



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

# Grupa LOTOS Management's Discussion and Analysis of Q4 2019 consolidated results

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

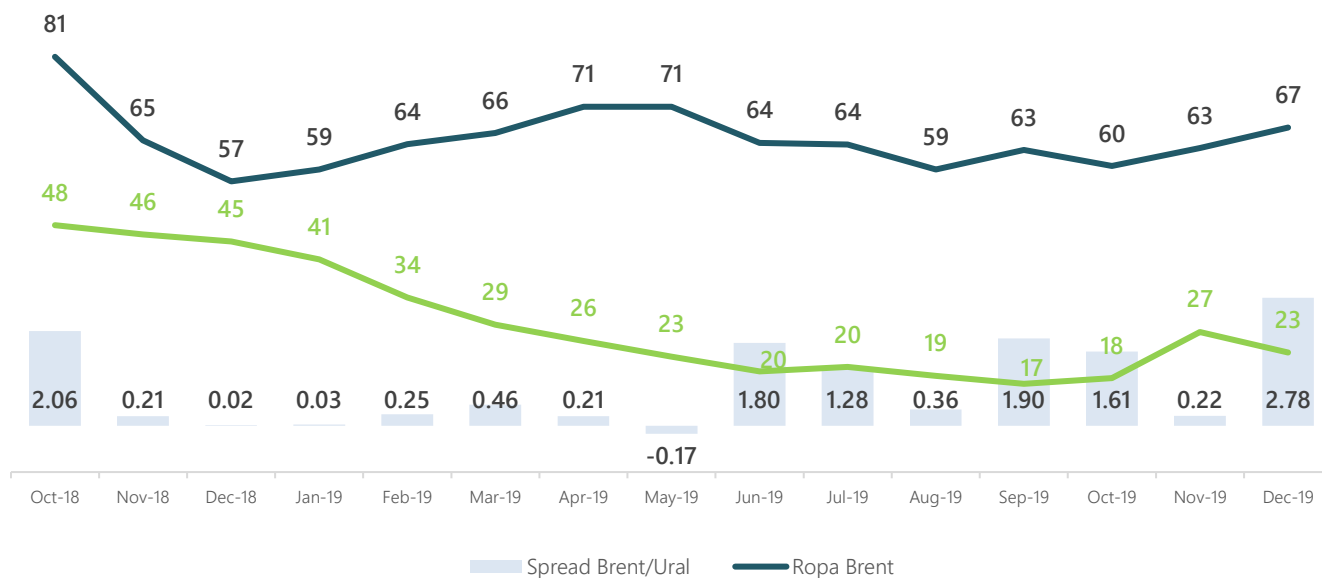
MARKET ENVIRONMENT .....	3
EXPLORATION & PRODUCTION SEGMENT .....	5
REFINING & MARKETING SEGMENT .....	11
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME.....	16
CONSOLIDATED STATEMENT OF FINANCIAL POSITION .....	19
CONSOLIDATED STATEMENT OF CASH FLOWS .....	21

An excel file with the operating and financial data for Q4 2019 and the previous reporting periods is published in the Investor Relations section of our website at [inwestor.lotos.pl](http://inwestor.lotos.pl) as [databook](#)

## MARKET ENVIRONMENT

- Crude oil and natural gas prices down year on year, respectively by 7.3% or USD 4.95/bbl<sup>1</sup> and 50.9% or USD 23.73 USD/boe<sup>2</sup>
- Crack spreads<sup>3</sup> for diesel oil and aviation fuel deteriorated year on year, respectively by -11.7% or USD -2.42/bbl and -7.4% or USD -1.44/bbl
- Sharp year-on-year decrease in negative crack spread for heavy fuel oil (-508.8%, or USD -21.37/bbl), and expansion of quarterly average diesel oil vs heavy fuel oil spread by 76%, or USD 18.95/bbl year on year
- Year-on-year widening of quarterly average Brent/Urals spread, from USD 0.82/bbl to USD 1.54/bbl
- Year-on-year appreciation of the USD/PLN quarterly average exchange rate by PLN 0.10 (to PLN 3.87).

Brent prices (USD/bbl), natural gas prices (USD/boe) and the Brent/Urals spread (USD/bbl)



Source: In-house analysis based on Refinitiv data.

Brent crude prices, Brent/Urals spread, gas prices and Grupa LOTOS' model refining margin

USD/bbl	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
DATED Brent FOB prices	63.27	62.00	68.22	2.0%	-7.3%
Brent/Urals spread	1.54	1.17	0.82	31.6%	87.8%
UK NBP natural gas prices <sup>4</sup>	22.85	18.88	46.58	21.0%	-50.9%

Source: In-house analysis based on Refinitiv data.

<sup>1</sup> bbl – barrel of crude oil.

<sup>2</sup> boe – barrel of oil equivalent.

<sup>3</sup> 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 crude price adjusted for the Brent/Urals spread).

<sup>4</sup>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.

## Crack spreads

USD/bbl	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Motor gasoline	10.56	14.23	5.09	-25.8%	107.5%
Naphtha	-3.58	-6.91	-5.03	48.2%	28.8%
Diesel oil (10 ppm)	18.31	17.38	20.73	5.4%	-11.7%
Light fuel oil	16.20	16.27	17.79	-0.4%	-8.9%
Aviation fuel	17.89	18.57	19.33	-3.7%	-7.4%
Heavy fuel oil	-25.57	-8.61	-4.20	-197.0%	-508.8%

Source: Refinitiv.

## Exchange rates

USD/PLN	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
PLN/USD exchange rate at end of period	3.80	4.00	3.76	-5.0%	1.1%
Average PLN/USD exchange rate	3.87	3.88	3.77	-0.3%	2.7%

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

Presented below are key factors contributing to the LOTOS Group's performance in Q4 2019.

- Feedstock and products
  - Refining & Marketing segment
 

Depressed year-on-year crack spreads for middle distillates, i.e. diesel oil and aviation fuel, had a major adverse impact on the Refining & Marketing segment's performance. On the other hand, refining costs were down on a year-on-year decline in the price of natural gas used by the Company's refinery. The price of crude oil processed into products and used in the processing operations (consumed internally) was also down.

An increase in the differential between the diesel oil and heavy fuel oil crack spreads in Q4 2019, of USD 43.88/bbl, alleviated adverse impacts of the macro environment on the profitability of the Grupa LOTOS refinery's product mix, which was changing as new EFRA units were being integrated into the existing refinery set-up (a shift towards a higher share of diesel oil and less heavy fuel oil). These factors translated into the Refining & Marketing segment's Q4 2019 adjusted LIFO-based EBITDA of PLN 406.3m (-30.3% year on year).
  - Exploration & Production segment
 

A year-on-year drop in the UK National Balancing Point prices of natural gas (-50.9%) and a 7.3% year-on-year decline in crude oil prices had an adverse effect on the Exploration & Production segment's performance. As a result, the Exploration & Production segment's adjusted EBITDA came in at PLN 175m (down 32.8% year on year).
- Exchange rates
  - An increase in the average USD/PLN exchange rate in the quarter (up 2.7% year on year) had a positive effect on crack spreads and thus on the operating performance of both reporting segments.

