POLISH FINANCIAL SUPERVISION AUTHORITY

Consolidated annual report SRR 2022

(in accordance with § 60 sec. 2 of the Decree regarding current and periodic information)

for issuers of securities involved in production, construction, trade or services activities

for the financial year **2022** comprising the period from **1 January 2022** to **31 December 2022** containing the consolidated financial statements according to International Financial Reporting Standards in PLN.

publication date: 22 March 2023

KGHM Polska Miedź Spółka Akcyjna
(name of the issuer)

KGHM Polska Miedź S.A.	**Mining**
(name of the issuer in brief)	(issuer branch title per the Warsaw Stock Exchange)
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(postal code)	(city)
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PricewaterhouseCoopers Polska Spółka z ograniczoną odpowiedzialnością Audyt Sp.k.
(auditing company)

SELECTED FINANCIAL DATA		in PLN mn		in EUR mn	
		2022	2021	2022	2021
I.	Revenues from contracts with customers	33 847	29 803	7 219	6 511
II.	Profit on sales	4 344	4 710	927	1 029
III.	Profit before income tax	6 489	7 824	1 384	1 709
IV.	Profit for the period	4 774	6 155	1 018	1 345
V.	Profit for the period attributable to shareholders of the Parent Entity	4 772	6 156	1 018	1 345
VI.	Profit for the period attributable to non-controlling interest	2	(1)	-	-
VII.	Other comprehensive income	871	217	186	47
VIII.	Total comprehensive income	5 645	6 372	1 204	1 392
IX.	Total comprehensive income attributable to shareholders of the Parent Entity	5 643	6 372	1 204	1 392
X.	Total comprehensive income attributable to non-controlling interest	2	-	-	-
XI.	Number of shares issued	200 000 000	200 000 000	200 000 000	200 000 000
XII.	Earnings per ordinary share attributable to shareholders of the Parent Entity	23.86	30.78	5.09	6.73
XIII.	Net cash generated from operating activities	2 464	4 266	526	932
XIV.	Net cash used in investing activities	(2 695)	(2 526)	(575)	(552)
XV.	Net cash used in financing activities	(446)	(2 200)	(95)	(481)
XVI.	Total net cash flow	(677)	(460)	(144)	(101)
XVII.	Non-current assets	40 379	36 664	8 610	7 971
XVIII.	Current assets	13 065	11 363	2 786	2 471
XIX.	Total assets	53 444	48 027	11 396	10 442
XX.	Non-current liabilities	12 113	11 351	2 584	2 468
XXI.	Current liabilities	9 185	9 538	1 958	2 074
XXII.	Equity	32 146	27 138	6 854	5 900
XXIII.	Equity attributable to shareholders of the Parent Entity	32 089	27 046	6 842	5 880
XXIV.	Equity attributable to non-controlling interest	57	92	12	20

Average EUR/PLN exchange rate announced by the National Bank of Poland

	2022	2021
Average exchange rate for the period*	4.6883	4.5775
Exchange rate at the end of the period	4.6899	4.5994

**Exchange rates are the arithmetical average of the current average exchange rates announced by the National Bank of Poland on the last day of each month respectively of 2022 and 2021.*

Polish Financial Supervision Authority

This report is a direct translation from the original Polish version.
In the event of differences resulting from the translation, reference should be made to the official Polish version

CONSOLIDATED FINANCIAL STATEMENTS FOR 2022

Lubin, March 2023

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CONSOLIDATED STATEMENT OF PROFIT OR LOSS

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 2.3	Revenues from contracts with customers	33 847	29 803
Note 4.1	Cost of sales	(27 541)	(23 529)
	Gross profit on sales	**6 306**	**6 274**
Note 4.1	Selling costs and administrative expenses	(1 962)	(1 564)
	Profit on sales	**4 344**	**4 710**
Note 6.2	Gain due to the reversal of allowances for impairment of loans granted to a joint venture	873	2 380
Note 6.2	Interest income on loans granted to a joint venture calculated using the effective interest rate method	582	494
	Profit or loss on involvement in a joint venture	1 455	2 874
Note 4.2	Other operating income, including:	1 881	1 757
	other interest calculated using the effective interest rate method	54	1
	reversal of impairment losses on financial instruments	5	27
Note 4.2	Other operating costs, including:	(919)	(1 046)
	impairment losses on financial instruments	(5)	(13)
Note 4.3	Finance income	148	70
Note 4.3	Finance costs	(420)	(541)
	Profit before income tax	**6 489**	**7 824**
Note 5.1	Income tax expense	(1 715)	(1 669)
	PROFIT FOR THE PERIOD	**4 774**	**6 155**
	Profit for the period attributable to:		
	Shareholders of the Parent Entity	4 772	6 156
	Non-controlling interest	2	(1)
	Weighted average number of ordinary shares (million)	**200**	**200**
	Basic/diluted earnings per share (in PLN)	**23.86**	**30.78**

in PLN millions, unless otherwise stated

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
	Profit for the period	**4 774**	**6 155**
Note 8.2.2	Measurement of hedging instruments net of the tax effect	1 354	(297)
	Exchange differences from translation of statements of operations with a functional currency other than PLN	(65)	(70)
	Other comprehensive income, which will be reclassified to profit or loss	**1 289**	**(367)**
Note 8.2.2	Measurement of equity financial instruments at fair value through other comprehensive income, net of the tax effect	(76)	22
	Actuarial gains/(losses) net of the tax effect	(342)	562
	Other comprehensive income which will not be reclassified to profit or loss	**(418)**	**584**
	Total other comprehensive net income	**871**	**217**
	TOTAL COMPREHENSIVE INCOME	**5 645**	**6 372**
	Total comprehensive income attributable to:		
	Shareholders of the Parent Entity	5 643	6 372
	Non-controlling interest	2	-

in PLN millions, unless otherwise stated

CONSOLIDATED STATEMENT OF CASH FLOWS

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2022
	Cash flow from operating activities		
	Profit before income tax	6 489	7 824
Note 9.3	Depreciation/amortisation recognised in profit or loss	2 239	2 123
Note 6.2	Gain due to the reversal of allowances for impairment of loans granted to a joint venture	(873)	(2 380)
Note 6.2	Interest on loans granted to a joint venture	(582)	(494)
	Other interest	30	120
	Impairment losses on property, plant and equipment and intangible assets	147	378
	Other gains on reversal of impairment losses on property, plant and equipment and intangible assets	(3)	(44)
	Gains on disposal of property, plant and equipment and intangible assets	(108)	(58)
Note 9.8	Gain on disposal of subsidiaries	(180)	-
	Exchange differences, of which:	(661)	(446)
	from investment activities and cash	(838)	(744)
	from financing activities	177	298
	Change in provisions for decommissioning of mines, liabilities related to future employee benefits programs and other provisions	(56)	30
	Change in other receivables and liabilities other than working capital	(133)	610
	Change in assets and liabilities due to derivatives	(353)	(1 921)
Note 7.2	Reclassification of other comprehensive income to profit or loss due to the realisation of hedging derivatives	492	2 030
Note 12.8	Other adjustments	29	1
	Exclusions of income and costs, total	(12)	(51)
	Income tax paid	(1 696)	(740)
Note 10.4	Changes in working capital, including:	(2 317)	(2 767)
	change in trade payables transferred to factoring	(77)	(1 114)
	Net cash generated from operating activities	**2 464**	**4 266**
	Cash flow from investing activities		
Note 9.1.3	Expenditures on mining and metallurgical assets, including:	(3 678)	(3 383)
Note 8.4.2	paid capitalised interest on borrowings	(214)	(122)
	Expenditures on other property, plant and equipment and intangible assets	(440)	(507)
	Expenditures on financial assets designated for decommissioning of mines and other technological facilities	-	(24)
	Advances granted on property, plant and equipment and intangible assets	(14)	(14)
	Proceeds from financial assets designated for decommissioning of mines and other technological facilities	26	-
	Proceeds from repayment of loans granted to a joint venture (principal)	358	-
	Proceeds from disposal of property, plant and equipment and intangible assets	394	98
	Proceeds from disposal of subsidiaries	243	-
	Proceeds from disposal of equity instruments measured at fair value through other comprehensive income	-	53
	Interest received on loans granted to a joint venture	431	1 259
	Other	(15)	(8)
	Net cash used in investing activities	**(2 695)**	**(2 526)**
	Cash flow from financing activities		
Note 8.4.2	Proceeds from borrowings	677	358
	Proceeds from derivatives related to sources of external financing	130	36
Note 8.4.2	Repayment of received borrowings	(425)	(2 078)
Note 8.4.2	Repayment of lease liabilities	(59)	(67)
	Expenditures due to derivatives related to sources of external financing	(89)	(79)
	Interest paid, including:	(92)	(94)
Note 8.4.2	due to borrowings	(89)	(85)
	Dividends paid to shareholders of the Parent Entity	(600)	(300)
	Other	12	24
	Net cash used in financing activities	**(446)**	**(2 200)**
	NET CASH FLOW	**(677)**	**(460)**
	Exchange gains/(losses)	(27)	(158)
	Cash and cash equivalents at beginning of the period	1 904	2 522
	Cash and cash equivalents at end of the period, including:	**1 200**	**1 904**
Note 9.8	recognised in assets held for sale (disposal group)	-	20
	restricted cash	21	24

in PLN millions, unless otherwise stated

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

		As at 31 December 2022	As at 31 December 2021
	ASSETS		
	Mining and metallurgical property, plant and equipment	22 894	21 564
	Mining and metallurgical intangible assets	2 772	2 316
Note 9.1	Mining and metallurgical property, plant and equipment and intangible assets	25 666	23 880
	Other property, plant and equipment	2 746	2 593
	Other intangible assets	218	250
Note 9.2	Other property, plant and equipment and intangible assets	2 964	2 843
Note 6.2	Involvement in joint ventures – loans granted	9 603	7 867
Note 7.1	Derivatives	714	595
Note 7.3	Other financial instruments measured at fair value	606	637
Note 7.4	Other financial instruments measured at amortised cost	469	496
	Financial instruments, total	1 789	1 728
Note 5.1.1	Deferred tax assets	137	185
Note 12.3	Other non-financial assets	220	161
	Non-current assets	**40 379**	**36 664**
Note 10.1	Inventories	8 902	6 337
Note 10.2	Trade receivables, including:	1 177	1 009
	trade receivables measured at fair value through profit or loss	751	614
Note 5.3	Tax assets	367	364
Note 7.1	Derivatives	796	254
Note 6.2	Involvement in joint ventures – loans granted	-	447
Note 12.3	Other financial assets	337	172
Note 12.3	Other non-financial assets	286	162
Note 8.5	Cash and cash equivalents	1 200	1 884
Note 9.8	Assets held for sale (disposal group)	-	734
	Current assets	**13 065**	**11 363**
	TOTAL ASSETS	**53 444**	**48 027**
	EQUITY AND LIABILITIES		
Note 8.2.1	Share capital	2 000	2 000
Note 8.2.2	Other reserves from measurement of financial instruments	(427)	(1 705)
Note 8.2.2	Accumulated other comprehensive income, other than from measurement of financial instruments	1 812	2 219
Note 8.2.2	Retained earnings	28 704	24 532
	Equity attributable to shareholders of the Parent Entity	32 089	27 046
	Equity attributable to non-controlling interest	57	92
	Equity	**32 146**	**27 138**
Note 8.4.1	Borrowings, lease and debt securities	5 220	5 409
Note 7.1	Derivatives	719	1 134
Note 11.1	Employee benefits liabilities	2 621	2 306
Note 9.4	Provisions for decommissioning costs of mines and other technological facilities	1 859	1 242
Note 5.1.1	Deferred tax liabilities	1 151	643
Note 12.4	Other liabilities	543	617
	Non-current liabilities	**12 113**	**11 351**
Note 8.4.1	Borrowings, lease and debt securities	1 223	455
Note 7.1	Derivatives	434	889
Note 10.3	Trade and similar payables	3 094	2 974
Note 11.1	Employee benefits liabilities	1 699	1 437
Note 5.3	Tax liabilities	1 233	1 453
	Provisions for liabilities and other charges	173	207
Note 12.4	Other liabilities	1 329	1 661
Note 9.8	Liabilities associated with disposal group	-	462
	Current liabilities	**9 185**	**9 538**
	Non-current and current liabilities	**21 298**	**20 889**
	TOTAL EQUITY AND LIABILITIES	**53 444**	**48 027**

in PLN millions, unless otherwise stated

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

		Equity attributable to shareholders of the Parent Entity						
		Share capital	Other reserves from measurement of financial instruments	Accumulated other comprehensive income	Retained earnings	Total	Equity attributable to non-controlling interest	Total equity
	As at 31 December 2020	**2 000**	**(1 430)**	**1 728**	**18 694**	**20 992**	**89**	**21 081**
	Transactions with non-controlling interest - owners	-	-	-	-	**-**	3	**3**
Note 12.2	Transactions with owners - Dividend	-	-	-	(300)	**(300)**	-	**(300)**
	Profit for the period	-	-	-	6 156	**6 156**	(1)	**6 155**
Note 8.2.2	Other comprehensive income	-	(275)*	491	-	**216**	1	**217**
	Total comprehensive income	-	(275)	491	6 156	**6 372**	**-**	**6 372**
	Reclassification of the result of disposal of equity instruments measured at fair value through other comprehensive income	-	-	-	(18)	**(18)**	-	**(18)**
	As at 31 December 2021	**2 000**	**(1 705)**	**2 219**	**24 532**	**27 046**	**92**	**27 138**
Note 12.2	Transactions with owners - Dividend	-	-	-	(600)	**(600)**	-	**(600)**
	Profit for the period	-	-	-	4 772	**4 772**	2	**4 774**
Note 8.2.2	Other comprehensive income	-	1 278	(407)	-	**871**	-	**871**
	Total comprehensive income	-	1 278	(407)	4 772	**5 643**	**2**	**5 645**
	Changes due to loss of control of subsidiaries	-	-	-	-	**-**	(37)	**(37)**
	As at 31 December 2022	**2 000**	**(427)**	**1 812**	**28 704**	**32 089**	**57**	**32 146**

**PLN 18 million due to reclassification resulting from the disposal of equity instruments measured at fair value through other comprehensive income was recognised in other comprehensive income.*

Part 1 – General information

Note 1.1 Corporate information

KGHM Polska Miedź S.A. ("the Parent Entity", "the Company") with its registered office in Lubin at 48 M.Skłodowskiej-Curie Street is a joint stock company registered at the Regional Court for Wrocław Fabryczna in Wrocław, Section IX (Economic) of the National Court Register, entry no. KRS 23302, on the territory of the Republic of Poland.

KGHM Polska Miedź S.A. has a multi-divisional organisational structure, comprised of a Head Office and 10 divisions: 3 mines (Lubin Mine Division, Polkowice-Sieroszowice Mine Division, Rudna Mine Division), 3 metallurgical plants (Głogów Smelter/Refinery, Legnica Smelter/Refinery, Cedynia Wire Rod Division), the Concentrator Division, the Tailings Division, the Mine-Smelter Emergency Rescue Division and the Data Center Division.

The shares of KGHM Polska Miedź S.A. are listed on the Warsaw Stock Exchange.

The Parent Entity's principal activities include:

- the mining of copper and non-ferrous metals ores; and
- the production of copper, precious and non-ferrous metals.

In addition, the KGHM Polska Miedź S.A. Group ("the Group") conducts other activities, which are described in Appendix no. 3 to the Management Board's Report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2022.

The consolidated financial statements were prepared under the assumption that the Group's companies will continue as a going concern during a period of at least 12 months from the end of the reporting period in an unaltered form and business scope, and there are no reasons to suspect any intentional or forced discontinuation or significant limitation of its current activities. As at the date of signing of the consolidated financial statements the Management Board of the Parent Entity is not aware of any facts or circumstances that may cast doubt about the going concern in the foreseeable future.

The COVID-19 pandemic and the war in Ukraine did not have a direct, negative impact on individual aspects of the Group's activities. There were neither production stoppages or slowdowns nor any reductions in the scope of services provided. However COVID-19, in particular the pandemic situation in China, and Russia's aggression against Ukraine were reflected in the increased inflation pressure. In 2022, prices of technological materials, energy, fuels and services increased significantly, which influenced the level of costs generated by the Group. On the other hand, the uncertainty as to the future global economic situation resulted in the weakening of the PLN and the increase in PLN-denominated copper prices, which translated into an increase in revenues from sales. The production and financial results of individual segments were presented in Part 2 Information on segments and revenues, while the impact of the macroeconomic situation on the activities of the Company and the Group was presented in the Management Board's report on the activities of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group in 2022.

Detailed information on the Group's operations during the pandemic and the on-going armed conflict in Ukraine in 2022 was presented in Note 12.12 of this report.

The KGHM Polska Miedź S.A. Group carries out exploration and the mining of copper, nickel and precious metals based on concessions given for the Polish deposits to KGHM Polska Miedź S.A., and also based on legal titles held by companies of the KGHM INTERNATIONAL LTD. Group for the exploration for or mining of these resources in the USA, Canada and Chile. Detailed information is presented in the Management Board's report on the activities of KGHM Polska Miedź S.A and of the KGHM Polska Miedź S.A. Group in 2022 (point 1.5).

In 2022, the Parent Entity of the Group consolidated 63 subsidiaries and used the equity method to account for the shares of two joint ventures (Sierra Gorda S.C.M. and NANO CARBON Sp. z o.o. in liquidation).

Declaration by the Management Board on the accuracy of the prepared financial statements

The Management Board of KGHM Polska Miedź S.A. declares that according to its best judgement the annual consolidated financial statements for 2022 and the comparative data have been prepared in accordance with accounting principles currently in force, and give a true, fair and clear view of the financial position of the KGHM Polska Miedź S.A. Group and the profit for the period of the Group.

The Management Board's report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2022 presents a true picture of the development and achievements, as well as the condition, of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group, including a description of the basic exposures and risks.

The consolidated financial statements were authorised for issue and signed by the Management Board of the Parent Entity on 21 March 2023.

Note 1.2 Basis of preparation and presentation

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union, on the basis of historical cost, except for financial instruments classified as measured at fair value and investment properties measured at fair value.

Accounting Policies

The accounting policies of the Group which apply to the consolidated financial statements as a whole, as well as significant estimates and their impact on amounts presented in the consolidated financial statements, are presented in the following note.

Topic	Accounting policies	Significant estimates and judgments
Consolidation principles	The consolidated financial statements include the financial statements of the Parent Entity and its subsidiaries. Subsidiaries are understood as being entities which are either directly controlled by the Parent Entity or indirectly through its subsidiaries. Obtaining control of a subsidiary, which is a business, is accounted for using the acquisition method. Subsidiaries are fully consolidated from the date on which control is obtained to the date on which control is lost. Balances, incomes, expenses and unrealised gains recognised in assets from intra-group transactions, are eliminated.	Determining whether the Parent Entity has control over a company requires an assessment as to whether it has rights to direct relevant activities of the company. Determining what constitutes relevant activities of the company and by which investor it is controlled requires a judgment. Among others, the following factors are taken into consideration when assessing the situation and determining the nature of relationships: voting rights, relative voting power, dilution of voting rights of other Investors and their ability to appoint members of key management personnel or members of the supervisory board.

<table>
<tr>
<td>Fair value measurement</td>
<td>Fair value is the price that would be received from selling an asset or would be paid for a transfer of a liability in an orderly transaction between market participants at the measurement date. For financial reporting purposes, a fair value hierarchy was established that categorises the inputs into three levels:

Level 1 Value is based on inputs from active markets, as they are seen as the most reliable source of data.

Level 2 Value is based on inputs other than from active markets, which are nevertheless observable (unbiased, measurable).

Level 3 Value is based on unobservable inputs, used when appropriate observable input data is not available. Unobservable input data reflect assumptions that would be adopted by market participants in order to calculate the price of an asset or a liability, including risk assumptions.

Transfer between levels of the fair value hierarchy takes place if there is a change of sources of input data used for fair value measurement, such as:
• active market,
• lack of an active market, but there is observable data on the market,
• subjective input data.

It is acknowledged that transfers between levels of the fair value hierarchy take place at the end of the reporting period.</td>
<td>Fair value presents current estimates which may be subject to change in subsequent reporting periods due to market conditions or due to other factors. There are many methods of measuring fair value, which may result in differences in fair values.

Moreover, assumptions constituting the basis of fair value measurement may require estimating the changes in costs/prices over time, the discount rate, inflation rate or other significant variables.

Certain assumptions and estimates are necessary to determine to which level of fair value hierarchy a given instrument should be classified.</td>
</tr>
<tr>
<td>Financial statements of operations with a functional currency other than PLN</td>
<td>For purposes of preparing the consolidated financial statements in the presentation currency of the KGHM Polska Miedź S.A. Group, i.e. in PLN, individual items of financial statements of foreign operations whose functional currencies are other than PLN are translated in the following manner:
(i) assets and liabilities – at the closing rate, i.e. at the average exchange rate for that currency announced by the NBP at the end of the reporting period,
(ii) items of the statement of profit or loss, the statement of comprehensive income and the statement of cash flows - at the arithmetical average of average exchange rates announced for a given currency by the NBP at the end of each month of a given reporting period. If there is a significant volatility of exchange rates in a given period, revenues and costs in the statement of profit or loss and the statement of comprehensive income are translated using the exchange rates as at the transaction date.

Exchange differences from the translation of statements of operations with a functional currency other than PLN are recognised in other comprehensive income of a given period.</td>
<td>The consolidated financial statements are presented in PLN, which is also the functional currency of the Parent Entity and the Group's subsidiaries, with the exception of: the subsidiary Future 1 Sp. z o.o. and entities of the subgroup KGHM INTERNATIONAL LTD. in which mainly the US dollar (USD) is the functional currency.

The balance of exchange differences from the translation of statements of the aforementioned operations amounted to:
in 2022 – PLN 2 554 million,
in 2021 – PLN 2 619 million.

(see Note 8.2.2 Changes of other equity items).</td>
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</table>

Foreign currency transactions and the measurement of items denominated in foreign currencies	At the moment of initial recognition, foreign currency transactions are translated into the functional currency: • at the actual exchange rate applied, i.e. at the buy or sell exchange rate applied by the bank in which the transaction occurs, in the case of the sale or purchase of currencies and the payment of receivables or liabilities; • at the average exchange rate set for a given currency, prevailing on the date of the transaction for other transactions. At the end of each reporting period, foreign currency monetary items are translated at the closing rate prevailing on that date. Foreign exchange gains or losses on the settlement of foreign currency transactions, and on the measurement of foreign currency monetary assets and liabilities (other than derivatives), are recognised in profit or loss. Foreign exchange gains or losses on the measurement of foreign currency derivatives are recognised in profit or loss as a fair value measurement, provided they do not represent a change in the fair value of the effective cash flow hedge. In such a case, they are recognised in other comprehensive income in accordance with hedge accounting policies. Foreign exchange gains or losses on non-monetary items, such as equity instruments classified as financial assets measured at fair value through other comprehensive income, are recognised in other comprehensive income and are presented in measurement at fair value. Foreign exchange gains or losses on monetary items measured at fair value through profit or loss (e.g. loans granted measured at fair value) are recognised as a part of the fair value measurement. On 1 January 2022, a change was introduced in the KGHM Polska Miedź S.A. Group concerning foreign exchange rates applied to measure currency sales and purchase transactions as well as payments of receivables and liabilities (including in the measurement of transactions involving the receipt, granting or repayment of borrowings) on the Group's currency bank accounts. To translate these transactions to the functional currency, an average exchange rate prevailing on the date of the transaction is used, and the prevailing rate on the date of the transaction is the average NBP exchange rate from the last working day preceding the transaction date. Any change in the applied exchange rates is, pursuant to IAS 8, a change in estimates, and its impact is recognised prospectively for periods beginning on or after 1 January 2022.	-

For a greater understanding of the data recognised in the consolidated financial statements, the accounting policy (principles) and important estimates, assumptions and judgments are presented in individual, detailed notes as presented in the table below. As compared to the reporting period ended on 31 December 2021, there were no significant changes to the estimation methods. Changes in estimates as at 31 December 2022 as compared to the aforementioned period arise from changes in assumptions as a result of changes in business circumstances and/or other variables.

in PLN millions, unless otherwise stated

Note	Title	Amount recognised in the financial statements		Accounting policies	Important estimates, assumptions and judgements
		2022	2021		
2.3	Revenues from contracts with customers	33 847	29 803	X	X
3.1	Impairment of assets	(230)	(438)		X
5.1	Income tax in the statement of profit or loss	(1 715)	(1 669)	X	
5.1.1	Deferred income tax	(533)	(186)	X	X
5.3	Tax assets	367	368	X	
5.3	Tax liabilities	(1 233)	(1 455)	X	
6.1	Joint ventures accounted for using the equity method	-	-	X	X
6.2	Loans granted to a joint venture	9 603	8 314	X	X
7.2	Derivatives	357	(1 174)	X	X
7.3	Other financial instruments measured at fair value	606	637	X	X
7.4	Other financial instruments measured at amortised cost	469	499	X	X
8.2	Equity attributable to shareholders of the Parent Entity	(32 089)	(27 046)	X	
8.4.1	Borrowings	(6 443)	(5 949)	X	
8.5	Cash and cash equivalents	1 200	1 904	X	
8.6	Labilities due to guarantees granted	(1 326)	(1 022)	X	X
9.1	Mining and metallurgical property, plant and equipment and intangible assets	25 666	23 999	X	X
9.2	Other property, plant and equipment and intangible assets	2 964	3 085	X	
9.4	Provisions for decommissioning costs of mines and other facilities*	(1 893)	(1 552)	X	X
9.7	Lease disclosures – the Group as a lessee	771	703	X	X
9.8	Assets held for sale (disposal group) and liabilities associated with them	-	734	X	
10.1	Inventories	8 902	6 487	X	X
10.2	Trade receivables	1 178	1 026	X	X
10.3	Trade and similar payables	(3 280)	(3 201)	X	X
10.4	Changes in working capital	(2 317)	(2 767)	X	X
11.1	Employee benefits liabilities	(4 320)	(3 756)	X	X
12.3	Other assets	843	498	X	
12.4	Other liabilities	(1 872)	(2 310)	X	

** In the statement of financial position, current provisions for decommissioning costs of mines and other technological facilities are recognised in the item Provisions for liabilities and other charges.*

The accounting policies described in this note and in individual notes were applied by the Group in a continuous manner to all presented periods.

Note 1.3 Impact of new and amended standards and interpretations

Amendments to standards applied for the first time in the consolidated financial statements for 2022:

- **Amendments to IFRS 3** on references to the Conceptual Framework,
- **Amendments to IAS 16** on proceeds prior to the intended use of an item of property, plant and equipment,
- **Amendments to IAS 37** on cost of fulfilling onerous contracts,
- **Annual amendments to IFRS 2018-2020** – amendments to IAS 41, IFRS 1, IFRS 9.

Up to the date of publication of these consolidated financial statements, the aforementioned amendments to the standards were adopted for use by the European Union. In the Group's opinion, the amendments to the standards will be applicable to the Group's activities in the scope of future economic operations, transactions or other events, towards which the amendments to the standards will be applicable.

In particular, the application of **amendments to IAS 16** on proceeds prior to the intended use of an item of property, plant and equipment will result in a change in the Group's accounting policy in this regard. In accordance with the current policy, the Group decreased expenditures by the amount of revenues achieved before an item of property, plant and equipment was brought into use, which incidentally took place during shaft sinking. Pursuant to the amendments, revenues from sales of products manufactured while an asset is brought to the desired location and condition (e.g. test production), together with associated costs, should be recognised in profit or loss for the period. Transitional provisions on the implementation of these amendments are applied retrospectively to items of property, plant and equipment brought into use on or after the beginning of the earliest presented period. The Group applied amendments to IAS 16 from 1 January 2022. With respect to the application of transitional provisions, the Group did not identify significant items of property, plant and equipment that would be subject to adjustments on or after 1 January 2021.

Note 1.4 Published standards and interpretations, which are not yet in force and were not applied earlier by the Group

Published standards and interpretations which are not yet in force, adopted for use by the European Union:

- **IFRS 17** Insurance contracts and amendments to IFRS 17 published in 2020 and 2021, effective on or after 1 January 2023.
- **Amendments to IAS 1 and Practice Statement 2** on disclosures of accounting policies, effective on or after 1 January 2023. In this standard, the requirement to disclosure the entity's „significant" accounting policies was replaced by the requirement to disclose „material" accounting policies. Information on accounting policies is material if considered together with other information contained within the financial statements, it could reasonably influence decisions made by their main users on the basis of these financial statements.
- **Amendments to IAS 8** on the introduction of a definition of accounting estimates, effective on or after 1 January 2023. Pursuant to the amended standard, accounting estimates are monetary amounts in financial statements that are subject to measurement uncertainty. The introduction of this definition will help entities in distinguishing between amendments to accounting policies and amendments to accounting estimates.
- **Amendments to IAS 12** on deferred tax related to assets and liabilities arising from a single transaction, effective on or after 1 January 2023. This standard introduces clarifications to paragraphs 15 and 24 that the recognition exemption on deferred tax related to assets and liabilities does not apply to transactions in which equal amounts of deductible and taxable temporary differences arise on initial recognition. In the Group's opinion, the first application of the aforementioned change will not have a significant impact on the consolidated financial statements.

Published standards and interpretations which are not yet in force, awaiting the adoption for use by the European Union:

- **IFRS 14 Regulatory deferral accounts,** effective on or after 1 January 2016, however the European Commission has decided not to launch the endorsement process of this interim standard and to wait for the final standard.
- **Amendments to IFRS 10 and IAS 28** on the sale or contribution of assets between an Investor and its Associate or Joint Venture (date of entry into force was not specified).
- **Amendments to IFRS 16** on lease liabilities in a sale and leaseback, effective on or after 1 January 2024.
- **Amendments to IAS 1** on classification of liabilities as current or non-current (including changes due to deferral of effective date), effective on or after 1 January 2024. The standard introduces changes clarifying conditions necessary to recognise financial liabilities as non-current. Such recognition will be possible only if the entity has the unconditional right to defer settlement of a liability for over 12 months after the reporting date and at the same time the entity's intent as to the early repayment will not have an impact on this recognition. If the amendments to IAS 1 were applied by the Group in these consolidated financial statements, the presentation of borrowings as at 31 December 2022 would not change.

- **Amendments to IAS 1** on non-current liabilities with covenants, effective on or after 1 January 2024. The amendments aim to clarify that covenants, whose conditions have to be met by an entity after the reporting date, and which refer to the rights of an entity to defer settlement of a liability by at least twelve months from the end of the reporting period, do not have an impact on the classification of liabilities as current or non-current at the end of the reporting period. However, it will be necessary to disclose information on such covenants in notes to the financial statements in order to allow users of financial statements to understand the risk that a particular liability may become due in the period of 12 months from the end of the reporting period. In such a situation, the Standard requires the disclosure of a description of a covenant, the amount of liabilities it is related to and facts and circumstances, if they occur, indicating the occurrence of a risk that an entity may not meet the conditions of the covenant within the deadline indicated after the end of the reporting period.

The Group intends to apply all of the amendments at their effective dates, except for IFRS 17, which will not have an impact on the Group's consolidated financial statements as at 31 December 2022. In the Group's opinion, the other amendments to the standards will be applicable to its activities in the scope of future economic operations, transactions or other events, towards which the amendments to the standards are applicable, while the amendments to IAS 1 and Practice Statement 2 on accounting policies (principles) presented in the financial statements will not have a significant impact on the scope of accounting policies which will be disclosed by the Group in the financial statements published for the reporting periods beginning after 1 January 2023.

Part 2 – Information on segments and revenues

Note 2.1 Operating segments

The operating segments identified in the KGHM Polska Miedź S.A. Group reflect the structure of the Group, the manner in which the Group and its individual entities are managed and the regular reporting to the Parent Entity's Management Board.

