This is the translated version of a document originally issued in Polish

Grupa LOTOS Management's Discussion and Analysis of the consolidated financial results for the second quarter of 2021

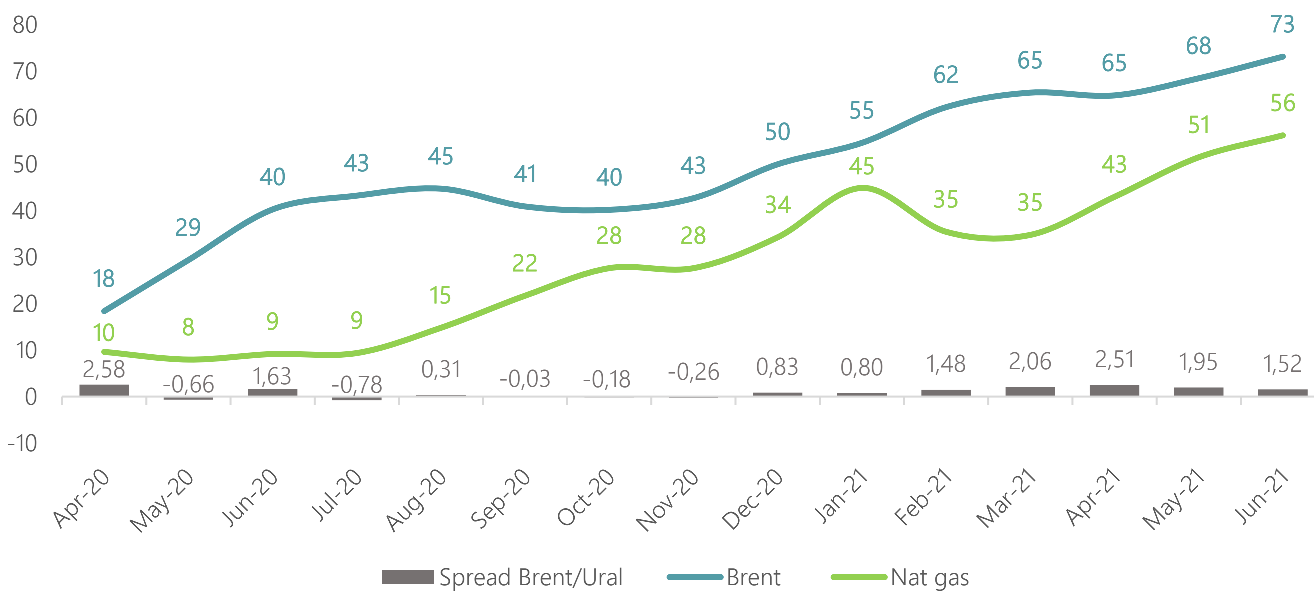
ISIN	Stock Exchange	Thomson Reuters	Bloomberg
PLLOTOS00025	LTS	LTSP.WA	LTS PW

An excel file with the operating and financial data for the second quarter of 2021 and the previous reporting periods is published in the Investor Relations section of our website at → inwestor.lotos.pl as → databook

MARKET ENVIRONMENT

- quarter-on-quarter and year-on-year growth in Brent crude prices of USD 7.92/bbl[1] (+13.0%) and USD 39.3/bbl (+132.2%), respectively
- strong uptrend in natural gas prices[2], up USD 12.2/boe[3] quarter on quarter (+31.9%) and USD 41.5/boe year on year (+463.2%)
- significant improvement in crack spreads[4] for motor gasoline, both year on year (up USD 9.1/bbl, or +290.4%), and quarter on quarter (up USD 4.6/bbl, or +60.2%)
- gradual widening of crack spreads for diesel oil quarter on quarter (up USD 0.9/bbl, or +13.1%), with a drop reported year on year (down USD 1.4/bbl, or -14.9%)
- widening of average spread between diesel oil and heavy fuel oil crack spreads to USD 16.5/bbl vs USD 12.8/bbl in the previous quarter and USD 13.6/bbl in the same period last year
- Brent/Urals differential at USD 2.0/bbl, having increased by USD 0.5/bbl quarter on quarter and as much as USD 1.9/bbl year on year

Figure 1. Brent prices (USD/bbl), Brent/Urals spread (USD/bbl) and natural gas prices (USD/boe)



Source: In-house analysis based on Refinitiv data.

Table 1. Brent prices, Brent/Urals spread and natural gas prices (USD/bbl)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Dated Brent FOB prices	68.96	61.04	29.70	13.0%	132.2%
Brent/Urals spread	1.98	1.46	0.05	35.6%	3,860.0%
UK NBP natural gas prices[5]	50.41	38.21	8.95	31.9%	463.2%

[1] bbl – barrel of crude oil.
[2] NBP – National Balancing Point.
[3] boe – barrel of oil equivalent.
[4] Product crack spread is calculated as the difference between the price per barrel of a given product (price per tonne computed using the appropriate density factor) and the price of Urals crude (the Brent Dtd crude price adjusted for the Brent/Urals spread).
[5] To ensure comparability, the UK NBP natural gas prices were converted from USD/MWh to USD/boe using the conversion factor of 1.6282 MWh/boe.

Source: In-house analysis based on Refinitiv data.

Table 2. Product crack spreads (USD/bbl)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Motor gasoline	12.22	7.63	3.13	60.2%	290.4%
Naphtha	0.49	1.93	-2.50	74.6%	-
Diesel oil (10 ppm)	8.12	7.18	9.54	13.1%	-14.9%
Light fuel oil	7.90	6.57	7.58	20.2%	4.2%
Aviation fuel	6.07	4.96	1.40	22.4%	333.6%
Heavy fuel oil	-8.41	-5.64	-4.03	-49.1%	-108.7%

Source: In-house analysis based on Refinitiv data.

Table 3. USD/PLN exchange rates

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
PLN/USD exchange rate at end of period	3.80	3.97	3.98	-4.3%	-4.5%
Average PLN/USD exchange rate	3.76	3.78	4.09	-0.5%	-8.1%

Source: In-house analysis based on National Bank of Poland data.

Key external factors affecting to the LOTOS Group's performance in the second quarter of 2021:

- Feedstock and products

  Refining & Marketing

  Strong volatility and a year-on-year decline in crack spreads for diesel oil and aviation fuel (despite a quarter-on-quarter rise), coupled with a significant increase in the prices of the refinery feedstock and natural gas used in crude oil processing at the Company's refinery, put pressure on the Refining & Marketing segment's performance relative to the corresponding period of the previous year.

  On the other hand, record-high prices of base oils, which also belong to the category of middle distillates, significantly supported the segment's performance. Crack spreads for base oils were significantly larger year on year and quarter on quarter during the reporting period as availability of the product was limited due to low refining capacity utilisation globally.

  In the second quarter of 2021, strong profitability of naphtha exports by sea was maintained, with the Company redirecting middle distillate streams to the production of naphtha.

  In the second quarter of 2021, favourable conditions in the domestic market compared with import parity supported premiums on wholesale of gasolines. At the same time, from the beginning of 2021 consumption on the domestic fuel market recovered steadily after the declines caused by the COVID-19 pandemic-related restrictions. After the first six months of the year, gasoline demand growth in Poland reached +10.4%. The consumption of diesel oil was up 8.1%. The market recovery was driven by increased mobility of people, due to gradual lifting of the restrictions in Poland, as well as the long weekend in May and the beginning of the summer holiday season. Foreign travel constraints related to the deceleration of the COVID-19 vaccination rollout in individual countries and the rapid spread of the COVID-19 Delta variant were additional factors contributing to increased car travel to destinations in Poland, which are being preferred over foreign ones.

  In the second quarter of 2021, bitumens outweighed HSFO in the Company's heavy products portfolio given the continued attractive prices of bitumens on the extremely absorptive markets in Poland and neighbouring countries. Higher sales was supported by favourable weather and operating conditions that improved also as a result of the DCU unit having resumed full capacity utilisation after a maintenance shutdown.

Exploration & Production segment

After the period of turbulence on the crude oil market, in the first and second quarter oil prices rebounded and started to rise. As a result, in the second quarter of 2021 the average price of Brent crude was USD 68.96/bbl, having increased 60.2% quarter on quarter and 290.4% year on year. UK National Balancing Point prices rose 31.9% quarter on quarter and 463.2% year on year, reaching their many-year highs.

- Exchange rates

A sizeable year-on-year decrease in the average USD/PLN exchange rate in the quarter (down 8.1%) had an adverse effect on crack spreads and commodity prices, and thus on the operating performance of both reporting segments. At the same time, a quarter-on-quarter drop in the USD/PLN exchange rate at the end of the period mitigated the adverse effect on the working capital (increase in inventories and receivables).