As of Q4 2019, the Company suspended the publication of its model refining margin as, in connection with the launch of EFRA Project units and changing production volumes, the model refining margin published by Grupa LOTOS ceased to reflect the yield structure and accurately present the refinery's profitability. The Company announced that the model margin calculation methodology would be updated once the refinery's operations with the EFRA units have stabilised.

## EXPLORATION & PRODUCTION SEGMENT

- Hydrocarbon production rate at 25.7 thousand boe/d (up 44% quarter on quarter and 25% year on year)
- Production from the newly launched Utgard field in Norway at 7.2 thousand boe/d in Q4
- Increase in crude oil and natural gas sales (up 29.3% quarter on quarter and 7.6% year on year)
- Exploration & Production segment's adjusted EBITDA of PLN 175m (up 147.9% quarter on quarter and down 32.8% year on year).

Crude oil and natural gas reserves, production and sales

Crude oil and natural gas reserves as at (mboe) <sup>5</sup>	Dec 31 2019	Sep 30 2019	Dec 31 2018
Norway	30.7	33.6	37.3
Poland	47.9	48.4	49.6
Lithuania	2.7	2.7	2.9
Total	81.3	84.7	89.8

Production (boe/d)	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Norway	20,045	13,121	15,258	52.8%	31.4%
Poland	5,000	3,991	4,535	25.3%	10.2%
Lithuania	657	683	743	-3.8%	-11.5%
Total	25,702	17,796	20,536	44.4%	25.2%

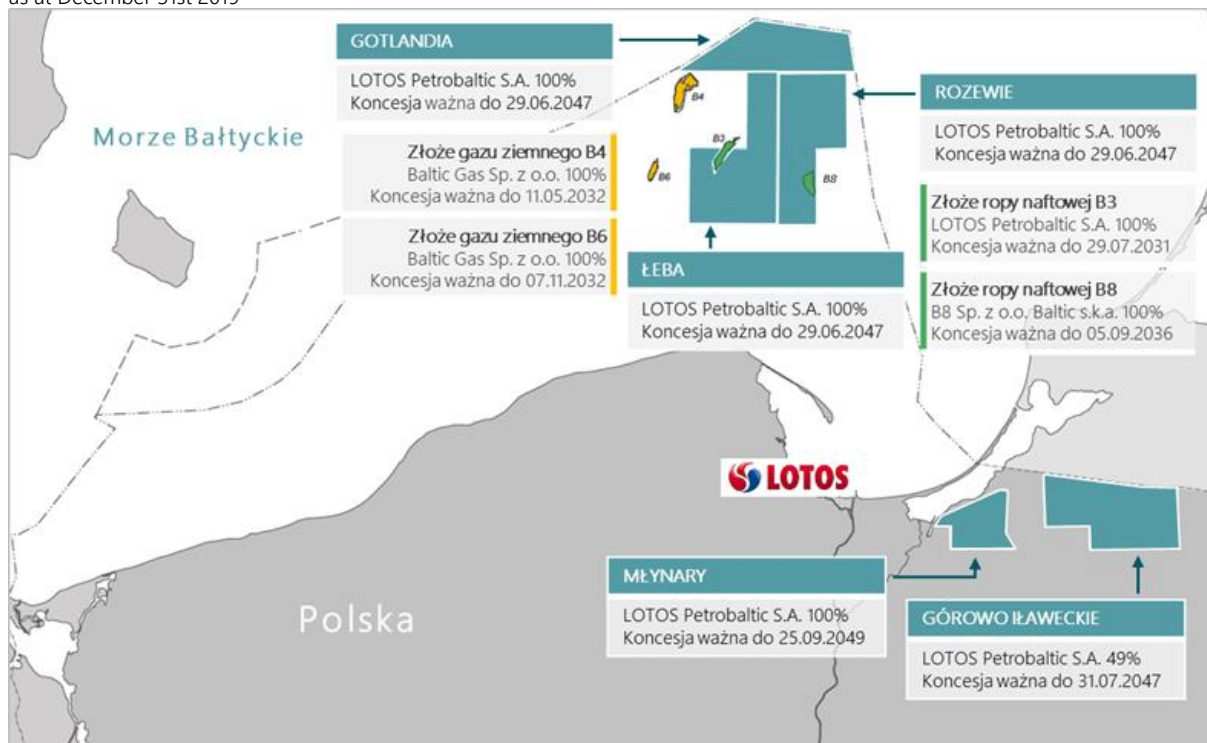
Production (boe)	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Norway	1,844,095	1,207,165	1,403,747	52.8%	31.4%
Poland	460,019	367,188	417,262	25.3%	10.2%
Lithuania	60,479	62,876	68,324	-3.8%	-11.5%
Total	2,364,593	1,637,229	1,889,333	44.4%	25.2%

Oil and gas sales (boe)	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Norway	1,420,853	1,119,551	1,324,107	26.9%	7.3%
Poland	466,910	318,101	414,209	46.8%	12.7%
Lithuania	92,318	94,182	101,926	-2.0%	-9.4%
Total	1,980,081	1,531,834	1,840,242	29.3%	7.6%

<sup>5</sup>2P – proved and probable reserves (SPE-PRMS classification).

## Exploration and production activities in Poland

Licences held by the LOTOS Group companies in Poland as at December 31st 2019



Source: Company.

In Q4 2019, 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 1,214 boe/d.

### B8 project

Development of a crude oil field in the Baltic Sea

In Q4 2019, the Petrobaltic Group produced crude oil and associated natural gas from the B8 field at an average rate of 3,786 boe/d. The year-on-year increase was attributable to the build-up of reservoir pressure during the rig's maintenance shutdown in Q3 2019. The *Petrobaltic* platform converted into the Maritime Production Centre for the B8 field was towed to its target location. Next, start-up work was commenced to launch the process modules, including functional tests of the oil separation system, which will be continued in 2020.

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

- LOTOS Group interest 100%
- 2P reserves 34.7 mboe as at December 31st 2019 (91% crude oil, 9% natural gas)
- current output 3.8 thousand boe/d (Q4 2019)
- full-scale production not earlier than in Q2 2021
- expected average output 5.0 thousand boe/d (for 5-year period from full-scale production launch).

B4B6 development project  
Development of natural gas fields in the Baltic Sea

The B4B6 project consists in the development of natural gas deposits in the Baltic Sea, in partnership with CalEnergy Resources Poland Sp. z o.o. In Q4 2019, it was awaiting a final investment decision (FID).

Key parameters of the B4B6 project (for the LOTOS Group interest):

- LOTOS Group interest 51%
- 2C resources<sup>6</sup> 17.9 mboe as at December 31st 2019 (74% natural gas, 26% NGL)
- first production 2023
- expected average output 4.3 thousand boe/d (for 5-year period from full-scale production launch).

Exploration projects

- As part of exploration activities in:
- the Gotland, Łeba and Rozewie offshore licence areas (LPB interest: 100%) – the Petrobaltic Group was engaged in geological surveys
- the Młynary licence areas (LPB interest: 100%) – as part of licence commitments, the company commenced work to design a 3D seismic survey
- Górowo Iławeckie licence area (PGNiG operator interest: 51%, LPB interest: 49%) – the company was involved in work on a joint recommendation to proceed to the exploration drilling stage.

