



PJSC LUKOIL

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

**for the three-month periods ended
31 December and 30 September 2021
and for the years
2021 and 2020**

The following report contains a discussion and analysis of the financial position of PJSC LUKOIL at 31 December 2021 and the results of its operations for the three-month periods ended 31 December and 30 September 2021 and for the years 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”) consolidated financial statements, including notes and supplementary information on oil and gas exploration and production activities.

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

This report includes forward-looking statements – words such as “believes,” “anticipates,” “expects,” “estimates,” “intends,” “plans,” etc. – that reflect management’s current estimates and beliefs, but are not guarantees of future results. Please see “Forward-looking statements” on page 48 for a discussion of some factors that could cause actual results to differ materially.

Table of Contents

Business overview.....	4
Impact of COVID-19 on the Group's operations	4
Key financial and operational results	6
Changes in the Group structure.....	7
Main macroeconomic factors affecting our results of operations	8
International crude oil and refined products prices	8
Domestic crude oil and refined products prices	8
Changes in ruble exchange rate and inflation	9
Taxation	9
Transportation tariffs on crude oil, natural gas and refined products in Russia	15
Reserves base	17
Segments highlights	19
Exploration and production.....	19
West Qurna-2 project	22
Refining, marketing and distribution	24
Financial results	29
Sales revenues	30
Operating expenses	34
Cost of purchased crude oil, gas and products	36
Transportation expenses.....	37
Selling, general and administrative expenses.....	38
Depreciation, depletion and amortisation.....	38
Equity share in income of associates and joint ventures	38
Taxes other than income taxes	39
Excise and export tariffs.....	40
Foreign exchange gain (loss)	41
Other expenses	41
Income taxes	42
Non-GAAP items reconciliation	43
EBITDA reconciliation	43
Free cash flow reconciliation	43
Liquidity and capital resources	44
Operating activities	44
Investing activities	44
Financing activities	45
Debt maturity	46
Litigation and claims.....	46
Critical accounting policies	46
Other information.....	46
Forward-looking statements.....	48

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 15.3 billion BOE at 1 January 2022 and comprised of 11.6 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 2021 amounted to 2.2 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 full year 2021 amounted to 1.3 million barrels per day, and we produced 1.1 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 full year 2021 amounted to 13.9 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 full year 2021, our total output of commercial electrical energy was 15.8 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 resulted in crude oil price growth, with the price of Brent reaching its peak of \$86 per barrel at the end of October 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.

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 minimise 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 fourth quarter of 2021 was approximately 270 thousand barrels per day higher as compared to the May 2020 level. As a result, our domestic average daily crude oil production in 2021 exceeded the level of 2020. Due to the OPEC+ 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 20 thousand barrels per day below its capacity in the fourth 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 optimised utilisation 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 utilisation rates at our refineries with the average daily refinery throughput volumes in 2021 being 16% higher 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 fourth quarter of 2021 were approximately 12% higher compared to the fourth quarter of 2020.

The impact of the pandemic on the Group's financial performance in 2021 is discussed in detail in the below discussion and analysis.

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 105 billion RUB at the end 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

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
(millions of rubles)						
Sales revenue	2,768,031	2,588,745	6.9	9,435,143	5,639,401	67.3
EBITDA ¹ , including	395,013	355,176	11.2	1,404,411	687,094	>100
Exploration and production segment.....	296,522	245,036	21.0	986,255	500,081	97.2
Refining, marketing and distribution segment	114,380	125,757	(9.0)	487,294	243,322	>100
EBITDA ¹ net of West Qurna-2 project.....	377,440	347,438	8.6	1,361,080	655,098	>100
Profit for the period attributable to LUKOIL shareholders.....	233,790	192,475	21.5	773,442	15,175	>100
Capital expenditures	127,281	94,328	34.9	433,042	495,443	(12.6)
Free cash flow ²	190,074	227,670	(16.5)	693,572	281,131	>100
Free cash flow before changes in working capital	244,236	233,522	4.6	877,468	189,383	>100
(thousand BOE per day)						
Production of hydrocarbons, including our share in associates and joint ventures.....	2,335	2,152	8.5	2,197	2,117	3.8
crude oil and natural gas liquids.....	1,782	1,662	7.2	1,678	1,651	1.6
gas.....	553	490	12.9	519	466	11.4
Refinery throughput at the Group refineries	1,233	1,378	(10.5)	1,264	1,174	7.7

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

² Cash flow from operating activities less capital expenditures.

In the fourth quarter of 2021, compared to the previous quarter, our financial results were positively impacted by an increase in international hydrocarbon prices, higher domestic crude oil and international gas production volumes, as well as higher positive export duty lag effect and the accounting specifics of our international trading operations. At the same time, these positive factors were partially offset by weaker results of our international refining, retail and trading businesses.

Compared to the full year 2020, our financial results were driven up by higher hydrocarbon prices, an increase in hydrocarbon production volumes, positive inventory effect at our refineries, higher refining margins in Russia, positive export duty lag effect, as well as the ruble depreciation. Elimination of tax incentives for high-viscous crude oil and weaker results of retail business in Russia were the main restraining factors.

As a result, our EBITDA increased by 11.2% and by 104.4% compared to the third quarter of 2021 and the full year 2020, respectively.

In the fourth quarter of 2021, a foreign exchange gain amounted to 5.8 billion RUB, as compared to a 0.7 billion RUB loss in the previous quarter. In the full year 2021, a foreign exchange gain amounted to 2.7 billion RUB, while in the full year 2020 sharp ruble depreciation resulted in a foreign exchange loss of 26.1 billion RUB.

Compared to the third quarter of 2021, our depreciation, depletion and amortisation expenses decreased by 8.9% mainly due to a positive effect of an increase in proved developed hydrocarbon reserves at Group's certain fields at the end of 2021 and consequent recalculation of depletion of respective fixed assets for the full year, despite an increase in crude oil production in Russia and an increase in cost compensation related to the West Qurna-2 project. Compared to the full year 2020, our depreciation, depletion and amortisation expenses increased by 4.9% mainly as a result of higher cost compensation related to the West Qurna-2 project, as well as an increase in gas production in Uzbekistan.

Due to a significant deterioration in the macroeconomic environment in 2020, the Group recognised an impairment loss of property, plant and equipment and other non-current assets in the total amount of 107 billion RUB in 2020 (net of impairment reversals). In 2021, a net impairment loss in relation to property, plant and equipment, goodwill and other non-current assets amounted to 10 billion RUB.

In the fourth quarter and the full year 2021, profit attributable to LUKOIL shareholders amounted to 234 billion RUB and 773 billion RUB, respectively, compared to profit in the amount of 192 billion RUB in the third quarter of 2021 and profit in the amount of 15 billion RUB in the full year 2020.

Our capital expenditures increased by 33 billion RUB, or by 34.9%, compared to the third quarter of 2021, and decreased by 62 billion RUB, or by 12.6%, compared to the full year 2020.

In the fourth quarter of 2021, our free cash flow amounted to 190 billion RUB, a decrease of 16.5% compared to the third quarter of 2021, and in the full year 2021, it amounted to 694 billion RUB, an increase of 146.7% compared to the full year 2020. A quarter-on-quarter decrease in our free cash flow was mainly due to dynamics of working capital and an increase in capital expenditures, while a year-on-year increase was mainly a result of improved profitability of our core operations and lower capital expenditures that was partially offset by working capital dynamics.

Compared to the third quarter of 2021 and the full year 2020, the Group's average daily hydrocarbon production increased by 8.5% and by 3.8%, respectively, mainly due to the dynamics of the external limitations on crude oil production due to the OPEC+ agreement, as well as higher international gas production volumes.

Compared to the previous quarter, average daily throughput volumes at our refineries decreased by 10.5% mainly due to scheduled maintenance works at the refineries outside Russia, as well as seasonal throughput optimisation in Russia. Compared to the full year 2020, average daily throughput volumes at our refineries increased by 7.7% mainly due to higher refineries utilisation rates due to better market environment in 2021, as well as scheduled maintenance works in 2020.

Changes in the Group structure

In December 2021, a Group company concluded a sale and purchase agreement with PJSC Gazprom Neft for 50% equity share of Meretoyakhaneftegaz LLC, a Gazprom Neft wholly owned subsidiary, for 52 billion RUB, including cession of claim of Gazprom Neft's loans worth 35 billion RUB. The contract was signed as part of creating a joint venture to develop oil and gas cluster in the Nadym-Pur-Tazovsky area of the Yamal-Nenets Autonomous District. The companies also agreed upon the programme of additional exploration of the blocks of Meretoyakhaneftegaz LLC where 8.9 billion RUB of expenditures will be financed by LUKOIL. The transaction is planned to be completed in 2022 after fulfilment of a number of conditions precedent, including all necessary corporate approvals, as well as the consent of the Federal Antimonopoly Service.

In October 2021, a Group company signed an agreement to purchase a 15.5% interest in the Shah Deniz natural gas project in Azerbaijan sector of the Caspian Sea from PETRONAS for \$2.25 billion. In December 2021, the terms of the agreement were amended as a result of negotiations with the Shah Deniz project partners on implementation of pre-emptive rights. In accordance with the new arrangement, the share acquired by the Group was reduced to 9.99% with proportional decrease in consideration to \$1.45 billion. The transaction was closed on 17 February 2022 after all customary conditions, including approval by SOCAR, the State Oil Company of the Azerbaijan Republic, were fulfilled.

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 and 2022 as of the transaction completion date. The transaction was closed on 24 February 2022 after all customary conditions, including approval by the Mexican authorities, were 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 realised 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 2021, the price for Brent crude oil increased from \$50.0 per barrel in January to \$86.1 per barrel in the end of October owing to gradual recovery of global demand for crude oil and the effect of the OPEC+ agreement. As a result, average price increased by 8.1% compared to the third quarter of 2021, and by 69.1% compared to the full year 2020.

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

	Q4 2021	Q3 2021	Change, %	12 months of 2021	2020	Change, %
				(US dollars per barrel)		
Brent FOB dated.....	79.48	73.55	8.1	70.69	41.79	69.1
Urals (average MED and Rotterdam).....	78.17	71.19	9.8	69.10	41.39	66.9
				(US dollars per tonne)		
Diesel fuel 10 ppm (FOB Rotterdam)	682.09	601.70	13.4	582.33	367.07	58.6
Premium gasoline (FOB Rotterdam)	768.70	718.74	7.0	676.22	382.61	76.7
Naphtha (FOB Rotterdam)	725.23	663.12	9.4	629.76	351.35	79.2
Jet fuel (FOB Rotterdam)	712.27	625.80	13.8	605.91	361.50	67.6
Vacuum gas oil (FOB Rotterdam).....	540.00	505.39	6.8	485.95	297.95	63.1
Marine fuel 0.5% (FOB Rotterdam).....	548.19	506.03	8.3	493.70	311.50	58.5
Fuel oil 3.5% (FOB Rotterdam)	424.54	396.64	7.0	383.38	221.37	73.2

Source: Platts, Argus.

