Grupa LOTOS S.A.
Full-year financial statements for 2021

prepared
in accordance with International Financial
Reporting Standards
as endorsed by the European Union
with the independent auditor's report

(This is a translation of a document originally issued in Polish)

STATEMENT OF COMPREHENSIVE INCOME

	Note	2021	2020
Revenue	9.1	29,036.2	17,736.9
Cost of sales	9.2	(25,500.6)	(18,202.4)
Gross profit/(loss)		3,535.6	(465.5)
Selling expenses	9.2	(702.1)	(743.2)
Administrative expenses	9.2	(281.6)	(279.0)
Other income	9.4	45.7	42.9
Other expenses	9.5	(69.0)	(69.6)
(Impairment losses)/reversal of impairment losses on receivables	9.8	(1.1)	1.9
Operating profit/(loss)		2,527.5	(1,512.5)
Finance income	9.6	604.7	425.2
including interest income calculated using the effective interest rate method	9.6	20.4	2.7
Finance costs	9.7	(94.2)	(41.6)
(Impairment losses)/reversal of impairment losses on loans	9.8	0.8	(9.4)
Profit/(loss) before tax		3,038.8	(1,138.3)
Corporate income tax	9.9.1	(518.9)	256.9
Net profit/(loss)		2,519.9	(881.4)
Other comprehensive income/(loss)			
Items that may be reclassified to profit or loss:		(28.9)	179.2
Cash flow hedges	10.7.3	(35.7)	221.2
Corporate income tax on cash flow hedges	9.9.1; 10.7.3	6.8	(42.0)
Items that will not be reclassified to profit or loss:		(9.6)	(2.8)
Gains/(losses) on investments in equity instruments	11.1.3	(12.3)	-
Actuarial gains/(losses) on post-employment benefits	10.11	0.5	(3.5)
Income tax	9.9.1	2.2	0.7
Other comprehensive income/(loss), net		(38.5)	176.4
Total comprehensive income/(loss)		2,481.4	(705.0)
Earnings/(loss) per share (PLN)			
Weighted average number of shares (million)	9.10	184.9	184.9
- basic	9.10	13.63	(4.77)
- diluted	9.10	13.63	(4.77)

STATEMENT OF FINANCIAL POSITION

	Note	Dec 31 2021	Dec 31 2020
ASSETS			
Non-current assets			
Property, plant and equipment	10.1.1	224.7	5,474.6
Intangible assets	10.1.3	45.1	77.7
Shares	10.2	8,012.8	3,293.0
Deferred tax assets	9.9.3	170.5	-
Derivative financial instruments	10.10	135.2	1.2
Loans	10.4	543.3	198.9
Other non-current assets	10.3	0.7	26.2
Total non-current assets		9,132.3	9,071.6
Current assets			
Inventories	10.5	4,976.0	3,193.7
- including emergency stocks		3,437.4	2,151.4
Trade receivables	10.3	2,964.0	1,445.4
Current tax assets		-	180.0
Derivative financial instruments	10.10	81.6	65.9
Loans	10.4	114.0	0.9
Other current assets	10.3	84.1	120.4
Cash and cash equivalents	10.6	672.8	1,072.0
Total current assets		8,892.5	6,078.3
Total assets		18,024.8	15,149.9
EQUITY AND LIABILITIES			
Equity			
Share capital	10.7.1	184.9	184.9
Share premium	10.7.2	2,228.3	2,228.3
Cash flow hedging reserve	10.7.3	(53.3)	(24.4)
Revaluation reserve		(10.0)	-
Retained earnings	10.7.4	9,585.0	7,060.6
Total equity		11,934.9	9,449.4
Non-current liabilities			
Bank borrowings, leases	10.8	681.2	1,027.2
Derivative financial instruments	10.10	1.1	1.0
Deferred tax liabilities	9.9.3	-	112.5
Employee benefit obligations	10.11	35.5	85.3
Other liabilities and provisions	10.12	13.3	13.4
Total non-current liabilities		731.1	1,239.4
Current liabilities			
Bank borrowings, leases	10.8	732.4	740.3
Derivative financial instruments	10.10	31.1	10.3
Trade payables	10.12	2,467.5	1,657.6
Current tax liabilities		33.8	-
Employee benefit obligations	10.11	38.9	76.0
Other liabilities and provisions	10.12	2,055.1	1,976.9
Total current liabilities		5,358.8	4,461.1
Total liabilities		6,089.9	5,700.5
Total equity and liabilities		18,024.8	15,149.9

STATEMENT OF CASH FLOWS
(indirect method)

	Note	2021	2020
Cash flows from operating activities			
Net profit/(loss)	9.10	2,519.9	(881.4)
Adjustments:		(2,346.8)	2,446.4
Income tax	9.9.1	518.9	(256.9)
Depreciation and amortisation	9.2	344.0	403.3
Foreign exchange (gains)/losses		98.7	213.3
Interest and dividends		(331.1)	(294.1)
(Gains)/losses from investing activities		(0.2)	19.4
Settlement and measurement of derivative financial instruments	9.6	(243.3)	(78.8)
(Increase)/Decrease in trade receivables		(1,518.6)	1,152.6
Decrease/(Increase) in other assets		44.1	(39.2)
(Increase)/Decrease in inventories		(2,070.9)	1,332.1
Increase/(Decrease) in trade payables		807.5	(311.0)
Increase/(Decrease) in other liabilities and provisions		13.6	281.1
(Decrease)/Increase in employee benefit obligations		(9.5)	24.6
Income tax paid		(130.4)	(194.7)
Net cash from operating activities		42.7	1,370.3
Cash flows from investing activities			
Dividends received		339.7	318.9
Interest received		4.6	0.3
Commissions received		11.1	-
Proceeds from sale of property, plant and equipment and intangible assets		-	16.6
Sale of shares in related entities		98.0	-
Repayment of loans		3.2	19.5
Purchase of property, plant and equipment and intangible assets		(263.3)	(171.3)
Acquisition of shares	10.2	(0.1)	(300.0)
Loans	10.4	(445.1)	(201.2)
Security deposit (margin)		102.0	1.7
Settlement of derivative financial instruments		79.0	34.0
Other cash used in investing activities		(3.0)	-
Net cash from investing activities		(73.9)	(281.5)
Cash flows from financing activities			
Proceeds from bank borrowings	10.8	554.1	-
Repayment of bank borrowings	10.8	(698.3)	(309.2)
Interest paid		(33.5)	(61.1)
Dividends paid		-	(184.9)
Lease payments	10.8	(3.3)	(2.8)
Settlement of derivative financial instruments		35,5	(0.7)
Net cash from financing activities		(145.5)	(558.7)
Total net cash flow		(176.7)	530.1
Effect of exchange rate fluctuations on cash held		(0.3)	0.7
Change in net cash		(177.0)	530.8
Cash at beginning of period		849.8	319.0
Cash at end of period	10.6	672.8	849.8

STATEMENT OF CHANGES IN EQUITY

	Note	Share capital	Share premium	Cash flow hedging reserve	Revaluation reserve	Retained earnings	Total equity
Jan 1 2021		184.9	2,228.3	(24.4)	-	7,060.6	9,449.4
Net profit	9.10	-	-	-	-	2,519.9	2,519.9
Other comprehensive income/(loss), net		-	-	(28.9)	(10.0)	0.4	(38.5)
Total comprehensive income/(loss)		-	-	(28.9)	(10.0)	2,520.3	2,481.4
In-kind contribution		-	-	-	-	4.1	4.1
Dec 31 2021		184.9	2,228.3	(53.3)	(10.0)	9,585.0	11,934.9
Jan 1 2020		184.9	2,228.3	(203.6)	-	8,129.7	10,339.3
Net loss	9.10	-	-	-	-	(881.4)	(881.4)
Other comprehensive income/(loss), net		-	-	179.2	-	(2.8)	176.4
Total comprehensive income/(loss)		-	-	179.2	-	(884.2)	(705.0)
Dividend		-	-	-	-	(184.9)	(184.9)
Dec 31 2020		184.9	2,228.3	(24.4)	-	7,060.6	9,449.4

NOTES TO THE FINANCIAL STATEMENTS

1. General information

Grupa LOTOS Spółka Akcyjna ("Grupa LOTOS S.A.", the "Company") was established on September 18th 1991. The Company's registered address is: ul. Elbląska 135, 80-718 Gdańsk, Poland.

Grupa LOTOS S.A.'s business comprises production, services and trading activities. The Company's principal business activity consists in the manufacture and processing of refined petroleum products. Since June 9th 2005, Grupa LOTOS shares have been listed on the main market of the Warsaw Stock Exchange in the continuous trading system. Based on the classification applied by the Warsaw Stock Exchange, Grupa LOTOS S.A. is included in the fuel sector.

2. Information whether the Company is the parent or major investor and whether it prepares consolidated financial statements

Grupa LOTOS S.A. is the parent of the Grupa LOTOS Group (the "LOTOS Group", the "Group"), which as at December 31st 2021 comprised Grupa LOTOS S.A. (the Parent) as well as production, service and trading companies which are direct or indirect subsidiaries of Grupa LOTOS S.A.

Consolidated financial statements prepared by Grupa LOTOS S.A. include financial data of its fully-consolidated subsidiaries and equity-accounted joint ventures.

The full-year consolidated financial statements of the LOTOS Group for 2021 were authorised for issue by the Company's Management Board on March 21st 2022.

2.1 Planned merger with Polski Koncern Naftowy ORLEN S.A.

On July 14th 2020, the European Commission issued a conditional approval for the concentration involving acquisition of control of Grupa LOTOS S.A. by Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN"). The Commission's decision was issued pursuant to the second paragraph of Article 8(2) of Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) (OJ L No 24, p. 1). Therefore, PKN ORLEN is required to implement remedies set out in the decision to prevent adverse effects of the proposed concentration on competition in the relevant markets (the "Remedies"). The Remedies include structural and behavioural commitments relating to the structure and policies of the undertakings involved in the concentration: PKN ORLEN and Grupa LOTOS S.A.

In Current Report No. 21/2020 of July 14th 2020, Grupa LOTOS S.A. reported on the obligations undertaken towards the European Commission. The following commitments continue in effect until the divestment of assets to be disposed of in the implementation of the Remedies ("LOTOS Divestment Assets") has been completed:

- Undertaking to preserve the value and competitiveness of the LOTOS Divestment Assets in accordance with good market practice and to minimise as far as possible any risk of loss of competitive potential by the LOTOS Divestment Assets;
- Undertaking to keep the LOTOS Divestment Assets separate from the business(es) that PKN ORLEN and Grupa LOTOS S.A. are retaining (hold separate obligations), which involves in particular ensuring that the management and staff involved in any business retained by Grupa LOTOS S.A. have no involvement in the business of the LOTOS Divestment Assets, and that the staff (including key personnel) of the LOTOS Divestment Assets identified in the undertakings have no involvement in any business retained by Grupa LOTOS S.A. and do not report to any individuals outside the LOTOS Divestment Assets. Immediately after the adoption of the Commission's decision, Grupa LOTOS S.A. will appoint an individual or individuals as an independent hold separate manager (the "Hold Separate Manager"). The Hold Separate Manager will be a member of key personnel of the LOTOS Divestment Assets. The Hold Separate Manager will manage the LOTOS Divestment Assets independently and will report to an individual appointed by PKN ORLEN to monitor the implementation of the Remedies (the Monitoring Trustee). The above undertaking will not apply to the Gdańsk refinery;
- Undertaking not to employ any key personnel of the LOTOS Divestment Assets within 12 months after the closing of divestment transactions giving effect to the Remedies;
- Undertaking to cooperate with and assist the Monitoring Trustee to a reasonable extent, as required by the Monitoring Trustee.

In the European Commission's decision, the following business areas of Grupa LOTOS S.A. ("LOTOS Divestment Assets") were identified:

- Fuel production and wholesale,
- Fuel logistics,
- Retail activities,
- Aviation fuel,
- Bitumens.

In Current Report No. 10/2021 issued on March 12th 2021, Grupa LOTOS S.A. announced that the Management Board gave a general approval for internal organisational measures aimed at optimising the Group's structure and preparing it for implementation of the model whereby the remedies necessary to go ahead with the intended acquisition of control over the Company by PKN ORLEN are to be carried out.

On May 12th 2021, Grupa LOTOS S.A. announced in Current Report No. 16/2021 that it had entered into a cooperation agreement with PKN ORLEN, PGNiG S.A. ("PGNiG") and the State Treasury (the "Parties") concerning the recommended scenario for consolidation of PKN ORLEN, PGNiG and the Company.

As at the date of the Agreement, the adopted scenario for acquisition by PKN ORLEN of control of Grupa LOTOS S.A. and PGNiG (the "Acquirees") is to merge PKN ORLEN and the Acquirees pursuant to Art. 492.1.1 of the Commercial Companies Code, so that all assets of the Acquirees would be transferred to PKN ORLEN in exchange for shares that PKN ORLEN would issue to the shareholders of Grupa LOTOS S.A. and PGNiG as part of one or two separate merger processes.

The Agreement stipulates that, as a result of the merger or mergers, as the case may be, the shareholders of Grupa LOTOS S.A. and PGNiG will acquire new shares in the increased share capital of PKN ORLEN and become shareholders in PKN ORLEN as of the date of the merger or mergers, as the case may be.

In July 2021, the European Commission decided to extend the deadline for the implementation of remedies for PKN ORLEN's acquisition of Grupa LOTOS S.A. until November 14th 2021.

On October 14th 2021, the Extraordinary General Meeting of Grupa LOTOS S.A. passed resolutions necessary to enable reorganisation of the LOTOS Group. The shareholders' consents allow the Company to prepare for the implementation of the remedies specified by the European Commission. As announced in Current Report No. 38/2021, the agenda for the Extraordinary General Meeting of Grupa LOTOS S.A. included:

- Adoption of a resolution to give consent to the disposal of an organised part of Grupa LOTOS S.A. business to LOTOS Asfalt sp. z o.o. by way of non-cash contribution in exchange for all new shares in the increased share capital of LOTOS Asfalt Sp. z o.o.
- Adoption of a resolution to give consent to the acquisition by Grupa LOTOS S.A. of 19,999 shares in LOTOS Biopaliwa sp. z o.o., representing 99.95% of the share capital of LOTOS Biopaliwa Sp. z o.o.
- Adoption of a resolution to give consent to the disposal by Grupa LOTOS S.A. of 100% of shares in LOTOS Biopaliwa sp. z o.o.
- Adoption of a resolution to give consent to the disposal by Grupa LOTOS S.A. of 100% of shares in LOTOS Terminale S.A.
- Adoption of a resolution to give consent to the disposal by Grupa LOTOS S.A. of 100% of shares in LOTOS Paliwa sp. z o.o. and companies which will acquire part of assets of LOTOS Paliwa sp. z o.o. as a result of demerger of LOTOS Paliwa sp. z o.o.
- Adoption of a resolution to give consent to the disposal by Grupa LOTOS S.A. of 30% of shares in LOTOS Asfalt Sp. z o.o.
- Adoption of a resolution to give consent to the disposal by Grupa LOTOS S.A. of 100% of shares in the company which will acquire part of LOTOS Asfalt Sp. z o.o.'s assets as a result of demerger of LOTOS Asfalt Sp. z o.o.

In order to prepare for the implementation of the remedies, on November 2nd 2021 the Extraordinary General Meeting of LOTOS Asfalt Sp. z o.o. ("LOTOS Asfalt") passed a resolution to increase the share capital of LOTOS Asfalt by issuing new shares, all of which were acquired by Grupa LOTOS S.A. as the sole shareholder of LOTOS Asfalt and paid for with a non-cash contribution in the form of an organised part of the Company's business consisting of tangible and intangible assets related to the refining business, thus starting the integration of refining assets within LOTOS Asfalt.

In November 2021, the European Commission agreed to extend the deadline for the implementation of the remedies that PKN ORLEN is obliged to implement in order to prevent adverse effects of the planned concentration. The new deadline was set for January 14th 2022, with the extension justified by the need to finalise the negotiation process with partners participating in the discussions concerning sale of the LOTOS Divestment Assets covered by the remedies and to allow the partners to complete the necessary decision-making processes.

In Current Report No. 1/2022 of January 12th 2022, Grupa LOTOS S.A. announced that in order to implement the Remedies, the following conditional agreements were concluded, whose entry into force depends on:

- the European Commission issuing a decision approving the buyers of divestment assets in the performance of the Remedies and the terms of the agreements concluded with them,
- concentration between Grupa LOTOS S.A. and PKN ORLEN S.A. being completed,
- the buyers (listed below) of the divestment assets to be sold as part of implementation of the Remedies obtain anti-trust and other administrative clearance for execution and performance those agreements,
- other competent authorities' approvals required by law for the disposal of rights to certain components of the divested assets are obtained.

In order to implement the Remedies with respect to fuel production and the fuel wholesale market, the following agreements were concluded:

I a preliminary share purchase agreement for 30% of shares in LOTOS Asfalt sp. z o.o. of Gdańsk ("LOTOS Asfalt") (the "LOTOS Asfalt Preliminary Share Purchase Agreement") between the Company and Aramco Overseas Company B.V. ("Aramco"), together with the following attachments:
  - a form of a joint venture agreement between PKN ORLEN, Grupa LOTOS, LOTOS Asfalt and Aramco, to be signed to fulfil the commitment to sell to an independent third party a 30% equity interest in the company to which the refinery located in Gdańsk was transferred as a contribution in kind, and to guarantee to that third party corporate governance rights under a contract,
  - b form of a processing agreement and an offtake agreement between Grupa LOTOS, LOTOS Asfalt and the Wholesale Company (as defined below), which will be concluded for the terms of the joint venture referred to in (a) above,
  - c form of a framework agreement for the maintenance of mandatory crude oil stocks between PKN ORLEN and the Wholesale Company (as defined below), to be concluded for a period of 10 years,
  - d form of a framework outsourcing agreement for rail logistics for transporting fuel between PKN ORLEN and the Wholesale Company (as defined below), to be concluded for the term of the processing agreement or the off-take agreement.

The agreements referred to above will be executed on the date of execution of the final agreement for the sale of shares in LOTOS Asfalt.

The price under the LOTOS Asfalt Preliminary Share Purchase Agreement will be calculated based on the formula defined in the LOTOS Asfalt Preliminary Share Purchase Agreement, comprising a fixed component of ca. PLN 1.15 billion and a variable component whose amount will depend on the amount of LOTOS Asfalt's debt and working capital on the day preceding the execution of the final agreement.

The LOTOS Asfalt Preliminary Share Purchase Agreement contains a material adverse change clause, giving Aramco the right to terminate the agreement if specific events, precisely defined therein, occur.

II preliminary agreement for the sale of 100% of shares in LOTOS SPV 1 Sp. z o.o. with its registered office in Gdańsk ("the Wholesale Company") between Grupa LOTOS and Aramco ("Wholesale Company Preliminary Share Purchase Agreement"). Prior to the execution of the final agreement for the sale of shares in the Wholesale Company, an organised part of wholesale business currently operated by LOTOS Paliwa sp. z o.o. with its registered office in Gdańsk ("LOTOS Paliwa") ("Wholesale Business") will be transferred to the Wholesale Company.

The price under the Wholesale Company Preliminary Share Purchase Agreement will be calculated based on the formula defined in the Wholesale Company Preliminary Share Purchase Agreement, comprising a fixed component of ca. PLN 1 billion and a variable component whose amount will depend on the amount of Wholesale Company's debt and working capital on the day preceding the execution of the final agreement.

The Wholesale Company Preliminary Share Purchase Agreement contains a material adverse change clause, giving Aramco the right to terminate the agreement if specific events, precisely defined therein, occur.

The following agreement was entered into to implement the Remedies with respect to the biofuels market:

I a preliminary share purchase agreement for 100% of shares in LOTOS Biopaliwa sp. z o.o. of Gdańsk ("LOTOS Biopaliwa") between Grupa LOTOS and Rossi Biofuel Zrt. ("LOTOS Biopaliwa Preliminary Share Purchase Agreement").

An additional document to the LOTOS Biopaliwa Preliminary Share Purchase Agreement is an agreement for sale of biocomponents between the Company and LOTOS Biopaliwa, to be concluded for a period of four years. The agreement will be executed on the date of execution of the final agreement for the sale of shares in LOTOS Biopaliwa.

In order to implement the Remedies with respect to fuel logistics, the following agreements were concluded, among others:

I a preliminary share purchase agreement for 100% of shares in LOTOS Terminale S.A. of Czechowice-Dziedzice ("LOTOS Terminale") between Grupa LOTOS and Unimot Investments spółka z ograniczoną odpowiedzialnością ("Unimot Investments"), together with a schedule in the form of the in-kind contribution agreement providing for the contribution of four fuel depots of PKN ORLEN located in Gdańsk, Szczecin, Gutkowo and Bolesławiec to LOTOS Terminale.

II a conditional fuel storage agreement between PKN ORLEN and Unimot Investments, enabling PKN ORLEN to use storage capacities in fuel depots located in Gdańsk, Szczecin, Gutkowo and Bolesławiec after disposal of LOTOS Terminale shares to Unimot Investments, concluded for a period of 10 years from its effective date;

III a conditional preliminary agreement on lease and reimbursement of outlays between the Company and Unimot Investments and Unimot S.A., providing for the obligation of the Company, Unimot Investments and Unimot S.A. to enter into a final agreement specifying the terms of delivery of a project to construct a fuel depot in Szczecin, to be owned and operated by LOTOS Terminale.

The in-kind contribution agreement will be concluded between PKN ORLEN and LOTOS Terminale upon completion of the concentration of PKN ORLEN and Grupa LOTOS.

In order to implement the Remedies with respect to the fuel retail market, the following agreements were concluded:

I a preliminary agreement for the sale of shares in LOTOS Paliwa between Grupa LOTOS and MOL Hungarian Oil and Gas Public Limited Company ("MOL") ("LOTOS Paliwa Preliminary Share Purchase Agreement"), covering a total of 417 petrol stations of the LOTOS retail network in Poland; prior to the execution of the final agreement for the sale of shares in LOTOS Paliwa, a Wholesale Business will be spun-off from the company.

An additional document to the LOTOS Paliwa Preliminary Share Purchase Agreement is a conditional agreement for the sale of fuels to the MOL Group between PKN ORLEN and MOL, to be concluded for a period of up to eight years.

The price under the LOTOS Paliwa Preliminary Share Purchase Agreement will be calculated based on the formula defined in the LOTOS Paliwa Preliminary Share Purchase Agreement, comprising a fixed component of ca. USD 610 million and a variable component whose amount will depend on the amount of LOTOS Paliwa's debt and working capital on the last day of the month preceding the month in which the final agreement is executed.

The LOTOS Paliwa Preliminary Share Purchase Agreement contains a material adverse change clause, pursuant to which the occurrence of specific events, precisely defined therein, will trigger a reduction in the price of LOTOS Paliwa shares based on an agreed formula.

In order to implement the Remedies with respect to the aviation fuel market, the following agreements were concluded:

I a preliminary agreement for sale of all shares in LOTOS-Air BP Polska sp. z o.o. of Gdańsk ("LOTOS-Air BP") held by Grupa LOTOS between Grupa LOTOS and Aramco;
II a conditional agreement for sale of aviation fuel to LOTOS-Air BP between PKN ORLEN and LOTOS-Air BP, concluded for up to 15 years from its effective date;
III a conditional agreement for storage of LOTOS-Air BP's aviation fuel at the Olszanica depot between PKN ORLEN and LOTOS-Air BP, concluded for up to 15 years from its effective date;
IV a conditional agreement for the provision of operating support services in case of an event of force majeure between PKN ORLEN, ORLEN Aviation sp. z o.o. with its registered office in Warsaw and LOTOS-Air BP, concluded for up to 15 years from its effective date.

In order to implement the Remedies with respect to bitumens, the following agreements were concluded, among others:

I a preliminary share purchase agreement for 100% of shares in LOTOS Terminale, which, prior to the execution of the final share sale agreement, will acquire 100% of shares in LOTOS SPV 2 sp. z o.o. (the "Bitumen Company"), between the Company and Unimot Investments. Prior to that, the Bitumen Business will be spun off and transferred to the Bitumen Company.
II a conditional agreement for sale of bitumens between Grupa LOTOS, PKN ORLEN and Unimot Investments, to be concluded for a period of 10 years from its effective date, with an option to extend for another two years, on terms previously agreed between the parties.

Professional judgement

The Management Board has analysed the requirements of IFRS 5 Non-current Assets Held for Sale and Discontinued Operations taking into account the progress of the implementation of particular Remedies provided for in the decision. As of December 31st 2021, the LOTOS Divestment Assets were not available for immediate sale as of that date. The process of preparing the individual LOTOS Divestment Assets for sale includes a number of significant, non-customary, activities in 2022 such as a number of reorganization activities within the Group, obtaining appropriate external approvals from relevant regulatory authorities and the European Commission, and obtaining internal corporate approvals, including from the Company's General Meeting and the general meeting of PKN ORLEN S.A. By January 14th 2022, the Management Board of PKN ORLEN S.A. notified the European Commission of conditional agreements for sale of the LOTOS Divestment Assets. Both as at December 31st 2021 and as at the date of authorisation of these financial statements for issue, the European Commission's decision and the approval of corporate bodies were not certain and it may be necessary to make significant changes to the divestment plan, which means that the criteria of high probability defined in IFRS 5 are not met.

Therefore, based on the judgement of the Management Board of the Company, as at December 31st 2021 the criteria defined in IFRS 5 for available-for-sale non-current assets (or disposal group) were not met by the LOTOS Divestment Assets specified in the European Commission's decision of July 14th 2020.

2.2. Transfer of an organised part of the Company's business to LOTOS Asfalt Sp. z o.o.

On November 2nd 2021, as part of the implementation of intra-organisational measures aimed at optimising the Group's structure and preparing the Group for the implementation of the remedies, the General Meeting of LOTOS Asfalt Sp. z o.o. adopted a resolution to increase the share capital of LOTOS Asfalt Sp. z o.o. through the issue of 24,597 new shares with a par value of PLN 5,000 per share. As the sole shareholder of LOTOS Asfalt Sp. z o.o., Grupa LOTOS S.A. acquired all new shares in the company and covered them with a non-cash contribution in the form of an organised part of business of Grupa LOTOS S.A.

As a result, a transfer was made to LOTOS Asfalt Sp. z o.o. of an organised part of business comprising tangible and intangible assets related to refinery activities conducted by the Company in Gdańsk, as specified in Resolution No. 3 of the Extraordinary General Meeting of LOTOS Group S.A. of October 14th 2021.

The effect of the transfer on the statement of financial position of Grupa LOTOS S.A. as at the date thereof is presented below.

	November 2nd, 2021
ASSETS	
Non-current assets	
Property, plant and equipment	(5,130.5)
Intangible assets	(41.1)
Shares	4,830.0
Total non-current assets	**(341.6)**
Current assets	
Inventories	(288.4)
Other current assets	(7.3)
Total current assets	**(295.7)**
Total assets	**(637.3)**
EQUITY AND LIABILITIES	
Equity	
Retained earnings	4.1
Total equity	**4.1**
Non-current liabilities	
Bank borrowings, leases	(96.0)
Deferred tax liabilities	(448.3)
Employee benefit obligations	(53.6)
Total non-current liabilities	**(597.9)**
Current liabilities	
Bank borrowings, leases	(4.0)
Trade payables	2.4
Employee benefit obligations	(23.3)
Other liabilities and provisions	(18.6)
Total current liabilities	**(43.5)**
Total liabilities	**(641.4)**
Total equity and liabilities	**(637.3)**

The transfer of the organised part of business had no effect the Company's financial results and did not affect the Company's ability to meet its obligations.