Growth initiatives

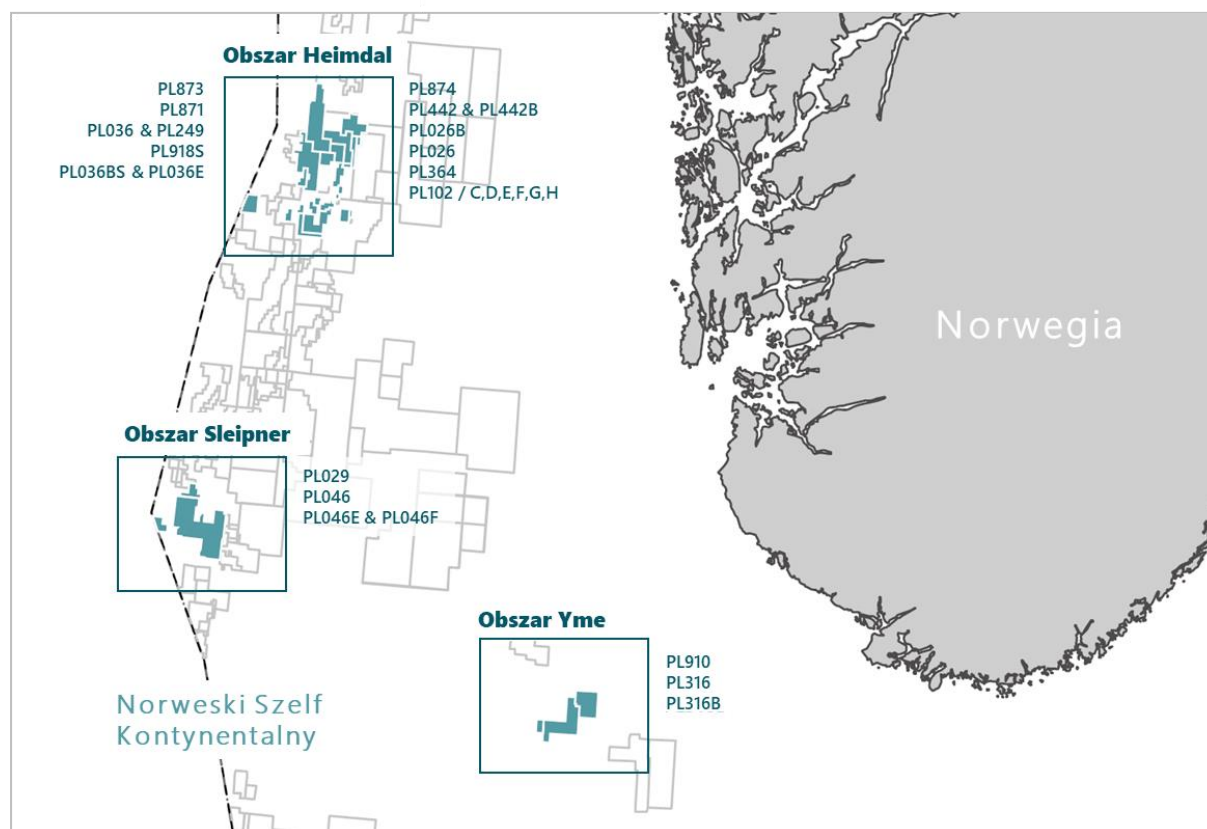
In Q4 2019, LPB was preparing for workover operations on Grupa LOTOS' Baltic Sea fields. In 2020, the first task of the newly purchased *Petro Giant* rig will be to work over two wells on the B3 field. In order to maximise the recovery rate and enhance production, the company will work over seven producer wells and drill one new well. In parallel, the *Petro Giant* platform is being technically prepared by LPB to provide external services.

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<sup>6</sup> Contingent resources prior to PDO approval.

## Exploration and production activities in Norway

Licences held by LOTOS Exploration & Production Norge AS as at December 31st 2019



Source: Company.

At the end of 2019, LOTOS Norge held interests in 27 licences for exploration, appraisal and production of hydrocarbon reserves in the Norwegian Continental Shelf. In January 2020, LEPN was awarded interests in two new licences in Norway following the APA 2019 licensing round<sup>7</sup>: 9.74% interest in the 442C licence covering an extension of the Liatårnet discovery and 16% interest in the 036F licence in the Trell/Trine area. The new licences are operated by AkerBP. Both licences are an important addition to the existing asset base in the Greater Heimdal and Trell/Trine areas. Following their formal inclusion, the LOTOS Group's portfolio of Norwegian assets will comprise 29 licences.

In Q4 2019, LOTOS Norge, operating as part of a consortium, produced natural gas and condensate from fields located in the Heimdal and Sleipner areas (including the Utgard field brought on stream in Q3 2019). The average output of the Norwegian assets in Q4 2019 was 20 thousand boe/d (+31% year on year).

### Utgard project

LEPN, operating as part of a consortium, completed the development of the Utgard field and put it on production on September 16th 2019. The Utgard field is tied back to the existing Sleipner infrastructure, which delivers additional synergies and added value for the entire Sleipner hub, one of the two (besides Heimdal) key areas of the LOTOS Group's activity in Norway.

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

- LOTOS Group interest 17.36%
- 2P reserves 5.4 mboe as at as at December 31st 2019<sup>8</sup> (48% crude oil, 52% natural gas)
- first production September 16th 2019

<sup>7</sup> Awards in Predefined Areas.

<sup>8</sup> After two production wells had been drilled, the consortium revised the resource volume and reservoir pressure estimates, which caused 2P reserves of the Utgard field to decrease relative to the quantity assumed in the PDO.



- current output 7.2 thousand boe/d (Q4 2019)
- expected average output 2.8 thousand boe/d (for 5-year period from production launch).

Moreover, in Q4 2019, LOTOS Norge was implementing projects to develop new fields in Norway, which reached the following status by the end of Q4 2019:

#### Yme project

The Yme project is at an advanced development stage. The field operator is Spain's Repsol, and the development activities are being carried out in accordance with the approved new PDO, using a leased platform – Maersk Inspirer. In Q4 2019, the company, as part of a consortium, carried on the project to modify the rig at the Egersund fabrication yard. Completion of the modification work on the Maersk Inspirer rig is scheduled for Q2 2020.

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

- LOTOS interest 20%
- 2P reserves 12.7 mboe as at December 31st 2019 (100% crude oil)
- Production to be launched in Q4 2020
- expected average output 5.0 thousand boe/d (for 5-year period from production launch).