Based on the aggregation of operating segments and taking into account the criteria stipulated in IFRS 8, the following reporting segments are currently identified within the KGHM Polska Miedź S.A. Group:

Reporting segment	Operating segments aggregated in a given reporting segment	Indications of similarity of economic characteristics of segments, taken into account in aggregations
KGHM Polska Miedź S.A.	KGHM Polska Miedź S.A.	Not applicable (it is a single operating and reporting segment)
KGHM INTERNATIONAL LTD.	Companies of the KGHM INTERNATIONAL LTD. Group, in which the following mines, deposits or mining areas and mining enterprises constitute operating segments: Sudbury Basin, Robinson, Carlota, Franke*, DMC, Victoria and Ajax projects.	Operating segments within the KGHM INTERNATIONAL LTD. Group are located in North and South America. The Management Board analyses the results of the following operating segments: Sudbury Basin, Robinson, Carlota, Franke*, Victoria and Ajax projects and other. In addition, the Management Board receives and analyses reports on the whole KGHM INTERNATIONAL LTD. Group. Operating segments are engaged in the exploration and mining of copper, molybdenum, silver, gold, nickel, platinum and palladium deposits. The operating segments were aggregated based on the similarity of long term margins achieved by individual segments, and the similarity of products, processes and production methods.
Sierra Gorda S.C.M.	Sierra Gorda S.C.M. (joint venture)	Not applicable (it is a single operating and reporting segment)
Other segments	This item includes other Group companies (every individual company is a separate operating segment).	Aggregation was carried out as a result of not meeting the criteria necessitating the identification of a separate additional reporting segment.

** Entity sold on 26 April 2022 (Note 9.8).*

The following companies were not included in any of the aforementioned segments:

- Future 1 Sp. z o.o., which acts as a holding company with respect to the KGHM INTERNATIONAL LTD. Group,
- Future 3 Sp. z o.o., Future 4 Sp. z o.o., Future 5 Sp. z o.o., which operate in the structure related to the establishment of a Tax Group.

These companies do not conduct operating activities which could impact the results achieved by individual segments, and as a result their inclusion could distort the data presented in this part of the consolidated financial statements due to significant settlements with other Group companies.

Each of the segments KGHM Polska Miedź S.A., KGHM INTERNATIONAL LTD. and Sierra Gorda S.C.M. have their own Management Board, which reports the results of their business activities to the Management Board of the Parent Entity.

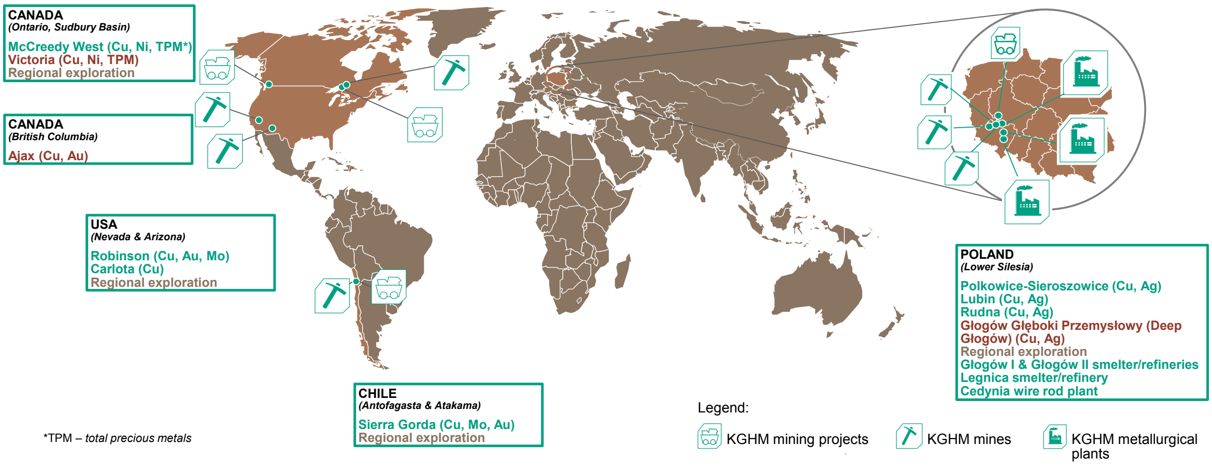
The segment KGHM Polska Miedź S.A. is composed only of the Parent Entity, and the segment Sierra Gorda S.C.M. is composed only of the joint venture Sierra Gorda S.C.M. Other companies of the KGHM Polska Miedź S.A. Group are presented below by segment: KGHM INTERNATIONAL LTD. and Other segments.

The SEGMENT KGHM INTERNATIONAL LTD.	
Location	**Company**
The United States of America	Carlota Copper Company, Carlota Holdings Company, DMC Mining Services Corporation, FNX Mining Company USA Inc., Robinson Holdings (USA) Ltd., Robinson Nevada Mining Company, Wendover Bulk Transhipment Company
Chile	Aguas de la Sierra Limitada, Minera Carrizalillo SpA, KGHM Chile SpA, Quadra FNX Holdings Chile Limitada, Sociedad Contractual Minera Franke* , DMC Mining Services Chile SpA
Canada	KGHM INTERNATIONAL LTD., 0899196 B.C. Ltd., Centenario Holdings Ltd., DMC Mining Services Ltd., FNX Mining Company Inc., FRANKE HOLDINGS LTD., KGHM AJAX MINING INC., KGHMI HOLDINGS LTD., Quadra FNX Holdings Partnership, Sugarloaf Ranches Ltd.
Mexico	DMC Mining Services Mexico, S.A. de C.V. *(formerly Raise Boring Mining Services S.A. de C.V.*)
Colombia	DMC Mining Services Colombia SAS
The United Kingdom	DMC Mining Services (UK) Ltd.
Luxembourg	Quadra FNX FFI S.à r.l.

OTHER SEGMENTS	
Type of activity	**Company**
Support of the core business	BIPROMET S.A., CBJ sp. z o.o., "Energetyka" sp. z o.o., INOVA Spółka z o.o., KGHM CUPRUM sp. z o.o. – CBR, KGHM ZANAM S.A., KGHM Metraco S.A., PeBeKa S.A., POL-MIEDŹ TRANS Sp. z o.o., WPEC w Legnicy S.A.
Sanatorium-healing and hotel services	Interferie Medical SPA Sp. z o.o.*, INTERFERIE S.A.*, Uzdrowiska Kłodzkie S.A. - Grupa PGU, Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU, Uzdrowisko Połczyn Grupa PGU S.A., Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU
Investment funds, financing activities	Fundusz Hotele 01 Sp. z o.o., Fundusz Hotele 01 Sp. z o.o. S.K.A., KGHM TFI S.A., KGHM VII FIZAN in liquidation**, Polska Grupa Uzdrowisk Sp. z o.o.
Other activities	CENTROZŁOM WROCŁAW S.A., CUPRUM Development sp. z o.o., CUPRUM Zdrowie sp. z o.o. (*formerly CUPRUM Nieruchomości sp. z o.o.*), KGHM (SHANGHAI) COPPER TRADING CO., LTD., KGHM Kupfer AG, MERCUS Logistyka sp. z o.o., MIEDZIOWE CENTRUM ZDROWIA S.A., NITROERG S.A., NITROERG SERWIS Sp. z o.o., PHU "Lubinpex" Sp. z o.o., PMT Linie Kolejowe Sp. z o.o., WMN "ŁABĘDY" S.A., Zagłębie Lubin S.A., OOO ZANAM VOSTOK, KGHM Centrum Analityki Sp. z o.o.

** Entities sold in the reporting period (Note 9.8).*
*** Entity liquidated on 22 November 2022.*

Location of mining assets of the KGHM Polska Miedź S.A. Group



The Parent Entity and the KGHM INTERNATIONAL LTD. Group (a subgroup) have a fundamental impact on the assets and the generation of revenues in the KGHM Polska Miedź S.A. Group. The activities of KGHM Polska Miedź S.A. are concentrated on the mining industry in Poland, while those of the KGHM INTERNATIONAL LTD. Group are concentrated on the mining industry in the countries of North and South America. The profile of activities of the majority of the remaining subsidiaries of the KGHM Polska Miedź S.A. Group differs from the main profile of the Parent Entity's activities.

The Parent Entity's Management Board monitors the operating results of individual segments in order to make decisions on allocating the Group's resources and to assess the financial results achieved.

Financial data prepared for management reporting purposes is based on the same accounting policies as those applied when preparing the consolidated financial statements of the Group, while the financial data of individual reporting segments constitutes the amounts presented in appropriate financial statements prior to consolidation adjustments at the level of the KGHM Polska Miedź S.A. Group, i.e.:

- The segment KGHM Polska Miedź S.A. – comprises data from the separate financial statements of the Parent Entity prepared in accordance with IFRSs. In the separate financial statements, investments in subsidiaries (including indirect interest in KGHM INTERNATIONAL LTD.) are measured at cost, including impairment losses,
- The segment KGHM INTERNATIONAL LTD. – comprises consolidated data of the KGHM INTERNATIONAL LTD. Group prepared in accordance with IFRSs. The involvement in Sierra Gorda S.C.M. is accounted for using the equity method,
- The segment Sierra Gorda S.C.M. – comprises the 55% share of assets, liabilities, revenues and costs of this venture presented in the separate financial statements of Sierra Gorda S.C.M. prepared in accordance with IFRSs,
- Other segments – comprises aggregated data of individual subsidiaries after excluding transactions and balances between them.

The Management Board of the Parent Entity assesses a segment's performance based on adjusted EBITDA and the profit or loss for the period.

The Group defines adjusted EBITDA as profit/loss for the period pursuant to IFRS, excluding taxes (current and deferred income tax as well as the mining tax), finance income and costs, other operating income and costs, profit or loss on involvement in joint ventures, depreciation/amortisation and recognition/reversal of impairment losses on property, plant and equipment and intangible assets included in the cost of sales, selling costs and administrative expenses. Since adjusted EBITDA is not a measure defined by IFRS, it is not a standardised measure and therefore its method of calculation may vary between entities, and consequently the presentation and calculation of adjusted EBITDA applied by the Group may not be comparable to that applied by other market entities.

Revenues from transactions with external entities and inter-segment transactions are carried out at arm's length. Eliminations of mutual settlements, revenues and costs between segments were presented in the item "Consolidation adjustments".

Unallocated assets and liabilities concern companies which have not been allocated to any segment. Assets which have not been allocated to the segments comprise cash, trade receivables and deferred tax assets. Liabilities which have not been allocated to the segments comprise trade liabilities and current tax liabilities.

Note 2.2 Financial results of reporting segments

		KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data: Elimination of data of the segment Sierra Gorda S.C.M	Reconciliation items to consolidated data: Consolidation adjustments****	Consolidated financial statements
		from 1 January 2022 to 31 December 2022						
Note 2.3	**Revenues from contracts with customers, of which:**	**28 429**	**3 217**	**3 974**	**12 889**	**(3 974)**	**(10 688)**	**33 847**
	- inter-segment	565	-	-	10 123	-	(10 688)	-
	- external	27 864	3 217	3 974	2 766	(3 974)	-	33 847
	Segment result – profit/(loss) for the period	**3 533**	**900**	**239**	**(51)**	**(239)**	**392**	**4 774**
	Additional information on significant revenues/costs items of the segment							
	Depreciation/amortisation recognised in profit or loss	(1 434)	(568)	(937)	(273)	937	36	(2 239)
	(Recognition)/reversal of impairment losses on non-current assets, including:	207	781	-	-	-	(259)	729
	reversal of allowances for impairment of loans granted	213	873	-	-	-	(213)	873
		As at 31 December 2022						
	Assets, including:	**47 995**	**15 228**	**13 563**	**6 071**	**(13 563)**	**(15 850)**	**53 444**
	Segment assets	47 995	15 228	13 563	6 071	(13 563)	(15 854)	53 440
	Assets unallocated to segments	-	-	-	-	-	4	4
	Liabilities, including:	**18 320**	**19 276**	**13 992**	**3 446**	**(13 992)**	**(19 744)**	**21 298**
	Segment liabilities	18 320	19 276	13 992	3 446	(13 992)	(19 804)	21 238
	Liabilities unallocated to segments	-	-	-	-	-	60	60
	Other information	from 1 January 2022 to 31 December 2022						
	Cash expenditures on property, plant and equipment and intangible assets – cash flows	2 731	913	1 031	380	(1 031)	94	4 118
	Production and cost data	from 1 January 2022 to 31 December 2022						
	Payable copper (kt)	586.0	56.2	90.8				
	Molybdenum (million pounds)	-	0.1	2.9				
	Silver (t)	1 298.4	2.0	26.7				
	TPM (koz t)	87.3	55.9	34.3				
	C1 cash cost of producing copper in concentrate (USD/lb PLN/lb)**	2.38 10.62	2.14 9.57	1.50 6.69				
	Segment result - Adjusted EBITDA	**5 400**	**1 001**	**2 190**	**274**	**-**	**-**	**8 865**
	EBITDA margin* **	**19%**	**31%**	**55%**	**2%**	**-**	**-**	**23%**

** 55% of the Group's share in Sierra Gorda S.C.M.'s financial and production data.*

*** Unit cash cost of payable copper production, reflecting ore mining and processing costs, transport costs, the minerals extraction tax, administrative expenses during the mining phase and smelter treatment and refining charges (TC/RC) less by-product value. C1 cost is in regard to payable copper in own concentrate in the case of the segment KGHM Polska Miedź S.A. and payable copper in end products of individual mines of the segment KGHM International Ltd. and the segment Sierra Gorda S.C.M. C1 cost in PLN/lb was calculated using the average exchange rate by the NBP (arithmetical average of daily quotations per the NBP's tables).*

**** Adjusted EBITDA to revenues from contracts with customers. For the purposes of calculating the Group's EBITDA margin (23%), the consolidated revenues from contracts with customers were increased by revenues from contracts with customers of the segment Sierra Gorda S.C.M. [8 865 / (33 847 + 3 974) * 100]*

***** Adjustments arise from consolidation eliminations and financial data of companies unallocated to any segment.*

Financial results of reporting segments for the comparable period

		KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data: Elimination of data of the segment Sierra Gorda S.C.M	Reconciliation items to consolidated data: Consolidation adjustments****	Consolidated financial statements
		from 1 January 2021 to 31 December 2021						
Note 2.3	**Revenues from contracts with customers, of which:**	**24 618**	**3 125**	**4 585**	**10 329**	**(4 585)**	**(8 269)**	**29 803**
	- inter-segment	408	-	-	7 861	-	(8 269)	-
	- external	24 210	3 125	4 585	2 468	(4 585)	-	29 803
	Segment result – profit/(loss) for the period	**5 169**	**2 632**	**3 178**	**(140)**	**(3 178)**	**(1 506)**	**6 155**
	Additional information on significant revenues/costs items of the segment							
	Depreciation/amortisation recognised in profit or loss	(1 363)	(516)	(777)	(258)	777	14	(2 123)
	(Recognition)/reversal of impairment losses on non-current assets, including:	1 742	2 200	2 639	(216)	(2 639)	(1 680)	2 046
	(recognition)/reversal of impairment losses on investments in subsidiaries	1 010	-	-	(86)	-	(924)	-
	(recognition)/reversal of allowances for impairment of loans granted	752	2 380	-	-	-	(752)	2 380
		As at 31 December 2021						
	Assets, including:	**43 458**	**13 646**	**12 232**	**6 066**	**(12 232)**	**(15 143)**	**48 027**
	Segment assets	43 458	13 646	12 232	6 066	(12 232)	(15 172)	47 998
	Assets unallocated to segments	-	-	-	-	-	29	29
	Liabilities, including:	**17 618**	**18 185**	**12 844**	**3 339**	**(12 844)**	**(18 253)**	**20 889**
	Segment liabilities	17 618	18 185	12 844	3 339	(12 844)	(18 299)	20 843
	Liabilities unallocated to segments	-	-	-	-	-	46	46
	Other information	from 1 January 2021 to 31 December 2021						
	Cash expenditures on property, plant and equipment and intangible assets – cash flows	2 407	1 014	605	490	(605)	(21)	3 890
	Production and cost data	from 1 January 2021 to 31 December 2021						
	Payable copper (kt)	577.6	71.7	104.4				
	Molybdenum (million pounds)	-	0.2	8.2				
	Silver (t)	1 332.2	2.0	31.9				
	TPM (koz t)	81.3	51.3	30.9				
	(C1) cash cost of producing payable copper (USD/lb PLN/lb)**	2.26 8.73	2.01 7.78	0.78 3.01				
	Segment result - adjusted EBITDA	**5 474**	**1 340**	**3 167**	**346**	**-**	**-**	**10 327**
	EBITDA margin* **	**22%**	**43%**	**69%**	**3%**	**-**	**-**	**30%**

** 55% of the Group's share in Sierra Gorda S.C.M.'s financial and production data.*

*** Unit cash cost of payable copper production, reflecting ore mining and processing costs, transport costs, the minerals extraction tax, administrative expenses during the mining phase and smelter treatment and refining charges (TC/RC) less by-product value. C1 cost is in regard to payable copper in own concentrate in the case of the segment KGHM Polska Miedź S.A. and payable copper in end products of individual mines of the segment KGHM International Ltd. and the segment Sierra Gorda S.C.M. C1 cost in PLN/lb was calculated using the average exchange rate by the NBP (arithmetical average of daily quotations per the NBP's tables).*

**** Adjusted EBITDA to revenues from contracts with customers. For the purposes of calculating the Group's EBITDA margin (30%) the consolidated revenues from contracts with customers were increased by revenues from contracts with customers of the segment Sierra Gorda S.C.M. [10 327 / (29 803 + 4 585) * 100]*

***** Adjustments arise from consolidation eliminations and financial data of companies unallocated to any segment.*

in PLN millions, unless otherwise stated

Reconciliation of adjusted EBITDA	from 1 January 2022 to 31 December 2022						
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Other segments	Consolidation adjustments*	Consolidated financial statements	Sierra Gorda S.C.M. **	Adjusted EBITDA (segments, total)
	1	2	3	4	5 (1+2+3+4)	6	7 (5+6-4)
Profit/(Loss) for the period	**3 533**	**900**	**(51)**	**392**	**4 774**	**239**	
[-] Profit or loss on involvement in joint ventures	-	1 455	-	-	1 455	-	
[-] Current and deferred income tax, mining tax***	(1 463)	(122)	(36)	(94)	(1 715)	(177)	
[-] Depreciation/amortisation recognised in profit or loss	(1 434)	(568)	(273)	36	(2 239)	(937)	
[-] Finance income and (costs)	(269)	(1 033)	(45)	1 075	(272)	(823)	
[-] Other operating income and (costs)	1 299	203	28	(568)	962	(14)	
[-] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	-	(36)	1	(45)	(80)	-	
Segment result - adjusted EBITDA	**5 400**	**1 001**	**274**	**(11)**	**6 664**	**2 190**	**8 865**

** Adjustments arise from consolidation eliminations and financial data of companies unallocated to any segment.*
***55% share of the Group in the financial data of Sierra Gorda S.C.M.*
****Mining tax concerns only the segment Sierra Gorda S.C.M.*

Reconciliation of adjusted EBITDA	from 1 January 2021 to 31 December 2021						
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Other segments	Consolidation adjustments*	Consolidated financial statements	Sierra Gorda S.C.M. **	Adjusted EBITDA (segments, total)
	1	2	3	4	5 (1+2+3+4)	6	7 (5+6-4)
Profit/(Loss) for the period	**5 169**	**2 632**	**(140)**	**(1 506)**	**6 155**	**3 178**	
[-] Profit or loss on involvement in joint ventures	-	2 874	-	-	2 874	-	
[-] Current and deferred income tax, mining tax***	(1 547)	1	(63)	(60)	(1 669)	(1 059)	
[-] Depreciation/amortisation recognised in profit or loss	(1 363)	(516)	(258)	14	(2 123)	(777)	
[-] Finance income and (costs)	(476)	(974)	(19)	998	(471)	(787)	
[-] Other operating income and (costs)	3 088	69	(19)	(2 427)	711	(5)	
[-] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	(7)	(162)	(127)	(3)	(299)	2 639	
Segment result - adjusted EBITDA	**5 474**	**1 340**	**346**	**(28)**	**7 132**	**3 167**	**10 327**

** Adjustments arise from consolidation eliminations and financial data of companies unallocated to any segment.*
***55% share of the Group in the financial data of Sierra Gorda S.C.M.*
****Mining tax concerns only the segment Sierra Gorda S.C.M.*

A detailed description of the results of individual segments is presented in the following sections of the Management Board's report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2022:

- the segment KGHM Polska Miedź S.A. – in section 8,
- the segment KGHM INTERNATIONAL LTD. – in section 9,
- the segment Sierra Gorda S.C.M. – in section 10.

Note 2.3 Revenues from contracts with customers of the Group – breakdown by products

Accounting policies

Revenues arising from ordinary operating activities of the Group, i.e. revenues from sales of products, merchandise and materials, are recognised in the statement of profit or loss as revenues from contracts with customers.

The Group generates its revenues mainly from the sale of: copper, silver and gold. Other, smaller streams of revenues arise from the sale of services (including distribution of electricity, other utilities and mine construction services) and other products (including electricity), merchandise and materials (including steel, petroleum and its derivatives).

The Group recognises revenue from contracts with customers when the Group satisfies a performance obligation by transferring a promised good or providing a service to a customer, which is when the customer obtains control of that asset, i.e. the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset, as well as the ability to prevent other entities from directing the use of, and obtaining the benefits from, the asset. Since in the majority of sales transactions, following the shipment of the promised good and transferring control over it, the Group has an unconditional right to consideration from the customer, and the only condition of receiving it is time lapse, the Group recognises the consideration from contracts with customers as receivables and therefore the Group does not recognise contractual assets.

Moreover, revenues from the sale of services are recognised by the Group in profit or loss over time if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance to the extent that it performs its obligations, or
- the Group satisfies a performance obligation and creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced, or
- the Group satisfies a performance obligation and creates an asset without an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If the Group recognises revenues on the basis of assessment pursuant to the adopted method of measurement the degree of advancement, prior to the issue of the invoice, it recognises due consideration as a contractual asset and transfers it to receivables at the moment the right to consideration becomes unconditional.

The Group recognises as a performance obligation every contractual promise to transfer to a customer a good or provide a service that is distinct, or a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer. For each performance obligation, the Group determines (based on contractual terms), whether the obligation will be performed over time or at a specified moment. In particular, in contracts for the sale of copper, silver and gold, every measurement unit of a transferred good (e.g. 1 tonne of copper or 1 kg of silver) is a separate performance obligation. Therefore, for every sale or transfer of goods, constituting a multiplication of a measurement unit of a transferred product, which is realised at the same time, the Group fulfils its performance obligation and at the same time recognises revenues.

In trade contracts in which the performance obligation is met at a specified time, the Group uses various payment conditions, including prepayments of up to several days before delivery and deferred payments of up to 120 days, although the deferred payments do not concern silver. Payment dates depend on the evaluation of the recipient's credit risk and the possibility of securing receivables. The consideration becomes due depending on contractual conditions, that is prior to the realisation of the delivery (prepayment) by the Group or after the Group meets its performance obligation. If the Group receives payment from the customer before it meets its performance obligation, it recognises it as contractual payables. However, in the case of deferred payments terms, the Group recognises due consideration from the customer as a receivable only after the transfer of promised products to the customer and the issuance of the invoice.

Revenues from contracts with customers are recognised in the amount of the transaction price, consisting of the amount of consideration to which – in accordance with the Group's expectations – it will be given in return for the transfer of promised goods or services to the customer, excluding consideration collected on behalf of third parties.
The transaction price also reflects the effects of the time value of money if a contract with a customer contains a significant financing element, which is determined based on the contractual payment terms, regardless of whether the promise of financing is explicitly stated in the contract. In determining whether a financing component is significant for a given agreement, all of the facts and circumstances are taken into consideration, including the eventual difference between the promised consideration and the cash selling price of the promised goods and services, as well as the total impact of the following two factors: (i) the estimated period from the moment an entity transfers the promised goods or services to a customer to the moment the customer pays for these goods or services, and (ii) prevailing interest rates on a given market. In the realised contracts of sales to customers in 2022 and 2021, the Group identified a significant financing component in the contract with Franco Nevada (contract described below in Important estimates, assumptions and judgments).
The Group presents the results of financing (interest costs) separately from revenues from contracts with customers in the statement of comprehensive income. In the Franco Nevada contract, there is also an element of variable consideration. In such a situation, the Group recognises revenues by estimating the amount of consideration, to which it will be entitled to in exchange for transferring the good to the customer and includes a part or all of the amount of variable consideration in the transaction price only to such an extent to which it is highly probable that there will not be a reversal of a significant part of previously recognised accumulated revenues at the moment when uncertainty as to the amount of consideration ceases to be.

In the case of copper and silver products sales transactions for which the price is set after the date of recognition of a given sale, at the moment of initial recognition of a transaction an adjustment of revenues from sales is made, arising from the difference between the forward price of a metal expressed in USD from the date of recognition of a sale in the period corresponding to the period of settlement of the transaction, and the price from provisional invoice. This adjustment brings the amount of the transaction to the expected amount as a transaction price at the moment of initial recognition. This only concerns cases where the change in transaction price arises from a change in the metal's price. For these types of variable revenues, the limitation of IFRS 15 on recognising variable consideration only to the amount in respect of which it is highly probable that a reversal will not be recognised, is not applicable. Changes to the booked amount after the moment of recognition do not impact the revenues from sales but are fair value gains/losses on measurement of receivables pursuant to the accounting policies presented in Note 10.2.

Sales revenue is adjusted for the gain or loss on the settlement of future cash flow hedging derivatives, in accordance with the general principle that the portion of gain or loss on a derivative hedging instrument that is determined to be an effective hedge is recognised in the same position of profit or loss in which the gain or loss on the hedged item is recognised at the moment when the hedged item affects profit or loss.

Important estimates, assumptions and judgments

The Group recognises revenues from the sale of products, merchandise and materials in profit or loss once, when the performance obligation is satisfied (in particular in accordance with the applied INCOTERMS principles. In the majority of contracts, control is transferred to the customer after delivery of the goods, which is also understood as delivery of the goods to the carrier or to a designated facility (DAP, FCA and EX WORKS bases). In other contracts, control is transferred to the customer at the moment it is handed over to the carrier and loaded aboard a ship (CFR, CIF, CPT and CIP bases). In these contracts, the Group is also obliged to organise the shipment. In these cases, the Group acts as a principal, as it has control over the service before its completion and transfer to the customer. At the same time, the Group allocates a part of the transaction price to the transport service and recognises these revenues over time.

The Group recognises revenues over time due to realised mine construction services and other geological work. The Group meets liabilities in time, because the customer simultaneously receives and makes use of economic benefits arising from the performed service as it is performed, or because components are made which do not have an alternative application for the Group and simultaneously the Group has an enforceable right to payment. To measure the degree of advancement of performance obligation, the Group applies a method based on expenses incurred while meeting the performance obligation on the basis of incurred costs and for other contracts, a method based on results, where the unit cost set in advance is applied to measure the unit of production (e.g. to measure meters of drilled tunneling).

<u>The contract with Franco Nevada</u>

Performance obligation

The Group realises the streaming arrangement contract, which is a source of financing available on the market for entities operating in the mining sector.

The contract concerns the sale of half of the production of gold, platinum and palladium contained in the ore extracted during the lives of the following mines: Morrison, McCreedy West and Podolsky, which are within the CGU Sudbury. Pursuant to the terms of the contract, Quadra FNX Mining Ltd. received a prepayment in the amount of CAD 400 million. Moreover, in accordance with the contract, the selling price for one ounce of gold equivalent is the lower of these two amounts: (a) USD 400, increased by 1% each year beginning from 2011, or (b) the market price of gold. The received prepayment covers the difference between the market price of ore sold and its fixed selling price. The Group recognised a liability due to the contract in the amount of prepayment due to the obligation put on the entity to meet the obligation to transfer or be ready to transfer goods or services in the future. The Group ceases to recognise this contractual obligation and recognises revenues at the moment it transfers these goods or services to the customer and therefore meets its performance obligation.

Variable consideration

In the contract with Franco Nevada the total transaction price is variable and depends on the amount of the raw material sold, and this in turn depends on ore extraction in the future throughout the life of the mine (including for example on the size of the deposit). Therefore, if in subsequent reporting periods the Group changes its judgment regarding the planned amount of ore to be extracted, and consequently to the amount of raw material sold, the transaction price will also be updated.

The Group recognises amounts related to satisfied performance obligations as revenue or as a decrease of revenue in the period in which the transaction price was changed.

Significant financing component

In the context of the contract with Franco Nevada, taking into consideration the expected period from the moment when prepayment is received to the moment when the Group transfers the promised good (the life of the mine, or several decades) and the nature of this contract, it was determined that the extension of payments over time provides benefits to the Group due to the financing of deliveries of raw material by the buyer (Franco Nevada), and as a result the contract includes a significant financing element.

The Group presents the effects of financing (interest costs) separately from revenue from contracts with customers in the statement of profit or loss. Interest costs are recognised solely to the extent to which the liabilities related to the contract with Franco Nevada were recognised.

Determination of the transaction price allocated to other performance obligations

If the Group has other performance obligations at the end of the reporting period, it is required to disclose the transaction price allocated to these performance obligations (IFRS 15.120-122). The Group applies a practical expedient and does not disclose performance obligations which are a part of a contract that has an original expected duration of one year or less. Moreover, the Group has long-term contracts with prices based mainly on a variable consideration, which is not included by the Group when estimating the transaction price.