- COVID-19 pandemic

The COVID-19 pandemic continues to negatively affect the conditions in the global refining sector. Although macro conditions are improving after a sudden collapse in economic activity in Poland and globally, reflected in falling consumption and lower prices of feedstocks and petroleum products, with the declines particularly pronounced in the second quarter of 2020, they remain significantly worse than before the pandemic, especially with respect to middle distillates of crude oil, which are a key driver of the Grupa LOTOS refinery's model margin. At the some time, there is still uncertainty about the expected fourth wave of the pandemic and its consequences, as well as about further prospects of the economic and macroeconomic recovery.

The scale and pace of recovery vary by country, sector and product category. As regards key refining products, a relatively fast rebound occurred in the case of motor gasoline, for which crack spreads expanded both year on year and quarter on quarter, to USD 12.2/bbl, in the second quarter of 2021, while in the case of diesel oil the crack spreads stagnated, averaging USD 8.1/bbl in the second quarter of 2021, compared with USD 9.5/bbl in the previous year. The slow recovery in global air traffic (according to IATA data[6], passenger air traffic was down 77.9% in May 2021 relative to May 2019) has as an indirect effect of creating an adverse price environment for middle distillates, and directly contributes to a low rate of recovery of crack spreads for aviation fuel, which stood at USD 6.1/bbl in the second quarter of 2021.

These trends put refiners focusing on middle distillates, including Grupa LOTOS, at a disadvantage. However, the increasing economic activity and gradual lifting of travel restrictions and restoration of passenger transport by air should support further improvement in crack spreads for diesel oil and aviation fuel, which would enhance the Company's model margin.

[6] *IATA – International Air Transport Association; air passenger traffic demand measured in revenue passenger kilometres (RPK).*

EXPLORATION & PRODUCTION

- positive effect of intervention at the Utgard field, with production stabilised at 3.2 thousand boe/d (up 26% quarter on quarter)
- adjusted EBITDA of PLN 214.7m (up approximately 28% quarter on quarter and as much as approximately 363% year on year)

Crude oil and natural gas reserves, production and total sales

Table 4. Crude oil and natural gas reserves[7] (mboe)

	Jun 30 2021	Mar 31 2021	Jun 30 2020
Norway	24.8	25.2	27.7
Poland	45.0	45.5	47.0
Lithuania	2.4	2.4	2.6
Total	72.2	73.2	77.3

Source: the Company.

Table 5. Daily production (boe/d)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Norway	13,143	12,565	15,091	4.6%	-12.9%
Poland	5,718	5,510	5,177	3.8%	10.4%
Lithuania	513	503	549	2.0%	-6.6%
Total	19,374	18,578	20,817	4.3%	-6.9%

Source: the Company.

Table 6. Quarterly production (boe)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Norway	1,196,004	1,130,824	1,373,306	5.8%	-12.9%
Poland	520,298	495,908	471,071	4.9%	10.4%
Lithuania	46,696	45,280	49,997	3.1%	-6.6%
Total	1,762,998	1,672,012	1,894,374	5.4%	-6.9%

Source: the Company.

[7] 2P – proved and probable reserves (SPE-PRMS classification).

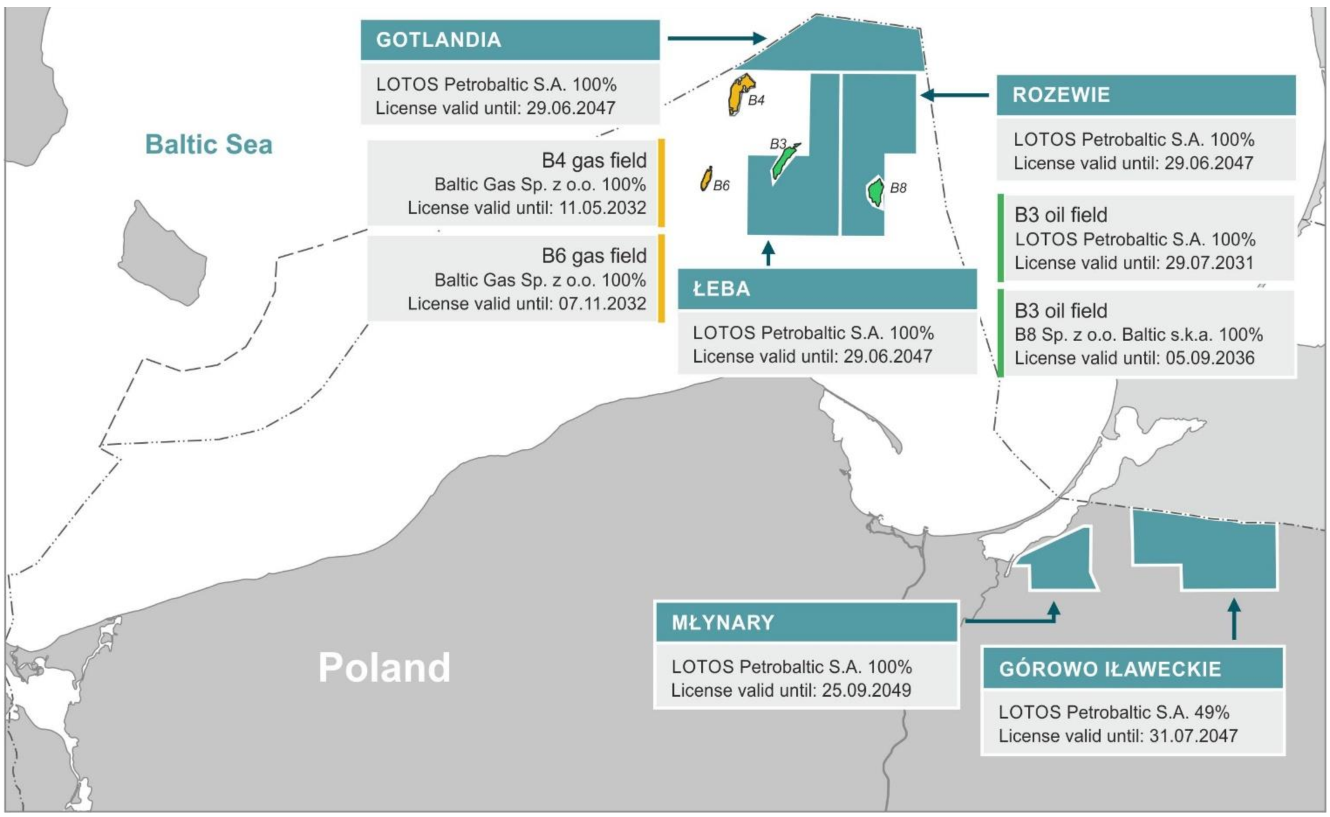
Table 6. Oil and gas sales (boe)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Norway	1,222,527	1,105,962	1,720,588	10.5%	-28.9%
Poland	454,261	466,944	516,195	-2.7%	-12.0%
Lithuania	45,493	47,594	46,598	-4.4%	-2.4%
Total	1,722,281	1,620,500	2,283,381	6.3%	-24.6%

Source: the Company.

Exploration and production activities in Poland

Map 1. Licences held by LOTOS Group companies in Poland as at June 30th 2021



Source: the Company.

In the second quarter of 2021, LOTOS Petrobaltic S.A. ("LPB") continued to produce crude oil and associated natural gas from the B3 field in the Baltic Sea at an average rate of 2,310 boe/d (up 69% year on year and 16% quarter on quarter). The increase in production rates was a result of a successful workover programme, with a total of eight wells (including two injectors) worked over on B3 in 2020. In the second quarter of 2021, the B3-13C well was drilled (sidetrack of the B3-13B well) and in May it was brought online. A workover of the B3-5 subsea well is planned for the third quarter of 2021.

B8 project
Development of a crude oil field in the Baltic Sea

In the second quarter of 2021, crude oil and associated natural gas were produced from the B8 field at an average rate of 3,408 boe/d (down 11% year on year and 3% quarter on quarter). In parallel, during the second quarter of 2021 work was carried out by the Company to launch a gas drying, compression and transmission system (SSG) and enable gas transmission from the B8 field to the Energobaltic CHP plant in Władysławowo. Process gas was injected into the compressor system to run operating tests on the compressor, a detailed inspection of the system was made, and tests and adjustments were performed on process gas, following which the SSG system and the pipeline entered commercial operation. The filling of the B8-Władysławowo pipeline with gas from the B3 field was commenced. Start of the B8 gas transmission onshore was suspended for the duration of the test operation of the of the SSG system, until any faults are removed and the system is fully operational.

Key parameters of the B8 project (for the LOTOS Group interest):

- LOTOS Group interest 100%
- 2P reserves 32.7 million boe as at June 30th 2021 (91% crude oil, 9% natural gas)
- current output 3.4 thousand boe/d (second quarter of 2021)

The Central Production Facility achieved full capacity in the fourth quarter of 2020. However, whether oil production volumes will be increased to an average level of 5.0 thousand boe/d within five years will depend on satisfaction of all assumed technical conditions and on the macroeconomic conditions, in particular the global oil prices.

