PAO NOVATEK

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

FOR THE YEAR ENDED 31 DECEMBER 2021

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GENERAL PROVISIONS

You should read the following discussion and analysis of our financial condition and results of operations as of 31 December 2021 and for the year then ended in conjunction with our audited consolidated financial statements as of and for the year ended 31 December 2021. The consolidated financial statements and the related notes thereto have been prepared in accordance with International Financial Reporting Standards (IFRS).

The financial and operating information contained in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" comprises information of PAO NOVATEK, its consolidated subsidiaries and joint ventures (hereinafter jointly referred to as "we" or the "Group").

OVERVIEW

We are Russia's second largest natural gas producer and one of the world leaders in terms of proved natural gas reserves under the Petroleum Resources Management System ("PRMS") and the Securities and Exchange Commission ("SEC") reserve reporting methodologies.

Our exploration and development, production and processing of natural gas, gas condensate and crude oil are conducted mainly within the Russian Federation.

The natural gas assets of our subsidiaries and joint ventures include projects where we sell natural gas through the Unified Gas Supply System in the Russian domestic market and liquefied natural gas ("LNG") delivered mainly to international markets.

The Group's LNG producing projects are Yamal LNG, Cryogas-Vysotsk and an LNG plant in the Chelyabinsk region.

The Group through its joint venture OAO Yamal LNG undertakes a project on natural gas production, liquefaction and shipping based on the feedstock resources of the South-Tambeyskoye field located in YNAO (the "Yamal LNG project"). The total annual nameplate capacity of the liquefaction plant is 17.4 million tons of LNG, including the first three LNG trains with an annual capacity of 5.5 million tons for each and the fourth train, launched in May 2021, with an annual capacity of 0.9 million tons of LNG. Yamal LNG is one of the largest suppliers of LNG to international markets and one of the lowest in terms of greenhouse gas emissions per ton of produced LNG globally. We purchase a part of the LNG volumes produced by Yamal LNG and sell these volumes to international markets via tankers under long-term contracts and on a spot basis.

Through its joint venture OOO Cryogas-Vysotsk, the Group undertakes a project on a medium-scale LNG production at the plant located at the Russian port of Vysotsk on the Baltic Sea. We purchase a part of the LNG volumes produced at the project and sell these volumes mainly to international markets via tankers and trucks, as well as through refueling complexes, and also sell LNG used for marine bunkering.

We also produce LNG at our small-scale domestic plant in the Chelyabinsk region. The LNG is sold through the Group's refueling complexes in the Chelyabinsk region and neighboring areas, as well as directly from the LNG plant without incurring additional transportation expenses.

In addition, through our joint venture OOO Arctic LNG 2, we are presently undertaking a project on LNG plant construction on the Gydan peninsula that will utilize the hydrocarbon resources of the Salmanovskoye (Utrenneye) field (the "Arctic LNG 2 project"). The project includes the construction of an LNG plant built on gravity-based platforms with an annual capacity of 19.8 million tons of LNG per annum (three processing trains of 6.6 million tons of LNG each) and up to 1.6 million tons of stable gas condensate per annum. The launch of the first train is expected to be in 2023, the second train – in 2024 and the launch of the third train is planned in 2025.

We deliver unstable gas condensate produced by our subsidiaries and our joint ventures Arcticgas, Nortgas and Terneftegas to our Purovsky Gas Condensate Plant (the "Purovsky Plant") for processing into stable gas condensate and natural gas liquids ("NGL"). The Purovsky Plant allows us to process more than 13 million tons of unstable gas condensate per annum.

Most of our stable gas condensate is sent for further processing to our Gas Condensate Fractionation and Transshipment Complex located at the port of Ust-Luga on the Baltic Sea (the "Ust-Luga Complex"). The Ust-Luga Complex processes our stable gas condensate into light and heavy naphtha, jet fuel, gasoil and fuel oil, nearly all of which we sell to the international markets allowing us to increase the added value of our liquid hydrocarbons sales. The Ust-Luga Complex allows us to process about seven million tons of stable gas condensate annually.

The excess volumes of stable gas condensate received from the processing at the Purovsky Plant over volumes sent for further processing to the Ust-Luga Complex are sold on both the domestic and international markets (from the Purovsky Plant without incurring additional transportation expenses, by rail or from the port of Ust-Luga on the Baltic Sea by tankers).

A significant part of our NGL volumes produced at the Purovsky Plant is dispatched via pipeline for further processing at the petrochemical complex of PAO SIBUR Holding group in Tobolsk (the "Tobolsk Refining Facilities"). The remaining volumes are sold directly from the Purovsky Plant without incurring additional transportation expenses. After processing at the Tobolsk Refining Facilities, we receive liquefied petroleum gas ("LPG") with higher added value, the majority of which are transported by rail to our end-customers in the domestic and international markets with the remaining portion sold directly from the Tobolsk Refining Facilities without incurring additional transportation expenses. NGL sold directly from the Purovsky Plant and sales of LPG received from the processing at the Tobolsk Refining Facilities are presented within LPG sales in this report.

We deliver our crude oil to both domestic and international markets.

RECENT DEVELOPMENTS

Arctic LNG 2 project

The Group, jointly with international partners TotalEnergies SE, China National Petroleum Corporation ("CNPC"), CNOOC Limited and Japan Arctic LNG B.V. (a joint venture of Mitsui & Co., Ltd and Japan Oil, Gas and Metals National Corporation ("JOGMEC")), through its joint venture OOO Arctic LNG 2 is implementing an integrated project for natural gas production, liquefaction and shipping based on the hydrocarbon resources of the Salmanovskoye (Utrenneye) field on the Gydan peninsula (the "Arctic LNG 2 project").

The Arctic LNG 2 plant is built on gravity-based structures ("GBS") and will consist of three processing trains with an annual capacity of 6.6 million tons of LNG each, or an aggregated capacity of 19.8 million tons of LNG per annum, and up to 1.6 million tons of stable gas condensate. The final investment decision (FID) on the Arctic LNG 2 project was made in September 2019. The first train is expected to be launched in 2023, the second train – in 2024 and the launch of the third train is planned in 2025.

Gravity-based structures and other major units for the plant are built at our own LNG construction center in the Murmansk region (the "Murmansk yard"), which will also be used for the Group's subsequent LNG projects. At present, the casting of the first GBS for the first train of the Arctic LNG 2 plant is completed at the Murmansk yard, and the topsides installation on it is in process. In addition, the casting of the second GBS for the second train is underway, the topsides for this platform are under construction.

The use of gravity-based structures technology for the plant construction, as well as localizing fabrication in the Russian Federation will contribute to lower LNG liquefaction costs compared to other LNG projects and allows to minimize the impact on the environment.

The Salmanovskoye (Utrenneye) field's development is ongoing. By the end of 2021, 56 production wells were drilled, which is sufficient to launch the first LNG train. In December 2021, commissioning works at the gas turbine power plant, the main power generation facility for the Arctic LNG 2 project, have begun. At present, the construction of the water treatment facility, the sewage pumping stations site and the landfill has been completed. Regular flights to the Utrenniy airport have begun. The berthing facilities for the GBS installation have been put into operation. Construction of the first gas treatment plant necessary for the launch and ongoing operation of the first LNG train is underway.

All volumes of LNG produced by the Arctic LNG 2 project will be sold to the project's participants under long-term agreements in proportion to their equity interest. At present, the agreements with all participants have been signed. The Group, in turn, continues its consistently effort to contract its share of volumes through active negotiations and signing long-term and medium-term agreements for LNG deliveries with major LNG industry players mainly from the Asian-Pacific region countries.

To ensure LNG deliveries from the Arctic LNG 2 project, long-term agreements on time chartering of 21 Arc7 ice-class tankers were signed: 15 tankers will be built by the Zvezda Shipbuilding Complex in Russia and 6 tankers – by Daewoo Shipbuilding & Marine Engineering in South Korea.

In 2021, Arctic LNG 2 entered into credit facility agreements with international and Russian banks for external financing in the total amount of up to EUR 9.5 billion for the period until the end of 2035, marking an important step in the project implementation.

The launch of the fourth train of the LNG plant at Yamal LNG project

In the second quarter 2021, the Groups' joint venture OAO Yamal LNG launched the plant's fourth liquefaction train with a nameplate annual capacity of 0.9 million tons of LNG. The fourth LNG train was constructed using equipment almost entirely manufactured in Russia and based on a proprietary natural gas liquefaction technology developed by the Group's specialists utilizing our patented technology "Arctic Cascade". The launch of the fourth train increased the total nameplate capacity of the plant from 16.5 million tons to 17.4 million tons of LNG per annum.

Low-carbon projects

The Group is considering the construction of a gas chemical complex to produce "blue" ammonia, other low-carbon emitting products, and hydrogen near the Sabetta village. Currently, the Group is conducting pre-front-end engineering design works (Pre-FEED) with engineering companies and licensors possessing advance low-carbon technologies to select the most efficient technical solutions for the gas chemical complex and define the key project parameters.

At the end of 2021, we obtained the licenses for the Obskiy and Tadebyayakhinskiy license areas located in the Yamal and Gydan peninsulas in YNAO to make possible the capturing of carbon dioxide generated at our own production facilities and its long-term underground storage. In the beginning of 2022, we completed the first of three stages of international certification for these license areas, which confirmed that the geological formations within the license areas have the geological storage capacity of at least 600 million tons of carbon dioxide each. Having certified carbon dioxide geological storage sites will allow reducing the carbon footprint of the Group's existing and prospective projects and is an important element of the Group's strategy to decarbonize production clusters for LNG and low-carbon gas chemicals.

Sale of a 10% participation interest in OOO Arctic Transshipment

In July 2021, the Group sold a 10% participation interest in its subsidiary OOO Arctic Transshipment to TOTAL E&P Transshipment SAS, a member of the TotalEnergies SE group. Arctic Transshipment will be an operator of the two LNG transshipment complexes currently under construction in the Kamchatka and Murmansk regions. The terminals will ensure efficient LNG transportation from the Arctic LNG 2 and other Group's projects through arranging LNG transshipments from Arc7 ice-class tankers to conventional tankers.

Upon closing the transaction, the key project's financial and operational decisions are approved unanimously by all participants, implying joint control over the company. As a result, the Group started to treat Arctic Transshipment as a joint venture and to account for the investment retained under the equity method.

Increasing our resource base and production facilities

In November 2021, the Group launched the Kharbeyskoye field within the North-Russkiy cluster with the estimated annual production capacity of 3.6 billion cubic meters of natural gas and 0.6 million tons of gas condensate. The launch of the Kharbeyskoye field contributes significantly to the maintenance of hydrocarbons production levels in the area of the Unified Gas Supply System.

In 2021, the Group obtained rights for geological research works, exploration and production of hydrocarbons at three license areas located in the YNAO in close proximity to the Group's existing assets:

- In September 2021, we won auctions for the rights to use license areas, which include the Arkticheskoye and Neytinskoye fields. Combined hydrocarbon reserves of the two fields appraised under the Russian resource classification are estimated at 413 billion cubic meters (bcm) of natural gas and 28 million tons of liquids, or approximately 2.9 billion barrels of oil equivalent (boe). The license areas are located on the Yamal Peninsula in YNAO in close proximity to the Group's other license areas. The aggregate payment for the licenses amounted to RR 13.2 billion. The licenses for the rights to use license areas, which include the Arkticheskoye and Neytinskoye fields, were obtained in October 2021.

- In March 2021, the Group won an auction for the right to use the North-Gydanskiy license area. The license area has estimated hydrocarbon resources of 1,244 bcm of natural gas and 209 million tons of liquids, or approximately 9.8 billion boe, under the Russian resource classification. The North-Gydanskiy license area is located in the YNAO on the Gydan peninsula and partly in the shallow waters of the Gydan Bay of the Kara Sea and borders with the Group's other license areas: the Salmanovskiy (Utrenniy), Gydanskiy, Shtormovoy and the flank of the Ladertoyskiy license area. The payment for the license amounted to RR 775 million. The license for the right to use the North-Gydanskiy license area was obtained in June 2021.

The acquisition of these license area expands our resource base for implementing new LNG projects.

In July 2021, PAO NOVATEK and PAO Gazprom Neft closed a transaction to form a joint venture to develop the North-Vrangelevskiy license area. As part of the transaction, the Group purchased a 49% participation interest in OOO Gazpromneft-Sakhalin, which was a subsidiary of PAO Gazprom Neft. Gazpromneft-Sakhalin owns a license for geological research works, exploration and production of hydrocarbons at the North-Vrangelevskiy license area located in the eastern part of the East Siberian Sea and the western part of the Chukchi Sea. The creation of a new joint venture to develop the North-Vrangelevskiy license area expands our long-term resource base for implementation of new projects in the Arctic Zone of Russia.

BASIS OF PRESENTATION

Oil and gas production and reserves in the current report are calculated based on 100% of our subsidiaries production and reserves and our proportionate share in the production and reserves of our joint ventures including volumes of natural gas consumed in oil and gas producing and development activities. Meanwhile, production costs per barrel of oil equivalent are calculated based on production volumes net of the volume of consumed natural gas. Production and reserves of the South-Tambeyskoye field developed by the Group's joint venture OAO Yamal LNG are reported at 60% including an additional 9.9% interest not owned by the Group, since the Group assumes certain economic and operational risks related to this interest.

Our oil and gas revenues and average realized net prices are presented net of VAT, export duties, and fuel taxes, where applicable, and excise on stable gas condensate refined products sales on the domestic market and hydrocarbons sales in Poland. The Group also receives the reverse excise on raw oil based on volumes of stable gas condensate sent for processing to our Ust-Luga Complex and reports it as a deduction to our operating expenses in the line "Purchases of natural gas and liquid hydrocarbons" in our consolidated statement of income (see "Our tax burden and obligatory payments" below).

SELECTED DATA

millions of Russian roubles except as stated	Year ended 31 December: 2021	2020	Change %
Financial results			
Total revenues [(1)]	1,156,724	711,812	62.5%
Operating expenses	(875,159)	(552,062)	58.5%
Normalized EBITDA [(2),(3)]	748,337	392,008	90.9%
Normalized profit attributable to shareholders of PAO NOVATEK [(3)]	432,338	106,044	307.7%
Normalized profit attributable to shareholders of PAO NOVATEK [(3)], excluding the effect of foreign exchange gains (losses) [(4)]	421,304	169,020	149.3%
Normalized earnings per share [(3)] (in Russian roubles)	144.04	35.30	308.1%
Normalized earnings per share [(3)], excluding the effect of foreign exchange gains (losses) [(4)] (in Russian roubles)	140.36	56.26	149.5%
Net debt [(5)]	73,946	39,557	86.9%
Production volumes [(6)]			
Hydrocarbons production (million barrels of oil equivalent)	626.3	608.2	3.0%
Daily production (million barrels of oil equivalent per day)	1.72	1.66	3.3%
Sales volumes			
Natural gas (million cubic meters)	75,817	75,620	0.3%
Naphtha (thousand tons)	4,398	4,294	2.4%
Crude oil (thousand tons)	3,909	4,468	(12.5%)
Liquefied petroleum gas (thousand tons)	3,506	2,959	18.5%
Other stable gas condensate refined products (thousand tons)	2,387	2,479	(3.7%)
Stable gas condensate (thousand tons)	2,341	2,169	7.9%
Oil and gas SEC reserves [(6)]			
Total proved reserves (billion barrels of oil equivalent)	16.4	16.4	0.3%
Total natural gas proved reserves (trillion cubic meters)	2.26	2.24	0.8%
Total liquids proved reserves (million tons)	189	197	(4.1%)
Cash flow results			
Net cash provided by operating activities	419,466	171,896	144.0%
Cash used for capital expenditures [(7)]	191,251	204,577	(6.5%)
Free cash flow [(8)]	228,215	(32,681)	n/a

(1) Net of VAT, export duties, excise and fuel taxes, where applicable.
(2) EBITDA represents profit (loss) adjusted for the add-back of depreciation, depletion and amortization, net impairment expenses (reversals), finance income (expense), income tax expense, as well as income (loss) from changes in fair value of derivative financial instruments. EBITDA includes EBITDA from subsidiaries and our proportionate share in the EBITDA of our joint ventures.
(3) Excluding the effects from the disposal of interests in subsidiaries and joint ventures (recognition of a net gain on disposal and subsequent non-cash revaluation of contingent consideration).
(4) Excluding the effect of foreign exchange gains (losses) of subsidiaries and our proportionate share in foreign exchange gains (losses) of our joint ventures (see "Profit attributable to shareholders and earnings per share" below).
(5) Net debt represents our total debt net of cash, cash equivalents and bank deposits with original maturity more than three months.
(6) Oil and gas production and reserves are calculated based on 100% of production and reserves of our subsidiaries and our proportionate share in the production and reserves of our joint ventures including fuel gas. Production and reserves of the South-Tambeyskoye field of Yamal LNG are reported at 60% (see "Basis of presentation" above).
(7) Cash used for capital expenditures represents purchases of property, plant and equipment, materials for construction and capitalized interest paid per Consolidated Statement of Cash Flows net of payments for mineral licenses and acquisition of subsidiaries.
(8) Free cash flow represents the difference between Net cash provided by operating activities and Cash used for capital expenditures. For the analysis of factors that impacted our free cash flow, please refer to "Net cash provided by operating activities" and "Capital expenditures" below.