	Q4 2021	Q3 2021	Change, %	12 months of 2021	2020	Change, %
				(rubles per barrel)		
Brent FOB dated.....	5,770	5,404	6.8	5,207	3,015	72.7
Urals (average MED and Rotterdam).....	5,676	5,231	8.5	5,089	2,986	70.4
				(rubles per tonne)		
Diesel fuel 10 ppm (FOB Rotterdam)	49,524	44,210	12.0	42,891	26,483	62.0
Premium gasoline (FOB Rotterdam)	55,812	52,809	5.7	49,807	27,604	80.4
Naphtha (FOB Rotterdam)	52,656	48,723	8.1	46,384	25,349	83.0
Jet fuel (FOB Rotterdam)	51,715	45,981	12.5	44,627	26,081	71.1
Vacuum gas oil (FOB Rotterdam).....	39,207	37,133	5.6	35,792	21,496	66.5
Marine fuel 0.5% (FOB Rotterdam).....	39,802	37,181	7.0	36,363	22,473	61.8
Fuel oil 3.5% (FOB Rotterdam)	30,824	29,143	5.8	28,237	15,971	76.8

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.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
	(rubles per tonne)					
	2021	2020		2021	2020	
Diesel fuel	49,000	45,007	8.9	43,625	37,292	17.0
Regular gasoline.....	44,694	48,681	(8.2)	46,083	39,727	16.0
Premium gasoline.....	45,653	50,556	(9.7)	47,858	41,866	14.3
Fuel oil	26,014	23,139	12.4	22,611	10,990	>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.

	Q4 2021	Q3 2021	12 months of	
	2021	2020	2021	2020
Ruble inflation (CPI), %.....	2.9	1.1	8.4	4.9
Ruble to US dollar exchange rate				
Average for the period	72.61	73.47	73.65	72.15
At the beginning of the period	72.76	72.37	73.88	61.91
At the end of the period	74.29	72.76	74.29	73.88
Ruble to euro exchange rate				
Average for the period	83.07	86.66	87.19	82.45
At the beginning of the period	84.88	86.20	90.68	69.34
At the end of the period	84.07	84.88	84.07	90.68

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:

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
	(US dollars per tonne)					
	2021	2020		2021	2020	
Mineral extraction tax ¹	308.02	276.00	11.6	261.66	120.87	>100
Export duty on crude oil.....	70.49	64.63	9.1	59.15	45.87	29.0

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
	(rubles per tonne)					
	2021	2020		2021	2020	
Mineral extraction tax	22,364	20,279	10.3	19,273	8,720	>100
Export duty on crude oil ¹	5,118	4,749	7.8	4,357	3,309	31.6

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 an increase in mineral extraction tax rate.

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

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

where *Price* is a Urals blend price in US dollars per barrel and *Exchange Rate* is an average ruble exchange rate to US dollar during the period. The *Incentive Factor* represents incentives discussed further in this section. The *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 synchronised with an increase in the damper coefficient in the formula of negative excise tax on refinery feedstock.

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

	2020	2021	2022	2023	2024 and 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 was applied to our Yu. Korchagin field located in the Caspian offshore until the end of 2021, and is applied to our new small-sized fields (recoverable reserves less than 5 million tonnes) and fields and deposits with low permeability like V. Vinogradov, Sredne-Nazymyskoye 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 licence 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 licence 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 licence area. For highly depleted licence 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.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

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 licence 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 licence area. For crude oil production subject to TAI, a special mineral extraction tax rate (in US dollars per barrel) is applied which equals to 50% of the difference between Urals oil price and \$15 less the enacted export duty rate. From September 2021, Damper Factors are added to this special mineral extraction tax rate.

TAI is implemented for five groups of licence areas. In Group 1, LUKOIL has nineteen licence 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 licence areas with brownfields in West Siberia that adopted TAI regime as of 1 January 2019, as well as 105 licence areas with depleted reserves in different regions transferred to TAI regime in 2021. In Group 4, LUKOIL has two licence areas with greenfields in West Siberia and five licence areas in Timan-Pechora added in 2021. LUKOIL has licence 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)

	2020	2021	2022	2023	2024 and further
Adjusting factor	0.667	0.500	0.333	0.167	0

The rate for a 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.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
				(US dollars per barrel)		
Urals price (Argus).....	78.17	71.19	9.8	69.10	41.39	66.9
Export duty on crude oil	9.66	8.85	9.2	8.10	6.28	29.0
Mineral extraction tax on crude oil	42.19	37.81	11.6	35.84	16.56	>100
Net Urals price ¹	26.32	24.53	7.3	25.16	18.55	35.6
Export duty lag effect.....	0.31	0.07	>100	0.50	(0.39)	-
Mineral extraction tax lag effect.....	0.31	0.07	>100	0.50	(0.20)	-
Net Urals price ¹ assuming no lag	25.70	24.39	5.3	24.16	19.14	26.2
				(rubles per barrel) ²		
Urals price (Argus).....	5,676	5,231	8.5	5,089	2,986	70.4
Export duty on crude oil	701	651	7.7	597	453	31.8
Mineral extraction tax on crude oil	3,064	2,778	10.3	2,640	1,195	>100
Net Urals price ¹	1,911	1,802	6.0	1,852	1,338	38.4
Export duty lag effect.....	23	5	>100	37	(28)	-
Mineral extraction tax lag effect.....	23	5	>100	37	(14)	-
Net Urals price ¹ assuming no lag	1,865	1,792	4.1	1,778	1,380	28.8

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

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

Crude oil produced at some of our fields and licence 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 licence 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.

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 tax	Export duty (in US dollars per barrel)	Total	As % of oil price
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 licence area, regional location and complexity of particular gas field. Reinjected natural gas and associated petroleum gas are subject to zero extraction tax rate.

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

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(US dollars per thousand cubic meters) ¹					
Nakhodkinskoye field	6.50	6.42	1.2	6.31	5.63	12.2
Pyakyakhinskoye field	5.40	5.23	3.3	6.56	6.97	(5.9)

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

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(rubles per thousand cubic meters)					
Nakhodkinskoye field	472	472	-	465	406	14.5
Pyakyakhinskoye field	392	384	2.1	483	503	(4.0)

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.

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.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

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.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				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	9,938	-	10,595	14,524	(27.1)

*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 tonne)			
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 starting from 2021. In August 2021, the Company signed similar agreement in relation to the project for construction of a catalytic cracker unit at Perm refinery, the investment factor is applied starting from December 2021. For both projects the investment factor will be applied until 1 January 2031.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

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 and 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:

	Q4 2021	Q3 2021	Change, %	12 months of 2021	2020	Change, %
	(US dollars per tonne) ¹					
Gasoline	240.53	214.26	12.3	165.83	(89.65)	-
Diesel fuel	151.87	94.10	61.4	81.39	(78.06)	-

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

	Q4 2021	Q3 2021	Change, %	12 months of 2021	2020	Change, %
	(rubles per tonne)					
Gasoline	17,464	15,743	10.9	12,214	(6,468)	-
Diesel fuel	11,027	6,914	59.5	5,995	(5,632)	-

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 Transneftproduct, a subsidiary of Transneft.

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

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

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

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

	Q4 2021 to Q3 2021	2021 to 2020
Transneft (crude oil)	0.0%	3.6%
Russian Railways (crude oil and refined products).....	0.0%	3.7%

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Reserves base

The tables below summarise the net proved reserves of our consolidated subsidiaries and our share in net proved reserves of our associates and joint ventures under the standards of the US Securities and Exchange Commission (until the economic limit of commercial production is reached) that have been derived from our reserve reports audited by Miller and Lents Ltd, our independent reservoir engineers, at 31 December 2021 and 2020.

(hydrocarbons, millions of BOE)	Changes in 2021				31 December 2020
	31 December 2021	Production ⁽¹⁾	Extensions, discoveries and changes in structure	Revision of previous estimates	
West Siberia	7,796	(323)	223	12	7,884
Timan-Pechora	2,461	(116)	99	75	2,403
Ural region	2,187	(127)	97	61	2,156
Volga region	1,132	(89)	28	77	1,116
Other in Russia	208	(11)	52	4	163
Outside Russia	1,484	(136)	15	(58)	1,663
Proved oil and gas reserves	15,268	(802)	514	171	15,385
Probable oil and gas reserves	6,057				5,581
Possible oil and gas reserves	2,851				2,802

¹ Gas production shown before own consumption.

(crude oil, millions of barrels)	Changes in 2021				31 December 2020
	31 December 2021	Production	Extensions, discoveries and changes in structure	Revision of previous estimates	
West Siberia	5,722	(258)	191	-	5,789
Timan-Pechora	2,329	(105)	92	64	2,278
Ural region	2,044	(118)	92	40	2,030
Volga region	766	(80)	22	68	756
Other in Russia	207	(10)	52	5	160
Outside Russia	504	(41)	12	(146)	679
Proved oil reserves	11,572	(612)	461	31	11,692
Probable oil reserves	4,544				4,105
Possible oil reserves	2,422				2,314

(gas, billions of cubic feet)	Changes in 2021				31 December 2020
	31 December 2021	Production ⁽¹⁾	Extensions, discoveries and changes in structure	Revision of previous estimates	
West Siberia	12,444	(391)	194	69	12,572
Timan-Pechora	792	(66)	41	67	750
Ural region	858	(53)	34	123	754
Volga region	2,198	(55)	39	55	2,159
Other in Russia	6	(3)	-	(7)	16
Outside Russia	5,879	(568)	13	529	5,905
Proved gas reserves	22,177	(1,136)	321	836	22,156
Probable gas reserves	9,080				8,861
Possible gas reserves	2,575				2,927

¹ Gas production shown before own consumption.

The Company's proved hydrocarbon reserves at 31 December 2021 amounted to 15.3 billion BOE and comprised of 11.6 billion barrels of crude oil and 22.2 trillion cubic feet of gas.

The proved reserves replacement ratio at the Company's projects in Russia totaled 109% in 2021, including 109% for liquids and 108% for gas.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

As a result of geological exploration and production drilling conducted in 2021, LUKOIL added 501 million BOE to proved reserves, which is 8% higher year-on-year. The largest contribution was made by the assets in West Siberia, Ural region, Timan-Pechora, as well as in the Baltic and Caspian Seas. The conversion of contingent resources to reserves added 40 million BOE to proved reserves. The reserves dynamics was negatively affected by reserves revision for the international projects which are based on production sharing agreements or service contracts due to an increase in annual average crude oil price.

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 32 “Segment information” to our consolidated financial statements.