The transfer of the organised part of business to LOTOS Asfalt Sp. z o.o. marked the commencement of the process of integrating refining assets, the objective of which is to change the operating model of LOTOS Asfalt Sp. z o.o. into one of a processing refinery, managed by Grupa LOTOS S.A. Under the model, Grupa LOTOS S.A., as the processor, will be responsible for the purchase of crude oil and other raw materials, the sale of fuels and other final products resulting from the processing of crude oil in the refinery, as well as logistics, administrative and corporate matters, and R&D activities. LOTOS Asfalt Sp. z o.o. will not purchase crude oil or other commodities nor will it sell products on its own behalf, and its core business will be processing crude oil and providing fuel production services to Grupa LOTOS S.A. on a cost-plus basis.

3. Basis of preparation

These financial statements have been prepared in accordance with the International Financial Reporting Standards ("IFRSs") endorsed by the European Union, issued and effective as at December 31st 2021.

These financial statements have been prepared on the assumption that the Company would continue as a going concern in the foreseeable future. As at the date of authorisation of these financial statements for issue, no circumstances were identified which would indicate any threat to the Company's continuing as a going concern.

4. Functional currency, presentation currency and transactions in foreign currencies

The Company's functional currency and the presentation currency of these financial statements is the Polish złoty (the "złoty", "PLN"). These financial statements have been prepared in millions of złoty and, unless indicated otherwise, all amounts are stated in millions of złoty.

4.1 Foreign currency transactions

Transactions denominated in foreign currencies are reported in the Company's functional currency (Polish złoty) as at the transaction date, using the following exchange rates:

- the exchange rate actually applied on that date due to the nature of the transaction – in the case of sale or purchase of foreign currencies;
- the mid rate quoted for a given currency by the National Bank of Poland (the "NBP") for the day immediately preceding the transaction date – in the case of payment of receivables or liabilities where there is no rationale for using the exchange rate referred to above, and in the case of other transactions.

The exchange rate applicable to purchase invoices is the mid rate quoted by the National Bank of Poland for the last business day immediately preceding the invoice date, and the exchange rate applicable to sales invoices is the mid rate quoted by the National Bank of Poland for the last business day immediately preceding the sale date. This practical expedient is applied unless it results in significant differences.

Any foreign exchange gains or losses resulting from currency translation are disclosed in the statement of comprehensive income, except foreign exchange gains and losses which are treated as a part of borrowing costs and are capitalised in property, plant and equipment (foreign exchange gains and losses on interest and fees and commissions). Non-monetary items measured at historical cost in a foreign currency are translated at the exchange rate effective as at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated at the exchange rate effective as at the date of determining the fair value.

The Company calculates realised and unrealised foreign exchange gains (losses) separately and recognises the resulting total balance in the statement of comprehensive income under:

- operating profit or loss: in the case of foreign exchange gains and losses related to settlement of trade receivables and payables,
- financial profit or loss: in the case of borrowings, investment commitments, and cash and cash equivalents.

The following exchange rates, determined on the basis of the exchange rates quoted by the National Bank of Poland, were used for the purpose of the valuation of items of the statement of financial position:

NBP's mid rate quoted for:	Dec 31 2021[1]	Dec 31 2020[2]
USD	4.0600	3.7584
EUR	4.5994	4.6148

[1] NBP's mid rates table effective for December 31st 2021.
[2] NBP's mid rates table effective for December 31st 2020.

5. New standards and interpretations

New standards, amendments to existing standards and interpretations that were first applied to the Company's financial statements for 2021:

- Amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures,* IFRS 4 *Insurance Contracts* and IFRS 16 *Leases*; Interest Rate Benchmark Reform — Phase 2 (effective for annual periods beginning on or after January 1st 2021),
- Amendments to IFRS 16 *Leases*: *Covid-19-Related Rent Concessions beyond June 30th 2021* (effective for annual periods beginning on or after January 1st 2021),
- Amendments to IFRS 4 Insurance Contracts titled Extension of the Temporary Exemption from Applying IFRS 9 (the temporary exemption from IFRS 9 was extended from January 1st 2021 to annual periods beginning on or after January 1st 2023).

The amendments to the standards adopted by the European Union for periods beginning on or after January 1st 2021 have no material effect on these financial statements.

The following new standards, amendments to existing standards and interpretations have been endorsed by the European Union (the "EU") but are not effective:

- Amendments to IAS 1 *Presentation of Financial Statements: Disclosure of Accounting Policies* (effective for annual periods beginning on or after January 1st 2023);
- Amendments to IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*: *Definition of Accounting Estimates* (effective for annual periods beginning on or after January 1st 2023);
- Amendments to IAS 16 *Property, Plant and Equipment — Proceeds before Intended Use* (effective for annual periods beginning on or after January 1st 2022),
- Amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts—Cost of Fulfilling a Contract* (effective for annual periods beginning on or after January 1st 2022),
- Amendments to IFRS 3 Business Combinations: Reference to the Conceptual Framework (Amendments to IFRS 3) (effective for annual periods beginning on or after January 1st 2022),
- IFRS 17 *Insurance Contracts*, with subsequent amendments to IFRS 17 (effective for annual periods beginning on or after January 1st 2023),
- Amendments to various standards *Improvements to IFRSs 2018–2020 Cycle* (effective for annual periods beginning on or after January 1st 2022).

New standards, amendments to existing standards and interpretations which have not been endorsed by the European Union:

- Amendments to IFRS 14 *Regulatory Deferral Accounts*: The European Commission decided not to commence the process of approval of this interim standard for use in the EU until the final draft of IFRS 14 is issued (effective for annual periods beginning on or after January 1st 2016),
- Amendments to IAS 1 *Presentation of Financial Statements: Classification of Liabilities as Current or Non-current* (effective for annual periods beginning on or after January 1st 2023),
- Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction (effective for annual periods beginning on or after January 1st 2023),
- Amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*, and subsequent amendments (the effective date of the amendments has been postponed until the research project on the equity method has been concluded),
- Amendments to IFRS 17 *Insurance Contracts: Initial Application of IFRS 17 and IFRS 9 Financial Instruments – Comparative Information* (effective for annual periods beginning on or after January 1st 2023).

The effective dates are stated in relevant standards issued by the International Accounting Standards Board. The dates of application of standards in the EU may differ from the effective dates stated in those standards and are announced upon their endorsement by the EU.

The Company has not elected to early adopt any of the standards, interpretations, or amendments endorsed by the EU which were not effective as at December 31st 2021.

6. Other factors with a bearing on the Company's financial statements

Impact of the COVID-19 pandemic on results of the Company

In 2021, the Company's results continued to be impacted by the COVID-19 pandemic.

In March 2020, the Company's market environment became extremely volatile and unpredictable. The Company operated in an environment prone to rapid changes triggered by the pandemic and by measures taken to contain its impact, both in Poland and globally.

The balance and liquidity in international trade, including trade in goods and services, has been disturbed and passenger traffic has fallen markedly. Restrictions were imposed on both air and road transport. Many countries banned non-essential travel, restricted the use of services, retail outlets, institutions of culture and schools. Borders were closed for tourist traffic and migrant workforce. On March 14th 2020, the state of epidemic emergency was introduced in Poland.

The effects of the pandemic were also seen in 2021, despite the much lower scale of the imposed restrictions compared with 2020.

The year 2021 saw a strong recovery in the global market for oil and related products, driven by increased demand. Uneven and unexpectedly high demand for energy commodities led to a surge in their market prices in 2021, particularly crude oil and natural gas, which also had a positive impact on the Company's revenue and operating results, which reflects an accelerating rebound in, and an improved outlook for, key markets, supported by the increasing number of COVID-19 vaccines administered worldwide. However, the risk of market instability cannot be ruled out, given the progression of successive waves of the pandemic.

Assessment of indications of impairment of non-current assets

As at December 31st 2021, the Company assessed whether there was any indication of impairment of non-financial non-current assets caused by the COVID-19 pandemic. When analysing indications of asset impairment, both the macroeconomic environment, influencing assets' potential to generate value, and internal factors affecting the ability to use this potential in practice, should be taken into account. Among external indications of possible impairment, COVID-19 was a significant event in the reporting period and continues to be considered a disrupting factor. The analysis showed no grounds for disclosing impairment indications.

Inventory measurement

The volatility of oil and gas prices associated with market disruptions caused by the COVID-19 pandemic is having an impact both on demand for and the cost to purchase, manufacture and sell the Company's products. The Company estimated net realisable value of inventory as at December 31st 2021, and did not identify any indication of impairment of inventories as at that date.

Assessment of expected credit loss (ECL)

Large-scale operational disruptions that could potentially entail liquidity constraints for certain entities may also have an adverse impact on the credit quality of various actors along the supply chain. As at December 31st 2021, the Company assessed the potential impact of the COVID-19 pandemic on its calculation of expected credit losses and the related impairment losses on financial assets. The Company's credit policy, security instruments used and factoring agreements in place allow it to assume that the loss ratio for receivables recognised as at the reporting date will remain largely unchanged.

The Company monitors market developments and any information on its customers that could suggest a deterioration of their financial standing. Based on relevant analyses, the Company has not changed the assumptions used to evaluate its expected credit loss as at December 31st 2021 from those used at December 31st 2020.

Liquidity

The liquidity position of the Company is monitored on an ongoing basis by the liquidity and financing team, whose task is to ensure adequate security and high efficiency of the Company's financing, and to strengthen coordination of implementation of the Group's financial strategy.

As at the date of these financial statements, the Company remained liquid and had financing available for its operating and investing activities.

In 2021, despite unfavourable conditions caused by the COVID-19 pandemic, the Company optimally managed its financial resources. Current ratio (1.7; 2020: 1.4), quick ratio (0.7; 2020: 0.6), as well as total debt ratio (33.8%; 2020: 37.6%) remained at safe levels, with liabilities were being serviced in a timely manner. As a consequence of a PLN 1,916.5m increase in working capital, the ratio of working capital to total assets was 19.6%, compared with 10.7% in 2020. The inventory turnover ratio shortened by 28.3 days compared with the year before, to 51.3 days. Following a 9.1% increase in average trade receivables and a 63.7% growth in revenue, the average collection period shortened to 27.7 days compared with 41.7 days in 2020. With an 13.8% increase in average trade payables and an increase in cost of sales (40.1%), the average payment period was 29.5 days, having shortened by 7 day year on year. As a result of these changes, the cash conversion cycle was 49.5 days relative to 84.9 days reported in 2020.

The Group has in place a centralised cash management system (cash pool) covering the majority of Group companies. The cash pool makes it possible to effectively use any surplus funds, while reducing the system participants' demand for day-to-day funding. In addition, as at December 31st 2021 Grupa LOTOS S.A. had undrawn overdraft facility, credit facility and factoring limits.

Currently, the Company's economic performance, liquidity position and debt remain at comfortable levels, with no significant risks identified as at the date of issue of these financial statements that could adversely affect this situation.

Effect of climate issues on the Company's financial statements

In recent years, wide-ranging efforts have been afoot (both globally and locally) to tackle climate change. The European Green Deal is the new economic development strategy for the European Union. The transition of the EU economy towards climate neutrality is a means of achieving the objective of changing the EU's status from the world's third largest greenhouse gas emitter into the first climate neutral region. The transition is expected to be completed within three decades. The Fit for 55 legislative proposal presented in July 2021, which includes more than a dozen legislative acts, is to provide the basis for achieving the EU's objective of reducing greenhouse gas emissions by 55% by 2030 (compared to 1990). The final regulations that will result from Fit for 55, will have a significant impact on the operations and development of the refining industry. Through changes in the taxation regime, higher prices of CO_2 emission allowances, higher costs to finance certain projects and growing requirements regarding the share of renewable energy in transport, these initiatives will affect the Company's operating expenses and results.

Regulatory risk at the national and European levels has strong relevance to the Company's business. The most important regulatory risks currently faced by the organisation are related to climate change. The Company monitors the legal environment and communicates its position as part of legislative processes, which is always formulated so as to make the best use of opportunities and reduce the potential adverse impact of new regulations.

Grupa LOTOS S.A. pursues a number of projects which contribute to climate neutrality, including projects in such areas as alternative fuels (e.g., hydrogen), as well as energy efficiency improvement projects aimed at reducing emissions and increasing the share of energy from renewable sources.

Climate-related risks stem from the Company's obligation to meet certain targets relating to a minimum share of renewable fuels and biocomponents contained in fuels used across all modes of transport, relative to the total amount of liquid fuels and biofuels consumed during a calendar year in road and railway transport, calculated according to their calorific value. This National Indicative Target (NIT) obligation is stated in the Act on Biocomponents and Liquid Biofuels of August 25th 2006. To date, Grupa LOTOS S.A. has met its National Indicative Target, in keeping with the applicable regulations (adjusted by the reduction coefficient and emission charge). For information on the provision for the NIT substitute fee, see Note 10.12.

A reduction of greenhouse gas emissions over the entire fuel life cycle per energy unit is another metric used. This obligation, referred to as the National Reduction Target, follows from the Act on Fuel Quality Monitoring and Control System of August 25th 2006. For information on the provision for the NRT fee and for any penalties, see Note 10.12.

Under the Energy Law, which implements the support of production of electricity generated from renewable energy sources in the internal market, Grupa LOTOS S.A., as an energy company, is subject to an obligation to acquire and present certificates of origin for redemption or to pay a substitute fee resulting from the obligation to acquire and present for redemption certificates of origin in a given year, for which it recognises a provision (see Note 10.12).

On November 2nd 2021, the transfer of an organised part of Grupa LOTOS S.A.'s business to LOTOS Asfalt Sp. z o.o., involved transfer of refining units covered by the EU ETS (European Union Emissions Trading System/Scheme). As of that moment, by operation of law the obligation to redeem CO_2 emission allowances rests with LOTOS Asfalt Sp. z o.o. However, in accordance with the processing contract concluded between the companies, Grupa LOTOS S.A. is required to cover the cost of any shortage of CO_2 emission allowances for LOTOS Asfalt Sp. z o.o. Therefore, the Company is exposed to the risk of higher prices of carbon dioxide emission allowances (CO_2), which may have a direct effect on the Company's operating costs. Last year saw a significant increase in the price of CO_2 emission allowances. In addition, the changes proposed in the Fir for 55 strategy may significantly reduce the pool of free allowances available in the ETS, and thus further increase their prices. For information on the management of the CO_2 emission allowance price risk and its impact on the Company's results, see Note 11.2.2. For information on the accounting treatment of CO_2 emission allowances and the provision for the costs of covering their shortfall, see Notes 10.1 and 10.12.

As at reporting date, Grupa LOTOS S.A. assesses the impact of climate issues on estimates of useful lives and residual values of property, plant and equipment and intangible assets.

As at the date of authorisation of these financial statements for issue, the Management Board of Grupa LOTOS S.A. did not find any threat to the Company continuing as a going concern in the foreseeable future.

7. Accounting policies

These financial statements have been prepared in accordance with the historical cost principle, with the exception of those financial instruments which are measured at fair value.

The key accounting policies applied by the Company are presented notes to the financial statements.

Use of accounting assumptions, estimates and judgements

Although the assumptions and estimates are based on the management's best knowledge of the current and future events and developments, the actual results might differ from the estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Any change in an accounting estimate is recognised in the period in which it was made if it refers exclusively to that period, or in the current period and future periods if it refers to both the current period and future periods. Material assumptions used in making the estimates are described in the relevant notes to these financial statements.

While making assumptions, estimates and judgements, the Company's Management Board (Management Board) relies on its experience and knowledge and may take into consideration opinions, analyses and recommendations issued by independent experts.

8. Business segments

The 2021 results by operating segments are presented in Note 8 to the consolidated financial statements for 2021, given that the Group companies have been allocated to the identified business segments. Grupa LOTOS S.A. is classified in the Refining & Marketing segment. The results of operations are assessed based on operating profit or loss at the Company (unconsolidated) level.

9. Notes to the statement of comprehensive income

9.1 Revenue

Accounting policies

Revenue is recognised when the Company satisfies (or is in the process of satisfying) a performance obligation by transferring a promised good or service to a customer (which is when the customer obtains control of that good or service). In the statement of comprehensive income, revenue from contracts with customers is recognised as revenue from the Company's day-to-day activities (i.e., revenue from sales of products, services, merchandise and materials), less value added tax (VAT), excise tax, fuel surcharge, emission fee and adjusted by the result from the settlement of instruments hedging future cash flows.

Contracts with customers are presented in the statement of financial position as a contract asset or a contract liability, depending on the relationship between the Company's performance and the customer's payment. Only the Company's unconditional rights to receive consideration are presented on a separate basis as trade receivables (e.g., where an invoice has been issued to a customer or where it received another legal title requiring it to make payment by a specified deadline). Conditional rights (where the passage of time is not the only condition for payment) are presented as contract assets. If several obligations arise under a single contract with respect to which both contract assets and contract liabilities have been recognised, such assets and liabilities are presented in net amounts in the statement of financial position.

There is no significant financing element in the Company's contracts with customers.

Professional judgement

Based on its analysis of sales contracts, the Company has identified an agency model, mainly in the area of base oil sales by LOTOS Oil to target customers. In other transactions, the Company acts as principal.

	2021	2020
Revenue from contracts with customers:		
Revenue from sale of products and rendering of services:	29,238.6	18,030.9
Revenue from sale of products	29,008.5	17,808.9
Revenue from rendering of services	230.1	222.0
Revenue from sale of merchandise and materials	551.1	312.9
Total revenue from contracts with customers	29,789.7	18,343.8
Effect of cash flow hedge accounting	(34.0)	(240.2)
Leases	(719.5)	(366.7)
Total revenue	29,036.2	17,736.9
- including from related entities	17,833.4	10,575.1

Performance obligations

The Company, under the terms of its contracts, undertakes to supply to its customers mainly refinery products and energy commodities, i.e., crude oil and natural gas. Under these contracts, the Company acts primarily as a principal, except where it acts as an agent in export sales of base oils.

Transaction prices in contracts with customers are not subject to any restrictions. There are no contracts that would provide for material discounts, rebates, refunds, credits, price concessions, incentives, performance bonuses, penalties or other similar obligations. The Company does not identify revenue for which the receipt of payment is contingent and, accordingly, does not present the line item Assets under contracts with customers.

For the vast majority of the Company's contracts with customers, consideration is based on a fixed transaction price. Contracts with variable consideration are recognised by the Company as revenue in the amount of consideration, which is highly probable that no significant reversal of previously recognised revenue will be required. As a result, the Company does not recognise revenue until uncertainty regarding receipt of remuneration ceases to exist, in particular in relation to the customers' rights to discounts, bonuses and penalties.

Contract warranties are warranties that provide a customer with assurance that the related product complies with agreed-upon specifications. Contract warranties do not consist in the provision of a separate service to the customer.

The Company sells mainly on a deferred payment basis. In most contracts with customers, payment terms not do not exceed 30 days. Payment is usually due upon delivery of the goods or after completion of the service.

In the supply of goods, where there is a transfer of control to the customer and benefits are satisfied at a point in time, customers are billed and revenue recognised after each delivery. If a customer simultaneously receives and consumes the benefits of provided goods or services, then the supply of such goods and services is recognised over time.

Revenue from contracts with customers by timing of performance of obligations

The Company recognises revenue for the satisfaction of a performance obligation at a given time in accordance with the INCOTERMS delivery terms (CPT, DAP, DDP, EXW, FCA).

9.1.1 Revenue from contracts with customers by product groups

	Note	2021	2020
Gasolines		4,427.9	2,818.8
Naphtha		1,093.4	753.5
Diesel oil		18,071.5	11,121.3
Light fuel oil		763.0	472.7
Heavy fuel oil		168.6	198.2
Aviation fuel		824.6	418.1
Bunker fuel		172.5	111.9
Bitumen production components		866.0	502.1
Base oils		1,117.0	467.1
Liquid gas		568.7	334.0
Crude oil		2.4	37.6
Natural gas		131.2	55.9
Xylene fraction		143.3	140.1
Slack wax		165.1	158.3
Reformate		152.2	64.9
VGO		676.4	345.0
Other refining products, merchandise and materials		196.6	97.8
Other merchandise and materials		19.3	24.6
Services		230.0	221.9
Total	9.1	29,789.7	18,343.8

9.1.2 Revenue from contracts with customers by geographical market

	Note	2021	2020
Poland		27,347.2	16,370.9
Belgium		326.3	280.4
Czech Republic		15.5	67.5
Denmark		178.2	68.7
France		414.3	159.9
Netherlands		671.5	548.5
Germany		274.9	308.0
Sweden		63.7	220.7
United Kingdom		35.0	141.2
Other countries		463.1	178.0
Total	9.1	29,789.7	18,343.8

LOTOS Paliwa Sp. z o.o. (wholly owned by Grupa LOTOS S.A.) was Grupa LOTOS S.A.'s largest customer, accounting for over 50% of the Company's total revenue in 2021 and 2020. In both periods, there were no other customers whose share in the Company's total revenue would exceed 10%.

9.2 Costs by nature of expense

	Note	2021	2020
Depreciation and amortisation		344.0	403.3
Raw materials and consumables used (1)		24,303.9 (2)	15,930.1
Services		1,485.9	974.1
Taxes and charges		543.2	652.6
Employee benefits expense	9.3	291.2	314.0
Other costs by nature of expense		133.6	117.3
Merchandise and materials sold		381.9	272.5
Total costs by nature of expense		27,483.7	18,663.9
Change in products and adjustments to cost of sales		(999.4)	560.7
Total		26,484.3	19,224.6
including:			
Cost of sales		25,500.6	18,202.4
Selling expenses		702.1	743.2
Administrative expenses		281.6	279.0

(1) Including PLN 78.3m of foreign exchange losses related to operating activities, recognised as cost of sales (2020: PLN 4.2m of foreign exchange losses).
(2) Increased costs of raw materials and consumables used as a result of higher prices of commodities and energy.

9.3 Employee benefits expense

	Note	2021	2020
Current service costs		223.6	237.2
Social security and other employee benefits		61.4	66.0
Length-of-service awards, retirement and other post-employment benefits		6.2	10.8
Total employee benefits expense	9.2	**291.2**	314.0
Change in products and adjustments to cost of sales		(10.7)	9.6
Total		**280.5**	323.6
including:			
Cost of sales		99.3	137.5
Selling expenses		13.1	14.4
Administrative expenses		168.1	171.7

For information on the accounting policies applicable to employee benefits, see Note 10.11.

9.4 Other income

	Note	2021	2020
Gain on disposal of non-financial non-current assets		2.3	0.3
Grants		0.9	2.1
Fines and compensation		2.6	1.0
Supply of materials related to combating COVID-19 pandemic	12.2.1	-	37.2
Settlement of costs to build, equip and operate temporary COVID-19 hospital	12.2.1	36.4	-
Other		3.5	2.3
Total		45.7	42.9

9.5 Other expenses

	Note	2021	2020
Charitable donations		10.1	15.9
Membership fees		3.4	3.3
Funds allocated to build, equip and operate temporary COVID-19 hospital	12.2.1	37.9	-
Supply of materials related to combating COVID-19 pandemic	12.2.1	15.6	48.7
Other		2.0	1.7
Total		69.0	69.6

The Company offsets similar transaction items in accordance with IAS 1 Presentation of Financial Statements, Sections 34 and 35. The Company discloses material items of income and expenses charged to profit or loss separately, as presented in the table above.

9.6 Finance income

Accounting policies

Dividend is recognised as finance income as at the date on which the appropriate governing body of the dividend payer resolves on distribution of profit, unless the resolution specifies another dividend record date.

Interest income is recognised as the interest accrues (using the effective interest rate).

	Note	2021	2020
Dividends:		340.0	319.5
- from related entities	10.2.2	338.3	316.5
- from other entities	11.1.3	1.7	3.0
Interest calculated using the effective interest rate method:		20.4	2.7
- on trade receivables	11.1.3	0.4	0.1
- on deposits	11.1.3	0.6	1.8
- on loans	11.1.3	19.4	0.8
Exchange differences:		-	17.4
- on bank borrowings	11.1.3	-	27.6
- on commissions and fees for borrowings	11.1.3	-	(0.2)
- on realised foreign-currency transactions in bank accounts	11.1.3	-	(9.5)
- on cash	11.1.3	-	0.7
- on investment commitments	11.1.3	-	(1.2)
Revaluation of derivative financial instruments:		243.3	78.8
- measurement	11.1.3	128.8	45.5
- settlement	11.1.3	114.5	33.3
Commission fees on conditional loan	10.2.2	1.0	1.9
Loan commission		-	4.9
Total		604.7	425.2

The Company offsets similar transaction items in accordance with IAS 1 Presentation of Financial Statements, Sections 34 and 35. The Company discloses material items of income and expenses charged to profit or loss separately, as presented in the table above.

9.7 Finance costs

	Note	2021	2020
Interest:		31.9	36.1
● interest calculated using the effective interest method:		23.4	26.7
- on bank borrowings	11.1.3	22.7	26.2
- on cash pool		0.2	-
- other		0.5	0.5
● interest on leases	11.1.3	6.9	7.4
● other interest:		1.6	2.0
- cost of discount on employee benefit obligations	10.11	1.1	1.6
- other		0.5	0.4
Exchange differences:		52.1	-
- on bank borrowings	11.1.3	64.3	-
- on commission on conditional loan	11.1.3	(0.2)	-
- on realised foreign-currency transactions in bank accounts	11.1.3	(12.6)	-
- on cash	11.1.3	0.3	-
- on investment commitments	11.1.3	0.3	-
Bank fees		2.9	1.2
Tax risk provision	12.1.1	4.1	4.2
Other		3.2	0.1
Total		94.2	41.6

The Company offsets similar transaction items in accordance with IAS 1 Presentation of Financial Statements, Sections 34 and 35. The Company discloses material items of income and expenses charged to profit or loss separately, as presented in the table above.

9.8 (Impairment losses)/reversal of impairment losses on financial instruments

	Note	2021	2020
(Impairment losses)/reversal of impairment losses on receivables	11.1.3	(1.1)	1.9
- impairment losses		(2.2)	(1.2)
- reversal of impairment losses		1.1	3.1
(Impairment losses)/reversal of impairment losses on loan	11.1.3	0.8	(9.4)
- impairment losses		-	(9.4)
- reversal of impairment losses		0.8	-
Total		(0.3)	(7.5)

9.9 Income tax

Accounting policies

Mandatory decrease in profit/(increase in loss) comprises current income tax (CIT) and deferred income tax. The current portion of income tax is calculated based on net profit/(loss) (taxable income) for a given financial year. The net profit (loss) for tax purposes differs from the net profit (loss) for accounting purposes due to temporary differences between income and expense amounts calculated for these two purposes, including taxable income and tax-deductible expenses which are tax-deductible in a period other than the current accounting period, as well as permanent differences attributable to income and cost items which will never be accounted for in tax settlements. Tax expense is calculated based on tax rates effective in a given financial year.

For the purposes of financial reporting, tax liabilities are calculated taking into account all temporary differences existing as at the end of the reporting period between the tax base of assets and liabilities and their carrying amounts disclosed in the financial statements.

Deferred tax liability is recognised for all taxable temporary differences:

- *except to the extent that the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction which is not a business combination and which, at the time of its execution, affects neither accounting profit before tax nor taxable income or tax loss, and*
- *in the case of taxable temporary differences associated with investments in subsidiaries, jointly-controlled entities or associates and interests in joint ventures, unless the investor is able to control the timing of reversal of temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.*

Deferred tax assets are disclosed in relation to all deductible temporary differences, unused tax assets, and unused tax losses brought forward, in the amount of the probable taxable income which would enable these differences, assets and losses to be used:

- *except to the extent that the deferred tax assets related to deductible temporary differences arise from the initial recognition of an asset or liability in a transaction which is not a business combination and, at the time of the transaction, affects neither accounting profit before tax nor taxable income (tax loss), and*
- *in the case of deductible temporary differences associated with investments in subsidiaries, jointly-controlled entities or associates and interests in joint ventures, the related deferred tax assets are recognised in the statement of financial position to the extent it is probable that in the foreseeable future the temporary differences will be reversed and taxable income will be generated which will enable the deductible temporary differences to be offset.*

Notwithstanding the above rules, the Company recognises deferred tax liabilities with respect to temporary differences related to the rights to use assets, as well as deferred tax assets with respect to temporary differences related to lease liabilities and provisions for the decommissioning and restoration costs.