Reconciliation of normalized EBITDA is as follows:

millions of Russian roubles	Year ended 31 December: 2021	2020	Change %
Profit	**451,621**	**78,586**	**n/a**
Depreciation, depletion and amortization	56,599	39,238	44.2%
Impairment expenses (reversals), net	1,908	254	n/a
Loss (income) from changes in fair value of commodity derivative instruments	2,600	1,689	53.9%
Total finance expense (income)	10,119	(160,565)	n/a
Total income tax expense	49,583	51,010	(2.8%)
Share of loss (profit) of joint ventures, net of income tax	(232,277)	143,981	n/a
EBITDA from subsidiaries	**340,153**	**154,193**	**120.6%**
Net gain on disposal of interests in subsidiaries	(662)	(69)	n/a
Changes in fair value of contingent consideration reported within the "Other operating income (loss)"	-	47,823	n/a
Normalized EBITDA from subsidiaries	**339,491**	**201,947**	**68.1%**
Share in EBITDA of joint ventures	**408,846**	**190,061**	**115.1%**
including:			
OAO Yamal LNG	297,082	131,085	126.6%
AO Arcticgas	92,477	52,885	74.9%
others	19,287	6,091	216.6%
Normalized EBITDA	**748,337**	**392,008**	**90.9%**

SELECTED MACRO-ECONOMIC DATA

Exchange rate, RR for one foreign currency unit (1)	1Q 2021	1Q 2020	2Q 2021	2Q 2020	3Q 2021	3Q 2020	4Q 2021	4Q 2020	Year 2021	Year 2020	Change Y-o-Y, %
US dollar (USD)											
Average for the period	74.34	66.38	74.22	72.36	73.47	73.56	72.61	76.22	73.65	72.15	2.1%
At the beginning of the period	73.88	61.91	75.70	77.73	72.37	69.95	72.76	79.68	73.88	61.91	19.3%
At the end of the period	75.70	77.73	72.37	69.95	72.76	79.68	74.29	73.88	74.29	73.88	0.6%
Depreciation (appreciation) of RR to US dollar	2.5%	25.6%	(4.4%)	(10.0%)	0.5%	13.9%	2.1%	(7.3%)	0.6%	19.3%	n/a
Euro											
Average for the period	89.70	73.23	89.39	79.65	86.66	85.97	83.07	90.81	87.19	82.45	5.7%
At the beginning of the period	90.68	69.34	88.88	85.74	86.20	78.68	84.88	93.02	90.68	69.34	30.8%
At the end of the period	88.88	85.74	86.20	78.68	84.88	93.02	84.07	90.68	84.07	90.68	(7.3%)
Depreciation (appreciation) of RR to Euro	(2.0%)	23.7%	(3.0%)	(8.2%)	(1.5%)	18.2%	(1.0%)	(2.5%)	(7.3%)	30.8%	n/a

(1) Based on the data from the Central Bank of Russian Federation (CBR). The average rates for the period are calculated as the average of the daily exchange rates on each business day (rate is announced by the CBR) and on each non-business day (rate is equal to the exchange rate on the previous business day).

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Average for the period	1Q 2021	1Q 2020	2Q 2021	2Q 2020	3Q 2021	3Q 2020	4Q 2021	4Q 2020	Year 2021	Year 2020	Change Y-o-Y, %
Benchmark natural gas prices, USD per mmbtu (2)											
NBP (National Balancing Point)	6.9	3.2	9.1	1.6	16.4	2.7	30.5	5.4	15.8	3.2	393.8%
TTF (Title Transfer Facility)	6.6	3.1	9.0	1.7	16.7	2.7	31.4	5.1	16.0	3.2	400.0%
Benchmark crude oil prices (3)											
Brent, USD per barrel	61.1	50.1	69.0	29.6	73.5	42.9	79.8	44.2	70.9	41.8	69.6%
Urals, USD per barrel	59.6	48.0	66.8	31.6	70.6	43.0	77.8	44.5	68.8	41.9	64.2%
Urals, RR per barrel	4,431	3,186	4,958	2,287	5,187	3,163	5,649	3,392	5,067	3,023	67.6%
Benchmark crude oil prices excluding export duties (4)											
Urals, USD per barrel	53.6	37.8	59.0	28.5	61.8	37.0	68.1	38.6	60.7	35.6	70.5%
Urals, RR per barrel	3,985	2,509	4,379	2,062	4,540	2,722	4,945	2,942	4,471	2,569	74.0%
Benchmark oil products (5) **and liquefied petroleum gas** (6) **prices, USD per ton**											
Naphtha Japan	559	437	606	276	676	397	744	408	647	381	69.8%
Naphtha CIF NWE	544	411	596	240	667	376	731	393	636	357	78.2%
Jet fuel	512	484	577	242	627	336	719	374	610	360	69.4%
Gasoil	493	467	555	281	599	353	680	365	583	367	58.9%
Fuel oil	408	348	432	196	468	268	510	301	455	279	63.1%
Liquefied petroleum gas	502	322	456	240	642	362	721	388	582	331	75.8%
Export duties, USD per ton (7)											
Crude oil, stable gas condensate	44.0	74.2	57.1	22.4	64.6	44.1	70.5	43.2	59.1	46.0	28.5%
Naphtha	24.1	40.7	31.3	12.3	35.5	24.2	38.7	23.7	32.4	25.2	28.6%
Jet fuel, gasoil	13.2	22.2	17.1	6.7	19.3	13.2	21.1	12.9	17.7	13.7	29.2%
Fuel oil	44.0	74.2	57.1	22.4	64.6	44.1	70.5	43.2	59.1	46.0	28.5%
Liquefied petroleum gas	0.0	1.3	11.8	0.0	26.3	0.0	130.4	0.0	42.1	0.4	n/a

(2) Based on spot natural gas prices at natural gas hubs in the United Kingdom (NBP) and the Netherlands (TTF).

(3) Based on Brent (dtd) and Russian Urals CIF Rotterdam spot assessments prices.

(4) Export duties per barrel were calculated based on export duties per ton divided by the coefficient 7.3.

(5) Based on Naphtha C+F (cost plus freight) Japan, Naphtha CIF NWE, Jet CIF NWE, Gasoil 0.1% CIF NWE, Fuel Oil 1.0% CIF NWE prices.

(6) Based on spot prices for propane-butane mix at the Belarusian-Polish border (DAF, Brest).

(7) Export duties are determined by the Russian Federation government in US dollars and are paid in Russian roubles (see "Our tax burden and obligatory payments" below).

CERTAIN FACTORS AFFECTING OUR RESULTS OF OPERATIONS

Current economic environment

Commodity price volatility continues to exert significant influence on financial and operational results in the global oil and gas industry. Our financial results are obviously impacted by these global developments as our export sales are linked to the specific underlying benchmark commodity prices, but we believe our business model, representing one of the lowest cost producers in the world, insulates us from severe financial and operational stress. In each reporting period, the Group demonstrated sustainable operating and financial results.

The declines in hydrocarbon prices on commodity markets in 2020 negatively impacted oil and gas companies. The main reasons for the financial and economic stress on the global commodity markets were the spread of COVID-19 and its negative effect on economic activities, as well as the cancellation of the OPEC+ production agreement in the first quarter 2020. From the second quarter 2020, global economic activity began a gradual recovery following the partial removals of restrictions aimed at preventing the epidemic spread, as well as a partial recovery in benchmark crude oil prices following the new OPEC+ production agreement reached in April 2020 and the compliance to the target cuts by its participants.

In 2021, the OPEC+ participants continued to restrict their production targets due to the ongoing instability caused by the spread of the COVID-19 virus and its variants, as well as stricter quarantine measures enforced by some countries. The maintenance of the restricted production targets as well as an increase in hydrocarbons consumption due to the severe cold weather in Europe, Asia and North America have led to a significant increase in benchmark hydrocarbons prices in the first quarter 2021.

Starting from May 2021, OPEC+ began to gradually lift the restrictions on crude oil production targets due to the increased mobility of population, signs of renewed economic activities and crude oil demand recovery in major consumer countries. In July 2021, the OPEC+ participants made a decision to further increase crude oil production volumes and extended the agreement on production restrictions until the end of 2022. Nevertheless, the crude oil supply still lagged behind global demand due to faster than expected economic recovery resulting in further price increases in the second and third quarters 2021. In addition, actual crude oil production by OPEC+ was not consistent with the increased production plans due to accidents and repair works on oil facilities in a number of countries, which has led to a growth in a deficit in crude oil and an increase in benchmark prices in the fourth quarter 2021. As a result, during 2021, benchmark crude oil prices returned to the pre-pandemic levels of 2019 and continued further growth.

The European and Asian natural gas markets were impacted by faster than expected recovery of demand after it was hit by the COVID-19 pandemic, declared energy transition policy, as well as weather factors (cold winter and hot summer, low wind speeds in Europe and droughts in South America) and the supply disruptions. All this caused storage level reduction in key consuming regions and a strong price rally in the second half of 2021.

Further developments surrounding the COVID-19 virus spread remains uncertain and may continue to influence our future earnings, cash flows and financial position.

The Group's management is taking necessary precautions to protect the safety and well-being of our employees, our contractors and our families against the infectious spread of COVID-19, while maintaining our commitment to meet the energy needs of our valued customers domestically and internationally. We continue working closely with federal, regional and local authorities, as well as our partners, to contain the spread of the virus and will take appropriate actions, where necessary, to minimize the possible disruptions of our operations.

Management continues to closely monitor the economic and political environment in Russia and abroad, including the domestic and international capital markets, to determine if any further corrective and/or preventive measures are required to sustain and grow our business. We also closely monitor the present commodity price environment and its impact on our business operations. We do not expect any asset impairments or write-offs resulting from a lower commodity price environment.

We conduct regular reviews of our capital expenditure program and existing debt obligations. In our opinion, the Group's financial position is stable and expected operating cash flows are sufficient to service and repay our debt, as well as to execute our planned capital expenditure programs.

Political events in Ukraine in the beginning of 2014 have prompted a negative reaction by the world community, including economic sanctions levied by the United States of America, Canada and the European Union against certain Russian individuals and legal entities. In July 2014, NOVATEK was included on the OFAC's Sectoral Sanctions Identification List (the "List"), which imposed sanctions that prohibit individuals or legal entities registered or working on the territory of the United States from providing new credit facilities to the Group for longer than 60 days.

Despite the inclusion on the List, the Group may conduct any other activities, including financial transactions, with U.S. investors and partners. NOVATEK was included on the List even though the Group does not conduct any business activities in Ukraine, nor does it have any impact on the political and economic processes taking place in this country. Management has assessed the impact of the sanctions described above on the Group's activities taking into consideration the current state of the world economy, the condition of domestic and international capital markets, the Group's business, and long-term projects with foreign partners. We have concluded that the inclusion on the List does not significantly impede the Group's operations and business activities in any jurisdiction, nor does it affect the Group's assets and debt, and does not have a material effect on the Group's financial position.

We together with our international partners are undertaking all necessary actions to implement our joint investment projects on time as planned, including, but not limited to, attracting financing from domestic and non-US capital markets.

Natural gas prices

Our sales of natural gas in the Russian domestic market are mainly natural gas sales through trunk pipelines and regional distribution networks, as well as sales of LNG mainly through our refueling complexes. LNG sold on the domestic market is produced at our small-scale LNG plant in the Chelyabinsk region or purchased primarily from our joint venture OOO Cryogas-Vysotsk.

Our sales of natural gas on international markets are sales of LNG purchased primarily from our joint ventures, OAO Yamal LNG and OOO Cryogas-Vysotsk. In addition, we sell on the European market regasified liquefied natural gas arising during the transshipment of LNG (boil-off gas), as well as during the regasification of purchased LNG at our own regasification stations in Poland and Germany.

The Group's natural gas prices in Russia are strongly influenced by the prices set by the Federal Anti-Monopoly Service, a federal executive agency of the Russian Federation that carries out governmental regulation of prices and tariffs for products and services of natural monopolies in energy, utilities and transportation (the "Regulator"), as well as present market conditions.

In 2020, wholesale natural gas prices for sales to all customer categories on the domestic market were increased by the Regulator by 3.0% effective 1 August 2020 and remained unchanged through the end of the second quarter 2021. Effective 1 July 2021, the wholesale prices were increased by 3.0%.

In September 2021, the Ministry of Economic Development of the Russian Federation published the "Forecast of Socio-economic Development of the Russian Federation for 2022 and the planned period 2023 and 2024", providing for an increase in wholesale natural gas prices for sales to all customer categories, except for residential customers, from July 2022 by 5.0% and from July 2023 to 2024 by 4.0% on an annual basis. Wholesale natural gas prices for sales to residential customers are expected to be increased from July 2022 to 2024 by 3.0% on an annual basis. The Russian Federation government continues to discuss various concepts relating to the natural gas industry development, including natural gas prices and transportation tariffs growth rates on the domestic market.

The specific terms for delivery of natural gas affect our average realized prices. The majority of our natural gas volumes on the domestic market are sold directly to end-customers in the regions of natural gas consumption, so transportation tariff to the end-customer's location is included in the contract sales price. The remaining volumes of natural gas are sold "ex-field" to wholesale gas traders, in which case the buyer is responsible for the payment of further gas transportation tariff. Sales to wholesale gas traders allow us to diversify our natural gas sales without incurring additional commercial expenses.

We deliver natural gas to residential customers in the Chelyabinsk and Kostroma regions of the Russian Federation at regulated prices through our subsidiaries OOO NOVATEK-Chelyabinsk and OOO NOVATEK-Kostroma, respectively. We disclose such residential sales within our end-customers category.

In addition, we periodically sell natural gas at the Saint-Petersburg International Mercantile Exchange based on market conditions. We disclose such sales within our sales to end-customers category.

The Group's prices for LNG sold in Russia are based on oil products prices on the domestic market.

The Group's natural gas prices on international markets are influenced by many factors, such as the balance between supply and demand fundamentals, weather, the geography of sales, and the delivery terms to name a few. The Group sells LNG on international markets under short- and long-term contracts with prices based on the prices for natural gas at major natural gas hubs and on benchmark crude oil prices. We sell boil-off gas in Europe at prices linked to natural gas prices at major European natural gas hubs. The Group's prices for regasified LNG sold as natural gas on the Polish market are based on the prices regulated by the Energy Regulatory Office of Poland.

The following table shows our aggregate average realized natural gas sales prices on the domestic and international markets (excluding VAT, where applicable):

	Year ended 31 December:		Change
	2021	2020	%
Average natural gas price, RR per mcm	6,912	4,748	45.6%
Average natural gas price, USD per mcm [(1)]	94.0	65.9	42.6%

[(1)] Operations initially priced in Russian roubles were translated into US dollars using the average exchange rate for the period.

In 2021, our aggregate average price for natural gas in Russian roubles increased by 45.6% primarily due to an increase in LNG prices on international markets, as well as an increase in the regulated Russian domestic price (by 3.0% effective 1 August 2020 and 1 July 2021).

Stable gas condensate and refined products, crude oil and liquefied petroleum gas prices

Crude oil, stable gas condensate, LPG and oil products prices on international markets have historically been volatile depending on, among other things, the balance between supply and demand fundamentals, the ability and willingness of oil producing countries to sustain or change production levels to meet changes in global demand and potential disruptions in global crude oil supplies due to war, geopolitical developments, terrorist activities, natural disasters, or pandemics.

The actual prices we receive for our liquid hydrocarbons on both the domestic and international markets are dependent on many external factors beyond the control of management. Among many other factors volatile movements in benchmark crude oil and oil products prices can have a positive and/or negative impact on the contract prices we receive for our liquids sales volumes.

In addition, our actual realized net export prices for crude oil, stable gas condensate and its refined products are affected by the so-called "export duty lag effect". This lag effect is due to the differences between actual crude oil prices for a certain period and crude oil prices based on which export duty rate is calculated for the same period (see "Our tax burden and obligatory payments" below). In periods when crude oil prices are rising, the duty lag effect normally has a positive impact on the Group's financial results, as the export duty rates are set on the basis of lower crude oil prices compared to the actual prices. Conversely, in periods of declining crude oil prices, the export duty rate is calculated based on higher prices compared to the actual prices, resulting in a negative financial impact.

Most of our liquid hydrocarbons sales prices on both the international and domestic markets include transportation expenses in accordance with the specific terms of delivery. The remaining portion of our liquids volumes is sold without additional transportation expenses (ex-works sales of liquefied petroleum gas from the Purovsky Plant and the Tobolsk Refining Facilities, as well as certain other types of sales).