B4/B6 development project
Development of natural gas fields in the Baltic Sea

The B4/B6 project consists in the development of natural gas deposits in the Baltic Sea, in partnership with CalEnergy Resources Poland Sp. z o.o. The project has been defined in technical terms and is in the pre-FID phase. The key activities currently underway include monitoring of the gas market and the market of suppliers of materials and services, formal and administrative procedures, and agreeing on a financing strategy. The Final Investment Decision will depend on market developments.

Key parameters of the B4/B6 project (for the LOTOS Group interest):

- LOTOS interest: 51%
- 2C reserves: 17.9 million boe as at June 30th 2021
- Final Investment Decision depending on market developments
- expected average output: 4.3 thousand boe/d (for 5-year period from production launch)

Growth initiatives

The Company is implementing a number of growth initiatives designed to diversify its business and revenue sources.

One of the key projects involves activities on the emerging offshore wind farm market. In the second quarter of 2021, the Company was in negotiations with Energa OZE regarding maintenance services to be provided to Baltic Power (PKN ORLEN). A division of tasks has been agreed: LPB will be responsible for maritime logistics and maintenance of the subsea infrastructure. Negotiations with Northland Power are underway on the possible participation of LPB in the installation of offshore wind farm components. The parties exchanged information on LPB's plans for the schedules and parameters of WTFIV, WTIV, CLV and SOV vessels. Negotiations are being held with potential partners in SPVs that are to be established to implement the Company's plans to build wind farm installation vessels. The Company is in negotiations with PKN ORLEN to sign an agreement on cooperation in the construction and maintenance of offshore wind farms under future licences. A termsheet is being drafted, which will serve as the basis for drawing up the agreement. A cooperation agreement is intended to be signed on the use of the planned installation vessels under a licence with PGE Baltica – it was provided with the draft termsheet, which is now being worked on by PGE.

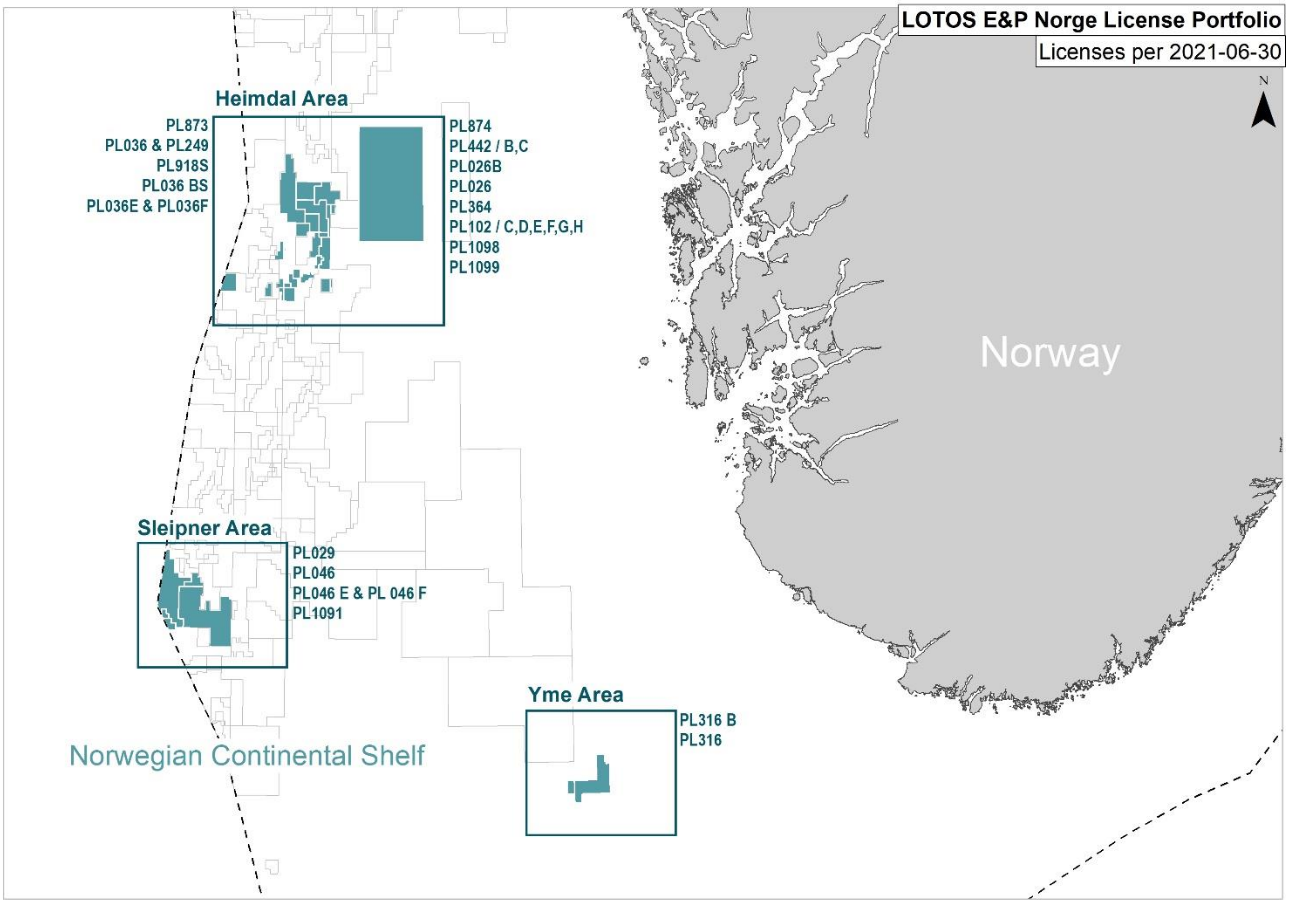
As part of the efforts to develop geological and geotechnical service capabilities, the Company entered a tender procedure announced by RWE to select a service provider to prepare geotechnical surveys for an export cable. Gas System requested LPB to prepare an offer for maintenance and inspection of the Baltic Pipe.

As part of the initiatives designed to produce green hydrogen from sea water, the Company engaged with scientific institutions: the AGH University of Science and Technology and the Gdańsk University of Technology. This collaboration resulted in a research and development project under the Smart Growth Operational Programme 2014–2020, called 'An integrated system for producing green hydrogen from seawater, powered by a floating wind turbine'. A grant application (No. POIR.01.01.01-00-0178/21) for the project as part of the 1/1.1.1./2021 competition was submitted with the National Centre for Research and Development on March 29th 2021 – an expert panel was held in the second quarter of 2021, as a result of which the application was supplemented; the procedure is underway.

Also, conceptual work was carried out relating to the potential implementation of a geosequestration programme that would enable storage of carbon dioxide within water-bearing formations in the Baltic Sea. The Company cooperates with scientific institutions on technological solutions, with entities that may be interested in CO_2 capture and transfer for storage, and participates in meetings and discussion panels devoted to the possibility of launching carbon capture and storage projects (CCS). In addition, it actively collaborates with the Ministry of Climate and Environment on amendments to the Geological and Mining Law by presenting proposed changes to the Act and the secondary legislation.

Exploration and production activities in Norway

Map 2. Licences held by LOTOS Exploration & Production Norge AS
As at June 30th 2021



Source: the Company.

As at June 30th 2021, LOTOS Norge held interests in 30 licences for exploration, appraisal and production of hydrocarbon reserves in the Norwegian Continental Shelf.

In the second quarter of 2021, LOTOS Norge, operating as part of a consortium, produced natural gas and condensate from fields located in the Heimdal and Sleipner areas at an average rate of 13.1 thousand boe/d per LOTOS' share (down 13% year on year and up 5% quarter of quarter). It is worth noting that the interventions in the Utgard field were successful: in the second quarter of 2021 average production from the field was 3.2 thousand boe/d per LOTOS' share, up 26% quarter on quarter. Furthermore, on June 21st 2021, a decision was approved to extend the operation of the Heimdal hub infrastructure until 2023. This decision will defer the decommissioning costs and will make it possible to continue production from the Vale, Skirne and Atla fields, which relies on the Heimdal infrastructure.

LOTOS Norge is engaged in efforts to develop new fields in Norway. Their status at the end of the second quarter of 2021 is presented below.

Yme project
Development of an oil field in Norway

The Yme project is at an advanced development stage. In the second quarter of 2021, offshore rig commissioning and production systems connection and start-ups were underway. On May 27th 2021, the Yme operator (Repsol Norge AS) entered into a number of conditional agreements with Maersk Drilling, Havila Sirius AS and other entities, which, once implemented, will result in the transfer of responsibility for the operation the Maersk Inspirer rig on the Yme field from Maersk to the operator and in change of the rig ownership. The transaction will be completed in the second half of 2021, provided that certain conditions are met, including approval by certain Norwegian authorities, completion of the rig start-up process on the Yme field, and achievement of readiness for receiving hydrocarbons and start of production using the rig. At present, LOTOS believes that the transaction will have no material effect on the project schedule. First oil for the Yme field is currently expected in the fourth quarter of 2021.