The carrying amount of deferred tax assets is revised as at the end of the reporting period and is subject to appropriate reduction to the extent it is no longer probable that taxable income sufficient for a partial or full realisation of the deferred tax assets would be generated.

Deferred tax assets and deferred tax liabilities are measured using tax rates expected to be effective at the time of realisation of particular asset or liability, based on tax rates (and tax legislation) effective as at the end of the reporting period or tax rates (and tax legislation) which as at the end of the reporting period are certain to be effective in the future. The effect of deferred tax on items posted directly to equity is recognised in equity through other comprehensive income.

The Company offsets deferred tax assets and deferred tax liabilities only if it has an enforceable title to offset current tax assets with current tax liabilities and the deferred tax asset relates to the same tax payer and the same tax authority.

Estimates

Deferred tax assets

The Company recognises deferred tax assets if it is assumed that taxable income against which the asset can be utilised will be generated in the future. If taxable profit deteriorates in the future, this assumption may prove invalid. The Management Board of the Company reviews its estimates regarding the likelihood of recovering deferred tax assets taking into account changes in the factors on which such estimates were based, new information and past experience.

9.9.1 Tax expense

	Note	2021	2020
Current tax		344.6	0.7
Deferred tax	9.9.3	174.3	(257.6)
Total income tax charged to net profit or loss	9.9.2	518.9	(256.9)
Tax expense recognised in other comprehensive income/(loss) (net), including:	9.9.3	(9.0)	41.3
- cash flow hedging	10.7.3	(6.8)	42.0
- gains/(losses) on investments in equity instruments		(2.3)	-
- actuarial gain/(loss) relating to post-employment benefits		0.1	(0.7)

The income tax expense was calculated at the rate of 19% of the income tax base.

9.9.2 Corporate income tax calculated at effective tax rate and reconciliation of profit before tax to tax base

	2021	2020
Profit/(loss) before tax	3,038.8	(1,138.3)
Income tax at 19%	577.4	(216.3)
Tax effect of dividends received	(64.6)	(60.7)
Tax effect of other differences	6.1	20.1
Income tax	518.9	(256.9)
Effective tax rate	17.1%	22.6%

9.9.3 Deferred income tax

	Dec 31 2020	Deferred tax recognised in net profit or loss	Deferred tax recognised in other comprehensive income/(loss)	In-kind contribution	Dec 31 2021
Deferred tax assets					
Employee benefit obligations	34.0	(5.6)	(0.1)	(14.5)	13.8
Negative fair value of derivative financial instruments	1.0	(0.1)	-	-	0.9
Tax losses carried forward	262.6	(127.2)	-	-	135.4
Cash flow hedges	5.8	-	6.8	-	12.6
Provisions	46.6	(4.0)	-	-	42.6
Other	27.1	(12.2)	-	(3.7)	11.2
	377.1	(149.1)	6.7	(18.2)	216.5
Deferred tax liabilities					
Difference between current tax value and carrying amount of property, plant and equipment and intangible assets	446.7	(0.7)	-	(442.6)	3.4
Difference on accounting and tax measurement of lease contracts	28.7	(0.6)	-	(23.9)	4.2
Positive fair value of derivative financial instruments	9.1	29.5			38.6
Fair value measurement of equity instruments	-	-	(2.3)	-	(2.3)
Other	5.1	(3.0)	-	-	2.1
	489.6	25.2	(2.3)	(466.5)	46.0
Net deferred tax assets/(liabilities)	(112.5)	(174.3)	9.0	448.3	170.5

Taxable temporary differences are expected to expire in 2022–2098.

9.10 Earnings/(loss) per share

	2021	2020
Net profit/(loss) (PLNm) (A)	2,519.9	(881.4)
Weighted average number of shares (million) (B)	184.9	184.9
Earnings/(loss) per share (PLN) (A/B)	13.63	(4.77)

Earnings/(loss) per share for each reporting period are calculated by dividing net profit/(loss) for the reporting period by the weighted average number of shares in the reporting period.

Diluted earnings/(loss) per share are equal to basic earnings/(loss) per share as there are no instruments with a dilutive effect.

10. Notes to the statement of financial position

10.1 Property, plant and equipment and intangible assets

Accounting policies

Property, plant and equipment

Items of property, plant and equipment other than land are measured at cost less accumulated depreciation and impairment losses.

Land is measured at cost less impairment losses.

Initial value of an item of property, plant and equipment comprises its cost, which includes all costs directly related to its acquisition and bringing it to working condition for its intended use. The cost also includes the cost of replacing component parts of plant and equipment, which is recognised when incurred, provided that relevant recognition criteria are fulfilled. Costs incurred on an asset which is already in service, such as costs of repairs, overhauls or operating fees, are expensed in the reporting period in which they were incurred.

Upon acquisition, items of property, plant and equipment are divided into components of material value which can be assigned different economic useful lives. The cost of overhauls is also deemed a component.

Items of property, plant and equipment (including their components), other than land, are depreciated using the straight-line method over their estimated useful lives, which are as follows:

Buildings, structures	*1 year–80 years*
Plant and equipment	*1 year–25 years*
Other	*1 year–15 years*

An item of property, plant and equipment may be removed from the statement of financial position if it is sold or if the company does not expect to realise any economic benefits from its further use. Any gains or losses on derecognition of an asset from the statement of financial position (calculated as the difference between net proceeds from its sale, if any, and the carrying amount of the asset) are disclosed in the statement of comprehensive income in the period of derecognition.

The residual values, useful economic lives and depreciation methods are reviewed on an annual basis and adjusted, if required, with effect as of the beginning of the next financial year.

Items of property, plant and equipment under construction are measured at the amount of aggregate costs directly attributable to their acquisition or production (including finance costs) less impairment losses, if any. Items of property, plant and equipment under construction are not depreciated until they are ready for their intended use.

Property, plant and equipment under construction comprise property, plant and equipment which are under construction or assembly and are recognised at cost.

Intangible assets

Intangible assets are recognised if the Company is likely to obtain future economic benefits attributable directly to the assets. Intangible assets are initially recognised at cost if they are acquired in separate transactions. Subsequent to initial recognition, intangible assets are carried at cost less accumulated amortisation and impairment losses.

Intangible assets include software licences, patents, trademarks, CO_2 emission allowances acquired, and intangible assets under development.

Purchased CO_2 emission allowances are measured at cost less impairment losses, if any, and carried as non-depreciable intangible assets. If the purchased rights are used to cover a shortage of allowances at the date of settlement of emissions for a given year, then the used allowances at their carrying amount are settled against the previously recognised provision for covering the shortage of CO_2 emission allowances. These allowances are accounted for using the First In First Out (FIFO) method. Income from sale of unused emission allowances is recognised in the statement of comprehensive income at the time of sale. CO_2 emission allowances received free of charge are presented by the Company in its financial statements in accordance with the net liability approach (see Note 10.12). Under this method, allowances received free of charge are not disclosed in the statement of financial position.

Intangible assets other than goodwill and purchased CO_2 allowances are amortised over their estimated useful lives, using the straight-line method. The expected useful lives of the Company's intangible assets range from 2 to 40 years.

The amortisation period and the amortisation method for an intangible asset are reviewed at the end of each financial year. Changes in the expected useful life or pattern of consumption of the future economic benefits embodied in an asset are reflected by changing the amortisation period or amortisation method, as appropriate, and are treated as changes in accounting estimates. The useful lives are reviewed on an annual basis and adjusted – if required – with effect as of the beginning of the next financial year.

With the exception of capitalised development expenditure, expenditure on intangible assets produced by the Company is not capitalised and is charged to expenses in the period in which it was incurred.

Borrowing costs are expensed in the period in which they were incurred, except for costs that are directly attributable to acquisition, construction or production of a qualifying asset (including foreign exchange losses on interest and fees and commissions). Such costs are capitalised in the cost of the asset. To the extent that funds are borrowed specifically for the purpose of acquiring a qualifying asset, the amount of the borrowing costs which may *be capitalised as part of such asset is determined as the difference between the actual borrowing costs incurred in connection with a given credit facility or loan in a given period and the proceeds from temporary investments of the borrowed funds.*

To the extent that funds are borrowed without a specific purpose and are later allocated to the acquisition of a qualifying asset, the amount of the borrowing costs which may be capitalised is determined by applying the capitalisation rate to the amount of expenditure on that asset.

Impairment losses on non-financial non-current assets

As at the end of the reporting period, the Company assesses whether there is an indication of impairment of any of its assets. If the Company finds that there is such indication, or if it is required to perform annual impairment tests, the recoverable amount of a given asset is estimated.

The recoverable amount of an asset is equal to the higher of the fair value of the asset or cash generating unit less costs to sell, or its value in use. The recoverable amount is determined for individual assets, unless a given asset does not generate separate cash flows largely independent from those generated by other assets or asset groups. If the carrying amount of an asset is higher than its recoverable amount, the value of the asset is impaired and an impairment loss is recognised, reducing the asset's carrying amount to the established recoverable amount.

In assessing value in use, the projected cash flows are discounted to their present value using a pre-tax discount rate which reflects current market assessments of the time value of money and the risks specific to the asset. Any impairment losses on non-financial assets used in operations are recognised under other expenses.

The Company assesses at the end of each reporting period whether there is any indication that previously recognised impairment of an asset no longer exists or should be reduced. If there is such indication, the Company estimates the recoverable amount of the asset. A recognised impairment loss is reversed if and only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. In such a case, the carrying amount of the asset is increased up to its recoverable amount.

Such increased amount may not exceed the carrying amount of the asset that would have been determined (net of accumulated amortisation or depreciation) had no impairment loss been recognised for the asset in previous years. Reversal of an impairment loss on a non-financial non-current asset is immediately recognised as other income. Following reversal of an impairment loss, in the subsequent periods the amortisation/depreciation charge for a given asset is adjusted so that its revised carrying amount, less residual value, can be regularly written off over the remaining useful life of that asset. The Company offsets corresponding items of other income and expenses in line with IAS 1 Presentation of Financial Statements (Section 34), with the resultant net amount disclosed in the statement of comprehensive income.

Estimates

Depreciation and amortisation

Depreciation and amortisation rates are determined based on the expected useful lives of property, plant and equipment and intangible assets. The Company reviews the useful lives of its assets annually, on the basis of current estimates. The relevant estimate update which had an effect on the Company's financial statements for 2021 resulted in a PLN 1.1m decrease in depreciation/amortisation.

10.1.1 Property, plant and equipment

	Dec 31 2021	Dec 31 2020
Land	106.0	324.2
Buildings, structures	79.1	2,018.6
Plant and equipment	25.1	2,736.6
Vehicles, other	2.1	63.5
Property, plant and equipment under construction	12.4	331.7
Total	224.7	5,474.6
including:		
Group-owned	164.0	5,171.1
Right-of-use assets	60.7	303.5

Change in property, plant and equipment

	Note	Land	Buildings, structures	Plant and equipment	Vehicles, other	Property, plant and equipment under construction	Total
Gross carrying amount Jan 1 2021		335.3	3,672.0	5,528.0	184.0	332.5	10,051.8
Capital expenditure		-	-	-	18.9	201.7	220.6
Transfer from property, plant and equipment under construction		25.0	147.3	230.9	8.3	(411.5)	-
Leases	10.1.2	4.2	0.1	-	0.5	-	4.8
Borrowing costs		-	-	-	-	2.2	2.2
In-kind contribution		(254.6)	(3,648.3)	(5,654.7)	(200.4)	(99.1)	(9,857.1)
Sale		-	(0.1)	(1.4)	(0.2)	(12.6)	(14.3)
Other		-	-	(0.1)	-	-	(0.1)
Gross carrying amount Dec 31 2021		109.9	171.0	102.7	11.1	13.2	407.9
Accumulated depreciation Jan 1 2021		11.1	1,653.4	2,791.4	120.5	-	4,576.4
Depreciation and amortisation		4.0	113.5	202.5	14.4	-	334.4
In-kind contribution		(11.2)	(1,674.9)	(2,914.8)	(125.7)	-	(4,726.6)
Sale		-	(0.1)	(1.4)	(0.2)	-	(1.7)
Other		-	-	(0.1)	-	-	(0.1)
Accumulated depreciation Dec 31 2021		3.9	91.9	77.6	9.0	-	182.4
Impairment losses Jan 1 2021		-	-	-	-	0.8	0.8
Recognised		-	-	-	-	0.4	0.4
Used / Reversed		-	-	-	-	(0.4)	(0.4)
Impairment losses Dec 31 2021		-	-	-	-	0.8	0.8
Net carrying amount Dec 31 2021		106.0	79.1	25.1	2.1	12.4	224.7
Gross carrying amount Jan 1 2020		334.9	3,666.0	5,473.5	159.2	260.2	9,893.8
Capital expenditure		-	-	-	21.7	127.7	149.4
Transfer from property, plant and equipment under construction		-	6.1	55.0	0.1	(61.2)	-
Leases	10.1.2	0.4	(0.1)	-	3.5	-	3.8
Borrowing costs		-	-	-	-	5.8	5.8
Sale		-	-	(0.5)	(0.1)	-	(0.6)
Other		-	-	-	(0.4)	-	(0.4)
Gross carrying amount Dec 31 2020		335.3	3,672.0	5,528.0	184.0	332.5	10,051.8
Accumulated amortisation Jan 1 2020		6.6	1,521.2	2,546.6	111.3	-	4,185.7
Depreciation and amortisation		4.5	132.3	245.3	9.9	-	392.0
Sale		-	-	(0.5)	(0.1)	-	(0.6)
Leases	10.1.2	-	(0.1)	-	(0.2)	-	(0.3)
Other		-	-	-	(0.4)	-	(0.4)
Accumulated depreciation Dec 31 2020		11.1	1,653.4	2,791.4	120.5	-	4,576.4
Impairment losses Jan 1 2020		-	-	-	-	0.8	0.8
Recognised		-	-	-	-	-	-
Used / Reversed		-	-	-	-	-	-
Impairment losses Dec 31 2020		-	-	-	-	0.8	0.8
Net carrying amount Dec 31 2020		324.2	2,018.6	2,736.6	63.5	331.7	5,474.6

In 2021, Grupa LOTOS S.A. made a contribution-in-kind to its subsidiary LOTOS Asfalt Sp. z o.o. in the form of tangible fixed assets with a net carrying amount of PLN 5,130.5m. The transaction is presented in Note 2.2.

In 2021, the Company incurred capital expenditure of PLN 220.6m, mainly on the purchase of catalysts and spare parts, purchase of land for investment projects, construction of the rail tank load station and upgrade of the Claus unit (sulfur recovery).

In 2020 , the Company incurred capital expenditure of PLN 149.4m, mainly on construction of the rail tank loading station, hydrogen recovery unit (HRU) and vapour recovery unit (VRU), as well as on purchase of spare parts.

As at December 31st 2021, borrowing costs capitalised as cost of property, plant and equipment under construction were PLN 2.4m (December 31st 2020: PLN 28.1m).

In 2021, cumulative borrowing costs capitalised as cost of property, plant and equipment under construction were PLN 2.2m (2020: PLN 5.8m).

Allocation of depreciation expense	2021	2020
Cost of sales	298.7	379.2
Selling expenses	9.0	10.0
Administrative expenses	14.6	14.5
Change in products and adjustments to cost of sales	12.1	(11.7)
Total	334.4	392.0

As at December 31st 2021, the amount of the Company's future contractual commitments for expenditure on property, plant and equipment not disclosed in the statement of financial position was to PLN 12.1m and mainly involved investment works and their supervision at refinery installations.

As at December 31st 2020, the amount of the Company's future contractual commitments for expenditure on property, plant and equipment not disclosed in the statement of financial position was to PLN 73.4m and was chiefly related to the construction of the rail tank loading station and the upgrade of the Claus unit (sulfur recovery).

10.1.2 Right-of-use assets

Accounting policies

The Company uses a single accounting model for leases under which the lessee recognises right-of-use assets and lease liabilities for all leases except short-term leases and leases of low-value assets.

Short-term leases are leases with a term of 12 months or less, containing no purchase options. In particular, the Company defines as short-term leases contracts made for an indefinite term which may be terminated on a short notice (up to 12 months) without any significant penalty imposed on the party.

The materiality threshold defined by the Company to identify low-value leases is PLN 20 thousand. The value of the underlying asset is measured based on the value of the asset when it is new, regardless of the age of the leased asset.

An asset is typically identified by being explicitly specified in a contract, but an asset can also be identified by being implicitly specified at the time it is made available for use by the customer.
The Company recognises a right-of-use asset and a lease liability upon commencement of a contract under which control of the use of specified assets is transferred for a certain period of time. The date of commencement of a lease contract is the date on which the leased asset is made available to the Company as the lessee.

A right-of-use asset is initially measured at cost which includes:
- *the amount of the initial measurement of the lease liability,*
- *any lease payments made at or prior to commencement, less any lease incentives received,*
- *any initial direct costs incurred by the lessee,*
- *the initial estimate of the costs of dismantling and removing the underlying asset and restoring the site on which it is located.*

Right-of-use assets are recognised in the statement of financial position as property, plant and equipment. Perpetual usufruct right to land acquired for a consideration or received free of charge is recognised in the same manner as other lease contracts (as right-of-use assets and lease liabilities). To calculate assets and liabilities related to perpetual usufruct, the Company conducts an analysis to determine the anticipated term of perpetual usufruct. Once the anticipated term of perpetual usufruct has been determined, the lease liability is calculated in accordance with general principles.

After the lease commencement date, the right-of-use asset is measured at cost less accumulated depreciation and accumulated impairment losses. If there is a lease modification, the right-of-use asset is adjusted to the remeasurement of the lease liability (reflecting changes resulting from the lease modification or revision of the discount rate).

The right-of-use asset is amortised on a straight-line basis over the period corresponding to the estimated useful life of the asset. The estimated useful lives of right-of-use assets are determined in the same manner as estimated useful lives of property, plant and equipment.

If the lease transfers the ownership of an asset to the Company before the end of the lease term, or if the cost of the right-of-use asset reflects that the Company will exercise a purchase option, the Company depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. In other cases, the Company depreciates the right-of-use assets from the commencement date to the earlier of the end of the useful life of the asset or the end of the lease term.

Decommissioning costs are capitalised as part of the right-of-use asset and amortised over the estimated useful life of the asset. The fair value of decommissioning costs is estimated by the Company in accordance with the methodology specified in IFRIC 1.

Change in right-of-use assets

	Land	Buildings, structures	Vehicles, other	Total
Gross carrying amount Jan 1 2021	309.7	3.0	4.9	317.6
New leases	-	-	0.5	0.5
Lease modifications	4.2	0.1	-	4.3
In-kind contribution	(251.3)	-	(1.5)	(252.8)
Gross carrying amount Dec 31 2021	62.6	3.1	3.9	69.6
Accumulated depreciation Jan 1 2021	11.0	2.0	1.1	14.1
Depreciation and amortisation	4.0	1.0	1.7	6.7
In-kind contribution	(11.2)	-	(0.7)	(11.9)
Accumulated depreciation Dec 31 2021	3.8	3.0	2.1	8.9
Net carrying amount Dec 31 2021	58.8	0.1	1.8	60.7
Gross carrying amount Jan 1 2020	309.3	3.1	1.4	313.8
New leases	-	0.1	3.7	3.8
Lease modifications	0.4	(0.2)	-	0.2
Termination of leases	-	-	(0.2)	(0.2)
Gross carrying amount Dec 31 2020	309.7	3.0	4.9	317.6
Accumulated depreciation Jan 1 2020	6.5	1.0	0.2	7.7
Depreciation and amortisation	4.5	1.1	1.1	6.7
Lease modifications	-	(0.1)	-	(0.1)
Termination of leases	-	-	(0.2)	(0.2)
Accumulated depreciation Dec 31 2020	11.0	2.0	1.1	14.1
Net carrying amount Dec 31 2020	298.7	1.0	3.8	303.5

Leasing costs recognised in the statement of comprehensive income		2021	2020
Depreciation and amortisation	Costs by nature of expense	6.7	6.7
Short-term leases	Costs by nature of expense: Services	32.3	34.2
Interest on lease liabilities	Finance costs	6.9	7.4
Total		45.9	48.3

Allocation of depreciation expense	2021	2020
Cost of sales	3.4	3.9
Selling expenses	0.7	0.8
Administrative expenses	2.6	2.0
Total	6.7	6.7

For information on lease liabilities, see Note 10.8.

In 2021, the total amount of expenditure under lease contracts, disclosed in the statement of cash flows as cash flows from financing and operating activities, was PLN 43.3m (2020: PLN 44.1m).

10.1.3 Intangible assets

	Dec 31 2021	Dec 31 2020
Licences, patents and trademarks	27.4	69.9
Carbon dioxide (CO_2) emission allowances	12.9	-
Other	2.6	4.2
Intangible assets under development	2.2	3.6
Total	45.1	77.7

In 2021, Grupa LOTOS S.A. made a contribution-in-kind to its subsidiary LOTOS Asfalt Sp. z o.o. in the form of tangible fixed assets with a net carrying amount of PLN 41.1m. The transaction is presented in Note 2.2.

In 2021 , the Company incurred capital expenditure of PLN 18.6m, mainly on CO_2 emission allowances, purchase of IT equipment and upgrade of the Claus unit (sulfur recovery).

In 2020, the Company incurred capital expenditure of PLN 6.2m, mainly on purchase of IT equipment.

Allocation of depreciation expense	2021	2020
Cost of sales	3.0	4.9
Selling expenses	0.2	0.2
Administrative expenses	6.0	6.5
Change in products and adjustments to cost of sales	0.4	(0.3)
Total	9.6	11.3

As at December 31st 2021, the Company had no future contractual commitments for expenditure on intangible assets which would not be recognised in the statement of financial position.

As at December 31st 2020, the Company's future contractual commitments for expenditure on intangible assets which were not recognised in the statement of financial position totalled PLN 3.2m and were related to licences for extension of the system for optimisation and blending of diesel oil and licences for upgrade of the Claus unit (sulfur recovery).

Change in intangible assets

	Licences, patents and trademarks	Carbon dioxide (CO_2) emission allowances	Other	Intangible assets under development	Total
Gross carrying amount Jan 1 2021	203.9	-	15.2	3.6	222.7
Capital expenditure	-	12.9	-	5.7	18.6
Transfer from intangible assets under development	4.3	-	0.3	(4.6)	-
Sale	(0.3)	-	(0.5)	(0.4)	(1.2)
In-kind contribution	(99.2)	-	(8.6)	(2.1)	(109.9)
Gross carrying amount Dec 31 2021	108.7	12.9	6.4	2.2	130.2
Accumulated depreciation Jan 1 2021	134.0	-	11.0	-	145.0
Depreciation and amortisation	9.1	-	0.5	-	9.6
Sale	(0.3)	-	(0.4)	-	(0.7)
In-kind contribution	(61.5)	-	(7.3)	-	(68.8)
Accumulated depreciation Dec 31 2021	81.3	-	3.8	-	85.1
Impairment losses Jan 1 2021	-	-	-	-	-
Recognised	-	-	-	-	-
Used / Reversed	-	-	-	-	-
Impairment losses Dec 31 2021	-	-	-	-	-
Net carrying amount Dec 31 2021	27.4	12.9	2.6	2.2	45.1
Gross carrying amount Jan 1 2020	194.9	10.2	14.9	6.6	226.6
Capital expenditure	-	-	0.2	6.0	6.2
Transfer from intangible assets under development	9.0	-	0.1	(9.1)	-
Borrowing costs	-	-	-	0.1	0.1
Other	-	(10.2)	-	-	(10.2)
Gross carrying amount Dec 31 2020	203.9	-	15.2	3.6	222.7
Accumulated depreciation Jan 1 2020	123.4	-	10.3	-	133.7
Depreciation and amortisation	10.6	-	0.7	-	11.3
Accumulated depreciation Dec 31 2020	134.0	-	11.0	-	145.0
Impairment losses Jan 1 2020	-	-	-	-	-
Recognised	-	-	-	-	-
Used / Reversed	-	-	-	-	-
Impairment losses Dec 31 2020	-	-	-	-	-
Net carrying amount Dec 31 2020	69.9	-	4.2	3.6	77.7

10.2 Shares

Accounting policies

Shares in subsidiaries and jointly-controlled entities are measured at historical cost less impairment losses.

Shares in other entities are measured at fair value. For information on the measurement of shares in unrelated entities, see Note 11.1.

Professional judgement

Professional judgement was exercised in analysing the indications of impairment of shares in subsidiaries.

	Note	Dec 31 2021	Dec 31 2020
Shares in related entities		7,718.8	2,986.7
- including investments in joint ventures [1]		6.9	6.9
Shares in other entities	11.1.1; 11.2.6	294.0	306.3
Total		8,012.8	3,293.0

[1] Joint venture agreement between Grupa LOTOS S.A. and BP Europe SE on joint operations related to supply of aviation fuel through LOTOS-Air BP Polska Sp. z o.o.

As at December 31st 2021, the Company performed an analysis for indications of impairment of shares, in particular the investment in LOTOS Asfalt Sp. z o.o., in the context of the sale price for 30% of the shares in the company offered by the investor, pursuant the preliminary share purchase agreement (see Note 2.1.) In its assessment, the Management Board took into account the results of impairment tests of the refining assets (i.e. the operating assets of LOTOS Asfalt Sp. z o.o.) presented in the consolidated financial statements of the LOTOS Group, which indicated no impairment of the assets of LOTOS Asfalt Sp. z o.o. On this basis, and taking into account the fact that the carrying amount of the shares in LOTOS Asfalt Sp. z o.o. is less than the value of the tested refining assets less liabilities of LOTOS Asfalt Sp. z o.o., the Management Board concluded that there are no grounds for recognising impairment of the investment of LOTOS Asfalt Sp. z o.o. as at December 31st 2021.

Following the review, no need was identified to test any of the shares held by the Company for impairment.

As at December 31st 2021 and December 31st 2020, impairment losses shares in related entities were PLN 16.3m. Impairment losses on shares in related entities were recognised for LOTOS Gaz S.A. w likwidacji (in liquidation). An impairment loss for the entire shareholding in the company was recognised in 2008.

Shares in other entities are measured at fair value, with gains/(losses) recognised in other comprehensive income. Dividends received from other entities are presented in Notes 9.6 and 11.1.3.

10.2.1 Significant investments in subsidiaries and joint ventures

Name	Registered office	Principal business	Ownership interest		Carrying amount of shares	
			Dec 31 2021	Dec 31 2020	Dec 31 2021	Dec 31 2020
Investments in subsidiaries						
LOTOS Petrobaltic S.A. (parent of another group: LOTOS Petrobaltic Group)	Gdańsk	Acquisition of crude oil and natural gas deposits, extraction of hydrocarbons	99.99%	100%	1,049.4	1,049.4
LOTOS Upstream Sp. z o.o. (parent of another group: LOTOS Upstream Group)	Gdańsk	Activities of head offices and holdings	100%	100%	1,224.5	1,224.5
LOTOS Paliwa Sp. z o.o.	Gdańsk	Wholesale and retail sale of fuels and light fuel oil, management of the LOTOS service station network	100%	100%	114.7	114.7
LOTOS Oil Sp. z o.o.	Gdańsk	Manufacturing and sale of lubricating oils and lubricants, and sale of base oils	100%	100%	0.5	0.5
LOTOS Asfalt Sp. z o.o.	Gdańsk	Production and sale of bitumens, and additionally after November 2nd 2021, crude oil processing	100%	100%	5,280.1 (1.0)	450.1
LOTOS Kolej Sp. z o.o.	Gdańsk	Rail transport	100%	100%	0.2	0.2
LOTOS Serwis Sp. z o.o.	Gdańsk	Maintenance of mechanical and electric operations and controlling devices, overhaul and repair services	100%	100%	4.0	4.0
LOTOS Lab Sp. z o.o. (parent of another group: LOTOS Lab Group)	Gdańsk	Laboratory testing	100%	100%	0.1 (2)	98.1
LOTOS Straż Sp. z o.o.	Gdańsk	Fire service activities	100%	100%	3.9	3.9
LOTOS Ochrona Sp. z o.o.	Gdańsk	Security services	100%	100%	0.4	0.4
LOTOS Terminale S.A. (parent of another group: LOTOS Terminale Group)	Czechowice-Dziedzice	Storage and distribution of fuels	100%	100%	28.2	28.2
LOTOS Infrastruktura S.A. (parent of another group: LOTOS Infrastruktura Group)	Jasło	Storage and distribution of fuels, renting and operating of own or leased real estate	66.95%	66.95%	5.8	5.8
Investment in a joint venture:						
LOTOS-Air BP Polska Sp. z o.o.	Gdańsk	Sale of aviation fuel and logistics services	50%	50%	6.9	6.9
Total					7,718.6	2,986.7

(1) On November 2nd 2021, the Extraordinary General Meeting of LOTOS Asfalt Sp. z o.o. passed a resolution to increase the share capital of LOTOS Asfalt Sp. z o.o. by issuing new shares, all of which were acquired by Grupa LOTOS as the sole shareholder of LOTOS Asfalt Sp. z o.o. and paid for with a non-cash contribution in the form of an organised part of the Company's business.