We commonly sell our stable gas condensate and refined products, as well as liquefied petroleum gas to the international markets with a premium to the respective international benchmark reference products prices. We export SILCO (low-sulfur "Siberian Light Crude Oil") and ESPO ("East Siberia – Pacific Ocean") grades of crude oil to international markets with a premium or a discount to the benchmark Brent and Dubai crude oil depending on current market situation.

The following table shows our average realized net stable gas condensate and refined products, crude oil and LPG sales prices. Average realized net prices are shown net of VAT, export duties, excise and fuel taxes, where applicable:

	Year ended 31 December:		Change
Russian roubles or US dollars per ton [(1)]	**2021**	**2020**	**%**
Naphtha			
Average net price, RR per ton	47,454	26,311	80.4%
Average net price, USD per ton	645	368	75.3%
Other stable gas condensate refined products			
Average net price, RR per ton	41,649	23,426	77.8%
Average net price, USD per ton	566	328	72.6%
Crude oil			
Average net price, RR per ton	31,511	17,541	79.6%
Average net price, USD per ton	428	245	74.7%
LPG			
Average net price, RR per ton	28,283	16,467	71.8%
Average net price, USD per ton	384	228	68.3%
Stable gas condensate			
Average net price, RR per ton	34,140	19,239	77.5%
Average net price, USD per ton	463	264	75.4%

(1) Operations initially priced in Russian roubles were translated into US dollars using the average exchange rate for the period.

In 2021, our weighted-average realized net prices for our liquid hydrocarbons increased compared to the corresponding period in prior year due to an increase in the underlying benchmark prices for these products excluding export duties (see "Selected macro-economic data" above).

The dynamics of our weighted average realized net prices for each product category also reflects changes in volumes sold within periods and changes in the geography of shipments that may significantly impact our average prices in periods of high benchmark prices volatility on international markets. In addition, the specifics of pricing mechanism for each particular product (such as time lag of international benchmark crude oil prices and export duty rates used in price calculation, price setting on an individual transaction basis for some deliveries and other factors) also have an impact on the dynamics of our weighted-average realized net prices.

Transportation tariffs

Natural gas by pipelines

We transport our natural gas within the Russian Federation territory through our own pipelines into the Unified Gas Supply System ("UGSS"), which is owned and operated by PAO Gazprom, a Russian Federation government controlled monopoly. Transportation tariffs charged to independent producers for the use of the Gas Transmission System ("GTS"), as part of the UGSS, are set by the Regulator (see "Terms and abbreviations" below).

In accordance with the existing methodology of calculating transportation tariffs for natural gas produced in the Russian Federation for shipments to consumers located within the customs territory of the Russian Federation and the member states of the Customs Union Agreement (Belarus, Kazakhstan, Kyrgyzstan, and Armenia), the transportation tariff consists of two parts: a rate for the utilization of the trunk pipeline and a transportation rate per mcm per 100 kilometers (km). The rate for utilization of the trunk pipeline is based on an "input/output" function, which is determined by where natural gas enters and exits the trunk pipeline and includes a constant rate for end-customers using Gazprom's gas distribution systems. The constant rate is deducted from the utilization rate for end-customers using non-Gazprom gas distribution systems.

In 2020 and 2021, the average tariff for natural gas transportation through the trunk pipeline did not change. The transportation rate amounted to RR 13.04 per mcm per 100 km (excluding VAT), and the rate for utilization of the trunk pipeline was set in the range from RR 62.57 to RR 2,014.16 per mcm (excluding VAT).

In September 2021, the Ministry of Economic Development published the Forecast for 2022 and the planning periods for 2023 and 2024, which does not provide for any increase in the tariffs for natural gas transportation through the trunk pipeline in 2022 to 2024. The Russian Federation government continues to discuss various concepts relating to the natural gas industry development, including natural gas prices and transportation tariffs growth on the domestic market.

Stable gas condensate and LPG by rail

Substantially all of our stable gas condensate and LPG (excluding volumes sold ex-works from the Purovsky Plant and the Tobolsk Refining Facilities) we transport by rail owned by Russia's state-owned monopoly railway operator – OAO Russian Railways ("RZD").

The railroad transportation tariffs are set by the Regulator and vary depending on the type of product, and the direction and the length of the transport route. In addition, the Regulator sets the range of railroad tariffs as a percentage of the regulated tariff within which RZD may vary railroad transportation tariffs within the Russian Federation territory based on the type of product, direction and length of the transportation route, and taking into account current railroad transportation and market conditions.

Effective January 2021, railroad freight transportation tariffs for all types of hydrocarbons were increased by 3.7% relative to the 2020 tariffs and did not change until the end of 2021. In January 2022, the Regulator increased the aforementioned tariffs by 6.8% relative to the 2021 tariffs.

In 2020 and 2021, we applied the discount coefficient of 0.94 to the existing railroad transportation tariffs for stable gas condensate deliveries from the Limbey rail station to the port of Ust-Luga and to end-customers on the domestic and international markets. The discount coefficient is set by the decision of the Management Board of RZD as part of the Strategic Partnership Agreement between the Group and RZD.

In addition, from April and through the end of 2020, we applied discount coefficients to the existing railroad transportation tariffs for LPG deliveries within the Russian Federation territory from the Tobolsk rail station, which were temporarily introduced due to unfavorable macroeconomic environment. In the second quarter 2020, the coefficients were initially set at 0.75 and 0.872 depending on the transportation distance and, from mid-June, a single discount coefficient of 0.6 applied.

Stable gas condensate, refined products and liquefied natural gas by tankers

We deliver part of our stable gas condensate and substantially all stable gas condensate refined products, as well as liquefied natural gas (excluding volumes purchased and sold to customers in the same location) to international markets by chartered tankers. In addition to time chartering expenses, we may also incur transshipment, bunkering, port charges and other expenses depending on the delivery terms, which are included in the transportation by tankers expense category. The distance to the final port of destination, tanker availability, seasonality of deliveries and other factors also influence our tanker transportation expenses.

Crude oil

We transport nearly all of our crude oil through the pipeline network owned by PAO Transneft, Russia's state-owned monopoly crude oil pipeline operator. The Regulator sets tariffs for transportation of crude oil through Transneft's pipeline network, which includes transport, dispatch, pumping, loading, charge-discharge, transshipment and other related services. The Regulator sets tariffs for each separate route of the pipeline network, so the overall expense for the transport of crude oil depends on the length of the transport route from the producing fields to the ultimate destination, transportation direction and other factors.

Effective 1 January 2021, crude oil transportation tariffs through the pipeline network within the Russian Federation territory were increased by an average of 3.6% relative to the 2020 tariffs and remained unchanged until the end of 2021. Effective 1 January 2022, transportation tariffs were increased by an average of 4.3% relative to the 2021 tariffs.

Our tax burden and obligatory payments

We are subject to a wide range of taxes imposed at the federal, regional, and local levels, many of which are based on revenue or volumetric measures. In addition to income tax, significant taxes and obligatory payments to which we are subject include VAT, unified natural resources production tax ("UPT", commonly referred as "MET" – mineral extraction tax), export duties, excise, property tax and social contributions to non-budget funds.

In practice, Russian tax authorities often have their own interpretation of tax laws that rarely favors taxpayers, who have to resort to court proceedings to defend their position against the tax authorities. Differing interpretations of tax regulations exist both among and within government ministries and organizations at the federal, regional and local levels, creating uncertainties and inconsistent enforcement. Tax declarations and other documentation such as customs declarations, are subject to review and investigation by a number of tax authorities, each of which may impose fines, penalties and interest charges. Generally, taxpayers are subject to an inspection of their activities for a period of three calendar years immediately preceding the year in which the audit is conducted. Previous audits do not completely exclude subsequent claims relating to the audited period. In addition, in some instances, new tax regulations may have a retroactive effect.

We have not employed any tax minimization schemes using offshore or domestic tax zones in the Russian Federation.

Detailed information regarding UPT, export duties, excise and social contributions to non-budget funds is described below based on the current versions of the Tax Code of the Russian Federation and the law "On Customs Tariff".

In 2019, the completion stage of the tax maneuver in the oil and gas industry in the Russian Federation began and will continue until the end of 2024. The tax maneuver envisages a gradual decrease in export duties for crude oil and oil products with a respective increase in unified production taxes for crude oil and gas condensate, as well as the introduction of reverse excise for raw oil.

The legislation changes aimed at the completion of the tax maneuver, with other factors being equal, influence line items in our consolidated financial statements by increasing our liquids net prices and revenues due to a gradual decrease in export duties, increasing our UPT expenses and increasing our hydrocarbons purchases as a result of opposite effects of increased purchase prices and excise tax deductions for raw oil.

Export duties

Procedure for the calculation and payment of export duties is set in the Law of the Russian Federation "On Customs Tariff". According to this law, we are subject to export duties on our exports of liquid hydrocarbons (stable gas condensate and refined products, LPG and crude oil).

Crude oil export duty rate formulas are set by the Russian Federation government and are based on the average Urals crude oil price (Mediterranean and Rotterdam) for the so called "monitoring period" (the period from the 15th calendar day in the previous month to the 14th calendar day of the current month):

Average Urals crude oil price for the monitoring period, USD per ton (P)	**Formula for export duty rate calculation**
less 109.5 (inclusive)	Zero rate
between 109.5 and 146 (inclusive)	K × [0.35 × (P – 109.5)]
between 146 and 182.5 (inclusive)	K × [0.45 × (P – 146) + 12.78]
above 182.5	K × [0.3 × (P – 182.5) + 29.2]

K – adjusting coefficient

The adjusting coefficient (K) will gradually decrease on an annual basis from 0.833 in 2019 to zero in 2024, thus gradually decreasing the export duty rate for crude oil to zero by 2024. In 2020 and 2021, the adjusting coefficient amounted to 0.667 and 0.5, respectively; in 2022, the coefficient is set at 0.333.

We pay export duties for our stable gas condensate export sales volumes at the export duty rate for crude oil.

The export duty rates for oil products are calculated based on the export duty rate for crude oil adjusted by a coefficient (discount) set for each category of oil products. The export duty rates for our exported stable gas condensate refined products as a percentage of the crude oil export duty rate are presented below:

	% from the crude oil export duty rate
Naphtha	55%
Jet fuel	30%
Gasoil	30%
Fuel oil	100%

The export duty rate for LPG for the next calendar month is calculated based on the average LPG price at the Polish border (DAF, Brest) for the current monitoring period and is calculated using the formula presented in the table below:

Average LPG price, USD per ton (P)	**Formula for export duty rate calculation**
less 490 (inclusive)	Zero rate
between 490 and 640 (inclusive)	0.5 × (P – 490)
between 640 and 740 (inclusive)	75 + 0.6 × (P – 640)
above 740	135 + 0.7 × (P – 740)

We record export duties as a deduction to our revenues in the consolidated statement of income.

UPT – natural gas

We pay UPT for natural gas on a monthly basis. The UPT rate for natural gas is set in Russian roubles per one mcm of extracted natural gas.

The UPT rate for natural gas is calculated as a product of the base UPT rate (RR 35 per mcm), the base value of a standard fuel equivalent and a coefficient characterizing the difficulty of extracting natural gas and gas condensate from each particular field. The result is then increased by a parameter characterizing natural gas transportation costs (was set at zero in both reporting periods).

The base value of a standard fuel equivalent is calculated by a taxpayer based on a combination of factors including natural gas prices, Urals crude oil prices and crude oil export duty rate.

UPT – crude oil

We pay UPT for crude oil on a monthly basis. The UPT rate for crude oil is set in Russian roubles per ton of extracted crude oil.

The UPT rate is calculated as a product of a coefficient characterizing the dynamics of world crude oil prices and the base UPT rate (RR 919 per ton) adjusted for parameters characterizing crude oil production peculiarities (the reserves' depletion (only in 2020), complexity of extraction, the region, crude oil properties). The result is then increased by a fixed amount (RR 428 per ton in both reporting periods). Further, the UPT rate for crude oil is gradually increased by the amount of the corresponding decrease in the crude oil export duty rate due to the completion of the tax maneuver (see "Export duties" above).

According to the Tax Code of the Russian Federation, a reduced UPT rate is applied to the license areas that are located to the north of the 65th degree of the northern latitude in the YNAO. The reduced UPT rate is effective until the latest of the dates: 1 January 2022 or the end of a certain period after the date of the state registration of the subsoil use license (10 or 15 years depending on the type of a license). The reduced base UPT rate amounted to RR 360 per ton in both reporting periods, and we applied it in respect of the crude oil produced at our East-Tarkosalinskoye, Khancheyskoye, Yarudeyskoye and Kharbeyskoye (launched in the end of 2021) fields. Starting from 2022, we will continue to use this benefit only in respect of the crude oil produced at the Kharbeyskoye field, for which it will remain effective till the end of 2026.

Where the average export alternative prices for petrol and diesel fuel exceed the regulated wholesale prices for these products on the Russian domestic market, the UPT rate for crude oil is also increased by the so called "petrol and diesel fuel premiums", which depend on the export and domestic price differentials for these products. The petrol and diesel fuel premiums are payable by all crude oil producers regardless of whether the extracted crude oil volumes will be further sold or refined.

UPT – gas condensate

We pay UPT for gas condensate on a monthly basis. The UPT rate for gas condensate is set in Russian roubles per ton of extracted gas condensate.

The UPT rate for gas condensate is calculated as a product of the base UPT rate (RR 42 per ton), the base value of a standard fuel equivalent, a coefficient characterizing the difficulty of extracting natural gas and gas condensate from each field and an adjusting coefficient of 6.5. The base value of a standard fuel equivalent is calculated by a taxpayer based on the combination of factors including natural gas prices, Urals crude oil prices and crude oil export duty rate.

The Group reduces its overall UPT expense accrued for gas condensate production volumes by applying a UPT tax deduction on gas condensate volumes produced for processing into NGL. The amount of the tax deduction is calculated monthly by multiplying a coefficient of NGL recovery from gas condensate processing, the quantity of gas condensate produced and processed, and the tax deduction rate in Russian roubles per ton of NGL derived. The tax deduction rate was set at RR 147 per ton for January 2018 and since then was increasing monthly by the same amount until the end of 2020. Starting from December 2020, the tax deduction rate is fixed at RR 5,280 per ton of produced NGL.

The UPT rate for gas condensate is increased by 75% of the decrease in the crude oil export duty rate. The share of 75% is deemed to represent volumes of produced gas condensate excluding the share of NGL received from gas condensate processing.

Excise for raw oil

In 2019, with the commencement of the completion stage of the tax maneuver in the oil and gas industry in the Russian Federation, a reverse excise on raw oil was introduced. Raw oil represents a mixture of hydrocarbons composed of one or more components of crude oil, stable gas condensate, vacuum gasoil, tar, and fuel oil. This deduction was introduced to compensate economic losses of oil and gas refining companies arising from the tax maneuver and the transfer of tax burden from export duties to the UPT in the amount of full export duty rate for crude oil while export duties for oil products are paid at a discount to crude oil export duty rate.

We receive the reverse excise on raw oil based on volumes of stable gas condensate sent for processing to our Ust-Luga Complex.

The excise tax rate on raw oil is calculated based on the average Urals crude oil prices, the mix of processed products, region of processing, and the adjusting coefficient, which will be gradually increased on an annual basis from 0.167 in 2019 to 1.0 in 2024 as part of the completion stage of the tax maneuver in the oil and gas industry. In 2020 and 2021, the adjusting coefficient amounted to 0.333 and 0.5, respectively; in 2022, the coefficient is set at 0.667.

In 2021, an investment premium to the reverse excise on raw oil was introduced for companies, which concluded an investment agreement with the Ministry of Energy of the Russian Federation prior to 1 October 2021 for construction or modernization of raw oil deep processing facilities. Effective July 2021, the reverse excise we receive includes the investment premium, which we obtain under an investment agreement for construction of a hydrocracker unit with the respective expansion of our Ust-Luga Complex.

We report the reverse excise on raw oil as a deduction to our operating expenses in the line "Purchases of natural gas and liquid hydrocarbons" in our consolidated statement of income as most of our unstable gas condensate volumes used to produce stable gas condensate we purchase from our joint ventures.

Social contributions

The Group makes contributions to the Pension Fund, the Federal Compulsory Medical Insurance Fund, and the Social Insurance Fund on behalf of employees in Russia. The base for social contributions accrual is the amount of salaries and similar employee compensation stipulated by the employment contracts.

The rates for social contributions depend on the fund and the employee's annual income:

	2020		2021		2022	
	Base, RR thousand	Rate, %	Base, RR thousand	Rate, %	Base, RR thousand	Rate, %
Pension Fund of the Russian Federation	less 1,292	22.0%	less 1,465	22.0%	less 1,565	22.0%
	above 1,292	10.0%	above 1,465	10.0%	above 1,565	10.0%
Federal Compulsory Medical Insurance Fund	No limit	5.1%	No limit	5.1%	No limit	5.1%
Social Insurance Fund of the Russian Federation	less 912	2.9%	less 966	2.9%	less 1,032	2.9%
	above 912	0.0%	above 966	0.0%	above 1,032	0.0%

OIL AND GAS RESERVES

We do not file with the Securities and Exchange Commission ("SEC") nor we are obliged to report our reserves in compliance with these standards. However, we have consistently disclosed proved oil and gas reserves as unaudited supplemental information in the Group's IFRS audited consolidated financial statements. The Group's total proved reserves, comprised of proved developed and proved undeveloped reserves, as of 31 December 2021 and 2020, are provided using the SEC reserves reporting classification. We also provide additional information about our hydrocarbon reserves based on the widely-industry accepted PRMS reserves reporting classification, which in addition to total proved reserves discloses information on our probable and possible reserves.