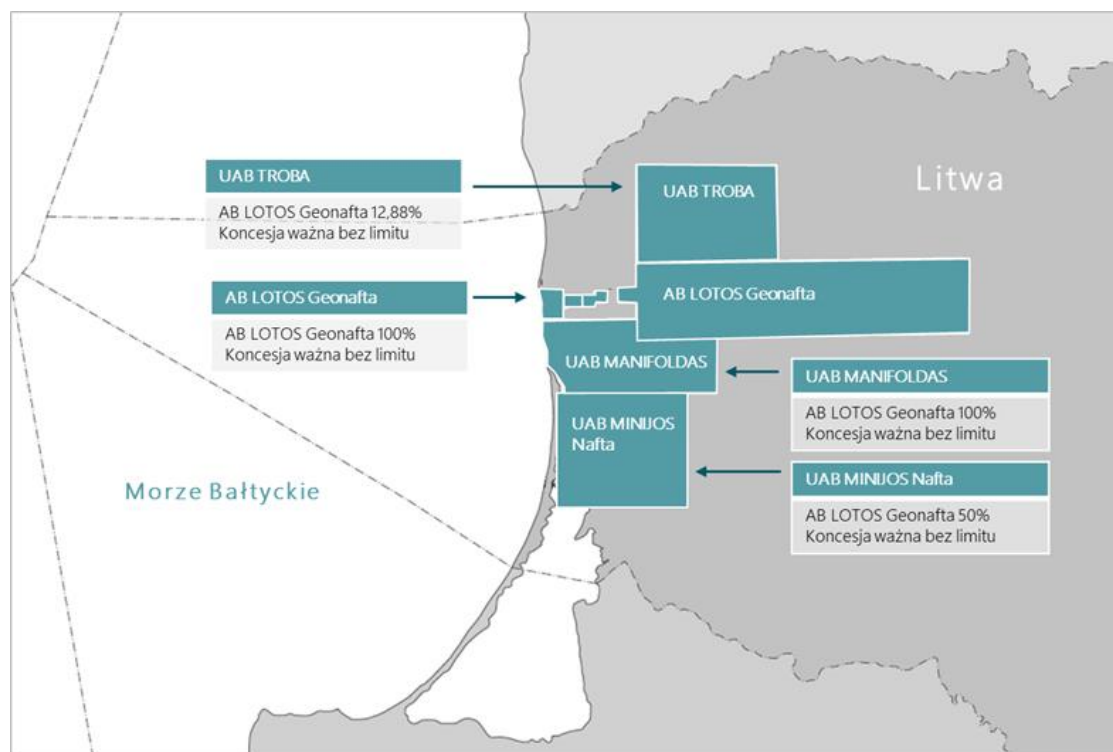
#### NOAKA development project

The project is now at the stage when a development concept is to be selected. It covers several discoveries north of the Heimdal hub, i.e.: Frigg Gamma Delta, Langfjellet, Rind, Fulla and Froy, in which the LOTOS Group holds an average interest of 10% and AkerBP is the operator. The project may also cover the Krafla and Askja discoveries, in which the LOTOS Group does not currently hold any interest, operated by Equinor. In Q4 2019, the interest holders carried out studies to select an optimal development option for the entire area. The drilling of the Liatårnet appraisal well to accurately evaluate its potential resources has been scheduled for Q3 2020. The Liatårnet discovery included, potential resources of NOAKA area attributable to the LOTOS Group interest are estimated by the company at approximately 38–49 mboe, with first production possible in 2024/2025.

#### Trell/Trine development project

The project involves potential 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. In Q4 2019, the companies were analysing a development concept to tie back the fields to the nearby Alvheim infrastructure. The Trell/Trine resources are estimated by the company at approximately 2.6 mboe for the LOTOS interest, with first production possible in 2022.

## Exploration and production activities in Lithuania

 Licences held by the AB LOTOS Geonafta Group  
as at December 31st 2019


Source: Company.

In Q4 2019, 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.

## Exploration and Production – key financial data

PLNm	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Revenue	333.5	235.1	423.7	41.9%	-21.3%
EBIT	190.8	14.6	577.8	1206.8%	-67.0%
Depreciation and amortisation	78.1	56.0	55.5	39.5%	40.7%
EBITDA	268.9	70.6	633.3	280.9%	-57.5%
Adjusted EBIT <sup>9</sup>	96.9	14.6	205.0	563.7%	-52.7%
Adjusted EBITDA <sup>9</sup>	175.0	70.6	260.5	147.9%	-32.8%

<sup>9</sup> EBITDA adjusted for one-off items:

in Q4 2019 (PLN 93.9m): reversal of impairment loss on the YME field of PLN +105.4m, reversal and re-estimation of provision for liabilities on account of contingent payments related to the acquisition of Sleipner assets of approximately PLN +44.5m, loss on discontinued projects in Norway of PLN -41.2m, impairment loss on a ship at the Miliana Group of PLN -5.9m, and impairment loss on Lithuanian fields of PLN -8.9m.  
in Q4 2018 (PLN 372.8m): reversal of impairment loss on the YME field of PLN 349.5m, recognition of insurance receivables in respect of a defective MOPU on the YME field of PLN 118.3m, impairment loss on the Heimdal fields of PLN -48.8m, re-estimation of provision for liabilities on account of contingents payments related to the acquisition of Sleipner assets of approximately PLN -51.2m, and reversal of impairment losses on Lithuanian field assets of PLN 5.0m.

The year-on-year decline in the Exploration & Production segment's revenue in Q4 2019 (down 21.3%) was mainly attributable to falling natural gas prices (down 50.9%) and lower Brent Dtd crude prices (down 7.3%), offset by an increase in the average USD/PLN exchange rate in the quarter (up 2.7%) and higher sales volumes (up 7.6%) in Poland and Norway.

The higher year-on-year and quarter-on-quarter depreciation and amortisation of the segment reflects an increase in the production volumes, chiefly in Norway (the first full quarter of production from the Utgard field).

As a combined effect of these factors, the Exploration & Production segment's adjusted EBITDA for Q4 2019 fell 32.8% on Q4 2018.

The rise in revenue (up 41.9% quarter on quarter) was attributable to the segment's higher (+29.3%) sales volumes combined with the rising prices of natural gas (+21.0%) and Brent Dtd crude (+2.0%). These factors lifted adjusted EBITDA (quarter on quarter) to PLN 175.0m.

## REFINING & MARKETING SEGMENT

- Improvement of the refinery yield structure year on year - first effect of the EFRA Project's operational stabilisation<sup>10</sup>
- Improved sales structure: diesel oil volume up 8.6%, with heavy fuel oil volume down 49.5% year on year
- Refining & Marketing segment's Q4 2019 adjusted LIFO-based EBITDA of PLN 406.3m (down 30.3% year on year).

### Crude slate

'000 tonnes	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Crude oil processed by the Gdańsk refinery	2,586.3	2,726.1	2,775.1	-5.1%	-6.8%
including:					
Urals crude	2,303.7	2,099.3	2,297.7	9.7%	0.3%
Rozewie crude	64.0	31.4	67.2	103.6%	-4.8%
Lithuanian crude	13.4	10.1	14.0	33.3%	-4.2%
Lubiatów crude	13.0	49.6	84.5	-73.8%	-84.6%
Other	192.2	535.7	311.7	-64.1%	-38.4%

In Q4 2019, the Company optimised the capacity utilisation rate of its refinery in Gdańsk. The refinery crude throughput was at the level of 2,586.3 thousand tonnes, down 6.8% year on year due to the crude distillation unit planned temporary maintenance shutdown. As successive EFRA units were coming online, the refinery's product mix varied over the reporting period.

In Q4 2019, the Company was engaged in start-up procedures on the Delayed Coking Unit. In October and December, performance test runs were conducted, confirming that the specifications contractually guaranteed by the general contractor and the licensors were met. In December 2019, the DCU was placed in service. Thus, all of the EFRA Project's facilities reached the operational status.