(2) On February 25th 2021, Grupa LOTOS S.A. and LOTOS Lab Sp. z o.o. signed an agreement for the transfer of 196,000 shares with a par value of PLN 500.0 per share to LOTOS Lab Sp. z o.o. The total amount of shares in LOTOS Lab Sp. z o.o. sold by Grupa LOTOS S.A. was PLN 98.0m.

As at December 31st 2021, the financial and registered pledges created over Grupa LOTOS S.A.'s shares in LOTOS Asfalt Sp. z o.o. as security under a credit facility agreement signed between LOTOS Asfalt Sp. z o.o. and a syndicate of financial institutions to fund the EFRA Project expired following repayment of the credit facilities on June 21st 2021. The pledges continued in effect as at December 31st 2020.

10.2.2 Material transactions with related entities in which Grupa LOTOS S.A. holds equity interests

	Note	2021	2020
Subsidiaries			
Sale	9.1	17,356.4	10,436.0
Purchases		3,303.6	2,162.9
Sale of CO_2 emission allowances		-	16.6
Purchase of property, plant and equipment and intangible assets		8.8	16.9
Dividends received	9.6	336.1	316.5
Interest income on loans		5.8	0.4
Disposal of financial assets	10.2.1	98.0	-
Sale of intangible assets and property, plant and equipment		15.5	-
Commission fees on conditional loan	9.6	1.0	1.9
Joint ventures			
Sale	9.1	477.0	139.1
Dividends received	9.6	2.2	-
		Dec 31 2021	Dec 31 2020
Subsidiaries			
Trade and other receivables	10.3	1,813.5	870.0
Receivables under loans	10.4	447.0	3.9
Commission fees on conditional loan	10.3	-	10.0
Trade and other payables	10.12	612.9	265.3
Joint ventures			
Trade receivables	10.3	30.2	6.5

As at December 31st 2021, there was an outstanding surety issued to B8 spółka z ograniczoną odpowiedzialnością BALTIC spółka komandytowo-akcyjna ("B8") in favour of the bondholder Bank Gospodarstwa Krajowego S.A. in connection with B8's note programme for up to USD 91.5m;

As at December 31st 2021, the surety provided to LOTOS Kolej Sp. z o.o. to secure funding of PLN 51.8m for the purchase of modern rolling stock for intermodal connections ceased to have effect following termination of the letter of intent. The surety was in effect as at December 31st 2020.

In 2021 and in 2020, the Company did not provide any sureties to related parties.

As at December 31st 2021, the financial and registered pledges created over Grupa LOTOS S.A.'s shares in LOTOS Asfalt Sp. z o.o. as security under a credit facility agreement signed between LOTOS Asfalt Sp. z o.o. and a syndicate of financial institutions to fund the EFRA Project expired following repayment of the credit facilities on June 21st 2021. The pledges were in effect as at December 31st 2020.

10.3 Trade receivables and other assets

	Note	Dec 31 2021	Dec 31 2020
Non-current financial assets:		-	25.4
Settlements with ICE exchange – margin	11.1.1	-	15.4
Commission fees on conditional loan from LOTOS Asfalt Sp. z o.o.	11.1.1; 10.2.2	-	10.0
Current financial assets:		2,983.9	1,447.9
Trade receivables	11.1.1	2,964.0	1,445.4
- including from related entities	10.2.2	1,824.6	876.5
Security deposit for a bank guarantee	11.1.1	-	0.4
Security deposit related to the use of gas fuel distribution and transmission system	11.1.1	0.2	1.3
Other	11.1.1	19.7	0.8
- including from related entities	10.2.2	19.1	-
Financial assets		2,983.9	1,473.3
Non-current non-financial assets		0.7	0.8
Current non-financial assets:		64.2	117.9
Other receivables from the state budget other than corporate income tax		1.3	3.4
Property and other insurance		16.0	60.8
Excise duty on inter-warehouse transfers		37.2	34.2
Prepaid deliveries		0.4	6.8
Fees for access to specialist information sites		2.2	2.0
Fee for IT services		5.0	6.1
Other		2.1	4.6
Non-financial assets		64.9	118.7
Total		3,048.8	1,592.0
including:			
non-current		0.7	26.2
current:		3,048.1	1,565.8
- trade receivables		2,964.0	1,445.4
- other		84.1	120.4

The collection period for trade receivables in the ordinary course of business is 7–35 days.

For description of financial instruments, see Note 11.1. For description of objectives and policies of financial risk management, see Note 11.1.
For maximum credit risk exposure of financial assets, see Note 11.2.6.
For currency risk sensitivity analysis of financial assets, see Note 11.2.3.1.
For interest rate risk sensitivity analysis of financial assets, see Note 11.2.4.1.

10.3.1 Change in impairment losses on receivables

Accounting policies

As at the last day of each reporting period, Grupa LOTOS S.A. estimates expected credit losses on debt instruments measured at amortised cost and at fair value through other comprehensive income, whether or not there has been any evidence of impairment. Grupa LOTOS S.A. applies the following impairment recognition approaches:

- *general (basic) approach,*
- *simplified approach.*

With respect to short-term trade receivables without a significant financing component, the Company applies the simplified approach and measures impairment losses in the amount of credit losses expected over the entire life of the receivable since its initial recognition. Grupa LOTOS S.A. applies the provision matrix for calculating impairment losses on trade receivables classified in different age groups or delinquency periods.

For the purpose of determining expected credit losses, receivables are grouped based on the similarity of credit risk characteristics. To determine the overall default rate, an analysis of collectability of receivables for the last three years is carried out. Default rates are calculated for the following periods:

- *up to 30 days;*
- *from 30 to 90 days;*
- *from 90 to 180 days;*
- *more than 180 days.*

To determine the default rate for a given period, the amount of written off trade receivables is compared with the amount of outstanding receivables. The calculation takes into account the effect of future factors on the amount of credit losses.

Impairment losses are calculated taking into account default rates adjusted for the effect of future factors and the amount of receivables outstanding at the reporting date for each period.

Material individual items of receivables (representing more than 5% of total receivables) are analysed on a case-by-case basis.

Intra-group receivables carry a different credit risk than receivables from third parties due to existing links and control. In the event of financial difficulties, Grupa LOTOS S.A. usually supports its subsidiaries. Therefore, poor financial performance and position of a subsidiary do not necessarily translate into higher credit risk. In such a case, the Company estimates impairment based on individual analysis. In other cases, where the number of items is significant, they may form a separate portfolio of intra-group receivables based on a portfolio analysis.

Grupa LOTOS S.A. applies a three-stage impairment model with respect to financial assets other than trade receivables:

- *Stage 1 – financial instruments that have not had a significant increase in credit risk since initial recognition. Expected credit losses are determined based on the probability of default within 12 months (i.e. the total expected credit loss is multiplied by the probability that the loss will occur over the next 12 months – 12 month ECL);*
- *Stage 2 – financial instruments that have had a significant increase in credit risk since initial recognition, but have no objective evidence of impairment; expected credit losses are calculated based on the probability of default over the life of an asset;*
- *Stage 3 – instruments for which there is objective evidence of impairment.*

To the extent necessary – according to the general approach – to assess whether there has been a significant increase in credit risk, the following factors are taken into account by Grupa LOTOS S.A.:

- *delinquency period of at least 30 days;*
- *any legislative, technological or macroeconomic changes with a material adverse effect on the debtor;*
- *a significant adverse event has been reported concerning the loan or another loan taken by the same debtor from another lender, such as termination of a loan agreement, breach of its terms and conditions, or its renegotiation due to financial difficulties, etc.;*
- *the debtor has lost a significant customer or supplier or has experienced other adverse developments on its market.*

The Company considers that there is a default risk for a financial asset if internal and external information indicates that it is unlikely that the Company will receive all remaining contractual cash flows in full. This is the case when the asset is past due 90 days or more. Financial assets are written off, in whole or in part, when the Company has used practically all measures to collect them and determines that they cannot be reasonably expected to be recovered.

Trade receivables are included in Stage 2 or Stage 3:

- *Stage 2 – trade receivables for which a simplified approach to lifetime expected credit losses was applied, except for trade receivables included in Stage 3;*
- *Stage 3 – trade receivables that are more than 90 days past due or are identified as not serviced, with identified impairment.*

	2021	2020
At beginning of period	66.9	57.1
Recognised	2.4	13.0
Used	(0.1)	-
Reversed	(1.6)	(3.2)
At end of period	67.6	66.9

Ageing of trade receivables and expected credit loss

Dec 31 2021	Gross carrying amount	Expected credit loss	Weighted average rate of expected credit loss	Net carrying amount
Not past due receivables	2,960.6	0.6	0.0002	2,960.0
Past due receivables:	42.0	38.0	-	4.0
Up to 30 days	3.7	-	0.0018	3.7
From 30 to 90 days	0.3	-	0.0884	0.3
More than 90 days	38.0	38.0	1.0000	-
Trade receivables	3,002.6	38.6	-	2,964.0

Ageing of receivables past due but not impaired

	Dec 31 2021	Dec 31 2020
Up to 1 month	3.7	10.4
From 1 to 3 months	0.3	2.1
From 3 to 6 months	-	0.1
From 6 months to 1 year	-	-
Over 1 year	-	0.1
Total	4.0	12.7

As at December 31st 2021, trade receivables from the Company's largest customer, LOTOS Paliwa Sp. z o.o. (a wholly-owned subsidiary of Grupa LOTOS S.A.), was 57% of total receivables. Apart from LOTOS Paliwa Sp. z o.o. the only customer whose share in the total balance of trade receivables as at December 31st 2021 exceeded 10% was Anwim S.A. (11%). None of the other customers accounted for more than 10% of total receivables as at December 31st 2021.

As at December 31st 2020, trade receivables from the Company's largest customer, LOTOS Paliwa Sp. z o.o. (a wholly-owned subsidiary of Grupa LOTOS S.A.), did not exceed 50% of total receivables. The second largest customer in terms of the share in trade receivables as at December 31st 2021 was Anwim S.A., with a share of 14%. None of the other customers accounted for significantly more than 10% of total receivables as at December 31st 2021.

In the Company's opinion, except for receivables from LOTOS Paliwa Sp. z o.o., there is no material concentration of credit risk. The Company's maximum exposure to credit risk as at the end of the reporting period is best represented by the carrying amounts of those instruments.

10.4 Loans

	Dec 31 2021	Dec 31 2020
Loans		
related entities	447.0	3.9
other entities	210.3	195.9
Total	657.3	199.8
including:		
non-current	543.3	198.9
short-term portion	114.0	0.9

Loans to related entities

In 2021, the Company advanced loans to LOTOS Asfalt Sp. z o.o., LOTOS Oil Sp. z o.o., and LOTOS Straż Sp. z o.o. of PLN 400.0m, PLN 40.7m, and PLN 4.4m, respectively (2020: a PLN 1.2m loan to LOTOS Straż Sp. z o.o.). Amounts disbursed under the loan are presented in the statement of cash flows as cash flows from investing activities under Loans.

After the reporting date, LOTOS Asfalt Sp. z o.o. prepaid the PLN 400.0m loan with accrued interest.

In 2021, LOTOS Straż Sp. z o.o. and SPV Petro Sp. z o.o. repaid loans of PLN 0.8m and PLN 2.4m, respectively (2020: Energobaltic Sp. z o.o. and LOTOS Upstream Sp. z o.o. repaid loans of PLN 10.0m and PLN 9.5m, respectively). Repayment of the loans is presented in cash flows from investing activities in the line item Repayment of loans.

Loans advanced by Grupa LOTOS S.A. to related entities as at December 31st 2021:

Related entity	Principal as per loan agreement		Maturity date	Security	Financial terms (interest rate)
	PLN (million)	Currency (million)			
LOTOS Straż Sp. z o.o.	6.0	-	Dec 31 2022 Apr 30 2026	blank promissory note with a 'protest waived' clause and promissory note declaration	the loan bears interest at a variable annual rate based on 1M WIBOR plus margin
LOTOS Asfalt Sp. z o.o.	400.0	-	Dec 8 2022 Jun 8 2025	blank promissory note with a 'protest waived' clause and promissory note declaration	the loan bears interest at a variable annual rate based on 3M WIBOR plus margin
LOTOS Oil Sp. z o.o.	335.0	-	Jun 30 2026	blank promissory note with a 'protest waived' clause and promissory note declaration	the loan bears interest at a variable annual rate based on 3M WIBOR plus margin

Loans to other entities

The Company did not grant loans to other entities in 2021. In 2020, the Company advanced a PLN 200.0m loan to Grupa Azoty Polyolefins S.A. as part of the Company's interest in the financing of the Polimery Police project. Amounts disbursed under the loan are presented in the statement of cash flows as cash flows from investing activities under Loans. The loan repayment date is December 15th 2037. The loan is secured by assignment of receivables, and it bears interest at a variable annual rate based on WIBOR.

10.5 Inventories

Accounting policies

Inventories are measured at the lower of cost and net realisable value.

Costs incurred in order to bring an inventory item to its present location and condition are accounted for in the following manner:
- *merchandise and materials – at cost, established with the weighted average method,*
- *finished goods and work-in-progress – at the cost of direct materials and labour and an appropriate portion of indirect production costs, established on the basis of normal capacity utilisation and with the weighted average method.*

Decrease in inventories is established with the weighted average method.

Net realisable value is the selling price realisable as at the end of the reporting period, net of VAT, excise duty and fuel charge, less any rebates, discounts and other similar items, and less the estimated costs to complete and costs to sell.

Net selling prices for the most significant inventory groups are determined as follows:
- *finished goods and merchandise – the average realised selling price of each index during the seven working days of the month following the end of the reporting month,*
- *crude oil (feedstock) – purchase price in the last reporting month,*
- *semi-finished products – prices are estimated using the PIMS production planning optimisation system using the purchase price of oil in the last reporting month,*
- *fast moving inventories – the sale price is equal to the purchase price; for materials in warehouses the sale price is determined on the basis of the analysis of the usability of the inventory; if an item of inventory is classified as redundant and unsaleable, the sale price is equal to zero.*

The Company complies with the emergency stocks regulations effective since April 7th 2007, introduced based on the Act on Stocks of Crude Oil, Petroleum Products and Natural Gas, and on Procedures to be Followed in the Event of Threat to National Fuel Security or Disruptions on the Petroleum Market of February 16th 2007 (Dz.U. No. 52, item 343, dated March 23rd 2007, as amended). The act defines the rules for creating, maintaining and financing stocks of crude oil and petroleum products. The emergency stocks include crude oil, petroleum products (liquid fuels) and LPG. Emergency stocks are disclosed as current assets given their short turnover cycle.

Write-downs of finished goods or semi-finished products, resulting from revaluation at net selling prices, are charged to production costs. Write-downs of merchandise are charged to cost of merchandise sold.

As at the end of the reporting period, the Company estimates (based on an individual assessment of the usefulness of inventories for the purposes of its business) the amount of write-down of stored materials. If crude oil and refining product prices go down, the Company recognises an inventory write-down to adjust the carrying amount of inventories, given the difference between their cost and net realisable value, in accordance with IAS 2. Write-downs of stored materials due to their impairment are charged to cost of sales.

If the reason for making an inventory write-down no longer exists, the value of the inventory item is increased by an amount equal to the entire or part of the write-down. For the sake of clarity and because of the economic substance of the operation, if a write-down is used, its reversal is reflected by reducing the cost of sales.

	Dec 31 2021	Dec 31 2020
Finished goods	1,273.5	739.2
Semi-finished products and work in progress	752.8	297.6
Merchandise	183.5	141.0
Materials	2,766.2	2,015.9
Total	4,976.0	3,193.7

As at December 31st 2021, the value of inventories serving as collateral for Grupa LOTOS S.A.'s liabilities under the inventory financing and refinancing facility discussed in Note 10.8.1 was PLN 4,624.0m (December 31st 2020: PLN 2,671.5m).

10.5.1 Change in inventory write-downs

	2021	2020
At beginning of period	6.4	1.9
Recognised	-	1,006.7
Used / Reversed	(5.6)	(1,002.2)
In-kind contribution	(0.8)	-
At end of period	-	6.4

The effect of revaluation of inventories is taken to cost of sales.

Inventories are measured at the lower of cost or cost less write-downs to net realisable value less cost to sell.

10.6 Cash and cash equivalents

Accounting policies

Cash in hand and at banks, as well as short-term deposits held to maturity are measured at amortised cost.

Cash and cash equivalents disclosed in the statement of cash flows comprise cash in hand, overdraft facilities as well as those bank deposits maturing within three months which are not treated as part of investment activity.

	Dec 31 2021	Dec 31 2020
Cash and cash equivalents in the statement of financial position	672.8	1,072.0
Overdraft facilities	-	(222.2)
Total cash and cash equivalents in the statement of cash flows	672.8	849.8

Cash and cash equivalents consist mainly of funds held in current accounts with banks bearing interest at variable interest rates. The level of interest on the deposited funds and its changes are based on the general terms of service of the individual banks. In addition, depending on the current cash requirements, if cash surplus is available, the Company makes short-term deposits for various tenors, from overnight to two months, which bear interest at individually-determined rates.

In July 2018, the Company began using the VAT split payment mechanism. Under this mechanism, the Company has separate bank accounts used to process VAT payments as part of settlements with trading partners and to pay other public charges. The Company uses the funds in these accounts to make payments on a regular basis. As at December 31st 2021, the balance of cash in VAT accounts was PLN 22.5m (December 31st 2020: PLN 127.5m).

As at December 31st 2021, the Company had undrawn credit of PLN 406.0m (December 31st 2020: PLN 153.6m) under working capital facilities for which all conditions precedent are met.

As of December 31st 2021 and December 31st 2020, the Company had no cash in its pledged bank accounts.

10.7 Equity

Accounting policies

Equity is recognised in the accounting books by categories, in accordance with the rules set forth in applicable laws and in the Company's Articles of Association.

The share capital of Grupa LOTOS S.A. is recognised at its par value, in the amount specified in the Company's Articles of Association and in the relevant entry in the National Court Register.

Hedge accounting

The Company has elected the option to continue to apply the existing requirements of IAS 39 as of January 1st 2019 and not to apply the new hedge accounting requirements of IFRS 9 until the International Accounting Standards Board has completed work on accounting for macro hedging.

GRUPA LOTOS S.A applies cash flow hedge accounting for USD-denominated borrowings designated as a hedging instrument for future highly probable USD-denominated revenue from sale of commodities and petroleum products exposed to the risk of USD/PLN exchange rate movements.

The objective of cash flow hedge accounting is to guarantee a specific Polish złoty value of revenue generated in USD. The hedged items comprise a number of highly probable and planned USD-denominated refined product sale transactions, in particular the first portion of revenue (up to the amount of the designated principal repayment) in USD generated in a given calendar month, or if the amount of revenue in a given month is lower than the amount of the designated principal payment – the first portion of revenue generated in three successive months. If a subsequent portion of revenue is designated in a given calendar month, the hedged item is the first portion of revenue generated after the previously designated portion of revenue in USD in a given calendar month, or if the amount of revenue in a given month is lower than the amount of the designated principal repayment – a subsequent portion of revenue generated in three successive months. A hedged item is linked to relevant hedging instruments based on an individual document designating the hedging relationship.

The designated hedging instruments cover an obligation to repay a USD-denominated credit facility, whose settlement dates fall on business days of specified calendar months, in accordance with the principal repayment schedule.

Changes in the fair value of instruments designated as cash flow hedges are charged as follows:
- *the portion which constitutes an effective hedge – directly to other comprehensive income,*
- *the portion which constitutes an ineffective hedge – to other finance income or costs in the reporting period.*

At the time when a hedge is undertaken, the Company formally designates and documents the hedging relationship, as well as its risk management objective and strategy for undertaking the hedge. The relevant documentation specifies the hedging instrument, the hedged item or transaction, the nature of the hedged risk, as well as how the Company will assess the hedging instrument's effectiveness in offsetting changes in the fair value of the hedged item or cash flows attributable to the hedged risk. The hedge is expected to be highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk. The hedge is assessed at inception and on an ongoing basis to determine whether it remains highly effective during all the reporting periods for which it was undertaken.

10.7.1 Share capital

	Dec 31 2021	Dec 31 2020
Series A shares	78.7	78.7
Series B shares	35.0	35.0
Series C shares	16.2	16.2
Series D shares	55.0	55.0
Total	184.9	184.9

As at December 31st 2021 and December 31st 2020, the share capital comprised 184,873,362 ordinary shares, fully paid-up, with a par value of PLN 1 per share. Each share confers the right to one vote at the General Meeting and carries the right to dividend.

10.7.2 Share premium

Share premium represents the excess of the issue price over the par value of Series B, C and D shares, net of costs directly attributable to the share issue.

Share premium	980.0	340.8	940.5	2,261.3
Costs directly attributable to the share issue	(9.0)	(0.4)	(23.6)	(33.0)
Total	971.0	340.4	916.9	2,228.3

10.7.3 Cash flow hedging reserve

Cash flow hedging reserve comprises changes in the valuation of foreign-currency bank borrowings used as cash flow hedges for USD-denominated sales, less the effect of deferred income tax.

Changes in the fair value of derivative financial instruments designated as cash flow hedges are charged to the cash flow hedging reserve to the extent they represent an effective hedge, while the ineffective portion is charged to finance income or costs in the reporting period.

	Note	2021	2020
At beginning of period		(24.4)	(203.6)
Valuation of cash flow hedging instruments	11.1.3	(35.7)	221.2
- effective portion		(35.7)	221.2
Income tax on valuation of cash flow hedging instruments	9.9.1	6.8	(42.0)
At end of period		(53.3)	(24.4)

10.7.4 Retained earnings

Retained earnings comprise capital reserves created and used in accordance with the rules stipulated by applicable laws and the Company's Articles of Association, as well as profit for the reporting period.

As at December 31st 2021 and December 31st 2020, Grupa LOTOS S.A. was restricted in its ability to distribute dividends; see Note 10.7.5.

Furthermore, retained earnings include actuarial gains/losses relating to defined post-employment benefits, recognised inclusive of tax effect, which are disclosed in the line item Other comprehensive income/(loss), net in the statement of comprehensive income.

10.7.5 Dividends

As at December 31st 2021, Grupa LOTOS S.A. was restricted in its ability to distribute funds in the form of dividends pursuant to a credit facility agreement of July 2nd 2019 entered into to refinance the 10+ Programme credit facilities (see Note 22.1 to the full-year consolidated financial statements for 2019). The agreement limits the ability of Grupa LOTOS S.A. to pay dividends and makes it conditional on achievement of certain levels of financial ratios.

On June 30th 2021, the General Meeting of Grupa LOTOS S.A. passed a resolution to fully cover the Company's net loss for 2020 of PLN 881.4m from statutory reserve funds.

10.8 Bank borrowings, leases

Accounting policies

Bank borrowings

All bank borrowings are initially recognised at cost, equal to the fair value, less cost of obtaining the funds.

Following initial recognition, interest-bearing borrowings are measured at amortised cost, using the effective interest rate method. Amortised cost includes the cost of obtaining the funds as well as discounts or premiums obtained on settlement of the liability. Upon removal of the liability from the statement of financial position or recognition of an impairment loss, gains or losses are recognised in the statement of comprehensive income.

Leases

A lease liability is initially measured at the present value of lease payments outstanding at that date, including:

- *fixed lease payments net of any lease incentives;*
- *variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;*
- *amounts expected to be payable by the lessee under residual value guarantees;*
- *the exercise price of a purchase option if exercise of that option by the lessee is reasonably certain;*
- *lease termination penalties if the lessee is entitled to exercise the option to terminate the lease.*

Lease payments do not include variable charges that depend on external factors. Variable lease payments not included in the initial measurement of a lease liability are recognised directly in profit or loss.

After initial recognition, the Company measures lease liabilities by:

- *increasing the carrying amount to reflect interest on the lease liability,*
- *reducing the carrying amount to reflect the lease payments made, and*
- *remeasuring the carrying amount in order to take into account a lease reassessment or modification, or to take account of revised substantially fixed lease payments, including increases or reductions due to index changes in the case of index-linked contracts.*

Upon lease commencement, and to the extent that the costs are not included in the carrying amount of another asset in accordance with applicable standards other than IFRS 16, the lessee recognises in profit or loss both interest on the lease liability and variable lease payments not included in the measurement of the lease liability in the period in which the event or condition that triggers the payments occurs.

Lease payments are discounted using the interest rate implicit in the lease or the Company's incremental borrowing rate when the interest rate implicit in the lease cannot be readily determined. To determine the incremental borrowing rate, the Company takes into account the type of contract, the duration of the contract, the currency of the contract and the potential margin it would have to pay to external financial institutions if it wanted to enter into such a transaction on the financial market.

The Company determined incremental borrowing rates in a breakdown by contract currency and taking into account contract term, based on the time brackets presented below:

- *short-term contracts (12 months or shorter),*
- *contracts for a term of 1 to 2 years (inclusive),*
- *contracts for a term of 2 to 5 years (inclusive),*
- *contracts for a term of 5 to 10 years (inclusive),*
- *contracts for a term of more than 10 years.*

Professional judgement

Discount rate

For each type of contract, the Company estimates the discount rate which will affect the final value of the contracts. The Company takes into account characteristics of the contract, the duration of the contract, the currency of the contract and the potential margin it would have to pay to external financial institutions if it wanted to enter into such a transaction on the financial market.

The process of determining the current incremental borrowing rate consists of the following steps:

- *analysis of the lessee's current financing structure (e.g., debt instruments held by the lessee and their terms);*
- *determination of the appropriate reference rate – assuming specific currency, economic conditions and lease term;*
- *analysis of other material lease terms, including the nature of the underlying assets.*

To calculate discount rates for the purposes of IFRS 16, the Company assumes that the discount rate should reflect the cost that it would have to pay to borrow the funds necessary to purchase the leased asset.

The Company enters into lease contracts based on the three principal currencies to which it has assigned the base discount rate, These are PLN at the WIBOR base rate for short-term periods and interest rates on government bonds for long-term periods, EUR at the EURIBOR base rate for short-term periods and interest rate on government bonds for long-term periods, and USD at the LIBOR base rate for short-term periods and interest rate on government bonds for long-term periods.

Current discount rates are determined every quarter, and the discount rates so determined are then used for lease calculations in accordance with IFRS 16 for the period until the next determination of the discount rates.

Identification of lease contracts under the EFRA project

Grupa LOTOS S.A. and its subsidiary LOTOS Asfalt Sp. z o.o. executed the EFRA project under which a number of contracts were entered into, including contracts for delivery of raw materials and utilities to LOTOS Asfalt Sp. z o.o., sale of products from the EFRA unit to Grupa LOTOS S.A., as well as provision of maintenance services and tank handling services. The Company analysed a group of these contracts to determine whether they contain leases.