The Group's reserves are located in the Russian Federation, primarily in the Yamal-Nenets Autonomous Region (Western Siberia), thereby representing one geographical area.

The Group's oil and gas estimation and reporting process involves an annual independent external appraisal, as well as internal technical appraisals of reserves. The internal technical appraisals of reserves are performed by the Group's qualified technical staff working directly with the oil and gas reserves and are periodically updated during the year based on evaluations of new wells, performance reviews, new technical information and other studies.

The annual independent external appraisal of our reserves is performed by independent petroleum engineers, DeGolyer and MacNaughton ("D&M"). The Group provides D&M annually with engineering, geological and geophysical data, actual production histories and other information necessary for reserves appraisal. The method or combination of methods used in the analysis of each reservoir is tempered by experience with similar reservoirs, stages of development, quality and completeness of basic data, and production history. Our reserves estimates were prepared using standard geological and engineering methods generally accepted in the oil and gas industry. The Group and D&M's technical staffs meet to review and discuss the information provided, and upon completion of the process, senior management reviews and approves the final reserves estimates issued by D&M.

The Reserves Management and Assessment Group ("RMAG") is comprised of qualified technical staff from various departments responsible for geology and geophysics, gas and liquids commercial operations, engineering and capital construction, production, and long-term financial planning, and also includes representatives from the Group's subsidiaries, which are the principal holders of the mineral licenses for geological research works, exploration and production of hydrocarbons. The person responsible for overseeing the work of the RMAG is a member of the Management Board.

The approval of the final reserve estimates is the sole responsibility of the Group's senior management.

The information below about the Group's oil and gas production and reserves under SEC and PRMS reserve classifications is presented based on 100% of production and reserves attributable to all consolidated subsidiaries (whether or not wholly owned) and our proportionate share in the production and reserves in companies accounted for by the equity method based on our equity ownership interest, including volumes of natural gas consumed in oil and gas production and development activities (primarily, as fuel gas). Production and reserves of the South-Tambeyskoye field of Yamal LNG are reported at 60% including an additional 9.9% interest not owned by the Group, since the Group assumes certain economic and operational risks related to this interest (see "Basis of presentation" above).

The table below provides proved oil and gas reserves under SEC reserve classification and the change in reserves in metric units and on a total barrel of oil equivalent basis:

	As of and for the year ended 31 December:		Change
	2021	**2020**	**%**
Natural gas, billions of cubic meters	**2,261**	**2,244**	**0.8%**
Subsidiaries	1,180	1,156	2.1%
Share in joint ventures	1,081	1,088	(0.6%)
Liquids, millions of metric tons	**189**	**197**	**(4.1%)**
Subsidiaries	95	102	(6.9%)
Share in joint ventures	94	95	(1.1%)
Combined reserves, millions of boe	**16,409**	**16,366**	**0.3%**
Change in total reserves, millions of boe	**43**	**101**	
Production	(626)	(608)	
Acquisitions (1)	-	31	
Organic growth (2)	669	678	
Reserves replacement ratio (3), %	**107%**	**117%**	
Normalized reserves replacement ratio (3), (4), %	**107%**	**112%**	

(1) Relate to an additional 50% interest in reserves of the Yevo-Yakhinskiy license area acquired by the Group as a result of the reorganization of Arcticgas in 2019 (a part of these reserves was appraised in 2020).

(2) Represents change due to extensions and discoveries, revisions of previous estimates.

(3) The reserves replacement ratio is calculated as the change in reserves increased for the production for the year divided by production for the year.

(4) Excluding reserves acquisitions and disposals.

The Groups' total proved reserves under the SEC reserve classification methodology as at the end of 2021 increased by 43 million boe, or 0.3%, to 16,409 million boe, representing a reserve replacement ratio of 107%.

The increase in total proved hydrocarbons reserves under the SEC reserve classification was primarily due to successful exploration works and production drilling at our subsidiaries and joint ventures.

Our subsidiaries obtained positive exploration results at the Geofizicheskoye and Gydanskoye fields, successfully performed production drilling at the North-Russkoye field and the Urengoyskoye field of the Yevo-Yakhinskiy license area, as well as increased recovery rate at the Yurkharovskoye field. The dynamics of the reserves of our joint ventures was positively affected by successful exploration and production drilling at the South-Tambeyskoye field of Yamal LNG and at the Urengoyskoye field of the Samburgskiy license area of Arcticgas, as well as production drilling at the Salmanovskoye (Utrenneye) field of Arctic LNG 2.

The following table provides for the Group's PRMS proved, proved and probable, and proved, probable and possible reserves in metric units and on a total barrel of oil equivalent basis:

	Natural gas, billions of cubic meters		Liquid hydrocarbons, millions of metric tons		Combined reserves, millions of boe	
	31 December 2021	**31 December 2020**	**31 December 2021**	**31 December 2020**	**31 December 2021**	**31 December 2020**
Proved reserves (1P reserves)	2,484	2,477	213	227	18,085	18,148
Proved and probable reserves (2P reserves)	3,948	3,981	363	380	28,970	29,318
Proved, probable and possible reserves (3P reserves)	5,206	5,257	502	529	38,444	38,986

As we continue to invest capital into the development of our fields, we anticipate that we will increase our resource base, as well as migrate reserves among the reserve categories.

The below table contains information about reserve to production ratios as of 31 December 2021 and 2020 under both reserves reporting methodologies:

	SEC		**PRMS**	
	At 31 December:		**At 31 December:**	
Number of years	**2021**	**2020**	**2021**	**2020**
Total proved reserves to production	26	27	29	30
Total proved and probable reserves to production	-	-	46	48
Total proved, probable and possible reserves to production	-	-	61	64

OPERATIONAL HIGHLIGHTS

Oil and gas production costs per unit of production

Oil and gas production costs on a barrel of oil equivalent basis are calculated by dividing oil and gas production costs by the barrel of oil equivalent of hydrocarbons produced during the year.

Oil and gas production costs include only the amounts directly related to the extraction of natural gas, gas condensate and crude oil and exclude processing costs incurred after saleable hydrocarbons are received, such as stable gas condensate processing costs and natural gas liquefaction costs, as well as transportation and other marketing expenses. Oil and gas production costs comprise of lifting costs (materials, services and other expenses, as well as administrative expenses being by nature operating expenses of oil and gas producing activities), taxes other than income tax and depreciation, depletion and amortization which are disclosed in the "Unaudited Supplemental Oil and Gas Disclosures" in the consolidated financial statements.

Natural gas, gas condensate and crude oil volumes produced are converted to a barrel of oil equivalent based on the relative energy content of each fields' hydrocarbons. Natural gas production volumes used for calculation of production costs per boe differ from the volumes presented in the section "Natural gas production volumes" as the former excludes volumes of natural gas consumed in oil and gas production and development activities (see "Basis of presentation" above).

The following tables set forth information with respect to oil and gas production costs on a barrel of oil equivalent basis of our subsidiaries and joint ventures, as well as combined weighted average oil and gas production costs for the Group's subsidiaries and joint ventures for the reporting periods in Russian roubles and US dollars.

	Year ended 31 December:		Change
RR per boe	2021	2020	%
Subsidiaries			
Production costs per boe:			
Lifting costs	63.9	61.2	4.4%
Taxes other than income tax	272.8	176.0	55.0%
Total production costs before DDA per boe	**336.7**	**237.2**	**41.9%**
Depreciation, depletion and amortization	115.4	97.4	18.5%
Total production costs of subsidiaries per boe	**452.1**	**334.6**	**35.1%**
Joint ventures			
Production costs per boe:			
Lifting costs	29.8	26.1	14.2%
Taxes other than income tax	191.7	121.9	57.3%
Total production costs before DDA per boe	**221.5**	**148.0**	**49.7%**
Depreciation, depletion and amortization	95.9	94.6	1.4%
Total weighted average production costs of joint ventures per boe (1)	**317.4**	**242.6**	**30.8%**
Subsidiaries and joint ventures			
Production costs per boe:			
Lifting costs	47.8	44.2	8.1%
Taxes other than income tax	234.6	149.8	56.6%
Total production costs before DDA per boe	**282.4**	**194.0**	**45.6%**
Depreciation, depletion and amortization	106.2	96.0	10.6%
Total weighted average production costs of subsidiaries and joint ventures per boe (2)	**388.6**	**290.0**	**34.0%**

(1) Calculated based on the Group's share in the production of each joint venture.

(2) Calculated based on 100% of the Group's subsidiaries production and our share in the production of each joint venture.

USD per boe [(1)]	Year ended 31 December: 2021	2020	Change %
Subsidiaries			
Production costs per boe:			
Lifting costs	0.87	0.85	2.4%
Taxes other than income tax	3.70	2.44	51.6%
Total production costs before DDA per boe	**4.57**	**3.29**	**38.9%**
Depreciation, depletion and amortization	1.57	1.35	16.3%
Total production costs of subsidiaries per boe	**6.14**	**4.64**	**32.3%**
Joint ventures			
Production costs per boe:			
Lifting costs	0.40	0.36	11.1%
Taxes other than income tax	2.60	1.69	53.8%
Total production costs before DDA per boe	**3.00**	**2.05**	**46.3%**
Depreciation, depletion and amortization	1.31	1.31	0.0%
Total weighted average production costs of joint ventures per boe [(2)]	**4.31**	**3.36**	**28.3%**
Subsidiaries and joint ventures			
Production costs per boe:			
Lifting costs	0.65	0.61	6.6%
Taxes other than income tax	3.19	2.08	53.4%
Total production costs before DDA per boe	**3.84**	**2.69**	**42.8%**
Depreciation, depletion and amortization	1.44	1.33	8.3%
Total weighted average production costs of subsidiaries and joint ventures per boe [(3)]	**5.28**	**4.02**	**31.3%**

(1) Production costs in US dollars per boe were translated from Russian roubles amounts using the average exchange rate for the period (see "Selected macro-economic data" above).

(2) Calculated based on the Group's share in the production of each joint venture.

(3) Calculated based on 100% of the Group's subsidiaries production and our share in the production of each joint venture.

Hydrocarbon production and sales volumes

In 2021, our total natural gas and liquids production including the proportionate share in the production of our joint ventures increased by 3.3% and 0.5%, respectively. The commissioning of gas condensate deposits within the fields of the North-Russkiy cluster (the North-Russkoye and East-Tazovskoye fields in the third quarter 2020, as well as the Kharbeyskoye field in the fourth quarter 2021) fully offset the declines in hydrocarbons production at mature fields of our subsidiaries and joint ventures.

In 2021, our total natural gas sales volumes marginally increased by 197 mmcm, or 0.3%. An increase in natural gas sales volumes on the domestic market fully offset a decline in volumes sold on the international markets. The increase in volumes sold on the domestic market resulted from the launch of additional production facilities, as well as higher demand from end-customers due to weather conditions. The decline in natural gas volumes sold on the international markets was due to a decrease in LNG sales volumes purchased primarily from our joint venture OAO Yamal LNG as a result of an increase in the share of Yamal LNG's direct LNG sales under long-term contracts.

In 2021, our liquids sales volumes increased by 168 thousand tons, or 1.0%, primarily due to an increase in gas condensate production.

Natural gas production volumes

The following table presents natural gas production of the Group's subsidiaries by major production fields and our proportionate share in natural gas production of joint ventures by entities:

millions of cubic meters if not stated otherwise	**Year ended 31 December: 2021**	**2020**	**Change %**
Production by subsidiaries from:			
Yurkharovskoye field	21,626	23,104	(6.4%)
North-Russkiy cluster (1)	9,318	4,831	92.9%
East-Tarkosalinskoye field	4,644	5,305	(12.5%)
Beregovoye field	1,947	1,905	2.2%
Yarudeyskoye field	1,478	1,648	(10.3%)
Khancheyskoye field	1,021	1,312	(22.2%)
Olimpiyskiy license area (2)	984	1,055	(6.7%)
East-Urengoyskoye + North-Esetinskoye field (West-Yaroyakhinskiy license area)	477	530	(10.0%)
Other fields	1,397	957	46.0%
Total natural gas production by subsidiaries (3),(4)	**42,892**	**40,647**	**5.5%**
Group's proportionate share in the production of joint ventures:			
Yamal LNG (5)	18,008	17,093	5.4%
Arcticgas	15,073	15,383	(2.0%)
Nortgas	2,513	2,931	(14.3%)
Terneftegas	1,325	1,269	4.4%
Arctic LNG 2	83	44	88.6%
Total Group's proportionate share in the natural gas production of joint ventures (3),(4)	**37,002**	**36,720**	**0.8%**
Total natural gas production including proportionate share in the production of joint ventures	**79,894**	**77,367**	**3.3%**
Average daily natural gas production including proportionate share in the production of joint ventures	*218.9*	*211.4*	*3.5%*
Total LNG production including proportionate share in the production of joint ventures (thousands of tons) (5)	*12,180*	*11,553*	*5.4%*

(1) Includes production at the North-Russkoye, East-Tazovskoye, Dorogovskoye and Kharbeyskoye fields.

(2) Includes production at the Urengoyskoye, Dobrovolskoye and Sterkhovoye fields.

(3) Excluding natural gas volumes injected to maintain reservoir pressure.

(4) Natural gas production includes natural gas volumes consumed in oil and gas production and development activities (primarily, as fuel gas):

in subsidiaries	2,033	1,785	13.9%
in joint ventures (Group's proportionate share)	547	491	11.4%

(5) Natural gas and LNG production at Yamal LNG are reported at 60% (see "Basis of presentation" above).

In 2021, our total natural gas production (including our proportionate share in the production of joint ventures) increased by 2,527 mmcm, or 3.3%, to 79,894 mmcm from 77,367 mmcm in 2020.

The main factor positively impacting our production growth was an increase in natural gas production within the North-Russkiy cluster resulting from the commissioning of gas condensate deposits at the North-Russkoye field and the launch of the East-Tazovskoye field in the third quarter 2020, as well as the launch of the Kharbeyskoye field in the fourth quarter 2021. This factor fully offset the declines in production at mature fields of our subsidiaries (the Yurkharovskoye, East-Tarkosalinskoye and Khancheyskoye fields) and joint ventures (Nortgas and Arcticgas) resulted mainly from natural declines in the reservoir pressure at the current gas producing horizons.

In the second quarter 2021, Yamal LNG launched the fourth LNG train (see "Recent developments" above), which together with the achievement of increased productivity of LNG trains and the shorter planned maintenance works in 2021 resulted in an increase in production in the current year compared to the prior year.

Natural gas sales volumes

In 2021, our total natural gas sales volumes marginally increased by 197 mmcm, or 0.3%, to 75,817 mmcm from 75,620 mmcm in 2020.

millions of cubic meters	**Year ended 31 December: 2021**	**2020**	**Change %**
Production by subsidiaries	42,892	40,647	5.5%
Purchases from the Group's joint ventures	27,383	28,870	(5.2%)
Other purchases	7,801	7,597	2.7%
Total production and purchases	**78,076**	**77,114**	**1.2%**
Own usage [1] and other movements	(2,132)	(1,920)	11.0%
Decrease (increase) in natural gas inventory balance	(127)	426	n/a
Total natural gas sales volumes	**75,817**	**75,620**	**0.3%**
Sold to end-customers	*64,868*	*63,632*	*1.9%*
Sold ex-field	*3,000*	*3,060*	*(2.0%)*
Subtotal sold in the Russian Federation	***67,868***	***66,692***	***1.8%***
Sold on international markets	***7,949***	***8,928***	***(11.0%)***

[1] Own usage represents volumes of natural gas consumed in oil and gas producing and development activities (primarily, as fuel gas), as well as used to maintain the refining process at the Purovsky Plant and production of LNG and methanol.

In 2021, natural gas purchases from our joint ventures decreased by 1,487 mmcm, or 5.2%, to 27,383 mmcm from 28,870 mmcm in 2020 primarily due to a decrease in spot LNG purchases from our joint venture Yamal LNG. The decrease in LNG purchases resulted from an increase in the share of Yamal LNG's direct sales under long-term contracts and the corresponding decrease in LNG spot sales to shareholders, including the Group.

Other natural gas purchases are included in our natural gas volumes for sale, which allows us to coordinate sales across geographic regions as well as to optimize our end-customers portfolios. In the years ended 31 December 2021 and 2020, we purchased from third parties 7,529 mmcm and 7,169 mmcm of natural gas, respectively, on the Russian domestic market, and 272 mmcm and 428 mmcm, respectively, on international markets.