Key parameters of the Yme project (for the LOTOS interest):

- LOTOS interest 20%
- 2P reserves 12.5 million boe as at June 30th 2021 (100% crude oil)
- production to be launched in the fourth quarter of 2021
- expected average output 5.0 thousand boe/d (for 5-year period from production launch)

New development project: NOAKA

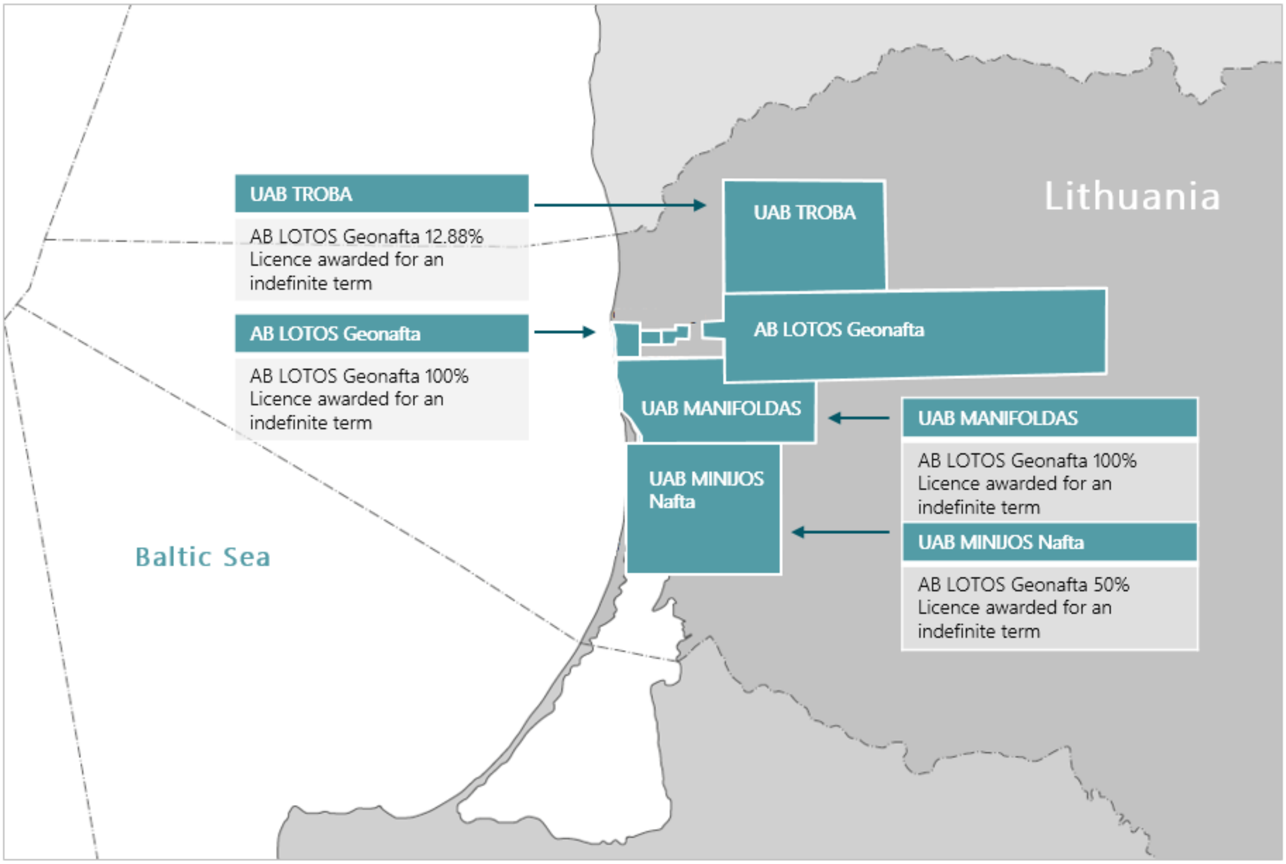
The NOAKA project involves the development of discoveries north of Heimdal: Frigg Gamma Delta, Langfjellet, Liatårnet, Rind, Fulla and Froy, in which LOTOS holds an average interest of 10% and AkerBP is the operator, as well as the Krafla and Askja fields, where LOTOS has no interests and Equinor is the operator. In the second quarter of 2021, work was carried out to verify the evaluation of geological resources. The project work is proceeding as planned. In line with the project schedule, the development concept is to be selected (DG2 decision gate) in the third or fourth quarter of 2021, and a field development plan is to be prepared (DG3 decision gate) by the end of 2022.
NOAKA is one of the key development projects on the Norwegian Continental Shelf, with total potential of more than 500 million boe of recoverable reserves (for the 100% interest). For the LOTOS Group, the project will be a foundation for reinforcement of the Company's position on the NCS in cooperation with key NCS operators: AkerBP and Equinor.

New development project: Trell/Trine

The project involves the development of the Trell and Trine fields located in the Heimdal area (in which LOTOS Norge holds interests of 10% and 16%, respectively), with AkerBP as the operator. The COVID-19 crisis necessitated a temporary suspension of the project work in 2020. Currently, the activities have been resumed. It is assumed that the fields may be developed by connecting them to the FPSO infrastructure in the Alvheim area, which is the preferred path, made possible by the extension of the FPSO operation period. In the second quarter of 2021, work was carried out on technical evaluation and preparations for harmonisation of the project interests. The project work is proceeding as planned. In line with the project schedule, the development concept is to be selected (DG2 decision gate) in the third or fourth quarter of 2021. Potential resources of the Trell/Trine fields are estimated by the Company at approximately 2.6 mboe per LOTOS' interest, with launch of production possible in 2025.

Exploration and production activities in Lithuania

Map 3. Licences held by the AB LOTOS Geonafta Group
As at June 30th 2021



Source: the Company.

In the second quarter of 2021, companies of Lithuania's AB LOTOS Geonafta Group focused on optimising production from their existing onshore oilfields located in the following licence blocks: Girkaliai, Genciai, Kretinga, Nausodis, Klaipėda, and Gargždai. The output from the Lithuanian assets in the second quarter of 2021 was 513 boe/d (down 6.6% year on year and up 2% quarter on quarter).

Table 8. Exploration & Production segment's key financial data (PLNm)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Revenue	381.2	312.6	213.2	21.9%	78.8%
EBIT	370.6	107.1	-474.9	246.0%	-
Depreciation and amortisation	62.7	60.8	82.5	3.1%	-24.0%
EBITDA	433.3	167.9	-392.4	158.1%	-
Adjusted EBIT[8]	152.0	107.1	-36.1	41.9%	-
Adjusted EBITDA[7]	214.7	167.9	46.4	27.9%	362.7%

Source: the Company.

The growth in the Exploration & Production segment's revenue in the second quarter of 2021 (up 78.8% year on year and 21.9% quarter on quarter) was driven mainly by higher natural gas prices (up 463.2% year on year and 31.9% quarter on quarter) and Brent Dtd crude prices (up 132.2% year on year and 13.0% quarter on quarter). The decline in the hydrocarbon sales volumes (down 24.6% year on year) reduced the positive effect of higher gas and crude prices on the segment's performance year on year. On the other hand, the 6.3% quarter-on-quarter increase in the sales volumes added to the effect of improved prices.

The Exploration & Production segment's adjusted EBITDA for the second quarter of 2021 was up 27.9% on the first quarter of 2021 and 362.4% on the second quarter of 2020.

[8]EBIT and EBITDA adjusted for one-off items:

- in the second quarter of 2021: PLN 218.6m (reversal of impairment losses: PLN +104.9m on B3 field assets, PLN +135.1m on B8 field assets, and PLN +17.9m on Heimdal field assets; recognition of impairment losses: PLN -38.9m on Utgard field assets, PLN -0.4m on Młynary and Górowo Iławeckie area assets);
- in the second quarter of 2020: PLN -438.8m (recognition of impairment losses: PLN -129.8m on Yme field assets, PLN -55.5m on Utgard field assets, PLN -118,3m on B3 field assets, -135,0m on B8 field assets and PLN -0.2m on Lithuanian assets).

REFINING & MARKETING

- Full installed capacity utilisation at the Company's refinery
- Flexible management of the yields structure and sales directions, using market opportunities to sell petroleum products (motor gasoline and naphtha, bitumens, base oils)
- Capturing market opportunities in relation to base oil, naphtha and bitumen prices
- Record adjusted LIFO-based EBITDA of the Refining & Marketing segment came in at healthy PLN 761.9m, supported by solid retail earnings of PLN 73.5m, up approximately 50% year on year and approximately 155% quarter on quarter.