The Company was keeping track of margin levels for individual refining products and their impact on future profitability as well as the incremental refining margin on the EFRA Project. Given the considerable market volatility and expected shift in demand after the International Maritime Organisation's new sulfur content caps for bunker fuels enter into force as of the beginning of 2020, the Company estimated that the additional refining margin achievable following completion of the EFRA Project will be somewhere between USD 2 and USD 4.5/bbl. This range was based on the most common scenarios proposed by analysts of the refining sector and industry institutions. It is, however, subject to change as a result of fluctuations in the macroeconomic environment or varied operational availability of the EFRA Project units.

In Q4, Grupa LOTOS was also involved in several smaller optimisation projects. The most advanced one, i.e. the Hydrogen Recovery Unit (HRU), completed in 99%, whose purpose is to increase the production of hydrogen, LPG and naphtha in the refinery's total

<sup>10</sup> EFRA, i.e. Effective Refining.

yields pool is scheduled to be placed in service in H1 2020. Seeking to expand its capacity to dispatch fuels from the refinery, the Company was engaged in a project to construct a railway loading facility, scheduled to be placed in service at the end of 2020.

### Refining products<sup>11</sup>

	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
'000 tonnes	2,779.3	3,029.3	3,005.5	-8.3%	-7.5%
Gasolines	436.9	444.5	401.8	-1.7%	8.7%
Naphtha	131.8	105.0	133.8	25.5%	-1.5%
Diesel oils	1,391.3	1,493.1	1,374.3	-6.8%	1.2%
Light fuel oils	68.3	44.6	84.5	53.1%	-19.2%
Jet fuel	110.0	115.8	150.6	-5.0%	-27.0%
Heavy products <sup>12</sup>	259.1	503.5	528.5	-48.5%	-51.0%
Petcoke	64.0	1.6	-	-	-
Other <sup>13</sup>	317.9	321.2	332.0	-1.0%	-4.2%

### Sales structure in the Refining & Marketing segment

	Q4 2019	Q3 2019	Q4 2018	Q4 2019/Q3 2019	Q4 2019/ Q4 2018
'000 tonnes <sup>10</sup>	2,776.5	3,098.2	2,933.6	-10.4%	-5.4%
Gasolines	416.5	447.8	404.9	-7.0%	2.9%
Naphtha	131.8	105.0	133.8	25.5%	-1.5%
Diesel oils	1,522.4	1,649.9	1,401.5	-7.7%	8.6%
Light fuel oils	69.5	46.1	80.9	50.8%	-14.1%
Jet fuel	91.6	127.6	140.9	-28.2%	-35.0%
Heavy products <sup>11</sup>	280.6	497.4	555.8	-43.6%	-49.5%
Other	264.1	224.4	215.8	17.7%	22.4%

### Polish fuel market<sup>14</sup>

Consumption of liquid fuels (diesel oil, gasoline and light fuel oil) in Poland grew in 2019 by 3.8% year on year. The strongest demand growth, of 5.6%, was recorded for motor gasoline. Demand for diesel oil went up 3.6%. By contrast, consumption of light fuel oil fell year on year (down 6.4%).

<sup>11</sup>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.

<sup>12</sup> Heavy fuel oil and bitumen components.

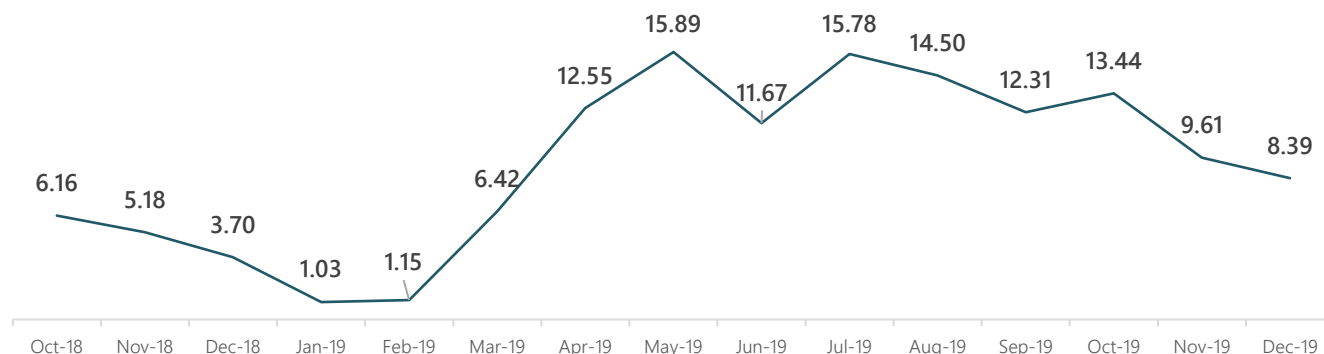
<sup>13</sup> Other products include fuel and industrial gases, sulfur, base oils, xylene fraction, LPG, bunker fuel, extracts, raffinates, and slack wax.

<sup>14</sup> Source of fuel consumption data in Poland - POPIHN.

### Motor gasoline

The LOTOS Group's total sales of gasoline rose 2.9% year on year in Q4 2019, while the average global crack spread for gasoline rose by USD 5.47/bbl year on year.

Motor gasoline – average monthly crack spread, USD/bbl  
October 2018 – December 2019



Source: In-house analysis based on Refinitiv data.

### Diesel oil

In response to the growing demand for diesel oil in Poland, the LOTOS Group increased the product's sales in Q4 2019 by some 8.6%, placing its entire output of the fuel on the Polish market. In Q4 2019, the average global crack spread for diesel oil went down by USD 2.42/bbl year on year.

Diesel oil – average monthly crack spread, USD/bbl  
October 2018 – December 2019

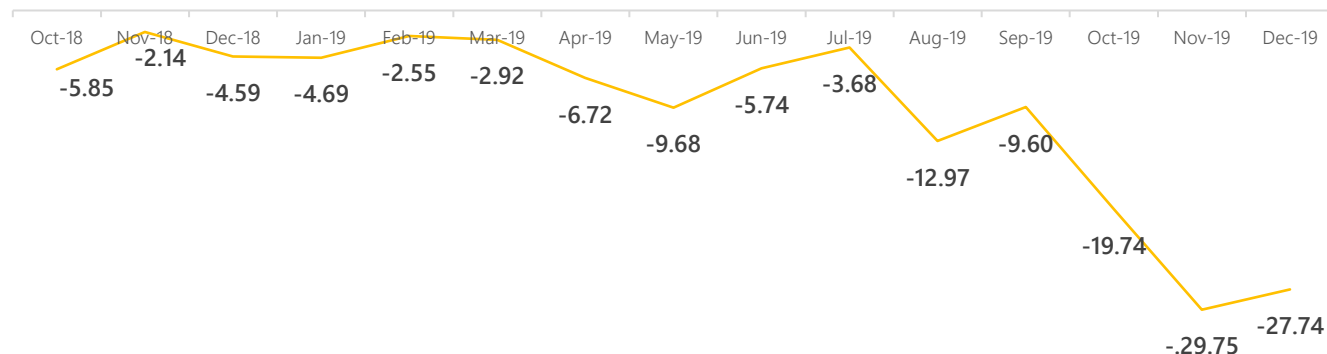


Source: In-house analysis based on Refinitiv data.