The assessment process included the following steps:

- *determination of the underlying asset,*
- *analysis of the Company's right to obtain substantially all economic benefits from the use of the identified asset,*
- *determination whether the Company has the right to control how and for what purpose the asset is used throughout its useful life.*

Based on an analysis of the facts and circumstances, the Company determined that the contractual arrangements meet the definition of a lease in accordance with IFRS 16.

Given that lease payments related to the operation of the unit are variable and do not contain a substantially fixed component, they are not included in the initial amount of the lease liability and the initial measurement of the right-of-use asset.

	Dec 31 2021	Dec 31 2020
Bank borrowings:	1,378.9	1,612.6
- inventory financing and refinancing facility	406.3	188.2
- investment facilities	972.6	1,202.2
- working capital facilities	-	222.2
Leases	34.7	154.9
Total	1,413.6	1,767.5
including:		
non-current	681.2	1,027.2
short-term portion	732.4	740.3

	Bank borrowings	Leases	Total
Jan 1 2021	1,612.6	154.9	1,767.5
Net proceeds	554.1	-	554.1
Net repayments	(698.3)	(3.3)	(701.6)
Interest, fees and commissions paid	(25.7)	(7.7)	(33.4)
New leases	-	0.5	0.5
Interest, fees and commissions accrued	24.4	6.9	31.3
Exchange differences	134.0	-	134.0
Change in overdraft facilities	(222.2)	-	(222.2)
In-kind contribution	-	(100.0)	(100.0)
Other	-	(16.6)	(16.6)
Dec 31 2021	1,378.9	34.7	1,413.6

	Bank borrowings	Leases	Total
Jan 1 2020	1,730.7	189.6	1,920.3
Net repayments	(309.2)	(2.8)	(312.0)
Interest, fees and commissions paid	(54.0)	(7.1)	(61.1)
New leases	-	3.8	3.8
Interest, fees and commissions accrued	31.5	7.4	38.9
Exchange differences	(8.6)	-	(8.6)
Change in overdraft facilities	222.2	-	222.2
Other	-	(36.0)	(36.0)
Dec 31 2020	1,612.6	154.9	1,767.5

10.8.1 Bank borrowings

Inventory financing and refinancing facility

On October 28th 2021, the conditions stipulated in the consent letter, which confirmed the approval of the financing banks for the contribution of the organised part of the enterprise by Grupa LOTOS S.A. to LOTOS Asfalt Sp. z o.o., were fulfilled. As a result, technical changes were made in the credit facility agreement to reflect the transfer to LOTOS Asfalt Sp. z o.o. of the tank depot which is now part of the refinery in Gdansk.

On December 7th 2021, an amendment was signed to the agreement for the financing and refinancing of inventories of October 10th 2012 to extend the term of the agreement until December 16th 2022.

As at December 31st 2021, the nominal amount drawn under the facility was PLN 406.0m (USD 100m). As at December 31st 2020, the amount was PLN 187.9m (USD 50m).

In connection with the credit facility incurred to finance and refinance inventories, Grupa LOTOS S.A. is required to maintain the Tangible Consolidated Net Worth (TCNW) as specified in the facility agreement. The Company is also required to comply with the covenant requiring it to maintain the Loan to Pledged Inventory Value Ratio at or below the level specified in the facility agreement. As at December 31st 2021 and December 31st 2020, the Company complied with these requirements.

Refinancing of the 10+ Programme credit facilities

On July 2nd 2019, Grupa LOTOS S.A. and a bank syndicate signed credit facility agreements for a total amount of USD 500m to refinance credit facilities contracted in 2008 to finance the 10+ Programme.

Under the agreements, the bank syndicate extended to the Company:

- a USD 400m term facility,
- a USD 100m working capital facility, disbursable in USD, EUR or PLN.

On October 28th 2021, the conditions stipulated in the consent letter, which confirmed the approval of the financing banks for the contribution of the organised part of the enterprise by Grupa LOTOS S.A. to LOTOS Asfalt Sp. z o.o., were fulfilled. As a result, the credit facility agreement was automatically amended, with new provisions added whereby additional security was created in the form of a guarantee provided by LOTOS Asfalt Sp. z o.o. The surety agreement of October 15th 2021 whereby LOTOS Asfalt Sp. z o.o. guarantees repayment of liabilities by the Company entered into force on the date of transfer of an organised part of business to LOTOS Asfalt Sp. z o.o., i.e., on November 2nd 2021.

As at December 31st 2021, the nominal amount drawn under the term facility was PLN 974.4m (USD 240m). As at December 31st 2020, the nominal amount drawn under the term facility was PLN 1,202.7m (USD 320m). The Company also had liabilities of PLN 222.2m under the working capital facility.

Under the facility agreements discussed above, Grupa LOTOS S.A. is required to maintain its net debt/ EBITDA ratio at a specified level. As at December 31st 2021, the Company complied with these requirements. As at December 31st 2020, one of the ratios specified in the credit facility agreements was not complied with. In anticipation of the breach of covenants, the Company requested a waiver from the financing banks. On December 29th 2020, the Company received a letter from the banks confirming their consent for the breach of covenants as at December 31st 2020.

Other credit agreements

On December 5th 2019, Grupa LOTOS S.A. and PKO BP S.A. signed a EUR 2.0m credit facility agreement. The purpose of the agreement is to finance the Pure H2 project, which is to build and launch infrastructure for the production and distribution of high purity hydrogen. On December 27th 2021, the agreement was amended, with the facility term extended until March 30th 2022. As at December 31st 2021 and December 31st 2020, the Company carried no liabilities under the facility.

Also, in addition to amounts available to the Company under the overdraft facilities specified in Note 10.6, the Company has access to working-capital facilities with a total amount of PLN 150m. As at December 31st 2021 and December 31st 2020, the Company carried no liabilities under these facilities.

Proceeds from and repayment of bank borrowings

In 2021, proceeds from bank borrowings were PLN 554.1m and included an inventory refinancing and financing facility. Repayments of bank borrowings in the same period were PLN 698.3m, of which PLN 301.9m as repaid under the investment facility and PLN 396.4m under the inventory refinancing and financing facility. These amounts are presented in the statement of cash flows as cash flows from financing activities in the line items Proceeds from bank borrowings and Repayment of bank borrowings, respectively.

In 2020 and 2021, the Company did not default on its borrowings.

Bank borrowings by currency

	Currency of credit facility advanced to the Company		Total
	USD	EUR	
Dec 31 2021	1,378.9	-	1,378.9
Dec 31 2020	1,585.6	27.0	1,612.6

Bank borrowings bear interest based on:

- 3M or 6M LIBOR (USD), depending on the interest period selected at a given time – in the case of USD-denominated facilities,
- 1M EURIBOR – in the case of EUR-denominated facilities.

For information on the benchmark reform (or the IBOR reform), see Note 11.2.4.

As at December 31st 2021, the average effective interest rate for the credit facilities denominated in USD and EUR was approximately 1.38% (December 31st 2020: 1.35%).

The facilities are collateralised with:

- registered pledges over bank accounts,
- registered pledges over assets,
- assignment by way of security of rights under inventory insurance and inventory storage agreements,
- representation on voluntary submission to enforcement.

For currency risk sensitivity analysis of the liabilities under bank borrowings, see Note 11.2.3.1.
For interest rate sensitivity analysis of the liabilities under bank borrowings, see Note 11.2.4.1.
For information on maturities of the liabilities under bank borrowings, see Note 11.2.5.

10.8.2 Leases

	Lease payments		Present value of lease payments	
	Dec 31 2021	Dec 31 2020	Dec 31 2021	Dec 31 2020
Up to 1 year	3.4	31.7	3.1	29.7
From 1 to 5 years	8.6	33.3	1.1	3.3
From 5 to 10 years.	10.0	38.7	0.8	1.6
From 10 to 30 years.	38.4	144.9	4.6	10.1
From 30 to 50 years.	35.9	151.2	11.2	31.7
From 50 to 90 years.	24.3	140.8	13.9	78.5
Total	120.6	540.6	34.7	154.9
Less finance costs	(85.9)	(385.7)	-	-
Present value of lease payments	34.7	154.9	34.7	154.9
including:				
non-current			31.6	125.2
short-term portion			3.1	29.7

Lease liabilities relate mainly to land usufruct rights.

For interest rate sensitivity analysis of the lease liabilities see Note 11.2.4.1 and maturities are presented in Note 11.2.5.

10.9 Capital management

The objective of the Grupa LOTOS S.A.'s financial policy is to maintain long-term liquidity while using an appropriate level of financial leverage to support the achievement of the principal goal of maximising the return on equity for the shareholders.

This is achieved by constant effort to develop the desired capital structure. Grupa LOTOS S.A. monitors its financing structure using the debt to equity ratio, calculated as net debt to equity.

Net debt comprises bank borrowings and lease liabilities less cash and cash equivalents.

As at December 31st 2021 and December 31st 2020, the ratio of debt to equity was significantly more favourable than the maximum level of the ratio assumed by the Company for its financing structure.

	Note	Dec 31 2021	Dec 31 2020
Non-current liabilities			
Bank borrowings	10.8	649.6	902.0
Leases	10.8	31.6	125.2
Total		681.2	1,027.2
Current liabilities			
Bank borrowings	10.8	729.3	710.6
Leases	10.8	3.1	29.7
Total		732.4	740.3
Cash and cash equivalents	10.6	(672.8)	(1,072.0)
Net debt		740.8	695.5
Total equity		11,934.9	9,449.4
Net debt to equity		0.06	0.07

10.10 Derivative financial instruments

Accounting policies

Derivative financial instruments used by the Company to hedge against currency risk include in particular FX forwards. The Company may also use full barrel swaps and commodity swaps to hedge its exposure to commodity and petroleum product price risk, and in the case of sale of products at fixed prices with an embedded option it uses commodity options. The Company uses futures contracts to manage its exposure to prices of carbon dioxide (CO_2) emission allowances, and may enter into interest rate swaps (IRSs) and forward rate agreements (FRAs) to hedge its interest rate exposure. Such financial derivatives are measured at fair value in line with the fair value hierarchy.

Based on the fair value measurement methods applied, the Company classifies its individual financial assets and liabilities according to the following levels (fair value hierarchy):

- *Level 1: Financial assets and liabilities whose fair values are measured directly on the basis of quoted prices (used without adjustment) from active markets for identical assets or liabilities.*
- *Level 2: Financial assets and liabilities whose fair values are measured using measurement models in the case of which all significant input data is observable on the market either directly (as prices) or indirectly (based on prices).*
- *Level 3: Financial assets and liabilities whose fair values are measured using measurement models in the case of which the input data is not based on observable market data (unobservable input data).*

Fair value of commodity swaps is established by reference to discounted future cash flows connected with the transactions, calculated on the basis of the difference between the average market price and the transaction price. The fair value is established on the basis of prices quoted on active markets provided by an external consultancy (Level 2 in the fair value hierarchy).

Fair value of spots, forwards and currency swaps is established by reference to future discounted cash flows connected with the transactions, calculated on the basis of the difference between the forward rate and the transaction price. The forward rate is calculated on the basis of the fixing rate quotations of the National Bank of Poland and the interest rate curve implied in FX swaps (Level 2 in the fair value hierarchy).

Fair value of FRAs is established by reference to future discounted cash flows connected with the transactions, calculated on the basis of the difference between the forward rate and the transaction price. The forward rate is calculated using the zero-coupon interest rate curve based on 6M or 3M LIBOR, depending on the type of transaction (Level 2 in the fair value hierarchy).

The fair value of futures hedging the risk of prices of carbon dioxide (CO_2) emission allowances is determined based on the difference between the market price quoted on the valuation date by the Intercontinental Exchange (ICE) and the transaction price. (Level 1 in the fair value hierarchy).

The fair value of derivative instruments does not take into account counterparty risk or the Company's own credit risk. Analysis showed that the credit value adjustment (CVA) accounting for counterparty credit risk and the debit value adjustment (DVA) accounting for the Company's credit risk would have no material effect on the measurement results. The effect of credit risk on the fair value of derivative instruments was analysed using conservative assumptions. A method estimating CVA as the hypothetical cost to purchase credit default swaps (CDS) for the projected exposure of derivatives entered into with a given counterparty was used for this purpose. The exposure forecast is made based on the current level of forward prices without taking into account their volatility. If no CDS are published on the market for a given entity, unsecured bond spreads over government bonds are used first, or, if no such spreads are published, Fitch, S&P and Moody's ratings are used to determine the hypothetical CDS level.

To manage risk related to carbon dioxide emission allowances, the Company assesses, on a case-by-case basis, the risk of expected deficit of emission allowances allocated free of charge under the carbon emission reduction system and manages the risk of changes in the price of emission allowance traded on an active market.

For information on the limit of free carbon dioxide emission allowances allocated to the Company and description of the Company's risk management process, see Note 11.2.2.

In the statement of financial position, financial derivatives are presented separately as either current or non-current, depending on the expected time of realisation of assets and liabilities. If their amount is immaterial, they are recognised under other assets and liabilities.

The Company applies hedge accounting. Changes in the fair value of derivative financial instruments designated to hedge cash flows, to the extent representing an effective hedge, are charged directly to other comprehensive income. For more information on hedge accounting, see Note 10.7.

(PLNm)

	Note	Dec 31 2021	Dec 31 2020
Non-current financial assets:		135.2	1.2
Commodity swaps (commodities and petroleum products)		6.6	1.2
Futures (CO_2 emissions)		128.6	-
Current financial assets:		81.6	65.9
Commodity swaps (commodities and petroleum products)		19.7	31.8
Currency forward and spot contracts		1.5	1.0
Currency swap		12.1	18.3
Futures (CO_2 emissions)		48.3	14.8
Financial assets	11.1.1	216.8	67.1
Non-current financial liabilities:		1.1	1.0
Commodity swaps (commodities and petroleum products)		1.1	1.0
Current financial liabilities:		31.1	10.3
Commodity swaps (commodities and petroleum products)		3.1	4.1
Futures (CO_2 emissions)		0.5	-
Currency forward and spot contracts		11.2	-
Currency swap		16.3	6.2
Financial liabilities	11.1.1	32.2	11.3

For description of objectives and policies of financial risk management, see Note 11.2.
For analysis of sensitivity of the derivative financial instruments to the risk of movements in commodity and petroleum product prices, see Note 11.2.1.1.
For analysis of sensitivity of the derivative financial instruments to the risk of movements in prices of carbon dioxide (CO_2) emission allowances, see Note 11.2.2.1.
For currency risk sensitivity analysis of the derivative financial instruments, see Note 11.2.3.1.
For interest rate sensitivity analysis of the derivative financial instruments, see Note 11.2.4.1.
For information on maturities of derivative financial instruments, see Note 11.2.5.
For information on maximum credit risk exposure of the derivative financial instruments (financial assets), see Note 11.2.6.

10.11 Employee benefit obligations

Accounting policies

Retirement severance payments, length-of-service awards and other employee benefits

In accordance with the Collective Bargaining Agreement, Company employees are entitled to length-of-service awards and severance payments upon retirement due to old age or disability, as well as death benefits.

Also, the employees, retired employees, and pensioners covered by the Company's social benefits are entitled to benefits from a separate social fund, which is established pursuant to applicable Polish regulations (Company Social Benefits Fund).

In accordance with IAS 19 Employee Benefits, retirement severance payments and contributions to the Company Social Benefits Fund are classified as defined post-employment benefit plans, while length-of-service awards, death benefits, and contributions to the Fund for current retired employees are recognised under other employee benefits.

Present value of future post-employment benefit obligations as at the end of the reporting period is calculated by an independent actuary using the projected unit credit method, and represents the discounted value of future payments the employer will have to make to fulfil its obligations related the employees' services in previous periods (until the end of the reporting period), defined individually for each employee, taking into account employee turnover (probability of employees leaving), without including future employees

The value of future employee benefit obligations includes length-of-service awards, old-age and disability retirement severance payments, as well as benefits paid to currently retired employees and the amount of estimated death benefits.

Length-of-service awards are paid after a specific period of employment. Old-age and disability retirement severance payments are one-off and paid upon retirement. Amounts of severance payments and length-of-service awards depend on the length of employment and the average remuneration of an employee. The amount of death benefit depends on the length of employment of the deceased employee, and the benefit is payable to the family, in accordance with the rules set forth in the Polish Labour Code.

Actuarial gains and losses on post-employment benefits are recognised in other comprehensive income, and actuarial gains and losses on other employee benefits are taken to profit or loss.

Company employees are entitled to holidays in accordance with the applicable provisions of the Polish Labour Code. The Company calculates the cost of employee holidays on an accrual basis using the liability method. The amount of compensation for holiday entitlements is recognised based on the difference between the balance of holidays actually used and the balance of holidays established proportionately to the passage of time, and disclosed in the financial statements as current employee benefits.

Obligations under other employee benefits also include bonuses and awards granted as part of the Company's incentive pay systems.

The Company recognises the cost of discount on its employee benefit obligations in finance costs.

Profit allocated for employee benefits and special accounts

In accordance with the business practice in Poland, shareholders have the right to allocate a part of profit to employee benefits by making contributions to the Company's social benefits fund and to other special accounts. However, in the financial statements such distributions are charged to operating expenses of the period in which the profit allocation was approved by the General Meeting.

	Note	Dec 31 2021	Dec 31 2020
Non-current liabilities:	10.11.1	35.5	85.3
Post-employment benefits	10.11.1	8.6	22.1
Length-of-service awards and other benefits	10.11.1	26.9	63.2
Current liabilities		38.9	76.0
Post-employment benefits	10.11.1	1.1	3.1
Length-of-service awards and other benefits	10.11.1	2.1	5.3
Bonuses, awards and holiday entitlements		30.3	55.1
Salaries and wages payable		5.4	12.5
Total		74.4	161.3

10.11.1 Obligations under length-of-service awards and post-employment benefits

In accordance with Grupa LOTOS S.A.'s remuneration systems, the Company employees are entitled to post-employment benefits upon retirement. Length-of-service awards are paid after a specific period of employment. Therefore, based on a valuation prepared by a professional actuarial firm or based on its own estimates, the Company recognises the present value of obligations under length-of-service awards and post-employment benefits. The amount of the obligation and reconciliation of changes in the obligation during the reporting period is presented below.

		Post-employment benefits		Length-of-service awards and other benefits		Total	
	Note	2021	2020	2021	2020	2021	2020
Jan 1		25.2	21.6	68.5	63.0	93.7	84.6
Current service cost		0.6	1.3	4.3	5.2	4.9	6.5
Cost of discount	9.7.	0.3	0.4	0.8	1.2	1.1	1.6
In-kind contribution		(14.1)	-	(40.7)	-	(54.8)	-
Benefits paid		(1.8)	(1.6)	(5.2)	(5.2)	(7.0)	(6.8)
Actuarial (gains)/losses under profit or loss		-	-	1.3	4.3	1.3	4.3
Actuarial (gains)/losses under other comprehensive income		(0.5)	3.5	-	-	(0.5)	3.5
Dec 31		9.7	25.2	29.0	68.5	38.7	93.7
including:							
non-current	10.11	8.6	22.1	26.9	63.2	35.5	85.3
short-term portion	10.11	1.1	3.1	2.1	5.3	3.2	8.4

Total cost of future employee benefit payments disclosed in the statement of comprehensive income

	Note	2021	2020
Items recognised in profit or loss:		7.3	12.4
Length-of-service awards, retirement and other post-employment benefits	9.3	6.2	10.8
- current service cost		4.9	6.5
- actuarial (gains)/losses		1.3	4.3
Cost of discount	9.7	1.1	1.6
Items recognised in other comprehensive (income)/loss:		(0.5)	3.5
Actuarial (gains)/losses		(0.5)	3.5
Total comprehensive income		6.8	15.9

Actuarial assumptions

Key assumptions adopted by the actuary	Dec 31 2021	Dec 31 2020
Discount rate (%)	3.50%	1.40%
Expected inflation rate (%)	2.50%	2.60%
Employee turnover ratio (%)	3.19%	4.40%
Expected wage growth rate (%) in the following year	10.00%	3.30%
Expected wage growth rate (%) in subsequent years	3.50%	2.50%

- In 2021, the employee attrition probability was based on the historical data on employee turnover at the Company and sector statistical data. The employee turnover ratios applied by the actuary were determined separately for age categories in five-year intervals. In 2020, the employee attrition probability was based on the historical data on employee turnover at the Company and statistical data on the Polish labour market. The employee turnover ratios applied by the actuary were determined separately for age categories in ten-year intervals. The employee turnover ratio is now calculated on an average basis.
- The mortality and life expectancy ratios are based on the Life Expectancy Tables of Poland for 2019-2020, published by Statistics Poland (GUS), and assume that the Company's employee population is representative of the average Polish population in terms of mortality (December 31st 2020: Life Expectancy Tables of Poland for 2019).
- It was assumed that employees would retire in accordance with the standard procedure, as prescribed by the Pensions Act, with the exception of employees who, according to the information provided by the Company, meet the conditions for early retirement entitlement.
- The discount rate on future benefits was assumed at 3.5%, i.e. reflecting the assumption made at the corporate level (December 31st 2020: 1.4%, i.e. reflecting the assumption made at the corporate level).

Sensitivity analysis: effect of changes in actuarial assumptions on employee benefits

Initial obligation balance

Wage growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total
base	base	25.2	8.2	1.0	4.3	38.7
base + 1%	base	27.4	9.1	1.1	5.0	42.6
base - 1%	base	23.3	7.3	0.9	3.7	35.2
base	base + 0.5%	24.1	7.7	1.0	4.0	36.8
base	base - 0.5%	26.4	8.7	1.1	4.6	40.8

Current service cost projected for 2022

Wage growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total
base	base	2.5	0.6	0.1	0.2	3.4
base + 1%	base	2.8	0.7	0.1	0.2	3.8
base - 1%	base	2.3	0.5	0.1	0.1	3.0
base	base + 0.5%	2.4	0.6	0.1	0.1	3.2
base	base - 0.5%	2.7	0.7	0.1	0.2	3.7

Cost of discount projected for 2022

Wage growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total
base	base	0.8	0.2	-	0.1	1.1
base + 1%	base	0.9	0.3	-	0.2	1.4
base - 1%	base	0.8	0.2	-	0.1	1.1
base	base + 0.5%	0.9	0.3	-	0.2	1.4
base	base - 0.5%	0.7	0.2	-	0.1	1.0

Total current service cost and cost of discount projected for 2022

Wage growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total
base	base	3.3	0.8	0.1	0.3	4.5
base + 1%	base	3.7	1.0	0.1	0.4	5.2
base - 1%	base	3.1	0.7	0.1	0.2	4.1
base	base + 0.5%	3.3	0.9	0.1	0.3	4.6
base	base - 0.5%	3.4	0.9	0.1	0.3	4.7

10.11.2 Termination benefits

In 2021, termination benefits and compensation payable in respect of the non-compete obligation totalled PLN 3.9m (2020: PLN 6.5m).

10.12 Trade and payables, and other liabilities and provisions

Accounting policies

Short-term trade and other payables are reported at nominal amounts payable.

The Company derecognises a financial liability when it is extinguished, that is when the obligation specified in the contract is either discharged or cancelled or expires. When a debt instrument between the same parties is replaced by another instrument whose terms are substantially different, the Company treats such replacement as if the former financial liability was extinguished and recognises a new liability. Similarly, material modifications to the terms of a contract concerning an existing financial liability are presented as extinguishment of the former and recognition of a new financial liability. Any differences in the respective carrying amounts arising in connection with the replacement are charged to profit or loss.

Other non-financial liabilities include in particular VAT, excise duty and fuel charge liabilities to tax authorities and liabilities under received prepayments that are to be settled by delivery of goods or property, plant and equipment, or performance of services. Other non-financial liabilities are measured at nominal amounts payable.

Accrued expenses are recognised at probable amounts of current-period liabilities. The Company discloses accrued expenses and deferred income under other non-financial liabilities or, if they refer to employee benefits, under employee obligations.

Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. If the Company anticipates that the costs for which provisions have been recognised will be recovered, e.g. under an insurance agreement, the recovery of such funds is recognised as a separate asset, but only when such recovery is practically certain to occur. The cost related to a given provision is disclosed in the statement of comprehensive income net of any recoveries. If the effect of the time value of money is significant, the amount of provisions is determined by discounting projected future cash flows to their present value at a pre-tax discount rate reflecting the current market estimates of the time value of money and risks, if any, specific to a given obligation. If the discount method is applied, an increase in the provision as a result of passage of time is recognised as finance costs. Provisions are charged against operating expenses, other expenses, or finance costs, depending on what circumstances the future obligation relates to.

Provision for deficit in CO_2 emission allowances

CO_2 emission allowances are presented by the Company in its financial statements in accordance with the net liability approach.

In accordance with this method, in the statement of financial position:

- *CO_2 emission allowances received free of charge are not presented,*
- *the provision to cover CO_2 emission costs is estimated if there is a shortfall in CO_2 emission allowances received free of charge in relation to actual emissions during the reporting period.*

The Company monitors emissions from installations covered by the European Union Emissions Trading System/Scheme during the financial year and compares them with the emission allowances granted free of charge under the EU ETS. A provision for CO_2 emissions is recognised when the cumulative emissions since the beginning of a given year have exceed the limit of allowances allocated free of charge for the year. The effect of the provision on profit or loss is presented in cost of sales (taxes and charges).

When establishing the amount of the provision, the part of the shortage which can be covered by allowances purchased earlier is measured at the carrying amount of the allowances held, and for the part of the shortage remaining to be covered - at the current market prices of the allowances on the day ending the reporting period.

	Note	Dec 31 2021	Dec 31 2020
Non-current financial liabilities:		9.2	11.3
Liabilities to Polish National Foundation	11.1.1	9.2	11.3
Current financial liabilities:		2,584.6	1,709.8
Trade payables	11.1.1	2,467.5	1,657.6
- including to related entities	10.2.2	612.9	260.9
Investment commitments	11.1.1	18.8	47.7
- including to related entities	10.2.2	-	4.4
Liabilities to Polish National Foundation	11.1.1	2.5	2.5
Security deposit – ICE Futures	11.1.1	86.6	-
Liabilities towards the LOTOS Foundation	11.1.1	8.5	1.0
Other	11.1.1	0.7	1.0
Financial liabilities		2,593.8	1,721.1
Non-current non-financial liabilities:		4.1	2.1
Current non-financial liabilities:		1,938.0	1,924.7
Value-added tax payable		603.1	470.6
Excise duty and fuel charge payable		883.5	938.8
Emissions charge payable		55.6	57.9
Other liabilities to the state budget other than corporate income tax		34.6	46.0
Grants	10.12.1	0.2	19.8
Provision for deficit in CO_2 emission allowances	11.2.2	-	142.0
National Reduction Target Provision		91.9	75.1
Provision for NIT emission charge		61.5	62.6
Tax risk provision		91.4	87.3
Provision for RES fees		41.5	17.2
Other		74.7	7.4
Non-financial liabilities		1,942.1	1,926.8
Total		4,535.9	3,647.9
including:			
non-current		13.3	13.4
current:		4,522.6	3,634.5
- trade receivables		2,467.5	1,657.6
- other		2,055.1	1,976.9

Trade payables do not bear interest and are usually paid in 14–30 days. Other liabilities do not bear interest and their average payment period is one month. The amount of difference between VAT receivable and VAT payable is paid to the relevant tax authorities on a monthly basis. Interest payable is typically settled within 14 days from the date of issue of an interest payment notice by the trading partner.

For currency risk sensitivity analysis of financial liabilities, see Note 11.2.3.1.
For information on maturities of financial liabilities, see Note 11.2.5.

10.12.1 Grants

Accounting policies

If there is reasonable certainty that a grant will be received and that all related conditions will be fulfilled, grants are recognised at fair value.

If a grant concerns a cost item, it is recognised as income in matching with the expenses it is to compensate for. If it concerns an asset, its fair value is recognised as deferred income, and then it is written off annually in equal parts through the statement of comprehensive income over the estimated useful life of the asset.