Exploration and production

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
EBITDA	296,522	245,036	21.0	986,255	500,081	97.2
in Russia	234,633	206,932	13.4	821,914	421,573	95.0
outside Russia and Iraq	44,316	30,366	45.9	121,010	46,512	>100
in Iraq	17,573	7,738	>100	43,331	31,996	35.4
Hydrocarbon extraction expenses	54,073	51,235	5.5	204,557	198,911	2.8
in Russia	43,457	40,817	6.5	162,453	158,328	2.6
outside Russia and Iraq	6,438	6,231	3.3	25,616	23,371	9.6
in Iraq	4,178	4,187	(0.2)	16,488	17,212	(4.2)
	(rubles per BOE)					
Hydrocarbon unit extraction expenses (excluding Iraq)	242	245	(1.2)	244	247	(1.2)
in Russia	249	244	1.9	246	243	1.2
outside Russia and Iraq	203	248	(18.1)	235	282	(16.8)
	(US dollars per BOE)					
Hydrocarbon unit extraction expenses (excluding Iraq)	3.33	3.33	-	3.31	3.42	(3.2)
in Russia	3.43	3.32	3.1	3.33	3.36	(0.8)
outside Russia and Iraq	2.79	3.37	(17.1)	3.19	3.91	(18.5)

Our upstream EBITDA increased by 21.0% compared to the third quarter of 2021. In Russia, EBITDA increased by 13.4% quarter-on-quarter mainly as a result of higher crude oil prices and production volumes, higher positive export duty lag effect, as well as prior periods' extraction tax recalculation. Outside Russia and Iraq, our EBITDA increased by 45.9% mainly as a result of an increase in hydrocarbon prices and higher gas production volumes.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Compared to the full year 2020, our upstream EBITDA increased almost two-fold. In Russia, the increase was mainly a result of higher crude oil prices, positive export duty lag effect, higher crude oil production volumes, and the ruble depreciation, although these factors were partially offset by elimination of tax incentives for high-viscous crude oil. Outside Russia and Iraq, our upstream EBITDA increased mainly due to higher hydrocarbon prices, higher natural gas production volumes and the ruble depreciation.

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 summarises our daily hydrocarbon production by major regions.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousand BOE per day)					
Crude oil and natural gas liquids						
Consolidated subsidiaries						
West Siberia	761	710	7.2	704	669	5.2
Timan-Pechora	300	284	5.6	281	274	2.6
Ural region	344	325	5.8	323	313	3.2
Volga region.....	214	223	(4.0)	219	217	0.9
Other in Russia.....	27	28	(3.6)	28	29	(3.4)
Total in Russia.....	1,646	1,570	4.8	1,555	1,502	3.5
Iraq ¹	36	20	80.0	34	53	(35.8)
Other outside Russia	57	40	42.5	50	53	(5.7)
Total outside Russia.....	93	60	55.0	84	106	(20.8)
Total consolidated subsidiaries	1,739	1,630	6.7	1,639	1,608	1.9
Our share in associates and joint ventures						
in Russia.....	10	9	11.1	10	11	(9.1)
outside Russia	33	23	43.5	29	32	(9.4)
Total share in production of associates and joint ventures	43	32	34.4	39	43	(9.3)
Total crude oil and natural gas liquids	1,782	1,662	7.2	1,678	1,651	1.6
Natural and petroleum gas²						
Consolidated subsidiaries						
West Siberia.....	172	170	1.2	179	203	(11.8)
Timan-Pechora	31	30	3.3	29	29	-
Ural region.....	26	21	23.8	24	23	4.3
Volga region.....	24	26	(7.7)	25	26	(3.8)
Other in Russia	0	0	-	0	0	-
Total in Russia	253	247	2.4	257	281	(8.5)
Uzbekistan	234	188	24.5	200	128	56.3
Other outside Russia	54	46	17.4	50	46	8.7
Total outside Russia	288	234	23.1	250	174	43.7
Total consolidated subsidiaries	541	481	12.5	507	455	11.4
Share in associates and joint ventures						
in Russia.....	1	1	(0.6)	2	1	18.2
outside Russia	11	8	44.5	10	10	(3.1)
Total share in production of associates and joint ventures	12	9	33.3	12	11	0.2
Total natural and petroleum gas	553	490	12.9	519	466	11.4
Total daily hydrocarbon production (excluding the West Qurna-2 project).....	2,299	2,132	7.8	2,163	2,064	4.8
Total daily hydrocarbon production.....	2,335	2,152	8.5	2,197	2,117	3.8
Including natural gas liquids produced at the gas processing plants	43	37	16.1	35	39	(8.9)

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.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousands of tonnes)					
West Siberia	9,300	8,658	7.4	34,157	32,448	5.3
Timan-Pechora	3,732	3,673	1.6	14,287	14,102	1.3
Ural region	4,038	3,825	5.6	15,094	14,565	3.6
Volga region	2,578	2,686	(4.0)	10,467	10,339	1.2
Other in Russia	351	358	(2.0)	1,424	1,486	(4.2)
Crude oil produced in Russia	19,999	19,200	4.2	75,429	72,940	3.4
Iraq ¹	488	271	80.1	1,828	2,843	(35.7)
Other outside Russia	596	430	38.6	2,088	2,256	(7.4)
Crude oil produced outside Russia	1,084	701	54.6	3,916	5,099	(23.2)
Total crude oil produced by consolidated subsidiaries.....	21,083	19,901	5.9	79,345	78,039	1.7
Our share in crude oil produced by associates and joint ventures:						
in Russia	120	104	15.4	503	519	(3.1)
outside Russia	382	269	42.0	1,328	1,491	(10.9)
Total crude oil produced.....	21,585	20,274	6.5	81,176	80,049	1.4

¹ Compensation crude oil related to the Group.

Our main oil producing region is West Siberia where we produced 44.1% and 43.0% of our crude oil in the fourth quarter and the full year 2021 (43.5% in the third quarter of 2021 and 41.6% in the full year 2020). Our crude oil production increased by 6.5% compared to the third quarter of 2021 and by 1.4% compared to the full year 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 stabilise 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, in 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 fourth quarter of 2021, crude oil production by the Group in Russia was approximately 270 thousand barrels per day higher than the May 2020 level and in 2021 it exceeded the level of 2020.

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-Nazymkoye and Pyakyakhinskoye fields increased in 2021 by 8.1% year-on-year, to 4.5 million tonnes.

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
	(millions of cubic meters)					
	2021	2020		2021	2020	
West Siberia, including:	2,691	2,659	1.2	11,082	12,592	(12.0)
Nakhodkinskoye field	1,025	1,026	(0.1)	4,334	5,376	(19.4)
Pyakyakhinskoye field	740	750	(1.3)	3,113	3,599	(13.5)
Other fields.....	926	883	4.9	3,635	3,617	0.5
Timan-Pechora	477	463	3.0	1,826	1,810	0.9
Ural region	400	331	20.8	1,502	1,451	3.5
Volga region.....	375	402	(6.7)	1,549	1,593	(2.8)
Other in Russia.....	3	3	-	11	17	(35.3)
Gas produced in Russia	3,946	3,858	2.3	15,970	17,463	(8.5)
Uzbekistan.....	3,655	2,944	24.2	12,420	7,947	56.3
Other outside Russia.....	851	713	19.4	3,053	2,861	6.7
Gas produced outside Russia.....	4,506	3,657	23.2	15,473	10,808	43.2
Total gas produced by consolidated subsidiaries..	8,452	7,515	12.5	31,443	28,271	11.2
Our share in gas produced by associates and joint ventures:						
in Russia.....	30	28	7.1	135	115	17.4
outside Russia.....	177	123	43.9	598	619	(3.4)
Total gas produced	8,659	7,666	13.0	32,176	29,005	10.9

In the fourth quarter and the full year 2021, LUKOIL Group's gas production was 8.7 billion cubic meters and 32.2 billion cubic meters, which was 13.0% higher quarter-on-quarter, and 10.9% higher year-on-year.

In Russia, our major gas production region is Bolshekhetskaya depression in West Siberia, where gas is produced mainly from the Nakhodkinskoye and Pyakyakhinskoye fields. Our gas production in Russia increased by 2.3% compared to the third quarter of 2021, and decreased by 8.5% compared to the full year 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) increased by 23.9%. The increase was mainly attributable to higher production volumes in Uzbekistan. Our international gas production increased by 40.6% year-on-year mainly as a result of recovery of gas production 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 fourth quarter of 2021, average daily production at the field was approximately 20 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 recognised in *Property, plant and equipment*. Extraction expenses are recognised 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 recognised, capitalised costs are amortised.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

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 recognised 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 recognised 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 recognised in *Sales*. Unsold crude oil and refined products are recognised in *Inventories*.

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

(millions of US dollars)	Costs incurred¹	Remuneration fee	Crude oil received	Crude oil to be received
Cumulative at 31 December 2020	9,778	675	9,868	585
Change in 2021	656	240	938	(42)
Cumulative at 31 December 2021.....	10,434	915	10,806	543

¹ Including prepayments.

The West Qurna-2 project summary is presented below:

	Q4 2021		Q3 2021		Change, %	
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	35,196	5,146	31,899	4,663	10.4	10.4
Production related to cost compensation and remuneration	3,343	488	1,853	271	80.1	80.1
Shipment of compensation crude oil ¹	1,988	291	3,709	542	(46.3)	(46.3)
	(millions of rubles)	(millions of US dollars)	(millions of rubles)	(millions of US dollars)		
Cost compensation	20,136	277	9,561	130	>100	>100
Remuneration fee	2,219	30	2,002	27	10.8	11.1
	22,355	307	11,563	157	>100	>100
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil, gas and products) ¹	11,422	158	20,314	276	(43.8)	(42.8)
Extraction expenses	4,178	58	4,187	57	(0.2)	1.8
Depreciation, depletion and amortisation	16,000	221	5,415	73	>100	>100
EBITDA	17,573	242	7,738	105	>100	>100

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

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

	12 months of				Change, %	
	2021		2020			
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	126,991	18,566	124,295	18,172	2.2	2.2
Production related to cost compensation and remuneration	12,506	1,828	19,447	2,843	(35.7)	(35.7)
Shipment of compensation crude oil ¹	13,439	1,965	18,996	2,777	(29.2)	(29.2)
	(millions of rubles)	(millions of US dollars)	(millions of rubles)	(millions of US dollars)		
Cost compensation	52,119	709	42,604	597	22.3	18.8
Remuneration fee	8,051	109	7,694	107	4.6	1.9
	60,170	818	50,298	704	19.6	16.2
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil, gas and products) ¹	69,237	939	45,428	626	52.4	50.0
Extraction expenses	16,488	224	17,212	239	(4.2)	(6.3)
Depreciation, depletion and amortisation	35,728	487	25,630	361	39.4	34.9
EBITDA	43,331	590	31,996	450	35.4	31.1

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

Refining, marketing and distribution

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

	Q4	Q3	Change,	12 months of		Change,
	2021	2021	%	2021	2020	%
				(millions of rubles)		
EBITDA	114,380	125,757	(9.0)	487,294	243,322	>100
in Russia	111,181	107,875	3.1	370,683	180,753	>100
outside Russia	3,199	17,882	(82.1)	116,611	62,569	86.4
Refining expenses at the Group refineries	39,825	32,171	23.8	129,093	92,613	39.4
in Russia	14,836	13,383	10.9	52,751	42,614	23.8
outside Russia	24,989	18,788	33.0	76,342	49,999	52.7
				(rubles per tonne)		
Unit refining expenses at the Group refineries	2,573	1,860	38.4	2,050	1,580	29.8
in Russia	1,359	1,188	14.4	1,238	1,062	16.5
outside Russia	5,483	3,116	76.0	3,753	2,703	38.8
				(US dollars per tonne)		
Unit refining expenses at the Group refineries	35.44	25.31	40.0	27.84	21.90	27.1
in Russia	18.71	16.16	15.8	16.81	14.73	14.1
outside Russia	75.51	42.41	78.1	50.95	37.46	36.0

Our refining, marketing and distribution EBITDA was 9.0% lower compared to the third quarter of 2021. At the same time, in Russia, refining, marketing and distribution EBITDA increased by 3.1% quarter-on-quarter largely due to better results of refineries, as well as a seasonal increase in profitability of our power generating business. Outside Russia, our refining, marketing and distribution EBITDA decreased by 82.1% mainly due to maintenance works and higher energy costs at our refineries, lower profitability of our trading business, as well as seasonally weaker results of our retail business. Negative impact of these factors was partially offset the accounting specifics of our international trading operations and higher positive inventory effect at our refineries.