Table 9. Crude oil throughput ('000 tonnes)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Crude oil throughput	2,627.6	1,975.3	2,540.8	33.0%	3.4%

Source: the Company.

In April, Grupa LOTOS completed on schedule a partial maintenance shutdown at the refinery and started up three systems of the oil unit. The Company smoothly normalised its crude throughput at 2,627.6 thousand tonnes (up +33.0% quarter on quarter and +3.4% year on year), which was reflected in full, i.e. 100%, utilisation of the refinery's production capacity in the second quarter of 2021.

In the second quarter the Company rebuilt its inventories of products sold during the maintenance shutdown period and benefited from high margins on gasoline sales on the domestic market. Profitability of the Company's sales in the second quarter of 2021 was supported by a year-on-year increase in premiums on domestic wholesale of gasoline relative to import parity. The diesel oil market in Poland saw a surge in demand in the second quarter, driven by the holiday season and increased car travel. The Company responded to the hike in demand by increasing sales of this product.

The profitability of seaborne exports of naphtha was maintained in the second quarter of 2021, and the Company leveraged the location of its refinery on the Baltic Sea coast to quickly and flexibly respond to increased demand and export opportunities. Prices of base oils, generating margins at historical highs due to limited availability caused by low global refinery capacity utilisation rates, also proved a major market opportunity from the beginning of 2021.

The gradual rebuilding of a wider spread between crack spreads for diesel oil and for heavy fuel oil had a positive effect on the marginal refining margin generated as a result of the EFRA project, which was close to USD 2.5/bbl in the second quarter of 2021.

In the second quarter of 2021, Grupa LOTOS implemented a number of growth projects. The largest one, i.e. the hydrogen recovery unit (HRU) project, whose purpose is to increase the share of hydrogen, LPG and naphtha in the refinery's total yields pool, was placed in service in May 2021.

Another major unit, also put into operation in May 2021, was the fourth rail loading facility. The new infrastructure has increased the capacity for dispatching fuels from the refinery expanded by the addition of the EFRA units by 2.2m tonnes of diesel oil and gasoline per year.

The Company continued work on the replacement of furnaces at the Claus facility. The activities included design work relating to the furnaces and agreeing on the contract with the contractor for the integration of the new furnaces with the facility. The purpose of the project is to improve the efficiency, reliability and safety of the hydrogen sulfide combustion unit. The project is due for completion in early 2023.

The Company carried out preparatory activities for a project to expand LPG storage and loading capacities. Design work was underway (acquisition of input data), as well as activities related to agreeing on the arrangement of the site and land testing for the building permit design. The projects seeks to increase dispatch capacity for the refinery's LPG output to about 1,200 tonnes per day with the use of rail or truck loading facilities.

Grupa LOTOS is making preparations for another major growth project after the EFRA Programme, namely the HBO (hydrocracked base oils) project. The project is economically viable and will help to diversify the Company's business into second- and third-generation base oils, a global market niche. Documents needed to secure the Final Investment Decision are being prepared and financing is being arranged for the project. A project to construct a cargo terminal on the Martwa Wisła river is in the planning phase. In the second quarter of 2021, a procedure was carried out to select a potential contractor for the main scope of the design and construction work.

At the beginning of 2021, the Company launched the Pure H2 project involving the construction of a hydrogen purification unit and a system for supplying hydrogen to tube trailers (vehicles used to haul compressed hydrogen). The project activities in the second quarter included design work on the hydrogen purification plant and a hydrogen compression and distribution facility as well analysis of the market of tube trailer suppliers. The project is scheduled for completion in the fourth quarter of 2023.

Table 10. Refining output structure ('000 tonnes)[9]

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Gasolines	388.9	288.9	374.4	34.6%	3.9%
Naphtha	110.7	132.9	155.6	-16.7%	-28.9%
Diesel oils	1,533.1	1,307.4	1,478.3	17.3%	3.7%
Light fuel oils	41.4	88.2	47.2	-53.0%	-12.3%
Jet fuel	74.1	69.3	21.0	6.9%	252.7%
Heavy products[10]	247.8	184.5	276.8	34.3%	-10.5%
Petcoke	85.3	51.1	70.7	67.1%	20.6%
Other[11]	320.6	294.5	335.1	8.9%	-4.3%
Total	2,802.0	2,416.7	2,759.2	15.9%	1.6%

Source: the Company.

Table 11. Sales structure in the Refining & Marketing segment ('000 tonnes)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Gasolines	383.3	286.7	393.3	33.7%	-2.5%
Naphtha	110.7	132.9	155.6	-16.8%	-28.9%
Diesel oils	1,504.6	1,338.5	1,516.9	12.4%	-0.8%
Light fuel oils	39.4	87.4	46.3	-54.9%	-14.9%
Jet fuel	77.3	74.1	25.6	4.3%	201.9%
Heavy products[10]	250.3	151.5	269.5	65.2%	-7.1%
Crude oil (commodity/material)	0.0	0.0	79.4	-	-100.0%
Other	298.6	259.8	296.8	15.0%	0.6%
Total	2,664.2	2,330.9	2,783.4	14.3%	-4.3%

Source: the Company.

[9]The difference between the volume of crude oil processed and the refinery's output of products stems from the fact that, apart from crude oil, the processing units and finished product blenders receive biocomponent streams, enhancing additives and middle distillates purchased from third-party suppliers.
[10]Heavy fuel oil and bitumen components
[11]Other products include fuel and industrial gases, sulfur, base oils, xylene fraction, LPG, bunker fuel, extracts, refinates, and slack wax.

Polish fuel market[12]

Consumption of liquid fuels (diesel oil, gasoline and light fuel oil) in Poland rose by 8.4% year on year after the first six months of 2021. The Polish fuel market was in a growth trend from the beginning of the year, showing a clear improvement after the last year's constraints relating to the COVID-19 pandemic. Consumption of both gasoline and diesel oil products was on a rise from March. Based on the POPiHN data, the first six months of 2021 saw growth in the consumption of gasolines (up 10.4%) and diesel oil (up 8.1%) and a drop in the consumption of aviation fuel (down 28%) and light fuel oil (down 0.7%).

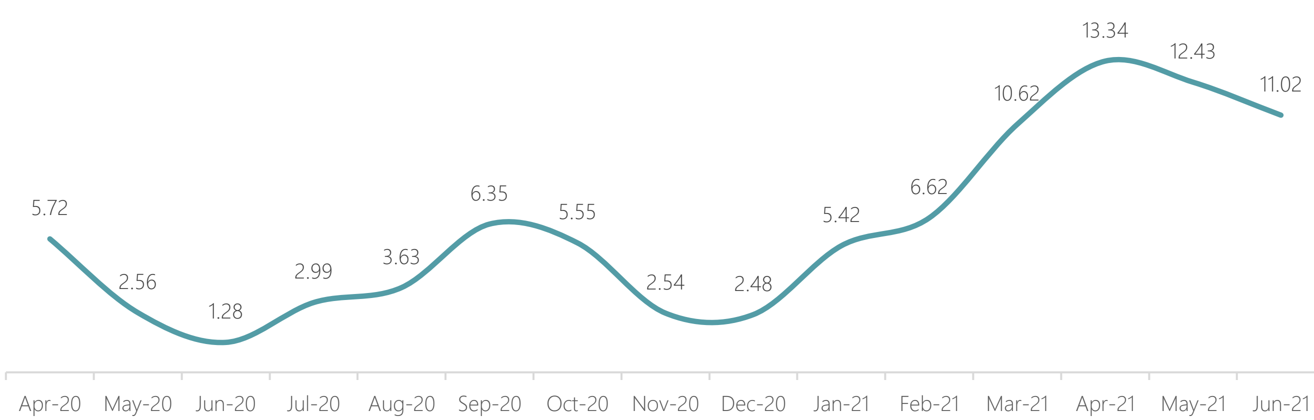
In the first six months of 2021, an undersupply of gasoline, diesel oil and light fuel oil was recorded in Poland, with consumption exceeding domestic output. A surplus output was only recorded in the case of aviation fuel, exacerbated by the pandemic-related restrictions on air travel.

Motor gasoline

The LOTOS Group's total sales of gasoline in the second quarter of 2021 shrank by 3% year on year, with domestic sales up 19%. After the first six months of 2021, the LOTOS Group's share in the Polish gasoline market was 27.6%. The average crack spread for gasoline on global markets was USD 12.22/bbl (up 290.4% year o year).

Figure 2. Motor gasoline – average monthly crack spread, USD/bbl

April 2020 – June 2021



Source: In-house analysis based on Refinitiv data.