	Note	Dec 31 2021	Dec 31 2020
At beginning of period		21.6	21.6
Grants received in the period		1.8	2.8
Deferred grants		(0.9)	(2.8)
In-kind contribution		(18.7)	-
At end of period		3.8	21.6
including:			
non-current		3.6	1.8
short-term portion	10.12	0.2	19.8

In 2021, Grupa LOTOS S.A. contributed PLN 18.7m to the subsidiary LOTOS Asfalt Sp. z o.o. in the form of grants related mainly to licences received free of charge. The transaction is presented in Note 2.2.

11. Notes on financial instruments and financial risk

11.1 Financial instruments

Accounting policies

Financial assets

Grupa LOTOS S.A. classifies financial assets into the following measurement categories:
- *measured at amortised cost,*
- *measured at fair value through other comprehensive income.*
- *measured at fair value through profit or loss,*

The classification depends on the model adopted by the Company to manage financial assets and on the terms of contractual cash flows. Grupa LOTOS S.A. reclassifies investments in debt instruments only when the management model changes.

The Company assesses the model of managing debt financial assets (including trade receivables) based on the following three possible criteria:
- *held to collect cash flows,*
- *held to collect cash flows and sell,*
- *other (effectively meaning assets held for disposal).*

Measurement upon initial recognition

On initial recognition, Grupa LOTOS S.A. measures a financial asset at fair value plus transaction costs that are directly attributable to the acquisition of the financial asset if it is not measured at fair value through profit or loss. Transaction costs related to financial assets at fair value through profit or loss are recognised in profit or loss.

Derecognition

Financial assets are recognised when the Company becomes a party to the contractual provisions covering the instrument. Financial assets are derecognised when the rights to receive cash flows from financial assets have expired or have been transferred, and the Company has transferred substantially all risks and rewards related to ownership of assets.

Measurement after initial recognition

Financial assets measured at amortised cost

Debt instruments held to collect contractual cash flows which comprise solely payments of principal and interest ("SPPI") are measured at amortised cost. Interest income is calculated using the effective interest rate method and recognised under interest income in profit or loss. Impairment losses are recognised in accordance with the accounting policy set out in Note 10.3.1 and presented under Impairment losses on financial assets.

In this category, the Company classifies in particular:
- *trade receivables other than factoring receivables within the factoring limit granted to the Company,*
- *loans that meet the SPPI classification test and, in line with the business model, are recognised as 'held to collect cash flows',*
- *cash and cash equivalents,*
- *deposits, security deposits, investment receivables and other financial receivables.*

Financial assets measured at amortised cost are classified as non-current assets if they mature more than 12 months after the reporting date.

If the effect of time value of money is material, the value of receivables is determined by discounting the projected future cash flows to their present value using a pre-tax discount rate reflecting the current market estimates of the time value of money.

Financial assets measured at fair value through other comprehensive income

Debt instruments giving rise to cash flows which are solely payments of principal and interest and which are held to collect contractual cash flows and to sell are measured at fair value through other comprehensive income. Changes in the carrying amount are recognised through other comprehensive income, except for impairment gains and losses, interest income and foreign exchange gains and losses, which are recognised in profit or loss. If a financial asset is derecognised, the total gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and recognised as other gains/(losses). Interest income on such financial assets is calculated using the effective interest rate method and recognised in the line item Interest income. Impairment due to expected credit losses is recognised in accordance with the accounting policy applicable to impairment of financial assets and presented in the line item 'Allowance for expected credit losses'.

Financial assets at fair value through profit or loss

Assets which do not meet the criteria for measurement at amortised cost or at fair value through other comprehensive income are measured at fair value through profit or loss.

In particular, Grupa LOTOS S.A. classifies loans that do not meet the SPPI test (i.e. cash flows from these loans are not solely payments of principal and interest) at fair value through profit or loss.

The fair value of trade receivables subject to factoring within the limit available as at the last day of the reporting period is determined on the basis of the factoring agreement with the factor.

Gain or loss on fair value measurement of debt investments is recognised in profit or loss and presented under 'Gains/(losses) on changes in the fair value of financial instruments' in the period in which they arise. Gains/(losses) on fair value measurement include interest received on financial instruments classified as measured at fair value.

The instruments classified at fair value through profit or loss include the derivative instruments described in Note 10.10.

Equity instruments measured at fair value through other comprehensive income.

Interests in other entities include such equity instruments in other entities which do not confer control, joint control or significant influence over such entities.

Interests in other entities are initially recognised at fair value plus transaction costs. Subsequently, they are measured at fair value. For all its investments, the Company has elected to present gains and losses on changes in the fair value of equity instruments in other comprehensive income as such investments are not held for short-term returns. If such election is made, gains and losses on changes in fair value are not reclassified to profit or loss when the investment is derecognised.

Dividends from such investments are recognised in profit or loss once the Company's right to receive payment is established.

Financial liabilities

Financial liabilities are initially recognised at fair value less transaction costs and subsequently at amortised cost using the effective interest rate method.

The instruments classified at fair value through profit or loss include the derivative instruments described in Note 10.10.

Under financial liabilities at amortised cost, Grupa LOTOS S.A. recognises mainly trade payables, investment commitments and other liabilities, bank and non-bank borrowings, and debt instruments. Such liabilities are recognised in the statement of financial position under: Bank and non-bank borrowings, notes and lease liabilities; Trade payables; Other liabilities and provisions.

Financial liabilities denominated in foreign currencies are translated into the functional currency using the exchange rate prevailing at the date of the transaction. Foreign exchange gains and losses on settlement of those liabilities and translation at the exchange rates prevailing at the reporting date are recognised in profit or loss unless their recognition in other comprehensive income is deferred when they qualify as cash flow hedging.

If contractual terms of a financial liability are modified in a way that does not result in derecognition of the existing liability, the gain or loss is immediately recognised in profit or loss. Profit or loss is calculated as the difference between the present value of modified and original cash flows, discounted using the original effective interest rate of the liability.

Professional judgement and estimates

Fair value of financial instruments

The fair value of financial instruments for which no active market exists is measured using appropriate valuation techniques. In selecting appropriate valuation methods and assumptions, the Company relies on professional judgement.

(PLNm)

11.1.1 Carrying amount

		IFRS 9								outside IFRS 9		Total	
		Measurement at amortised cost		Measurement at fair value through: Profit or loss		Measurement at fair value through: Other comprehensive income		Total					
	Note	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Financial assets													
Trade receivables	10.3	2,964.0	1,445.4	-	-	-	-	2,964.0	1,445.4	-	-	2,964.0	1,445.4
Derivative financial instruments	10.10	-	-	216.8	67.1	-	-	216.8	67.1	-	-	216.8	67.1
Equity investments	10.2	-	-	-	-	294.0	306.3	294.0	306.3	-	-	294.0	306.3
Cash and cash equivalents	10.6	672.8	1,072.0	-	-	-	-	672.8	1,072.0	-	-	672.8	1,072.0
Other financial assets:		677.2	227.7	-	-	-	-	677.2	227.7	-	-	677.2	227.7
Loans	10.4	657.3	199.8	-	-	-	-	657.3	199.8	-	-	657.3	199.8
Security deposits (margins)	10.3	0.2	17.1	-	-	-	-	0.2	17.1	-	-	0.2	17.1
Commission fees on conditional loan	10.3	-	10.0	-	-	-	-	-	10.0	-	-	-	10.0
Other	10.3	19.7	0.8	-	-	-	-	19.7	0.8	-	-	19.7	0.8
Total		4,314.0	2,745.1	216.8	67.1	294.0	306.3	4,824.8	3,118.5	-	-	4,824.8	3,118.5
Financial liabilities													
Bank borrowings	10.8	1,378.9	1,612.6	-	-	-	-	1,378.9	1,612.6	-	-	1,378.9	1,612.6
Leases	10.8	-	-	-	-	-	-	-	-	34.7	154.9	34.7	154.9
Derivative financial instruments	10.10	-	-	32.2	11.3	-	-	32.2	11.3	-	-	32.2	11.3
Trade payables	10.12	2,467.5	1,657.6	-	-	-	-	2,467.5	1,657.6	-	-	2,467.5	1,657.6
Other financial liabilities	10.12	126.3	63.5	-	-	-	-	126.3	63.5	-	-	126.3	63.5
Total		3,972.7	3,333.7	32.2	11.3	-	-	4,004.9	3,345.0	34.7	154.9	4,039.6	3,499.9

(PLNm)

11.1.2 Fair value measurement

Dec 31 2021	Note	Carrying amount	Fair value	Fair value hierarchy		
				Level 1	Level 2	Level 3
Financial assets						
Financial assets measured at fair value through other comprehensive income	10.2	294.0	294.0	-	-	294.0
Loans	10.4	657.3	685.6	-	685.6	-
Derivative financial instruments	10.10	216.8	216.8	176.9	39.9	-
Total		1,168.1	1,196.4	176.9	725.5	294.0
Financial liabilities						
Bank borrowings	10.8	1,378.9	1,381.2	-	1,381.2	-
Derivative financial instruments	10.10	32.2	32.2	0.5	31.7	-
Total		1,411.1	1,413.4	0.5	1,412.9	-

For the other classes of financial assets and liabilities, the fair value corresponds to their carrying amounts.

Dec 31 2020	Note	Carrying amount	Fair value	Fair value hierarchy		
				Level 1	Level 2	Level 3
Financial assets						
Financial assets measured at fair value through other comprehensive income	10.2	306.3	306.3	-	-	306.3
Loans	10.4	199.8	199.8	-	199.8	-
Derivative financial instruments	10.10	67.1	67.1	14.8	52.3	-
Total		573.2	573.2	14.8	252.1	306.3
Financial liabilities						
Bank borrowings	10.8	1,612.6	1,617.3	-	1,617.3	-
Derivative financial instruments	10.10	11.3	11.3	-	11.3	-
Total		1,623.9	1,628.6	-	1,628.6	-

For the other classes of financial assets and liabilities, the fair value corresponds to their carrying amounts.

11.1.3 Material items of income, expenses, gains and losses disclosed in the statement of comprehensive income by category of financial instrument

		IFRS 9								outside IFRS 9		Total	
		Measurement at amortised cost		Measurement at fair value through: Profit or loss		Measurement at fair value through: Other comprehensive income		Total					
	Note	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Trade receivables:													
Interest income	9.6	0.4	0.1	-	-	-	-	0.4	0.1	-	-	0.4	0.1
Foreign exchange gains recognised in cost of sales	9.2	15.9	4.8	-	-	-	-	15.9	4.8	-	-	15.9	4.8
(Impairment losses)/reversal of impairment losses on financial instruments	9.8	(1.1)	1.9	-	-	-	-	(1.1)	1.9	-	-	(1.1)	1.9
Equity investments:													
Dividend income	9.6	-	-	-	-	1.7	3.0	1.7	3.0	-	-	1.7	3.0
Loss on fair value measurement		-	-	-	-	(12.3)	-	(12.3)	-	-	-	(12.3)	-
Cash and cash equivalents													
Foreign exchange (gains)/losses	9.6; 9.7	(0.3)	0.7	-	-	-	-	(0.3)	0.7	-	-	(0.3)	0.7
Other financial assets:													
Interest income on deposits, loans	9.6	20.0	2.6	-	-	-	-	20.0	2.6	-	-	20.0	2.6
Foreign exchange gains/(losses) on contingent loan commission fees recognised in finance income/(costs)	9.6; 9.7	0.2	(0.2)	-	-	-	-	0.2	(0.2)	-	-	0.2	(0.2)
(Impairment losses)/reversal of impairment losses on financial instruments	9.8	0.8	(9.4)	-	-	-	-	0.8	(9.4)	-	-	0.8	(9.4)
Derivative financial instruments (financial assets/liabilities):													
Gains on fair value measurement of derivative financial instruments	9.6	-	-	128.8	45.5	-	-	128.8	45.5	-	-	128.8	45.5
Gains/(losses) on realised derivative financial instruments	9.6	-	-	114.5	33.3	-	-	114.5	33.3	-	-	114.5	33.3
Bank borrowings:													
Interest expense	9.7	(22.7)	(26.2)	-	-	-	-	(22.7)	(26.2)	-	-	(22.7)	(26.2)
Losses on cash flow hedge accounting charged against revenue	9.1	(34.0)	(240.2)	-	-	-	-	(34.0)	(240.2)	-	-	(34.0)	(240.2)
Foreign exchange gains/(losses) on bank borrowings recognised in finance income/(costs)	9.6; 9.7	(64.3)	27.6	-	-	-	-	(64.3)	27.6	-	-	(64.3)	27.6
Foreign exchange gains/(losses) on realised foreign-currency transactions in bank accounts recognised in finance income/(costs)	9.6; 9.7	12.6	(9.5)	-	-	-	-	12.6	(9.5)	-	-	12.6	(9.5)
Gains on measurement of cash flow hedges recognised in other comprehensive income	10.7.3	(35.7)	221.2	-	-	-	-	(35.7)	221.2	-	-	(35.7)	221.2
Leases													
Interest expense	9.7	-	-	-	-	-	-	-	-	(6.9)	(7.4)	(6.9)	(7.4)
Trade and other payables:													
Foreign exchange gains/(losses) recognised in cost of sales	9.2	(94.2)	(9.0)	-	-	-	-	(94.2)	(9.0)	-	-	(94.2)	(9.0)
Other financial liabilities:													
Foreign exchange gains/(losses) on investment liabilities recognised in finance income/(costs)	9.6; 9.7	(0.3)	(1.2)	-	-	-	-	(0.3)	(1.2)	-	-	(0.3)	(1.2)
Total		(202.7)	(36.8)	243.3	78.8	(10.6)	3.0	30.0	45.0	(6.9)	(7.4)	23.1	37.6

11.2 Objectives and policies of financial risk management

Grupa LOTOS S.A. is exposed to financial risks, including:

- market risk (risk of movements in commodity and petroleum product prices, risk of movements in prices of CO_2 allowances, currency risk, interest rate risk),
- liquidity risk,
- credit risk in financial and trade transactions.

The Company has appropriate units (Finance Management Office, Financial Risk Analysis and Control Office) reporting to the Chief Financial Officer, who coordinates and exercises ongoing supervision of the LOTOS Group's financial risk management processes.

Furthermore, the Price Risk and Trading Committee, appointed by the Management Board, supervises the work on development of policies and procedures, and monitors implementation of the Group's strategy in the area of its responsibilities. Specifically, the Committee provides opinions on or initiates key price and trading risk management initiatives, issues recommendations, and submits proposals for actions that require the Management Board's approval.

In addition, to ensure effective management of liquidity, debt structure and external finance raising by companies of the LOTOS Group, the Management Board has appointed the Liquidity Optimisation and Financing Coordination Team.

Financial risk management seeks to achieve the following key objectives:

- increase the probability of budget and strategic objectives being met,
- limit cash flow volatility,
- ensure short-term financial liquidity,
- optimise the expected level of cash flows and risk,
- support operating, investment and financial processes, and create value in the long term.

With a view to implementing the above objectives, Grupa LOTOS S.A. has put in place appropriate tools and developed a number of documents, approved at the relevant decision-making levels, defining the framework for ensuring effectiveness and safety of the Company's financial activities, including:

- the methodology for quantifying exposures to particular risks,
- the time horizon for hedging a given risk,
- acceptable financial instruments,
- the method of assessing financial risk management,
- limits within risk management,
- the reporting method,
- credit limits,
- documentation and operating standards,
- separation of responsibilities for execution of transactions, risk analysis and control, documentation of and accounting for transactions, and their allocation to different corporate units.

Grupa LOTOS S.A. monitors and reports all managed market risks on an ongoing basis. The Company uses liquid derivative financial instruments which can be measured by applying commonly used valuation models. The valuation of derivative financial instruments is performed based on market inputs provided by reliable sources. Opening positions involving risks do not arise as part of the Company's core business is prohibited.

In July 2019, as part of the refinancing of foreign-currency facilities used to finance the 10+ Programme, the existing hedging relationships were terminated and new financing agreements were created to maintain the type of hedge accounting applied (cash flow hedge) and designated as the hedged item for future sales of oil products denominated in USD.

11.2.1 Risk of movements in commodity and petroleum product prices

The Company considers the risk of movements in commodity and petroleum product prices to be particularly important.

Grupa LOTOS S.A. identifies the following factors of this risk:

- volatility of the refining margin, measured as the difference between liquid indices of a reference petroleum product basket (e.g. aviation fuel, gasoline, diesel oil, fuel oil) and a liquid index of reference commodity (e.g. Urals crude),
- volatility of prices with respect to the commodity and product inventory volumes deviating from the required levels of emergency and operational stocks,
- volatility of differentials between the reference indices and indices used in commercial contracts (e.g. Urals-Brent differential, i.e. the difference between different types of crude oil),
- use of non-standard pricing formulae in trade contracts.

Grupa LOTOS S.A. has in place "Grupa LOTOS S.A.'s commodity and petroleum products price risk management policy", which defines the classification system for transaction portfolios and their business functions, describes how risk is understood and how portfolio exposures are measured, specifies permitted financial instruments and limitations on their use, and transaction execution standards, and also provides guidelines on how to evaluate risk management performance and set relevant limits. Transaction limits falling within the scope of that policy are delegated by the Management Board to lower-level decision-makers.

To support the achievement of the policy objectives, the Company uses a leading Energy Trading and Risk Management system (Allegro). Under the approved policy, the Company may continue to offer its customers petroleum products at fixed prices.

Considering the sale of bitumen components at fixed prices, in 2021 the Company entered into commodity swaps to preserve the original price risk profile.

Open commodity swaps as at December 31st 2021:

Type of contract	Reference index	Valuation period	Amount in tonnes in the valuation period	Fair value measurement	
				Financial assets	Financial liabilities
Commodity swap	3.5 PCT Barges FOB Rotterdam	Apr 2022 – Sep 2023	31,040	26.3	-
Commodity swap	Gasoil 0.1 pct Crg CIF NWE_ARA	Apr 2022 – Sep 2023	9,809	-	(4.2)
			Total	26.3	(4.2)

These swap transactions for a total of 31,040 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from April 2022 to September 2023 and 9,809 tonnes based on the Gasoil 0.1 pct Crg CIF NWE ARA liquid index in the same period were entered into to reverse the risk profile of commodity and petroleum product prices arising from the sale of bitumen components at fixed prices.

Open commodity swaps as at December 31st 2020:

Type of contract	Reference index	Valuation period	Amount in tonnes in the valuation period	Fair value measurement	
				Financial assets	Financial liabilities
Commodity swap	3.5 PCT Barges FOB Rotterdam	Mar 2021–Nov 2022	196,939	29.6	(2.8)
Commodity swap	Gasoil 0.1 pct Crg CIF NWE_ARA	Mar 2021–Nov 2022	(18,203)	3.4	(2.3)
			Total	33.0	(5.1)

These swap transactions for a total of 196,939 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from March 2021 to November 2022 and (18,203) tonnes based on the Gasoil 0.1 pct Crg CIF NWE ARA liquid index in the same period were entered into to reverse the risk profile of commodity and petroleum product prices arising from the sale of bitumen components at fixed prices.

11.2.1.1 Sensitivity analysis: risk of movements in commodity and petroleum product prices

Below is presented an analysis of the sensitivity of the Company's financial transactions to the risk of movements in commodity and petroleum product prices as at December 31st 2021 and December 31st 2020.

	Dec 31 2021			Dec 31 2020		
	Carrying amount	Change*		Carrying amount	Change**	
		+ implied volatility	- implied volatility		+ implied volatility	- implied volatility
Financial assets	26.3	25.9	(25.9)	33.0	67.3	(67.3)
Financial liabilities	(4.2)	(8.4)	8.4	5.1	(12.1)	12.1
Effect on profit/loss		34.3	(34.3)		79.4	(79.4)

* With respect to instruments held as at December 31st 2021, the above deviations of reference index prices were calculated based on the implied annual volatility of the reference index for December 31st 2021, as published by SuperDerivatives. The volatility was +/- 51.24% for the 3.5 PCT Barges FOB Rotterdam index and +/- 34.23% for the Gasoil 0.1 pct Crg CIF NWE_ARA index.

** With respect to instruments held as at December 31st 2020, the above deviations of reference index prices were calculated based on the implied annual volatility of the reference index for December 31st 2020, as published on the SuperDerivatives website. The volatility was +/- 44.93% for the 3.5 PCT Barges FOB Rotterdam index and +/- 34.67% for the Gasoil 0.1 pct Crg CIF NWE_ARA index.

The effect of the reference index price changes on the fair value was examined assuming that the currency exchange rates remain unchanged.

11.2.2 Risk of movements in prices of carbon dioxide (CO_2) emission allowances

As part of the organised part of business transferred from Grupa LOTOS S.A. to LOTOS Asfalt Sp. z o.o. on November 2nd 2021, the Group transferred, among other things, refining units covered by the greenhouse gas emission allowance trading scheme (EU ETS). As of that moment, by operation of law the obligation to redeem CO_2 emission allowances rests with LOTOS Asfalt Sp. z o.o. However, it does not mean that the risk of prices of CO_2 emission allowances was eliminated from Grupa LOTOS S.A., as under the concluded processing contract the Company is obliged to cover the cost of emission allowances deficit for LOTOS Asfalt Sp. z o.o. and thus the risk of prices of CO_2 emission allowances was transferred to Grupa LOTOS S.A. Therefore, the Company continues to manage the risk based on the Policy for managing the risk of prices of CO_2 emission allowances at Grupa LOTOS S.A. (the "Policy").

In line with the Policy, approved by the Management Board of Grupa LOTOS S.A, the Company decides on how to balance future CO_2 emission allowance deficit or surpluses under the processing contract depending on the market situation and within defined limits. The Company enters into financial transactions for emission unit allowances (EUAs, one EUA representing the right to emit one tonne of CO_2) within the framework of the approved Policy and the available limits.

To manage the risk related to carbon dioxide emission allowances, the Company evaluates the risk of deficit of free emission allowances allocated by the EU.

As at December 31st 2021, the estimated deficit in free emission allowances for installations located at the Gdańsk refinery in the 2021–2025 trading period (Phase IV) was 1,566,818 tonnes. However, taking into account derivative transactions for a total of 1,746,000 tonnes and EUA allowances held by the Company and LOTOS Asfalt Sp. z o.o. in the accounts, there is a surplus of 179,182 tonnes for that settlement period. The long position is maintained due to market conditions and in the context of the strategic nature of the allowances deficit anticipated between in 2026–2030.

The total amount of free CO_2 emission allowances allocated for 2021–2025 to the installations covered by the processing contract and the total CO_2 emissions from these installations are presented below.

in million tonnes	2021	2022	2023	2024	2025	Total
Free allowances (1)	1.7	1.7	1.7	1.7	1.7	8.5
Actual CO_2 emissions	1.9(2)	-	-	-	-	1.9

(1) Number of free CO_2 emission allowances for 2021–2025, announced by the Minister of Climate and Environment for installations covered by the scheme, together with the final number of emission allowances allocated for 2021-2025, pursuant to Art. 26e.3 and Art. 64b.8 of the Act on Trading in Greenhouse Gas Emission Allowances of June 12th 2015 (Dz. U. of 2021, items 332 and 1047).

(2) CO_2 emissions, calculated based on the production data for the installations covered by the processing contract, as part of the emissions trading scheme. The data is verified in accordance with Art. 84.1 of the Act on Trading in Greenhouse Gas Emission Allowances of June 12th 2015 (Dz. U. of 2021, items 332 and 1047) and Art. 68 of Commission Regulation (EU) No 2018/2066.

As at December 31st 2021, there was a deficit of CO_2 emission allowances, which Grupa LOTOS S.A. is obliged to cover under the processings contract, Therefore, as at December 31st 2021, the Company recognised PLN 39.6m of these liabilities, disclosed in the statement of financial position under current liabilities as: Other liabilities and provisions The effect of the provision on EBIT is presented under cost of sales.

As at December 31st 2020, liabilities recognised at the Company level in connection with the deficit in CO_2 emission allowances were PLN 142.0m. Of the amount, PLN 133.6 m was used to purchase CO_2 emission allowances for 2020. The PLN 8.4m effect of reversal of the remaining portion of the provision on EBIT is presented under cost of sales.

If required, futures contracts to purchase CO_2 allowances open as at the last day of the reporting period are settled by the Company through physical delivery to LOTOS Asfalt Sp. z o.o. for redemption to offset actual CO_2 emissions.

Below is presented the contract position as at December 31st 2021 and December 31st 2020.

Open emission allowances contracts as at December 31st 2021:

Type of contract	Contract settlement period	Contract volume (in tonnes)	Phase	Fair value measurement	
				Financial assets	Financial liabilities
EUA Futures	Mar 2022 – Dec 2025	1,746,000	Phase IV	176.9	(0.5)

Open CO_2 allowances contracts as at December 31st 2020:

Type of contract	Contract settlement period	Contract volume (in tonnes)	Phase	Fair value measurement	
				Financial assets	Financial liabilities
EUA Futures	Mar 2021	1,555,000	Phase III	14.8	-

11.2.2.1 Sensitivity analysis: risk of movements in prices of carbon dioxide (CO_2) emission allowances

As at December 31st 2021 and December 31st 2020, the Company held futures for the purchase of carbon dioxide (CO_2) emission allowances.

The analysis of sensitivity of CO_2 contracts' fair value as at December 31st 2021 and December 31st 2020 is presented below:

	Dec 31 2021			Dec 31 2020		
	Carrying	Change*		Carrying	Change**	
	amount	+ implied volatility	- implied volatility	amount	+ implied volatility	- implied volatility
Financial assets	176.9	262.0	(262.0)	14.8	109.4	(109.4)
Financial liabilities	0.5	(50.9)	50.9	-	-	-
Effect on profit/loss		312.9	(312.9)		109.4	(109.4)

*With respect to instruments held as at December 31st 2021, the above deviations of prices of CO_2 emission allowances were calculated based on the implied annual volatility of EUA futures contracts of December 31st 2021, as published by SuperDerivatives; the implied volatility was 47.5%.

**With respect to instruments held as at December 31st 2020, the above deviations of prices of CO_2 emission allowances were calculated based on the implied annual volatility of EUA futures contracts of December 31st 2020, as published by SuperDerivatives; the implied volatility was 46.79%.

11.2.3 Currency risk

In its activities the Company is exposed to currency risks related to:

- trading in raw materials, petroleum products and other commodities,
- investment cash flows,
- cash flows from financing activities, including deposits and borrowings,
- valuation of derivative instruments,
- payment costs dependent on exchange rates, pursuant to the processing contract with LOTOS Asfalt Sp. z o.o,

indexed to or denominated in a currency other than the functional currency.

Currency risk is managed by the Company in line with the assumptions of the Grupa LOTOS S.A. Currency Risk Management Policy. Under the policy, exposure is understood as material positions exposed to currency risk, affecting liquidity within the management horizon when the risk arises. The central risk metric is Cash-Flow-at-Risk (CFaR), computed based on the CorporateMetrics™ methodology, with the CFaR value limit and the maximum hedge ratio being the key limits. The exposure management horizon is linked with the budget forecast horizon, which varies from three to six consecutive quarters depending on the time of the year.

Grupa LOTOS S.A. actively manages its currency exposure by optimising the expected values of cash flows and risk within applicable limits, taking into account expected market developments.

As USD is used in market price quotations for crude oil and petroleum products, it was decided that USD is the most appropriate currency for contracting and repaying long-term credit facilities as this would reduce the structural long position and, consequently, also the strategic currency risk.

The Grupa LOTOS S.A. has a structural long position in USD (it benefits from a rise in the USD/PLN exchange rate) as its cash inflows dependent on the USD exchange rate (mainly revenue from sale of petroleum products) are higher than the corresponding cash outflows (e.g. on purchase of crude oil, credit facility repayments), and it has a short position in EUR resulting mainly from feedstock purchases and payments related to investing activities.