### Heavy fuel oil

Sales of heavy fuel oil (HFO) by the LOTOS Group in the reporting quarter went down 17.0% year on year. In Q4 2019, the average negative crack spread for heavy fuel oil on global markets was USD -25.57/bbl, having deteriorated by USD 21.37/bbl year on year.

Heavy fuel oil – average monthly crack spread, USD/bbl  
October 2018 – December 2019



Source: In-house analysis based on Refinitiv data.

Refining & Marketing – key financial data

PLNm	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Revenue	7,035.8	7,768.8	7,639.2	-9.4%	-7.9%
EBIT	252.8	480.6	184.1	-47.4%	37.3%
Depreciation and amortisation	178.6	170.8	125.3	4.6%	42.5%
EBITDA	431.4	651.4	309.4	-33.8%	39.4%
LIFO-based EBIT	274.9	602.0	350.9	-54.3%	-21.7%
LIFO-based EBITDA	453.5	772.8	476.2	-41.3%	4.8%
Adjusted LIFO-based EBITDA <sup>15</sup>	406.3	784.0	582.8	-48.2%	-30.3%

The 7.9% year-on-year decline in the Refining & Marketing segment's revenue was driven primarily by a 5.4% drop in the segment's sales volumes. In Q4 2019, the segment's average net selling price was PLN 2.534 per tonne, having decreased 2.7% quarter on quarter, chiefly on lower prices of petroleum products.

The 9.4% quarter-on-quarter decline in the Refining & Marketing segment's revenue reported in Q4 2019 was chiefly attributable to a 10.4% decrease in the segment's sales volumes.

In Q4 2019, adjusted LIFO-based EBITDA of the Refining & Marketing segment came in at PLN 406.3m, down 48.2% quarter on quarter and 30.3% year on year.

The year-on-year and quarter-on-quarter decline in adjusted LIFO-based EBITDA was mainly an effect of the segment's lower sales volumes and contracting margins on key refinery products, coupled with a rise in operating expenses reflecting chiefly the payment of a one-off bonus on completion of the EFRA Project.

On December 1st, the Delayed Coking Unit ("DCU") (key facility of the EFRA Project) was placed in service. Accordingly, in October and November 2019 revenue and expenses related to DCU products were not included in the consolidated statement of comprehensive income, but reduced or increased – as appropriate – the relevant capital expenditure. This effect has been estimated by the Company at approximately PLN 90m.

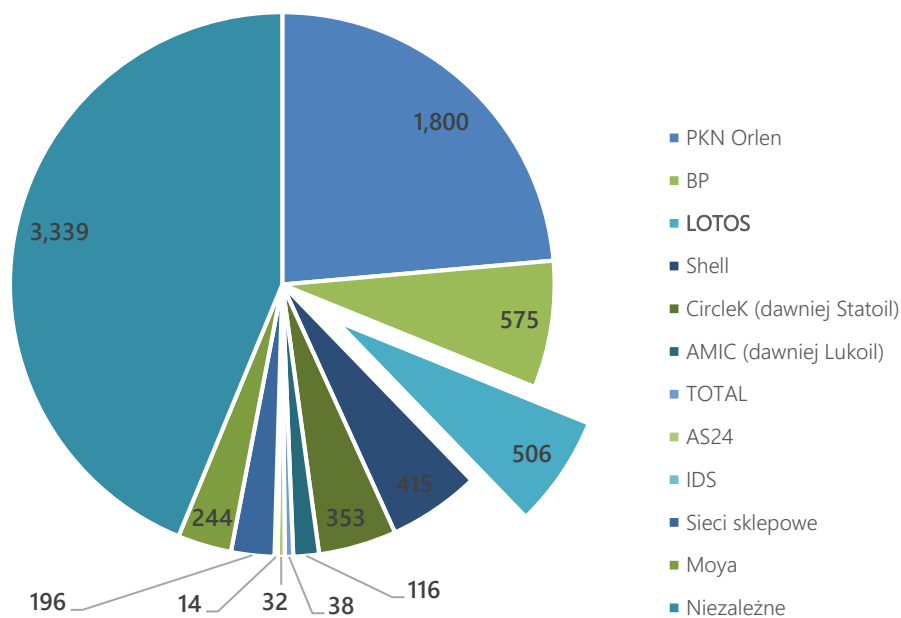
<sup>15</sup> EBITDA including the LIFO effect of inventory measurement and excluding theoretical write-downs on LIFO-measured inventories, net of foreign exchange differences on operating activities and, additionally, in Q4 2019 of impairment loss on services stations, and in Q4 2018 of impairment loss on services stations and tax risk provision.

Number of service stations within the LOTOS network  
as at September 30th 2019

	Dec 31 2019	Sep 30 2019	Dec 31 2018	Q4 2019 – Q3 2019	Q4 2019 – Q4 2018
	506	496	495	10	11
CODO	312	307	306	5	6
DOFO	194	189	189	5	5

As at the end of 2019, the LOTOS Group operated a chain of 506 service stations, an increase of 10 sites relative to the end of the previous quarter.

Polish retail market  
as at December 31st 2019



Source: POPIHN (Polish Organisation of Oil Industry and Trade).

Retail – key financial data

PLNm	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Sales volume ('000 tonnes)	325.1	344.6	318.3	-5.7%	2.1%
Revenue	1,779.8	1,891.4	1,769.8	-5.9%	0.6%
EBIT	-23.2	61.6	2.0	-137.7%	-1260.0%
Depreciation and amortisation	29.3	27.6	16.9	6.2%	73.4%
EBITDA	6.1	89.2	18.9	-93.2%	-67.7%
Adjusted EBIT	-1.9	61.6	35.3	-103.1%	-105.4%
Adjusted EBITDA	<b>27.4</b>	<b>89.2</b>	<b>52.2</b>	<b>-69.3%</b>	<b>-47.5%</b>

EBIT posted in Retail for Q4 2019 was negative at PLN -23.2m. The Retail operating result reflects a PLN 21.3m impairment loss on service stations. The marked quarter-on-quarter and year-on-year declines in adjusted EBITDA were attributable to lower unit margins earned on fuel sales through the Group's CODO and DOFO stations, coupled with a lower volume of fuel sales (vs Q3 2019).

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Key financial results of the LOTOS Group

PLNm	Q4 2019	Q3 2019	Q4 2018	Q4 2019/ Q3 2019	Q4 2019/ Q4 2018
Revenue	7,212.5	7,877.8	7,922.0	-8.4%	-9.0%
EBIT	452.4	496.3	768.7	-8.8%	-41.1%
Depreciation and amortisation	256.7	226.8	180.8	13.2%	42.0%
EBITDA	709.1	723.1	949.5	-1.9%	-25.3%
LIFO effect <sup>16</sup>	22.1	121.4	166.8	-	-
LIFO-based EBIT	474.5	617.7	935.5	-23.2%	-49.3%
Adjusted LIFO-based EBIT	333.4	628.9	669.3	-47.0%	-50.2%
Adjusted LIFO-based EBITDA <sup>17</sup>	590.1	855.7	850.1	-31.0%	-30.6%

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 Q4 2019, the LOTOS Group posted an operating profit (EBIT) of PLN 452.4m, being the combined result of the Refining & Marketing segment's EBIT of PLN 252.8m, the Exploration & Production segment's EBIT of PLN 190.8m, and PLN 8.8m in consolidation adjustments. LIFO-based EBITDA (excluding theoretical LIFO-based write-downs), net of exchange differences on operating activities and other non-recurring items (adjusted LIFO-based EBITDA), was PLN 590.1m.