Moreover, the Group (via the company DMC) advances long-term contracts for mine construction, in which it uses a method based on expenditures to recognise revenues, which meets the criteria for recognising revenues in the amount, that the Group has a right to invoice. The total transaction price allocated to performance obligations, which remained unsatisfied at the end of the reporting period, amounted to PLN 899 million, of which the amount of PLN 559 million will be realised in 2023, the amount of PLN 149 million will be realised in 2024 and the amount of PLN 191 million will be realised in or after 2025. These contracts do not have an element of variable consideration.

in PLN millions, unless otherwise stated

Revenues from contracts with customers of the Group – breakdown by products

	from 1 January 2022 to 31 December 2022						
					Reconciliation items to consolidated data		
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	Consolidated data
Copper	22 207	2 015	3 248	10	(3 248)	(51)	**24 181**
Silver	4 341	30	82	-	(82)	-	**4 371**
Gold	649	313	269	-	(269)	-	**962**
Services	174	595	-	2 307	-	(1 745)	**1 331**
Energy	35	-	-	358	-	(212)	**181**
Salt	36	-	-	-	-	23	**59**
Blasting materials and explosives	-	-	-	300	-	(151)	**149**
Mining machinery, transport vehicles and other types of machinery and equipment	-	-	-	315	-	(271)	**44**
Fuel additives	-	-	-	159	-	-	**159**
Lead	295	-	-	-	-	-	**295**
Products from other non-ferrous metals	-	-	-	179	-	(4)	**175**
Steel	-	-	-	623	-	(142)	**481**
Petroleum and its derivatives	-	-	-	528	-	(431)	**97**
Other merchandise and materials	367	-	-	7 313	-	(7 224)	**456**
Other products	325	264	375	797	(375)	(480)	**906**
TOTAL	**28 429**	**3 217**	**3 974**	**12 889**	**(3 974)**	**(10 688)**	**33 847**

** 55% of the Group's share in revenues of Sierra Gorda S.C.M.*

in PLN millions, unless otherwise stated

	from 1 January 2021 to 31 December 2021						
					Reconciliation items to consolidated data		
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	Consolidated data
Copper	19 079	2 325	3 756	8	(3 756)	(32)	**21 380**
Silver	3 990	8	95	-	(95)	-	**3 998**
Gold	548	243	212	-	(212)	-	**791**
Services	143	426	-	2 089	-	(1 581)	**1 077**
Energy	51	-	-	250	-	(167)	**134**
Salt	29	-	-	-	-	32	**61**
Blasting materials and explosives	-	-	-	219	-	(168)	**51**
Mining machinery, transport vehicles and other types of machinery and equipment	-	-	-	212	-	(171)	**41**
Fuel additives	-	-	-	123	-	-	**123**
Lead	271	-	-	-	-	-	**271**
Products from other non-ferrous metals	-	-	-	114	-	(4)	**110**
Steel	-	-	-	604	-	(66)	**538**
Petroleum and its derivatives	-	-	-	325	-	(275)	**50**
Other merchandise and materials	278	-	-	5 703	-	(5 518)	**463**
Other products	229	123	522	682	(522)	(319)	**715**
TOTAL	**24 618**	**3 125**	**4 585**	**10 329**	**(4 585)**	**(8 269)**	**29 803**

** 55% of the Group's share in revenues of Sierra Gorda S.C.M.*

in PLN millions, unless otherwise stated

Note 2.4 Revenues from contracts with customers of the Group – breakdown by category

	from 1 January 2022 to 31 December 2022						
					Reconciliation items to consolidated data		
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	Consolidated data
Total revenues from contracts with customers	**28 429**	**3 217**	**3 974**	**12 889**	**(3 974)**	**(10 688)**	**33 847**
Revenues from sales contracts, for which the sales price is set after the date of recognition of the sales (M+ principle), of which:	21 767	2 556	3 974	6 259	(3 974)	(6 038)	**24 544**
settled	21 045	1 459	2 068	6 259	(2 068)	(6 038)	**22 725**
unsettled	722	1 097	1 906	-	(1 906)	-	**1 819**
Revenues from realisation of long-term contracts for mine construction	-	555	-	165	-	(146)	**574**
Revenues from other sales contracts	6 662	106	-	6 465	-	(4 504)	**8 729**
Total revenues from contracts with customers, of which:	**28 429**	**3 217**	**3 974**	**12 889**	**(3 974)**	**(10 688)**	**33 847**
in factoring	8 677	-	-	390	-	(304)	**8 763**
not in factoring	19 752	3 217	3 974	12 499	(3 974)	(10 384)	**25 084**

** 55% of the Group's share in revenues of Sierra Gorda S.C.M.*

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Total revenues from contracts with customers, of which:	**33 847**	**29 803**
transferred at a certain moment	32 229	28 592
transferred over time	1 618	1 211

in PLN millions, unless otherwise stated

	from 1 January 2021 to 31 December 2021						
					Reconciliation items to consolidated data		
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	Consolidated data
Total revenues from contracts with customers	**24 618**	**3 125**	**4 585**	**10 329**	**(4 585)**	**(8 269)**	**29 803**
Revenues from sales contracts, for which the sales price is set after the date of recognition of the sales (M+ principle), of which:	19 838	2 690	4 369	4 751	(4 369)	(4 648)	**22 631**
settled	18 952	2 621	1 874	4 751	(1 874)	(4 648)	**21 676**
unsettled	886	69	2 495	-	(2 495)	-	**955**
Revenues from realisation of long-term mine construction contracts	-	403	-	220	-	(211)	**412**
Revenues from other sales contracts	4 780	32	216	5 358	(216)	(3 410)	**6 760**
Total revenues from contracts with customers, of which:	**24 618**	**3 125**	**4 585**	**10 329**	**(4 585)**	**(8 269)**	**29 803**
in factoring	8 575	-	-	106	-	(46)	**8 635**
not in factoring	16 043	3 125	4 585	10 223	(4 585)	(8 223)	**21 168**

** 55% of the Group's share in revenues of Sierra Gorda S.C.M.*

in PLN millions, unless otherwise stated

Note 2.5 Revenues from contracts with customers of the Group – geographical breakdown reflecting the location of end customers

	from 1 January 2022 to 31 December 2022							from 1 January 2021 to 31 December 2021
					Reconciliation items to consolidated data			
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Elimination of data of the segment Sierra Gorda S.C.M.	Consolidation adjustments	Consolidated data	KGHM Polska Miedź S.A. Group
Poland	7 158	-	17	12 474	(17)	(10 646)	8 986	7 608
Germany	5 502	-	-	101	-	-	5 603	3 787
China	2 147	1 595	1 701	-	(1 701)	-	3 742	4 158
Italy	2 319	-	-	29	-	-	2 348	2 022
Czechia	2 250	-	-	19	-	-	2 269	1 828
The United Kingdom	1 676	-	-	6	-	-	1 682	1 290
Hungary	1 408	-	-	11	-	-	1 419	1 129
The United States of America	997	198	7	16	(7)	(1)	1 210	2 261
France	896	-	-	5	-	-	901	794
Canada	50	855	-	-	-	(40)	865	527
Switzerland	790	-	-	7	-	-	797	590
Australia	787	-	-	-	-	-	787	1 020
Austria	542	-	-	28	-	-	570	457
Thailand	437	-	-	5	-	-	442	463
Chile	7	304	1 231	1	(1 231)	(1)	311	201
Turkey	282	-	-	15	-	-	297	130
Vietnam	231	-	-	-	-	-	231	336
Slovakia	178	-	-	19	-	-	197	140
Philippines	-	173	-	-	-	-	173	91
Romania	138	-	-	4	-	-	142	258
Slovenia	130	-	-	2	-	-	132	150
Mexico	-	92	-	-	-	-	92	-
Malaysia	72	-	-	-	-	-	72	47
Taiwan	69	-	-	-	-	-	69	-
South Korea	68	-	54	-	(54)	-	68	58
Belgium	51	-	-	16	-	-	67	29
Japan	64	-	786	-	(786)	-	64	139
Bulgaria	29	-	-	18	-	-	47	41
Sweden	-	-	-	31	-	-	31	56
Denmark	27	-	-	1	-	-	28	44
Bosnia and Herzegovina	23	-	-	2	-	-	25	-
Lithuania	3	-	-	19	-	-	22	12
Estonia	14	-	-	3	-	-	17	20
Norway	-	-	-	16	-	-	16	15
The Netherlands	7	-	127	-	(127)	-	7	4
Russia	-	-	-	6	-	-	6	26
India	-	-	10	-	(10)	-	-	-
Brazil	-	-	38	-	(38)	-	-	8
Other countries	77	-	3	35	(3)	-	112	64
TOTAL	**28 429**	**3 217**	**3 974**	**12 889**	**(3 974)**	**(10 688)**	**33 847**	**29 803**

**55% of the Group's share in revenues of Sierra Gorda S.C.M.*

in PLN millions, unless otherwise stated

Note 2.6 Main customers

In the period from 1 January 2022 to 31 December 2022 and in the comparable period the revenues from no single customer exceeded 10% of the sales revenue of the Group.

Note 2.7 Non-current assets – geographical breakdown

	As at 31 December 2022	As at 31 December 2021
Poland	25 008	23 545
Canada	1 919	1 577
The United States of America	1 841	1 765
Chile	204	229
Other countries	-	94
TOTAL*	**28 972**	**27 210**

**non-current assets, excluding: derivatives, other financial instruments, other non-financial assets and deferred tax assets (IFRS 8.33b) in the total amount of PLN 11 448 million as at 31 December 2022 (PLN 9 813 million as at 31 December 2021).*

Part 3 – Impairment of assets

Note 3.1. Impairment of assets as at 31 December 2022

Pursuant to IAS 36, as at 31 December 2022 the Group assessed the occurrence of indications of impairment of its assets. Key non-current assets of the Group were subjected to the analysis. As a result of the performed evaluation, no indications of impairment of these assets were identified. Because of the Parent Entity's market capitalisation remaining below the level of its net assets for a significant part of 2022, this area was subjected to a further analysis.

Assessment of the risk of impairment of assets in the context of the market capitalisation of KGHM Polska Miedź S.A.
In 2022, a general deterioration in sentiment was seen in stock markets due to the substantial uncertainty as to the development of the global macroeconomic situation in reaction to the start of the armed conflict in Ukraine and the tangible consequences of the COVID-19 (coronavirus) pandemic. As a result, stock market indices, amongst others, suffered greatly. In 2022, the share price of KGHM Polska Miedź S.A. fell by 9% compared to the share price at the end of 2021, and as at 31 December 2022 it amounted to PLN 126.75. During the same period the WIG and WIG 20 indices fell respectively by 17% and 21%. As a result, the Parent Entity's market capitalisation fell from PLN 27 880 million to PLN 25 350 million, which means that as at 31 December 2022 it remained 15% below the level of the Company's net assets. As at 15 March 2023, the Parent Entity's share price amounted to PLN 113.30 and as a result, the market capitalisation amounted to PLN 22 660 million and was 24% lower than the level of the Parent Entity's net assets. Due to the fact that, during a significant part of the reporting period, the Company's market capitalisation remained below the carrying amount of its net assets, in accordance with IAS 36 Impairment of assets, the Management Board of KGHM Polska Miedź S.A. conducted an analysis to determine whether any area of KGHM Polska Miedź S.A.'s activities could be impaired. The analysis of the assets located in Poland indicated that not all of the factors which affect the market capitalisation of KGHM Polska Miedź S.A. are factors which are related to the conducted economic activities. The drop in share prices affected companies in the majority of sectors, in different economies, and reflected investor uncertainty as to the future. In particular, the armed conflict in Ukraine caused withdrawal of foreign investors from areas bordering the war zone, which can be seen not only in the situation on the Warsaw stock exchange, but also on exchanges in the region, such as in Czechia, Slovakia and Hungary, and also had a significant impact on the weakening of the PLN versus the USD. From the point of view of the Company's operations, the key factor influencing the level of market capitalisation is the copper price. In December 2021, the average price of copper amounted to 9 550 USD/t, and following the initial continuation of the upward trend in the first months of 2022 it recorded a significant decline. The minimum was recorded in July 2022, when the average copper price was at the level of 7 530 USD/t. But over time, as reassuring information as to the demand for this metal kept coming, prices returned to the trend observed at the start of the year and in December 2022 the average price for copper amounted to 8 367 USD/t. The share prices of companies involved in the mining and processing of copper are strongly correlated with the price of this metal. It should be pointed out that in the case of the Polish assets, of significance are PLN-expressed metals prices, which are also affected by the USD/PLN exchange rate. Fluctuations in the price of copper related to the turbulence on the financial markets, whose origins may often be found not only in macroeconomics but also in broadly understood geopolitics, are usually to a large extent offset by changes in the USD/PLN exchange rate, which additionally remains under the influence of the armed conflict in Ukraine. Despite the continued uncertainty in the economic environment, KGHM Polska Miedź S.A. maintains full operational capacity and consistently advances planned production and sales targets. The financial results achieved by the Company significantly exceed the budget targets, which is also a result of conducted optimisation initiatives and cost discipline applied in response to macroeconomic conditions. As a result of the assessment, it was judged that there was no relation between the fall in the share price of KGHM Polska Miedź S.A. both in terms of the activities of KGHM Polska Miedź S.A. in Poland as well as abroad. The Company realises production and sales targets in Poland as well as abroad. Consequently, there were no indications identified suggesting the risk of impairment of the Polish and international production assets, therefore there were no tests for impairment conducted for these assets as at 31 December 2022. Due to the uncertainty and the significant volatility of basic economic parameters, including metals prices and currency exchange rates, and dynamic development of the global pandemic situation, and its impact on the economic situation, the Company is continuously monitoring the global situation.

in PLN millions, unless otherwise stated

TEST FOR THE IMPAIRMENT OF NON-CURRENT ASSETS OF SPA COMPANIES – Segment – Other segments

As at 30 June 2022, new risks were identified to the realisation of forecasted financial results of the Group companies providing spa services (CGU): Uzdrowiska Kłodzkie S.A. - Grupa PGU, Uzdrowisko Połczyn Grupa PGU S.A., Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU, Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU. Apart from the increase in prices of electricity, energy carriers, food and other cost items due to inflation pressure, there is also a risk of inability to effectively transfer these increases into prices for end customers and/or an impact of these costs on provided services.

For the purpose of estimating the recoverable amount, in the conducted test the value in use of the cash generating units, comprised of property, plant and equipment and intangible assets of all of the aforementioned companies, was measured using the DCF method, i.e. the method of discounted cash flows.

The recoverable amount of CGUs, estimated as described above, was confirmed by the fair value of a transaction price of tested assets, which were sold between entities of the Group as part of the reorganisation project realised by the Group (details on changes in the organisational structure of the Group may be found in Note 12.11 Composition of the Group).

Basic assumptions adopted for impairment testing

Assumption	Uzdrowiska Kłodzkie S.A. - Grupa PGU	Uzdrowisko Połczyn Grupa PGU S.A.	Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU
Detailed forecast period*	2nd half of 2022 - 1st half of 2028	2nd half of 2022 - 1st half of 2028	2nd half of 2022 - 1st half of 2028	2nd half of 2022 - 1st half of 2028
Average EBITDA margin during the detailed forecast period	12%	13%	12%	13%
EBITDA margin during the residual period	15%	14%	14%	16%
Capital expenditures during the detailed forecast period	PLN 58 million	PLN 12 million	PLN 12 million	PLN 9 million
Average notional discount rate during the detailed forecast period**	11.4%	11.3%	11.4%	11.5%
Discount rate during the residual period**	11.4%	11.7%	11.5%	11.8%
Notional growth rate following the detailed forecast period	2.0%	2.0%	2.0%	2.0%

** A 6-year detailed forecast period was adopted instead of a 5-year one, pursuant to the approach applied by KGHM VII FIZAN for the measurement of portfolio deposits, in order to maintain the comparability over time (the methodology applied in previous periods).*
*** Data is presented after taxation, despite the measurement model of value in use. The application of data before taxation does not have a significant impact on the recoverable amount.*

The results of the conducted tests are presented in the following table:

CGU	Carrying amount	Recoverable amount	Impairment loss
Uzdrowiska Kłodzkie S.A. - Grupa PGU	114	102	12
Uzdrowisko Połczyn Grupa PGU S.A	81	55	26
Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	34	28	6
Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU	38	36	2

As a result of the tests conducted, an impairment loss on non-current assets was recognised in the total amount of PLN 46 million – by comparing the carrying amount with the recoverable amount.

The impairment loss was recognised in the items: "Cost of sales" in the amount of PLN 45 million and in "Other operating costs" in the amount of PLN 1 million.

in PLN millions, unless otherwise stated

The recoverable amount of individual CGUs indicated a significant sensitivity to changes in the adopted discount rate, the average EBITDA margin, and the growth rate following the forecast period. Moreover, it should be noted that sensitivity to the change in the level of revenues is reflected in sensitivity to the changes in the EBITDA margin.

	Recoverable amount		
Average EBITDA margin during the forecast period	**decrease by 2 pp.**	**per test**	**increase by 2 pp.**
Uzdrowiska Kłodzkie S.A. - Grupa PGU	60	**102**	144
Uzdrowisko Połczyn Grupa PGU S.A.	43	**55**	69
Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	20	**28**	35
Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU	27	**36**	45
Average discount rate during the forecast period	**decrease by 1 pp.**	**per test**	**increase by 1 pp.**
Uzdrowiska Kłodzkie S.A. - Grupa PGU	119	**102**	88
Uzdrowisko Połczyn Grupa PGU S.A.	63	**55**	50
Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	32	**28**	24
Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU	41	**36**	32
Growth rate following the forecast period	**decrease by 1 pp.**	**per test**	**increase by 1 pp.**
Uzdrowiska Kłodzkie S.A. - Grupa PGU	92	**102**	113
Uzdrowisko Połczyn Grupa PGU S.A.	52	**55**	60
Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	25	**28**	30
Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU	33	**36**	39

In order to monitor the risk of further impairment of operating assets in subsequent reporting periods as well as to monitor the possibility of reversing the impairment loss, it was determined that the recoverable amount would be equal to the carrying amount of individual companies if the notional discount rate were as presented below:

Uzdrowiska Kłodzkie S.A. - Grupa PGU	10.54%
Uzdrowisko Połczyn Grupa PGU S.A.	8.50%
Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU	10.00%
Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU	10.75%

EVALUATION OF IMPAIRMENT OF WATER RIGHTS

In the Group, water rights in Chile are annually subjected to impairment testing by comparing their carrying amount to the recoverable amount, which is set as fair value decreased by costs to sell. The fair value of water rights is classified under level 2 of the fair value hierarchy, in which fair value measurements are based on significant observable input data, other than market prices.

For the year ended on 31 December 2022, the Group assessed the factors impacting the recoverable amount of the asset and concluded that there are no grounds for recognising an impairment loss, as the water price and the estimated amount of water available for extraction did not change compared to the level of these factors adopted for measurement as at 31 December 2021. The carrying amount of water rights amounted to PLN 73 million as at 31 December 2022 (as at 31 December 2021: PLN 67 million).

Other impairment losses on assets

Other impairment losses on assets concern:

- fixed assets and intangible assets, PLN 38 million (including PLN 36 million on the segment KGHM INTERNATIONAL LTD.),
- fixed assets under construction and other intangible assets not yet available for use, PLN 63 million (including PLN 55 million on the segment KGHM INTERNATIONAL LTD., projects under IFRS 6, which were fully impaired since the drilling was concluded without confirmation of economic feasibility of explored deposits),
- write-down of inventories, PLN 74 million,
- allowances for impairment of receivables, PLN 9 million.

Information on the item in which impairment losses are recognised in the consolidated statement of profit or loss is presented in Note 4.4.

Note 3.2. Impairment of assets as at 31 December 2021

TEST FOR THE IMPAIRMENT OF ASSETS OF THE KGHM INTERNATIONAL LTD. GROUP – the Segment KGHM INTERNATIONAL LTD.

As at 30 June 2021, as a result of the identification of indications of a possible change in the recoverable amount of some of the international mining assets of the KGHM INTERNATIONAL LTD. Group, the Parent Entity's Management Board performed impairment testing of these assets. The following cash generating units (CGUs) have been selected for the purpose of evaluation of the recoverable amount of the assets of the KGHM INTERNATIONAL LTD. Group, in which indications of a possible change in the recoverable amount were identified:

- The Robinson mine,
- The Sudbury Basin, comprising the Morrison mine and the McCreedy mine,
- The pre-operational Victoria project,
- The Ajax project.

The key indications to perform impairment testing were:

- a change in market forecasts of commodities prices,
- the decision to commence the process of preparing to sell some of the assets located in the Sudbury CGU (this does not include the Victoria project in the pre-operational phase, which remains within the KGHM INTERNATIONAL LTD. Group as a strategic asset),
- a change in technical and economic parameters for the KGHM INTERNATIONAL LTD. Group's CGU Sudbury mine assets in terms of production volumes, planned operating costs and capital expenditures during the life of a mine.

The main indications that the recoverable amount may be higher than the carrying amount, with the consequent justification for the reversal of previously recognised impairment losses, were increases in the price paths for copper, gold, palladium and silver.

The main indications that the recoverable amount may be lower than the carrying amount, with the consequent necessity for the recognition of an additional impairment loss, were as follows:

- a decrease in the price paths for nickel,
- a change in technical and economic parameters of assets of the CGU Sudbury, among others the deferment of re-commencement of production, lower expected production volume, an increase in the expected capital expenditures during the life of a mine.

In order to determine the recoverable amount of assets of individual CGUs, in the test conducted the fair value (decreased by estimated costs to sell) was calculated using the DCF method, i.e. the method of discounted cash flows, for the following CGUs: Sudbury, Victoria and the value in use for the CGU Robinson.

Basic macroeconomic assumptions adopted for impairment testing as at 30 June 2021 – metal prices

Price paths were adopted on the basis of long-term forecasts available from financial and analytical institutions. A detailed forecast is being prepared for the period 2022-2026, while for the period 2027-2031 a technical adjustment of prices was applied between the last year of the detailed forecast and 2032, from which a long-term metal price forecast is used as follows:

- for copper – 7 000 USD/t (3.18 USD/lb);
- for gold – 1 500 USD/oz;
- for nickel – 7.25 USD/lb.

Assumption adopted for impairment testing as at 30 June 2021	Victoria	Sudbury	Robinson
Mine life / forecast period	14	14	7
Level of copper production during mine life (kt)	249	43	358
Level of nickel production during mine life (kt)	221	23	-
Level of gold production during mine life (koz t)	157	27	263
Average operating margin during mine life	62%	27%	43%
Capital expenditures to be incurred during mine life [USD million]	1 530	157	410
Applied discount rate after taxation for assets in the operational phase*	-	7.5%	7.5%
Applied discount rate after taxation for assets in the pre-operational phase	10.5%	-	-
Costs to sell	2%		
Level of fair value hierarchy to which the measurement at fair value was classified	Level 3		

** The presented data of the CGU Robinson is post-taxation despite the model of measuring the value in use. The use of pre-taxation data does not significantly impact the recoverable amount.*

Key factors responsible for the modification of technical and economic assumptions adopted for impairment testing as at 30 June 2021	
Sudbury	The inclusion in production of copper and precious metals mineralisation zones („700 Zone" and „PM Zone") and exclusion of a nickel zone („Intermain Orebody"). Deferment of re-commencement of the Levack mine up to 2027 and a decrease of the production volume.

Results of the test performed as at 30 June 2021 are presented in the following table:

CGU	Segment (Part 2)	Carrying amount*		Recoverable amount		Reversal of impairment loss	
		USD mn	PLN mn	USD mn	PLN mn	USD mn	PLN mn
Victoria	KGHM INTERNATIONAL LTD.	280	1 065	280	1 065	-	-
Sudbury		43	164	43	164	-	-
Robinson		369	1 404	614	2 335	10**	38**

** The carrying amount of non-current assets decreased by the provision for future decommissioning costs of mines.*

***Despite estimating the recoverable amount of CGU Robinson at the level of USD 614 million (PLN 2 335 million), which was higher than the carrying amount of this CGU's assets by the amount of USD 245 million (PLN 932 million), the Group reversed, pursuant to IAS 36.117, impairment losses on assets of this CGU recognised in prior periods in the amount of USD 10 million (PLN 38 million), that is to the level of the carrying amount of assets, which would be determined (after deducting any accumulated depreciation/amortisation), if there was no recognition of impairment losses on these assets in prior periods.*

As a result of the conducted test, there was a reversal of an impairment loss on the assets of the CGU Robinson in the amount of PLN 38 million, which decreased the item "Cost of sales".

The results of tests performed as at 30 June 2021 for the CGU Victoria and the CGU Sudbury confirmed that their recoverable amounts are equal to their carrying amounts.

Sensitivity analysis of the recoverable amount of CGU Victoria (USD mn)	Recoverable amount
Discount rate 11%	247
Discount rate 10.5% (test)	**280**
Discount rate 10%	329

Sensitivity analysis of the recoverable amount of CGU Victoria (USD mn)	Recoverable amount
Copper price -0.10 $/lb	275
Copper price (test)	**280**
Copper price +0.10 $/lb	299

Sensitivity analysis of the recoverable amount of CGU Victoria (USD mn)	Recoverable amount
Nickel price -0.10 $/lb	238
Nickel price (test)	**280**
Nickel price +0.10 $/lb	336

Sensitivity analysis of the recoverable amount of CGU Robinson (USD mn)	Recoverable amount
Discount rate 8%	604
Discount rate 7.5% (test)	**614**
Discount rate 7%	625

Sensitivity analysis of the recoverable amount of CGU Robinson (USD mn)	Recoverable amount
Copper price -0.10 $/lb	564
Copper price (test)	**614**
Copper price +0.10 $/lb	665

The sensitivity analysis of the recoverable amount of the CGU Sudbury, due to the low carrying amount of assets, was not presented.

In the second half of 2021, as a result of the identification of indications of a possible change in the recoverable amount of the CGU Sudbury's mining assets of the KGHM INTERNATIONAL LTD. Group, the Parent Entity's Management Board performed impairment testing of these assets. The key indications to perform impairment testing and indicating that that the recoverable amount of assets may be lower than their carrying amount, and therefore it may be necessary to recognise an additional impairment loss, were the decision to abandon mining operations on the additional deposit and the decrease in efficiency of these assets. Production was halted in two of the mines in the CGU Sudbury, that is Morrison and Podolsky, and they are maintained without conducting mining operations. Moreover, results of another mine of this CGU – McCreedy – were below expectations in 2021, mainly due to a significant decrease in metal content in mined ore.

In order to determine the recoverable amount of the CGU Sudbury's assets, in the test conducted the fair value (decreased by estimated costs to sell) was calculated using the DCF method, i.e. the method of discounted cash flows.

The basic macroeconomic assumptions adopted for impairment testing as at 31 December 2021, that is metal prices, did not significantly change as compared to those adopted for impairment testing as at 30 June 2021.

Assumption adopted for impairment testing as at 31 December 2021	Sudbury
Mine life / forecast period	5
Level of copper production during mine life (kt)	14.8
Level of nickel production during mine life (kt)	3.7
Level of gold production during mine life (koz t)	14.1
Average operating margin during mine life	7%
Capital expenditures to be incurred during mine life [USD million]	14.28
Applied discount rate after taxation	7.5%
Costs to sell	2%
Level of fair value hierarchy to which the fair value measurement was classified	Level 3

Key factors responsible for the modification of technical and economic assumptions adopted for impairment testing as at 31 December 2021	
Sudbury	A decrease in production volume of McCreedy and Morrison/Levack, a decrease in the life of McCreedy mine to 2026.

Results of the test performed as at 31 December 2021 are presented in the following table:

CGU	Segment (Part 2)	Carrying amount*		Recoverable amount		Impairment loss	
		USD mn	PLN mn	USD mn	PLN mn	USD mn	PLN mn
Sudbury	KGHM INTERNATIONAL LTD.	41	166	0	0	41	166

** The carrying amount of non-current assets decreased by the provision for future decommissioning costs of mines.*

in PLN millions, unless otherwise stated

As a result of the conducted test, an impairment loss was recognised on the assets of CGU Sudbury in the following items: “Cost of sales” in the amount of PLN 162 million and “Other operating costs” in the amount of PLN 4 million.

The sensitivity analysis of the recoverable amount of CGU Sudbury was not presented due to the low carrying amount of assets.

Due to the fact that as at 30 June 2021 the Carlota and Franke mines (assets of the KGHM INTERNATIONAL LTD. Group) were reclassified to assets held for sale, their recognition and measurement at the moment of reclassification and as at 31 December 2021 were performed pursuant to IFRS 5 (Note 9.8).

EVALUATION OF IMPAIRMENT OF WATER RIGHTS

In the Group, water rights in Chile are annually subjected to impairment testing by comparing their carrying amount to the recoverable amount, which is set as fair value decreased by costs to sell. The fair value of water rights is classified under level 2 of the fair value hierarchy, in which fair value measurements are based on significant observable input data, other than market prices.

For the year ended on 31 December 2021, the Group assessed the factors impacting the recoverable amount of the asset and concluded that there are no grounds for recognising an impairment loss, as the water price and the estimated amount of water available for extraction did not change compared to the level of these factors adopted for measurement as at 31 December 2020. The carrying amount of water rights amounted to PLN 67 million as at 31 December 2021 (as at 31 December 2020: PLN 65 million).

TEST FOR THE IMPAIRMENT OF PROPERTY, PLANT AND EQUIPMENT OF WPEC w Legnicy S.A. – Segment – Other segments

In the current period, due to indications of the possibility of changes in the recoverable amount of the property, plant and equipment and intangible assets of the company WPEC S.A., the company performed impairment testing of these assets. The main indications to perform impairment testing in the current reporting period were losses on principal activities, a significant increase in prices of CO_2 emissions rights and a risk of prolongation of the investment process related to the gas source in Legnica. As at 31 December 2021, the carrying amount of the property, plant and equipment and intangible assets of WPEC S.A., decreased by the carrying amount of subsidies and land located in the town of Lubin and the carrying amount of CO_2 emission rights, amounted to PLN 106 million. For the purpose of estimating the recoverable amount, in the conducted test the fair value decreased by estimated costs to sell was measured, using the DCF method, i.e. the method of discounted cash flows.

Basic assumptions adopted for impairment testing

Assumption	Level adopted in testing
Detailed forecast period	2022-2031
Operating margin range during the detailed forecast period	-3.24% - +3.25%
Capital expenditures during the detailed forecast period	PLN 202 million
Discount rate	3.86% (real rate after taxation)
Growth rate following the forecast period	0%

The recoverable amount of tested property, plant and equipment was determined using an analysis of discounted forecasted cash flows. The adopted forecast period is 10 years. Extension of the forecast period is justified mainly, among others, by the significant and long-term impact of expected changes in the regulatory environment and in order to fully reflect the impact of planned capital expenditures,
The adopted level of capital expenditures during the forecast period mainly concerns the realisation of a task – Modernisation of a heat supply system for the Legnica city and modernisation of heating networks.

in PLN millions, unless otherwise stated

For the forecast of costs for the years 2022 – 2031, the change in the heat generation technology in Legnica from 2024 and reduction of transmission losses will have a significant impact, and in particular:

- a decrease in costs of raw materials and production processes of a coal-based economy and the associated current maintenance, operations, overhauls and shut-downs;
- a decrease in the amount of CO_2 emissions by approx. 50%;
- reorganisation of employment due the switch to a natural gas-based technology;
- reduction of heat losses in owned transmission infrastructure, related to the on-going modernisation of transmission infrastructure.

The aforementioned forecast takes into account significant changes in prices of CO_2 emission rights and energy which took place in the last period.

As the result of the aforementioned assumptions and with due prudence, the estimated EBIT will increase in the period 2022 – 2032 from the yearly level of –PLN 5 million to PLN 8 million.

The EBIT in 2032 in the amount of PLN 8 million is a basis to calculate free cash flows necessary to determine the residual value, which is estimated to be PLN 115 million.

As a result of the impairment testing of property, plant and equipment and intangible assets, the recoverable amount of assets was determined to be at the level of PLN 56 million, which was lower than the carrying amount of the tested assets, which was the basis for recognising an impairment loss in the amount of PLN 50 million in the item "Cost of sales".

The measurement of non-current assets and intangible assets of the company indicated a significant sensitivity to the adopted discount rates and the measurement of the residual value, which was determined based on EBIT from 2032. The following table presents the impact of changes to these parameters on the measurement of the assets.

Sensitivity analysis of the recoverable amount of property, plant and equipment and intangible assets of WPEC w Legnicy S.A.			
	Recoverable amount for a given discount rate		
	lower by 1 pp	**per test**	**higher by 1 pp**
Discount rate 3.86 % (test)	**113**	**56**	**23**
	Recoverable amount for a given EBIT in a residual period		
	lower by 5 %	**per test**	**higher by 5 %**
EBIT in the residual period PLN 8 million (test)	**50**	**56**	**62**

In order to monitor the risk of impairment of the operating assets in subsequent reporting periods, it was determined that the recoverable amount would be equal to the carrying amount of assets if the discount rate fell by 0.91% or if EBIT increased by 43.2%.

TEST FOR THE IMPAIRMENT OF PROPERTY, PLANT AND EQUIPMENT OF "Energetyka" sp. z o.o. -

Segment – Other segments

In the current period, due to indications of the possibility of changes in the recoverable amount of property, plant and equipment and intangible assets of the company "Energetyka" sp. z o.o., the Company performed impairment testing of these assets. The key indication to perform impairment testing in the current reporting period were the following: worse than expected economic results and a significant increase in prices of CO_2 emissions rights. As at 31 December 2021, the carrying amount of tested non-current assets of "Energetyka" sp. z o.o. amounted to PLN 386 million. For the purpose of estimating the recoverable amount, in the conducted test the value in use of the CGU was measured using the DCF method, i.e. the method of discounted cash flows.

in PLN millions, unless otherwise stated

Basic assumptions adopted for impairment testing	
Assumption	**Level adopted in testing**
Detailed forecast period	2022-2031
Operating margin range during the detailed forecast period	-0.43% - +2.07%
Capital expenditures during the detailed forecast period	PLN 313 million
Discount rate*	3.80% (real rate after taxation)
Growth rate following the forecast period	0%

**data is presented after taxation, despite the measurement model of value in use. The application of data before taxation does not have a significant impact on the recoverable amount.*

The recoverable amount of tested property, plant and equipment was determined using an analysis of discounted forecasted cash flows. The adopted forecast period is 10 years. Extension of the forecast period is justified mainly by the significant and long-term impact of expected changes in the regulatory environment. Moreover, in the detailed forecast period it is necessary to present the impact of incurred capital expenditures, the increase in their amounts in the first forecast period (for the years 2022/2023) and the lack of necessity to incur them in similar amounts in subsequent years.

The approved Budget of the company for the years 2022 – 2026, adjusted due to significant changes in prices of CO_2 emissions rights and energy which took place recently , is the basis for the preparation of forecasts of revenues and costs.

The adopted level of capital expenditures in the forecast period concerns mainly modernisation and replacement tasks.

As the result of the aforementioned assumptions and with due prudence, the estimated EBIT will increase in the period 2022 – 2024 from the level of -PLN 3 million to PLN 17 million, while from 2025 to 2032 EBIT will be at the yearly level of PLN 16 million.

As a result of the impairment testing of the property, plant and equipment and intangible assets, the recoverable amount of tested assets was determined to be at the level of PLN 307 million, which was lower than the carrying amount of the tested assets, which was the basis for recognising an impairment loss in the amount of PLN 79 million in the item “Cost of sales”.

The measurement of tested non-current assets indicated a significant sensitivity to the adopted levels of discount rates and a moderate sensitivity to a change in EBIT which is a basis used to determine the residual value. The following table presents the impact of changes of these parameters on the measurement of assets.