Open currency contracts as at December 31st 2021:

Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/floating)	Amount in base currency	Fair value measurement	
					Financial assets	Financial liabilities
Currency spot	Purchase	Jan 2022	USD/PLN	41.0	-	-
Currency spot	Sale	Jan 2022	USD/PLN	(19.5)	-	-
Currency forward	Purchase	Jan 2022	USD/PLN	11.5	-	(0.2)
Currency forward	Purchase	Jan – Dec 2022	EUR/PLN	60.6	-	(1.8)
Currency forward	Purchase	Apr – Jul 2022	EUR/USD	125.0	-	(9.2)
Currency forward	Sale	Sep 2022	USD/PLN	(80.0)	1.5	-
Currency forward	Sale	Feb 2022	EUR/PLN	(1.3)	-	-
Currency swap	Purchase	Jan – Mar 2022	USD/PLN	261.8	-	(9.1)
Currency swap	Purchase	Jan 2022	EUR/PLN	16.4	-	(0.5)
Currency swap	Purchase	Jan – Mar 2022	EUR/USD	50.4	0.3	-
Currency swap	Sale	Jan – Dec 2022	USD/PLN	(493.2)	10.5	(6.7)
Currency swap	Sale	Jan 2022	EUR/PLN	(27.4)	1.3	-
				Total	13.6	(27.5)

Open currency contracts as at December 31st 2020:

Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/floating)	Amount in base currency	Fair value measurement	
					Financial assets	Financial liabilities
Currency spot	Purchase	Jan 2021	USD/PLN	29.5	1.0	-
Currency spot	Purchase	Jan 2021	EUR/PLN	0.4	-	-
Currency forward	Sale	Apr 2021	USD/PLN	(0.5)	-	-
Currency swap	Sale	Jan – May 2021	USD/PLN	(192.8)	18.3	(3.0)
Currency swap	Sale	Jan – Feb 2021	EUR/PLN	(19.8)	-	(3.2)
				Total	19.3	(6.2)

11.2.3.1 Sensitivity analysis: currency risk

Currency structure of selected financial instruments as at December 31st 2021

Dec 31 2021	USDm	USD translated into PLN	EURm	EUR translated into PLN	Carrying amount in foreign currency translated into PLN as at the reporting date
Financial assets					
Trade receivables	37.6	152.9	1.0	4.8	157.7
Cash and cash equivalents	5.5	22.2	2.1	9.8	32.0
Total	43.1	175.1	3.1	14.6	189.7
Financial liabilities					
Bank borrowings	339.6	1,378.9	-	-	1,378.9
Trade payables	378.5	1,536.8	13.2	60.7	1,597.5
Other financial liabilities	2.3	9.2	19.6	90.2	99.4
Total	720.4	2,924.9	32.8	150.9	3,075.8

Currency structure of selected financial instruments as at December 31st 2020

Dec 31 2020	USDm	USD translated into PLN	EURm	EUR translated into PLN	Carrying amount in foreign currency translated into PLN as at the reporting date
Financial assets					
Trade receivables	31.7	119.0	0.6	2.8	121.8
Cash and cash equivalents	6.2	23.2	28.5	131.3	154.5
Other financial assets:	3.4	12.6	3.3	15.4	28.0
Security deposits (margins)	-	-	3.3	15.4	15.4
Loans to related entities	0.7	2.6	-	-	2.6
Commission fees on conditional loan	2.7	10.0	-	-	10.0
Total	41.3	154.8	32.4	149.5	304.3
Financial liabilities					
Bank borrowings	421.9	1,585.6	5.8	27.0	1,612.6
Trade payables	301.7	1,134.0	14.3	65.9	1,199.9
Other financial liabilities	3.3	12.5	3.6	16.5	29.0
Total	726.9	2,732.1	23.7	109.4	2,841.5

Apart from the instruments listed above, the Company may hold foreign-currency derivative financial instruments, including commodity swaps and interest-rate swaps, as well as currency spot contracts, forwards and swaps. Depending on the type of derivative, the Company applies the appropriate method of fair value measurement, which also determines the method of calculating the effect of changes of foreign exchange rates on the value of individual derivative financial instruments (for more detailed information on derivative measurement methods see Note 10.10). The tables below, presenting sensitivity of financial instruments to currency risk as at December 31st 2021 and December 31st 2020, also present the effect of currency exchange rate movements on the carrying amounts of the derivative financial instruments.

Analysis of the sensitivity to currency risk as at December 31st 2021, showing the effect of a +/- 8.5% change in the USD/PLN exchange rate and a +/- 5.575% change in the EUR/PLN exchange rate on net profit or loss

Dec 31 2021	Effect of exchange rate increase/decrease on net profit/loss for the year in 2021			
	+8.5%	+5.575%	-8.5%	-5.575%
	USD	EUR	USD	EUR
Financial assets				
Derivative financial instruments	(191.6)	15.0	191.6	(15.0)
Trade receivables	13.0	0.3	(13.0)	(0.3)
Cash and cash equivalents	1.9	0.5	(1.9)	(0.5)
Total financial assets	(176.7)	15.8	176.7	(15.8)
Financial liabilities				
Bank borrowings	34.4 (1)	-	(34.4)	-
Derivative financial instruments	(28.3)	(52.4)	28.3	52.4
Trade payables	130.6	3.4	(130.6)	(3.4)
Other financial liabilities	0.8	5.0	(0.8)	(5.0)
Total financial liabilities	137.5	(44.0)	(137.5)	44.0
Total	(314.2)	59.8	314.2	(59.8)

(1) The calculation of the effect of an exchange rate movement on the balance-sheet item takes into account the effect of cash flow hedge accounting. Assuming an 8.5% change of the USD/PLN exchange rate, the effect of cash flow hedge accounting would potentially lead to a change of PLN (82.8)m/PLN 82.8m in the fair value of borrowings.

The above deviations of carrying amounts in the złoty that are dependent on currency exchange rates were calculated on the basis of the implied annual exchange rate volatility for December 31st 2021, which was 8.5% for USD/PLN and 5.575% for EUR/PLN, as published by Reuters. The sensitivity analysis was performed with reference to the balance of instruments held as at December 31st 2021.

Analysis of the sensitivity to currency risk as at December 31st 2020, showing the effect of a +/- 9.188% change in the USD/PLN exchange rate and a +/- 5.475% change in the EUR/PLN exchange rate on net profit or loss

Dec 31 2020	Effect of exchange rate increase/decrease on net profit/loss for the year in 2020			
	+9.188%	+5.475%	-9.188%	-5.475%
	USD	EUR	USD	EUR
Financial assets				
Derivative financial instruments	(21.8)	0.9	21.8	(0.9)
Trade receivables	10.9	0.2	(10.9)	(0.2)
Cash and cash equivalents	2.1	7.2	(2.1)	(7.2)
Other financial assets:	1.1	0.8	(1.1)	(0.8)
Security deposits (margins)	-	0.8	-	(0.8)
Loans to related entities	0.2	-	(0.2)	-
Commission fees on conditional loan	0.9	-	(0.9)	-
Total financial assets	(7.7)	9.1	7.7	(9.1)
Financial liabilities				
Bank borrowings	35.2 (1)	1.5	(35.2)	(1.5)
Derivative financial instruments	32.5	5.0	(32.5)	(5.0)
Trade payables	104.2	3.6	(104.2)	(3.6)
Other financial liabilities	1.1	0.9	(1.1)	(0.9)
Total financial liabilities	173.0	11.0	(173.0)	(11.0)
Total	(180.7)	(1.9)	180.7	1.9

(1) The calculation of the effect of an exchange rate movement on the balance-sheet item takes into account the effect of cash flow hedge accounting. Assuming a 9.188% change of the USD/PLN exchange rate, the effect of cash flow hedge accounting would potentially lead to a change of PLN (110.5)m/PLN 110.5m in the fair value of borrowings.

The above deviations of carrying amounts in the złoty that are dependent on currency exchange rates were calculated on the basis of the implied annual exchange rate volatility for December 31st 2020, which was 9.188% for USD/PLN and 5.475% for EUR/PLN, as published by Reuters. The sensitivity analysis was performed with reference to the balance of instruments held as at December 31st 2020.

11.2.4 Interest rate risk

Grupa LOTOS S.A is exposed to the risk of changes in cash flows caused by interest rate movements, as interest income and expense related to certain assets and liabilities accrues based on floating interest rates. This is driven primarily by the expected facility repayment schedules, as well as the amount of interest computed by reference to the floating LIBOR USD rate. The Company manages the interest rate risk within the set limits using interest rate swaps.

As at December 31st 2021 and December 31st 2020, Grupa LOTOS S.A. had no open derivative interest rate transactions.

Reform of interest rate benchmarks (IBOR Reform)

Issued by the European Parliament and the Council (EU) in 2016, the so-called BMR Regulation introduced new rules on the setting and use of reference rates, as well as on the operation and supervision of entities that prepare indices and make them available to other market participants. Alignment with the principles of the Regulation is expected to increase the safety of market participants by improving the reliability of indices and the transparency of their calculation methodology. Since January 2018, when the BMR Regulation came into force, EU member states have been working on the benchmark reform.

As a result of the reform, the method of calculation some interest rate benchmarks (e.g. WIBOR, EURIBOR) was adjusted to the requirements of the BMR Regulation. Therefore, they will continue to be prepared and provided, and there was no need to replace them with other indices. However, for some indices (e.g., LIBOR) the effect of the reform will be to phase out their calculation and publication, and thus there has been or will be a need to replace them with alternative indices.

The following table provides information on when selected benchmarks will cease to be provided and on proposed alternative benchmarks.

Benchmark	Maturities	Cessation date	Alternative benchmark
LIBOR CHF	O/N, 1W, 1M, 2M, 3M, 6M, 12M	Dec 31 2021	SARON
LIBOR EUR	O/N, 1W, 1M, 2M, 3M, 6M, 12M	Dec 31 2021	€STR
LIBOR GBP	O/N, 1W, 2M, 12M	Dec 31 2021	SONIA
LIBOR JPY	S/N, 1W, 2M, 12M	Dec 31 2021	TONA
USD LIBOR	1W, 2M	Dec 31 2021	SOFR
USD LIBOR	ON, 1M, 3M, 6M, 12M	Jun 30 2023	SOFR

Grupa LOTOS S.A. actively monitored the progress of the reform to the extent applicable to it, including with respect to the hedge accounting requirements, and took all decisions and actions necessary to implement the reform-related changes.

As at December 31st 2021, Grupa LOTOS S.A. did not have any financial instruments for which it would be necessary to adopt alternative reference rates as of January 1st 2022 following the cessation of the existing reference rates.

As a rule, the Company's financial instruments are based either on benchmarks that meet the requirements of the BMR Regulation and therefore there is no risk of transition to alternative benchmarks, or on USD LIBOR rates which will continue to be provided until June 30th 2023. The Company also holds cash deposited in bank accounts and the account used for the purposes of transactions on the ICE exchange, as well as lease contracts which are not exposed to the risks arising from the benchmark reform due to the applied mechanisms of determining interest rates.

Below is presented information on the Company's financial instruments exposed to interest rate risk which are based on benchmarks that are compliant with the BMR Regulation and therefore will continue to be provided and do not require transition to alternative benchmarks.

Benchmark	Type of financial instrument	Dec 31 2021
	Financial assets	657.3
WIBOR	Loans	657.3

The table below presents financial instruments held by the Company as at December 31st 2021 that are based on the USD LIBOR benchmark whose provision is to be discontinued on June 30th 2023.

Benchmark	Type of financial instrument	Termination date	Dec 31 2021
	Financial liabilities		1,378.9
3M USD LIBOR	Bank borrowings	Dec 16 2022	406.3
3M USD LIBOR	Bank borrowings	Jul 15 2024	972.6

In respect of the credit facility agreements entered into by Grupa LOTOS S.A. , where interest rates are based on USD LIBOR benchmarks, an analysis was made of the provisions stipulating the rules to be followed in the event of the cessation of the benchmarks. The relevant clauses were included either in the original wording of the agreements with financing providers or were incorporated in the agreements as amendments.

In principle, the relevant clauses of the facility agreements entered into by the Company stipulate that if the provision of USD LIBOR is discontinued, the benchmark will be replaced by an alternative index indicated by the regulator or by an index agreed by the parties. As the publication period of the USD LIBOR index has been extended until 30 June 2023, such alternative indices have not yet been determined for the facility agreements. In this regard, the Company remains in contact with its financial partners, and discussions regarding the choice of alternative benchmarks will continue in the following year.

The Company may continue to use the interest rate benchmarks previously applied in its hedge accounting calculations until the uncertainty arising from the interest rate benchmark reform no longer exists (pursuant to Annex 'Interest Rate Benchmark Reform' to Commission Regulation (EU) 2020/34 of January 15th 2020, describing temporary exceptions from applying specific hedge accounting requirements), and it intends to transition to new benchmarks as soon as the conditions set out in the Regulation are met. As the publication of USD LIBOR rates will not be discontinued until June 30th 2023, the Company has not yet made the transition to new benchmarks.

11.2.4.1 Sensitivity analysis: interest rate risk

Dec 31 2021	Note	Carrying amount	Change	
			+0.36%	-0.36%
Financial assets				
Cash and cash equivalents	10.6	672.8	2.4	(2.4)
Other financial assets:		657.3	2.4	(2.4)
Loans	10.4	657.3	2.4	(2.4)
Total		1,330.1	4.8	(4.8)
Financial liabilities				
Bank borrowings	10.8	1,378.9	5.0	(5.0)
Leases	10.8	34.7	0.1	(0.1)
Security deposit (margin)	10.12	86.6	0.3	(0.3)
Total		1,500.2	5.4	(5.4)

Dec 31 2020	Note	Carrying amount	Change	
			+0.11%	-0.11%
Financial assets				
Cash and cash equivalents	10.6	1,072.0	1.2	(1.2)
Other financial assets:		215.6	0.2	(0.2)
Loans	10.4	199.8	0.2	(0.2)
Security deposits (margins)	10.3	15.8	-	-
Total		1,287.6	1.4	(1.4)
Financial liabilities				
Bank borrowings	10.8	1,612.6	1.8	(1.8)
Leases	10.8	154.9	0.2	(0.2)
Total		1,767.5	2.0	(2.0)

The sensitivity analysis was performed for the instruments held as at December 31st 2021 and December 31st 2020. The effect of the interest rate changes on the fair value was examined assuming that the currency exchange rates remain unchanged. In the case of derivative instruments held as at December 31st 2021 and December 31st 2020, for the purpose of interest rate sensitivity analysis the interest rate curve was moved up or down by the historical annual volatility for December 31st 2021 and December 31st 2020, calculated based on historical volatility data for interest rates on interest rate swaps expiring in one year, as published by Reuters.

11.2.5 Liquidity risk

The liquidity risk management process at the Company consists in monitoring projected cash flows and the portfolio of financial assets and liabilities, matching maturities of the assets and liabilities, analysing working capital, and optimising cash flows within the Group. This process requires that units operating in different business areas closely cooperate in activities undertaken in order to ensure safe and effective allocation of the liquidity.

The majority of the Group's Polish subsidiaries participate in a physical cash pooling arrangement, whereby Grupa LOTOS S.A. manages the subsidiaries' structure on an ongoing basis to optimise liquidity and interest balances.

In the period covered by the budget, liquidity is monitored on an ongoing basis across the Group as part of the financial risk management process. In the mid- and long term, it is monitored as part of the planning process, which helps to develop a long-term financial strategy.

In the area of financial risk, in addition to active management of market risk, the Company applies the following liquidity management rules:

- no margins in derivative financial instrument trading on the OTC market,
- limited possibility of early termination of financial transactions,
- limits for low-liquidity spot financial instruments,
- credit risk limits for counterparties in financial and trade transactions,
- ensuring adequate availability of diversified sources of funding of appropriate structure and quality,
- internal control processes and organisational efficiency facilitating prompt contingency response.

As at December 31st 2021 and December 31st 2020, the maturities of financial liabilities were as follows:

(PLNm)

Maturities of financial liabilities	Note	Carrying amount	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Dec 31 2021								
Bank borrowings (other than overdraft facilities)	10.8	1,378.9	1,399.7	578.0	166.2	329.6	325.9	-
Leases	10.8	34.7	120.6	2.7	0.7	2.6	6.0	108.6
Trade payables	10.12	2,467.5	2,467.5	2,467.5	-	-	-	-
Other financial liabilities	10.12	126.3	126.3	117.1	-	2.4	6.8	-
Total		4,007.4	4,114.1	3,165.3	166.9	334.6	338.7	108.6
Dec 31 2020								
Bank borrowings (other than overdraft facilities)	10.8	1,390.4	1,421.0	348.3	156.1	614.8	301.8	-
Overdraft facilities	10.8	222.2	222.2	222.2	-	-	-	-
Leases	10.8	154.9	540.6	30.3	1.4	9.4	23.8	475.7
Trade payables	10.12	1,657.6	1,657.6	1,657.6	-	-	-	-
Other financial liabilities	10.12	63.5	63.5	52.2	-	2.1	6.8	2.4
Total		3,488.6	3,904.9	2,310.6	157.5	626.3	332.4	478.1

Maturities of derivative financial instruments	Note	Carrying amount*	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Dec 31 2021								
Commodity swap	10.10	22.1	22.1	3.8	12.7	5.6	-	-
Currency forward and spot contracts		(9.7)	(9.7)	(10.6)	0.9	-	-	-
Currency swap		(4.2)	(4.2)	(8.6)	4.4	-	-	-
Futures (CO_2 emissions)		176.4	176.4	(0.2)	48.0	54.1	74.5	-
Total		184.6	184.6	(15.6)	66.0	59.7	74.5	-
Dec 31 2020								
Commodity swap	10.10	27.9	27.9	7.5	20.3	0.1	-	-
Currency forward and spot contracts		1.0	1.0	1.0	-	-	-	-
Currency swap		12.1	12.1	12.1	-	-	-	-
Futures (CO_2 emissions)		14.8	14.8	14.8	-	-	-	-
Total		55.8	55.8	35.4	20.3	0.1	-	-

* Carrying amount (fair value gains on derivative financial instruments less fair value losses on derivative financial instruments) represents the fair value of derivative financial instruments disclosed in the statement of financial position.

11.2.6 Credit risk

Management of credit risk in financial transactions consists in the verification of creditworthiness of the current and potential counterparties and monitoring of credit exposures against the granted limits.

Credit exposure includes bank deposits, cash balances in bank accounts, measurement of derivative financial instruments, and granted security.

The counterparties must have an appropriate credit rating assigned by leading rating agencies or hold guarantees from institutions meeting the minimum acceptable rating requirement. The Company enters into financial transactions with reputable firms with sound credit standing, and diversifies the group of institutions with which it maintains relationships.

As at December 31st 2021 and December 31st 2020, the concentration of credit risk exposure to any single counterparty in financial transactions of Grupa LOTOS S.A. did not exceed PLN 577.5m and PLN 380m, respectively (3.18% and 6.11% of the Company's equity, respectively).

As regards management of counterparty risk in non-financial transactions, all customers who request trading on credit terms are subject to credit assessment, whose results determine the possible credit limit amounts. The Company uses an internal rating model to support the process of assigning limits to trading partners. The Company defines guidelines for managing counterparty risk in non-financial transactions to ensure that appropriate standards of credit analysis and operational security are observed across the Group.

As at December 31st 2021 and December 31st 2020, the concentration of credit risk exposure to any single counterparty in the Company's trade transactions did not exceed PLN 335m and PLN 206.8m, respectively (2.81% and 2.19% of the Company's equity).

Credit risk is measured by the maximum exposure to risk of each class of financial assets. Carrying amounts of financial assets represent the maximum credit risk exposure.

Maximum credit risk exposure of financial assets	Note	Dec 31 2021	Dec 31 2020
Shares	10.2	294.0	306.3
Derivative financial instruments (assets)	10.10	216.8	67.1
Trade receivables	10.3	2,964.0	1,445.4
Cash and cash equivalents	10.6	672.8	1,072.0
Other financial assets:		677.2	227.7
Loans	10.4	657.3	199.8
Security deposits (margins)	10.3	0.2	17.1
Commission fees on conditional loan	10.3	-	10.0
Other	10.3	19.7	0.8
Total		**4,824.8**	3,118.5

In the Management Board's opinion, the risk related to non-performing financial assets is reflected in the recognised impairment losses. For information on impairment of financial assets, see Notes 9.8 and 10.3.1.

For discussion of credit risk concentrations for trade receivables, see Note 10.3.1.
For ageing of trade receivables and expected credit losses, see Note 10.3.1.
For ageing of receivables past due but not impaired, see Note 10.3.1.

12. Other notes

12.1 Contingent liabilities and assets

Accounting policies

In line with the policies applied by the Company, consistent with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, a contingent liability is understood as:

- *a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity, or*
- *a present obligation that arises from past events but is not recognised in the financial statements because:*
  - *(i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation, or*
  - *(ii) the amount of the obligation cannot be measured with sufficient reliability.*

Contingent liabilities are not recognised in the statement of financial position, however information on contingent liabilities is disclosed, unless the likelihood of the outflow of resources embodying economic benefits is negligible.

In compliance with the IFRSs, the Company defines a contingent asset as a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

Contingent receivables are not recognised in the statement of financial position, but information on them is disclosed if the inflow of resources embodying economic benefits is likely to occur.

Examples of contingent assets and liabilities include liabilities or receivables related to pending court disputes whose future impacts are neither known nor fully controlled by the entity. For more information on pending court proceedings and other contingent liabilities, see Note 12.1.1 and Note 12.1.2, respectively.

12.1.1 Material court, arbitration or administrative proceedings and other risks

Tax settlements

The Company's tax settlements are subject to customs and tax inspections carried out by competent authorities. As at December 31st 2021, the Company disclosed a provision for tax risk, recognised in connection with such proceedings, of PLN 91.4m (December 31st 2020: PLN 87.3m).

After the reporting period, on January 21st 2022 the Company was notified of the results of two revenue and customs inspections for the period January–October 2014 and October–December 2015, issued on January 7th 2022. As a result of these inspections, input VAT settlements by the Company, for a total amount of PLN 23.3m (net of interest), were questioned. The company has not filed corrections to the VAT returns for the aforementioned periods as required by the authority because it is of the opinion that there are arguments in favour of taking a different course of action. Due to the failure to submit the corrections by the Company, the tax authority (Head of the Pomeranian Customs and Fiscal Office in Gdynia) will initiate tax proceedings (transform customs and fiscal inspections into two tax proceedings) and issue decisions (both in the first and second instance). It will be possible to file complaints against the decision of the authority of second instance with the Provincial Administrative Court in Gdańsk, and if the court reaches an unfavourable verdict, it will be possible to file a cassation complaint with the Supreme Administrative Court.

In connection with a judgment by the Court of Justice of the European Union of October 16th 2019 in Case C-189/18 Glencore, on January 15th 2020 the Company filed a petition for resumption of proceedings in which the following decisions had been issued:

- decision by the Director of the Tax Chamber in Gdańsk, dated December 29th 2015, upholding the decision by the Director of the Tax Audit Office in Bydgoszcz, dated September 28th 2015, assessing the Company's VAT liabilities for individual months of 2010 at a total amount of PLN 48.4m,
- decision by the Director of the Tax Chamber in Gdańsk, dated February 29th 2016, upholding the decision by the Director of the Tax Audit Office in Bydgoszcz, dated September 28th 2015, assessing the Company's VAT liabilities for individual months of 2011 at a total amount of PLN 112.5m,
- decision by the Director of the Tax Administration Chamber in Gdańsk, dated October 25th 2018, upholding the decision by the Head of the Gdańsk Province Customs and Tax Office in Gdynia, dated January 19th 2018, assessing the Company's VAT liabilities for January 2012 at a total amount of PLN 7.3m,

and after resumption of the proceedings, for:

- reversal of the decisions by the tax authorities of both instances and discontinuation of the tax proceedings – with respect to the proceedings for 2010–2011;
- suspension of the proceedings until final conclusion of the court proceedings – with respect to the proceedings for 2012, in connection with proceedings pending before the Supreme Administrative Court, initiated by the Company's cassation complaint.

On October 8th 2020, the Head of the Tax Administration Chamber in Gdańsk upheld the decisions of the Head of the Tax Chamber in Gdańsk, dated December 29th 2015 and February 29th 2016. On November 23rd 2020, the Company appealed against the unfavourable decisions of the Head of the Tax Administration Chamber in Gdańsk. On December 23rd 2020, the Head of the Tax Administration Chamber in Gdańsk issued decisions refusing to revoke its decision of October 8th 2020, against which the Company filed complaints with the Provincial Administrative Court in Gdańsk. On June 15th 2021, the Provincial Administrative Court of Gdańsk dismissed the Company's complaints against refusal to reverse the final decisions concerning determination of VAT liabilities for the individual months of 2010 and 2011. On September 10th 2021, the Company appealed against the rulings of the Provincial Administrative Court of Gdańsk to the Supreme Administrative Courts.

In the twelve months ended December 31st 2021, there were no material settlements under court or other proceedings, save for those presented above.

12.1.2 Other contingent liabilities

In the period between the end of the previous financial year, i.e. December 31st 2020, and the date of issue of these financial statements, there were no changes in the Company's other material contingent liabilities, with the exception of sureties granted to subsidiaries (see Note 10.2.2).

12.2 Other related parties

12.2.1 Entity exercising control of the Company

As at December 31st 2021 and December 31st 2020, the State Treasury held a 53.19% interest in Grupa LOTOS S.A.

In connection with measures introduced to control the COVID-19 pandemic, in 2020 Grupa LOTOS S.A., acting in compliance with an order issued by the Polish Prime Minister pursuant to Art. 11.2 of the Act on Special Measures Related to Preventing, Counteracting and Combating COVID-19, Other Infectious Diseases and Related Crisis Situations of March 2nd 2020 (Dz. U. of 2020, item 1842), purchased personal protection equipment against COVID-19 and delivered it to the Material Reserves Agency. As at December 31st 2021, the Company did not disclose any outstanding receivables from the State Treasury under the transaction (December 31st 2020: PLN 45.8m).

In addition, by way of an administrative decision, Grupa LOTOS S.A. was ordered to build a temporary hospital as another form of support for the society provided by state-controlled entities. In the 12 months ended December 31st 2021, Grupa LOTOS S.A. incurred costs to build, equip and operate the hospital of PLN 37.9m (see Note 9.5), which are to be reimbursed to Grupa LOTOS S.A. under an agreement it signed with the State Treasury on April 6th 2021 (see Note 9.5). In the 12 months to December 31st 2021, the State Treasury approved costs for a total amount of PLN 36.4m (see Note 9.4).As at December 31st 2021, the amount of outstanding receivables under the agreement with the State Treasury was PLN 6.7m (see Note 12.2.4).

12.2.2 Transactions with related entities of which the State Treasury has control or joint control or on which the State Treasury has significant influence

In 2021 and 2020, Grupa LOTOS S.A. executed transactions with parties related to it through the State Treasury, the aggregate value of which was material. The Company identified transactions with entities related to it through the State Treasury based on the List of State-Owned Companies sourced from the official website of the Republic of Poland. The transactions were concluded at arm's length in the course of the Company's day-to-day business and involved mainly purchase and sale of fuels, purchase of crude oil and natural gas, energy and transport services.

	2021	2020
Sale	738.3	942.8
Purchases	1,944.5	1,362.6
	Dec 31 2021	Dec 31 2020
Receivables	56.9	75.1
Liabilities	84.8	158.9

In addition, as at December 31st 2021, the Company had borrowings from banks of which the State Treasury has control or joint control or over which it exercises significant influence, in the total amount of PLN 280.1m (from PKO BP S.A. and PEKAO S.A.) (December 31st2020: PLN 380.2m).