At 31 December 2021, our cumulative natural gas inventory balance, mainly representing our inventory balances of natural gas in the UGSF, aggregated 924 mmcm and increased by 127 mmcm during the year as compared to a decrease by 426 mmcm in 2020. Natural gas inventory balances tend to fluctuate period-to-period depending on the Group's demand for natural gas withdrawal from the UGSF for the sale in the subsequent periods.

Liquids production volumes

The following table presents liquids production of the Group's subsidiaries by major production fields and our proportionate share in the liquids production of joint ventures by entities:

thousands of tons	**Year ended 31 December: 2021**	**2020**	**Change %**
Production by subsidiaries from:			
Yarudeyskoye field	2,779	3,139	(11.5%)
East-Tarkosalinskoye field	1,203	1,294	(7.0%)
North-Russkiy cluster (1)	1,070	392	173.0%
Yurkharovskoye field	972	1,021	(4.8%)
Beregovoye field	267	267	0.0%
Khancheyskoye field	142	162	(12.3%)
Other fields	203	158	28.5%
Total liquids production by subsidiaries	**6,636**	**6,433**	**3.2%**
including crude oil	*3,944*	*4,355*	*(9.4%)*
including gas condensate	*2,692*	*2,078*	*29.5%*
Group's proportionate share in the production of joint ventures:			
Arcticgas	4,468	4,479	(0.2%)
Yamal LNG (2)	605	701	(13.7%)
Terneftegas	384	383	0.3%
Nortgas	206	241	(14.5%)
Total Group's proportionate share in the liquids production of joint ventures	**5,663**	**5,804**	**(2.4%)**
Total liquids production including proportionate share in the production of joint ventures	**12,299**	**12,237**	**0.5%**
Average daily liquids production including proportionate share in the production of joint ventures	*33.7*	*33.4*	*0.8%*

(1) Including production at the North-Russkoye, East-Tazovskoye and Kharbeyskoye fields.

(2) Production at the South-Tambeyskoye field of Yamal LNG is reported at 60% (see "Basis of presentation" above).

In 2021, our total liquids production (including our proportionate share in the production of joint ventures) increased by 62 thousand tons, or 0.5%, to 12,299 thousand tons from 12,237 thousand tons in 2020.

The launch of gas condensate production within the North-Russkiy cluster (the North-Russkoye and East-Tazovskoye fields in the third quarter 2020, as well as the Kharbeyskoye field in the fourth quarter 2021) fully offset a decrease in production at mature fields of our subsidiaries and joint ventures, which was mainly due to natural declines in the concentration of liquids as a result of decreasing reservoir pressure at the current producing horizons.

Liquids sales volumes

In 2021, our total liquids sales volumes increased by 168 thousand tons, or 1.0%, to 16,555 thousand tons from 16,387 thousand tons in 2020.

thousands of tons	Year ended 31 December: 2021	2020	Change %
Production by subsidiaries	6,636	6,433	3.2%
Purchases from the Group's joint ventures	9,841	10,028	(1.9%)
Other purchases	429	141	204.3%
Total production and purchases	**16,906**	**16,602**	**1.8%**
Losses [(1)], own usage [(2)] and other movements [(3)]	(284)	(215)	32.1%
Decreases (increases) in liquids inventory balances	(67)	-	n/a
Total liquids sales volumes	**16,555**	**16,387**	**1.0%**
Naphtha export	*4,398*	*4,294*	*2.4%*
Other stable gas condensate refined products export [(4)]	*2,031*	*2,259*	*(10.1%)*
Other stable gas condensate refined products domestic [(4)]	*356*	*220*	*61.8%*
Subtotal stable gas condensate refined products	***6,785***	***6,773***	***0.2%***
Crude oil export	*1,157*	*1,559*	*(25.8%)*
Crude oil domestic	*2,752*	*2,909*	*(5.4%)*
Subtotal crude oil	***3,909***	***4,468***	***(12.5%)***
LPG export	*567*	*568*	*(0.2%)*
LPG domestic	*2,939*	*2,391*	*22.9%*
Subtotal LPG	***3,506***	***2,959***	***18.5%***
Stable gas condensate export	*364*	*589*	*(38.2%)*
Stable gas condensate domestic	*1,977*	*1,580*	*25.1%*
Subtotal stable gas condensate	***2,341***	***2,169***	***7.9%***
Other oil products	***14***	***18***	***(22.2%)***

(1) Losses associated with processing at the Purovsky Plant, the Ust-Luga Complex and the Tobolsk Refining Facilities, as well as during railroad, trunk pipeline and tanker transportation.

(2) Own usage associated primarily with the maintaining of refining process at the Ust-Luga Complex, as well as bunkering of chartered tankers.

(3) Other movements relate to volumes of natural gas received from the deethanization of unstable gas condensate purchased from third parties.

(4) Other stable gas condensate refined products include jet fuel, gasoil and fuel oil received from the processing of stable gas condensate at the Ust-Luga Complex.

Other purchases of liquid hydrocarbons increased due to purchases of unstable gas condensate from a Gazprom group's company for deethanization and further processing at our Purovsky Plant at the suggestion of Gazprom.

Our sales volumes of naphtha and other stable gas condensate refined products fluctuate from period-to-period depending on changes in inventory balances, with volumes of the products received from processing at the Ust-Luga Complex staying relatively flat. Our sales volumes of stable gas condensate represent the volumes remaining after we deliver most of our stable gas condensate for further processing to our Ust-Luga Complex, as well as volumes purchased by the Group for subsequent sale on international markets, including purchases from our joint venture Yamal LNG.

In 2021, our liquids inventory balances increased by 67 thousand tons to 868 thousand tons as of 31 December 2021. In 2020, our liquids inventory balances did not change and amounted to 801 thousand tons as of 31 December 2020 and 2019. Our liquids inventory balances may vary period-to-period depending on shipping schedules and final destinations (see "Changes in natural gas, liquid hydrocarbons and work-in-progress" below).

RESULTS OF OPERATIONS FOR THE YEAR ENDED 31 DECEMBER 2021 COMPARED TO THE YEAR ENDED 31 DECEMBER 2020

The following table and discussion are a summary of our consolidated results of operations for the years ended 31 December 2021 and 2020. Each line item is also shown as a percentage of our total revenues.

	Year ended 31 December:			
millions of Russian roubles	**2021**	**% of total revenues**	**2020**	**% of total revenues**
Total revenues [(1)]	**1,156,724**	***100.0%***	**711,812**	***100.0%***
including:				
natural gas sales	524,071	*45.3%*	359,040	*50.4%*
liquids sales	611,135	*52.8%*	340,710	*47.9%*
Operating expenses	(875,159)	*(75.7%)*	(552,062)	*(77.6%)*
Gain on disposal of interests in subsidiaries, net	662	*0.1%*	69	*0.0%*
Other operating income (loss)	(3,181)	*(0.3%)*	(46,807)	*(6.6%)*
Profit from operations	**279,046**	***24.1%***	**113,012**	***15.9%***
Normalized profit from operations [(2)]	**278,384**	***24.1%***	**160,766**	***22.6%***
Finance income (expense)	(10,119)	*(0.9%)*	160,565	*22.6%*
Share of profit (loss) of joint ventures, net of income tax	232,277	*20.1%*	(143,981)	*(20.2%)*
Profit before income tax	**501,204**	***43.3%***	**129,596**	***18.2%***
Total income tax expense	(49,583)	*(4.3%)*	(51,010)	*(7.2%)*
Profit	**451,621**	***39.0%***	**78,586**	***11.0%***
Less: profit (loss) attributable to non-controlling interest	(18,694)	*(1.6%)*	(10,754)	*(1.5%)*
Profit attributable to shareholders of PAO NOVATEK	**432,927**	***37.4%***	**67,832**	***9.5%***
Normalized profit attributable to shareholders of PAO NOVATEK [(2)], excluding the effect of foreign exchange gains (losses)	**421,304**	***36.4%***	**169,020**	***23.7%***

(1) Net of VAT, export duties, excise and fuel taxes, where applicable.

(2) Excluding the effects from the disposal of interests in subsidiaries and joint ventures (recognition of a net gain on disposal and subsequent non-cash revaluation of contingent consideration).

Total revenues

The following table sets forth our sales (excluding VAT, export duties, excise and fuel taxes, where applicable) for the years ended 31 December 2021 and 2020:

	Year ended 31 December:		Change	Change (1)		
millions of Russian roubles	**2021**	**2020**	**%**	**Total**	**Due to volume (2)**	**Due to price (3)**
Natural gas sales	524,071	359,040	46.0%	165,031	936	164,095
Stable gas condensate refined products sales	308,123	171,038	80.1%	137,085	597	136,488
Naphtha	*208,713*	*112,963*	*84.8%*	*95,750*	*2,759*	*92,991*
Other refined products	*99,410*	*58,075*	*71.2%*	*41,335*	*(2,162)*	*43,497*
Crude oil sales	123,179	78,381	57.2%	44,798	(9,810)	54,608
Liquefied petroleum gas sales	99,142	48,725	103.5%	50,417	8,999	41,418
Stable gas condensate sales	79,931	41,728	91.6%	38,203	3,315	34,888
Other products sales	760	838	(9.3%)	(78)	n/a	n/a
Total oil and gas sales	**1,135,206**	**699,750**	**62.2%**	**435,456**	**n/a**	**n/a**
Other revenues	21,518	12,062	78.4%	9,456	n/a	n/a
Total revenues	**1,156,724**	**711,812**	**62.5%**	**444,912**	**n/a**	**n/a**

(1) The figures reflect the impact of sales volumes and average realized net prices factors on the change in total revenues from hydrocarbons sales in millions of Russian roubles for the respective periods.

(2) The amount of the change in total revenues due to sales volumes is calculated for each product category as a product of the average realized net price for the previous reporting period and the change in sales volumes.

(3) The amount of the change in total revenues due to average realized net prices is calculated for each product category as a product of the volume sold in the current reporting period and the change in average realized net prices.

Natural gas sales

Revenues from natural gas sales represent our revenues from natural gas sales in the Russian Federation (to end-customers and wholesale traders), and revenues from LNG sales to international and domestic markets, as well as revenues from sales of regasified LNG to customers in Europe.

In 2021, our total revenues from natural gas sales increased by RR 165,031 million, or 46.0%, compared to 2020 due to higher gas prices on international markets, as well as an increase in sales prices and volumes in the Russian domestic market (see "Natural gas prices" and "Natural gas sales volumes" above).

Stable gas condensate refined products sales

Stable gas condensate refined products sales represent revenues from sales of naphtha, jet fuel, gasoil and fuel oil produced from our stable gas condensate at the Ust-Luga Complex.

In 2021, our revenues from sales of stable gas condensate refined products increased by RR 137,085 million, or 80.1%, to RR 308,123 million from RR 171,038 million in 2020 mainly due to an increase in average realized prices (see "Stable gas condensate and refined products, liquefied petroleum gas and crude oil prices" and "Liquids sales volumes" above).

Revenues from sales of naphtha increased by RR 95,750 million, or 84.8%, as compared to 2020. In the years ended 31 December 2021 and 2020, we exported 4,398 thousand tons and 4,294 thousand tons of naphtha, respectively, mainly to the APR, and the European and North American markets. Our average realized net price, excluding export duties, where applicable, increased by RR 21,143 per ton, or 80.4%, to RR 47,454 per ton from RR 26,311 per ton in 2020.

Revenues from sales of jet fuel, gasoil and fuel oil increased by RR 41,335 million, or 71.2%, as compared to 2020. In the years ended 31 December 2021 and 2020, we exported in aggregate 2,031 thousand tons and 2,259 thousand tons of these products mainly to the European markets, or 85.1% and 91.1% of total sales volumes (on both the domestic and export markets), respectively. Our average realized net price, excluding export duties, where applicable, increased by RR 18,223 per ton, or 77.8%, to RR 41,649 per ton from RR 23,426 per ton in 2020.

Crude oil sales

In 2021, our revenues from crude oil sales increased by RR 44,798 million, or 57.2%, compared to 2020 due to an increase in average realized prices, the effect of which was partially offset by a decrease in sales volumes.

We sold 2,752 thousand tons, or 70.4% of our total crude oil sales volumes, domestically as compared to sales of 2,909 thousand tons, or 65.1%, in 2020 (see "Liquids sales volumes" above). The remaining 1,157 thousand tons of crude oil, or 29.6% of our total crude oil sales volumes, in 2021, and 1,559 thousand tons, or 34.9%, in 2020 were sold to customers with destination points in the APR markets in both periods, as well as in the European and the Middle East markets in 2020.

Our average realized net price, excluding export duties, where applicable, increased by RR 13,970 per ton, or 79.6%, to RR 31,511 per ton from RR 17,541 per ton in 2020 (see "Stable gas condensate and refined products, liquefied petroleum gas and crude oil prices" above).

Liquefied petroleum gas sales

In 2021, our revenues from sales of LPG increased by RR 50,417 million, or 103.5%, compared to 2020 mainly due to an increase in average realized prices and, to a lesser extent, sales volumes.

We sold 2,939 thousand tons of LPG, or 83.8% of our total LPG sales volumes, on the domestic market compared to sales of 2,391 thousand tons, or 80.8%, in 2020 (see "Liquids sales volumes" above). The remaining 567 thousand tons of LPG, or 16.2% of our total LPG sales volumes, in 2021 and 568 thousand tons, or 19.2%, in 2020 were sold primarily to the Polish market.

Our average realized LPG net price, excluding export and import duties, excise, and fuel taxes expense, where applicable, in 2021 increased by RR 11,816 per ton, or 71.8%, to RR 28,283 per ton from RR 16,467 per ton in 2020 (see "Stable gas condensate and refined products, liquefied petroleum gas and crude oil prices" above).

Stable gas condensate sales

In 2021, our revenues from sales of stable gas condensate increased by RR 38,203 million, or 91.6%, compared to 2020 primarily due to an increase in average realized prices, as well as in sales volumes.

We sold 1,977 thousand tons of stable gas condensate, or 84.5% of our total stable gas condensate sales volumes, on the domestic market as compared to sales of 1,580 thousand tons, or 72.8%, in 2020 (see "Liquids sales volumes" above). The remaining 364 thousand tons of stable gas condensate, or 15.5% of our total stable gas condensate sales volumes, in 2021, and 589 thousand tons, or 27.2%, in 2020 were sold to the European, APR and Middle East (only in 2020) markets.

Our average realized net price, excluding export duties, where applicable, increased by RR 14,901 per ton, or 77.5%, to RR 34,140 per ton from RR 19,239 per ton in 2020 (see "Stable gas condensate and refined products, liquefied petroleum gas and crude oil prices" above).

Other products sales

Other products sales represent our revenues from sales of purchased oil products (diesel fuel and petrol) through our retail stations, as well as sales of other liquid hydrocarbons, including methanol from our own production. In 2021, our revenues from other products sales decreased by RR 78 million, or 9.3%, to RR 760 million from RR 838 million in 2020.

Other revenues

Other revenues include revenue from transportation, geological and geophysical research services, repair and maintenance of energy equipment services, rent and other services.

In 2021, other revenues increased by RR 9,456 million, or 78.4%, to RR 21,518 million from RR 12,062 million in 2020 primarily due to an increase in revenues from leasing of facilities of our LNG construction center located in the Murmansk region, used for the construction of the LNG plant at the Arctic LNG 2 project. Other revenues also increased due to additional license fees received from the joint venture Yamal LNG for our technology "Arctic Cascade" as a result of the launch of the fourth LNG train, as well as due to an increase in revenues from geological and geophysical research services provided to our joint ventures.

Operating expenses

In 2021, our total operating expenses increased by RR 323,097 million, or 58.5%, to RR 875,159 million compared to RR 552,062 million in 2020 mainly due to an increase in global hydrocarbon commodity prices, which resulted in an increase in average hydrocarbon purchase prices (see "Purchases of natural gas and liquid hydrocarbons" below) and UPT rates (see "Taxes other than income tax" below).

	Year ended 31 December:			
millions of Russian roubles	**2021**	**% of total revenues**	**2020**	**% of total revenues**
Purchases of natural gas and liquid hydrocarbons	497,282	*43.0%*	235,224	*33.0%*
Transportation expenses	161,506	*14.0%*	154,757	*21.7%*
Taxes other than income tax	88,506	*7.7%*	54,501	*7.7%*
Depreciation, depletion and amortization	56,599	*4.9%*	39,238	*5.5%*
Materials, services and other	34,442	*3.0%*	29,577	*4.2%*
General and administrative expenses	34,250	*3.0%*	26,795	*3.8%*
Exploration expenses	9,582	*0.8%*	9,103	*1.3%*
Impairment expenses, net	1,908	*0.2%*	254	*n/a*
Changes in natural gas, liquid hydrocarbons and work-in-progress	(8,916)	*n/a*	2,613	*0.4%*
Total operating expenses	**875,159**	***75.7%***	**552,062**	***77.6%***

Purchases of natural gas and liquid hydrocarbons

In 2021, our purchases of natural gas and liquid hydrocarbons increased by RR 262,058 million, or 111.4%, to RR 497,282 million as compared to RR 235,224 million in 2020.