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

Refining and petrochemicals

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousands of tonnes)					
Refinery throughput at the Group refineries	15,478	17,299	(10.5)	62,959	58,608	7.4
in Russia	10,920	11,270	(3.1)	42,616	40,109	6.3
outside Russia, including	4,558	6,029	(24.4)	20,343	18,499	10.0
crude oil	4,223	5,396	(21.7)	18,331	16,888	8.5
refined products	335	633	(47.1)	2,012	1,611	24.9
Refinery throughput at third party refineries	3	2	50.0	6	146	(95.9)
Total refinery throughput	15,481	17,301	(10.5)	62,965	58,754	7.2
Production of the Group refineries in Russia¹	10,345	10,718	(3.5)	40,423	38,090	6.1
diesel fuel	4,386	4,379	0.2	16,615	16,084	3.3
motor gasoline	2,209	2,265	(2.5)	8,147	7,076	15.1
fuel oil	956	1,213	(21.2)	4,173	3,142	32.8
jet fuel	706	822	(14.1)	2,747	2,182	25.9
lubricants and components	211	216	(2.3)	856	923	(7.3)
straight-run gasoline	600	561	7.0	2,419	2,458	(1.6)
vacuum gas oil	-	-	-	633	589	7.5
bitumen	271	271	-	923	904	2.1
coke	295	264	11.7	1,100	1,108	(0.7)
bunker fuel	379	370	2.4	1,460	2,022	(27.8)
gas products	74	88	(15.9)	321	307	4.6
petrochemicals	106	99	7.1	372	298	24.8
other products	152	170	(10.6)	657	997	(34.1)
Production of the Group refineries outside						
Russia	4,466	5,739	(22.2)	19,592	16,874	16.1
diesel fuel	2,015	2,780	(27.5)	9,238	8,334	10.8
motor gasoline	723	1,182	(38.8)	3,692	3,778	(2.3)
fuel oil	74	42	76.2	249	754	(67.0)
jet fuel	159	174	(8.6)	559	539	3.7
straight-run gasoline	566	568	(0.4)	2,246	1,616	39.0
coke	13	28	(53.6)	96	76	26.3
bunker fuel	670	619	8.2	2,350	438	>100
gas products	78	147	(46.9)	463	462	0.2
petrochemicals	6	12	(50.0)	39	45	(13.3)
other products	162	187	(13.4)	660	832	(20.7)
Refined products produced by the Group	14,811	16,457	(10.0)	60,015	54,964	9.2
Refined products produced at third party refineries ..	3	2	50.0	9	139	(93.5)
Total refined products produced	14,814	16,459	(10.0)	60,024	55,103	8.9
Reference: Net of cross-supplies of refined products between the Group refineries	559	456	22.6	1,760	1,397	26.0
Products produced at petrochemical plants and facilities	236	293	(19.5)	1,134	1,228	(7.7)
in Russia	168	214	(21.5)	825	898	(8.1)
outside Russia	68	79	(13.9)	309	330	(6.4)

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

In the fourth quarter and the full year 2021, refinery throughput at the Group refineries was 15.5 million tonnes and 63.0 million tonnes, respectively, which is 10.5% lower compared to the third quarter of 2021 and 7.4% higher compared to the full year 2020.

Compared to the previous quarter, refinery throughput volumes decreased by 3.1% in Russia due to seasonal throughput optimisation and by 24.4% outside Russia mainly due to scheduled maintenance works.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

Compared to the full year 2020, refinery throughput volumes increased by 6.3% in Russia and by 10.0% outside Russia mainly as a result of higher refineries utilisation rates due to better market environment in 2021, as well as scheduled maintenance works in 2020.

In 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 purchased 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.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousands of tonnes)					
Crude oil purchases						
In Russia.....	331	318	4.1	1,233	704	75.1
For trading internationally.....	15,248	17,964	(15.1)	57,462	51,678	11.2
For refining internationally	3,265	4,489	(27.3)	16,002	13,241	20.9
Shipment of the West Qurna-2 compensation crude oil.....	291	542	(46.3)	1,965	2,777	(29.2)
Total crude oil purchased	19,135	23,313	(17.9)	76,662	68,400	12.1

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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousands of tonnes)					
Refined products purchases						
In Russia.....	278	305	(8.9)	1,083	730	48.4
For trading internationally.....	12,222	11,526	6.0	46,260	49,455	(6.5)
For refining internationally	276	542	(49.1)	1,686	1,558	8.2
Total refined products purchased	12,776	12,373	3.3	49,029	51,743	(5.2)
Petrochemical products purchases						
In Russia.....	35	29	20.7	134	135	(0.7)
For trading internationally.....	134	196	(31.6)	662	606	9.2
For refining internationally	45	45	-	175	177	(1.0)
Total petrochemical products purchased	214	270	(20.7)	971	918	5.8

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 summarised as follows:

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Exports of crude oil to Customs Union	13,336	18,032	(26.0)	62,052	29,913	>100
Exports of crude oil beyond Customs Union.....	329,486	263,044	25.3	1,070,571	584,474	83.2
Total crude oil exports	342,822	281,076	22.0	1,132,623	614,387	84.4
	(thousands of tonnes)					
Exports of crude oil to Customs Union	375	559	(32.9)	1,988	1,779	11.7
Exports of crude oil beyond Customs Union.....	8,078	6,926	16.6	29,009	30,330	(4.4)
Total crude oil exports	8,453	7,485	12.9	30,997	32,109	(3.5)
Exports of crude oil through Transneft, excluding ESPO pipeline.....	4,998	3,998	25.0	16,806	18,440	(8.9)
ESPO pipeline	699	600	16.5	2,857	1,739	64.3
CPC pipeline	1,461	1,537	(4.9)	5,889	5,317	10.8
Exports of crude oil through the Group's transportation infrastructure	1,295	1,350	(4.1)	5,445	6,613	(17.7)
Total crude oil exports	8,453	7,485	12.9	30,997	32,109	(3.5)
Supply of exported crude oil to refineries	422	711	(40.6)	1,924	3,131	(38.5)
	(millions of rubles)					
Refined and petrochemical products exports	200,335	176,388	13.6	731,955	419,665	74.4
	(thousands of tonnes)					
Refined products exports						
diesel fuel.....	2,205	2,274	(3.0)	9,232	9,716	(5.0)
gasoline.....	65	3	>100	166	654	(74.6)
fuel oil.....	822	962	(14.6)	3,265	1,916	70.4
jet fuel.....	4	2	100.0	16	19	(15.8)
lubricants and components.....	151	135	11.9	562	607	(7.4)
gas refinery products.....	192	151	27.2	613	695	(11.8)
other products	798	565	41.2	3,718	4,314	(13.8)
Total refined products exports	4,237	4,092	3.5	17,572	17,921	(1.9)
Total petrochemicals exports.....	97	113	(14.2)	445	388	14.7

The volume of our crude oil exports from Russia increased by 12.9% compared to the third quarter of 2021 as a result of higher production and lower domestic refinery throughput volumes, and decreased by 3.5% compared to the full year 2020 due to an increase in domestic refinery throughput. In the fourth quarter and the full year 2021, we exported 42.3% and 41.1% of our domestic crude oil production, respectively (39.0% in the third quarter of 2021 and 44.0% in the full year 2020).

The volume of our refined products exports increased by 3.5% compared to the third quarter of 2021 and decreased by 1.9% compared to the full year 2020. The quarter-on-quarter increase was a result of lower domestic sales volumes owing to a seasonal decrease in domestic demand.

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.

In the fourth quarter and the full year 2021, we sold 2.6 million tonnes and 9.9 million tonnes of motor fuels, respectively, via our domestic retail network, which was 3.4% lower compared to the third quarter of 2021, and 9.3% higher compared to the full year 2020. Outside Russia, retail sales decreased by 6.4% compared to the third quarter of 2021 and increased by 9.5% compared to the full year 2020. The decrease in sales volumes compared to the third quarter of 2021 was due to a seasonality factor, while the increase compared to the full year 2020 was due to lower demand in 2020 because of the consequences of the COVID-19 pandemic.

In the fourth quarter and the full year 2021, our jet fuel deliveries volume net of trading operations amounted to 1.0 million tonnes and 3.1 million tonnes, respectively, compared to 0.9 million tonnes in the third quarter of 2021 and 2.5 million tonnes in the full year 2020.

In the fourth quarter and the full year 2021, our bunkering volume net of trading operations amounted to 0.5 million tonnes and 2.1 million tonnes, respectively, compared to 0.6 million tonnes in the third quarter of 2021 and 2.7 million tonnes in the full year 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 fourth quarter and the full year 2021, our total output of commercial electrical energy was 4.6 billion kWh and 15.8 billion kWh, respectively (3.4 billion kWh in the third quarter of 2021 and 17.1 billion kWh in the full year 2020), and our total output of commercial heat energy was approximately 3.5 million Gcal and 10.2 million Gcal (0.8 million Gcal in the third quarter of 2021 and 10.0 million Gcal in the full year 2020).

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 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.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Revenues						
Sales (including excise and export tariffs).....	2,768,031	2,588,745	6.9	9,435,143	5,639,401	67.3
Costs and other deductions						
Operating expenses	(139,915)	(128,314)	9.0	(509,192)	(439,973)	15.7
Cost of purchased crude oil, gas and products.....	(1,667,146)	(1,574,170)	5.9	(5,484,824)	(3,000,916)	82.8
Transportation expenses	(77,099)	(70,906)	8.7	(291,135)	(292,899)	(0.6)
Selling, general and administrative expenses	(59,323)	(55,466)	7.0	(215,190)	(199,027)	8.1
Depreciation, depletion and amortisation	(97,835)	(107,403)	(8.9)	(425,466)	(405,440)	4.9
Taxes other than income taxes	(392,326)	(351,395)	11.6	(1,308,882)	(569,078)	>100
Excise and export tariffs.....	(33,195)	(52,142)	(36.3)	(214,433)	(444,300)	(51.7)
Exploration expenses.....	(4,014)	(1,176)	>100	(7,076)	(6,114)	15.7
Profit from operating activities	297,178	247,773	19.9	978,945	281,654	>100
Finance income	7,013	4,641	51.1	16,519	13,051	26.6
Finance costs	(9,682)	(9,246)	4.7	(37,568)	(44,122)	(14.9)
Equity share in income of associates and joint ventures	10,146	6,722	50.9	29,980	11,474	>100
Foreign exchange gain (loss).....	5,812	(661)	-	2,731	(26,110)	-
Other expenses	(14,640)	(7,061)	-	(23,643)	(137,160)	(82.8)
Profit before income taxes	295,827	242,168	22.2	966,964	98,787	>100
Current income taxes.....	(41,980)	(48,928)	(14.2)	(163,807)	(61,362)	>100
Deferred income taxes.....	(19,816)	(121)	>100	(27,644)	(20,792)	33.0
Total income tax expense	(61,796)	(49,049)	26.0	(191,451)	(82,154)	>100
Profit for the period	234,031	193,119	21.2	775,513	16,633	>100
Profit for the period attributable to:						
PJSC LUKOIL shareholders	233,790	192,475	21.5	773,442	15,175	>100
Non-controlling interests.....	241	644	(62.6)	2,071	1,458	42.0
Earnings per share						
Profit for the period attributable to PJSC LUKOIL shareholders per share of common stock (in Russian rubles):						
Basic	358.59	294.98	21.6	1,185.60	23.31	>100
Diluted.....	340.38	280.63	21.3	1,129.17	22.46	>100