12.2.3 Remuneration of members of the Company's governing bodies and its key management staff

Remuneration paid to members of the Company's Management and Supervisory Boards	2021	2020
Management Board		
Short-term employee benefits (wages):	6.48	5.39
Zofia Paryła	1.20	0.85
Jarosław Wittstock	1.38	0.71
Piotr Walczak	0.85	0.17
Jarosław Wróbel	0.54	-
Krzysztof Nowicki	0.61	-
Marian Krzemiński	0.77 (1)	0.84
Artur Cieślik	0.36	0.20
Paweł Majewski	0.36	0.60
Jarosław Kawula	0.25	0.94 (2)
Mateusz Bonca	-	0.47 (1)
Patryk Demski	0.01	0.18 (1)
Robert Sobków	0.15	0.26 (1)
Mariusz Machajewski	-	0.17
Supervisory Board		
Short-term employee benefits (wages):	0.54	0.55
Piotr Ciach	0.08	0.08
Dariusz Figura	0.08	0.08
Beata Kozłowska-Chyła	0.10	0.10
Katarzyna Lewandowska	0.08	0.08
Adam Lewandowski	0.05	0.08
Grzegorz Rybicki	0.08	0.08
Katarzyna Maćkowska	0.04	-
Rafał Włodarski	0.03	-
Agnieszka Szklarczyk-Mierzwa	-	0.05
Total (3)	7.02	5.94
including variable remuneration paid:	2.58	1.34
Management Board		
Zofia Paryła	0.42	0.12
Jarosław Wittstock	0.70	-
Piotr Walczak	0.14	-
Marian Krzemiński	0.42	0.12
Artur Cieślik	0.15	-
Paweł Majewski	0.36	-
Jarosław Kawula	0.24	0.28
Mateusz Bonca	-	0.28
Patryk Demski	-	0.15
Robert Sobków	0.15	0.22
Mariusz Machajewski	-	0.17

Other employee benefits	Dec 31 2021	Dec 31 2020
Management Board		
Short-term variable remuneration payable (4):	3.49	2.91 (5)
Zofia Paryła	0.74	0.46
Jarosław Wittstock	0.69	0.70
Piotr Walczak	0.69	0.17
Jarosław Wróbel	0.57	-
Krzysztof Nowicki	0.64	-
Marian Krzemiński	0.07	0.42
Artur Cieślik	0.09	0.21
Paweł Majewski	-	0.38
Jarosław Kawula	-	0.30
Robert Sobków	-	0.27
Total	3.49	2.91

(1) Including non-compete compensation paid.

(2) Including a severance pay for termination of the management service contract and non-compete compensation.

(3) The amount reflects changes in the composition of the Company's Management and Supervisory Boards.

(4) Pursuant to the Act on Rules of Remunerating Persons Who Manage Certain Companies. Payment of variable remuneration is conditional on the achievement of targets set for the Management Board members and consent of the Supervisory Board.

(5) The amount includes short-term variable remuneration payable for 2019.

In 2020 and 2021, the Company did not enter into any material transactions with any Management Board or Supervisory Board members, did not advance any loans, make any advance payments, issue any guarantees to or conclude any other agreements with any Management Board or Supervisory Board member which would be advanced, made, issued or concluded otherwise than on an arm's length basis or which would have material bearing on these financial statements.

Based on representations submitted by members of the Company's Management and Supervisory Boards, in 2020 and 2021 the Company was not aware of any transactions concluded with the Company or another company of the LOTOS Group by the spouses, relatives, or relatives by affinity in the direct line up to the second degree, of members of the Management and Supervisory Boards or persons related to them through guardianship or adoption or other persons with whom they have personal relationships.

Remuneration paid to members of the key management staff (excluding members of the Management Board)	2021	2020
Short-term employee benefits (salaries)[1], including:	16.5	15.9
- annual bonus paid	3.5 [2]	2.2 [3]
- length-of-service award paid	-	0.1
Other employee benefits	Dec 31 2021	Dec 31 2020
Post-employment benefits, length-of-service awards and other benefits	2.8	10.0
Current liabilities under annual bonus	3.8	4.4
Total	6.6	14.4

[1] The amount of remuneration reflects changes in the Company's Collective Bargaining Agreement.
[2] Payment of the annual bonus for 2020.
[3] Payment of the annual bonus for 2019.

The Company did not advance any loans or provide any similar benefits to its key management staff in 2021 or 2020.

12.2.4 Transactions with related parties of members of the Management Board and the Supervisory Board

	2021	2020
Sale	36.4	-
Purchases	13.1	86.8
	Dec 31 2021	Dec 31 2020
Receivables	6.8	-
Liabilities	0.9	-

In 2021, Grupa LOTOS S.A. executed transactions with parties related to it through members of the Supervisory Board. The transactions were mainly involved purchase of third-party liability and property insurance (PLN 4.8m), purchase of natural gas (PLN 6.6m), and purchase of chemicals (PLN 1.6m). As at December 31st 2021, the amount of outstanding receivables under the transactions was PLN 0.9m.

In 2021, the Grupa LOTOS S.A. also signed an agreement with the State Treasury, related to it through members of the Supervisory Board, for reimbursement of cost incurred to build, equip and operate a temporary COVID-19 hospital. Under the agreement, in the reporting period the Company issued invoices for a total amount of PLN 36.4m. As at December 31st 2021, the amount of outstanding receivables under the agreement with the State Treasury was PLN 6.7m (see Note 12.2.1).

In 2020, Grupa LOTOS S.A. executed transactions with parties related to it through members of the Supervisory Board. The transactions were mainly involved purchase of third-party liability and property insurance (PLN 79.0m), purchase of transport services related to purchases of personal protective equipment (PLN 6.4m), and purchase of chemicals (PLN 1.4m). As at December 31st 2020, no balances were outstanding under these transactions.

In addition, as at 31 December 2021, the Company had a liability to a bank related through a member of the Supervisory Board, of PLN 178.6m (December 31st 2020: PLN 290.7m).

All transactions with parties related to the Group through Supervisory Board members were executed on an arm's length basis.

13. Significant events after to the reporting date

13.1 Execution of conditional sale agreements as part of implementation of the Remedies

On January 12th 2022, conditional sales agreements were signed as part of the implementation of the Remedies in the following business areas:

- fuel production and the fuel wholesale market,
- the biofuels market,
- the retail fuel market,
- the aviation fuel market,
- the bitumens market.

For more information on the agreements and the planned merger with Polski Koncern Naftowy ORLEN S.A., see Note 2.1.

13.2 Hostilities in Ukraine

On February 24th 2022, Russia attacked Ukraine, thereby initiating large-scale hostilities in Ukraine. The international community responded by introducing sanctions against Russia. As at the date of authorisation of these financial statements, it is not possible to predict how the armed conflict and the international response to the conflict will develop further.

Grupa LOTOS S.A. does not conduct any direct operations in Ukraine, Belarus or Russia.

The Company is closely monitoring developments on the ground and analysing its potential negative consequences. At present. it is not yet possible to reliably assess their impact on the Company's business in the future or to estimate the impact on the future financial statements of Grupa LOTOS S.A., as this is highly dependent on further development of the war in Ukraine, the reaction of the international community and their effect on the Polish economy and macroeconomic environment.

As at the date of authorisation of these financial statements, the Company did not observe any risk of interruption of the supply chain. The flow of the feedstock remains uninterrupted. The Company prepares for various scenarios, mainly through diversification of supplies from various directions, and the Company's diversification efforts are an ongoing process. Operationally, the Company is ready to pursue various alternative operating schemes and the refinery, being one of the most modern refineries in Europe, is technologically capable of processing different types of crude.

In the past, the Company experienced a disruption of pipeline deliveries of crude oil from the Russian direction during the so-called "chloride crisis", when deliveries were made by sea. The incident did not affect the continuity of production and the execution of sales contracts. The location of the Company's refinery significantly improves its flexibility in diversifying supply and distribution channels.

In addition, for March and April 2022, the Company planned lower demand for the feedstock due to the scheduled maintenance shutdown of the refinery. Supplies contracted for this purpose are secured and are being delivered.

The Company also holds mandatory reserves of its own and at the State Reserves Agency, which may be released when necessary, subject to approval by the state authorities, in order to secure supplies and thus ensure the country's energy security.

As at the date of authorisation of these financial statements, Grupa LOTOS S.A. performs all its commercial contracts in a timely and uninterrupted manner.

Credit exposure of Grupa LOTOS S.A. to Ukrainian, Belarusian and Russian institutions and entities is immaterial. Large-scale operational disruptions that could potentially entail liquidity constraints for certain entities may also have an adverse impact on the credit quality of various actors along the supply chain. As part of the credit risk management process, the Company monitors on an ongoing basis market developments and information on its customers that could suggest a deterioration of their financial standing and adjusts the structure of credit limits when and as needed. Based on its analyses, the Company has not identified any need to update the assumptions used to assess the expected credit losses after the end of the reporting period and until the date of authorisation of these financial statements.

The events described above do not necessitate an adjustments in these financial statements of Grupa LOTOS S.A. for 2021. At present, the Company does not identify any indication that it may not be able to continue as a going concern as a result of this situation. At the same time, the Company is not able to reliably estimate its possible effects on future financial statements.

14. Financial statements by types of energy business – selected items

As an energy company, Grupa LOTOS S.A., acting in compliance with Art. 44 of the Act Amending the Energy Law and Certain Other Acts, dated July 26th 2013 (Dz.U. of 2013, item 984), identifies six types of the energy business, for which it separately records revenue and expenses, profits and losses, as well as items of the statement of financial position.

In accordance with the licences it has been granted, the Company's energy business comprises:

- gas fuel trading,
- distribution of gas fuels,
- generation of energy in the form of heat,
- transmission of energy in the form of heat,
- transmission of electricity,
- electricity trading.

Revenue from sale of the energy products and costs of the energy products are allocated directly to the respective types of the energy business, whereas the general overhead costs, other income and expenses and finance income and costs are apportioned based on appropriate allocation keys. Costs are distributed proportionately to the cost of products sold, while revenue – according to net revenue.

Items of the statement of financial position are allocated directly to the respective types of the energy business, or apportioned based on appropriate allocation keys.

Property, plant and equipment and intangible assets relate directly to assets used for production or transmission of energy and gas fuels. Their value has been assigned to the individual types of the energy business based on the ratio of the energy volume sold to the energy volume produced and the ratio of the volume of gas fuel sold to the volume of gas fuel purchased.

Deferred tax assets or liabilities include deferred tax related to employee benefit obligations and the difference between tax and accounting depreciation/ amortisation of assets used in energy production. These items have been apportioned to the respective types of the energy business based on the volume ratio defined above.

Inventories assigned to the energy business include materials. The key to their allocation is the ratio of the cost of energy products sold to total cost of all products sold.

Receivables are assigned directly to the individual types of the energy business on the basis of sale invoices.

Cash and cash equivalents have been allocated to the respective types of the energy business pro rata to revenue generated from this business.

The line item 'Retained earnings' includes net profits or losses from the individual types of the energy business as reported in the statement of comprehensive income, accumulated profits brought forward and the balancing items of assets and liabilities.

Employee benefits and other liabilities and provisions have been apportioned among the individual types based on the ratio of the energy volume sold to the energy volume produced and the ratio of the volume of gas fuel sold to the volume of gas fuels purchased.

For trade payables, the allocation key is the ratio of the cost of energy products sold to total cost of all products sold. In the case of trade in electricity and gas fuels, trade payables are allocated directly to individual activities based on purchase invoices.

The Company earned no income from exercising ownership rights to the transmission network in 2021 or 2020.

The full-year statement of comprehensive income for 2021 and the statement of financial position as at December 31st 2021 by types of the energy business, with selected additional notes, are presented below.

(PLNm)

	Note	2021	2020
Revenue	9.1	29,036.2	17,736.9
- from principal business activities		28,858.1	17,623.0
- from gas trading business		126.2	49.8
- from gas fuel distribution business		5.0	6.1
- from heat generation business		23.7	27.2
- from heat transmission business		2.4	3.0
- from electricity transmission business		5.5	6.5
- from electricity trading business		15.3	21.3
Cost of sales	9.2	(25,500.6)	(18,202.4)
- from principal business activities		(25,314.0)	(18,093.8)
- from gas trading business		(125.4)	(48.8)
- from gas fuel distribution business		(5.5)	(5.3)
- from heat generation business		(28.8)	(26.5)
- from heat transmission business		(2.5)	(3.6)
- from electricity transmission business		(6.3)	(5.8)
- from electricity trading business		(18.1)	(18.6)
Gross profit/(loss)		3,535.6	(465.5)
- from principal business activities		3,544.1	(470.8)
- from gas trading business		0.8	1.0
- from gas fuel distribution business		(0.5)	0.8
- from heat generation business		(5.1)	0.7
- from heat transmission business		(0.1)	(0.6)
- from electricity transmission business		(0.8)	0.7
- from electricity trading business		(2.8)	2.7
Selling expenses	9.2	(702.1)	(743.2)
- from principal business activities		(702.1)	(743.2)
- from gas trading business		-	-
- from gas fuel distribution business		-	-
- from heat generation business		-	-
- from heat transmission business		-	-
- from electricity transmission business		-	-
- from electricity trading business		-	-
Administrative expenses	9.2	(281.6)	(279.0)
- from principal business activities		(279.5)	(277.3)
- from gas trading business		(1.4)	(0.7)
- from gas fuel distribution business		(0.1)	(0.1)
- from heat generation business		(0.3)	(0.4)
- from heat transmission business		-	(0.1)
- from electricity transmission business		(0.1)	(0.1)
- from electricity trading business		(0.2)	(0.3)
Other income		46.8	44.8
- from principal business activities		46.6	44.8
- from gas trading business		0.2	-
- from gas fuel distribution business		-	-
- from heat generation business		-	-
- from heat transmission business		-	-
- from electricity transmission business		-	-
- from electricity trading business		-	-
Other expenses		(71.2)	(69.6)
- from principal business activities		(70.8)	(69.6)
- from gas trading business		(0.3)	-
- from gas fuel distribution business		-	-
- from heat generation business		(0.1)	-
- from heat transmission business		-	-
- from electricity transmission business		-	-
- from electricity trading business		-	-
Operating profit/(loss)		2,527.5	(1,512.5)
- from principal business activities		2,538.3	(1,516.1)
- from gas trading business		(0.7)	0.3
- from gas fuel distribution business		(0.6)	0.7
- from heat generation business		(5.5)	0.3
- from heat transmission business		(0.1)	(0.7)
- from electricity transmission business		(0.9)	0.6
- from electricity trading business		(3.0)	2.4

(PLNm)

	Note	2021	2020
Finance income		605.5	425.2
- from principal business activities		601.8	422.9
- from gas trading business		2.6	1.0
- from gas fuel distribution business		0.1	0.1
- from heat generation business		0.5	0.6
- from heat transmission business		0.1	-
- from electricity transmission business		0.1	0.1
- from electricity trading business		0.3	0.5
Finance costs		(94.2)	(51.0)
- from principal business activities		(93.5)	(50.8)
- from gas trading business		(0.5)	(0.1)
- from gas fuel distribution business		-	-
- from heat generation business		(0.1)	(0.1)
- from heat transmission business		-	-
- from electricity transmission business		-	-
- from electricity trading business		(0.1)	-
Profit/(loss) before tax		3,038.8	(1,138.3)
- from principal business activities		3,046.6	(1,144.0)
- from gas trading business		1.4	1.2
- from gas fuel distribution business		(0.5)	0.8
- from heat generation business		(5.1)	0.8
- from heat transmission business		(0.0)	(0.7)
- from electricity transmission business		(0.8)	0.7
- from electricity trading business		(2.8)	2.9
Income tax	9.9.1	(518.9)	256.9
- from principal business activities		(518.6)	258.0
- from gas trading business		(0.3)	(0.2)
- from gas fuel distribution business		-	(0.1)
- from heat generation business		-	(0.1)
- from heat transmission business		-	-
- from electricity transmission business		-	(0.1)
- from electricity trading business		-	(0.6)
Net profit/(loss)		2,519.9	(881.4)
- from principal business activities		2,528.0	(886.0)
- from gas trading business		1.1	1.0
- from gas fuel distribution business		(0.5)	0.7
- from heat generation business		(5.1)	0.7
- from heat transmission business		(0.0)	(0.7)
- from electricity transmission business		(0.8)	0.6
- from electricity trading business		(2.8)	2.3

(PLNm)

	Note	2021	2020
ASSETS			
Non-current assets			
Property, plant and equipment	10.1.1	224.7	5,474.6
- principal business activities		224.7	5,439.8
- gas fuel trading business		-	-
- gas distribution business		-	0.2
- heat generation business		-	10.5
- heat transmission business		-	8.4
- electricity transmission business		-	15.7
- electricity trading business		-	-
Intangible assets	10.1.3	45.1	77.7
- principal business activities		45.1	77.6
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	-
- heat transmission business		-	0.1
- electricity transmission business		-	-
- electricity trading business		-	-
Shares	10.2	8,012.8	3,293.0
Deferred tax assets	9.9.3	170.5	-
- principal business activities		170.5	-
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	-
- heat transmission business		-	-
- electricity transmission business		-	-
- electricity trading business		-	-
Derivative financial instruments	10.10	135.2	1.2
Loans	10.4	543.3	198.9
Other non-current assets	10.3	0.7	26.2
Total non-current assets		9,132.3	9,071.6
- principal business activities		9,132.3	9,036.7
- gas fuel trading business		-	-
- gas distribution business		-	0.2
- heat generation business		-	10.5
- heat transmission business		-	8.5
- electricity transmission business		-	15.7
- electricity trading business		-	-

(PLNm)

	Note	2021	2020
Current assets			
Inventories	10.5	4,976,0	3,193.7
- principal business activities		4,975,8	3,193.2
- *including emergency stocks*		*3,437,4*	*2,151.4*
- gas fuel trading business		0,2	-
- gas distribution business		-	0.1
- heat generation business		-	0.3
- heat transmission business		-	-
- electricity transmission business		-	0.1
- electricity trading business		-	-
Trade receivables	10.3	2,964,0	1,445.4
- principal business activities		2,964,0	1,430.4
- gas fuel trading business		-	7.6
- gas distribution business		-	0.7
- heat generation business		-	3.3
- heat transmission business		-	0.4
- electricity transmission business		-	0.7
- electricity trading business		-	2.3
Current tax assets		-	180.0
Derivative financial instruments	10.10	81,6	65.9
Other current assets		198,1	121.3
Cash and cash equivalents	10.6	672,8	1,072.0
- principal business activities		672,5	1,063.2
- gas fuel trading business		0,3	4.4
- gas distribution business		-	0.5
- heat generation business		-	1.6
- heat transmission business		-	0.2
- electricity transmission business		-	0.3
- electricity trading business		-	1.8
Total current assets		8,892,5	6,078.3
- principal business activities		8,892,0	6,054.0
- gas fuel trading business		0,5	12.0
- gas distribution business		-	1.3
- heat generation business		-	5.2
- heat transmission business		-	0.6
- electricity transmission business		-	1.1
- electricity trading business		-	4.1
Non-current assets (or disposal groups) held for sale		-	-
Total assets		18,024,8	15,149.9
- principal business activities		18,024,3	15,090.7
- gas fuel trading business		0,5	12.0
- gas distribution business		-	1.5
- heat generation business		-	15.7
- heat transmission business		-	9.1
- electricity transmission business		-	16.8
- electricity trading business		-	4.1

(PLNm)

	Note	2021	2020
EQUITY AND LIABILITIES			
Equity			
Share capital	10.7.1	184.9	184.9
Share premium	10.7.2	2,228.3	2,228.3
Cash flow hedging reserve	10.7.3	(53.3)	(24.4)
Revaluation reserve		(10)	-
Retained earnings	10.7.4	9,585.0	7,060.6
- principal business activities		9,584.8	7,012.0
- gas fuel trading business		0.2	7.6
- gas distribution business		-	0.9
- heat generation business		-	14.6
- heat transmission business		-	9.1
- electricity transmission business		-	15.7
- electricity trading business		-	0.7
Total equity		11,934.9	9,449.4
- principal business activities		11,934.7	9,400.8
- gas fuel trading business		0.2	7.6
- gas distribution business		-	0.9
- heat generation business		-	14.6
- heat transmission business		-	9.1
- electricity transmission business		-	15.7
- electricity trading business		-	0.7
Non-current liabilities			
Borrowings and lease liabilities	10.8	681.2	1,027.2
Derivative financial instruments	10.10	1.1	1.0
Deferred tax liabilities	9.9.3	-	112.5
- principal business activities		-	111.6
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	0.3
- heat transmission business		-	(0.1)
- electricity transmission business		-	0.7
- electricity trading business		-	-
Employee benefit obligations	10.11	35.5	85.3
- principal business activities		35.5	84.8
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	0.4
- heat transmission business		-	-
- electricity transmission business		-	0.1
- electricity trading business		-	-
Other liabilities and provisions	10.12	13.3	13.4
Total non-current liabilities		731.1	1,239.4
- principal business activities		731.1	1,238.0
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	0.7
- heat transmission business		-	(0.1)
- electricity transmission business		-	0.8
- electricity trading business		-	-

(PLNm)

	Note	2021	2020
Current liabilities			
Bank borrowings and lease liabilities	10.8	732.4	740.3
Derivative financial instruments	10.10	31.1	10.3
Trade payables	10.12	2,467.5	1,657.6
- principal business activities		2,467.5	1,648.3
- gas fuel trading business		-	4.4
- gas distribution business		-	0.6
- heat generation business		-	0.4
- heat transmission business		-	0.1
- electricity transmission business		-	0.4
- electricity trading business		-	3.4
Current tax liabilities		33.8	-
Employee benefit obligations	10.11	38.9	76.0
- principal business activities		38.9	75.9
- gas fuel trading business		-	-
- gas distribution business		-	-
- heat generation business		-	0.1
- heat transmission business		-	-
- electricity transmission business		-	-
- electricity trading business		-	-
Other liabilities and provisions	10.12	2,055.1	1,976.9
- principal business activities		2,054.8	1,976.8
- gas fuel trading business		0.3	-
- gas distribution business		-	-
- heat generation business		-	0.1
- heat transmission business		-	-
- electricity transmission business		-	-
- electricity trading business		-	-
Total current liabilities		5,358.8	4,461.1
- principal business activities		5,358.5	4,451.6
- gas fuel trading business		0.3	4.4
- gas distribution business		-	0.6
- heat generation business		-	0.6
- heat transmission business		-	0.1
- electricity transmission business		-	0.4
- electricity trading business		-	3.4
Total liabilities		6,089.9	5,700.5
- principal business activities		6,089.6	5,689.6
- gas fuel trading business		0.3	4.4
- gas distribution business		-	0.6
- heat generation business		-	1.3
- heat transmission business		-	-
- electricity transmission business		-	1.2
- electricity trading business		-	3.4
Total equity and liabilities		18,024.8	15,149.9
- principal business activities		18,024.3	15,090.4
- gas fuel trading business		0.5	12.0
- gas distribution business		-	1.5
- heat generation business		-	15.9
- heat transmission business		-	9.1
- electricity transmission business		-	16.9
- electricity trading business		-	4.1

14.1 Income and expenses

14.1.1 Revenue

	Note	2021	2020
Revenue from sale of products	9.1	29,008.5	17,808.9
Revenue from rendering of services	9.1	230.1	222.0
- with respect to heat generation		23.7	27.2
- with respect to heat transmission		2.4	3.0
- with respect to electricity transmission		5.5	6.5
- gas fuel distribution		5.0	6.1
- other		193.5	179.2
Total revenue from sale of products and rendering of services	9.1	29,238.6	18,030.9
Revenue from sale of merchandise and materials			
- gas fuels		126.2	49.8
- electricity		15.3	21.3
- other merchandise and materials		409.6	241.8
Total revenue from sale of merchandise and materials	9.1	551.1	312.9
Total revenue from contracts with customers		29,789.7	18,343.8
Effect of cash flow hedge accounting	9.1	(34.0)	(240.2)
Leases	9.1	(719.5)	(366.7)
Total revenue	9.1	29,036.2	17,736.9
- including from related entities	9.1	17,833.4	10,575.1

14.1.2 Costs by nature of expense

	Note	2021	2020
Depreciation and amortisation	9.2	344.0	403.3
- from principal business activities		342.9	400.7
- from gas trading business		0.1	-
- from gas fuel distribution business		-	0.1
- from heat generation business		-	0.8
- from heat transmission business		-	0.4
- from electricity transmission business		1.0	1.3
- from electricity trading business		-	-
Raw materials and consumables used	9.2	24,303.9	15,930.1
- from principal business activities		24,275.6	15,910.7
- from gas trading business		-	-
- from gas fuel distribution business		-	-
- from heat generation business		27.9	18.7
- from heat transmission business		0.1	0.4
- from electricity transmission business		0.3	0.3
- from electricity trading business		-	-
Services	9.2	1,485.9	974.1
- from principal business activities		1,472.6	955.8
- from gas trading business		0.4	0.2
- from gas fuel distribution business		5.3	5.0
- from heat generation business		0.7	6.7
- from heat transmission business		2.1	2.5
- from electricity transmission business		4.7	3.8
- from electricity trading business		0.1	0.1
Taxes and charges	9.2	543.2	652.6
- from principal business activities		542.8	652.1
- from gas trading business		-	-
- from gas fuel distribution business		-	0.1
- from heat generation business		0.1	-
- from heat transmission business		0.2	0.2
- from electricity transmission business		0.1	0.2
- from electricity trading business		-	-
Employee benefits expense	9.2; 9.3	291.2	314.0
- from principal business activities		289.4	311.9
- from gas trading business		0.8	0.5
- from gas fuel distribution business		0.2	0.2
- from heat generation business		0.4	0.7
- from heat transmission business		-	0.2
- from electricity transmission business		0.3	0.3
- from electricity trading business		0.1	0.2

	Note	2021	2020
Other costs by nature of expense	9.2	133.6	117.3
- from principal business activities		133.6	117.3
- from gas trading business		-	-
- from gas fuel distribution business		-	-
- from heat generation business		-	-
- from heat transmission business		-	-
- from electricity transmission business		-	-
- from electricity trading business		-	-
Merchandise and materials sold	9.2	381.9	272.5
- from principal business activities		238.4	205.1
- from gas trading business		125.4	48.8
- from electricity trading business		18.1	18.6
Total costs by nature of expense	9.2	27,483.7	18,663.9
- from principal business activities		27,295.3	18,553.6
- from gas trading business		126.7	49.5
- from gas fuel distribution business		5.5	5.4
- from heat generation business		29.1	26.9
- from heat transmission business		2.4	3.7
- from electricity transmission business		6.4	5.9
- from electricity trading business		18.3	18.9
Change in products and adjustments to cost of sales		(999.4)	560.7
Total	9.2	26,484.3	19,224.6
- from principal business activities		26,295.9	19,114.3
- from gas trading business		126.7	49.5
- from gas fuel distribution business		5.5	5.4
- from heat generation business		29.1	26.9
- from heat transmission business		2.4	3.7
- from electricity transmission business		6.4	5.9
- from electricity trading business		18.3	18.9

14.1.3 Other income

	2021	2020
Other income	46.8	44.8
- from principal business activities	46.6	44.8
- from gas trading business	0.2	-
- from gas fuel distribution business	-	-
- from heat generation business	-	-
- from heat transmission business	-	-
- from electricity transmission business	-	-
- from electricity trading business	-	-

14.1.4 Other expenses

	2021	2020
Other expenses	(71.2)	(69.6)
- from principal business activities	(70.8)	(69.6)
- from gas trading business	(0.3)	-
- from gas fuel distribution business	-	-
- from heat generation business	(0.1)	-
- from heat transmission business	-	-
- from electricity transmission business	-	-
- from electricity trading business	-	-

AUTHORISATION OF THE FINANCIAL STATEMENTS

These financial statements were authorised for issue by the Management Board on March 21st 2022.

Signatures of the Management Board members and the person responsible for keeping the accounting books of Grupa LOTOS S.A.

President of the Management Board	Zofia Paryła
Vice President of the Management Board, Chief Investment and Innovation Officer	Jarosław Piotr Wróbel
Vice President of the Management Board, Chief Refining and Marketing Officer	Piotr Aleksander Walczak
Vice President of the Management Board, Corporate Affairs	Jarosław Wittstock
Vice President of the Management Board, Mergers and Acquisitions	Krzysztof Nowicki
Finance and Accounting Centre Director - Chief Accountant	Magdalena Skibińska