Diesel oil

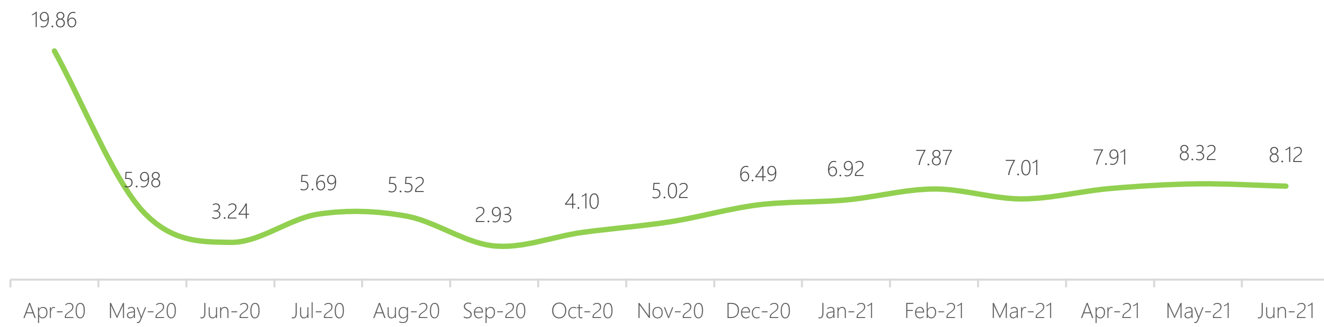
In the second quarter of 2021, the LOTOS Group's total sales of diesel oil did not change relative to the previous year, with domestic sales up 6%. The Company's share in the Polish diesel oil market after the first six months of 2021 was 32.5%. In the second quarter

In the second quarter of 2021, the average global crack spread for diesel oil was USD 8.12 /bbl, having contracted by USD 1.4/bbl year on year.

Figure 3. Diesel oil – average monthly crack spread, USD/bbl

April 2020 – June 2021

[12] Source of fuel consumption data in Poland – Polish Organisation of Oil Industry and Trade (POPiHN).



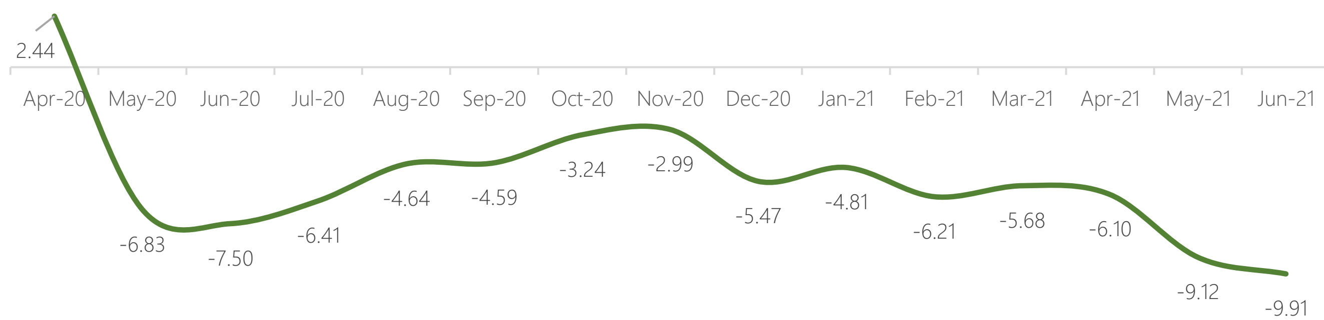
Source: In-house analysis based on Refinitiv data.

Heavy fuel oil and bitumen

As a result of yield structure optimisation efforts, the Group reported a 62% year-on-year reduction in sales of heavy fuel oil and a 1% increase in sales of bitumens. In the second quarter of 2021, the average crack spread for heavy fuel oil on global markets was negative, at USD -8.41%/bbl, having shrunk by USD 4.38/bbl year on year.

Figure 4. Heavy fuel oil – average monthly crack spread, USD/bbl

April 2020 – June 2021



Source: In-house analysis based on Refinitiv data.

Table 12. Refining & Marketing segment's key financial data (PLNm)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Revenue	7,168.2	5685.1	4155.8	26.1%	72.5%
EBIT	863.4	554.8	234.6	55.6%	268.0%
Depreciation and amortisation	191.9	202.6	190.2	-5.3%	0.9%
EBITDA	1,055.3	757.4	424.8	39.3%	148.4%
LIFO-based EBIT	561.0	218.6	-171.0	156.6%	428.1%
LIFO-based EBITDA	752.9	421.2	19.2	78.7%	3821.2%
Adjusted LIFO-based EBITDA[13]	761.9	444.7	14.8	71.3%	5,048.0%

Source: the Company.

The 72.5% year-on-year improvement in the Refining & Marketing segment's revenue was driven primarily by an increase in the segment's average net selling price, which was partly offset by a 4.3% drop in the segment's sales volumes. In the second quarter of 2021, the average net selling price was PLN 2,691/tonne, having increased by PLN 1,198/tonne year on year, chiefly led by higher prices of petroleum products, including motor gasolines, base oils, lubricants and bitumens.

The 26.1% quarter-on-quarter growth in the segment's revenue reported in the second quarter of 2021 was mainly attributable to an increase (+PLN 252) in the average selling price and higher (+14.3%) sales volumes, resulting from full utilisation of the refinery's capacity after the maintenance shutdown in the first quarter of 2021.

The Refining & Marketing segment's adjusted LIFO-based EBITDA for the second quarter of 2020 came in at PLN 761.9m.

The Company further announces that:

- fluctuations in its oil inventories and differences between the volumes purchased and processed during Q2 2021 resulted in the cost of crude oil processed, based on the LIFO (First in First out) inventory method, being calculated at a lower unit cost than the currently prevailing price, as the effect of 'cheap crude inventories' (calculated at a materially lower unit cost) occurred.
- This effect reflects a shortcoming of the adopted inventory valuation model, which, in an environment with significant oil price fluctuations, distorted the LIFO-based result for the period and has no effect on cash flows from operating activities.
- The Company estimates the above-mentioned positive effect on its LIFO-based operating result at PLN ~0.09bn, i.e. the segment's normalised LIFO-based EBITDA is higher by PLN ~0.09bn. This effect is opposite to the effect of 'expensive crude inventories' seen in Q2 2020, which reduced the segment's normalised LIFO-based by PLN ~0.37bn (as reported by the Company in Current Report No. 22/2020 of July 24th 2020).

Table 13. Number of service stations within the LOTOS network

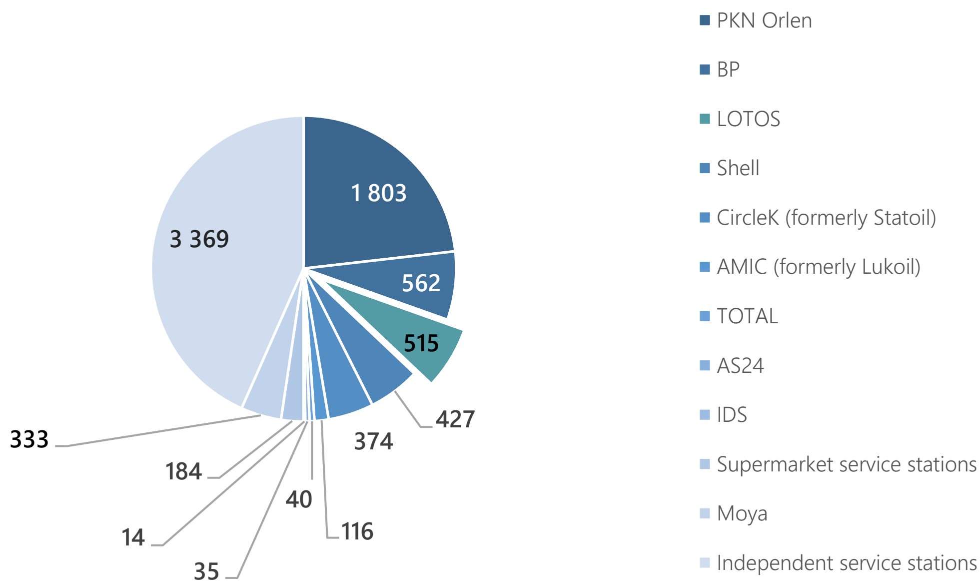
	Jun 30 2021	Mar 31 2021	Jun 30 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
CODO	323	319	312	4	11
DOFO	192	195	195	-3	-3
Total	515	514	507	1	8

Source: the Company.

[13] EBITDA including the LIFO effect on inventory measurement and reversal/recognition of inventory write-downs, net of foreign exchange differences on operating activities in each quarter.

At the end of the second quarter of 2021, the LOTOS Group operated a chain of 515 service stations, i.e. 8 more than at the end of June 2020.

Figure 5. Service stations in Poland
as at June 30th 2021



Source: In-house analysis based on Polish Organisation of Oil Industry and Trade (POPiHN) data.