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 31 December and 30 September 2021 and for the years 2021 and 2020

Sales revenues

Sales breakdown	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Crude oil						
Export and sales on international markets other than Customs Union	1,026,888	960,495	6.9	3,407,562	1,838,509	85.3
Export and sales to Customs Union	13,275	18,083	(26.6)	62,225	30,137	>100
Domestic sales	25,089	25,735	(2.5)	86,338	23,522	>100
	1,065,252	1,004,313	6.1	3,556,125	1,892,168	87.9
Cost compensation and remuneration at the West Qurna-2 project.....	22,355	11,563	93.3	60,170	50,298	19.6
	1,087,607	1,015,876	7.1	3,616,295	1,942,466	86.2
Refined products						
Export and sales on international markets						
Wholesales	1,133,224	1,018,830	11.2	3,849,715	2,245,940	71.4
Retail	110,394	114,436	(3.5)	411,969	303,021	36.0
Domestic sales						
Wholesales	161,924	162,489	(0.3)	534,789	340,320	57.1
Retail	138,311	141,528	(2.3)	508,278	445,343	14.1
	1,543,853	1,437,283	7.4	5,304,751	3,334,624	59.1
Petrochemicals						
Export and sales on international markets	18,997	28,127	(32.5)	101,491	57,036	77.9
Domestic sales	14,458	15,235	(5.1)	58,685	36,386	61.3
	33,455	43,362	(22.8)	160,176	93,422	71.5
Gas						
Sales on international markets	46,041	40,755	13.0	142,692	68,200	>100
Domestic sales	7,477	7,515	(0.5)	29,714	32,649	(9.0)
	53,518	48,270	10.9	172,406	100,849	71.0
Sales of energy and related services						
Sales on international markets	6,200	4,353	42.4	14,316	10,451	37.0
Domestic sales	16,095	10,852	48.3	57,227	53,607	6.8
	22,295	15,205	46.6	71,543	64,058	11.7
Other						
Export and sales on international markets	15,316	14,292	7.2	61,375	63,813	(3.8)
Domestic sales	11,987	14,457	(17.1)	48,597	40,169	21.0
	27,303	28,749	(5.0)	109,972	103,982	5.8
Total sales	2,768,031	2,588,745	6.9	9,435,143	5,639,401	67.3

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Sales volumes	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(thousands of tonnes)					
Crude oil						
Export and sales on international markets other than Customs Union	23,682	24,480	(3.3)	89,295	81,391	9.7
Export and sales to Customs Union.....	375	559	(32.9)	1,992	1,799	10.7
Domestic sales.....	721	798	(9.6)	2,715	1,415	91.9
	24,778	25,837	(4.1)	94,002	84,605	11.1
Crude oil volumes related to cost compensation and remuneration at the West Qurna-2 project	576	358	60.9	1,750	2,843	(38.4)
	25,354	26,195	(3.2)	95,752	87,448	9.5
Refined products						
Export and sales on international markets						
Wholesales	21,288	21,020	1.3	83,081	80,095	3.7
Retail	1,030	1,101	(6.4)	4,016	3,667	9.5
Domestic sales						
Wholesales	3,803	3,990	(4.7)	13,702	12,011	14.1
Retail	2,625	2,717	(3.4)	9,870	9,032	9.3
	28,746	28,828	(0.3)	110,669	104,805	5.6
Petrochemicals						
Export and sales on international markets	200	335	(40.3)	1,211	1,269	(4.6)
Domestic sales.....	156	183	(14.8)	707	771	(8.3)
	356	518	(31.3)	1,918	2,040	(6.0)
	(millions of cubic meters)					
Gas						
Sales on international markets.....	4,489	3,928	14.3	16,398	11,288	45.3
Domestic sales.....	2,721	2,758	(1.3)	11,109	12,777	(13.1)
	7,210	6,686	7.8	27,507	24,065	14.3

Realised average sales prices		Q4 2021	Q3 2021	Change, %	12 months of		Change, %
					2021	2020	
Average realised price on international markets							
Crude oil (beyond Customs Union) ¹ ..	(RUB/barrel)	5,916	5,353	10.5	5,206	3,082	68.9
Crude oil (Customs Union)	(RUB/barrel)	4,829	4,413	9.4	4,262	2,285	86.5
Refined products							
Wholesales.....	(RUB/tonne)	53,233	48,470	9.8	46,337	28,041	65.2
Retail.....	(RUB/tonne)	107,179	103,938	3.1	102,582	82,635	24.1
Petrochemicals	(RUB/tonne)	94,985	83,961	13.1	83,808	44,946	86.5
Gas (excluding royalty)	(RUB/1,000 m ³)	10,256	10,376	(1.1)	8,702	6,042	44.0
Crude oil (beyond Customs Union) ¹ ..	(\$/barrel)	81.48	72.85	11.8	70.68	42.71	65.5
Crude oil (Customs Union)	(\$/barrel)	66.52	60.06	10.7	57.86	31.68	82.7
Refined products							
Wholesales.....	(\$/tonne)	733	660	11.1	629	389	61.9
Retail.....	(\$/tonne)	1,476	1,415	4.4	1,393	1,145	21.6
Petrochemicals	(\$/tonne)	1,308	1,143	14.5	1,138	623	82.6
Gas (excluding royalty)	(\$/1,000 m ³)	141	141	-	118	84	41.1
Average realised price within Russia							
Crude oil.....	(RUB/barrel)	4,747	4,400	7.9	4,338	2,268	91.3
Refined products							
Wholesales.....	(RUB/tonne)	42,578	40,724	4.6	39,030	28,334	37.7
Retail.....	(RUB/tonne)	52,690	52,090	1.2	51,497	49,307	4.4
Petrochemicals	(RUB/tonne)	92,679	83,251	11.3	83,006	47,193	75.9
Gas ²	(RUB/1,000 m ³)	2,748	2,725	0.8	2,675	2,555	4.7

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.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020**

Compared to the third 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, an increase in refined products trading volumes and international gas production volumes. The revenue growth was restrained by a decrease in refinery throughput volumes, crude oil trading and retail sales volumes.

Compared to the full year 2020, our revenues were positively impacted by an increase in international hydrocarbon prices and production volumes, refinery throughput and hydrocarbons trading volumes, the ruble depreciation, as well as higher retail sales volumes.

Sales of crude oil

Compared to the third quarter of 2021, our crude oil sales revenue in Russia decreased by 2.5%, despite of an increase in crude oil prices, mainly due to a decrease in sales volumes. Our crude oil sales revenue outside Russia increased by 6.9%, largely as a result of an increase in crude oil prices and production volumes.

Compared to the full year 2020, our international crude oil sales revenue increased by 85.3%, mainly as a result of an increase in realised crude oil prices by 68.9%, as well as higher sales volumes. Our domestic crude oil sales revenue increased more than three-fold owing to an increase in realised crude oil prices by 91.3% and sales volumes by 91.9%.

Sales of refined products

Sales breakdown	Q4	Q3	Change, %	12 months of		Change, %
	2021	2021		2021	2020	
	(millions of rubles)					
Wholesales outside Russia.....	1,133,224	1,018,830	11.2	3,849,715	2,245,939	71.4
diesel fuel.....	392,482	373,786	5.0	1,413,726	937,614	50.8
motor gasoline.....	244,924	223,935	9.4	805,072	440,292	82.8
fuel oil.....	123,278	87,536	40.8	435,614	414,171	5.2
jet fuel.....	29,061	32,814	(11.4)	91,001	20,866	>100
lubricants and components.....	21,143	21,754	(2.8)	84,895	67,454	25.9
gas products	85,087	63,390	34.2	192,443	76,703	>100
others.....	237,249	215,615	10.0	826,964	288,839	>100
Retail outside Russia	110,394	114,436	(3.5)	411,969	303,021	36.0
Wholesales in Russia	161,924	162,489	(0.3)	534,789	340,320	57.1
diesel fuel.....	53,549	48,242	11.0	162,178	110,395	46.9
motor gasoline.....	21,906	25,297	(13.4)	80,873	43,959	84.0
fuel oil.....	4,398	4,966	(11.4)	17,698	8,789	>100
jet fuel.....	41,802	36,410	14.8	122,467	77,138	58.8
lubricants and components.....	8,771	11,619	(24.5)	38,205	25,866	47.7
gas products	3,930	5,639	(30.3)	16,499	11,805	39.8
others.....	27,568	30,316	(9.1)	96,869	62,368	55.3
Retail in Russia	138,311	141,528	(2.3)	508,278	445,343	14.1
Total refined products sales	1,543,853	1,437,283	7.4	5,304,751	3,334,623	59.1

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Sales volumes	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(thousands of tonnes)					
Wholesales outside Russia	21,288	21,020	1.3	83,081	80,096	3.7
diesel fuel	7,202	7,461	(3.5)	29,192	29,745	(1.9)
motor gasoline	4,203	3,949	6.4	15,063	13,926	8.2
fuel oil	3,351	2,724	23.0	13,638	20,415	(33.2)
jet fuel.....	536	679	(21.1)	1,898	654	>100
lubricants and components	182	168	8.3	744	1,075	(30.8)
gas products.....	1,089	1,259	(13.5)	3,468	2,855	21.5
others	4,725	4,780	(1.2)	19,078	11,426	67.0
Retail outside Russia	1,030	1,101	(6.4)	4,016	3,667	9.5
diesel fuel	715	745	(4.0)	2,759	2,508	10.0
motor gasoline	277	311	(10.9)	1,106	1,012	9.3
gas products	38	45	(15.6)	151	147	2.7
Wholesales in Russia	3,803	3,990	(4.7)	13,702	12,011	14.1
diesel fuel	1,131	1,076	5.1	3,633	2,720	33.6
motor gasoline	474	521	(9.0)	1,737	1,091	59.2
fuel oil	174	220	(20.9)	812	899	(9.7)
jet fuel.....	865	825	4.8	2,917	2,401	21.5
lubricants and components	76	93	(18.3)	337	373	(9.7)
gas products.....	121	163	(25.8)	535	598	(10.5)
others	962	1,092	(11.9)	3,731	3,929	(5.0)
Retail in Russia	2,625	2,717	(3.4)	9,870	9,032	9.3
diesel fuel	1,015	937	8.3	3,622	3,450	5.0
motor gasoline	1,594	1,761	(9.5)	6,185	5,527	11.9
gas products.....	16	19	(15.8)	63	55	14.5
Total refined products volumes	28,746	28,828	(0.3)	110,669	104,806	5.6

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

The fourth quarter of 2021 vs. the third quarter of 2021

- Our revenue from the wholesales of refined products outside Russia increased by 11.2% largely due to an increase in average realised prices by 9.8% and sales volumes by 1.3%.
- International retail revenue decreased by 3.5% primarily due to a seasonal decrease in sales volumes by 6.4%, despite of an increase in average realised prices by 3.1%.
- Revenue from the wholesales of refined products on the domestic market didn't change significantly, an increase in average realised prices was offset by a decrease in sales volumes.
- Revenue from the retail sales of refined products on the domestic market decreased by 2.3%, mainly as a result of a seasonal decrease in sales volumes by 3.4%.