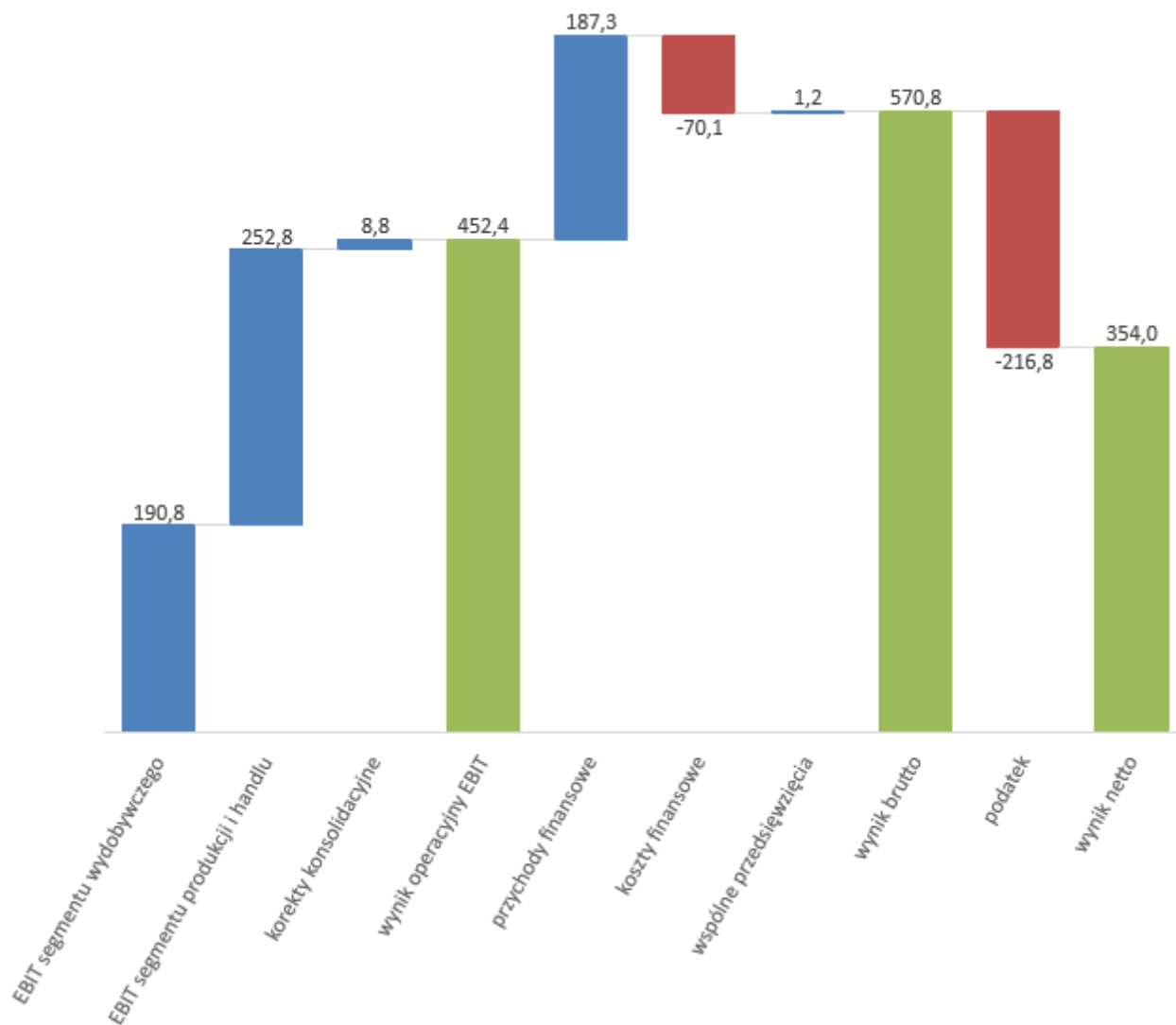
A negative contributor to the operating performance was a decline in crude oil and natural gas prices (performance of the Exploration & Production segment), as well as a lower margin in the Refining & Marketing segment (ca. PLN 90m for October and November), caused by the recognition of revenue and expenses related to the DCU in capital expenditure (the margin was not recognised in the consolidated statement of comprehensive income until December).

<sup>16</sup> LIFO effect = LIFO-based EBIT (estimated with the LIFO, or Last In First Out, method) - EBIT.

<sup>17</sup> EBITDA, including events described in the segment discussion.



Structure of the LOTOS Group's consolidated results in Q4 2019 (PLNm)



Upstream segment's EBIT	EBIT segmentu wydobywczego
Downstream segment's EBIT	EBIT segmentu produkcji i handlu
Consolidation adjustments	Korekty konsolidacyjne
EBIT	Wynik operacyjny EBIT
Finance income	Przychody finansowe
Finance costs	Koszty finansowe
Joint ventures	Wspólne przedsięwzięcia
Profit/(loss) before tax	Wynik brutto
Tax	Podatek
Net profit/(loss)	Wynik netto

In Q4 2019, the LOTOS Group reported a net finance loss of PLN -117.2m, with the main contributors being foreign exchange gains of PLN 71.6m, a PLN 107.0m gain on measurement and settlement of hedging transactions, and a PLN -60.4m negative balance of interest on debt, interest income and commissions.

In Q4 2019, the net effect of measurement and settlement of market risk hedging transactions at the LOTOS Group included mainly a PLN 72.8m net gain on settlement and measurement of exchange rate hedging transactions and a PLN 32.5m net gain on settlement and measurement of transactions hedging CO<sub>2</sub> emission allowances.

#### Market risk management

Presented below is the market risk management process, including the measures undertaken in Q4 2019.

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

- the risk related to commodity and petroleum product prices
- the risk related to prices of carbon dioxide emission allowances
- the currency risk
- the 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 Q4 2019, commodity swaps were entered into as part of the adopted policy of managing the commodity and petroleum product price risk. A significant portion of the swap 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, in line with the assumptions set forth in the strategy for managing the risk. The Group balances its future CO<sub>2</sub> emission allowance shortages and surpluses depending on the market situation and within defined limits.

In Q4 2019, the Company continued to purchase EUA futures contracts in view of the shortage of allowances expected after 2020, and also given the estimated shortages within the LOTOS Group following the launch of the EFRA project units. Currently, Grupa LOTOS S.A. has surplus carbon allowances.

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 Q4 2019, 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.

Under the EFRA project, the LOTOS Group concluded EUR/USD currency contracts designed to hedge EUR-denominated capital expenditure against USD as the main financing currency.

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 the investment credit facility for the EFRA Project and the inventory financing and refinancing credit facilities where the amount of interest is computed by reference to the floating LIBOR USD rate. To hedge its interest rate risk, the LOTOS Group enters into interest rate swap contracts.

In Q4 2019, the LOTOS Group posted a consolidated net profit of PLN 354.0m.