Table 14. Retail's key financial data (PLNm)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Sales volume ('000 tonnes)	319.0	281.3	260.0	13.4%	22.7%
Revenue	1,841.3	1,518.7	1,175.6	21.2%	56.6%
EBIT	42.4	-2.3	20.1	1,945.2%	111.1%
Depreciation and amortisation	31.0	31.1	29.0	-0.2%	7.1%
EBITDA	73.5	28.8	49.1	155.2%	49.7%

Source: the Company.

In the second quarter of 2021, the retail business generated EBITDA of PLN 73.5m. The quarter-on-quarter and year-on-year improvement was driven by higher retail sales volumes of motor gasoline and diesel oil, which went up following the lifting of the COVID-19-related mobility restrictions and gradual recovery of demand on the domestic market, as well as higher retail margins on the key products sold in this channel.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Table 15. Key financial results of the LOTOS Group (PLNm)

	Q2 2021	Q1 2021	Q2 2020	Q2 2021/Q1 2021	Q2 2021/Q2 2020
Revenue	7,415.0	5,863.3	4,245.5	26.5%	74.7%
EBIT	1,241.5	664.3	-249.4	86.9%	-
Depreciation and amortisation	254.6	263.4	272.7	-3.3%	-6.6%
EBITDA	1,496.1	927.7	23.3	61.3%	6,321.0%
LIFO effect[14]	-302.4	-336.2	-405.6	-10.0%	-
LIFO-based EBIT	939.1	328.1	-655.0	186.2%	-
Adjusted LIFO-based EBIT	729.5	351.6	-220.6	107.5%	-
Adjusted LIFO-based EBITDA[15]	984.1	615.0	52.1	60.0%	1788.9%

Source: the Company.

In line with its inventory measurement policies, the LOTOS Group uses the weighted average cost method to measure changes in inventories. This method defers the impact of changes in crude oil prices on the prices of finished goods. Thus, an increase in crude oil prices has a positive effect on financial performance, while a decrease adversely affects the performance.

Operating results computed using this inventory measurement method are presented in the EBITDA and EBIT lines of the table. The table also presents estimated inventory decreases measured using the LIFO method, as well as the LIFO effect, LIFO-based EBIT, adjusted LIFO-based EBIT, and adjusted LIFO-based EBITDA.

In the second quarter of 2021, the LOTOS Group posted an operating profit (EBIT) of PLN 1,241.5m, being the combined result of the Refining & Marketing segment's EBIT of PLN 863.4m, the Exploration & Production segment's EBIT of PLN 370.6m, and PLN 7.5m in consolidation adjustments. LIFO-based EBITDA, net of exchange differences on operating activities and other non-recurring items (adjusted LIFO-based EBITDA), was PLN 984.1m.

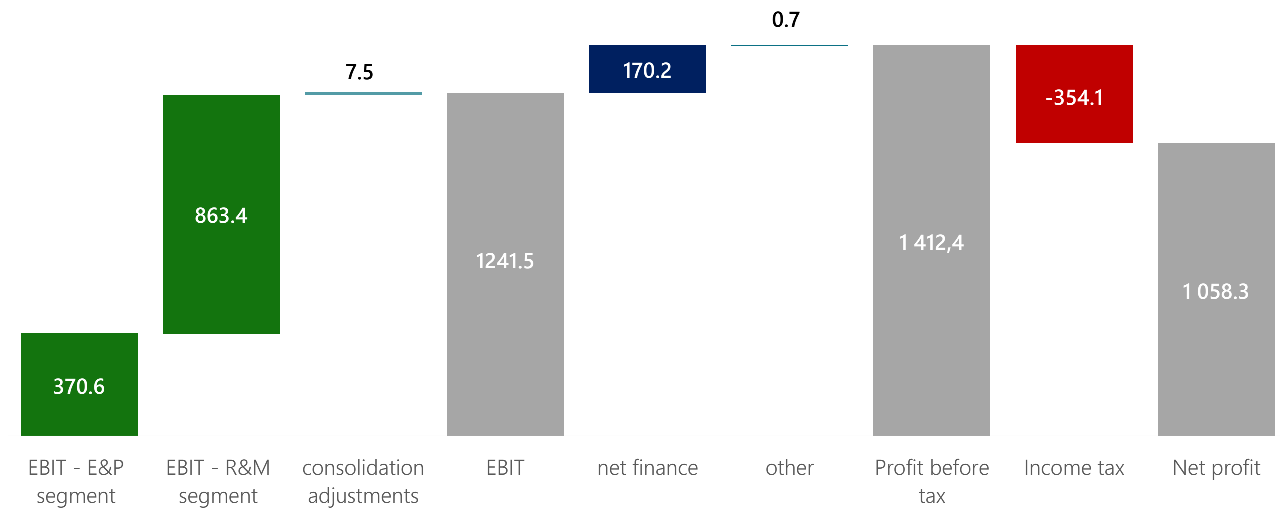
The Company further announces that:

- fluctuations in its oil inventories and differences between the volumes purchased and processed during Q2 2021 resulted in the cost of crude oil processed, based on the LIFO (First in First out) inventory method, being calculated at a lower unit cost than the currently prevailing price, as the effect of 'cheap crude inventories' (calculated at a materially lower unit cost) occurred.
- This effect reflects a shortcoming of the adopted inventory valuation model, which, in an environment with significant oil price fluctuations, distorted the LIFO-based result for the period and has no effect on cash flows from operating activities.
- The Company estimates the above-mentioned positive effect on its LIFO-based result at PLN ~0.09bn, i.e. normalised consolidated LIFO-based EBITDA is higher by PLN ~0.09bn. This effect is opposite to the effect of 'expensive crude inventories' seen in Q2 2020, which reduced normalised LIFO-based by PLN ~0.37bn (as reported by the Company in Current Report No. 22/2020 of July 24th 2020).

Figure 6. Structure of the LOTOS Group's consolidated results in the second quarter of 2021 (PLNm)

[14] LIFO effect = LIFO-based EBIT (estimated with the LIFO, or Last In First Out, method) - EBIT.

[15] LIFO-based EBITDA, including one-off items described in the segment discussion.



Source: the Company.

In the second quarter of 2021, the LOTOS Group reported net finance income of PLN 170.2m, With the main contributors being net foreign exchange gains of PLN 100.9m, a PLN 142.2m gain on measurement and settlement of hedging transactions, and a PLN -73.7m negative balance of interest on debt, interest income, commissions and other items.

The effect of measurement and settlement of market risk hedging transactions at the LOTOS Group included mainly a PLN 65.8m net gain on settlement and measurement of transactions hedging currency risk, a PLN 33.7m net gain on measurement of transactions hedging commodity price risk, and a PLN 42.8m net gain on settlement and measurement of transactions hedging CO_2 emission allowances.

Market risk management

Presented below is the market risk management process, including the measures undertaken in the second quarter of 2021.

In its core business activities, the LOTOS Group is exposed to market risk manifest in:

- risk related to commodity and petroleum product prices,
- risk related to prices of carbon dioxide emission allowances,
- currency risk,
- interest rate risk.

As part of the risk related to commodity and petroleum product prices, certain key risk factors have been identified at the LOTOS Group, including volatility of the refining margin, volatility of prices of stocks held in excess of the mandatory emergency stock volumes, volatility of differentials used in trade contracts (e.g. Urals vs Brent), and the use of non-standard pricing formulas in trade contracts.

In the second quarter of 2021, commodity swaps were entered into as part of the adopted policy of managing the commodity and petroleum product price risk. The contracts were concluded in order to preserve the original price risk profile in connection with the fact that bitumen components are offered for sale at fixed prices.

The risk related to prices of carbon dioxide emission allowances is managed at Grupa LOTOS on an ongoing basis, since the first quarter of 2021 in line with the new Policy on Managing Risk Related to Carbon Dioxide Emission Allowance Prices. The Policy introduces fundamental changes to the structure of existing limits and defines a classification for transaction portfolios, which include a hedging portfolio as well as a trading portfolio. Transactions classified into the latter portfolio may have no direct link to the company's exposure and are executed within a predefined risk appetite to leverage movements in allowance prices and reduce the cost of participation in the EU ETS.

In the first quarter of 2021, the Company began managing its CO_2 exposure as part of ETS Phase 4, and in early second quarter of 2021 it finished the exposure management under Phase 3 after settlement of the transactions executed in connection with that phase, generating approximately PLN +70m above the total cost of allowance purchases.

In the reporting period, Grupa LOTOS entered into EUA futures contracts for both portfolios (the hedging and trading portfolio) to hedge its exposure to the risk of changes in the prices of CO_2 emission allowances and capture market opportunities as part of ETS Phase 4.