The full year 2021 vs. the full year 2020

- Our revenue from the wholesales of refined products outside Russia increased by 71.4% mostly as a result of an increase in average realised prices by 65.2% and sales volumes by 3.7%.
- Our international retail revenue increased by 36.0% as a result of an increase in realised prices and sales volumes.
- Our revenue from the wholesales of refined products on the domestic market increased by 57.1% as a result of higher average realised prices, as well as an increase in sales volumes.
- 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 realised prices.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020***Sales of petrochemical products*

Compared to the third quarter of 2021, our revenue from sales of petrochemical products decreased by 22.8%, despite of an increase in average international realised prices, mainly as a result of a decrease in trading volumes. Compared to the full year 2020, our revenue from sales of petrochemical products increased by 71.5%, mainly due to higher average realised prices.

Sales of gas

Compared to the third quarter of 2021, our revenue from gas sales increased by 10.9%, as a result of higher international production volumes.

An increase in international gas production volumes and prices along with a ramp up of our gas trading activities in Europe resulted in an increase in revenue by 71.0% compared to the full year 2020. At the same time, domestic sales decreased due to lower gas production.

Sales of energy and related services

Our revenue from sales of energy and related services increased by 46.6% compared to the third quarter of 2021, mainly due to a seasonality factor in Russia, as well as an increase in electricity tariffs in Italy.

Our revenue from sales of energy and related services increased by 11.7% compared to the full year 2020 due to an increase in volumes of electricity trading. Lower electricity output in Italy was offset by an increase in electricity tariffs.

Other sales

Other sales include non-petroleum sales through our retail network, transportation services, rental revenue, crude oil extraction and refining 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 third quarter of 2021, revenue from other sales decreased by 5.0% largely as a result of lower non-petrol revenue of our retail network due to a seasonality factor that was partially offset by higher revenue from transportation services.

Compared to the full year 2020, revenue from other sales increased by 5.8% largely as a result of an increase in non-petrol revenue of our retail network that was partially offset by lower volumes of transportation services provided. Moreover, other sales revenue for 2020 included 5.9 billion RUB (approximately €68 million) of loss compensation in relation to energy supplies in Sicily, Italy in 2015.

Operating expenses

Operating expenses include the following:

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Hydrocarbon extraction expenses ¹	49,895	47,048	6.1	188,069	181,699	3.5
Extraction expenses at the West Qurna-2 field.....	4,178	4,187	(0.2)	16,488	17,212	(4.2)
Own refining expenses	39,825	32,171	23.8	129,093	92,613	39.4
Expenses for feedstock transportation to refineries ..	12,464	13,971	(10.8)	50,513	51,693	(2.3)
Power generation and distribution expenses.....	8,813	7,553	16.7	31,877	29,991	6.3
Petrochemical expenses.....	5,243	4,388	19.5	16,587	12,731	30.3
Other operating expenses	19,497	18,996	2.6	76,565	54,034	41.7
Total operating expenses.....	139,915	128,314	9.0	509,192	439,973	15.7

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 32 "Segment information" to our 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.

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
Hydrocarbon extraction expenses.....	49,895	47,048	6.1	188,069	181,699	3.5
in Russia	43,457	40,817	6.5	162,453	158,328	2.6
outside Russia ¹	6,438	6,231	3.3	25,616	23,371	9.6
	(rubles per BOE)					
Hydrocarbon unit extraction expenses.....	242	245	(1.2)	244	247	(1.2)
in Russia	249	244	1.9	246	243	1.2
outside Russia ¹	203	248	(18.1)	235	282	(16.8)

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

Compared to the third quarter of 2021, our extraction expenses in Russia increased by 6.5% due to crude oil production growth, a seasonal increase in energy consumption and technological transport cost. At the same time, unit extraction expenses increased by 1.9%. Outside Russia, our extraction expenses increased by 3.3%. An increase in expenses related to gas production growth in Uzbekistan, was partly offset by decrease in maintenance costs in Kazakhstan. At the same time, hydrocarbon unit extraction expenses outside Russia decreased by 18.1% due to higher gas production volumes in Uzbekistan and an increase in crude oil production in Kazakhstan after completion of maintenance works.

Compared to the full year 2020, our extraction expenses in Russia increased by 2.6% mainly due to higher energy tariffs, as well as a general increase in production costs. At the same time, our hydrocarbon unit extraction expenses increased by 1.2%. Outside Russia, our hydrocarbon extraction expenses increased by 9.6% 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 16.8% due to higher share of gas in the production volumes as gas has lower unit extraction expenses compared to crude oil.

Own refining expenses

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
Refining expenses at the Group refineries.....	39,825	32,171	23.8	129,093	92,613	39.4
in Russia	14,836	13,383	10.9	52,751	42,614	23.8
outside Russia.....	24,989	18,788	33.0	76,342	49,999	52.7
	(rubles per tonne)					
Unit refining expenses at the Group refineries	2,573	1,860	38.4	2,050	1,580	29.8
in Russia	1,359	1,188	14.4	1,238	1,062	16.5
outside Russia.....	5,483	3,116	76.0	3,753	2,703	38.8

Compared to the third quarter of 2021, refining expenses at the Group refineries increased by 23.8%. Our refining expenses in Russia increased by 10.9% due to an increase in maintenance and fuel costs. Outside Russia, refining expenses increased by 33.0%, despite lower throughput volumes, as a result of an increase in fuel and energy costs, as well as an increase in expenses related to scheduled maintenance.

Compared to the full year 2020, expenses at our refineries increased by 39.4%. In Russia, refining expenses increased by 23.8%, mainly as a result of an increase in throughput volumes and corresponding increase in consumption of purchased additives to substitute lower own production, as well as an increase in fuel, energy and other production costs. Outside Russia, expenses at our refineries increased by 52.7% mainly due to an increase in fuel and energy costs, maintenance expenses, the ruble depreciation to euro, and an increase in throughput.

PJSC LUKOIL**Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020***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 decreased by 10.8% compared to the third quarter of 2021 and by 2.3% compared to the full year 2020 largely as a result of changes in feedstock supply structure. Quarterly dynamics were also affected by a decrease in refinery throughput volumes.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Own feedstock transportation to our domestic refineries.....	10,912	11,569	(5.7)	42,858	41,179	4.1
Own feedstock transportation from Russia to our international refineries.....	372	587	(36.6)	2,157	5,175	(58.3)
Other feedstock transportation costs outside Russia..	1,180	1,815	(35.0)	5,498	5,339	3.0
Feedstock transportation to refineries.....	12,464	13,971	(10.8)	50,513	51,693	(2.3)

Power generation and distribution expenses

Power generation and distribution expenses increased by 16.7% compared to the third quarter of 2021 due to seasonality, and by 6.3% compared to the full year 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 fourth quarter and the full year 2021, our petrochemical expenses increased by 19.5%, compared to the previous quarter, and by 30.3% compared to the full year 2020 as a result of higher costs of purchased raw materials and maintenance expenses.

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 third quarter of 2021 and the full year 2020, our other operating expenses increased by 2.6% and by 41.7%, respectively. Quarter-on-quarter increase was largely a result of higher volumes of transportation services provided, that was partially offset by lower cost of non-petrol goods sold via our retail network. The increase to the full year 2020 was mainly due to higher cost of non-petrol goods sold via our retail network, as well as higher operating costs 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.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Cost of purchased crude oil in Russia	12,910	11,460	12.7	43,399	13,788	>100
Cost of purchased crude oil outside Russia	808,709	877,074	(7.8)	2,790,192	1,461,688	90.9
Compensation crude oil related to West Qurna-2 project.....	11,422	20,314	(43.8)	69,237	45,428	52.4
Cost of purchased crude oil	833,041	908,848	(8.3)	2,902,828	1,520,904	90.9
Cost of purchased refined products in Russia.....	13,824	14,205	(2.7)	49,246	31,043	58.6
Cost of purchased refined products outside Russia ...	716,583	605,444	18.4	2,321,093	1,420,226	63.4
Cost of purchased refined products	730,407	619,649	17.9	2,370,339	1,451,269	63.3
Other purchases	36,335	37,785	(3.8)	132,810	64,139	>100
Net loss/(gain) from hedging of trading operations...	9,950	21,238	(53.2)	87,928	(79,614)	-
Change in crude oil and petroleum products inventory	57,413	(13,350)	-	(9,081)	44,218	-
Total cost of purchased crude oil, gas and products.....	1,667,146	1,574,170	5.9	5,484,824	3,000,916	82.8

In the fourth quarter and the full year 2021, cost of purchased crude oil, gas and products increased by 5.9% and by 82.8%, respectively.

An increase in refined products purchases compared to the previous quarter was mostly due to higher prices and trading volumes. A decrease in crude oil purchases was largely a result of lower trading volumes.

Compared to the full year 2020, cost of purchased crude oil and refined products increased mostly due to higher prices. An increase in other purchases compared to the full year 2020 was mostly related to a 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

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Crude oil transportation expenses.....	27,254	21,147	28.9	93,287	107,147	(12.9)
in Russia	15,745	12,640	24.6	52,433	46,110	13.7
outside Russia	11,509	8,507	35.3	40,854	61,037	(33.1)
Refined products transportation expenses	42,552	41,054	3.6	167,388	169,526	(1.3)
in Russia	22,631	22,205	1.9	85,364	84,723	0.8
outside Russia	19,921	18,849	5.7	82,024	84,803	(3.3)
Other transportation expenses	7,293	8,705	(16.2)	30,460	16,226	87.7
in Russia	1,019	1,110	(8.2)	4,115	3,269	25.9
outside Russia	6,274	7,595	(17.4)	26,345	12,957	>100
Total transportation expenses	77,099	70,906	8.7	291,135	292,899	(0.6)

Compared to the third quarter of 2021, our expenses for transportation of crude oil and refined products increased by 28.9% and by 3.6%, respectively. In Russia, our expenses for transportation of crude oil and refined products increased mainly as a result of higher export sales volumes beyond Custom Union. Outside Russia, an increase in crude oil transportation expenses was due to an increase in freight rates, despite a decrease in sales volumes. An increase in refined products transportation expenses was in line with dynamics of freight rates and sales volumes.

Compared to the full year 2020, our expenses for transportation of crude oil and refined products decreased by 12.9% and 1.3%, respectively. In Russia, our expenses for transportation of crude oil increased as a result of tariffs indexation, an increase in domestic sale volumes and changes in export routes from Russia that was partly offset by inventory effect. Our expenses for transportation of refined products in Russia did not change significantly, despite tariffs indexation and an increase in domestic sales volumes, as a result of change in sales structure and inventory effect. Outside Russia, our expenses for transportation of crude oil and refined products decreased mainly as a result of a decrease in freight rates, despite an increase in sales volumes and the ruble depreciation.