Sensitivity analysis of the recoverable amount of property, plant and equipment of “Energetyka” sp. z o.o.			
	Recoverable amount for a given discount rate		
	lower by 1 pp	per test	higher by 1 pp
Discount rate 3.80 % (test)	**431**	**307**	**234**
	Recoverable amount for a given EBIT in a residual period		
	lower by 5 %	per test	higher by 5 %
EBIT in the residual period of PLN 16 million PLN (test)	**292**	**307**	**322**

In order to monitor the risk of impairment of operating assets in subsequent reporting periods, it was determined that the recoverable amount would be equal to the carrying amount of the assets if the discount rate fell by 0.71 percentage point or EBIT increased by 26.3%.

Other impairment losses on assets

Other impairment losses on assets concern:

- fixed assets and intangible assets, PLN 49 million,
- fixed assets under construction and other intangible assets not yet available for use, PLN 34 million,
- write-down of inventories, PLN 47 million,
- allowances for impairment of receivables, PLN 13 million.

Information on the item in which impairment losses are recognised in the consolidated statement of profit or loss is presented in Note 4.4.

in PLN millions, unless otherwise stated

Part 4 - Explanatory notes to the statement of profit or loss

Note 4.1 Expenses by nature

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 9.3	Depreciation of property, plant and equipment and amortisation of intangible assets	2 398	2 254
Note 11.1	Employee benefits expenses	7 333	6 443
	Materials and energy, including:	15 876	11 962
	purchased metal-bearing materials	8 859	7 132
	External services	2 604	2 200
Note 5.2	Minerals extraction tax	3 046	3 548
	Other taxes and charges	786	661
Note 4.4	Reversal of impairment losses on property, plant and equipment and intangible assets	(3)	(42)
Note 4.4	Reversal of write-down of inventories	(55)	(88)
	Advertising costs and representation expenses	89	72
	Property and personal insurance	80	76
Note 4.4	Impairment losses on property, plant and equipment and intangible assets	83	340
Note 4.4	Write-down of inventories	74	47
	Other costs	77	64
	Total expenses by nature	**32 388**	**27 537**
	Cost of merchandise and materials sold (+)	792	790
	Change in inventories of finished goods and work in progress (+/-)	(2 008)	(1 544)
	Cost of products for internal use of the Group (-) *	(1 669)	(1 690)
	Total costs of sales, selling costs and administrative expenses, of which:	**29 503**	**25 093**
	Cost of sales	27 541	23 529
	Selling costs	560	450
	Administrative expenses	1 402	1 114

**The amount is mainly comprised of cost of manufacturing fixed assets by the Group – in particular stripping costs of open-pit mines.*

in PLN millions, unless otherwise stated

Note 4.2 Other operating income and (costs)

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 7.1	Gains on derivatives, of which:	270	383
	measurement	109	208
	realisation	161	175
	Interest income calculated using the effective interest rate method	54	1
Note 7.1	Exchange differences on assets and liabilities other than borrowings	949	994
	Reversal of impairment losses on fixed assets under construction	-	2
Note 4.4	Reversal of impairment losses on financial instruments	5	27
	Release of provisions	62	34
	Gain on disposal of intangible assets	134	1
	Gain on disposal of property, plant and equipment	-	57
Note 9.8	Gain on disposal of subsidiaries	180	-
	Government grants received	19	24
	Income from servicing of letters of credit and guarantees	28	66
	Compensation, fines and penalties received	66	34
	Compensation received due to the purchase of electricity for 2020	-	39
	Other	114	95
	Total other operating income	**1 881**	**1 757**
Note 7.1	Losses on derivatives, of which:	(490)	(768)
	measurement	(116)	(141)
	realisation	(374)	(627)
Note 4.4	Impairment losses on financial instruments	(5)	(13)
	Fair value losses on financial assets	(58)	(39)
Note 4.4	Impairment losses on fixed assets under construction and intangible assets not yet available for use	(64)	(38)
	Provisions recognised	(27)	(88)
	Financial support granted to municipalities	(100)	-
	Losses on disposal of property, plant and equipment	(26)	-
	Donations granted	(55)	(33)
	Other	(94)	(67)
	Total other operating costs	**(919)**	**(1 046)**
	Other operating income and (costs)	**962**	**711**

in PLN millions, unless otherwise stated

Note 4.3 Finance income and (costs)

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 7.1	Gains on derivatives - realisation	130	70
	Result of the settlement of a transaction hedging against interest rate risk due to the issue of bonds with a variable interest rate	18	-
	Total finance income	**148**	**70**
Note 7.1	Interest on borrowings including:	(18)	(94)
	leases	(9)	(13)
	Unwinding of the discount effect on provisions	(21)	(15)
	Bank fees and charges on drawn borrowings	(29)	(25)
Note 7.1	Losses on derivatives, of which:	(149)	(80)
	measurement	-	(1)
	realisation	(149)	(79)
Note 7.1	Exchange differences on measurement and realisation of borrowings	(179)	(299)
	Other	(24)	(28)
	Total finance costs	**(420)**	**(541)**
	Finance income and (costs)	**(272)**	**(471)**

Note 4.4 Reversal and (recognition) of impairment losses on assets recognised in the statement of profit or loss

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
	Reversal of impairment losses on assets recognised in:		
	cost of sales, of which:	**58**	**130**
Note 4.1	reversal of impairment loss on property, plant and equipment and intangible assets	3	42
	reversal of write-down of inventories	55	88
Note 6.2	**gains due to reversal of allowances for impairment of loans granted to a joint venture**	**873**	**2 380**
	other operating income, of which:	**5**	**32**
	reversal of impairment losses on fixed assets under construction	-	2
Note 4.2	reversal of an allowance for impairment of trade receivables	2	8
Note 4.2	reversal of an allowance for impairment of other financial receivables	3	19
	reversal of an allowance for impairment of other non-financial receivables	-	3
	Reversal of impairment losses, total	**936**	**2 542**
	Impairment losses on assets, recognised in:		
	cost of sales, of which:	**(157)**	**(387)**
Note 4.1	impairment loss on property, plant and equipment and intangible assets	(83)	(340)
	write-down of inventories	(74)	(47)
	other operating costs, of which:	**(73)**	**(51)**
Note 4.2	impairment losses on fixed assets under construction and intangible assets not yet available for use	(64)	(38)
	allowance for impairment of non-financial receivables	(4)	-
Note 4.2	allowance for impairment of trade receivables	(4)	(5)
Note 4.2	allowance for impairment of other financial receivables	(1)	(8)
	Impairment losses, total	**(230)**	**(438)**

in PLN millions, unless otherwise stated

Part 5 – Taxation

Note 5.1 Income tax in the consolidated statement of profit or loss

Accounting policies
Income tax recognised in profit or loss comprises current income tax and deferred income tax. Current income tax is calculated in accordance with current tax laws.

On 6 October 2021, an agreement to extend the functioning of Tax Group "PGK KGHM II" by another three tax years, that is from 2022 to 2024, was signed. It is the second Tax Group founded within the KGHM Polska Miedź S.A. Group. The "PGK KGHM I" Tax Group operated in the years 2016-2018. Real benefits were noted in the period of operation of the first PGK KGHM, including the possibility of current utilisation of losses generated by some of the companies within PGK to settle them with the profits of other companies, and the positive result of an analysis of companies of the Group with respect to meeting the criteria indicated in the act on corporate income tax were a basis to found a new tax group – PGK KGHM II. PGK KGHM II is comprised of:

1) KGHM Polska Miedź S.A.
2) Energetyka sp. z o.o.
3) Zagłębie Lubin S.A.
4) Miedziowe Centrum Zdrowia S.A.
5) KGHM CUPRUM sp. z o.o. – Centrum Badawczo-Rozwojowe
6) INOVA Centrum Innowacji Technicznych sp. z o.o.
7) PeBeKa S.A.
8) KGHM ZANAM S.A.
9) POL-MIEDŹ TRANS Sp. z o.o.
10) Mercus Logistyka sp. z o.o.
11) KGHM Metraco S.A.
12) special purpose companies: Future 1 Sp. z o.o., Future 3 Sp. z o.o., Future 4 Sp. z o.o., Future 5 Sp. z o.o.,
13) KGHM Centrum Analityki Sp. z o.o.
14) Centrum Badań Jakości Sp. z o.o.
15) BIPROMET S.A.

Income tax

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
	Current income tax	1 369	1 564
Note 5.1.1	Deferred income tax	315	124
	Tax adjustments for prior periods	31	(19)
	Income tax	**1 715**	**1 669**

In 2022, Group entities paid income tax in the amount of PLN 1 696 million (in 2021: PLN 740 million) to the appropriate tax offices.

in PLN millions, unless otherwise stated

The table below presents differences between income tax from profit before income tax for the Group and the income tax which could be achieved if the Parent Entity's tax rate was applied:

Reconciliation of effective tax rate

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Profit before income tax	**6 489**	**7 824**
Tax calculated using the Parent Entity's rate (2022: 19%, 2021: 19%)	1 233	1 487
Effect of applying other tax rates abroad	(26)	118
Tax effect of non-taxable income	(6)	(19)
Tax effect of expenses not deductible for tax purposes, including:	713	798
the minerals extraction tax, which is not deductible for corporate income tax purposes	600	674
Deductible temporary differences in respect of which tax assets were not recognised	2	10
Utilisation in the period of previously-unrecognised tax losses	(287)	(590)
Adjustments of current income tax for prior periods	31	(19)
Tax losses and tax credits in the period from which there was no recognition of deferred tax assets	160	5
Deferred tax on eliminated interest on intra-Group loans	(81)	(92)
Other	(24)	(29)
Income tax in profit or loss [the effective tax rate amounted to 26.4% of profit before income tax (in 2021: 21.3% of profit before income tax)]	**1 715**	**1 669**

In Poland, tax bodies are empowered to audit tax declarations for a period of five years, although during this period companies may offset tax assets with tax liabilities being the income of the State Treasury (including due to current income tax). In Canada, tax declarations may be audited for a period of three years without the right to offset assets with liabilities due to current income tax.

in PLN millions, unless otherwise stated

Note 5.1.1 Deferred income tax

Accounting policies	Significant estimates, assumptions and judgments
Deferred income tax is determined using tax rates and tax laws that are expected to be applicable when the asset is realised or the liability is settled based on tax rates and tax laws that have been enacted or substantively enacted at the end of the reporting period. Deferred tax liabilities and deferred tax assets are recognised for temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements, with the exception of temporary differences arising from initial recognition of assets or liabilities in transactions other than business combinations, which do not have an impact either on profit/(loss) before tax or on the taxable profit/(tax loss) at the moment they are concluded. Deferred tax assets are recognised if it is probable that taxable profit will be available against which the deductible temporary differences and unused tax losses can be utilised. Deferred tax assets and deferred tax liabilities are offset if the company has a legally enforceable right to set off current tax assets and current tax liabilities, and if the deferred tax assets and deferred tax liabilities relate to income taxes levied on a given entity by the same tax authority.	The assessment of probability of realising deferred tax assets with future tax income is based on the budgets of the companies of the Group. Companies of the Group recognised deferred tax assets in their accounting books to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilised. Companies of the Group which historically have generated losses, and whose financial projections do not foresee the achievement of taxable profit enabling the deduction of deductible temporary differences, do not recognise deferred tax assets in their accounting books.

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Deferred net income tax at the beginning of the period, of which:	**(458)**	**(249)**
Deferred tax assets	185	193
Deferred tax liabilities	(643)	(442)
Deferred income tax during the period:	**(533)**	**(186)**
Recognised in profit or loss	(315)	(124)
Recognised in other comprehensive income	(218)	(62)
Exchange differences from translation of balances of deferred tax assets of statements of operations with a functional currency other than PLN	**(23)**	**(23)**
Deferred net income tax at the end of the period, of which:	**(1 014)**	**(458)**
Deferred tax assets	137	185
Deferred tax liabilities	(1 151)	(643)

in PLN millions, unless otherwise stated

Maturities of deferred tax assets and deferred tax liabilities were as follows:

	Deferred tax assets		Deferred tax liabilities	
	As at 31 December 2022	As at 31 December 2021	As at 31 December 2022	As at 31 December 2021
Maturity over the 12 months from the end of the reporting period	31	86	(1 238)	(996)
Maturity of up to 12 months from the end of the reporting period	106	99	87	353
Total	**137**	**185**	**(1 151)**	**(643)**

Expiry dates of unused tax losses and tax credits, for which deferred tax assets were not recognised in individual countries, are presented in the following table:

	As at 31 December 2022				As at 31 December 2021			
	Unused tax losses	Expiry date	Unused tax credits	Expiry date	Unused tax losses	Expiry date	Unused tax credits	Expiry date
Luxembourg	158	indefinite	-	-	333	indefinite	-	-
	520	2036-2037	-	-	1 359	2034-2037	-	-
Chile	91	indefinite	-	-	1 056	indefinite	-	-
Canada	1 602	2026-2042	60	2030-2039	1 443	2026-2040	42	2030-2039
Other	16	2025	-	-	17	2025	-	-
Total	**2 387**		**60**		**4 208**		**42**	

As at 31 December 2022, the Group did not recognise a deferred tax asset on deductible temporary differences in the amount of PLN 3 022 million (as at 31 December 2021: PLN 2 704 million) because there is low possibility that they will be reversed in the foreseeable future and that taxable income, on which it could be recognised, will be achieved.

As at 31 December 2022, at the level of the consolidated financial statements, there was no recognition of deferred tax liabilities on taxable temporary differences in the amount of PLN 1 076 million (as at 31 December 2021: PLN 962 million) related to investments in subsidiaries and shares in joint ventures, as the conditions stipulated in IAS 12.39 were met.

The following tables present deferred income tax assets and liabilities before their compensation at the level of individual companies of the Group.

in PLN millions, unless otherwise stated

Deferred tax assets (deferred tax assets prior to offsetting with deferred tax liabilities at the level of individual companies of the Group)

		Credited/(Charged)				Credited/(Charged)				
	As at 31 December 2020	profit or loss	other comprehensive income	exchange differences from translation of balances of deferred tax assets of statements of operations with a functional currency other than PLN	As at 31 December 2021	profit or loss	other comprehensive income	exchange differences from translation of balances of deferred tax assets of statements of operations with a functional currency other than PLN	changes due to loss of control of subsidiaries	As at 31 December 2022
Provision for decommissioning of mines and other technological facilities	**253**	(63)	-	1	**191**	1	-	2	-	**194**
Measurement of forward transactions other than hedging instruments	**36**	35	-	-	**71**	(27)	-	-	-	**44**
Difference between the depreciation rates of property, plant and equipment for accounting and tax purposes	**93**	(5)	-	-	**88**	7	-	-	-	**95**
Future employee benefits	**600**	(3)	(132)	-	**465**	-	80	-	-	**545**
Equity instruments measured at fair value	**104**	-	-	-	**104**	-	19	-	-	**123**
Lease liabilities	**61**	14	-	-	**75**	19	-		-	**94**
Accrued and unpaid interest on borrowings	**197**	24	-	14	**235**	45	-	17	-	**297**
Recognition/reversal of impairment losses on assets	**83**	(25)	-	-	**58**	(17)	-	-	(1)	**40**
Short-term accruals for remuneration	**96**	17	-	-	**113**	12	-	-	-	**125**
Re-measurement of hedging instruments	**235**	-	70	-	**305**	-	(292)	-	-	**13**
Liabilities related to fixed fee due to setting mining usufruct	**30**	5	-	-	**35**	-	-	-	-	**35**
Employee benefits (holidays)	**13**	-	-	-	**13**	-	-	-	-	**13**
Unpaid remuneration with surcharges	**24**	-	-	-	**24**	3	-	-	-	**27**
Other	**172**	42	-	-	**214**	(11)	-		(4)	**199**
Total	**1 997**	**41**	**(62)**	**15**	**1 991**	**32**	**(193)**	**19**	**(5)**	**1 844**

in PLN millions, unless otherwise stated

Deferred tax liabilities (deferred tax liabilities prior to offsetting with deferred tax assets at the level of individual companies of the Group)

		(Credited)/Charged			(Credited)/Charged				
	As at 31 December 2020	profit or loss	exchange differences from translation of balances of deferred tax assets of statements of operations with a functional currency other than PLN	As at 31 December 2021	profit or loss	other comprehensive income	exchange differences from translation of balances of deferred tax assets of statements of operations with a functional currency other than PLN	changes due to loss of control of subsidiaries	As at 31 December 2022
Measurement of forward transactions other than hedging instruments	**35**	15	-	**50**	(9)	-	-	-	**41**
Difference between the depreciation rates for accounting and tax purposes, including:	**1 514**	122	23	**1 659**	159	-	26	(4)	**1 840**
related to depreciation of right-to-use assets	**60**	11	-	**71**	18	-	-	-	**89**
Accrued and unpaid interest on loans	**470**	17	17	**504**	119	-	20	-	**643**
Re-measurement of hedging instruments	**-**	-	-	**-**	-	25	-	-	**25**
Equity instruments measured at fair value	**37**	54	-	**91**	(7)	-	-	-	**84**
Other	**190**	(43)	(2)	**145**	85	-	(4)	(1)	**225**
Total	**2 246**	**165**	**38**	**2 449**	**347**	**25**	**42**	**(5)**	**2 858**

in PLN millions, unless otherwise stated

Note 5.2 Other taxes and charges

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021	Basis for calculating tax	Tax rate	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021	
Minerals extraction tax, of which:	**3 046**	**3 548**			2 951	3 238	tax recognised in cost of sold products
- copper	2 650	3 012	Amount of copper in produced concentrate, expressed in tonnes	tax rate calculated for every reporting period*			
- silver	396	536	Amount of silver in produced concentrate, expressed in kilograms		95	310	tax recognised in inventories

** In accordance with conditions specified by the Act dated 2 March 2012 on the minerals extraction tax and the Act dated 24 February 2022 on amending the Act on personal income tax, Act on Vocational and Social Rehabilitation and Employment of Persons with Disabilities and the Act on the minerals extraction tax, which decreased the tax rates by approx. 30% from January to November 2022. In 2022, tax rates for copper ranged from PLN 5 136.69 to PLN 8 657.15 and for silver from PLN 352.90 to PLN 453.03 (in the comparable period for copper they ranged from PLN 4 926.27 to PLN 9 629.78, while for silver from PLN 369.76 to PLN 449.38).*

The minerals extraction tax paid by the Parent Entity is calculated from the amount of copper and silver in produced concentrate and depends on the prices of these metals as well as on the USD/PLN exchange rate. The tax is accounted for under manufacturing costs of basic products and is not deductible for corporate income tax purposes.

Other taxes and charges, with a breakdown by geographical location, were as follows:

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Poland	**693**	**572**
Real estate tax	268	250
Royalties	122	116
Excise tax	6	7
Environmental fees	16	21
Costs of surrender of CO_2 emission allowances	199	109
Contributions to the State Fund for the Rehabilitation of the Disabled People (PFRON)	29	24
Other taxes and charges	53	45
Other countries	**113**	**118**
Total	**806**	**690**

in PLN millions, unless otherwise stated

Note 5.3 Tax assets and liabilities

Accounting policies
Tax assets comprise current income tax assets and the settlement related to VAT. Assets not representing financial assets are initially recognised at nominal value and are measured at the end of the reporting period at the amount due. Tax liabilities comprise the Group's liabilities towards the tax office arising from the corporate income tax, including due to the withholding tax, personal income tax and liabilities due to the minerals extraction tax and the excise tax. Liabilities not representing financial liabilities are measured at the amount due.

	As at 31 December 2022	As at 31 December 2021
Current corporate income tax assets	39	16
Assets due to other taxes	328	352
Tax assets, of which:	**367**	**368**
recognised in assets held for sale (disposal group)	-	4
recognised as "deferred tax assets"	367	364

	As at 31 December 2022	As at 31 December 2021
Current corporate income tax liabilities	612	881
Liabilities due to other taxes	621	574
Tax liabilities, of which:	**1 233**	**1 455**
recognised in liabilities related to disposal group	-	2
recognised as "deferred tax liabilities"	1 233	1 453

Part 6 – Involvement in joint ventures

Accounting policies
The item "involvement in joint ventures" comprises investments in joint ventures accounted for using the equity method and loans granted to joint ventures. The Group classifies as investments accounted for using the equity method interests in joint ventures which are joint contractual arrangements, in which the parties sharing control have the right to the net assets of a given entity. Joint control occurs when decisions on the relevant activities of joint ventures require the unanimous consent of the parties sharing control. Investments are initially recognised at cost. The Group's share in the profit or loss of entities accounted for using the equity method (assessed while taking into account the impact of measurements to fair value at the investment's acquisition date) from the acquisition date is recognised in profit or loss, while its share in changes of accumulated other comprehensive income from the acquisition date is recognised in the relevant item of accumulated comprehensive income. Unrealised gains and losses on transactions between the investor and the joint venture are eliminated in an amount proportional to the investor's share in these profits/(losses), and correspond with the carrying amount of the Group's share in this unit. If, at the end of the reporting period, the Group's share in the unrealised gains on transactions between the Group and the joint venture exceeds the carrying amount of the investment in this unit, the Group's share in these gains is eliminated to the level of the carrying amount of the Group's interest in this unit. Elimination of unrealised gains, proportionally to the Group's share, unsettled in the period in which the transaction occurred, is performed in subsequent reporting period at the moment the carrying amount of the Group's interest in this unit exceeds zero. If there are any indications of a possibility of impairment, an investment is tested for impairment by calculating the recoverable amount.

Significant estimates, assumptions and judgments
Joint control The Group classifies Sierra Gorda S.C.M. with its head office in Chile as a joint venture under IFRS 11, in which KGHM INTERNATIONAL LTD.'s share equals 55%. Classification of Sierra Gorda S.C.M. as a joint venture, despite the 55% share of the Group, was made based on analysis of the terms of the agreements between the parties and contractual stipulations which indicated joint control. Pursuant to the terms of the agreements, all relevant activities of Sierra Gorda S.C.M. require the unanimous consent of both owners. The Group and other owners have three members each in the appointed Owners Council. The Owners Council makes strategic decisions and is responsible for overseeing their execution. Moreover, it approves the appointment of senior management. In the reporting period, there were no changes to provisions that were the basis of classifying the investment as a joint venture. Pursuant to the Group's judgment, loans granted to the joint venture Sierra Gorda S.C.M. do not meet the criteria of recognition as net investments in a joint venture, because the loans' settlement is planned and probable in the foreseeable future.

Note 6.1 Joint ventures accounted for using the equity method

During the reporting period, a change in partnership with the KGHM Polska Miedź S.A. Group in the joint venture Sierra Gorda S.C.M. was made. On 22 February 2022, the sale of a 45% share in Sierra Gorda S.C.M. by Sumitomo Metal Mining Co. Ltd. and Sumitomo Corporation to South32 Limited, an Australian mining group with its head office in Perth, was concluded. The transaction was carried out on the basis of sales agreements entered into on 14 October 2021.

The purchase price includes the amount of USD 1 408 million, payable on the transaction date, and USD 500 million, depending on the copper prices in the years 2022 - 2025. The new partner of the Group is a globally diversified mining and metallurgical company with production plants in Australia, South Africa and South America. The company produces among others aluminium, metallurgical coal, manganese, nickel, silver, lead and zinc.

As at 31 December 2022, none of the agreements regulating the cooperation between the JV partners in the venture Sierra Gorda S.C.M. have been modified. Sierra Gorda S.C.M. had an off-take agreement signed with the companies Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation, pursuant to which they had the right to off-take 50% of the copper concentrate. The right to off-take 50% of the copper concentrate is not in force with respect to South32 Limited.

in PLN millions, unless otherwise stated

Value of the investment in the consolidated statement of financial position	2022	2021
As at 1 January	**-**	**-**
Share of profit for the reporting period	239	3 178
Settlement of the Group's share of unsettled losses from prior years (accumulated comprehensive losses)	(183)	(2 920)
Exchange differences from the translation of statements of operations with a functional currency other than PLN	(56)	(258)
As at 31 December	**-**	**-**

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
The Group's share (55%) of profit for the reporting period of Sierra Gorda S.C.M., recognised in the valuation of the joint venture	**239**	**3 178**

Unrecognised share of the Group of the losses of Sierra Gorda S.C.M.	2022	2021
As at 1 January	**(1 283)**	**(4 203)**
Settlement of the Group's share of unsettled losses from prior years (accumulated comprehensive losses)	183	2 920
Unrecognised adjustment due to unrealised gains on a transaction between the Group and the joint venture (sale of the Oxide project, details in Note 9.8.3)	(74)	-
As at 31 December	**(1 174)**	**(1 283)**

As at 31 December 2022, the KGHM Polska Miedź S.A. Group's share of the unsettled accumulated losses of Sierra Gorda S.C.M amounted to PLN 1 174 million (USD 362 million), as at 31 December 2021: PLN 1 283 million (USD 389 million). The Group stopped recognising its share of losses of Sierra Gorda S.C.M. at the moment the value of this share exceeded the carrying amount of the interest in the investment in Sierra Gorda S.C.M. Recognition of the Group's share of losses of Sierra Gorda S.C.M. caused the carrying amount of shares in Sierra Gorda S.C.M. to be equal to PLN 0. After reducing the share to zero, the Group performed an analysis as to whether there is a legal or customary obligation to pay on Sierra Gorda S.C.M.'s behalf, which would result in an obligation of the Group to recognise a liability for this reason. On the basis of conducted analyses, the Group does not identify the existence of a legal or customary obligation to pay on Sierra Gorda S.C.M.'s behalf, which is described in IAS 28.39.

Moreover, the Group analysed the terms of the guarantee granted to Sierra Gorda S.C.M. to secure repayment of an instalment of the credit facility, which meets the definition of a financial guarantee pursuant to IFRS 9. Details on the guarantees granted to Sierra Gorda S.C.M. are described in Note 8.6.

in PLN millions, unless otherwise stated

Condensed financial data of Sierra Gorda S.C.M. is presented in the table below

	As at 31 December 2022	As at 31 December 2021
Non-current assets	**22 052**	**19 848**
Current assets, including:	**2 608**	**2 393**
Cash and cash equivalents	377	776
Non-current liabilities, including:	**23 751**	**21 768**
Borrowings and lease	2 242	1 713
Liabilities due to loans granted by jointly-controlling entities	20 891	19 531
Current liabilities, including:	**1 689**	**1 585**
Borrowings and lease	63	106
Carrying amount of net assets (incorporating the fair value measurement from date of obtaining joint control)	**(780)**	**(1 112)**
The Group's share in net assets (55%)	(429)	(612)
Total unrecognised accumulated share of losses of Sierra Gorda S.C.M. (accumulated comprehensive losses)	1 174	1 283
Balance of impairment loss on interest in Sierra Gorda S.C.M.	(671)	(671)
Unrecognised adjustment due to unrealised gains on a transaction between the Group and the joint venture (sale of the Oxide project)	(74)	-
Value of the investment in the consolidated statement of financial position	**-**	**-**
	from 1 January 2022 to 31 December 2022	**from 1 January 2021 to 31 December 2021**
Revenues from contracts with customers	7 225	8 335
Depreciation/amortisation	(1 704)	(1 413)
Reversal of an impairment loss on property, plant and equipment	-	4 799
Interest costs	(1 440)	(1 349)
Other incomes/(costs)	(3 325)	(2 670)
Profit before income tax	**756**	**7 702**
Income tax	(321)	(1 924)
Profit for the period	**435**	**5 778**
Exchange differences from the translation of Sierra Gorda S.C.M.'s net assets to the PLN presentation currency	**(103)**	**(469)**
Total comprehensive income	**332**	**5 309**

Other information on the Group's involvement in the joint venture Sierra Gorda S.C.M.

		As at 31 December 2022	As at 31 December 2021
	Group's share in commitments (investment and operating)	7 153	5 865
	Group's share in the total amount of future lease gross payments due to lease agreements for mining equipment	459	495
Note 8.6	Guarantees granted by the Group	969	670

in PLN millions, unless otherwise stated

Note 6.2 Loans granted to a joint venture (Sierra Gorda S.C.M.)

Accounting policies	Significant estimates, assumptions and judgments
Loans granted to Sierra Gorda S.C.M. were classified as credit-impaired financial assets due to the high credit risk at the moment of initial recognition (POCI). POCI loans are measured at amortised cost using the effective interest rate, adjusted by the credit risk using the scenario analysis and available free cash of Sierra Gorda S.C.M.	The terms of repayment of loans granted to finance operations abroad, including planned repayment dates, were set in individual agreements. Pursuant to the schedule, the principal amount and interest are paid on demand, but not later than 15 December 2024. Due to the implementation of IFRS 9 as at 1 January 2018, the expected, undiscounted credit loss at the moment of initial recognition was estimated to amount to PLN 6 105 million (USD 1 754 million per the 3.4813 USD/PLN exchange rate of NBP dated 29 December 2017). The repayments of loans by Sierra Gorda S.C.M. depend on that company's financial standing. Due to the good financial situation, in 2021 there were first repayments in the total amount of USD 308 million (PLN 1 259 million). Further payments were made in 2022 in the total amount of USD 193 million (PLN 789 million). Due to the fact that settling the loan is planned and probable in the foreseeable future, the loan is not a net investment under IAS 21.15. Pursuant to the requirements of IFRS 9.5.5.17, the Group performed impairment testing of the loan. To estimate the expected credit losses, scenario analysis (IFRS 9.5.5.18) was used, comprising the Group's assumptions on the repayment of the loan granted. The scenario analysis was based on cash flows of Sierra Gorda S.C.M., estimated on the basis of current market paths of commodities price forecasts, which were subsequently discounted using the effective interest rate adjusted by the credit risk, determined at the initial recognition of the loan pursuant to IFRS 9.B5.5.45 at the level of 6.42%. Other important assumptions used in the measurement of the loan concern the following: • the probability of realisation of individual measurement scenarios, • the level of production, • the level of costs, • the level of capital expenditures, • the external financing of Sierra Gorda S.C.M., • the form and level of financing Sierra Gorda S.C.M. by owners, • taxation at the level of Sierra Gorda S.C.M., • the distribution of cash. Future realisation, or not, of assumptions will depend on many macroeconomic, operational and financial factors, as well as agreements made between JV partners (sensitivity analysis of the carrying amount of the loan is presented in Note 7.5.2.4).

		2022	2021
	As at 1 January	**8 314**	**6 069**
	Repayment of loans (principal and interest)	(789)	(1 259)
	Accrued interest	582	494
Note 4.4	Gain due to the reversal of allowances for impairment	873	2 380
	Exchange differences from the translation of statements of operation with a functional currency other than PLN	623	630
	As at 31 December	**9 603**	**8 314**

The loan granted to Sierra Gorda S.C.M. has a fixed interest rate of 8%.

As at 31 December 2022, the Group estimated the expected cash flows on repayment of receivables due to loans granted to Sierra Gorda S.C.M., as a result of which an allowance for impairment was reversed in the amount of PLN 837 million (in the first half of 2022 an allowance for impairment was reversed in the amount of PLN 783 million, and in the second half of 2022 in the amount of PLN 90 million). In the comparable period an allowance for impairment was reversed in the amount of PLN 2 380 million.