In its business activities, the LOTOS Group is exposed to exchange rate movements in connection with its commodity and petroleum product trading activities, investing cash flows, financing cash flows (including deposits and credit facilities), and measurement of derivative instruments. The parent actively manages its currency exposure based on an adopted policy and within defined limits, using Cash-Flow-at-Risk (CFaR) as the principal risk measure. In the second quarter of 2021, as part of the currency risk management process, in order to optimise the value of expected cash flows, the Group entered into spot, FX forward and FX swap contracts taking into account prevailing market conditions.

The Group is exposed to the risk of changes in cash flows caused by interest rate movements as interest income and interest expense related to certain assets and liabilities accrue based on floating interest rates, including in particular under inventory financing and refinancing credit facilities where the amount of interest is computed by reference to the floating LIBOR USD rate. In the second quarter of 2021, the Company repaid the investment credit facility contracted for the EFRA Project and closed positions hedging interest rate risk related to the facility. To hedge its interest rate risk exposure, the LOTOS Group may enter into interest rate swap contracts.

In connection with the ongoing reform of inter-bank offered rates (IBOR), which will result in cessation of the currently applied interest rates (including the planned discontinuation of LIBOR at the end of 2021 and of LIBOR USD in June 2023) and their replacement with other benchmarks, the Parent is actively monitoring the progress of the reform to the extent applicable to the Company and takes all necessary decisions and steps to prepare for the transition to new interest rates.

Table 16. EBIT, profit before tax and net profit/(loss) of the LOTOS Group (PLNm)

	Q2 2021	Q1 2021	Q2 2020
EBIT	1,241.5	664.3	-249.4
Profit/(loss) before tax	1,412.4	479.0	-229.6
Net profit/(loss)	1,058.3	353.3	-76.4

Source: the Company.

In the second quarter of 2021, the LOTOS Group posted a consolidated net profit of PLN 1,058.3m.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Table 17. Consolidated statement of financial position – assets (PLNm)

	Jun 30 2021	Dec 31 2020	Nominal change	Change in %
Total	23,940.4	21,856.4	2,084.0	9.5%
Non-current assets	14,178.0	13,960.1	217.9	1.6%
Property, plant and equipment of the Refining & Marketing segment	9,469.4	9,466.9	2.5	0.0%
Intangible assets of the Refining & Marketing segment	155.3	161.0	-5.7	-3.5%
Property, plant and equipment of the Exploration & Production segment	3,175.5	2,923.1	252.4	8.6%
Intangible assets of the Exploration & Production segment	343.2	313.8	29.4	9.4%
Equity-accounted joint ventures	23.8	26.1	-2.3	-8.8%
Deferred tax assets	299.6	384.2	-84.6	-22.0%
Derivative financial instruments	44.5	1.2	43.3	3608.3%
Shares	309.8	309.8	0.0	0.0%
Loans	201.0	195.9	5.1	2.6%
Other non-current assets	155.9	178.1	-22.2	-12.5%
Current assets	9,761.6	7,896.3	1,865.3	23.6%
Inventories	4,602.1	3,495.7	1,106.4	31.7%
Trade receivables	2,882.7	1,693.9	1,188.8	70.2%
Current tax assets	32.4	180.9	-148.5	-82.1%
Derivative financial instruments	86.4	65.9	20.5	31.1%
Other current assets	367.9	314.3	53.6	17.1%
Cash and cash equivalents	1,790.1	2,145.6	-355.5	-16.6%
Assets held for sale	0.8	0.0	0.8	-

Source: the Company.

As at June 30th 2021, the LOTOS Group carried total assets of PLN 23,940.4m (up PLN 2,084.0m on December 31st 2020).

Key changes in assets:

- PLN 1,106.4m increase in inventories, due mainly to higher prices of crude oil and petroleum products;
- PLN 1,188.8m increase in trade receivables attributable to higher selling prices in June 2021 compared with December 2020;
- PLN 252.4m increase in property, plant and equipment of the Exploration & Production segment, mainly LOTOS Norge;
- PLN 355.5m decrease in cash and cash equivalents caused by a significant increase in working capital requirements (increase in inventory and receivables) driven by rising prices of crude oil and refinery products.

Table 18. Consolidated statement of financial position – sources of funding (PLNm)

	Jun 30 2021	Dec 31 2020	Nominal change	Change in %
Total	23,940.4	21,856.4	2,084.0	9.5%
Equity	13,007.7	11,573.8	1,433.9	12.4%
Share capital	184.9	184.9	0.0	0.0%
Share premium	2,228.3	2,228.3	0.0	0.0%
Cash flow hedging reserve	-4.1	-24.4	20.3	83.2%
Retained earnings	10,489.6	9,078.0	1,411.6	15.5%
Translation reserve	108.9	106.9	2.0	1.9%
Non-controlling interests	0.1	0.1	0.0	0.0%
Non-current liabilities	4,165.0	4,513.9	-348.9	-7.7%
Borrowings, other debt instruments and finance lease liabilities	2,099.6	2,717.7	-618.1	-22.7%
Derivative financial instruments	1.5	1.0	0.5	50.0%
Deferred tax liabilities	384.4	144.5	239.9	166.0%
Employee benefit obligations	238.1	230.2	7.9	3.4%
Other liabilities and provisions	1,441.4	1,420.5	20.9	1.5%
Current liabilities	6,767.7	5,768.7	999.0	17.3%
Borrowings, other debt instruments and finance lease liabilities	1,471.0	1,355.8	115.2	8.5%
Derivative financial instruments	28.9	18.5	10.4	56.2%
Trade payables	2,261.3	1,636.0	625.3	38.2%
Current tax liabilities	276.3	134.2	142.1	105.9%
Employee benefit obligations	168.3	196.1	-27.8	-14.2%
Other liabilities and provisions	2,561.9	2,428.1	133.8	5.5%

Source: the Company.

The increase in the LOTOS Group's equity in the first half of 2021 to PLN 13,007.7m (up by PLN 1,433.9m) was driven primarily by higher retained earnings (up by PLN 1,411.6m), foreign exchange gains on measurement of cash flow hedges adjusted for tax effect of PLN 20.3m, recognised in capital reserves, and a PLN 2.0m increase in translation reserve.

The share of equity in total equity and liabilities grew by 1.4pp year on year, to 54.3%.

Key changes in liabilities (up by PLN 675.3m):

- PLN 625.3m decrease in trade payables, driven by higher purchase prices of crude oil in June 2021 compared with December 2020;
- PLN 239.9m increase in deferred tax liabilities, mainly at Grupa LOTOS;
- PLN 502.9m decrease in borrowings, other debt instruments and finance lease liabilities, resulting from repayment of investment credit facilities (mainly at LOTOS Asfalt and Grupa LOTOS S.A.);
- PLN 154.7m increase in other liabilities and provisions, related to higher VAT, excise duty and fuel charge liabilities, partly offset by a decrease in the provision for a deficit of CO_2 emission allowances, and remeasurement of provisions for decommissioning and restoration costs in the Exploration & Production segment.

As at June 30th 2021, the LOTOS Group's financial debt totalled PLN 3,570.6m, down by PLN 502.9m on the end of December 2020, mainly as a result of repayment of investment credit facilities. Net debt totalled PLN 1,780.5m, compared with PLN 1,927.9m as at the end of December 2020. The net debt to adjusted LIFO-based EBITDA ratio as at June 30th 2021 was 0.8x, down 0.6x on December 31st 2020, reflecting a strong growth in working capital requirements driven by rising prices of oil and petroleum products.

CONSOLIDATED STATEMENT OF CASH FLOWS

Table 19. Cash flows (PLNm)

	Q2 2021	Q1 2021	Q2 2020
Cash flows from operating activities	1,835.7	-1,030.5	1,445.4
Cash flows from investing activities	-156.6	-253.9	-164.9
Cash flows from financing activities	-912.0	292.0	-226.8
Effect of exchange rate fluctuations on cash held	0.2	5.7	-20.7
Change in net cash	767.3	-986.7	1,033.0
Cash at beginning of period	936.7	1,923.4	1,287.5
Cash at end of period	1,704.0	936.7	2,320.5

Source: the Company.

As at June 30th 2021, the LOTOS Group's cash balance (including overdraft facilities) amounted to PLN 1,704.0m. Cash and cash equivalents increased by PLN 767.3m as a result of net cash flows in the second quarter of 2021

The positive net cash flows from operating activities in the second quarter of 2021, of PLN 1,835.7m, were driven mainly by the net profit earned in the second quarter of 2021 and an increase in trade payables offset by an increase in trade receivables and inventories. This was a consequence of rising prices of crude oil and petroleum products, which drove a strong growth in working capital requirements.

Negative net cash flows from investing activities of PLN -156.6m were mainly attributable to acquisition of property, plant and equipment and other intangible assets, chiefly for the Exploration & Production segment.

Negative net cash flows from financing activities in the second quarter of 2021, of PLN - 912.0m, chiefly comprised repayments of borrowings, payments of interest and of liabilities under finance leases.