An increase in other transportation expenses compared to 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.

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Payroll costs included in selling, general and administrative expenses.....	19,901	19,689	1.1	80,268	75,257	6.7
Other selling, general and administrative expenses ...	29,809	22,016	35.4	94,465	86,593	9.1
Share-based compensation	7,841	7,841	-	31,366	31,366	-
Expenses on allowance for expected credit losses.....	1,772	5,920	(70.1)	9,091	5,811	56.4
Total selling, general and administrative expenses.....	59,323	55,466	7.0	215,190	199,027	8.1

Our selling, general and administrative expenses increased by 7.0% compared to the third quarter of 2021 mainly as a result of an increase in other expenses that was partially offset by a decrease in expenses on allowance for expected credit losses.

Compared to the full year 2020, our selling, general and administrative expenses increased by 8.1% mainly as a result of an increase in other expenses and payroll costs due to salary indexation, as well as a result of an increase in expenses on allowance for expected credit losses and the ruble depreciation.

Depreciation, depletion and amortisation

Compared to the third quarter of 2021, our depreciation, depletion and amortisation expenses decreased by 8.9%, mainly due to a positive effect of an increase in proved developed hydrocarbon reserves at Group's certain fields at the end of 2021 and consequent recalculation of depletion of respective fixed assets for the full year, despite an increase in crude oil production in Russia and cost compensation related to the West Qurna-2 project. Compared to the full year 2020, our depreciation, depletion and amortisation expenses increased by 4.9%, mainly as a result of higher cost compensation related to the West Qurna-2 project, as well as an increase in gas production volumes in Uzbekistan.

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 and joint ventures 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.

Compared to the third quarter of 2021 and the full year 2020, our share in income of associates and joint ventures increased two- and three-fold, respectively, mainly due to an increase in profits of our upstream projects in Kazakhstan and Russia.

Taxes other than income taxes

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
(millions of rubles)						
In Russia						
Mineral extraction taxes.....	331,756	291,773	13.7	1,088,928	495,877	>100
Tax on additional income	43,716	41,899	4.3	149,504	6,645	>100
Statutory insurance contributions and social taxes...	6,813	7,728	(11.8)	29,837	28,437	4.9
Property tax	6,341	6,606	(4.0)	25,931	24,800	4.6
Other taxes.....	721	479	50.5	2,354	2,112	11.5
Total in Russia	389,347	348,485	11.7	1,296,554	557,871	>100
International						
Mineral extraction taxes.....	6	7	(14.3)	26	23	13.0
Statutory insurance contributions and social taxes...	1,805	1,585	13.9	7,472	6,626	12.8
Property tax	317	285	11.2	1,103	1,005	9.8
Other taxes.....	851	1,033	(17.6)	3,727	3,553	4.9
Total internationally	2,979	2,910	2.4	12,328	11,207	10.0
Total taxes other than income taxes.....	392,326	351,395	11.6	1,308,882	569,078	>100

Our taxes other than income taxes increased by 11.6% compared to the third 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 10.3% due to higher crude oil prices, as well as an increase in crude oil extraction volumes and an increase in mineral extraction tax rate for license areas with TAI regime from September 2021 which was partially compensated by a gain on extraction tax recalculation based on revised tax declarations for 2018–2020. TAI expenses increased as a result of higher crude oil prices and crude oil extraction volumes at licence areas subject to TAI.

Compared to the full year 2020, our taxes other than income taxes increased by 130.0% mainly as a result of an increase in mineral extraction tax expense on the back of an increase in the tax rate by 121.0% 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 and an increase in crude oil extraction volumes. This was partially compensated by inventory effect and time lag effect. TAI expenses increased due to transfer of licence 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).

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
(millions of rubles)						
Decrease in extraction taxes from application of reduced rates for crude oil production	12,114	11,256	7.6	40,751	79,146	(48.5)
(thousands of tonnes)						
Volume of crude oil production subject to:						
reduced rates (ultra-high viscosity).....	-	-	-	-	2,427	(100.0)
reduced rates (tax holidays for specific regions).....	260	273	(4.8)	1,114	4,289	(74.0)
reduced rates (low permeability deposits).....	558	548	1.8	2,136	1,628	31.2
reduced rates (Tyumen deposits)	140	136	2.9	541	736	(26.5)
reduced rates (depleted fields)	-	-	-	-	18,456	(100.0)
reduced rates (other)	832	789	5.4	3,034	2,216	36.9
Total volume of production subject to reduced rates	1,790	1,746	2.5	6,825	29,752	(77.1)

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Also, a special tax regime is applied for crude oil production at certain Group's offshore fields and deposits. In the fourth quarter and the full year 2021, volumes of production subject to such regimes amounted to 1,497 thousand tonnes and 6,303 thousand tonnes, respectively (compared to 1,610 thousand tonnes in the third quarter of 2021 and 6,389 thousand tonnes in the full year 2020).

The table below summarises our production from licence areas subject to TAI in the respective periods.

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
Mineral extraction tax for crude oil and gas condensate on licence areas under TAI	65,609	51,684	26.9	210,784	18,521	>100
	(thousands of tonnes)					
Group 1	506	540	(6.3)	2,101	2,071	1.4
Group 3	4,992	4,752	5.1	18,741	3,030	>100
Group 4	46	47	(2.1)	152	95	60.0
Total volume of crude oil and gas condensate production at licence areas subject to TAI	5,544	5,339	3.8	20,994	5,196	>100

Excise and export tariffs

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
In Russia						
Excise tax on refined products	46,531	47,425	(1.9)	166,658	132,303	26.0
Excise tax on oil feedstock (excluding damper)	(38,655)	(33,352)	15.9	(124,173)	(37,881)	>100
Damper	(59,565)	(49,203)	21.1	(148,477)	73,086	-
Crude oil export tariffs	29,272	21,755	34.6	85,615	70,885	20.8
Refined products export tariffs	11,486	9,814	17.0	37,775	26,460	42.8
Total in Russia	(10,931)	(3,561)	>100	17,398	264,853	(93.4)
International						
Excise tax and sales taxes on refined products	43,933	55,389	(20.7)	196,450	179,179	9.6
Crude oil export tariffs	20	13	53.8	66	48	37.5
Refined products export and import tariffs, net	173	301	(42.5)	519	220	>100
Total internationally	44,126	55,703	(20.8)	197,035	179,447	9.8
Total excise and export tariffs	33,195	52,142	(36.3)	214,433	444,300	(51.7)

Compared to the third quarter of 2021, crude oil export tariffs increased mainly due to higher crude oil export volumes beyond Customs Union and higher export duty rates as a result of increased crude oil prices, which was partially compensated by higher positive export duty lag effect and inventory effect. Refined products export tariffs increased also as result of higher export duty rates for gas products.

In the fourth quarter of 2021, excise tax on refined products in Russia and internationally decreased compared to the previous quarter mainly due to lower sales volumes.

Compared to the full year 2020, crude oil and refined products export tariffs increased due to higher export duty rates as a result of an increase in crude oil prices, which was partially compensated by inventory and export duty lag effects, a decrease in crude oil export volumes beyond Customs Union, as well as the effect of the ongoing tax manoeuvre. Refined products export tariffs increased also due to an increase in the share of export of heavy refined products with a higher export duty rate.

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

Proceeds from excise tax on feedstock, excluding damper, increased by 15.9% compared to the third quarter of 2021 as a result of higher crude oil prices. Compared to the full year 2020, the excise tax on feedstock increased more than three-fold as a result of excise tax rates increase due to ongoing tax manoeuvre, higher crude oil prices, the ruble depreciation and also as a result of higher refinery throughput volumes. Excise tax on feedstock in 2021 was increased by the investment factor in relation to Nizhny Novgorod refinery and Perm refinery.

In 2021, damper was positive as export netbacks for gasoline and diesel fuel stayed above respective fixed benchmarks. In the fourth quarter of 2021, damper increased compared to the previous quarter levels in spite of lower sales volumes of motor gasoline on the domestic market due to ongoing increase in export netbacks for gasoline and diesel fuel.

Foreign exchange gain (loss)

Foreign exchange gains or losses are mostly related to revaluation of US dollar and euro net monetary position of the Group entities that largely consists of accounts receivables of our international subsidiaries and loans, mostly intra-group, given or received in currencies other than the entities' functional currencies ("other currencies").

During 2021, the Group's net monetary position in other currencies was varying from a net liability at the beginning of the year to a net asset at the year-end that, together with rather stable exchange rate, resulted in relatively insignificant quarterly currency exchange gains and losses during the year, totaling a gain of 2.7 billion RUB for the full year 2021. A sharp ruble depreciation during 2020 resulted in a foreign exchange loss in the amount of 26 billion RUB in the full year 2020.

Other expenses

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 fourth quarter of 2021, the Group recognised an impairment loss in relation to property, plant and equipment and goodwill in the total amount of 36.5 billion RUB, of which 27.9 billion RUB related to two international refineries and resulted from a decline in the forecasted refining margins that followed the tightening of the European Union decarbonisation policy. A loss of 6.0 billion RUB related to refining, marketing and distribution assets in Russia, a loss of 1.0 billion RUB related to exploration and production assets in Russia and a loss of 1.6 billion related to other assets in Russia. We also recognised an impairment loss of intangible assets in the total amount 0.2 billion RUB. At the same time, as a result of an improvement of certain economic parameters, the Group recognised an impairment reversal for its exploration and production assets in Russia in the amount of 10.0 billion RUB, for its international exploration and production assets in the amount of 1.3 billion RUB, and for its refining, marketing and distribution assets in Russia in the amount of 15.4 billion RUB.

In the fourth quarter of 2020, the Group recognised an impairment loss for its exploration and production assets in Russia in the amount of 3.0 billion RUB and abroad in the amount of 0.1 billion RUB. The Group also recognised an impairment loss for its refining, marketing and distribution assets in Russia and abroad in the amount of 7.7 billion RUB and 21.6 billion RUB, respectively.

In the third quarter of 2020, the Group recognised a reversal of impairment of receivables related to our project in Egypt in the amount of 5.3 billion RUB.

In the second quarter of 2020, the Group recognised an impairment loss for its international exploration and production assets in the amount of 38 billion RUB, 36 billion RUB of which related to the projects in Uzbekistan, and a reversal of impairment of receivables related to our project in Egypt in the amount of 2 billion RUB.