	Year ended 31 December:		Change
millions of Russian roubles	**2021**	**2020**	**%**
Natural gas	258,989	125,844	105.8%
Unstable gas condensate	245,400	102,568	139.3%
Other hydrocarbons	10,764	12,221	(11.9%)
Reverse excise	(17,871)	(5,409)	230.4%
Total purchases of natural gas and liquid hydrocarbons	**497,282**	**235,224**	**111.4%**

Purchases of natural gas increased by RR 133,145 million, or 105.8%, as compared to 2020 mainly due to an increase in LNG purchase prices that are based on natural gas prices at major natural gas hubs and benchmark crude oil prices (see "Selected macro-economic data" above), as well as due to domestic gas prices indexation (see "Natural gas prices" above). The impact of these factors was partially offset by a decrease in volumes of LNG purchased from our joint venture OAO Yamal LNG for subsequent sale on international markets due to an increase in the share of direct sales of Yamal LNG under long-term contracts and the corresponding decrease in the share of LNG spot sales to shareholders, including the Group.

Purchases of unstable gas condensate increased by RR 142,832 million, or 139.3%, as compared to 2020 mainly due to an increase in purchase prices, which are primarily impacted by international crude oil and LPG prices excluding export duties (see "Selected macro-economic data" above).

Other hydrocarbon purchases represent our purchases of crude oil, LPG, stable gas condensate and oil products for subsequent resale depending on the demand for these types of products. Purchases of other hydrocarbons decreased by RR 1,457 million, or 11.9%, as compared to 2020 mainly due to purchases of stable gas condensate from Yamal LNG for subsequent sale in 2020 (there were no such purchases in 2021).

We receive the reverse excise on raw oil based on volumes of stable gas condensate sent for processing to our Ust-Luga Complex on a monthly basis (see "Our tax burden and obligatory payments" above). We report the amount of reverse excise as a deduction to our operating expenses in the line "Purchases of natural gas and liquid hydrocarbons" in our consolidated statement of income as most of our unstable gas condensate volumes used to produce stable gas condensate we purchase from our joint ventures.

Transportation expenses

In 2021, our total transportation expenses increased by RR 6,749 million, or 4.4%, to RR 161,506 million as compared to RR 154,757 million in 2020.

millions of Russian roubles	Year ended 31 December: 2021	2020	Change %
Natural gas transportation by trunk and low-pressure pipelines	106,628	100,594	6.0%
Stable gas condensate and liquefied petroleum gas transportation by rail	36,499	34,198	6.7%
Stable gas condensate and refined products, crude oil and liquefied natural gas transportation by tankers	9,907	10,283	(3.7%)
Crude oil transportation by trunk pipelines	6,754	8,042	(16.0%)
Other	1,718	1,640	4.8%
Total transportation expenses	**161,506**	**154,757**	**4.4%**

Expenses for natural gas transportation by trunk and low-pressure pipelines increased by RR 6,034 million, or 6.0%, to RR 106,628 million from RR 100,594 million in 2020 due to an increase in the transportation distance as a result of, inter alia, production growth at the fields within the North-Russkiy cluster, and a 1.9% increase in our natural gas sales volumes to our end-customers, for which we incurred transportation expenses.

Expenses for stable gas condensate and LPG transportation by rail increased by RR 2,301 million, or 6.7%, to RR 36,499 million from RR 34,198 million in 2020. The increase was due to an increase in the weighted average transportation cost per unit resulted from a 3.7% growth in the regulated railroad transportation tariffs effective January 2021 (see "Transportation tariffs" above), as well as a 2.4% increase in volumes of liquids sold and transported via rail.

Transportation expenses for our hydrocarbons delivered by tankers to international markets decreased by RR 376 million, or 3.7%, to RR 9,907 million from RR 10,283 million in 2020 mainly due to a decrease in liquids volumes delivered.

Expenses for crude oil transportation to customers by trunk pipeline decreased by RR 1,288 million, or 16.0%, to RR 6,754 million from RR 8,042 million in 2020 due to a 12.5% decrease in sales volumes, as well as an increase in the proportion of sales to our domestic customers located at closer regions from our production fields.

Other transportation expenses mainly include our short-term vessels time charter expenses and other expenses related to our revenues from hydrocarbons transportation by tankers and transshipment services rendered to our joint ventures and third parties (see "Other revenues" above), as well as expenses for hydrocarbons transportation by trucks.

Taxes other than income tax

In 2021, taxes other than income tax increased by RR 34,005 million, or 62.4%, to RR 88,506 million from RR 54,501 million in 2020 primarily due to an increase in unified natural resources production tax expense.

millions of Russian roubles	Year ended 31 December: 2021	2020	Change %
Unified natural resources production tax (UPT)	83,281	50,204	65.9%
Property tax	4,803	3,929	22.2%
Other taxes	422	368	14.7%
Total taxes other than income tax	**88,506**	**54,501**	**62.4%**

Unified natural resources production tax expense increased by RR 33,077 million, or 65.9%, to RR 83,281 million from RR 50,204 million in 2020 primarily due to an increase in UPT rates, as well as an increase in gas condensate and natural gas production volumes (see "Hydrocarbon production and sales volumes" above). The increase in UPT rates was due to an increase in benchmark crude oil prices and changes in the UPT rates formulas caused by the completion of the tax maneuver in the oil and gas industry (see "Our tax burden and obligatory payments" above).

Property tax expense increased by RR 874 million, or 22.2%, to RR 4,803 million from RR 3,929 million in 2020 primarily due to the launch of new production assets in both reporting periods.

Depreciation, depletion and amortization

In 2021, our depreciation, depletion and amortization ("DDA") expense increased by RR 17,361 million, or 44.2%, to RR 56,599 million from RR 39,238 million in 2020 primarily due to additions of new assets: launch of the fields within the North-Russkiy cluster and production facilities of our LNG construction center located in the Murmansk region, used for construction of LNG plant at our Arctic LNG 2 project. We accrue depreciation and depletion on oil and gas assets using the "units-of-production" method and straight-line method for other facilities.

Materials, services and other

In 2021, our materials, services and other expenses increased by RR 4,865 million, or 16.4%, to RR 34,442 million compared to RR 29,577 million in 2020.

	Year ended 31 December:		**Change**
millions of Russian roubles	**2021**	**2020**	**%**
Employee compensation	17,033	14,027	21.4%
Repair and maintenance	3,791	3,294	15.1%
Materials and supplies	2,412	1,833	31.6%
Preparation and processing of hydrocarbons	2,227	2,323	(4.1%)
Electricity and fuel	1,818	1,702	6.8%
Transportation services	1,304	1,140	14.4%
Fire safety and security expenses	1,304	1,152	13.2%
Liquefied petroleum gas volumes reservation expenses	1,205	1,205	0.0%
Insurance expense	634	462	37.2%
Rent expenses	591	592	(0.2%)
Labor safety expenses	565	703	(19.6%)
Other	1,558	1,144	36.2%
Total materials, services and other	**34,442**	**29,577**	**16.4%**

Employee compensation relating to operating personnel increased by RR 3,006 million, or 21.4%, to RR 17,033 million compared to RR 14,027 million in 2020 due to an increase in average number of employees resulting from the launch of new production assets at our subsidiaries and provision of servicing of new assets to our joint ventures (mainly, Arctic LNG 2 and Arcticgas), as well as an indexation of base salaries effective from 1 January 2021, and the related increase in social contributions for medical and social insurance and to the Pension Fund of the Russian Federation.

The launch of gas condensate deposits at the fields within the North-Russkiy cluster in 2020 and 2021 (at the North-Russkoye and East-Tazovskoye fields in the third quarter 2020, as well as at the Kharbeyskoye field in the fourth quarter 2021) resulted in an increase in maintenance expenses, expenses for materials and supplies required to maintain the technological process, as well as the expenses for its transportation. In addition, the launch of new assets resulted in an increase in insurance, fire safety and security expenses.

In addition to factors mentioned above, repair and maintenance expenses also increased due to an increase in current repair works performed on wells at our core production subsidiaries. Materials and supplies expenses also increased due to a growth in power generation for our joint ventures due to the expansion of their operations at our service subsidiary NOVATEK-Energo, as well as due to outfitting a new crew camp at one of our production subsidiaries.

The line "Other" increased due to expenses related to the provision of geological and geophysical research services to our joint ventures, which was in line with an increase in revenues from these services (see "Other revenues" above).

General and administrative expenses

In 2021, our general and administrative expenses increased by RR 7,455 million, or 27.8%, to RR 34,250 million compared to RR 26,795 million in 2020.

millions of Russian roubles	**Year ended 31 December: 2021**	**2020**	**Change %**
Employee compensation	26,122	17,849	46.3%
Social expenses and compensatory payments	2,753	4,128	(33.3%)
Legal, audit and consulting services	1,358	1,289	5.4%
Advertising expenses	988	599	64.9%
Repair and maintenance expenses	740	947	(21.9%)
Fire safety and security expenses	616	581	6.0%
Business travel expense	283	187	51.3%
Rent expense	161	184	(12.5%)
Other	1,229	1,031	19.2%
Total general and administrative expenses	**34,250**	**26,795**	**27.8%**

Employee compensation relating to administrative personnel increased by RR 8,273 million, or 46.3%, to RR 26,122 million in 2021 from RR 17,849 million in 2020 primarily due to an increase in accrued provision for bonuses to management personnel, as well as an increase in average number of employees resulting from the expansion of the Group's activities, an indexation of base salaries effective from 1 January 2021, and the related increase in social contributions for medical and social insurance and to the Pension Fund of the Russian Federation.

Social expenses and compensatory payments amounted to RR 2,753 million compared to RR 4,128 million in 2020. In 2021, we recorded compensatory payments in the total amount of RR 537 million, which primarily related to the development of the East-Tambeyskiy and North-Obskiy license areas and the East-Tarkosalinskoye field. In 2020, compensatory payments amounted to RR 1,602 million and mainly related to the development of the Yurkharovskoye and West-Yurkharovskoye fields, the Nyakhartinskiy and West-Yaroyakhinskiy license areas. The remaining expenses represented our social expenses and related to continued support of charities and social programs in the regions where we operate. Social expenses and compensatory payments fluctuate period-to-period depending on the implementation schedules of specific programs we support.

Advertising expenses amounted to RR 988 million compared to RR 599 million in 2020 and mainly related to advertising during sporting events, forums and conferences. Advertising expenses fluctuate period-to-period depending on timing of events.

Repair and maintenance expenses decreased by RR 207 million, or 21.9%, to RR 740 million from RR 947 million in 2020 mainly due to settling in and outfitting a new office building for our subsidiaries in Novy Urengoy last year.

Other items of our general and administrative expenses changed marginally.

Exploration expenses

In 2021, our exploration expenses amounted to RR 9,582 million, of which the major part related to exploration works at the Soletsko-Khanaveyskiy, North-Russkiy and Nyakhartinskiy license areas, on the flank of the East-Tazovskoye field, as well as on an offshore block in Montenegro. In 2020, our exploration expenses amounted to RR 9,103 million and related to exploration works at the Gydanskiy, Soletsko-Khanaveyskiy, Shtormovoy, Nyakhartinskiy and North-Russkiy license areas, as well as on an offshore block in Lebanon.

Exploration works ensure timely preparation of reserves at our promising fields for development and further progress of the Group's hydrocarbons production projects in line with our long-term strategy. Exploration expenses fluctuate period-to-period in accordance with the approved exploration work schedule at our production subsidiaries.

In accordance with our accounting policies, exploration expenses include geological and geophysical research services, expenditures associated with the maintenance of license areas with non-proven reserves, expenses of our science and technology center associated with the exploration activities at our fields, costs related to exploratory wells drilling when reserves are not found, and other expenditures relating to exploration activity.

Impairment expenses

In 2021 and 2020, we recognized net impairment expenses of RR 1,908 million and RR 254 million, respectively, which in both periods mainly related to impairments of trade accounts receivables, as well as to an impairment of property, plant and equipment in 2021 in the amount of RR 576 million in respect of assets related to the Yumantylskiy license area as a result of the decision to return the license in 2022.

Changes in natural gas, liquid hydrocarbons and work-in-progress

In 2021, we recorded a reversal of RR 8,916 million to changes in inventory expense due to an increase in most of our hydrocarbons inventory balances and the cost of hydrocarbons purchases as a result of an increase in benchmark crude oil prices. In 2020, we recorded a charge of RR 2,613 million to changes in inventory expense due to a decrease in natural gas inventory balances and a decrease in the cost of hydrocarbons purchases as a result of a decrease in benchmark crude oil prices.

In the current year, our cumulative natural gas inventory balance increased by 127 mmcm as compared to a decrease by 426 mmcm in 2020. Natural gas inventory balances tend to fluctuate period-to-period depending on the Group's demand for natural gas withdrawal for the sale in the subsequent periods.

In 2021, our cumulative liquid hydrocarbons inventory balances, recognized as inventory in transit or in storage, increased by 67 thousand tons mainly due to an increase in inventory balances of stable gas condensate in rail cars in transit not realized at the reporting date. In 2020, our cumulative liquid hydrocarbons inventory balances did not change. Inventory balances of stable gas condensate and refined products tend to fluctuate period-to-period depending on shipment schedules and final destination of our shipments.

The following table highlights movements in our hydrocarbons inventory balances:

	2021			**2020**		
Inventory balances in transit or in storage	**At 31 December**	**At 1 January**	**Increase / (decrease)**	**At 31 December**	**At 1 January**	**Increase / (decrease)**
Natural gas (millions of cubic meters)	**924**	**797**	**127**	**797**	**1,223**	**(426)**
incl. Gazprom's UGSF	*771*	*698*	*73*	*698*	*982*	*(284)*
Liquid hydrocarbons (thousand tons)	**868**	**801**	**67**	**801**	**801**	**-**
incl. stable gas condensate						
refined products	*357*	*380*	*(23)*	*380*	*331*	*49*
stable gas condensate	*293*	*238*	*55*	*238*	*272*	*(34)*
crude oil	*99*	*81*	*18*	*81*	*94*	*(13)*

Net gain on disposal of interests in subsidiaries

In the third quarter 2021, the Group sold a 10% participation interest in its subsidiary OOO Arctic Transshipment to TOTAL E&P Transshipment SAS, a member of the TotalEnergies SE group, and recognized a gain on the disposal in the amount of RR 662 million before income tax (see "Recent developments" above).

In 2020, we sold a 100% participation interest in OOO Chernichnoye to our joint venture ZAO Terneftegas and recognized a gain on the disposal in the amount of RR 69 million before income tax.

Other operating income (loss)

Other operating income (loss) includes realized income (loss) from hydrocarbons trading on the international markets, income (loss) from the change in the fair value of the aforementioned contracts, as well as other income (loss) relating to penalty charges, disposal of materials, fixed assets and other transactions. In 2021, we recognized other operating loss of RR 3,181 million compared to other operating loss of RR 46,807 million in 2020.

In 2021, we purchased and sold approximately 11.6 bcm of natural gas, as well as various derivative commodity instruments within our trading activities, and recognized an aggregate realized loss from trading activities of RR 1,278 million as compared to an income of RR 1,479 million in 2020. At the same time, we recognized a non-cash loss of RR 2,600 million in 2021 due to a decrease in the fair value of the aforementioned contracts as compared to a non-cash loss of RR 1,689 million in 2020. The effect of the change in fair value of the commodity contracts fluctuates from period-to-period depending on the forecast prices for hydrocarbons on international markets and other macroeconomic parameters and may or may not reflect actual future cash flows from trading activities.

In addition, in 2020, we recognized a loss of RR 47,823 million due to the non-cash revaluation of fair value of contingent consideration related to the sale of a 40% participation interest in OOO Arctic LNG 2 in 2019, resulting from a decrease in long-term crude oil benchmark prices forecast, which may be revised subject to world market conditions and may or may not reflect actual future cash inflows.

Profit from operations and EBITDA

In 2021, our profit from operations and EBITDA including our proportionate share of joint ventures, but excluding the effects from the disposal of interests in subsidiaries and joint ventures, increased to RR 608,741 million and RR 748,337 million, respectively, compared to RR 274,718 million and RR 392,008 million in 2020.

Profit from operations and EBITDA of our subsidiaries, excluding the effects from the disposal of participation interests, also increased to RR 278,384 million and RR 339,491 million, respectively, compared to RR 160,766 million and RR 201,947 million in 2020.

Increases in normalized profit from operations and EBITDA were mainly due to an increase in hydrocarbon commodity prices on international markets in the current year compared to the prior year, as well as the launch of new production assets within the fields of the North-Russkiy cluster in 2020 and 2021.

Finance income (expense)

In 2021, we recorded net finance expense of RR 10,119 million compared to net finance income of RR 160,565 million in 2020.