EBIT, profit before tax and net profit/(loss) of the LOTOS Group

PLNm	Q4 2019	Q3 2019	Q4 2018
EBIT	452.4	496.3	768.7
Profit/(loss) before tax	570.8	163.1	617.4
Net profit/(loss)	354.0	125.9	99.9

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### Consolidated statement of financial position – assets

	Dec 31 2019	Dec 31 2018	Change	%
PLNm	23,672.1	22,223.9	1,448.2	6.5%
Non-current assets	14,236.2	13,078.0	1,158.2	8.9%
Property, plant and equipment of the Refining & Marketing segment	9,638.4	8,742.4	896.0	10.2%
Intangible assets of the Refining & Marketing segment	160.0	151.9	8.1	5.3%
Property, plant and equipment of the Exploration & Production segment	3,632.4	3,044.0	588.4	19.3%
Intangible assets of the Exploration & Production segment	330.5	338.0	-7.5	-2.2%
Equity-accounted joint ventures	142.2	117.2	25.0	21.3%
Deferred tax assets	174.5	149.6	24.9	16.6%
Derivative financial instruments	0.1	9.1	-9.0	-98.9%
Other non-current assets	158.1	525.8	-367.7	-69.9%
Current assets	9,435.9	9,145.9	290.0	3.2%
Inventories	4,854.3	4,848.9	5.4	0.1%
Trade receivables	2,609.1	1,880.4	728.7	38.8%
Current tax assets	96.7	2.4	94.3	3929.2%
Derivative financial instruments	25.1	15.3	9.8	64.1%
Other current assets	334.1	457.6	-123.5	-27.0%
Cash and cash equivalents	1,516.6	1,941.3	-424.7	-21.9%

As at December 31st 2019, the LOTOS Group carried total assets of PLN 23,672.1m (up PLN 1,448.2m on December 31st 2018).

#### Key changes in assets:

- PLN 896.0m increase in the Refining & Marketing segment's property, plant and equipment, related mainly to the application of IFRS 16 and implementation of the EFRA Project
- PLN 588.4m increase in the Exploration & Production segment's property, plant and equipment, related mainly to the YME, Sleipner and Utgard fields in Norway, the B8 field in the Baltic Sea, and the newly purchased Giant drilling rig
- PLN 728.7m increase in trade receivables, mainly under domestic sales, due primarily to the lack of factoring arrangements in 2019
- PLN 491.2m decrease in other assets related mainly to a bank guarantee provided by BNP Paribas in favour of Exxon Exploration and Production Norge AS to cover Sleipner decommissioning liabilities and the resulting release of funds from the escrow account
- PLN 424.7m decrease in cash and cash equivalents.

## Consolidated statement of financial position – sources of funding

PLNm	Dec 31 2019	Dec 31 2018	Change	%
	23,672.1	22,223.9	1,448.2	6.5%
Equity	12,715.4	12,034.8	680.6	5.7%
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	-203.6	-288.2	84.6	29.4%
Retained earnings	10,415.5	9,826.1	589.4	6.0%
Translation reserve	90.2	83.6	6.6	7.9%
Non-controlling interests	0.1	0.1	0.0	0.0%
Non-current liabilities	5,097.9	4,044.3	1,053.6	26.1%
Borrowings, other debt instruments and finance lease liabilities	3,142.6	2,345.3	797.3	34.0%
Derivative financial instruments	6.6	6.9	-0.3	-4.3%
Deferred tax liabilities	475.2	324.9	150.3	46.3%
Employee benefit obligations	207.5	170.4	37.1	21.8%
Other liabilities and provisions	1,266.0	1,196.8	69.2	5.8%
Current liabilities	5,858.8	6,144.8	-286.0	-4.7%
Borrowings, other debt instruments and finance lease liabilities	1,273.8	1,538.7	-264.9	-17.2%
Derivative financial instruments	15.3	47.4	-32.1	-67.7%
Trade payables	1,940.8	1,913.7	27.1	1.4%
Current tax liabilities	217.1	565.3	-348.2	-61.6%
Employee benefit obligations	174.3	156.2	18.1	11.6%
Other liabilities and provisions	2,237.5	1,923.5	314.0	16.3%

The increase in the LOTOS Group's equity as at the end of 2019 to PLN 12,715.4m (up PLN 680.6m on 2018) was driven primarily by higher retained earnings (up PLN 589.4m), which were increased by foreign exchange gains on valuation of cash flow hedges recognised in capital reserves, adjusted by the tax effect of PLN 84.6m.

The share of equity in total equity and liabilities fell by 0.4pp year on year, to 53.7%.

Key changes in liabilities (up PLN 767.6m):

- PLN 532.4m increase in borrowings, other debt instruments and finance lease liabilities, due mainly to the implementation of IFRS 16 *Leases* and withdrawal, at the parent's option, of a deposit securing loan interest and principal repayments concurrently, some of the investment loans and the inventory financing and refinancing facilities were repaid
- PLN 383.2m increase in other liabilities and provisions (mainly liabilities under excise duty, fuel charge and VAT)
- PLN 150.3m increase in deferred tax liabilities
- PLN 348.2m decrease in current tax liabilities.

As at December 31st 2019, the LOTOS Group's debt totalled PLN 4,416.4m, up by PLN 532.4m on the end of 2018, mainly as a result of the implementation of IFRS 16 *Leases*. The ratio of debt adjusted for free cash to equity was 22.8% (including lease liabilities representing 10.0% of equity), up 6.6pp on December 31st 2018. Net debt was PLN 2,899.8m. The ratio of net debt to adjusted LIFO-based EBITDA was 1.0 as at December 31st 2019.

## CONSOLIDATED STATEMENT OF CASH FLOWS

PLNm	Q4 2019	Q3 2019	Q4 2018
Cash flows from operating activities	132.9	1,259.2	631.8
Cash flows from investing activities	-153.5	-204.6	-505.6
Cash flows from financing activities	-786.8	-918.2	-310.8
Effect of exchange rate fluctuations on cash held	-18.7	25.8	4.9
Change in net cash	-826.1	162.2	-179.7
Cash at beginning of period	2,342.7	2,180.5	2,118.0
Cash at end of period	1,516.6	2,342.7	1,938.3

As at December 31st 2019, the LOTOS Group's cash balance (including current account overdrafts) was PLN 1,516.6m. In Q4 2019, net cash flows reduced cash and cash equivalents by PLN 826.1m.

In Q4 2019, net cash flows from operating activities were positive by a slight margin, at PLN 132.9m, driven mainly by net profit increased by depreciation and amortisation and a decrease in trade receivables reflecting a revenue decline during the quarter. The low level of operating cash flows was attributable to a decrease in other liabilities and provisions, mainly liabilities on VAT, excise duty and fuel charge.

Negative net cash flows from investing activities (PLN -153.5m) were mainly attributable to acquisition of property, plant and equipment and other intangible assets, chiefly for the Exploration & Production segment and the EFRA Project. The capital expenditure was reduced by ca. PLN 90m on account of the margin generated by DCU products in October and November.

Negative cash flows from financing activities in Q4 2019, of PLN -786.8m, chiefly comprised a negative net balance of proceeds from borrowings and repayments of borrowings (principal and interest), and payments of liabilities under finance leases.