Assumptions adopted for the estimation of cash flows of Sierra Gorda S.C.M. (commodity prices and other key assumptions) were presented below:

Basic macroeconomic assumptions adopted for cash flow estimation – copper and gold prices

Price paths were adopted on the basis of current market forecasts:

Period	2023	2024	2025	2026	2027	LT
Copper price [USD/t]	8 200	8 500	8 500	8 500	8 500	7 700
Gold price [USD/oz]	1 750	1 750	1 700	1 600	1 550	1 500

Other key assumptions used for estimation of cash flows	
Mine life / forecast period	26
Level of copper production during mine life (kt)	3 781
Level of molybdenum production during mine life (mn lbs)	239
Level of gold production during mine life (koz)	1 151
Average operating margin during mine life	43.97%
Applied discount rate after taxation (used to calculate the fair value for disclosure purposes in Note 7)	9.75%
Capital expenditures to be incurred during mine life (USD million)	1 573

in PLN millions, unless otherwise stated

PART 7 – Financial instruments and financial risk management

Note 7.1 Financial Instruments

Financial assets	As at 31 December 2022					As at 31 December 2021				
	At fair value through other comprehensive income	At fair value through profit or loss	At amortised cost	Hedging instruments	Total	At fair value through other comprehensive income	At fair value through profit or loss	At amortised cost	Hedging instruments	Total
Non-current	521	90	10 072	709	**11 392**	615	32	8 366	585	**9 598**
Loans granted to a joint venture	-	-	9 603	-	**9 603**	-	-	7 867	-	**7 867**
Derivatives	-	5	-	709	**714**	-	10	-	585	**595**
Other financial instruments measured at fair value	521	85	-	-	**606**	615	22	-	-	**637**
Other financial instruments measured at amortised cost*	-	-	469	-	**469**	-	-	499	-	**499**
Current	-	829	1 926	755	**3 510**	-	632	2 920	249	**3 801**
Loans granted to a joint venture	-	-	-	-	**-**	-	-	447	-	**447**
Trade receivables*	-	751	426	-	**1 177**	-	627	397	-	**1 024**
Derivatives	-	41	-	755	**796**	-	5	-	249	**254**
Cash and cash equivalents*	-	-	1 200	-	**1 200**	-	-	1 904	-	**1 904**
Other financial assets	-	37	300	-	**337**	-	-	172	-	**172**
Total	**521**	**919**	**11 998**	**1 464**	**14 902**	**615**	**664**	**11 286**	**834**	**13 399**

** Including balances of assets and liabilities held for sale regarding 2021, presented in the table below. Detailed information on assets and liabilities held for sale may be found in Note 9.8.*

in PLN millions, unless otherwise stated

Financial liabilities	As at 31 December 2022				As at 31 December 2021			
	At fair value through profit or loss	At amortised cost	Hedging instruments	Total	At fair value through profit or loss	At amortised cost	Hedging instruments	Total
Non-current	19	5 460	700	**6 179**	78	5 696	1 056	**6 830**
Borrowings, lease and debt securities*	-	5 220	-	**5 220**	-	5 475	-	**5 475**
Derivatives	19	-	700	**719**	78	-	1 056	**1 134**
Other financial liabilities	-	240	-	**240**	-	221	-	**221**
Current	188	4 440	280	**4 908**	200	3 587	848	**4 635**
Borrowings, lease and debt securities*	-	1 223	-	**1 223**	-	474	-	**474**
Derivatives	154	-	280	**434**	41	-	848	**889**
Trade payables*	-	3 076	-	**3 076**	-	2 919	-	**2 919**
Similar payables – reverse factoring	-	18	-	**18**	-	95	-	**95**
Other financial liabilities*	34	123	-	**157**	159	99	-	**258**
Total	**207**	**9 900**	**980**	**11 087**	**278**	**9 283**	**1 904**	**11 465**

**Including balances of assets and liabilities held for sale regarding 2021 presented in tables below. Detailed information on assets and liabilities held for sale may be found in Note 9.8.*

in PLN millions, unless otherwise stated

Financial assets - held for sale (disposal group)	As at 31 December 2021		
	At fair value through profit or loss	At amortised cost	Total
Non-current	**-**	3	**3**
Other financial instruments measured at amortised cost	-	3	**3**
Current	13	22	**35**
Trade receivables	13	2	**15**
Cash and cash equivalents	-	20	**20**
Total	**13**	**25**	**38**

Financial liabilities at amortised cost – liabilities related to disposal group	As at 31 December 2021
Non-current	66
Borrowings, lease and debt securities	66
Current	66
Borrowings, lease and debt securities	19
Trade payables	40
Other financial liabilities	7
Total	**132**

Financial assets – excluding assets held for sale (disposal group)	As at 31 December 2021				
	At fair value through other comprehensive income	At fair value through profit or loss	At amortised cost	Hedging instruments	Total
Non-current	615	32	8 363	585	**9 595**
Loans granted to a joint venture	-	-	7 867	-	**7 867**
Derivatives	-	10	-	585	**595**
Other financial instruments measured at fair value	615	22	-	-	**637**
Other financial instruments measured at amortised cost	-	-	496	-	**496**
Current	-	619	2 898	249	**3 766**
Loans granted to a joint venture	-	-	447	-	**447**
Trade receivables	-	614	395	-	**1 009**
Derivatives	-	5	-	249	**254**
Cash and cash equivalents	-	-	1 884	-	**1 884**
Other financial assets	-	-	172	-	**172**
Total	**615**	**651**	**11 261**	**834**	**13 361**

in PLN millions, unless otherwise stated

Financial liabilities – excluding liabilities related to disposal group	As at 31 December 2021			
	At fair value through profit or loss	At amortised cost	Hedging instruments	Total
Non-current	78	5 630	1 056	**6 764**
Borrowings, lease and debt securities	-	5 409	-	**5 409**
Derivatives	78	-	1 056	**1 134**
Other financial liabilities	-	221	-	**221**
Current	200	3 521	848	**4 569**
Borrowings, lease and debt securities	-	455	-	**455**
Derivatives	41	-	848	**889**
Trade payables	-	2 879	-	**2 879**
Similar payables – reverse factoring	-	95	-	**95**
Other financial liabilities	159	92	-	**251**
Total	**278**	**9 151**	**1 904**	**11 333**

in PLN millions, unless otherwise stated

Gains/(losses) on financial instruments recognised in profit/(loss) for the period

	from 1 January 2022 to 31 December 2022	Financial assets/liabilities measured at fair value through profit or loss	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost	Hedging instruments	Total
Note 4.2 Note 6.2	Interest income	-	636	-	-	**636**
Note 6.2	Gain due to the reversal of allowances for impairment of loans granted to a joint venture	-	873	-	-	**873**
Note 4.3	Interest income/(costs)	-	-	(60)	60	**-**
Note 4.2	Foreign exchange gains/(losses) other than borrowings	233	767	(51)	-	**949**
Note 4.3	Foreign exchange losses on borrowings	-	-	(179)	-	**(179)**
Note 4.4	Reversal of impairment losses	-	5	-	-	**5**
Note 4.4	Impairment losses	-	(5)	-	-	**(5)**
Note 7.2	Revenues from contracts with customers	-	-	-	(182)	**(182)**
Note 4.2 Note 4.3	Gains on measurement and realisation of derivatives	400	-	-	-	**400**
Note 4.2 Note 4.3	Losses on measurement and realisation of derivatives	(329)	-	-	(310)	**(639)**
Note 4.3	Fees and charges on bank loans drawn	-	-	(29)	-	**(29)**
Note 4.2	Fair value losses on financial receivables	(58)	-	-	-	**(58)**
	Other gains/(losses)	-	2	(2)	-	**-**
	Total net gain/(loss)	**246**	**2 278**	**(321)**	**(432)**	**1 771**

	from 1 January 2021 to 31 December 2021	Financial assets/liabilities measured at fair value through profit or loss	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost	Hedging instruments	Total
Note 4.2 Note 6.2	Interest income	-	495	-	-	**495**
Note 6.2	Gain due to the reversal of allowances for impairment of loans granted to a joint venture	-	2 380	-	-	**2 380**
Note 4.3	Interest costs	-	-	(94)	-	**(94)**
Note 4.2	Foreign exchange gains/(losses) other than borrowings	181	1 358	(545)	-	**994**
Note 4.3	Foreign exchange losses on borrowings	-	-	(299)	-	**(299)**
Note 4.4	Impairment losses	-	(13)	-	-	**(13)**
Note 4.4	Reversal of impairment losses	-	27	-	-	**27**
Note 7.2	Revenues from contracts with customers	-	-	-	(1 651)	**(1 651)**
Note 4.2 Note 4.3	Gains on measurement and realisation of derivatives	453	-	-	-	**453**
Note 4.2 Note 4.3	Losses on measurement and realisation of derivatives	(848)	-	-	-	**(848)**
Note 4.3	Fees and charges on bank loans drawn	-	-	(25)	-	**(25)**
Note 4.2	Fair value losses on financial receivables	(39)	-	-	-	**(39)**
	Other losses	-	-	(8)	-	**(8)**
	Total net gain/(loss)	**(253)**	**4 247**	**(971)**	**(1 651)**	**1 372**

in PLN millions, unless otherwise stated

The fair value hierarchy of financial instruments

	As at 31 December 2022				As at 31 December 2021			
	fair value				fair value			
Classes of financial instruments	level 1	level 2	level 3	carrying amount	level 1	level 2	level 3	carrying amount
Loans granted	-	20	7 787	9 623	-	22	8 193	8 336
Listed shares	422	-	-	422	516	-	-	516
Unquoted shares	-	99	-	99	-	99	-	99
Trade receivables	-	751	-	751	-	627	-	627
Derivatives, of which:	-	357	-	357	-	(1 174)	-	(1 174)
assets	-	1 510	-	1 510	-	849	-	849
liabilities	-	(1 153)	-	(1 153)	-	(2 023)	-	(2 023)
Received long-term bank and other loans	-	(2 560)	-	(2 560)	-	(2 913)	-	(2 901)
Long-term debt securities	(1 952)	-	-	(2 000)	(2 034)	-	-	(2 000)
Other financial assets	-	37	65	102	-	-	-	-
Other financial liabilities	-	(34)	-	(34)	-	(159)	-	(159)

The Group does not disclose the fair value of financial instruments measured at amortised cost (except for loans granted, long-term bank and other loans received and long-term debt securities) in the statement of financial position, because it makes use of the exemption arising from IFRS 7.29. (Disclosure of information on fair value is not required when the carrying amount is approximate to the fair value).

There was no transfer in the Group of financial instruments between individual levels of the fair value hierarchy in the current reporting period.

Methods and measurement techniques used by the Group in determining fair values of each class of financial assets or financial liabilities.

Level 1

Listed shares
Shares are measured based on quotations from the Warsaw Stock Exchange and the TSX Venture Exchange in Toronto.

Long-term debt securities
Long-term debt securities are measured based on quotations from the Catalyst Market of the Warsaw Stock Exchange.

Level 2

Unquoted shares
Unquoted shares are measured using the adjusted net assets. Observable Input data other than the ones from the active market were used in the measurement (e.g. transaction prices of real estate similar to the one subjected to measurement, market interest rates of State Treasury bonds and term deposits in financial institutions, and the risk-free discount rate published by the European Insurance and Occupational Pensions Authority).

Trade receivables
Receivables arising from the realisation of sales under contracts which are finally settled using future prices were measured using forward prices, depending on the period/month of contractual quoting. Forward prices are from the Reuters system. For trade receivables transferred to non-recourse factoring, a fair value is assumed at the level of the amount of the trade receivables transferred to the factor (nominal value from the invoice) less interest, which are the factor's compensation. Due to the short term between the transfer of receivables to the factor and their payment, fair value is not adjusted by the credit risk of the factor and impact of time lapse.

Loans granted
This item comprises loans measured at fair value, the fair value of which was estimated on the basis of contractual cash flows (per the contract) using the model of discounted cash flows, including the borrower's credit risk.

Other financial assets/liabilities
Receivables/payables due to the settlement of derivatives, whose date of payment falls two working days after the end of the reporting period, were recognised in this item. These instruments were measured at fair value set per the reference price applied in the settlement of these transactions.

Currency and currency-interest derivatives
In the case of derivatives on the currency market and currency-interest transactions (CIRS), the forward prices from the maturity dates of individual transactions were used to determine their fair value. The forward price for currency exchange rates was calculated on the basis of fixing and appropriate interest rates. Interest rates for currencies and the volatility ratios for exchange rates are taken from Reuters. The standard Garman-Kohlhagen model is used to measure European options on currency markets.

Metals derivatives
In the case of derivatives on the commodity market, forward prices from the maturity dates of individual transactions were used to determine their fair value. In the case of copper, official closing prices from the London Metal Exchange were used, and with respect to silver and gold - the fixing price set by the London Bullion Market Association. Volatility ratios and forward prices for measurement of derivatives at the end of the reporting period were obtained from the Reuters system. Levy's approximation to the Black-Scholes model was used for Asian options pricing on metals markets.

Received long-term bank and other loans
The fair value of bank and other loans is estimated by discounting the cash flows associated with these liabilities in timeframes and under conditions arising from agreements, and by applying current rates. Fair value differs from the carrying amount by the amount of the premium paid to acquire the financing.

Level 3

Loans granted
Loans granted measured at amortised cost in the statement of financial position are included in this category, because of the use of unobservable assumptions in the fair value measurement. With respect to estimating the fair value of these loans, a significant element of the estimation are the forecasted cash flows of Sierra Gorda S.C.M., which are unobservable input data, and pursuant to IFRS 13 the fair value of these assets is classified to level 3 of the hierarchy. The discount rate adopted to calculate the fair value of loans measured at amortised cost is 9.75% (as at 31 December 2021: 8%).

Detailed disclosures on the assumptions adopted for the measurement of loans were presented in Note 6.2, while the sensitivity of the fair value classified to level 3 for loans granted – in Note 7.5.2.4. As at 31 December 2022, assumptions adopted for forecasted cash flows which were applied to measurement of fair value are consistent with assumptions adopted for the calculation of the carrying amount, while the difference between the carrying amount and the fair value arises from the adoption of different discount rates.

Other financial assets

This item includes receivables due to conditional payments associated with the agreement on the sale of a subsidiary S.C.M. Franke, which were estimated based on a probabilistic model stipulated in the binding offer and including the discount of payments for subsequent years.

Note 7.2 Derivatives

Accounting policies
Derivatives are classified as financial assets/liabilities measured at fair value through profit or loss, unless they have not been designated as hedging instruments. Purchases or sales of derivatives are recognised at the transaction date. Derivatives not designated as hedges, defined as trade derivatives, are initially recognised at fair value and at the end of the reporting period are measured at fair value, with recognition of the gains/losses on measurement in profit or loss. In the KGHM Polska Miedź S.A. Group, the Parent Entity applies hedge accounting for cash flows. Hedge accounting aims at reducing volatility in the Parent Entity's net result, arising from periodic changes in the measurement of transactions hedging individual types of market risk to which the Parent Entity is exposed. Hedging instruments may be derivatives as well as bank and other loans in foreign currencies. The designated hedges relate to the future sales transactions forecasted as assumed in the Sales Plan for a given year. These plans are prepared based on the production capacities for a given period. The Parent Entity estimates that the probability that transactions included in the production plan will occur is very high, as from the historical point of view sales were always realised at the levels assumed in Sales Plans. Future cash flows arising from interest on bonds issued in PLN also represent a hedged position. The Parent Entity may use natural currency risk hedging through the use of hedge accounting for bank and other loans denominated in USD, and designates them as positions hedging foreign currency risk, which relates to future revenues of the Parent Entity from sales of copper, silver and other metals, denominated in USD. Gains and losses arising from changes in the fair value of the cash flow hedging instrument are recognised in other comprehensive income, to the extent by which the change in fair value represents an effective hedge of the associated hedged item. The Group recognises in other reserves from measurement of financial instruments a part of the change of the hedging instrument arising from changes in the time value of the option, the forward element and currency margin. The portion which is ineffective is recognised in profit or loss as other operating income or costs. Gains or losses arising from the cash flow hedging instrument are recognised in profit or loss as a reclassification adjustment, in the same period or periods in which the hedged item affects profit or loss. Derivatives are no longer accounted for as hedging instruments when they expire, are sold, terminated or settled, or when the goal of risk management for a given relation has changed. The Parent Entity may designate a new hedging relationship for a given derivative, change the intended use of the derivative, or designate it to hedge another type of risk. In such a case, for cash flow hedges, gains or losses which arose in the periods in which the hedge was effective are retained in accumulated other comprehensive income until the hedged item affects profit or loss. If the hedge of a forecasted transaction ceases to function because it is probable that the forecasted transaction will not occur, then the net gain or loss recognised in other comprehensive income is immediately transferred to profit or loss as a reclassification adjustment. If a hybrid contract has an underlying instrument which is not a financial asset, the derivative is separated from an underlying instrument and is measured pursuant to the rules for derivatives only if (i) the economic characteristic and risk of the embedded instrument are not strictly related to the character of the host contract and its risks, (ii) a separate instrument, whose characteristics reflect the traits of the embedded derivative, would fulfil the conditions of the derivatives, and (iii) the combined instrument is not classified to financial assets measured at fair value, whose results of revaluation are recognised in other income or other operating costs in the reporting period. If an embedded derivative is separated, the underlying instrument is measured pursuant to appropriate accounting principles. The Parent Entity separates embedded derivatives in commodities transactions with settlement periods in the future, after the date of recognising a purchase invoice in the books up to the date of final settlement of the transaction. If a hybrid contract has an underlying instrument, which is a financial asset, the criteria for classification of financial assets are applied to the whole contract.

Important estimates, assumptions and judgments
Assumptions and estimates adopted for the measurement of fair value of derivatives were presented in note 7.1, in point „Methods and measurement techniques used by the Group in determining fair values of each class of financial assets or financial liabilities" and in tables in Note 7.2. below.

in PLN millions, unless otherwise stated

Hedging derivatives – open items as at the end of the reporting period

Type of derivative	As at 31 December 2022					As at 31 December 2021				
	Financial assets		Financial liabilities			Financial assets		Financial liabilities		
	Non-current	Current	Non-current	Current	**Total**	Non-current	Current	Non-current	Current	**Total**
Hedging instruments (CFH), including:	**709**	**755**	**(700)**	**(280)**	**484**	**585**	**249**	**(1 056)**	**(848)**	**(1 070)**
Derivatives – Metals (price of copper, silver)										
Options – *seagull** (copper)	60	440	(36)	(232)	**232**	299	89	(578)	(837)	**(1 027)**
Options – *collar* (silver)	-	-	-	-	**-**	11	97	-	-	**108**
Options – *seagull** (silver)	5	50	(1)	(3)	**51**	92	49	(14)	-	**127**
Derivatives – Currency (USDPLN exchange rate)										
Options – *collar*	328	262	(88)	(11)	**491**	1	5	(2)	(6)	**(2)**
Options – *seagull**	1	3	(6)	(34)	**(36)**	20	9	(31)	(5)	**(7)**
Derivatives – Currency-interest rate										
Cross Currency Interest Rate Swap CIRS	315	-	(569)	-	**(254)**	162	-	(431)	-	**(269)**
Trade instruments, including:	**5**	**41**	**(14)**	**(118)**	**(86)**	**6**	**3**	**(73)**	**(40)**	**(104)**
Derivatives – Metals (price of copper, silver, gold)										
Sold put option (copper)	-	-	(13)	(49)	**(62)**	-	-	(57)	(6)	**(63)**
Purchased put option (copper)	-	1	-	-	**1**	-	-	-	-	**-**
Purchased call option (copper)	4	32	-	-	**36**	-	-	-	-	**-**
QP adjustment *swap* transactions (copper)	-	-	-	(10)	**(10)**	-	-	-	(5)	**(5)**
Sold put option (silver)	-	-	(1)	(1)	**(2)**	-	-	(10)	(3)	**(13)**
Purchased put option (silver)	-	-	-	-	**-**	-	2	-	-	**2**
Purchased call option (silver)	-	-	-	-	**-**	1	-	-	-	**1**
QP adjustment *swap* transactions (gold)	-	4	-	(14)	**(10)**	-	-	-	(2)	**(2)**
Derivatives – Currency										
Sold put option (USDPLN)	-	-	-	(1)	**(1)**	-	-	(5)	(2)	**(7)**
Purchased put option (USDPLN)	-	-	-	-	**-**	1	1	-	-	**2**
Purchased call option (USDPLN)	1	4	-	-	**5**	4	-	-	-	**4**
Collars and *forwards/swaps* (EURPLN)	-	-	-	-	**-**	-	-	(1)	(1)	**(2)**
Embedded derivatives (price of copper, silver, gold)										
Purchase contracts for metal-bearing materials	-	-	-	(43)	**(43)**	-	-	-	(21)	**(21)**
Instruments initially designated as hedging instruments excluded from hedge accounting, including:	**-**	**-**	**(5)**	**(36)**	**(41)**	**4**	**2**	**(5)**	**(1)**	**-**
Derivatives – Currency (USDPLN exchange rate)										
Options – *seagull*	-	-	(1)	(4)	**(5)**	4	2	(4)	(1)	**1**
Derivatives – Metals (price of copper, silver)										
Options – *seagull (silver)*	-	-	-	-	**-**	-	-	(1)	-	**(1)**
Options – *seagull (copper)*	-	-	(4)	(32)	**(36)**	-	-	-	-	**-**
TOTAL OPEN DERIVATIVES	**714**	**796**	**(719)**	**(434)**	**357**	**595**	**254**	**(1 134)**	**(889)**	**(1 174)**

** Collar structures, i.e. purchased put options and sold call options were designated as hedging under seagull options structures (CFH – Cash Flow Hedging),.*

The table below presents detailed data on derivative transactions designated as hedging, held by the Parent Entity as at 31 December 2022.

Open hedging derivatives	**Notional**	**Average weighted price /exchange rate/interest rate**	**Maturity - settlement period**		**Period of profit/loss impact*** **	
Type of derivative	copper [t] silver [mn ounces] currency [USD mn] CIRS [PLN mn]	[USD/t] [USD/ounce] [USD/PLN] [USD/PLN, fixed interest rate for USD]	from	to	from	to
Copper – *seagulls**	189 000	8 075 - 9 759	Jan'23	- Dec'23	Jan'23	- Jan'24
Silver – *seagulls**	4.20	26.00 - 42.00	Jan'23	- Dec'23	Jan'23	- Jan'24
Currency – *collars*	2 640	4.58 - 5.78	Jan'23	- Dec'24	Jan'23	- Jan'25
Currency – *seagulls**	315	3.94 - 4.54	Jan'23	- Dec'23	Jan'23	- Jan'24
Currency – interest rate – CIRS**	400	3.78 and 3.23%		June'24		June '24
Currency - interest rate – CIRS**	1 600	3.81 and 3.94%		June'29	June'29	-July '29

** Collar structures, i.e. purchased put options and sold call options were designated as hedging under seagull options structures (CFH – Cash Flow Hedging).*

*** Settlements of interest payments are made periodically, on a half-year basis, until the moment of the realisation of the transaction.*

**** Reclassification of profits or losses on a cash flow hedging instrument from other comprehensive income to the statement of profit or loss takes place in the reporting period in which the hedged position impacts profit or loss (as an adjustment of a hedged position and to other operating income/costs for the settled hedging cost). However, the recognition of the result on the settlement of the transaction takes place on the date of its settlement.*

The table below presents detailed data on derivative transactions designated as hedging, held by the Parent Entity as at 31 December 2021.

Open hedging derivatives	**Notional**	**Average weighted price /exchange rate/interest rate**	**Maturity - settlement period**		**Period of profit/loss impact*** **	
Type of derivative	copper [t] silver [mn ounces] currency [USD mn] CIRS [PLN mn]	[USD/t] [USD/ounce] [USD/PLN] [USD/PLN, fixed interest rate for USD]	from	to	from	to
Copper – *seagulls**	243 000	7 553-9 227	Jan'22	- Dec'23	Jan'22	- Jan'24
Silver – *collars*	6.60	26.36-55.00	Jan'22	- Dec'22	Jan'22	- Jan'23
Silver – *seagulls**	7.80	26.00-42.00	Jan'22	- Dec'23	Jan'22	- Jan'24
Currency – *collars*	240	3.85-4.60	July'22	- Dec'22	July'22	Jan'23
Currency – *seagulls**	630	3.94-4.54	Jan'22	- Dec'23	Jan'22	- Jan'24
Currency – interest rate – CIRS**	400	3.78 and 3.23%		June '24		June '24
Currency – interest rate – CIRS**	1 600	3.81 and 3.94%		June '29	June '29	- July '29

** Collar structures, i.e. purchased put options and sold call options were designated as hedging under seagull options structures (CFH – Cash Flow Hedging).*

*** Settlements of interest payments are made periodically, on a half-year basis, until the moment of the realisation of the transaction.*

**** Reclassification of profits or losses on a cash flow hedging instrument from other comprehensive income to the statement of profit or loss takes place in the reporting period in which the hedged position impacts profit or loss (as an adjustment of a hedged position and to other operating income/costs for the settled hedging cost). However, the recognition of the result on the settlement of the transaction takes place on the date of its settlement.*

in PLN millions, unless otherwise stated

The impact of derivatives and hedging transactions on the items of the statement of profit or loss and on the statement of comprehensive income is presented below.

Statement of profit or loss	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Revenues from contracts with customers (reclassification adjustment)	(182)	(1 651)
Other operating income / (costs) (including the reclassification adjustment):	(220)	(385)
realisation of derivatives	(213)	(452)
measurement of derivatives	(7)	67
Finance income / (costs):	41	(44)
realisation of derivatives	(19)	(9)
measurement of derivatives	-	(1)
interest on borrowings (reclassification adjustment)	60	(34)
Impact of derivatives and hedging instruments on profit or loss for the period (excluding the tax effect)	**(361)**	**(2 080)**
Statement of other comprehensive income		
Impact of measurement of hedging transactions (effective portion)	1 239	(2 431)
Reclassification to revenues from contracts with customers due to realisation of a hedged item	182	1 651
Reclassification to finance costs due to realisation of a hedged item	(60)	34
Reclassification to other operating costs due to realisation of a hedged item (settlement of the hedging cost)	310	379
Impact of hedging transactions (excluding the tax effect)*	**1 671**	**(367)**
TOTAL COMPREHENSIVE INCOME	**1 310**	**(2 447)**

**Amounts of income tax corresponding to individual items of other comprehensive income are presented in Note 8.2.2.*

Note 7.3 Other financial instruments measured at fair value

Accounting policies

The item “Other financial instruments measured at fair value” mainly includes: shares (listed and unquoted) which were not acquired for trading purposes, for which the option of measurement at fair value through other comprehensive income was selected in order to limit the volatility of the result, and loans granted measured at fair value through profit or loss, as they did not pass the contractual cash flow test (SPPI), because in the financing structure at the last stage of the target recipient of funds, debt is changed into a share, and that is why they were obligatorily classified to this measurement category.

Shares are initially recognised at fair value increased by transaction costs, and at the end of the reporting period they are measured at fair value with recognition of gains/losses from measurement in other comprehensive income. The amounts recognised in accumulated other comprehensive income are not transferred later to profit or loss, while accumulated gains/losses on a given equity instrument are transferred within equity to retained earnings at the moment an equity instrument ceases to be recognised. Dividends from such investments are recognised in profit or loss.

The translation of items expressed in a foreign currency is performed according to the accounting policies described in Note 1.2.

in PLN millions, unless otherwise stated

Important estimates, assumptions and judgments
The fair value of unquoted shares is calculated using the adjusted net assets method. The application of this method is due to the specific nature of the assets of companies whose shares are subject to measurement. Observable Input data other than the ones from the active market were used in the measurement (e.g. transaction prices of real estate similar to one subjected to measurement, market interest rates of State Treasury bonds and fixed-term deposits in financial institutions, and the risk-free discount rate published by the European Insurance and Occupational Pensions Authority). The fair value of listed shares is calculated based on the closing price as at the end of the reporting period. The loan's fair value is set at the present value of future cash flows, including any change in market risk and credit risk factors during the loans' life.

	As at 31 December 2022	As at 31 December 2021
Shares of listed companies (Warsaw Stock Exchange and TSX Venture Exchange), of which:	422	516
TAURON POLSKA ENERGIA S.A.	386	483
GRUPA AZOTY S.A.	32	27
Other listed shares	4	6
Unquoted shares	99	99
Loans granted	20	22
Other receivables	65	-
Other financial instruments measured at fair value, of which:	**606**	**637**
recognised in assets held for sale (disposal group)	-	-
recognised as "other financial instruments measured at fair value"	606	637

The measurement of listed shares is classified to level 1 of the fair value hierarchy (i.e. measurement is based on the prices of these shares listed on an active market at the measurement date), while the measurement of unquoted shares is classified to level 2 (i.e. measurement based on observable data, not deriving from an active market).

The measurement of loans granted is classified to level 2 of the fair value hierarchy.

In 2022 as well as in 2021, there were no dividends from companies in which the Group had shares classified as other financial instruments measured at fair value.

In 2022 there were no transfers of accumulated gain or loss within equity in respect of companies in which the Group holds shares classified as other financial instruments measured at fair value. In 2021, following the sale of shares of the company PGE EJ1 Sp. z o.o., the result on the sale of these shares was reclassified in the amount of PLN 18 million.

Due to investments in listed companies, the Group is exposed to price risk. Changes in the listed share prices of these companies resulting from the current macroeconomic situation may have a significant impact on the level of other comprehensive income and on the accrued amount recognised in equity.

The following table presents the sensitivity analysis of listed companies' shares to price changes.

	As at 31 December 2022	Percentage change of share price		As at 31 December 2021	Percentage change of share price	
		14%	-14%		12%	-12%
	Carrying amount	Other comprehensive income	Other comprehensive income	Carrying amount	Other comprehensive income	Other comprehensive income
Listed shares	**422**	60	(60)	**516**	63	(63)

Sensitivity analysis for significant types of market risk to which the Group is exposed presents the estimated impact of potential changes in individual risk factors (at the end of reporting period) on profit or loss and other comprehensive income.

Potential changes in share prices at the end of the reporting period were determined at the level of standard deviations from the WIG20 index for a period of 3 calendar years ended on the reporting date.

in PLN millions, unless otherwise stated

Note 7.4 Other financial instruments measured at amortised cost

Accounting policies	Important estimates, assumptions and judgements
The item other financial instruments measured at amortised cost includes financial assets designated to cover the costs of decommissioning mines (accounting policies with respect to the obligation to decommission mines are presented in Note 9.4) and other financial assets not classified to other items. Assets included, in accordance with IFRS 9, in the category "measured at amortised cost", are initially recognised at fair value adjusted by transaction costs, which can be directly attributed to the purchase of these assets and measured at amortised cost at the end of the reporting period using the effective interest rate method, reflecting impairment.	Sensitivity analysis of the risk of changes in interest rates of cash accumulated on a bank account of the Mine Closure Fund and of investments in debt securities is presented in Note 7.5.1.4.

		As at 31 December 2022	As at 31 December 2021
	Cash held in the Mine Closure Fund and Tailings Storage Facility Restoration Fund*	406	427
	Other non-current financial receivables	63	72
Note 7.1	**Total, of which:**	**469**	**499**
	recognised in assets held for sale (disposal group)	-	3
	recognised as "other financial instruments measured at amortised cost"	469	496

** As of 15 July 2022, the Company changed the form of the Tailings Storage Facility Restoration Fund in the amount of PLN 98 million from a bank account to a bank guarantee. This cash was collected by the Parent Entity and the KGHM INTERNATIONAL LTD. Group based on obligations resulting from law, among others the Law on Geology and Mining and the Waste Act as well as from laws applicable in the United States of America and Canada.*

Financial assets designated for decommissioning mines and restoring tailings storage facilities are exposed to the credit risk described in Note 7.5.2.5.

Details regarding revaluation of the provision for the decommissioning costs of mines and other technological facilities are described in Note 9.4.

Note 7.5 Financial risk management

In the course of its business activities the Group is exposed to the following main financial risks:

- market risks:
  - commodity risk,
  - risk of changes in foreign exchange rates,
  - risk of changes in interest rates,
  - price risk related to investments in shares of listed companies (Note 7.3),
- credit risk, and
- liquidity risk (the process of financial liquidity management is described in Note 8).

The Group identifies and measures financial risk on an ongoing basis, and also takes actions aimed at minimising its impact on the financial position.

The Parent Entity manages identified financial risk factors in a conscious and responsible manner, using the adopted Market Risk Management Policy, the Financial Liquidity Management Policy and the Credit Risk Management Policy. The process of financial risk management in the Parent Entity is supported by the work of the Market Risk Committee, the Financial Liquidity Committee and the Credit Risk Committee.

Note 7.5.1 Market risk

The market risk to which the Group is exposed to is understood as the possible occurrence of negative impact on the Group's results arising from changes in the market prices of commodities, exchange rates, interest rates, and debt securities, as well as the share prices of listed companies.

Note 7.5.1.1 Principles and techniques of market risk management

In market risk management (especially commodity and currency risk) the scale and profile of activities of the Parent Entity and of mining companies of KGHM INTERNATIONAL LTD. is of the greatest significance and impact the results of the KGHM Polska Miedź S.A. Group.

The Parent Entity actively manages market risk by taking actions and making decisions in this regard within the context of the KGHM Polska Miedź S.A. Group's global exposure as a whole.

In accordance with the adopted policy, the goals of the market risk management process in the Group are as follows:

- limit volatility in the financial result;
- increase the probability of meeting budget targets;
- decrease the probability of losing financial liquidity;
- maintain financial health; and
- support the process of strategic decision making related to investing activities, including financing sources.