	Year ended 31 December:		**Change**
millions of Russian roubles	**2021**	**2020**	**%**
Accrued interest expense on loans received	(7,925)	(10,051)	(21.2%)
Less: capitalized interest	4,768	6,641	(28.2%)
The effect from recalculating of the amortized cost of a financial liability due to a change in the repayment schedule	(3,886)	-	n/a
Provisions for asset retirement obligations: effect of the present value discount unwinding	(886)	(960)	(7.7%)
Interest expense on lease liabilities and other expenses	(535)	(569)	(6.0%)
Interest expense	**(8,464)**	**(4,939)**	**71.4%**
Interest income	16,000	25,440	(37.1%)
Change in fair value of non-commodity financial instruments	19,600	(7,397)	n/a
Foreign exchange gain (loss), net	(37,255)	147,461	n/a
Total finance income (expense)	**(10,119)**	**160,565**	**n/a**

Interest expense increased by RR 3,525 million, or 71.4% primarily due to the Group's decision to repay the loan obtained from China's investment fund Silk Road Fund ahead of its maturity schedule, in late 2021 – early 2022. The amortized cost of the liability was recalculated based on the new repayment schedule, and the difference of RR 3,886 million, representing a non-cash expense, was recognized within "Interest expense" line.

Interest income decreased by RR 9,440 million, or 37.1%, to RR 16,000 million from RR 25,440 million in 2020 as a result of the termination starting from 2021 of interest income recognition on the shareholders' loans issued to our joint venture Yamal LNG and accounted for at fair value in accordance with IFRS 9 *"Financial instruments"*. A portion of the change in fair value of such loans attributable to interest income is determined based on the amortized cost of the loans using the effective rate method based on initial interest rates and anticipated repayment schedules. Upon the expiration of initially anticipated repayment schedules, a portion of the change in the loans fair value reflecting the time value of money is no longer recorded within "Interest income" line but is instead recorded within "Change in fair value of non-commodity financial instruments" line, which also includes other effects of changes in the fair value of these loans (such as changes in interest rates and expected maturities).

In 2021, we recognized a non-cash gain of RR 19,600 million compared to a non-cash loss of RR 7,397 million in 2020 due to the remeasurement of the shareholders' loans issued by the Group to our joint ventures in accordance with IFRS 9 *"Financial instruments"*. The effect of the fair value remeasurement of shareholders' loans may change period-to-period due to the change in market interest rates and other macroeconomic parameters and does not affect real future cash flows of loans repayments.

The Group continues to record non-cash foreign exchange gains and losses each reporting period due to movements between currency exchange rates. In 2021, we recorded a net foreign exchange loss of RR 37,255 million compared to a net foreign exchange gain of RR 147,461 million in 2020 due to the revaluation of our foreign currency denominated borrowings and loans received and provided, cash balances in foreign currency, trade receivables and contingent consideration related to the transactions on the sale of participation interests in Arctic LNG 2.

Share of profit (loss) of joint ventures, net of income tax

In 2021, the Group's proportionate share of profit of joint ventures amounted to RR 232,277 million as compared to the share of loss in the amount of RR 143,981 million in 2020.

millions of Russian roubles (Group's share)	**Year ended 31 December: 2021**	**2020**	**Change %**
Share of profit from operations	**330,357**	**113,952**	**189.9%**
Share of finance income (expense) excluding foreign exchange effects	**(96,379)**	**(71,685)**	**34.4%**
Interest income (expense), net	(61,132)	(85,502)	(28.5%)
Change in fair value of non-commodity financial instruments	(35,247)	13,817	n/a
Share of income tax excluding foreign exchange effects	**(42,539)**	**(5,303)**	**n/a**
Share of profit (loss) of joint ventures, net of income tax and excluding foreign exchange effects	**191,439**	**36,964**	**n/a**
Share of foreign exchange gain (loss), net	86,174	(254,022)	n/a
Share of income tax related to foreign exchange gain (loss)	(15,091)	42,832	n/a
Total	**262,522**	**(174,226)**	**n/a**
Unrecognized share of loss (profit) of joint ventures	(30,245)	30,245	n/a
Total share of profit (loss) of joint ventures, net of income tax	**232,277**	**(143,981)**	**n/a**

The following table presents the Group's proportionate share of profit (loss) of our joint ventures by entities:

	Yamal LNG		Arcticgas		Others	
millions of Russian roubles (Group's share)	2021	2020	2021	2020	2021	2020
Share of profit from operations	**239,066**	**76,020**	**79,303**	**37,657**	**11,988**	**275**
Share of finance income (expense) excluding foreign exchange effects	**(86,349)**	**(65,789)**	**(2,955)**	**(1,355)**	**(7,075)**	**(4,541)**
Interest income (expense), net	(56,357)	(81,398)	(2,955)	(1,355)	(1,820)	(2,749)
Change in fair value of non-commodity financial instruments	(29,992)	15,609	-	-	(5,255)	(1,792)
Share of income tax excluding foreign exchange effects	**(26,837)**	**(3,163)**	**(12,930)**	**(5,691)**	**(2,772)**	**3,551**
Share of profit (loss) of joint ventures, net of income tax and excluding foreign exchange effects	**125,880**	**7,068**	**63,418**	**30,611**	**2,141**	**(715)**
Share of foreign exchange gain (loss), net	59,732	(222,431)	13	(22)	26,429	(31,569)
Share of income tax related to foreign exchange gain (loss)	(9,856)	36,700	(2)	4	(5,233)	6,128
Total	**175,756**	**(178,663)**	**63,429**	**30,593**	**23,337**	**(26,156)**
Unrecognized share of loss (profit) of joint ventures	(27,763)	27,763	-	-	(2,482)	2,482
Total share of profit (loss) of joint ventures, net of income tax	**147,993**	**(150,900)**	**63,429**	**30,593**	**20,855**	**(23,674)**

Our proportionate share in the profit from operations of our joint ventures increased by RR 216,405 million, or 189.9%, from RR 113,952 million to RR 330,357 million mainly due to increases in LNG and liquids average realized prices.

Our proportionate share in interest expense decreased by RR 24.4 billion, or 28.5%, primarily due to the termination starting from 2021 of interest expense recognition on the shareholders' loans issued to our joint venture Yamal LNG and accounted for at fair value in accordance with IFRS 9 "*Financial Instruments*". A portion of the change in the fair value of these loans reflecting the time value of money is now recorded within "Change in fair value of non-commodity financial instruments" line (see "Finance income (expense)" above).

In 2021, our share in foreign exchange gains amounted to RR 86.2 billion as compared to our share in foreign exchange losses of RR 254.0 billion in 2020. These foreign exchange gains (losses) in both reporting periods were mainly non-cash and primarily related to the revaluation of foreign currency denominated loans in our joint ventures Yamal LNG and Arctic LNG 2. We assess that the impact of foreign currency risk relating to the debt portfolio of OAO Yamal LNG and OOO Arctic LNG 2 is largely mitigated by the fact that all of their products are targeted for the delivery to international markets at prices denominated in foreign currencies.

In 2021, a portion of our share of profit of OAO Yamal LNG and OOO Cryogas-Vysotsk in the amount of RR 30.2 billion was not recognized in the consolidated statement of income as it was offset against the unrecognized share of losses in 2020 resulted from the significant foreign exchange losses.

Income tax expense

The Russian statutory income tax rate for both reporting periods was 20%.

The Group recognizes in profit before income tax its share of net profit (loss) from joint ventures, which influences the consolidated profit of the Group but does not result in additional income tax expense (benefit) at the Group's level. Net profit (loss) of joint ventures was recorded in their financial statements on an after-tax basis. The Group's dividend income from the joint ventures in which it holds at least a 50% interest is subject to a zero withholding tax rate according to the Russian tax legislation, and also does not result in a tax charge.

Without the effect of net profit (loss) from joint ventures and excluding the effects from the disposal of interests in subsidiaries and joint ventures, the effective income tax rate (total income tax expense calculated as a percentage of profit before income tax) for the years ended 31 December 2021 and 2020 was 18.7% and 18.8%, respectively.

Profit attributable to shareholders and earnings per share

As a result of the factors discussed in the respective sections above, profit attributable to shareholders of PAO NOVATEK increased by RR 365,095 million, or 6.4 times, to RR 432,927 million in 2021 compared to RR 67,832 million in 2020.

Excluding the effects from the disposal of interests in subsidiaries and joint ventures and foreign exchange gains (losses), our profit attributable to shareholders of PAO NOVATEK increased by RR 252,284 million, or 149.3%, and amounted to RR 421,304 million in 2021 compared to RR 169,020 million in 2020.

Reconciliation of normalized profit attributable to shareholders of PAO NOVATEK is as follows:

millions of Russian roubles	**Year ended 31 December: 2021**	**2020**	**Change %**
Profit attributable to shareholders of PAO NOVATEK	**432,927**	**67,832**	**n/a**
Gain on disposal of interests in subsidiaries, net	(662)	(69)	n/a
Income tax expense related to the disposal of interests in subsidiaries	73	23	217.4%
Changes in fair value of contingent consideration reported within the "Other operating income (loss)"	-	47,823	n/a
Income tax expense (benefit) related to changes in fair value of contingent consideration	-	(9,565)	n/a
Normalized profit attributable to shareholders of PAO NOVATEK	**432,338**	**106,044**	**307.7%**
including:			
profit from subsidiaries	200,061	250,025	(20.0%)
share of profit (loss) of joint ventures	232,277	(143,981)	n/a

Reconciliation of normalized profit attributable to shareholders of PAO NOVATEK excluding the effect of foreign exchange gains (losses) is as follows:

millions of Russian roubles	**Year ended 31 December: 2021**	**2020**	**Change %**
Normalized profit from subsidiaries attributable to shareholders of PAO NOVATEK	**200,061**	**250,025**	**(20.0%)**
Foreign exchange (gains) losses, net	37,255	(147,461)	n/a
Income tax expense relating to foreign exchange (gains) losses	(7,451)	29,492	n/a
Normalized profit from subsidiaries attributable to shareholders of PAO NOVATEK excluding the effect of foreign exchange gains (losses)	**229,865**	**132,056**	**74.1%**
Share of profit (loss) of joint ventures, net of income tax and excluding foreign exchange effects [(1)]	191,439	36,964	n/a
Normalized profit attributable to shareholders of PAO NOVATEK, excluding the effect of foreign exchange gains (losses)	**421,304**	**169,020**	**149.3%**

[(1)] See "Share of profit (loss) of joint ventures, net of income tax" above.

In 2021, our weighted average basic and diluted earnings per share, calculated from the profit attributable to shareholders of PAO NOVATEK, increased by RR 121.65, or 6.4 times, to RR 144.23 per share compared to RR 22.58 per share in 2020. Excluding the effects from the disposal of interests in subsidiaries and joint ventures and foreign exchange gains (losses), our weighted average basic and diluted earnings per share increased by RR 84.10, or 149.5%, to RR 140.36 per share in 2021 from RR 56.26 per share in 2020.

LIQUIDITY AND CAPITAL RESOURCES

Cash flows

The following table shows our net cash flows from operating, investing and financing activities for the years ended 31 December 2021 and 2020:

millions of Russian roubles	Year ended 31 December: 2021	2020	Change %
Net cash provided by **operating** activities	419,466	171,896	144.0%
Net cash used for **investing** activities	(253,135)	(47,872)	n/a
Net cash used for **financing** activities	(237,898)	(78,075)	204.7%

Net cash provided by operating activities

Our net cash provided by operating activities increased to RR 419,466 million from RR 171,896 million in 2020 mainly due to an increase in profit from operations and dividends received from joint ventures.

millions of Russian roubles	Year ended 31 December: 2021	2020	Change %
Profit from operations, excluding the effects from the disposal of interests in subsidiaries and joint ventures	278,384	160,766	73.2%
Non-cash adjustments [(1)]	62,785	43,121	45.6%
Changes in working capital and long-term advances given	(21,186)	(10,876)	94.8%
Dividends and cash received from joint ventures	118,786	11,420	n/a
Interest received	8,832	8,442	4.6%
Income taxes paid excluding payments relating to disposal of interests in subsidiaries	(28,135)	(40,977)	(31.3%)
Total net cash provided by operating activities	**419,466**	**171,896**	**144.0%**

[(1)] Include adjustments for depreciation, depletion and amortization, net impairment expenses (reversals), change in fair value of non-commodity financial instruments and some other adjustments.

In 2021, profit from operations, excluding the effects from the disposal of interests in subsidiaries and joint ventures, and adjusted for non-cash items increased primarily due to a strong growth in hydrocarbon prices on international markets, as well as an increase in our hydrocarbon production volumes.

At the same time, income tax payments, on the contrary, decreased in 2021 due to the recognition of foreign exchange losses in our subsidiaries as compared to the recognition of substantial foreign exchange gains in 2020. Moreover, the Group offset other taxes refund in the amount of RR 14.4 billion against income tax in the current year compared to RR 7.1 billion in 2020.

In 2021 and 2020, we received RR 99,375 million and RR 10,750 million, respectively, of dividends from our joint venture Arcticgas, as well as RR 3,679 million and RR 670 million, respectively, of cash distributed in favor of the Group and dividends from our joint venture Terneftegas. In addition, in 2021, we received RR 15,732 million of dividends from our joint venture Yamal LNG.

The "Interest received" line primarily represents interest on deposits, as well as interest on loans provided to our joint ventures. In 2021 and 2020, we received RR 7.1 billion and RR 6.9 billion, respectively, of interest on loans provided to our joint ventures Yamal LNG and Cryogas-Vysotsk (only in 2021).

Net cash used for investing activities

In 2021, our net cash used for investing activities amounted to RR 253,135 million compared to RR 47,872 million in 2020.

millions of Russian roubles	**Year ended 31 December:** 2021	2020	**Change %**
Cash used for capital expenditures	(191,251)	(204,577)	(6.5%)
Proceeds from disposal of interests in subsidiaries and joint ventures, net of cash disposed	806	195,479	(99.6%)
Actual income tax payments relating to disposal of interests in subsidiaries	(73)	(23)	217.4%
Payments for mineral licenses	(14,182)	(434)	n/a
Loans provided to/acquisition of loans of joint ventures	(103,445)	(120,798)	(14.4%)
Repayments of loans provided to joint ventures	57,551	41,543	38.5%
Acquisition of joint ventures	(1,655)	-	n/a
Capital contributions to joint ventures	(1,749)	-	n/a
Net decrease (increase) in bank deposits with original maturity more than three months	1,667	43,057	(96.1%)
Other	(804)	(2,119)	(62.1%)
Net cash used for investing activities	**(253,135)**	**(47,872)**	**n/a**

In 2021, cash used for capital expenditures amounted to RR 191,251 million compared to RR 204,577 million in 2020. A significant part of our capital investments related to the development of the infrastructure for our LNG projects, the ongoing development and the launch of the fields within the North-Russkiy cluster (the North-Russkoye, East-Tazovskoye, Dorogovskoye and Kharbeyskoye fields), the construction of a hydrocracker unit at our Ust-Luga Complex, the development of the Yevo-Yakhinskiy, Ust-Yamsoveyskiy, Verhnetiuteyskiy and West-Seyakhinskiy license areas, and exploratory drilling (see "Capital expenditures" below).

In 2021, proceeds from disposal of interests related to the sale of the 100% participation interest in OOO Chernichnoye to our joint venture ZAO Terneftegas in the end of 2020 (RR 575 million) and to the sale of a 10% participation interest in OOO Arctic Transshipment to the TotalEnergies SE group (RR 231 million). In 2020, we received the second part of cash payments from the sale of a 40% participation interest in OOO Arctic LNG 2 in 2019 in the aggregate amount of RR 195,324 million (income tax related to this transaction was paid in 2019), as well as RR 155 million from the sale of a participation interest in OOO Chernichnoye.

In 2021, we paid in aggregate RR 13,930 million for the acquisition of a license for the rights to use the North-Gydanskiy license area and the license areas, which include the Arkticheskoye and Neytinskoye fields, as well as made a one-time payment fee in the amount of RR 193 million to expand the borders of our Geofizicheskiy license area. In addition, in 2021, we made a final payment in the amount of RR 59 million for the acquisition of the exploration and production license for our discovered Kharbeyskoye field (in 2020, the payment also amounted to RR 59 million). In 2020, we paid an aggregate amount of RR 317 million for the acquisition of the licenses for the East-Ladertoyskiy, South-Yamburgskiy and Bukharinskiy license areas, as well as made a one-time payment fee of RR 58 million to expand the borders of our Ust-Yamsoveyskiy license area.

In 2021, we provided loans in the aggregate amount of RR 103,445 million compared to RR 120,798 million in 2020. In both reporting periods, the main part of loans was provided to OOO Arctic LNG 2 for developing its activities. In addition, in November 2021, the Group acquired a portion in the project financing, previously provided to OOO Cryogas-Vysotsk by its second participant. In both periods, the Group received partial repayment of the loans provided in the amount of RR 57,551 million and RR 41,543 million, respectively, mainly from Yamal LNG.