In the first quarter of 2020, the Group recognised an impairment loss for its exploration and production assets in Russia and abroad in the amount of 8 billion RUB, as well as for its refining, marketing and distribution fixed assets and other non-current 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 increased by 13 billion RUB, or by 26.0%, compared to the third quarter of 2021, and by 109 billion RUB, or by 133.0%, compared to the full year 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 utilised, and changes in tax rates of certain regional income tax incentives.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

Non-GAAP items reconciliation**EBITDA reconciliation**

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

	Q4 2021	Q3 2021	12 months of 2021 2020	
	(millions of rubles)			
Profit for the period attributable to PJSC LUKOIL shareholders	233,790	192,475	773,442	15,175
Add back				
Profit for the period attributable to non-controlling interests	241	644	2,071	1,458
Income tax expense	61,796	49,049	191,451	82,154
Finance income	(7,013)	(4,641)	(16,519)	(13,051)
Finance costs	9,682	9,246	37,568	44,122
Foreign exchange (gain) loss	(5,812)	661	(2,731)	26,110
Equity share in income of associates and joint ventures	(10,146)	(6,722)	(29,980)	(11,474)
Other expenses	14,640	7,061	23,643	137,160
Depreciation, depletion and amortisation	97,835	107,403	425,466	405,440
EBITDA	395,013	355,176	1,404,411	687,094
EBITDA by operating segments				
Exploration and production segment				
Revenues and other operating income	834,988	744,799	2,855,876	1,542,239
Operating expenses	(73,301)	(70,922)	(279,074)	(262,343)
Cost of purchased crude oil, gas and products	(13,101)	(33,381)	(97,947)	(52,784)
Transportation expenses	(23,552)	(21,620)	(84,717)	(63,364)
Selling, general and administrative expenses	(11,781)	(9,137)	(41,611)	(48,670)
Taxes other than income taxes	(384,644)	(342,991)	(1,276,133)	(540,587)
Excise and export tariffs	(28,071)	(20,536)	(83,061)	(68,309)
Exploration expenses	(4,016)	(1,176)	(7,078)	(6,101)
EBITDA of Exploration and production segment	296,522	245,036	986,255	500,081
Refining, marketing and distribution segment				
Revenues and other operating income	2,702,891	2,541,730	9,235,532	5,525,980
Operating expenses	(80,232)	(70,797)	(276,170)	(195,558)
Cost of purchased crude oil, gas and products	(2,398,556)	(2,214,631)	(7,941,507)	(4,302,803)
Transportation expenses	(59,446)	(54,523)	(232,152)	(269,656)
Selling, general and administrative expenses	(37,119)	(36,403)	(135,140)	(120,607)
Taxes other than income taxes	(6,454)	(7,098)	(27,672)	(25,908)
Excise and export tariffs	(6,704)	(32,521)	(135,597)	(368,126)
EBITDA of Refining, marketing and distribution segment	114,380	125,757	487,294	243,322
EBITDA of Corporate and other segment	(12,167)	(12,709)	(50,208)	(39,378)
Elimination	(3,722)	(2,908)	(18,930)	(16,931)
EBITDA	395,013	355,176	1,404,411	687,094

Free cash flow reconciliation

	Q4 2021	Q3 2021	12 months of 2021 2020	
	(millions of rubles)			
Net cash provided by operating activities	317,355	321,998	1,126,614	776,574
Capital expenditures	(127,281)	(94,328)	(433,042)	(495,443)
Free cash flow	190,074	227,670	693,572	281,131

Liquidity and capital resources

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
Net cash provided by operating activities.....	317,355	321,998	(1.4)	1,126,614	776,574	45.1
including (increase) decrease in working capital ..	(54,162)	(5,852)	>100	(183,896)	91,748	-
Net cash used in investing activities.....	(133,195)	(97,286)	36.9	(438,055)	(492,769)	(11.1)
Net cash used in financing activities	(145,227)	(152,131)	(4.5)	(354,377)	(514,005)	(31.1)

Changes in operating assets and liabilities:

	Q4 2021	Q3 2021	Change, %	12 months of 2021	12 months of 2020	Change, %
	(millions of rubles)					
(Increase) decrease in accounts receivable	(86,161)	(48,982)	75.9	(363,337)	128,139	-
Decrease (increase) in inventory	51,501	(21,978)	-	(44,657)	37,868	-
Increase (decrease) in accounts payable	26,086	20,336	28.3	185,047	(69,305)	-
Increase in net other taxes	(122)	18,262	-	83,061	10,200	>100
Change in other current assets and liabilities.....	(45,466)	26,510	-	(44,010)	(15,154)	-
Total (increase) decrease in working capital.....	(54,162)	(5,852)	>100	(183,896)	91,748	-

Operating activities

Our primary source of cash flow are funds generated from our operations. Compared to the third quarter of 2021 and the full year 2020, our cash generated from operations decreased by 1.4% and increased by 45.1%, respectively. The decrease compared to the previous quarter was mainly due to the dynamics of working capital, while the increase compared to 2020 was mainly a result of improved profitability of our core operations. This was negatively affected by the working capital dynamics.

Investing activities

Compared to the third quarter of 2021 and the full year 2020, our cash used in investing activities increased by 36.9% and decreased by 11.1%, respectively, that was largely defined by the dynamics in capital expenditures.

Our capital expenditures increased by 34.9% and decreased by 12.6% compared to the third quarter of 2021 and the full year 2020, respectively.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

	Q4 2021	Q3 2021	Change, %	12 months of		Change, %
				2021	2020	
	(millions of rubles)					
Capital expenditures						
Exploration and production						
West Siberia.....	35,078	33,553	4.5	129,818	150,167	(13.6)
Timan-Pechora.....	10,063	9,439	6.6	48,310	81,967	(41.1)
Ural region.....	7,654	7,600	0.7	30,788	39,733	(22.5)
Volga region.....	8,655	8,446	2.5	34,618	61,739	(43.9)
Other in Russia.....	6,466	2,109	>100	12,103	9,686	25.0
Total in Russia.....	67,916	61,147	11.1	255,637	343,292	(25.5)
Iraq.....	12,694	3,844	>100	36,430	26,379	38.1
West Qurna-2 project.....	12,572	3,667	>100	35,720	24,235	47.4
Block-10.....	122	177	(31.1)	710	2,144	(66.9)
Other outside Russia.....	10,907	5,796	88.2	28,167	29,882	(5.7)
Total outside Russia.....	23,601	9,640	>100	64,597	56,261	14.8
Total exploration and production.....	91,517	70,787	29.3	320,234	399,553	(19.9)
Refining, marketing and distribution						
Russia.....	28,236	16,796	68.1	77,987	72,486	7.6
refining.....	15,505	10,296	50.6	48,535	51,566	(5.9)
retail.....	2,681	860	>100	5,912	4,528	30.6
other.....	10,050	5,640	78.2	23,540	16,392	43.6
International.....	6,635	5,787	14.7	31,665	20,558	54.0
refining.....	4,710	4,441	6.1	26,320	16,506	59.5
retail.....	1,604	791	>100	4,314	3,479	24.0
other.....	321	555	(42.2)	1,031	573	79.9
Total refining, marketing and distribution.....	34,871	22,583	54.4	109,652	93,044	17.8
Corporate and other.....	893	958	(6.8)	3,156	2,846	10.9
Total capital expenditures.....	127,281	94,328	34.9	433,042	495,443	(12.6)

Compared to the third quarter of 2021, an increase in our upstream capital expenditures in Russia was mainly due to development of our fields in West Siberia and the Baltic Sea, as well as uneven payment schedule. An increase in our international upstream capital expenditures was due to further development of West Qurna-2 project. Quarter-on-quarter dynamics of capital expenditures of our refining and marketing segment were mainly defined by planned upgrade of Russian refineries, as well as uneven payment schedule.

Year-on-year decrease in exploration and production capital expenditures in Russia was mainly driven by external limitations on crude oil production due to the OPEC+ agreement. Year-on-year dynamics of capital expenditures of our refining and marketing segment were 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. In Russia capital expenditures of our refining and marketing segment was primarily defined by construction schedule of delayed coker unit at our refinery in Nizhny Novgorod. An increase in other downstream capital expenditures in Russia was due to modernisation of our power generation assets.

Financing activities

In the fourth quarter and the full year 2021, net movements of short-term and long-term debt generated an inflow of 91 billion RUB and 52 billion RUB, compared to an outflow of 1 billion RUB in the third quarter of 2021 and an outflow of 62 billion RUB in the full year 2020.

On 26 October 2021, a Group company issued two tranches of non-convertible bonds totalling \$2.3 billion. The first tranche of \$1.15 billion was placed with a maturity of 5.5 years and a coupon yield of 2.80% per annum, the second tranche of \$1.15 billion was placed with a maturity of 10 years and a coupon yield of 3.60% per annum. All bonds were placed at face value and have a half year coupon period.

In November 2020, a Group company repaid the bonds issued in 2010 in the amount of \$1 billion.

On 6 May 2020, a Group company issued non-convertible bonds totalling \$1.5 billion. The bonds were placed with a maturity of 10 years and a coupon yield of 3.875% per annum. All bonds were placed at face value and have a half year coupon period.

Debt maturity

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

	Total	2022	2023	2024	2025	2026	After
	(millions of rubles)						
Short term debt	8,892	8,892	-	-	-	-	-
Long-term bank loans and borrowings .	58,728	4,887	4,809	29,528	4,822	5,438	9,244
6.656% Non-convertible US dollar bonds, maturing 2022	37,131	37,131	-	-	-	-	-
4.563% Non-convertible US dollar bonds, maturing 2023	111,393	-	111,393	-	-	-	-
4.750% Non-convertible US dollar bonds, maturing 2026	74,186	-	-	-	-	74,186	-
2.80% Non-convertible US dollar bonds, maturing 2027	85,299	-	-	-	-	-	85,299
3.875% Non-convertible US dollar bonds, maturing 2030	111,181	-	-	-	-	-	111,181
3.60% Non-convertible US dollar bonds, maturing 2031	85,297	-	-	-	-	-	85,297
Lease obligation ¹	185,843	29,341	23,374	21,617	18,921	16,473	76,117
Total	757,950	80,251	139,576	51,145	23,743	96,097	367,138

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

Litigation and claims

The Group is involved in various claims and legal proceedings arising in the normal course of business. While these claims may seek substantial damages against the Group and are subject to uncertainty inherent in any litigation, management does not believe that the ultimate resolution of such matters will have a material adverse impact on the Group's operating results or financial condition. See Note 29 "Commitments and contingencies" to our consolidated financial statements for detailed information on claims and legal proceedings involving the Group.

Critical accounting policies

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

Other information

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.

PJSC LUKOIL

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 31 December and 30 September 2021 and for the years 2021 and 2020

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

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

In recent days, due to the events in Ukraine, the US has imposed additional sanctions on the Russian government, as well as Russian entities and individuals. This includes full blocking sanctions on certain Russian state-owned financial institutions. There have been restrictions put in place on the opening and maintenance of, or transacting with, certain correspondent and payable-through accounts at foreign financial institutions. Additionally, there have been new debt and equity restrictions imposed on major state-owned and private entities and Russian sovereign debt. Similarly, the UK and EU have announced additional sanctions in recent days. The UK has imposed blocking and asset freezing sanctions on certain Russian banks, entities, and individuals operating in financial and defense sectors. The EU has designated certain Russian government officials, entities (including Russian banks), and other individuals, and imposed restrictions on capital markets, loans, and credit that target Russian sovereign debt. Moreover, there is a risk that further sanctions may be introduced. This may have significant adverse impact on Russia's economy. These events have led to depreciation of the Russian ruble and increased volatility and uncertainty in the Russian economy.

At the same time, it is a stated goal to minimise the impact of these sanctions on energy companies and consumers. The U.S. has specifically authorised certain transactions related to the energy sector, highlighting the need for continued, legitimate energy-related trade.

Management will continue monitoring the situation closely to ensure prompt reaction to the rapidly changing environment.

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

Forward-looking statements

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

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

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

These factors include:

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

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