The objectives of market risk management should be considered as a whole, and their realisation is determined mainly by the Group's internal situation and market conditions.
The goals of market risk management at the Group level are achieved through their realisation in individual mining companies of the Group, with the coordination of these activities at the Parent Entity's level, in which key tasks related to the process of market risk management in the Group were centralised (such as coordination of the identification of sources of exposure to market risk, proposing hedging strategies, contacting financial institutions in order to sign, confirm and settle derivative transactions, and calculating measurements to fair value).

The primary technique used by the Parent Entity in market risk management is the utilisation of hedging strategies involving derivatives. Natural hedging is also used. Some other domestic companies of the Group make use of derivatives, however only the Parent Entity applies hedging strategies, as understood by hedge accounting.

Taking into account the potential scope of their impact on the Group's results, market risk factors were divided into the following groups:

	Group	Market risk	Approach to risk management
Note 7.2	Group I – factors having the greatest impact on the Group's total exposure to market risk	Copper price	A strategic approach is applied to this group, aimed at systematically building up a hedging position comprising production and revenues from sales for subsequent periods while taking into account the long-term cyclical nature of various markets. A hedging position may be restructured before it expires.
Note 7.2		Silver price	
Note 7.2		USD/PLN exchange rate	
Note 7.2	Group II – other exposure to market risk	Prices of other metals and merchandise	From the Group's point of view, this group is comprised of less significant risks, although sometimes these risks are significant from an individual entity points of view. Therefore, it is tactically managed - on an ad-hoc basis, taking advantage of favourable market conditions.
Note 7.2		Other exchange rates	
Note 7.2		Interest rates	

In market risk management various approaches are applied for particular, identified exposure groups. The Parent Entity considers the following factors when selecting hedging strategies or restructuring hedging positions: current and forecasted market conditions, the internal situation of the Entity, the effective level and cost of hedging, and the impact of the minerals extraction tax.

The Parent Entity applies an integrated approach to managing the market risk to which it is exposed. This means a comprehensive approach to market risk, and not to each element individually. An example is the hedging transactions on the currency market, which are closely related to contracts entered into on the metals market. The hedging of metals sales prices determines the probability of achieving specified revenues from sales in USD, which represent a hedged position for the strategy on the currency market.

The Parent Entity only executes those derivatives which it has the ability to evaluate internally, using standard pricing models appropriate for a particular type of derivative, and which can be traded without significant loss of value with a counterparty other than the one with whom the transaction was initially entered into. In the market valuation of a given instrument, the Parent Entity uses information obtained from leading information services, banks, and brokers.

The Market Risk Management Policy in the Group permits the use of the following types of instruments:

- swaps,
- forwards and futures,
- options, and
- structures combining the above instruments.

The instruments applied may be, therefore, either of standardised parameters (publicly traded instruments) or non-standardised parameters (over-the-counter instruments). The primary instruments applied are cash flow hedging instruments meeting the requirements for effectiveness as understood by hedge accounting. The effectiveness of the financial hedging instruments applied by the Parent Entity in the reporting period is continually monitored and assessed (details in Note 7.2 Derivatives - accounting policies).

The economic relationship between a hedging instrument and a hedged position is based on the sensitivity of the value of the position to the same market factors (metals prices, exchange rates or interest rates) and on matching appropriate key parameters of the hedging instrument and the hedged position (volume/notional amount, maturity date).

The hedge ratio of the established hedging relationship is set at the amount ensuring the effectiveness of the relationship and is consistent with the actual volume of the hedged position and the hedging instrument. Sources of potential ineffectiveness of the relationship arise from a mismatch of the parameters of the hedging instrument and the hedged position (e.g. the notional amount, maturity, base instrument, impact of credit risk). When structuring a hedging transaction, the Parent Entity aims to ensure a maximal match between these parameters to minimise the sources of ineffectiveness.

The Parent Entity quantifies its market risk exposure using a consistent and comprehensive measure. Market risk management in the Group is supported by simulations (such as scenario analysis, stress-tests, backtests) and calculated risk measures. The risk measures being used are mainly based on mathematical and statistical modelling, which uses historical and current market data concerning risk factors and takes into consideration the current exposure to market risk.

One of the measures used as an auxiliary tool in making decisions in the market risk management process in the Parent Entity is EaR - Earnings at Risk. This measure indicates the lowest possible level of profit for the period for a selected level of confidence (for example, with 95% confidence the profit for a given year will be not lower than…). The EaR methodology enables the calculation of profit for the period incorporating the impact of changes in market prices of copper, silver and foreign exchange rates in the context of budget plans. EBITDA-at-Risk ratio is calculated for both the KGHM INTERNATIONAL LTD. Group and the JV Sierra Gorda S.C.M.

Due to the risk of production cutbacks (for example because of force majeure) or failure to achieve planned foreign currency revenues, as well as purchases of metals contained in purchased materials, limits with respect to commitment in derivatives have been set.

For the Parent Entity limits on metals and currency markets were set at:

- up to 85% of planned, monthly sales volumes of copper, silver and gold from own concentrates, while: for copper and silver - up to 50% with respect to instruments which are obligations of the Parent Entity (for financing the hedging strategy), and up to 85% with respect to instruments representing the rights of the Parent Entity,
- up to 85% of planned, monthly revenues from the sale of products from own concentrates in USD or of the monthly, contracted net currency cash flows in the case of other currencies. For purposes of setting the limit, expenses for servicing the debt denominated in USD decrease the nominal amount of exposure to be hedged.

With respect to the risk of changes in interest rates, the Parent Entity has set a limit of commitment in derivatives of up to 100% of the debt’s nominal value in every interest period, as stipulated in the signed agreements.

For selected mining companies in the Group, limits were set for commitment in derivatives on the copper and currency markets at the same levels as those functioning in the Parent Entity, while with respect to transactions on the nickel, silver and gold markets the limits were set as up to 60% of planned, monthly sales volume from own concentrates.

These limits are in respect both of hedging transactions as well as of the instruments financing these transactions.

The maximum time horizon within which the Group decides to limit market risk is set in accordance with the technical and economic planning process and amounts to 5 years, whereas in terms of interest rate risk, the time horizon reaches up to the maturity date of the long-term financial liabilities of the Group.

in PLN millions, unless otherwise stated

Note 7.5.1.2 Commodity risk

The Parent Entity is exposed to the risk of changes in the prices of the metals it sells: copper, silver, gold and lead. Furthermore, the KGHM INTERNATIONAL LTD. Group is exposed to the risk of changes in the prices of copper, gold, nickel, molybdenum, platinum and palladium.

In the Parent Entity and the KGHM INTERNATIONAL LTD. Group, the price formulas used in physical delivery contracts are mainly based on average monthly quotations from the London Metal Exchange for copper and other common metals and from the London Bullion Market for precious metals. Within the commercial policy, the Parent Entity and KGHM INTERNATIONAL LTD. set the price base for physical delivery contracts as the average price of the appropriate future month.

The permanent and direct link between sales proceeds and metals prices, without similar relationships on the expenditures side, results in a strategic exposure. In turn, operating exposure is a result of possible mismatches in the pricing of physical contracts with respect to the Group's benchmark profile, in particular in terms of the reference prices and the quotation periods.

On the metals market, the Group has a so-called long position, which means it has higher sales than purchases. The analysis of the Group's strategic exposure to market risk should be performed by deducting from the volume of metals sold the amount of metal in purchased materials.

The Group's strategic exposure to the risk of changes in the price of copper and silver in the years 2021-2022 is presented in the table below:

	from 1 January 2022 to 31 December 2022			from 1 January 2021 to 31 December 2021		
	Net	Sales	Purchase	Net	Sales	Purchase
Copper [t]	391 180	619 944	228 764	432 910	628 011	195 101
Silver [t]	1 322	1 347	25	1 222	1 251	29

The notional amount of copper price hedging strategies settled in 2022 represented approx. 25% (44% in 2021) of the total sales of this metal realised by the Parent Entity (it represented approx. 42% of net sales[1] in 2022 and 67% in 2021).

The notional amount of silver price hedging strategies settled in 2022 represented approx. 24% of the total sales of this metal realised by the Parent Entity (25% in 2021).

As part of the realisation of the strategic plan to hedge the Parent Entity against market risk, in 2022 strategies hedging the planned revenues from copper sales were implemented. *Seagull* hedging strategies were entered into for the period from January 2023 to December 2023 for a total tonnage of 90 thousand tonnes. Moreover, an open hedging position on the copper market was restructured for the same period with a total tonnage of 12 thousand tonnes by raising the sold options' strike price from a seagull structure entered into in 2020. In 2022, the Parent Entity did not implement any hedging strategies on the silver market.

In 2022 QP adjustment *swap* transactions were entered into on the copper and gold markets with maturities of up to June 2023, as part of the management of a net trading position[2].

As a result, as at 31 December 2022 the Parent Entity held open derivatives positions for 193.5 thousand tonnes of copper (of which: 189 thousand tonnes came from strategic management of market risk, while 4.3 thousand tonnes came from the management of a net trading position) and 4.2 million troy ounces of silver.

The condensed tables of open derivatives transactions held by the Parent Entity on the copper and silver markets as at 31 December 2022, entered into as part of the strategic management of market risk, are presented below (the hedged notional in the presented periods is allocated evenly on a monthly basis).

[1] *Copper sales less copper in purchased metal-bearing materials.*

[2] *Applied in order to react to changes in contractual arrangements with customers, non-standard pricing terms as regards metals sales and the purchase of copper-bearing materials.*

in PLN millions, unless otherwise stated

Hedging against copper price risk – open derivatives as at 31 December 2022

	Instrument/ option	Notional [tonnes]	Average weighted option strike price – sold put option: *hedge limited to* [USD/t]	purchased put option: *copper price hedging* [USD/t]	sold call option: *participation limited to* [USD/t]	Average weighted premium [USD/t]	Effective hedge price [USD/t]
1st half of 2023	seagull	18 000	5 200	6 900	8 300	(196)	6 704
	seagull	6 000	6 000	6 900	10 000	(296)	6 604
	seagull	15 000	6 000	9 000	11 400	(248)	8 752
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
	seagull	45 000	6 000	8 120	9 120	(143)	7 977
2nd half of 2023	seagull	18 000	5 200	6 900	8 300	(196)	6 704
	seagull	6 000	6 000	6 900	10 000	(296)	6 604
	seagull	15 000	6 000	9 000	11 400	(248)	8 752
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
	seagull	45 000	6 000	8 100	9 600	(172)	7 928
	TOTAL 2023	**189 000**					

Hedging against silver price risk – open derivatives as at 31 December 2022

	Instrument/ option	Notional [mn ounces]	Average weighted option strike price – sold put option: *hedge limited to* [USD/ounce]	purchased put option: *silver price hedging* [USD/ounce]	sold call option: *participation limited to* [USD/ounce]	Average weighted premium [USD/ounce]	Effective hedge price [USD/ounce]
2023	seagull	4.20	16.00	26.00	42.00	(1.19)	24.81
	TOTAL 2023	**4.20**					

The condensed tables of open derivatives transactions held by the Parent Entity on the copper and silver markets as at 31 December 2021, entered into as part of the strategic management of market risk, are presented below (the hedged notional in the presented periods is allocated evenly on a monthly basis).

Hedging against copper price risk – open derivatives as at 31 December 2021

	Instrument/ option	Notional [tonnes]	Average weighted option strike price – Sold put option: *hedge limited to* [USD/t]	Purchased put option: *copper price hedging* [USD/t]	Sold call option: *participation limited to* [USD/t]	Average weighted premium [USD/t]	Effective hedge price [USD/t]
1st half	seagull	30 000	4 600	6 300	7 500	(160)	6 140
	seagull	24 000	5 200	6 900	8 300	(196)	6 704
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
2nd half	seagull	30 000	4 600	6 300	7 500	(160)	6 140
	seagull	24 000	5 200	6 900	8 300	(196)	6 704
	seagull	15 000	6 000	9 000	11 400	(248)	8 752
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
	TOTAL 2022	**144 000**					
1st half	seagull	24 000	5 200	6 900	8 300	(196)	6 704
	seagull	15 000	6 000	9 000	11 400	(248)	8 752
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
2nd half	seagull	24 000	5 200	6 900	8 300	(196)	6 704
	seagull	15 000	6 000	9 000	11 400	(248)	8 752
	seagull	10 500	6 700	9 286	11 486	(227)	9 059
	TOTAL 2023	**99 000**					

in PLN millions, unless otherwise stated

Hedging against silver price risk – open derivatives as at 31 December 2021

	Instrument/ option	Notional	Average weighted option strike price: sold put option	purchased put option	sold call option	Average weighted premium	Effective hedge price
			hedge limited to	*silver price hedging*	*participation limited to*		
		[mn ounces]	[USD/ounce]	[USD/ounce]	[USD/ounce]	[USD/ounce]	[USD/ounce]
2022	seagull	3.60	16.00	26.00	42.00	(0.88)	25.12
	collar	6.60	-	26.36	55.00*	(1.96)	24.40
	TOTAL 2022	**10.20**					
2023	seagull	4.20	16.00	26.00	42.00	(1.19)	24.81
	TOTAL 2023	**4.20**					

** As part of restructuration the strike price of sold call options was increased from 42 and 43 USD/ounce to 55 USD/ounce.*

In 2022 and in 2021, neither KGHM INTERNATIONAL LTD. nor any of the mining companies implemented any forward transactions on the commodity market.

As at 31 December 2022, the risk of changes in metals prices was also related to derivatives embedded in the purchase contracts for metal-bearing materials entered into by the Parent Entity.

in PLN millions, unless otherwise stated

An analysis of the Group's sensitivity to the risk of changes in copper, silver and gold prices in the years 2021-2022

Financial assets and liabilities as at 31 December 2022	Value at risk	Carrying amount 31 December 2022	Change in COPPER price [USD/t] 10 293 (+23%)		Change in COPPER price [USD/t] 6 463 (-23%)		Change in SILVER price [USD/ ounce] 31.69 (+32%)		Change in SILVER price [USD/ ounce] 17.06 (-29%)		Change in GOLD price [USD/ ounce] 2 107 (+15%)	Change in GOLD price [USD/ ounce] 1 524 (-16%)
			Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Profit or loss
Derivatives (copper)	**161**	**161**	(49)	(1 026)	17	935	-	-	-	-	-	-
Derivatives (silver)	**50**	**50**	-	-	-	-	2	(67)	(17)	106	-	-
Derivatives (gold)	**(10)**	**(10)**	-	-	-	-	-	-	-	-	(22)	29
Embedded derivatives (copper, silver, gold)	**(43)**	**(43)**	(164)	-	161	-	-	-	-	-	(24)	27
Impact on profit or loss			**(213)**	**-**	**178**		**2**	**-**	**(17)**	**-**	**(46)**	**56**
Impact on other comprehensive income			**-**	**(1 026)**	**-**	**935**	**-**	**(67)**	**-**	**106**	**-**	**-**

Financial assets and liabilities as at 31 December 2021	Value at risk	Carrying amount 31 December 2021	Change in COPPER price [USD/t] 11 614 (+19%)		Change in COPPER price [USD/t] 7 495 (-23%)		Change in SILVER price [USD/ounce] 30.52 (+31%)		Change in SILVER price [USD/ounce] 16.55 (-29%)		Change in GOLD price [USD/ounce] 2 122 (+17%)	Change in GOLD price [USD/ounce] 1 523 (-16%)
			Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income	Profit or loss	Profit or loss
Derivatives (copper)	**(1 096)**	**(1 096)**	(74)	(1 770)	173	1 701	-	-	-	-	-	-
Derivatives (silver)	**224**	**224**	-	-	-	-	9	(192)	(39)	334		
Derivatives (gold)	**-**	**-**	-	-	-	-	-	-	-	-	(20)	20
Embedded derivatives (copper, silver, gold)	**(21)**	**(21)**	(129)	-	165	-	(1)	-	1	-	(11)	11
Impact on profit or loss			**(203)**	**-**	**338**		**8**	**-**	**(38)**	**-**	**(31)**	**31**
Impact on other comprehensive income			**-**	**(1 770)**	**-**	**1 701**	**-**	**(192)**	**-**	**334**	**-**	**-**

In order to determine the potential changes in metals prices for purposes of sensitivity analysis of commodity risk factors (copper, silver, gold), the mean reverting Schwarz model (the geometrical Ornstein-Uhlenbeck process) was used.

Note 7.5.1.3 Risk of changes in foreign exchange rates

Regarding the risk of changes in foreign exchange rates within the KGHM Polska Miedź S.A. Group, the following types of exposures were identified:

- transaction exposure related to the volatility of cash flows in the base currency;
- exposure related to the volatility of selected items of the statement of financial position in the base (functional) currency;
- the exposure to net investments in foreign operations as concerns the volatility of consolidated equity in the Group's base currency (presentation currency).

The transaction exposure to currency risk derives from cash flow-generating contracts, whose values expressed in the base (functional) currency depend on future levels of exchange rates of the foreign currencies with respect to the base currency. Cash flows exposed to currency risk may possess the following characteristics:

- denomination in the foreign currency – cash flows are settled in foreign currencies other than the functional currency; and
- indexation in the foreign currency – cash flows may be settled in the base currency, but the price (i.e. of a metal) is set in a different foreign currency.

The key source of exposure to currency risk in the Parent Entity's business operations are the proceeds from sales of products (with respect to metals prices, processing and producer margins).

The exposure to currency risk also derives from items in the consolidated statement of financial position denominated in foreign currencies, which under the existing accounting regulations must be translated, upon settlement or periodic valuation, including the translation of foreign operations statements, by applying the current exchange rate of the foreign currencies versus the base (functional) currency. Changes in the carrying amounts of such items between valuation dates result in the volatility of profit or loss for the period or of other comprehensive income.

Items in the consolidated statement of financial position which are exposed to currency risk include in particular:

- trade receivables and trade payables related to purchases and sales denominated in foreign currencies;
- financial receivables due to loans granted in foreign currencies;
- financial liabilities due to borrowings in foreign currencies;
- cash and cash equivalents in foreign currencies; and
- derivatives on metals market.

As for the currency market, the notional amount of settled transactions hedging revenues from metals sales amounted to approx. 20% (in 2021: 28%) of the total revenues from sales of copper and silver realised by the Parent Entity in 2022.

As part of the realisation of the strategic plan to hedge against market risk, in 2022 the Parent Entity purchased the following: put options on the currency market for USD 205 million of planned sales revenues with maturities from April 2022 to December 2022, collar option structures on the currency market for USD 400 million of planned sales revenues with maturities from August 2022 to December 2022, and collar structures for USD 2 640 million with maturities from January 2023 to December 2024.

In addition, as part of on-going management of the currency risk, short-term forward sale transactions were entered into for the planned current cash flows, aimed at hedging against risk connected with USD/PLN rate fluctuations. Forward transactions were settled in the third quarter of 2022.

As a result, as at 31 December 2022 the Parent Entity held an open position on the currency market for the notional amount of USD 2 955 million (USD 1 050 million as at 31 December 2021), and *Cross Currency Interest Rate Swap* (CIRS) transactions for the notional amount of PLN 2 billion, hedging revenues from sales in the currency as well as the variable interest of issued bonds.

The condensed table of open transactions in derivatives of the Parent Entity on the currency market as at 31 December 2022 is presented below (the hedged notional in the presented periods is allocated evenly on a monthly basis).

Hedging against USD/PLN currency risk - open derivatives as at 31 December 2022

	Instrument/ option	Notional	Average weighted option strike price: sold put option	Average weighted option strike price: purchased put option	Average weighted option strike price: sold call option	Average weighted premium	Effective hedge price
			hedge limited to	*exchange rate hedging*	*participation limited to*		
		[USD mn]	[USD/PLN]	[USD/PLN]	[USD/PLN]	[PLN per USD 1]	[USD/PLN]
2023	seagull	135.00	3.30	4.00	4.60	(0.00)	4.00
2023	seagull	180.00	3.30	3.90	4.50	0.03	3.93
2023	collar	660.00	-	4.48	5.48	(0.03)	4.45
2023	collar	660.00	-	4.69	6.09	(0.05)	4.64
	TOTAL 2023	**1 635.00**					
2024	collar	660.00	-	4.48	5.48	(0.00)	4.48
2024	collar	660.00	-	4.69	6.09	(0.01)	4.68
	TOTAL 2024	**1 320.00**					

Hedging against USD/PLN currency risk – open derivatives as at 31 December 2021

	Instrument/ option	Notional	Option strike price: sold put option	Option strike price: purchased put option	Option strike price: sold call option	Average weighted premium	Effective hedge price
			hedge limited to	*exchange rate hedging*	*participation limited to*		
		[USD mn]	[USD/PLN]	[USD/PLN]	[USD/PLN]	[PLN per USD 1]	[USD/PLN]
1st half	seagull	67.5	3.30	4.00	4.60	(0.01)	3.99
1st half	seagull	90	3.50	3.90	4.50	0.04	3.94
1st half	purchased put option	180	-	3.75	-	(0.04)	3.71
2nd half	seagull	67.5	3.30	4.00	4.60	(0.01)	3.99
2nd half	seagull	90	3.30	3.90	4.50	0.03	3.93
2nd half	collar	240	-	3.85	4.60	(0.04)	3.81
	TOTAL 2022	**735**					
2023	seagull	135	3.30	4.00	4.60	(0.00)	4.00
2023	seagull	180	3.30	3.90	4.50	(0.03)	3.93
	TOTAL 2023	**315**					

Hedging against currency-interest rate risk connected with the issue of bonds with a variable interest rate in PLN - open derivatives as at 31 December 2022 and as at 31 December 2021

	Instrument	Notional	Average interest rate	Average exchange rate
		[PLN mn]	[fixed interest rate for USD]	[USD/PLN]
VI 2024	CIRS	400	3.23%	3.78
VI 2029	CIRS	1 600	3.94%	3.81
	TOTAL	**2 000**		

Some of the Group's Polish companies managed the currency risk related to their core business (among others trade) by opening transactions in derivatives, among others on the USD/PLN and EUR/PLN markets. The table of open transactions as at 31 December 2022 and 31 December 2021 is not presented, due to its immateriality for the Group.

As for managing currency risk, the Parent Entity applies natural hedging by borrowing in the currency in which it has revenues. As at 31 December 2022, following their translation to PLN, the bank loans and the investment loans which were drawn in USD amounted to PLN 3 435 million (as at 31 December 2021: PLN 2 980 million).

The currency structure of financial instruments exposed to currency risk (change in the USD/PLN, EUR/PLN, CAD/PLN and GBP/PLN exchange rates) of the KGHM Polska Miedź S.A. Group and sensitivity analysis to the risk of changes in the exchange rates are presented in the tables below. In order to determine the potential changes in the USD/PLN, EUR/PLN, CAD/PLN and GBP/PLN exchange rates for sensitivity analysis purposes, the Black-Scholes model (the geometrical Brownian motion) was used.

Financial instruments	Value at risk as at 31 December 2022			
	total PLN million	USD million	EUR million	CAD million
Shares	**4**	-	-	1
Trade receivables	**776**	140	30	5
Cash and cash equivalents	**868**	163	20	17
Long-term loans granted to joint ventures	**9 603**	2 182	-	-
Other financial assets	**234**	44	-	12
Derivatives*	**357**	36	-	-
Trade and similar payables	**(1 063)**	(153)	(75)	(11)
Borrowings	**(3 578)**	(793)	(10)	(13)
Other financial liabilities	**(49)**	(9)	(2)	-

**Transactions on the commodities market which are denominated in USD and translated to PLN at the exchange rate as at the end of the reporting period are presented in the item "derivatives", in the column "USD million", while the column "total PLN million" also includes the fair value of derivatives which are denominated solely in PLN.*

Financial instruments	Value at risk as at 31 December 2021				
	total PLN million	USD million	EUR million	CAD million	GBP million
Shares	**5**	-	-	2	-
Trade receivables	**515**	80	30	4	8
Cash and cash equivalents	**1 558**	341	20	23	2
Long-term loans granted to joint ventures	**7 867**	1 938	-	-	-
Short-term loans granted to joint ventures	**447**	110	-	-	-
Other financial assets	**150**	26	-	12	-
Derivatives*	**(1 174)**	220	-	-	-
Trade and similar payables	**(1 132)**	(167)	(87)	(16)	-
Borrowings	**(3 121)**	(736)	(18)	(15)	-
Other financial liabilities	**(177)**	(41)	(3)	-	-

**Transactions on the commodities market which are denominated in USD and translated to PLN at the exchange rate as at the end of the reporting period are presented in the item "derivatives", in the column "USD million", while the column "total PLN million" also includes the fair value of derivatives which are denominated solely in PLN.*

in PLN millions, unless otherwise stated

An analysis of the Group's sensitivity to the currency risk in 2022 and 2021

Financial assets and liabilities as at 31 December 2022	Value at risk	Carrying amount 31 December 2022	Change in the USD/PLN exchange rate				Change in the EUR/PLN exchange rate		Change in the CAD/PLN exchange rate	
			5.03 (+14%)		3.91 (-11%)		5.18 (+10%)	4.48 (-5%)	3.68 (+13%)	2.88 (-11%)
			profit or loss	other comprehensive income	profit or loss	other comprehensive income	profit or loss	profit or loss	profit or loss	profit or loss
Shares	**4**	**521**	-	-	-	-	-	-	-	-
Trade receivables	**776**	**1 178**	88	-	(68)	-	15	(6)	2	(2)
Cash and cash equivalents	**868**	**1 200**	102	-	(79)	-	10	(4)	7	(6)
Long-term loans granted to joint ventures	**9 603**	**9 603**	1 372	-	(1 065)	-	-	-	-	-
Other financial assets	**234**	**890**	28	-	(21)	-	-	-	5	(4)
Derivatives	**357**	**357**	(3)	(1 197)	(6)	1 193	(2)	1	-	-
Trade and similar payables	**(1 063)**	**(3 280)**	(96)	-	75	-	(37)	16	(5)	4
Borrowings	**(3 578)**	**(6 443)**	(499)	-	387	-	(5)	2	(5)	5
Other financial liabilities	**(49)**	**(211)**	(6)	-	4	-	(1)	-	-	-
		Impact on profit or loss	**986**	**-**	**(773)**	**-**	**(20)**	**9**	**4**	**(3)**
		Impact on other comprehensive income		**(1 197)**		**1 193**	**-**	**-**	**-**	**-**

Financial assets and liabilities as at 31 December 2021	Value at risk	Carrying amount 31 December 2021	Change in the USD/PLN exchange rate				Change in the EUR/PLN exchange rate		Change in the CAD/PLN exchange rate		Change in the GBP/PLN exchange rate	
			4.57 (+13%)		3.66 (-10%)		5.01 (+9%)	4.37 (-5%)	3.55 (+11%)	2.90 (-9%)	6.15 (+12%)	4.98 (-9%)
			profit or loss	other comprehensive income	profit or loss	other comprehensive income	profit or loss	profit or loss	profit or loss	profit or loss	profit or loss	profit or loss
Shares	**5**	**615**	-	-	-	-	-	-	1	-	-	-
Trade receivables	**515**	**1 026**	41	-	(32)	-	12	(7)	1	(1)	5	(4)
Cash and cash equivalents	**1 558**	**1 904**	175	-	(138)	-	8	(4)	8	(7)	1	(1)
Long-term loans granted to joint ventures	**7 867**	**7 867**	997	-	(782)	-	-	-	-	-	-	-
Short-term loans granted to joint ventures	**447**	**447**	57	-	(44)	-	-	-	-	-	-	-
Other financial assets	**150**	**671**	14	-	(11)	-	-	-	4	(3)	-	-
Derivatives	**(1 174)**	**(1 174)**	10	(646)	2	527	(7)	4	-	-	-	-
Trade and similar payables	**(1 132)**	**(3 201)**	(86)	-	67	-	(36)	20	(6)	5	-	-
Borrowings	**(3 121)**	**(5 949)**	(379)	-	297	-	(7)	4	(6)	4	-	-
Other financial liabilities	**(177)**	**(479)**	(21)	-	16	-	(1)	1	-	-	-	-
		Impact on profit or loss	**808**	**-**	**(625)**	**-**	**(31)**	**18**	**2**	**(2)**	**6**	**(5)**
		Impact on other comprehensive income		**(646)**		**527**	**-**	**-**	**-**	**-**	**-**	**-**

in PLN millions, unless otherwise stated

Note 7.5.1.4 Interest rate risk

In 2022 the Group was exposed to the risk of changes in interest rates due to loans granted to a joint venture, investing cash, the reverse factoring program and using borrowings.

Positions with variable interest rates expose the Group to the risk of changes in cash flow from a given position as a result of changes in interest rates (i.e. it has an impact on the interest costs or income recognised in profit or loss). Positions with fixed interest rates expose the Group to the risk of fair value changes of a given position, excluding positions measured at amortised cost, for which the change in fair value does not affect their measurement and profit or loss.

The main items which are exposed to interest rate risk are presented below:

		As at 31 December 2022			As at 31 December 2021		
		Cash flow risk	Fair value risk	Total	Cash flow risk	Fair value risk	Total
	Cash and cash equivalents	1 200	-	**1 200**	2 333	-	**2 333**
	Loans granted	-	20	**20**	-	22	**22**
Note 7.1	Borrowings	(2 656)	(3 787)	**(6 443)**	(2 153)	(3 796)	**(5 949)**
	Similar payables*	(18)	-	**(18)**	(55)	-	**(55)**

* *In order to effectively manage the working capital and realise mutual payables arising from binding agreements with suppliers on time, the Group performed reverse factoring agreements. Consequently, for a part of the portfolio of trade payables, an extension of payment dates was agreed upon in exchange for additional consideration in the form of interest. Interest is calculated with a variable rate, based on a fixed margin increased by a specified reference rate determined for individual currencies.*
Details on reverse factoring may be found in Note 8.4.1, Note 10.3 and Note 10.4.

As at 31 December 2022 the Parent Entity had CIRS transactions (Cross Currency Interest Rate Swap) with maturities falling in June 2024 and June 2029, in the notional amount of PLN 2 billion, hedging both the sales revenues in the currency, as well as the variable interest rate of issued bonds. The open hedging position as at 31 December 2022 and as at 31 December 2021 is presented in the table in Note 7.5.1.3.

An analysis of the Group's sensitivity to interest rate risk, assuming changes in interest rates for the balance sheet items in PLN, USD and EUR (presented in basis points, bps) is presented in the following table. An expert method including recommendations of the ARMA model was used to determine the potential volatility of interest rates.

	31 December 2022 change in interest rate				31 December 2021 change in interest rate			
	+150 bps (PLN, USD, EUR)		-100 bps (PLN, USD, EUR)		+250 bps (PLN) +150 bps (USD, EUR)		-100 bps (PLN) -50 bps (USD, EUR)	
	profit or loss	other comprehensive income	profit or loss	other comprehensive income	profit or loss	other comprehensive income	profit or loss	other comprehensive income
Cash and cash equivalents	18	-	(12)	-	32	-	(11)	-
Borrowings	(40)	-	27	-	(54)	-	21	-
Financial derivatives – interest rate	-	134	-	(97)	-	186	-	(66)
Similar payables	-	-	-	-	-	-	-	-
Impact on profit or loss	**(22)**	**-**	**15**	**-**	**(22)**	**-**	**10**	**-**
Impact on other comprehensive income		**134**		**(97)**	**-**	**186**	**-**	**(66)**

Impact of the reference rates reform

The Group uses financial instruments based on variable interest rates, which fall under the reference rates reform. As a result of the reform, publication of certain IBOR rates ceased from 1 January 2022 and the next ones will cease to be published from 30 June 2023.

The Group identified agreements which include clauses based on LIBOR and which will be changed once the reference rates are superseded. These are mainly borrowing and factoring agreements. In 2022 some of the bilateral financing agreements were annexed in order to introduce SOFR or CME Term SOFR rates. Negotiations are underway with other financial institutions aimed at replacing LIBOR rates with an alternative benchmark.

in PLN millions, unless otherwise stated

On 7 July 2022, an Act on crowdfunding for business and support for borrowers, which is a basis to change the WIBOR and WIBID rates applicable to instruments in PLN, was adopted. As a result of legislative changes in September 2022, the Steering Committee of the National Work Group for reform of the reference rates selected WIRON as the target Risk-Free Rate (RFR) for the Polish financial market. Details on the replacement of current rates by an alternative one will be published in 2023, and the publication of old WIBOR and WIBID rates will end in 2025.