In 2021, the Group acquired a 49% participation interest in OOO Gazpromneft-Sakhalin for RR 1,655 million and made capital contributions to the company in the amount of RR 1,642 million. In addition, in 2021, we made capital contributions to our joint venture OOO SMART LNG in the amount of RR 107 million.

The Group's cash management involves periodic cash placement on bank deposits with different maturities. Deposits are reported in "Cash and cash equivalents" if opened for three months or less, or otherwise in "Short-term bank deposits with original maturity more than three months". Transactions with bank deposits with original maturity more than three months are classified as investing activities in the Consolidated Statement of Cash Flows. In 2021, the net decrease in bank deposits with original maturity more than three months amounted to approximately RR 2 billion compared to the net decrease of approximately RR 43 billion in 2020.

Net cash used for financing activities

In 2021, our net cash provided by financing activities increased by RR 159,823 million, or 204.7%, to RR 237,898 million as compared to RR 78,075 million in 2020.

millions of Russian roubles	**Year ended 31 December: 2021**	**2020**	**Change %**
Dividends paid to shareholders of PAO NOVATEK	(154,332)	(89,857)	71.8%
Dividends paid to non-controlling interest	(19,943)	(11,858)	68.2%
Proceeds from (repayments of) long-term debt, net	(51,265)	39,460	n/a
Proceeds from (repayments of) short-term debt with original maturity three months or less, net	6,545	36	n/a
Loan commitment fee	-	(534)	n/a
Purchases of treasury shares	(12,963)	(8,271)	56.7%
Payments of lease liabilities	(3,687)	(4,649)	(20.7%)
Interest on debt paid	(2,253)	(2,402)	(6.2%)
Net cash used for financing activities	**(237,898)**	**(78,075)**	**204.7%**

In both reporting periods, our major financing cash flows related to payment of dividends.

In addition, in 2021, the Group fully repaid ten-year US dollar denominated Eurobonds and partially repaid a loan obtained from China's investment fund Silk Road Fund in the aggregate amount of RR 76,184 million (USD 1.0 billion). In 2020, the aggregate amount of long-term borrowings repayments totaled RR 5,935 million and related to a partial repayment of a loan from Silk Road Fund in the amount of RR 4,928 million (USD 70 million) and full repayment of a loan obtained under a credit line facility from a Russian bank in the amount of RR 1,007 million, respectively. At the same time, in 2021 and 2020, we obtained long-term loans from a Russian bank under a non-revolving credit line facility in the amount of RR 24,919 million (EUR 300 million) and RR 45,395 million (EUR 500 million), respectively.

In both reporting periods, we obtained short-term loans to finance trade activities. In 2021, net proceeds of short-term loans amounted to RR 6,545 million, while in 2020 the total amount of short-term loans repayments substantially corresponded to the amount of proceeds.

Other cash flows from financing activities related primarily to shares buy-back, payments of lease liabilities and interest on borrowings.

Liquidity and working capital

The following table shows the Group's liquidity and credit measures as of 31 December 2021 and 2020:

	31 December 2021	31 December 2020	Change, %
Absolute amounts, RR million			
Net debt [(1)]	73,946	39,557	86.9%
Net working capital position [(2)]	188,284	202,938	(7.2%)
Liquidity and credit ratios			
Current ratio [(3)]	1.48	2.27	(34.8%)
Total debt to total equity	0.09	0.14	(35.7%)
Long-term debt to long-term debt and total equity	0.03	0.09	(66.7%)
Net debt to total capitalization [(4)]	0.03	0.02	50.0%
Net debt to normalized EBITDA from subsidiaries [(5)]	0.22	0.20	10.0%
Interest coverage ratio [(6)]	29	20	45.0%

(1) Net debt represents total debt less cash, cash equivalents and bank deposits with original maturity more than three months.

(2) Net working capital position represents current assets less current liabilities.

(3) Current ratio is calculated as current assets divided by current liabilities.

(4) Total capitalization represents total debt, total equity and deferred income tax liability.

(5) Net debt to normalized EBITDA from subsidiaries ratio is calculated as Net debt divided by EBITDA from subsidiaries excluding the effects from the disposal of interests in subsidiaries and joint ventures (recognition of a net gain on disposal and subsequent non-cash revaluation of contingent consideration) for the last twelve months.

(6) Interest coverage ratio is calculated as normalized EBITDA from subsidiaries divided by accrued interest on debt, including capitalized interest.

The Group has consistently demonstrated sustainable operating and financial results, and even in the periods of unfavorable macroeconomic conditions had generated cumulative positive free cash flow. This allowed to maintain sufficient liquidity to increase investments in our main projects in both reporting periods. The Group's management believes that it presently has and will continue to have the ability to generate sufficient cash flows (from operating and financing activities) to repay all its current liabilities as they become due and to finance the Group's capital construction programs.

Capital expenditures

In both reporting periods, our capital expenditures represent our investments primarily relating to developing our oil and gas assets. The following table shows capital expenditures at our main fields, processing facilities and other assets:

millions of Russian roubles	**Year ended 31 December: 2021**	**2020**
Infrastructure for LNG projects [(1)]	53,326	78,338
North-Russkiy cluster [(2)]	35,869	39,692
Ust-Luga Complex	13,362	7,781
Yevo-Yakhinskiy license area	10,265	2,741
Verhnetiuteyskiy and West-Seyakhinskiy license area	9,035	10,316
Geofizicheskoye field	8,334	5,723
Yarudeyskoye field	6,309	5,769
Gydanskiy license area	4,946	4,318
Ust-Yamsoveyskiy license area	4,116	4,066
Laboratory research center in Tyumen	4,079	286
East-Tarkosalinskoye field	3,577	3,951
Soletsko-Khanaveyskiy license area	3,445	356
Olimpiyskiy license area	3,415	553
Yurkharovskoye field	2,827	5,398
Nyakhartinskiy license area	1,979	1,097
Novatek Green Energy	1,734	1,402
North-Chaselskiy license area	1,299	162
West-Yurkharovskoye field	981	4,121
Bukharinskiy license area	924	563
Trekhbugorniy license area	867	30
NOVATEK-AZK	755	770
Beregovoye field	362	5,143
Administration facilities	14,793	10,147
Other	5,372	15,983
Capital expenditures	**191,971**	**208,706**

[(1)] Mainly includes expenditures related to the project for the LNG construction center located in the Murmansk region.

[(2)] Includes expenditures related to the North-Russkoye, East-Tazovskoye, Dorogovskoye and Kharbeyskoye fields.

Total capital expenditures on property, plant and equipment in 2021 decreased by RR 16,735 million, or 8.0%, to RR 191,971 million from RR 208,706 million.

In both reporting periods, a significant part of our capital expenditures related to the development of the infrastructure for our LNG projects, mainly to the project for the LNG construction center located in the Murmansk region. We also invested in the development and launch of the fields within the North-Russkiy cluster: the preparation for production commencement and the launch of the Kharbeyskoye field, further development of the North-Russkoye field, the launch and the development of the East-Tazovskoye and Dorogovskoye fields. In addition, we continued the development of the Yevo-Yakhinskiy, Ust-Yamsoveyskiy, Verhnetiuteyskiy and West-Seyakhinskiy license areas, the development of our producing assets (the Yurkharovskoye field, Olimpiyskiy license area, the East-Tarkosalinskoye and Yarudeyskoye fields' crude oil deposits), as well as exploratory drilling, which in 2021 mainly related to the Geofizicheskoye field, as well as the Gydanskiy, North-Chaselskiy, Soletsko-Khanaveyskiy and Nyakhartinskiy license areas.

In both reporting periods, we continued to invest in the project for construction of a hydrocracker unit with the respective expansion of our Ust-Luga Complex, which will increase the depth and volume of processing of stable gas condensate and output of light oil products.

We also continued to expand the filling stations network at our subsidiary NOVATEK-AZK and to develop our LPG and LNG wholesale and retail network in Germany and Poland through our subsidiary Novatek Green Energy Sp. Z o.o. (Novatek Polska Sp. z o.o. prior to February 2020).

The "Administration facilities" line in the table above represents our capital expenditures of an administrative nature, of which a significant part related to construction of our new office building in Moscow.

In addition, we are constructing a Laboratory research center in Tyumen, which includes a laboratory building with core storage and other supporting facilities.

The "Other" line represents our capital expenditures related to other fields and processing facilities of the Group, as well as unallocated capital expenditures as of the reporting date. The allocation of capital expenditures by fields or processing facilities takes place upon the completion of the fixed assets construction stages and depends on the approved fixed assets launch schedule.

The following table presents the reconciliation of our capital expenditures and additions to property, plant and equipment per Note "Property, plant and equipment" in the Group's IFRS Consolidated Financial Statements, and cash used for capital expenditures:

	Year ended 31 December:		**Change**
millions of Russian roubles	**2021**	**2020**	**%**
Total additions to property, plant and equipment per Note "Property, plant and equipment" in the Group's IFRS Consolidated Financial Statements	**206,166**	**210,037**	**(1.8%)**
Less: acquisition of mineral licenses	(14,123)	(375)	n/a
Less: right-of-use assets additions [1]	(72)	(956)	(92.5%)
Capital expenditures	**191,971**	**208,706**	**(8.0%)**
Less: advance payments under lease agreements	-	(801)	n/a
Add (less): change in accounts payable, capitalized foreign exchange losses and other non-cash adjustments	(720)	(3,328)	(78.4%)
Cash used for capital expenditures [2]	**191,251**	**204,577**	**(6.5%)**

[1] Related mainly to long-term agreements on energy equipment leases and office premises rentals in 2020.

[2] Represents purchases of property, plant and equipment, materials for construction and capitalized interest paid per Consolidated Statement of Cash Flows net of payments for mineral licenses and acquisition of subsidiaries and joint ventures.

In 2021, the Group won auctions for geological research works, exploration and production of hydrocarbons at the North-Gydanskiy license area, as well as at license areas, which include the Arkticheskoye and Neytinskoye fields, and paid RR 13,930 million in aggregate. In addition, in 2021, we paid a one-time fee in the amount of RR 193 million to expand the borders of our Geofizicheskoye license area (see "Net cash used for investing activities" above).

In 2020, we made final payments in the aggregate amount of RR 317 million for the auctions won in December 2019 for the right to use the East-Ladertoyskiy, South-Yamburgskiy and Bukharinskiy license areas (an advance payment of RR 3,176 million was made in the end of 2019). In addition, we paid a one-time fee in the amount of RR 58 million to expand the borders of the Ust-Yamsoveyskiy license area.

QUANTITATIVE AND QUALITATIVE DISCLOSURES AND MARKET RISKS

We are exposed to market risk from changes in commodity prices, foreign currency exchange rates and interest rates. We are exposed to commodity price risk as our prices for crude oil, stable gas condensate and refined products destined for export sales are linked to international crude oil prices and other benchmark price references. We are exposed to foreign exchange risk to the extent that a portion of our sales, costs, receivables, loans and debt are denominated in currencies other than Russian roubles. We are subject to market risk from changes in interest rates that may affect the cost of our financing. From time to time we may use derivative instruments, such as commodity forward contracts, commodity price swaps, commodity options, foreign exchange forward contracts, foreign currency options, interest rate swaps and forward rate agreements, to manage these market risks, and we may hold or issue derivative or other financial instruments for trading purposes.

Foreign currency risk

Our principal exchange rate risk involves changes in the value of the Russian rouble relative to the US dollar and the Euro. As of 31 December 2021, all our debt was denominated in foreign currencies. Changes in the value of the Russian rouble relative to foreign currencies will impact the value in Russian rouble terms of our foreign currency-denominated costs, debt, receivables at our foreign subsidiaries and loans provided to our joint ventures. We believe that the risks associated with our foreign currency exposure are partially mitigated by the fact that 52.3% of our total revenues in 2021 was denominated in foreign currencies.

In addition, our share of profit (loss) of joint ventures is also exposed to foreign currency exchange rate movements due to the significant amount of foreign currency-denominated borrowings in our joint ventures, mostly in OAO Yamal LNG and OOO Arctic LNG 2. We assess that the impact of foreign currency risk relating to the debt portfolio of OAO Yamal LNG and OOO Arctic LNG 2 is largely mitigated by the fact that all of their products are targeted for the delivery to international markets at prices denominated in foreign currencies.

As of 31 December 2021, the Russian rouble depreciated by 0.6% against the US dollar and appreciated by 7.3% against the Euro compared to 31 December 2020.

Commodity risk

Our export prices for natural gas, stable gas condensate and refined products, LPG and crude oil are primarily linked to international natural gas, crude oil and oil products prices and/or a combination thereof. External factors such as geopolitical developments, natural disasters and the actions of the Organization of Petroleum Exporting Countries affect crude oil prices and thus our export prices.

The weather is another factor affecting demand for natural gas. Changes in weather conditions from year to year can influence demand for natural gas and to some extent stable gas condensate and refined products.

From time to time we may employ derivative instruments to mitigate the price risk of our sales activities. In our consolidated financial statements, all derivative instruments are recognized at their fair values. Unrealized gains or losses on derivative instruments are recognized within other operating income (loss), unless the underlying arrangement qualifies as a hedge.

Within our trading activities, the Group purchases and sells natural gas on the European market under long-term contracts based on formulas with reference to benchmark natural gas prices quoted for the North-Western European natural gas hubs, crude oil and oil products prices and/or a combination thereof. Therefore, the Group's financial results from natural gas foreign trading activities are subject to commodity price volatility based on fluctuations or changes in the respective benchmark reference prices.

Pipeline access

We transport substantially all of our natural gas within the Russian Federation territory through the Gas Transmission System ("GTS") owned and operated by PAO Gazprom, which is responsible for gathering, transporting, dispatching and delivering substantially all natural gas supplies in the domestic market. Under existing legislation, Gazprom must provide access to the GTS to all independent suppliers on a non-discriminatory basis provided there is capacity available that is not being used by Gazprom. In practice, Gazprom exercises considerable discretion over access to the GTS because it is the sole owner of information relating to capacity. There can be no assurance that Gazprom will continue to provide us with access to the GTS; however, we have not been denied access in prior periods.

Ability to reinvest

Our business requires significant ongoing capital expenditures in order to grow our production and meet our strategic plans. An extended period of reduced demand for our hydrocarbons available for sale and the corresponding revenues generated from these sales would limit our ability to maintain an adequate level of capital expenditures, which in turn could limit our ability to increase or maintain current levels of production and deliveries of natural gas, gas condensate, crude oil and other associated products; thereby, adversely affecting our financial and operating results.

Forward-looking statements

This report includes forward-looking statements concerning future possible events that can impact operational and financial results of the Group. Forward-looking statements can be identified by words such as "believes", "anticipates", "expects", "estimates", "intends", "plans" and similar expressions. Forward-looking statements are made based on the current situation with definite and indefinite risks and uncertainties. Actual future results could differ materially from those discussed in the forward-looking statements as they are dependent on various factors beyond and under the control of management.

Off balance sheet activities

As of 31 December 2021, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are typically established for the purpose of facilitating off-balance sheet arrangements.

TERMS AND ABBREVIATIONS

APR	Asian-Pacific Region
bbl	barrel
bcm	billion cubic meters
boe	barrels of oil equivalent
btu	British thermal unit
CBR	Central Bank of Russian Federation
CIF	"Cost, insurance and freight"
DDA	depreciation, depletion and amortization
FEED	Front-End Engineering Design
FID	Final Investment Decision
Forecast of the Ministry of Economic Development	The document *"Forecast of Socio-economic Development of the Russian Federation for the period till 2024"* prepared by the Ministry of Economic Development of the Russian Federation or the similar document prepared for another period
GTS	Gas Transmission System part of the UGSS
IFRS	International Financial Reporting Standards
List	the OFAC's Sectoral Sanctions Identification List
LNG	liquefied natural gas
LPG	liquefied petroleum gas
mcm	thousand cubic meters
MET	mineral extraction tax
Murmansk yard	LNG construction center located in the Murmansk region
NBP	National Balancing Point
NGL	natural gas liquids
OFAC	U.S. Treasury Department's Office of Foreign Assets Control
PRMS	Petroleum Resources Management System
Purovsky Plant	Purovsky Gas Condensate Plant
Regulator	A federal executive agency of the Russian Federation that carries out governmental regulation of prices and tariffs for products and services of natural monopolies in energy, utilities and transportation. Effective July 2015, Federal Anti-Monopoly Service fulfills the Regulator's role.
RR	Russian rouble(s)
RZD	OAO Russian Railways, Russia's state-owned monopoly railway operator
SEC	Securities and Exchange Commission
Tobolsk Refining Facilities	Petrochemical complex of PAO SIBUR Holding group in Tobolsk
TTF	Title Transfer Facility
UGSF	Underground Gas Storage Facilities
UGSS	Unified Gas Supply System owned and operated by PAO Gazprom
UPT	unified natural resources production tax
USD, US dollar	United States Dollar
Ust-Luga Complex	Gas Condensate Fractionation and Transshipment Complex located at the port of Ust-Luga on the Baltic Sea
VAT	value added tax
YNAO	Yamal-Nenets Autonomous Region