Until 2025, the IBOR reform will not have an impact on the interest rate applied in the Group's derivatives, because the CIRS transactions entered into (open cross currency interest rate swaps) and bonds issued by the Group are based on the WIBOR reference rate. In the case of this benchmark, until 2025 we are in the transitional period, during which adjustments to transactions entered into before the reform will not be required. After 2025, the IBOR reform may have an impact on cash flow hedging of variable interest of issued bonds (Tranche B) in the amount of PLN 1.6 billion, based on WIBOR 6M, that is CIRS transactions (cross currency swap) with maturity falling in 2029. The Group applied temporary exemptions from application of specific requirements of hedge accounting under IFRS 9 due to the IBOR reform and adopted an assumption that it may continue the hedge relationships. The notional amounts of hedging instruments to which these exemptions apply are disclosed in the following table.

As at 31 December 2022, the Group estimated that the impact of IBOR reform on the financial statements of the Group will be immaterial.

As at 31 December 2022, the Group held financial instruments based on variable interest rates, which were not yet replaced by alternative rates.

Type of financial instrument		Carrying amount as at 31 December 2022
Bank loans	USD LIBOR 1M WIBOR 1	(528) (63)
Debt securities	WIBOR 6M	(2 002)
Reverse factoring	WIBOR 6M	(18)
Derivatives (CIRS for 2029, PLN 1 600 million)	WIBOR 6M	(198)
Total		**(2 809)**

in PLN millions, unless otherwise stated

Note 7.5.1.5 Impact of hedge accounting on the financial statements

The following table contains information on changes in the fair value of instruments, as well as corresponding changes in the fair value of hedged positions during the reporting period, being the basis for recognising the effective and ineffective portions of changes in the fair value of hedging instruments in the years 2021-2022 (excluding the tax effect).

In hedging relations, only the intrinsic value of the option is designated as a hedging instrument. The time value approximates zero in the horizon of a hedging relation. The hedge's inefficiency recognised in the statements of profit or loss in the reporting periods 2021-2022 was immaterial.

	As at 31 December 2022		from 1 January 2022 to 31 December 2022	from 1 January 2022 to 31 December 2022	As at 31 December 2021		from 1 January 2021 to 31 December 2021	from 1 January 2021 to 31 December 2021
	Balance of other comprehensive income due to cash flow hedging for relations				Balance of other comprehensive income due to cash flow hedging for relations			
relation type *risk type* *instrument type – hedged item*	remaining in hedge accounting	for which hedge accounting was ceased	Change in the value of hedged item	Change in the value of hedging instrument	remaining in hedge accounting	for which hedge accounting was ceased	Change in the value of hedged item	Change in the value of hedging instrument
Cash flow hedging								
Commodity risk (copper)								
Options – Sales revenue	(21)	(11)	(327)	255	(1 357)	-	979	(981)
intrinsic value	152	-	-	325	(1 027)	-	-	(976)
time value	(173)	(11)	-	(70)	(330)	-	-	(5)
Commodity risk (silver)								
Options – Sales revenue	19	-	16	(21)	92	15	(172)	14
intrinsic value	30	-	-	(16)	163	12	-	172
time value	(11)	-	-	(5)	(71)	3	-	(158)
Currency risk (USD)								
Options – Sales revenue	402	-	(183)	403	(1)	-	115	(192)
intrinsic value	193	-	-	182	23	-	-	(114)
time value	209	-	-	221	(24)	-	-	(78)
Loans – Sales revenue	-	(64)	-	-	-	(80)	-	-
intrinsic value	-	(64)	-	-	-	(80)	-	-
Currency-interest rate risk								
Options – Sales revenue	(569)	-	154	(137)	(431)	-	406	(371)
intrinsic value	(569)	-	-	(137)	(431)	-	-	(371)
Options – Finance income/costs	315	-	(181)	152	162	-	(332)	300
intrinsic value	315	-	-	152	162	-	-	300
Total, including:	**146**	**(75)**	**(521)**	**652**	**(1 535)**	**(65)**	**996**	**(1 230)**
Total intrinsic value	121	-	-	506	(1 110)	(68)	-	(989)
Total time value	25	(75)	-	146	(425)	3	-	(241)

in PLN millions, unless otherwise stated

The table below presents information on the impact of hedge accounting on profit or loss and other comprehensive income (excluding the tax effect).

relation type / *risk type* / *instrument type*	from 1 January 2022 to 31 December 2022		from 1 January 2021 to 31 December 2021	
	Profits or (losses) due to hedging recognised in other comprehensive income	Amount reclassified from other comprehensive income to the statement of profit or loss as a reclassification adjustment, due to realisation of a hedged item in the period	Profits or (losses) due to hedging recognised in other comprehensive income	Amount reclassified from other comprehensive income to the statement of profit or loss as a reclassification adjustment, due to realisation of a hedged item in the period
Cash flow hedging				
Commodity risk (copper)				
Options*	800	(525)	(2 047)	(1 903)
Commodity risk (silver)				
Options*	26	114	(11)	(30)
Currency risk (USD)				
Options*	357	(46)	(260)	(72)
Loans**	-	(16)	-	(16)
Currency-interest rate risk				
CIRS***	56	41	(113)	(43)
Total	**1 239**	**(432)**	**(2 431)**	**(2 064)**

Item of the statement of profit or loss which includes a reclassification adjustment:

* *revenues from contracts with customers, other operating income and (costs),*

** *revenues from contracts with customers,*

*** *revenues from contracts with customers, other finance income and (costs).*

The following table contains information on changes in other comprehensive income (excluding the tax effect) in the period in connection with the application of hedge accounting in 2021 and 2022.

	2022			2021		
Other comprehensive income due to cash flow hedging	**Effective value ***	**Cost of hedging ****	**Total**	**Effective value ***	**Cost of hedging ****	**Total**
Other comprehensive income – transactions hedging against commodity and currency risk – as at 1 January	**(1 178)**	**(422)**	**(1 600)**	**(735)**	**(498)**	**(1 233)**
Impact of measurement of hedging transactions (effective part)	1 124	115	1 239	(2 128)	(303)	(2 431)
Reclassification to profit or loss due to realisation of hedged item	122	310	432	1 685	379	2 064
Other comprehensive income – transactions hedging against commodity and currency risk – as at 31 December	**68**	**3**	**71**	**(1 178)**	**(422)**	**(1 600)**

* *Effective portions of changes in the fair value of hedging instruments due to hedged risk - intrinsic value of option.*

** *Time value of option + CCBS (Cross Currency Basis Swap).*

in PLN millions, unless otherwise stated

Note 7.5.2 Credit risk

Credit risk is defined as the risk that the Group's counterparties will not be able to meet their contractual liabilities and involves three main areas:

- the creditworthiness of the customers with whom physical sales transactions are undertaken,
- the creditworthiness of the financial institutions (banks/brokers) with whom, or through whom, hedging transactions are undertaken, as well as those in which free cash and cash equivalents are deposited, and
- the financial standing of subsidiaries - borrowers.

In particular, the sources of exposure to credit risk are:

- cash and cash equivalents and deposits,
- derivatives,
- trade receivables,
- loans granted (Note 6.2),
- guarantees granted (Note 8.6), and
- other financial assets.

Accounting policies
The Group recognises impairment loss on expected credit losses on financial assets measured at amortised cost. Expected credit losses are credit losses weighed by the default probability. The Group applies the following models for designating impairment losses: - the simplified model – for trade receivables, - the general (basic) model – for other financial assets. Under the general model the Group monitors changes in the level of credit risk related to a given financial asset and classifies financial assets to one of three stages of determining impairment losses – based on observations of changes in the level of credit risk compared to an instrument's initial recognition. In particular, the following are monitored: the credit rating and the financial condition of the customer and the payment delay period. Depending on which degree it is classified to, an impairment loss is estimated for a 12-month period (degree 1) or in the horizon of lifetime (degree 2 and degree 3). The absolute indicator of default is an overdue period of more than 90 days. Under the simplified model the Group does not monitor changes in the level of credit risk during an instrument's life and estimates the expected credit loss over the time horizon of maturity of the instrument based on historical data respecting the repayments of receivables.

Note 7.5.2.1 Credit risk related to cash, cash equivalents and bank deposits

The Group allocates periodically free cash in accordance with the requirements to maintain financial liquidity and limit risk and in order to protect capital and maximise interest income.

As at 31 December 2022, the total amount of free and restricted cash and cash equivalents of PLN 1 195 million was held in bank accounts and in short-term deposits (in total as at 31 December 2021: PLN 1 904 million).

All entities with which deposit transactions are entered into by the Group operate in the financial sector. Analysis of exposure to this type of risk indicated that these are solely banks with the highest, medium-high and medium ratings, and which have an appropriate level of equity and a strong, stable market position. The credit risk in this regard is monitored through the on-going review of the financial standing and by maintaining an appropriately low concentration levels in individual financial institutions.

The following table presents the level of concentration of cash and deposits, with the assessed creditworthiness of the financial institutions*.

Rating level		As at 31 December 2022	As at 31 December 2021
Highest	from AAA to AA- according to S&P and Fitch, and from Aaa to Aa3 according to Moody's	10%	22%
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	73%	53%
Medium	from BBB+ to BBB- according to S&P and Fitch, and from Baa1 to Baa3 according to Moody's	17%	25%

**Weighed by amount of cash deposited in current accounts and deposits.*

in PLN millions, unless otherwise stated

The risk level of a financial institution arising from depositing cash on bank accounts or deposits in the said institution, and taking into consideration the risk of these instruments, is almost the same, and therefore they are presented jointly.

As at 31 December 2022 the maximum single entity share of the amount exposed to credit risk arising from cash and bank deposits amounted to 30%, or PLN 354 million (as at 31 December 2021: 41%, or PLN 778 million).

	As at 31 December 2022	As at 31 December 2021
Counterparty 1	354	778
Counterparty 2	335	322
Counterparty 3	105	259
Counterparty 4	76	156
Counterparty 5	73	121
Other	252	268
Total	**1 195**	**1 904**

Impairment losses on cash and cash equivalents were determined individually for each balance of a given financial institution. External bank ratings were used to measure credit risk. The analysis determined that these assets have a low credit risk at the reporting date. The Group used a simplification permitted by the standard and the impairment loss was determined on the basis of 12-month credit losses. The calculation of impairment determined that the amount of impairment loss is insignificant. These assets are classified to Degree 1 of the impairment model.

Nota 7.5.2.2 Credit risk related to derivative transactions

All entities with which derivative transactions (excluding embedded derivatives) are entered into by the Group operate in the financial sector.

The Group's credit exposure related to derivatives by main counterparties is presented in the table below[3].

	As at 31 December 2022				As at 31 December 2021			
	Financial receivables	Financial liabilities	Fair value	Exposure to credit risk	Financial receivables	Financial liabilities	Fair value	Exposure to credit risk
Counterparty 1	260	(250)	10	**260**	227	(195)	32	227
Counterparty 2	226	(172)	54	**226**	162	(112)	50	162
Counterparty 3	154	(33)	121	**154**	113	(437)	(324)	113
Counterparty 4	120	(53)	67	**120**	78	(57)	21	78
Other	787	(636)	151	**787**	279	(1 360)	(1 081)	279
Total	**1 547**	**(1 144)**	**403**	**1 547**	**859**	**(2 161)**	**(1 302)**	**859**
Open derivatives*	1 510	(1 110)	400		849	(2 002)	(1 153)	
Settled derivatives, net	37	(34)	3		10	(159)	(149)	

**excluding embedded derivatives*

Taking into consideration the receivables due to open derivatives transactions entered into by the Group (excluding embedded derivatives) as at 31 December 2022 and net receivables[4] due to settled derivatives, the maximum single entity share of the amount exposed to credit risk arising from these transactions amounted to 17%, or PLN 260 million (as at 31 December 2021: 26%, or PLN 227 million).

In order to reduce cash flows and at the same time to limit credit risk, the Parent Entity carries out net settlements (based on standard framework agreements entered into with its customers, regulating the trade of financial instruments, meaning ISDA or based on a formula of the Polish Bank Association). Moreover, the resulting credit risk is continuously monitored by reviewing the credit ratings and is limited by striving to diversify the portfolio while implementing hedging strategies.

[3] *Does not concern embedded derivatives.*
[4] *The Parent Entity offsets receivables and liabilities due to settled derivatives, for which the future flows are known at the end of the reporting period, pursuant to the principles of net settlements of cash flows adopted in framework agreements with individual customers.*

in PLN millions, unless otherwise stated

Despite the concentration of credit risk associated with derivatives' transactions, the Parent Entity has determined that, due to its cooperation solely with renowned financial institutions, as well as continuous monitoring of their ratings, it is not materially exposed to credit risk as a result of transactions concluded with them.

The following table presents the structure of ratings of the financial institutions with whom the Group had derivatives transactions, representing exposure to credit risk.

Rating level		As at 31 December 2022	As at 31 December 2021
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	84%	98%
Medium	from BBB+ to BBB- according to S&P and Fitch, and from Baa1 to Baa3 according to Moody's	16%	2%

Note 7.5.2.3 Credit risk related to trade receivables

The following Group companies had significant trade receivables as at 31 December 2022: KGHM Polska Miedź S.A. PLN 517 million, the KGHM INTERNATIONAL LTD Group PLN 364 million, CENTROZŁOM WROCŁAW S.A. PLN 67 million, WPEC w Legnicy S.A. PLN 49 million, NITROERG S.A. PLN 39 million, Metraco S.A. PLN 28 million, „MCZ" S.A. PLN 24 million, WMN "Łabędy" S.A. PLN 19 million, Energetyka Sp. z o.o. PLN 11 million (as at 31 December 2021: KGHM Polska Miedź S.A. PLN 537 million, the KGHM INTERNATIONAL LTD. Group PLN 219 million, CENTROZŁOM WROCŁAW S.A. PLN 88 million, WPEC w Legnicy S.A. PLN 39 million, NITROERG S.A. PLN 37 million, „MCZ" S.A. PLN 22 million, Metraco S.A. PLN 14 million, and WMN "Łabędy" PLN 12 million).

The total net amount of trade receivables of the Group as at 31 December 2022, excluding the fair value of accepted collateral, up to the amount of which the Group may be exposed to credit risk, amounts to PLN 1 178 million (as at 31 December 2021: PLN 1 026 million).

The Parent Entity limits its exposure to credit risk related to trade receivables by evaluating and monitoring the financial condition of its customers, setting credit limits, requiring collateral, and non-recourse factoring. The terms of factoring agreements entered into meet the criteria of removing receivables from the books at the moment of their purchase by the factor. As at 31 December 2022, the amount of receivables transferred to factoring, for which payment from factors was not received, amounted to PLN 4 million (as at 31 December 2021: PLN 17 million). Information on the amount of revenues from sales subjected to factoring in the financial period is presented in Note 2.4.

An inseparable element of the credit risk management process performed by the Parent Entity is the continuous monitoring of receivables and the internal reporting system.

Buyer's credit is only provided to proven customers. In the case of new customers, an effort is made to ensure that sales are based on prepayments or trade financing instruments which transfer the credit risk to financial institutions.

The Parent Entity makes use of the following forms of collateral:

- registered pledges, bank guarantees, promissory notes, notarial enforcement declarations, corporate guarantees, cessation of receivables, mortgages and documentary collection;
- ownership rights to goods to be transferred to the buyer only after payment is received;
- a receivables insurance contract, which covers receivables from entities with buyer's credit which have not provided strong collateral or have provided collateral which does not cover the total amount of the receivables.

Taking into account the above forms of collateral and the credit limits received from the insurance company, as at 31 December 2022 the Parent Entity had secured 76% of its trade receivables (as at 31 December 2021, 84%).

Although KGHM INTERNATIONAL LTD. does not use collateral, credit risk connected with trade receivables is subject to monitoring, and the majority of sales are to proven, long-term customers conducting international activities.

Assessment of concentration of credit risk in the Group:

Sector concentration	While KGHM Polska Miedź S.A. and KGHM INTERNATIONAL LTD. operate in the same sector, these two companies are different both in terms of their portfolios of products as well as in terms of the geographic location and nature of their customers, and consequently this sector concentration of credit risk is considered to be acceptable. Other companies of the Group operate in various economic sectors, such as transport, construction, commerce, industrial production and energy. As a consequence, in the case of most Group companies, in terms of sectors, there is no concentration of credit risk.
Customers concentration	As at 31 December 2022 the balance of receivables from the 7 largest customers represented 58% of trade receivables (2021: 49%). Despite the concentration of this type of risk, it is believed that due to the availability of historical data and the many years of experience cooperating with its customers, as well as to the securing used, the level of credit risk is low.

in PLN millions, unless otherwise stated

Geographical concentration

Companies of the Group have been cooperating for many years with a large number of customers, which affects the geographical diversification of trade receivables. Geographical concentration of credit risk for trade receivables is presented in the table below.

Trade receivables (net)	As at 31 December 2022	As at 31 December 2021
Poland	40%	59%
Canada	19%	8%
European Union (excluding Poland)	10%	10%
Asia	26%	17%
Other countries	5%	6%

Accounting policies

The Group applies the simplified model of calculating the allowance for impairment of trade receivables (regardless of their maturity). The expected credit loss on trade receivables is calculated at the closest ending date of the reporting period after the moment of recognition of a receivable in the statement of financial position and is updated at every subsequent reporting period ending date. In order to estimate the expected credit loss on trade receivables, the Group's entities apply provision matrices, made on the basis of historical levels of payment of trade receivables, which are periodically recalibrated in order to update them.
Loss allowance for expected credit losses is measured at the amount equal to expected credit losses during the whole life of the receivables. The Group adopted an assumption that the receivable risk is characterised by the number of days of delay and this parameter determines the estimated PD, i.e. the probability of a delay in payment of trade receivables by at least 90 days. For the purpose of estimating PD, 5 risk groups have been selected based on the criteria of number of days in payment, according to ranges presented below as "Important estimates and assumptions".

Default is defined as being a failure by a customer to meet its liabilities after a period of 90 days from the due date. In order to estimate the loss allowance for expected credit losses, collateral is also taken into account by allocating expected recovery rates to the particular types of collateral.
Moreover, forward-looking information is taken into account in the applied parameters of the model for estimating expected losses, by adjusting the base coefficients of default probability. This means that if as a result of analysis of macroeconomic data, such as for example: current GDP dynamics, inflation, unemployment rate, or WIG index, the Group recognises any deterioration in them in comparison to the previous period, in the ECL calculation the *looking forward* factor, which corrects risk connected with any decrease in receivables recovery, is taken into account. Despite the growing inflation, alongside the favourable performance of among others the GDP, unemployment rate, and also forecasts of these indicators, the Parent Entity did not note any deterioration of macroeconomic factors as at the end of the reporting period on 31 December 2022.

Important estimates and assumptions

	31 December 2022			31 December 2021		
Time frame	Percent of allowance for impairment*	Gross amount of receivables	Allowance for impairment in individual time frames**	Percent of allowance for impairment*	Gross amount of receivables	Allowance for impairment in individual time frames**
Not overdue	0.1-2.7	401	(2)	0.2-5.1	373	(3)
<1,30)	0.2-8.1	23	(1)	0.4-7.8	23	(1)
<30,60)	5.5-41.4	5	(1)	3.1-34.2	2	-
<60,90)	34.1-72.3	1	-	42.9-75.5	-	-
Default	100	36	(35)	100	37	(32)
Total		**466**	**(39)**		**435**	**(36)**

**Probability of default is represented in thresholds, calculated individually by Group companies on the basis of real historical data as respects the number of days of delay, pursuant to the model for calculating expected credit losses adopted by the Group for trade receivables.*
***The amount of allowance for impairment includes the recovery due to collateral.*

The following table presents the change in trade receivables measured at amortised cost.

in PLN millions, unless otherwise stated

		2022	2021
	Gross amount as at 1 January	**435**	**444**
	Change in the balance of receivables	31	5
	Utilisation of a loss allowance in the period	-	(14)
Note 10.2	**Gross amount as at 31 December**	**466**	**435**

The following table presents the change in the estimation of expected credit losses on trade receivables measured at amortised cost.

		2022	2021
	Loss allowance for expected credit losses as at 1 January	**36**	**53**
	Change in allowance in the period recognised in profit or loss	3	(3)
	Utilisation of a loss allowance in the period	-	(14)
Note 10.2	**Loss allowance for expected credit losses as at 31 December**	**39**	**36**

As at 31 December 2022, disputed receivables amounted to PLN 36 million (as at 31 December 2021, PLN 35 million). The Group is taking actions aimed at recovering these receivables or explaining the validity of pursuing claims.

Note 7.5.2.4 Credit risk related to loans granted to the joint venture Sierra Gorda S.C.M. (POCI)

Credit risk related to loans granted depends on risk related to the realisation of the joint mining venture in Chile (Sierra Gorda S.C.M.). These loans, as a result of the impairment recognised at the moment of initial recognition due to credit risk, were classified as POCI, and are measured at the end of the subsequent reporting periods at amortised cost using the effective interest rate method and the effective discount rate adjusted by credit risk.
The basis for accruing interest on POCI loans is their gross value less any allowance for impairment at the moment of initial recognition.

The loan granted does not have collateral limiting the exposure to credit risk, therefore the maximum amount exposed to potential loss due to credit risk is the gross amount of the loan, less expected credit losses recognised pursuant to IFRS 9.

Changes in the value of POCI loans in the reporting and comparable periods are presented in Note 6.2.

Neither in the reporting period nor in the comparable period was there any expected impairment of POCI loans.

Sensitivity analysis of the fair value of loans due to the change in forecasted cash flows of Sierra Gorda S.C.M.

As at 31 December 2022, the Group classified the measurement to fair value of loans granted to level 3 of the fair value hierarchy because of the utilisation in the measurement of a significant unmeasurable parameter, being the forecasted cash flows of Sierra Gorda S.C.M. These cash flows are the most sensitive to changes in copper prices, which implies other assumptions such as forecasted production and operating margin. Therefore, the Group performed a sensitivity analysis of the fair value of loans to changes in copper prices.

Because of the significant sensitivity of the forecasted cash flows of Sierra Gorda S.C.M. to changes in copper price, pursuant to IFRS 13 p.93.f the Group performed a sensitivity analysis of the fair value (level 3) of loans to changes in copper prices.

	Copper prices [USD/t]					
Scenarios – 31 December 2022	**2023**	**2024**	**2025**	**2026**	**2027**	**LT**
Base	8 200	8 500	8 500	8 500	8 500	7 700
Base minus 0.1 USD/lb during mine life (220 USD/tonne)	7 980	8 280	8 280	8 280	8 280	7 480
Base plus 0.1 USD/lb during mine life (220 USD/tonne)	8 420	8 720	8 720	8 720	8 720	7 920

Scenarios – 31 December 2021	Copper prices [USD/t] 2022	2023	2024	2025	2026	LT
Base	8 500	8 000	7 500	7 500	7 500	7 000
Base minus 0.1 USD/lb during mine life (220 USD/tonne)	8 280	7 780	7 280	7 280	7 280	6 780
Base plus 0.1 USD/lb during mine life (220 USD/tonne)	8 720	8 220	7 720	7 720	7 720	7 220

Classes of financial instruments	Fair value	Sensitivity analysis of the fair value to changes in copper price	
		Base plus 0.1 USD/lb during mine life	Base minus 0.1 USD/lb during mine life
Loans granted measured at amortised cost	**7 787**	8 064	7 465
Loans granted measured at amortised cost (USD million)	**1 769**	1 832	1 696

Classes of financial instruments	Carrying amount	Sensitivity analysis of the carrying amount to changes in copper price	
		Base plus 0.1 USD/lb during mine life	Base minus 0.1 USD/lb during mine life
Loans granted measured at amortised cost	**9 603**	9 766	9 380
Loans granted measured at amortised cost (USD million)	**2 182**	2 219	2 131

The maximum potential carrying amount as at 31 December 2022, assuming that contractual obligations are met, amounts to USD 2 576 million (PLN 11 339 million).

On 22 February 2022 the sale of the 45% share in the company Sierra Gorda S.C.M. by Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation to South32 Limited, the Australian mining group with its registered head office in Perth was concluded. The transaction was completed on the basis of sales agreements concluded on 14 October 2021.

Taking into account the above transaction, and the lack of knowledge about the details of the negotiation process, conditions of the transaction, and the valuation assumptions made by the parties to the transaction, and the fact that the shares of Sierra Gorda S.C.M. are not listed, it is not justifiable to assess the value of loans by directly referring to the transaction price from the sale of the 45% interest in Sierra Gorda S.C.M. (i.e. participation in equity and loan receivables).

Nevertheless, the Group made a comparison of the carrying amount of the involvement in the joint venture Sierra Gorda S.C.M. (i.e. receivable due to a loan and investments in equity instruments) to the transaction price in order to verify that the total carrying amount of the involvement does not differ substantially from the value that would result from the transaction price, taking into account: (i) limitations as to the Group's ability to obtain full knowledge of the process of reaching the transaction price, and (ii) differences in the applied discount rates for future expected cash flows obtainable from the JV (i.e. the effective interest rate for loan measurement according to IFRS 9, versus the rate of return expected by the investor in the valuation of the transaction price).

In the opinion of the Management Board, the value of loans estimated by the Group does not differ significantly from the value that would be determined by reference to the transaction price.

Note 7.5.2.5 Credit risk related to other financial assets

As at 31 December 2022, the most significant item in other financial assets was cash accumulated on the bank accounts of the Mine Closure Fund in the amount of PLN 407 million (as at 31 December 2021: PLN 429 million).
All special purpose deposits of the Group, which are dedicated to collection of cash for future decommissioning costs of mines and other technological facilities and restoration of tailing storage facilities, are carried out by banks with the highest or medium-high ratings confirming the security of the deposited cash.

The following tables present the level of cash concentration within special purpose funds dedicated to the collection of cash by the Group for future decommissioning costs of mines and other technological facilities, according to the credit ratings of financial institutions in which cash is held on special purpose accounts.

in PLN millions, unless otherwise stated

Rating level		As at 31 December 2022	As at 31 December 2021
Highest	AAA to AA- according to S&P and Fitch, and from Aaa to Aa3 according to Moody's	12%	10%
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	88%	90%

	As at 31 December 2022	As at 31 December 2021
Counterparty 1	358	331
Counterparty 2	49	53
Counterparty 3	-	45
Total	**407**	**429**

Impairment losses on cash accumulated on the bank accounts of special purpose funds: the Mine Closure Fund, were determined individually for each balance of a given financial institution. External bank ratings were used to measure credit risk. The analysis determined that these assets have a low credit risk at the reporting date. The Group used a simplification permitted by the standard and the impairment loss was determined on the basis of 12-month credit losses. The calculation of impairment determined that the amount of impairment loss is insignificant. These assets are classified to Degree 1 of the impairment model.
Moreover, as of 15 July 2022, the Company changed the form of the Tailings Storage Facility Restoration Fund from a bank account to a bank guarantee.

in PLN millions, unless otherwise stated

Part 8 – Borrowings and the management of liquidity and capital

Note 8.1 Capital management policy

In accordance with market practice, the Group monitors the level of financial security, among others on the basis of the Net Debt/Adjusted EBITDA ratio presented in the table below:

Ratios	Calculations	31 December 2022	31 December 2021
Net Debt/Adjusted EBITDA	relation of net debt to adjusted EBITDA	**0.8**	**0.6**
Net Debt*	borrowings, debt securities and lease liabilities less free cash and its equivalents	5 264	4 069
Adjusted EBITDA**	profit on sales plus depreciation/amortisation recognised in profit or loss and impairment losses on non-current assets	6 675	7 160

**Net debt does not include reverse factoring liabilities.*
*** Adjusted EBITDA for the period of 12 months ended on the last day of the reporting period excluding EBITDA of the joint venture Sierra Gorda S.C.M.*

In the management of liquidity and capital, the Group also pays attention to adjusted operating profit, which is the basis for calculating the financial covenant and which is comprised of the following items:

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Profit on sales	4 344	4 710
Interest income on loans granted to a joint venture	582	494
Other operating income and (costs)	962	711
Adjusted operating profit*	**5 888**	**5 915**

** Presented amount does not include the profit due to reversal of allowances for impairment of loans granted to a joint venture.*

As at the end of the reporting period, in the financial period and after the end of the reporting period, up to the date of publication of these Consolidated financial statements, the value of the financial covenant subject to the obligation to report as at 30 June 2022 and 31 December 2022, met the conditions stipulated in the credit agreements.

in PLN millions, unless otherwise stated

Note 8.2 Equity

Accounting policies
Share capital is recognised at nominal value. **Other reserves from the measurement of financial instruments** arise from the measurement of cash flow hedging instruments (Note 7.2, Accounting policies) and the measurement of financial assets at fair value through other comprehensive income (Note 7.3, Accounting policies) less any deferred tax effect. **Accumulated other comprehensive income** consists of exchange differences from the translation of statements of operations with a functional currency other than PLN (Note 1.2, Accounting policies) and actuarial gains/losses on post-employment benefits programs less any deferred tax effect (Part 11, Accounting policies). **Retained earnings** are the sum of profit for the current financial year and accumulated profits from previous years, which have not been paid out as dividends, but were transferred to the reserve capital or were not distributed.

Note 8.2.1 Share capital

As at 31 December 2022 and at the date of signing of these financial statements, the Parent Entity's share capital, in accordance with the entry in the National Court Register, amounted to PLN 2 000 million and was divided into 200 000 000 shares, series A, fully paid, each having a face value of PLN 10. All of the shares are bearer shares. The Parent Entity has not issued preference shares. Each share grants the right to one vote at the general meeting. The Parent Entity does not have treasury shares. Subsidiaries and joint ventures do not have shares of KGHM Polska Miedź S.A.

In the years ended 31 December 2022 and 31 December 2021, there were no changes in either registered share capital or in the number of issued shares. Additionally, in 2022 and 2021, there were no changes in the ownership of significant blocks of shares of KGHM Polska Miedź S.A.

The Parent Entity's shareholder structure as at 31 December 2022, established on the basis of notifications received by the Parent Entity pursuant to art. 69 of the Act on public offerings and conditions governing the introduction of financial instruments to organised trading, and on public companies, is shown in the following table:

shareholder	number of shares/votes	total nominal value of shares (PLN)	percentage held in share capital/total number of votes
State Treasury	63 589 900	635 899 000	31.79%
Nationale-Nederlanden Otwarty Fundusz Emerytalny	10 104 354	101 043 540	5.05%
Aviva Otwarty Fundusz Emerytalny Aviva Santander	10 039 684	100 396 840	5.02%
Other shareholders	116 266 062	1 162 660 620	58.14%
Total	**200 000 000**	**2 000 000 000**	**100.00%**

On 5 January 2023 the Company was informed of the merger of the companies: Powszechne Towarzystwo Emerytalne Allianz Polska Spółka Akcyjna (PTE Allianz Polska S.A.) and Aviva Powszechne Towarzystwo Emerytalne Aviva Santander Spółka Akcyjna. As a result of the merger, the total number of shares of KGHM Polska Miedź S.A. recorded on the accounts of the funds managed by PTE Allianz Polska S.A.: Allianz Otwarty Fundusz Emerytalny, Allianz Polska Dobrowolny Fundusz Emerytalny and Drugi Allianz Polska Otwarty Fundusz Emerytalny amounted to 12 241 453, representing 6.12% of the Company's share capital.

The Parent Entity's shareholder structure as at the date of signing of these financial statements is presented in the following table:

shareholder	number of shares/votes	total nominal value of shares (PLN)	percentage held in share capital/total number of votes
State Treasury	63 589 900	635 899 000	31.79%
Powszechne Towarzystwo Emerytalne Allianz Polska Spółka Akcyjna*	12 241 453	122 414 530	6.12%
Nationale-Nederlanden Otwarty Fundusz Emerytalny	10 104 354	101 043 540	5.05%
Other shareholders	114 064 293	1 140 642 930	57.04%
Total	**200 000 000**	**2 000 000 000**	**100.00%**

**Total number of shares recorded on the accounts of funds managed by Powszechne Towarzystwo Emerytalne Allianz Polska Spółka Akcyjna: Allianz Otwarty Fundusz Emerytalny, Allianz Polska Dobrowolny Fundusz Emerytalny and Drugi Allianz Polska Otwarty Fundusz Emerytalny*

in PLN millions, unless otherwise stated

Note 8.2.2 Changes of other equity items

		Other reserves from measurement of financial instruments					
		Investments in equity instruments measured at fair value through other comprehensive income	Other reserves from measurement of future cash flow hedging financial instruments	Other reserves from measurement of financial instruments, total	Actuarial gains /(losses) on post-employment benefits programs	Exchange differences from the translation of statements of operations with a functional currency other than PLN	Retained earnings
	As at 1 January 2021	**(432)**	**(998)**	**(1 430)**	**(962)**	**2 690**	**18 694**
	Transactions with owners - Dividend	-	-	-	-	-	(300)
	Profit for the period	-	-	-	-	-	6 156
	Fair value gains on financial assets measured at fair value through other comprehensive income	22*	-	22	-	-	-
Note 7.2	Impact of effective cash flow hedging transactions entered into	-	(2 431)	(2 431)	-	-	-
Note 7.2	Amount transferred to profit or loss due to settlement of hedging instruments	-	2 064	2 064	-	-	-
Note 11.2	Actuarial gains on post-employment benefits	-	-	-	694	-	-
Note 1.2	Exchange differences from the translation of statements of operations with a functional currency other than PLN	-	-	-	-	(71)	-
Note 5.1.1	Deferred income tax	-	70	70	(132)	-	-
	Other comprehensive income	22	(297)	(275)	562	(71)	-
	Total comprehensive income	22	(297)	(275)	562	(71)	6 156
	Reclassification of the result on the disposal of equity instruments measured at fair value through other comprehensive income	-	-	-	-	-	(18)
	As at 31 December 2021	**(410)**	**(1 295)**	**(1 705)**	**(400)**	**2 619**	**24 532**
	Transactions with owners - Dividend	-	-	-	-	-	(600)
	Profit for the period	-	-	-	-	-	4 772
	Fair value losses on financial assets measured at fair value through other comprehensive income	(95)	-	(95)	-	-	-
Note 7.2	Impact of effective cash flow hedging transactions entered into	-	1 239	1 239	-	-	-
Note 7.2	Amount transferred to profit or loss due to settlement of hedging instruments	-	432	432	-	-	-
Note 11.2	Actuarial losses on post-employment benefits	-	-	-	(422)	-	-
Note 1.2	Exchange differences from the translation of statements of operations with a functional currency other than PLN	-	-	-	-	(65)	-
Note 5.1.1	Deferred income tax	19	(317)	(298)	80	-	-
	Other comprehensive income	(76)	1 354	1 278	(342)	(65)	-
	Total comprehensive income	(76)	1 354	1 278	(342)	(65)	4 772
	As at 31 December 2022	**(486)**	**59**	**(427)**	**(742)**	**2 554**	**28 704**

**PLN 18 million due to reclassification resulting from the disposal of equity instruments measured at fair value through other comprehensive income was recognised in other comprehensive income.*

Based on the Act of 15 September 2000, i.e. the Commercial Partnerships and Companies Code, the Parent Entity is required to create reserve capital for any potential (future) or existing losses, to which no less than 8% of a given financial year's profit is transferred until the reserve capital has been built up to no less than one-third of the registered share capital. The reserve capital created in this manner may not be employed otherwise than in covering the loss reported in the financial statements. As at 31 December 2022 the statutory reserve capital in the Group's entities amounted to PLN 806 million, of which PLN 667 million relates to the Parent Entity, and is recognised in retained earnings.

Information related to dividends paid may be found in Note 12.2.

Note 8.3 Liquidity management policy

The Management Board of the Parent Entity is responsible for financial liquidity management in the Group and compliance with adopted policy. The Financial Liquidity Committee is a body supporting the Management Board in this regard.
The management of financial liquidity in the Group is performed in accordance with the Financial Liquidity Management Policy in the KGHM Group. This document describes processes of managing financial liquidity in the Group, which are realised by Group companies, while their organisation, coordination and supervision is performed by the Parent Entity by using appropriate procedures and instruments. The basic principles resulting from this document are:

- assuring the stable and effective financing of the Group's activities,
- continuous monitoring of the Group's debt level,
- effective management of working capital, and
- coordination, by the Parent Entity, of processes of financial liquidity management in the Group companies.

Under the liquidity management process, the Group utilises instruments which enhance its effectiveness. One of the instruments used by the Group to deal with on-going operating activities is cash pooling – locally in PLN, USD and EUR, and internationally - in USD and CAD. The cash pooling service is aimed at optimising the management of cash resources, limiting interest costs, the effective financing of current working capital needs and the support of short-term financial liquidity in the Group.

In 2022 the Group modified the cash pooling system in order to optimise the process of exchanging currencies by the domestic companies of the Group. The modified system ensures the daily (automatic) conversion into PLN of the positive and negative balances in EUR and USD on the accounts of the companies participating in the cash pool. In order to support current liquidity and to optimise these services, the Company entered into an overdraft facility agreement with the bank in which the cash pooling system operates in the amount of PLN 200 million with availability to 15 May 2023 and the possibility of utilisation in the following currencies: PLN, USD and EUR.

in PLN millions, unless otherwise stated

Note 8.3.1 Contractual maturities for financial liabilities

Financial liabilities – as at 31 December 2022

Contractual maturities from the end of the reporting period	Maturity period: up to 3 months	over 3 months to 12 months	over 1 to 3 years	over 3 years	Total (without discounting)	Carrying amount
Borrowings	803	390	946	1 778	**3 917**	**3 697**
Debt securities liabilities	-	174	699	2 093	**2 966**	**2 002**
Lease liabilities	27	63	165	1 303	**1 558**	**744**
Trade payables	3 013	11	26	344	**3 394**	**3 210**
Similar payables – reverse factoring	5	13	-	-	**18**	**18**
Derivatives – currency contracts*	-	2	1	-	**3**	**146**
Derivatives – commodity contracts – metals*	13	26	1	-	**40**	**395**
Derivatives – interest rates	-	-	28	348	**376**	**569**
Embedded derivatives	43	-	-	-	**43**	**43**
Other financial liabilities	120	38	51	7	**216**	**211**
Total	**4 024**	**717**	**1 917**	**5 873**	**12 531**	**11 035**

**Financial liabilities arising from derivatives are calculated at their intrinsic values excluding the discount effect.*

Overdue liabilities	Overdue period: up to 1 month	over 3 months to 12 months	over 1 year to 3 years	over 3 years	Total/Carrying amount
Trade payables	12	3	36	1	**52**

The above tables regarding maturities do not include financial guarantees in the amount of PLN 969 million, which are due if there is a breach in contractual terms by parties to which the guarantees were granted and toward which the Group cannot postpone payments, that is they must be paid on demand within 3 months. Details on financial guarantees and their maturity dates were described in Note 8.6.

Financial liabilities – as at 31 December 2021

Contractual maturities from the end of the reporting period	Maturity period: up to 3 months	over 3 months to 12 months	over 1 to 3 years	over 3 years	Total (without discounting)	Carrying amount
Borrowings	118	370	1 518	1 598	**3 604**	**3 303**
Debt securities liabilities	-	84	561	1 910	**2 555**	**2 001**
Lease liabilities	26	55	139	1 231	**1 451**	**645**
Trade payables	2 749	118	25	353	**3 245**	**3 106**
Similar payables – reverse factoring	26	69	-	-	**95**	**95**
Derivatives – currency contracts*	-	1	1	-	**2**	**57**
Derivatives – commodity contracts – metals*	144	611	313	-	**1 068**	**1 514**
Derivatives – interest rates	-	-	20	294	**314**	**431**
Embedded derivatives	21	-	-	-	**21**	**21**
Other financial liabilities	242	16	22	13	**293**	**292**
Total	**3 326**	**1 324**	**2 599**	**5 399**	**12 648**	**11 465**

**Financial liabilities arising from derivatives are calculated at their intrinsic values excluding the discount effect.*

in PLN millions, unless otherwise stated

Overdue liabilities

	Overdue period				
	up to 1 month	over 3 months to 12 months	over 1 year to 3 years	over 3 years	Total/Carrying amount
Borrowings	-	1	7	3	**11**
Trade payables	29	1	21	1	**52**

Note 8.4 Borrowings

Accounting policies
Liabilities arising from borrowings are initially recognised at fair value, less (in the case of payment) or plus (in the case of accrual) transaction costs which are an integral part of the financing drawn, and are measured at amortised cost at the reporting date using the effective interest rate method. Accrued interest is recognised in finance costs, unless it is capitalised through property, plant and equipment or intangible assets.

Note 8.4.1 Net debt

		As at 31 December 2022	As at 31 December 2021
	Bank loans	573	703
	Loans	1 987	2 198
	Debt securities	2 000	2 000
	Leases	660	574
Note 7.1	**Non-current liabilities due to borrowings**	**5 220**	**5 475**
	Bank loans	690	32
	Loans	447	370
	Debt securities	2	1
	Leases	84	71
Note 7.1	**Current liabilities due to borrowings**	**1 223**	**474**
	Total borrowings, of which:	**6 443**	**5 949**
	recognised in liabilities related to the disposal group	-	85
	recognised as "borrowings, lease and debt securities"	6 443	5 864
Note 8.5	Free cash and cash equivalents	1 179	1 880
	Net debt	**5 264**	**4 069**

Liabilities due to borrowings, debt securities and leases - breakdown by currency (translated into PLN) and by type of interest rate

	As at 31 December 2022	As at 31 December 2021
PLN/WIBOR	2 069	2 133
EUR/EURIBOR	16	20
EUR/fixed	32	63
USD/USD LIBOR	528	(16)
PLN/fixed	794	694
USD/fixed	2 961	3 004
CAD/fixed	41	49
Other	2	2
Total	**6 443**	**5 949**

As at 31 December 2022, the Group's liabilities due to borrowing, debt securities issued and leases, translated into PLN, amounted to PLN 6 443 million, or broken down by currencies: USD 793 million, PLN 2 863 million, EUR 10 million, CAD 13 million and in other currencies in the amount of PLN 2 million (as at 31 December 2021 liabilities, translated into PLN, amounted to PLN 5 949 million, or broken down by currencies: USD 736 million, PLN 2 827 million, EUR 18 million, CAD 15 million and in other currencies in the amount of PLN 2 million).

in PLN millions, unless otherwise stated

As at 31 December 2022, the balance of trade payables transferred to reverse factoring by the Group amounted to PLN 18 million (as at 31 December 2021: PLN 95 million).
Trade payables transferred to reverse factoring are presented in the statement of financial position as "Trade and similar payables" and are in the category of "similar", as due to the significant judgment of the Group presented in Note 10.4 of these consolidated financial statements; such a presentation most accurately presents the nature of these transactions.

The structure of debt confirms the effective advancing of the strategy of the Group, aimed at ensuring long term financial stability by basing the financial structure on diversified and long term financing sources.

Note 8.4.2 Net debt changes

Liabilities due to borrowing	As at 31 December 2021	Cash flows	Accrued interest	Exchange differences	Other changes	As at 31 December 2022
Bank loans	735	530	68	(25)	(45)*	1 263
Loans	2 568	(417)	79	206	(2)	2 434
Debt securities	2 001	(130)	131	-	-	2 002
Leases	645	(93)	33	-	159**	744
Total debt	**5 949**	**(110)**	**311**	**181**	**112**	**6 443**
Free cash and cash equivalents	1 880	(701)	-	-	-	1 179
Net debt	**4 069**	**591**	**311**	**181**	**112**	**5 264**

** Including PLN (60) million at the date of loss of control of subsidiaries.*
*** Including PLN 165 million due to modification and conclusion of new lease agreements.*

Liabilities due to borrowing	As at 31 December 2020	Cash flows	Accrued interest	Exchange differences	Other changes	As at 31 December 2021
Bank loans	1 994	(1 470)	62	150	(1)	735
Loans	2 685	(388)	79	190	2	2 568
Debt securities	2 000	(36)	37	-	-	2 001
Leases	656	(100)	31	-	58	645
Total debt	**7 335**	**(1 994)**	**209**	**340**	**59**	**5 949**
Free cash and cash equivalents	2 501	(621)	-	-	-	1 880
Net debt	**4 834**	**(1 373)**	**209**	**340**	**59**	**4 069**

Reconciliation of cash flows recognised in net debt change to the consolidated statement of cash flows

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
I. Financing activities	**104**	**(1 872)**
Proceeds from borrowings	677	358
Repayment of borrowings	(425)	(2 078)
Repayment of lease liabilities	(59)	(67)
Repayment of interest on borrowings and debt securities	(79)	(70)
Repayment of interest on leases	(10)	(15)
II. Investing activities	**(214)**	**(122)**
Paid capitalised interest on borrowings	(214)	(122)
III. Changes in free cash and cash equivalents	**(701)**	**(621)**
TOTAL (I+II+III)	**591**	**(1 373)**

Currency risk and interest rate risk are related to borrowings. A description of exposures to financial risks may be found in Note 7.5.

in PLN millions, unless otherwise stated

Note 8.4.3 Detailed information concerning the main sources of borrowings

As at 31 December 2022, the Group had open credit lines, loans and debt securities with a total balance of available financing in the amount of PLN 15 386 million, out of which PLN 5 699 million had been drawn (as at 31 December 2021 the Group had open credit lines and investment loans with a total balance of available financing in the amount of PLN 14 505 million, out of which PLN 5 304 million had been drawn).

The structure of financing sources is presented below.

Unsecured, revolving syndicated credit facility
A credit facility in the amount of USD 1 500 million (PLN 6 603 million), obtained on the basis of a financing agreement concluded by the Parent Entity with a syndicate of banks in 2019 with a maturity of 19 December 2024 and an option to extend it by a further 2 years (5+1+1). In the years 2020-2021 the Parent Entity received consent from Syndicate Members to extend the term of the agreement by 2 years in total, i.e. to 20 December 2026. The limit of available financing during the extension period will amount to USD 1 438 million (PLN 6 330 million). The funds acquired through this credit facility are used to finance general corporate purposes. Interest is based on LIBOR plus a bank margin, depending on the net debt/EBITDA ratio. The credit facility agreement obliges the Group to comply with the financial covenant and non-financial covenants. Financing parameters meet the standard conditions of these types of transactions. Pursuant to contractual terms and conditions, the Parent Entity is obliged to report the level of financial covenant for the reporting periods, i.e. as at 30 June and as at 31 December. The Parent Entity continuously monitors the risk of exceeding the level of the financial covenant stipulated in the credit facility agreement. As at the reporting date, during the financial year and after the reporting date, up to the publication of these consolidated financial statements, the value of the financial covenant subject to the obligation to report as at 30 June 2022 and as at 31 December 2022, complied with the provisions of the agreement. In 2022, the Group altered the judgement regarding the recognition of a preparatory fee and determined that the preparatory fee paid due to the signing of a borrowing agreement in the form of a revolving credit facility represents a payment benefitting the Group by gaining access to financing under terms set and accepted by the Group, and not a cost of financial liabilities incurred under this agreement. Therefore, the unamortised amount of the preparatory fee was recognised as an asset and was reclassified in the statement of financial position under accruals (respectively short- and long-term) and continues to be settled on a straight-line basis in the financial result for the period to the end of the life of the revolving syndicated credit facility agreement.

	2022	2022	2021
	Amount granted	Amount of the liability	Amount of the liability
	6 603	528	-
Preparatory fee		-	(14)
Carrying amount of liabilities due to bank loans		**528**	**(14)**

in PLN millions, unless otherwise stated

Investment loans
Loans, including investment loans granted to the Parent Entity by the European Investment Bank in the total amount of PLN 3 340 million: 1. Investment loan in the amount of PLN 2 000 million, with three instalments drawn and the payback periods expiring on 30 October 2026, 30 August 2028 and 23 May 2029 and utilised to the maximum available amount. The funds acquired through this loan were used to finance Parent Entity investment projects related to modernisation of metallurgy and development of the Żelazny Most tailings storage facility. The loan's instalments have a fixed interest rate. 2. Investment loan in the amount of PLN 1 340 million granted in December 2017 with a financing period of 12 years. The Parent Entity has drawn three instalments under this loan with the payback periods expiring on 28 June 2030, 23 April 2031 and 11 September 2031. The unutilised part of the loan in the amount of PLN 440 million, by which the amount of financing granted to the Parent Entity was increased in June 2021, is available until April 2023. The funds acquired through this loan are used to finance the Parent Entity's projects related to development and replacement at various stages of the production process. The loan's instalments have a fixed interest rate. The loan agreements with the European Investment Bank oblige the Group to comply with the financial covenant and non-financial covenants commonly stipulated in such types of agreements. Pursuant to contractual terms and conditions, the Parent Entity is obliged to report the level of the financial covenant for the reporting periods, i.e. as at 30 June and as at 31 December. The Parent Entity continuously monitors the risk of exceeding the levels of the financial covenant stipulated in the loan agreements. As at the reporting date, during the financial year and after the reporting date, up to the publication of these consolidated financial statements, the value of the financial covenant subject to the obligation to report as at 30 June 2022 and as at 31 December 2022, complied with the provisions of the loan agreements.

2022	2022	2021
Amount granted	Amount of the liability	Amount of the liability
3 528	2 434	2 568

in PLN millions, unless otherwise stated

Other bank loans

Bilateral bank loans in the total amount of PLN 3 255 million, are used for financing working capital and are a supporting tool in the management of financial liquidity and support financing of advanced investment undertakings. The Group holds lines of credit in the form of short-term and long-term credit agreements. The funds under open lines of credit are available in PLN, USD and EUR, with interest based on a fixed interest rate or variable WIBOR, LIBOR and EURIBOR plus a margin.

	2022	2022	2021
	Amount granted	Amount of the liability	Amount of the liability
	3 255	735	751
Preparatory fee		-	(2)
Carrying amount of liabilities due to bank loans		**735**	**749**

Debt securities

A bond issue program of the Parent Entity was established on the Polish market by an issue agreement on 27 May 2019. The issue with a nominal value of PLN 2 000 million took place on 27 June 2019, under which bonds were issued with a maturity of 5 years in the amount of PLN 400 million and a redemption date of 27 June 2024 as well as bonds with a maturity of 10 years in the amount of PLN 1 600 million and a redemption date of 27 June 2029.

The nominal value of one bond is PLN 1 000, and the issue price is equal to the nominal value. The bonds' interest rates based on variable WIBOR plus a margin.
The funds from the issue of the bonds are used to finance general corporate purposes.

	2022	2022	2021
	Nominal value of the issue	Amount of the liability	Amount of the liability
	2 000	2 002	2 001

Total bank and other loans, debt securities	**15 386**	**5 699**	**5 320**
Preparation fee which decreases liabilities due to bank loans		-	(16)
Carrying amount of liabilities due to bank and other loans, debt securities		**5 699**	**5 304**

The aforementioned sources ensure the availability of external financing in the amount of PLN 15 386 million. The funds available for use from these sources fully cover the liquidity needs of the Group.
The syndicated credit in the amount of USD 1 500 million (PLN 6 603 million), the investment loans in the amount of PLN 3 340 million, and bilateral bank loans granted to the Parent Entity in the amount of PLN 3 193 million, are unsecured.
Repayment of a part of the liabilities of other Group companies due to bilateral bank loans and other loans are secured amongst others by statements on submitting to an enforcement regime, contractual mortgages, registered pledges or the assignment of receivables. The carrying amount of guarantees of repayment of external financing as at 31 December 2022 amounted to PLN 243 million, including property, plant and equipment in the amount of PLN 117 million (as at 31 December 2021: PLN 343 million, including property, plant and equipment in the amount of PLN 217 million).

in PLN millions, unless otherwise stated

Note 8.5 Cash and cash equivalents

Accounting policies
Cash and cash equivalents include mainly cash in bank accounts and deposits with maturities of up to three months from the date of their placement (the same applies to the statement of cash flows). Cash is measured at its nominal amount plus interest, including a loss allowance for expected credit losses (Note 7.5.2.1).

		As at 31 December 2022	As at 31 December 2021
	Cash in bank accounts	619	1 151
	Other financial assets with a maturity of up to 3 months from the date of acquisition - deposits	573	744
	Other cash	8	9
	Total cash and cash equivalents, of which:	**1 200**	**1 904**
	recognised in assets held for sale (disposal group)	-	20
	recognised as “cash and cash equivalents”	1 200	1 884
	Restricted cash	21	24
Note 8.4.1	**Free cash and cash equivalents**	**1 179**	**1 880**

As at 31 December 2022, the Group had cash in bank deposits in the amount of PLN 66 million (as at 31 December 2021 PLN 31 million), which are funds in separate VAT accounts, designated for servicing split payments. These funds are gradually used, mainly to pay the VAT payables to suppliers and other payments mandated by law.

Note 8.6 Liabilities due to guarantees granted

Guarantees and letters of credit are an essential financial liquidity management tool of the Group.

Accounting policies

The Group issued guarantees which meet the definition of contingent liabilities pursuant to IAS 37 and recognises them in contingent liabilities and guarantees, which meet the definition of financial guarantees under IFRS 9, and which are measured and recognised as financial instruments pursuant to this standard.
The financial guarantee agreement is an agreement obliging its issuer to make certain payments compensating the holder of the guarantee for the loss they will incur due to a debtor’s failure to pay on the due date, pursuant to the initial or amended terms of a debt instrument.
At the moment of initial recognition, the Group recognises the financial guarantee at its fair value, in the following items of the statement of financial position:

- financial assets measured at amortised cost (other financial assets),
- other liabilities (deferred income).

The liability due to the financial guarantee granted as at the end of the reporting period is recognised at the higher of two amounts: the initial value of the issued guarantee less the amount of profits recognised in profit or loss on guarantees, or the amount of an allowance for expected credit losses – set pursuant to the principles of the general model, described in accounting policies in Note 7.5.2.

Important estimates, assumptions and judgements

For the calculation of expected credit losses – ECL - the Group adopts estimates for the rating, PD (probability of default) and LGD (loss given default) parameters. Calculation of the expected credit losses takes place in the horizon remaining to the end of the guarantee, while the rating of a guarantee’s beneficiary is adopted as the rating of the entity used for the purposes of calculating the PD parameter.

As at 31 December 2022, the liabilities of the Group due to guarantees and letters of credit granted amounted to a total of PLN 1 156 million (as at 31 December 2021, PLN 849 million) and due to promissory note payables amounted to PLN 170 million (as at 31 December 2021, PLN 173 million).

The most significant items are liabilities of the Parent Entity aimed at securing the following obligations:

- **Sierra Gorda S.C.M.** – a corporate guarantee in the amount of PLN 969 million (USD 220 million) set as security on the repayment of a bank loan drawn by Sierra Gorda S.C.M. (as at 31 December 2021 in the amount of PLN 670 million, or USD 165 million). The guarantee's validity period falls on September 2024. The carrying amount of the liability due to a financial guarantee granted was recognised in the amount of PLN 57 million (as at 31 December 2021, PLN 58 million)*,
- **other entities, including the Parent Entity:**
    - PLN 126 million - securing the proper execution by the Parent Entity of future environmental obligations related to the obligation to restore terrain, following the conclusion of operations of the Żelazny Most tailings storage facility (as at 31 December 2021 in the amount of PLN 124 million), the guarantee is valid for up to 1 year,
    - PLN 14 million - securing claims on behalf of Marshal of the Voivodeship of Lower Silesia to cover costs related to collecting and processing waste, the guarantee is valid up to 1 year,
    - PLN 37 million (PLN 30 million and CAD 2 million) securing the obligations related to proper execution of agreements concluded by the Group (as at 31 December 2021 in the amount of PLN 39 million, or PLN 32 million and CAD 2 million), the guarantee is valid for up to 3 years,
    - PLN 2 million - securing obligations related to tax and customs duties, the guarantee is valid indefinitely.

Based on the knowledge held, at the end of the reporting period the Group assessed the probability of payments resulting from liabilities due to guarantees and letters of credit granted as low.

** The financial guarantee was recognised pursuant to par. 4.2.1. point c of IFRS 9.*

Part 9 – Non-current assets and related liabilities

Note 9.1 Mining and metallurgical property, plant and equipment and intangible assets

Accounting policies – property, plant and equipment

The most important property, plant and equipment of the Group is property, plant and equipment related to the mining and metallurgical operations, comprised of land, buildings, water and civil engineering structures, such as: primary mine tunnels (including, in underground mines: shafts, wells, galleries, drifts, primary chambers), backfilling, drainage and firefighting pipelines, piezometric holes and electricity, signal and optical fiber cables. Pre-stripping costs in open pit mines and machines, technical equipment, motor vehicles and other movable fixed assets, as well as right-to-use assets recognised in accordance with IFRS 16 Leases, including perpetual usufruct rights to land, are also included in mining and metallurgical property, plant and equipment.

Property, plant and equipment, excluding usufruct right-to-use assets, are recognised at cost less accumulated depreciation and accumulated impairment losses.

In the initial cost of items of property, plant and equipment the Group includes discounted decommissioning costs of fixed assets related to underground and surface mining and other facilities which, in accordance with binding laws, will be incurred following the conclusion of activities. Principles of recognition and measurement of decommissioning costs are presented in Note 9.4.

An asset's carrying amount includes costs of significant components, regular, major overhauls and significant periodic repairs, the performance of which determines further use of the asset.

Costs are increased by borrowing costs (i.e. interest and exchange differences representing an adjustment to interest cost) that were incurred for the purchase or construction of a qualifying item of property, plant and equipment.

Right-to-use assets are initially measured at cost, which comprises the initial lease liability and all lease payments paid on the date the lease began and before that date, less any lease incentives received, any initial direct costs incurred by the lessee and an estimate of costs which will be incurred by the lessee due to the disassembly or removal of a base asset or renovation of the site in which it was placed.
The perpetual usufruct right to land is measured at the amount of the liability on the perpetual usufruct right to land, which is measured using the perpetual rent method and all lease payments paid on the date the lease began or before that date (including payments for acquisition of this right on the market).
After the initial recognition, a right-to-use asset, excluding the perpetual usufruct right to land measured using the perpetual rent method, is measured at cost decreased by accumulated depreciation/amortisation and accumulated impairment losses, adjusted by the updated measurement of lease liabilities.

Items of property, plant and equipment (excluding land and perpetual usufruct rights to land) are depreciated by the Group, pursuant to the model of consuming the economic benefits from the given item of property, plant and equipment:

- using the **straight-line method,** for items which are used in production at an equal level throughout the period of their usage,
- using the **units of production method,** for items in respect of which the consumption of economic benefits is directly related to the quantity of ore extracted from the deposit or quantity of units produced, and this extraction or production is not spread evenly through the period of their usage. In particular it relates to buildings and structures of the mines machines and mining equipment, except for the items of property, plant and equipment used in metallurgical plants, where their usage results from the useful economic life of the given item of property, plant and equipment.

The useful lives, and therefore the depreciation rates of fixed assets used in the production of copper are adapted to the plans for the closure of operations, and in the case of right-to-use assets to the earlier of these two dates – either to the useful life end date or to the lease end date, unless the ownership of an asset is transferred to the Group before the end of the lease, in which case depreciation rates are adjusted to the estimated useful life end date.

For individual groups of fixed assets, the following useful lives have been adopted, estimated based on the anticipated useful lives of mines and metallurgical plants with respect to deposit content:

in PLN millions, unless otherwise stated

For own fixed assets:

Group	Fixed assets type	Total useful lives
Buildings and land	Land	Not subject to depreciation
	Buildings:	
	– buildings in mines and metallurgical plants,	40-100 years
	– sheds, reservoirs, container switchgears	20-30 years
	Primary mine tunnels	22-90 years
	Pipelines:	
	– backfilling to transfer sand with water,	6-9 years
	– technological, drainage, gas and firefighting	22-90 years
	Electricity, signal and optical fibre cables	10-70 years
Technical equipment, machines, motor vehicles and other fixed assets	Technical equipment, machines:	
	– mining vehicles, mining roof support	4-10 years
	– conveyor belts, belt weigher	10-66 years
	– switchboards, switchgears	4-50 years
	Motor vehicles:	
	– underground electric locomotives,	20-50 years
	– mining vehicles, railway vehicles, tankers, transportation platforms	7-35 years
	– trolleys, forklift, battery-electric truck	7-22 years
	– cars, trucks, special vehicles	5-22 years
	– underground diesel locomotives	10-20 years
	Other fixed assets, including tools and equipment	5-25 years
Pre-stripping costs	Total useful life depends on the expected individual mine life:	
	– Robinson	14 years
	– Carlota	2 years

The individual significant parts of a fixed asset (significant components), whose useful lives are different from the useful life of the given fixed asset as a whole are depreciated separately, applying a depreciation rate which reflects its anticipated useful life.

For the property, plant and equipment due to right-to-use assets:

Group	Type of right-to-use	Total period of use
Buildings and land	Perpetual usufruct right to land measured using the perpetual rent method	Not subject to depreciation
	Transmission easements	6-54 years (period of depreciation depends on the period of depreciation of an asset in respect of which a transmission easement was established)
	Land	5-30 years
	Buildings and Structures	3-5 years
	Computer sets	3 years
Technical equipment, machines, motor vehicles and other fixed assets	Machines and technical equipment	3-4 years
	Motor vehicles	3 years
	Equipment and other	5 years

Accounting policies – intangible assets
Mining and metallurgical intangible assets are mainly comprised of exploration and evaluation assets, and water rights in Chile. Exploration and evaluation assets The following expenditures are classified as exploration and evaluation assets: • geological projects, • obtaining environmental decisions, • obtaining concessions and mining usufruct for geological exploration, • work related to drilling (drilling; geophysical and hydrogeological research; geological, analytical and geotechnical services; etc.), • the purchase of geological information, • the preparation of geological documentation and its approval, • the preparation of economic and technical assessments of resources for the purpose of making decisions regarding applying for mine operating concessions, and • equipment usage costs (property, plant and equipment) used in exploratory work. Expenditures on exploration and evaluation assets are measured at cost less accumulated impairment losses and are recognised as intangible assets not yet available for use. The Group is required to test an individual entity (project) for impairment when: • the technical feasibility and commercial viability of extracting mineral resources is demonstrable; and • the facts and circumstances indicate that the carrying amount of exploration and evaluation assets may exceed their recoverable amount. Any potential impairment losses are recognised prior to reclassification resulting from the demonstration of the technical and economic feasibility of extracting the mineral resources.

Significant estimates, assumptions and judgments
Significant estimates and assumptions relating to impairment of mining and metallurgical property, plant and equipment and intangible assets are presented in Note 3. The net value of mining and metallurgical property, plant and equipment which are subject to depreciation using the natural method as at 31 December 2022 amounted to PLN 1 694 million (as at 31 December 2021: PLN 1 169 million).

in PLN millions, unless otherwise stated

Mining and metallurgical property, plant and equipment and intangible assets

		Property, plant and equipment			Intangible assets			
		Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction	Water rights	Exploration and evaluation assets	Other	Total
	As at 31 December 2020							
	Gross carrying amount	19 711	15 627	5 631	237	2 933	893	**45 032**
	Accumulated depreciation/amortisation	(9 396)	(7 905)	-	-	-	(302)	**(17 603)**
	Impairment losses	(2 407)	(637)	(48)	(172)	(1 537)	(28)	**(4 829)**
	Net carrying amount, of which:	**7 908**	**7 085**	**5 583**	**65**	**1 396**	**563**	**22 600**
	own fixed assets and intangible assets	7 450	7 055	5 583	65	1 396	563	**22 112**
	leased fixed assets (right-to-use)	458	30	-	-	-	-	**488**
	Changes in 2021 net							
	Settlement of fixed assets under construction	1 320	1 213	(2 533)	-	-	-	**-**
	Purchase	-	-	1 832	6	71	224	**2 133**
	Leases – new contracts, modification of existing contracts	24	14	-	-	-	-	**38**
	Stripping cost in surface mines	537	-	-	-	-	-	**537**
	Self-constructed	-	-	687	-	45	1	**733**
	Capitalised borrowing costs	-	-	171	-	1	1	**173**
Note 9.4	Change in provision for decommissioning costs of mines and tailings storage facilities	(356)	-	-	-	-	-	**(356)**
Note 4.1	Depreciation/amortisation, of which:	(782)	(1 127)	-	-	-	(15)	**(1 924)**
	own fixed assets and intangible assets	(757)	(1 115)	-	-	-	(15)	**(1 887)**
	right-to-use (leased fixed assets)	(25)	(12)	-	-	-	-	**(37)**
Note 4.4	(Recognition)/reversal of impairment losses	(80)	(82)	(20)	-	(10)	(2)	**(194)**
	Exchange differences from the translation of statements of operations with a functional currency other than PLN	71	50	25	5	107	1	**259**
	Reclassification to assets held for sale	-	-	-	-	(176)	-	**(176)**
	Donations and gratuitous receipt of other entities' assets	-	-	-	-	-	268	**268**
	Liquidation, sale, donations and free of charge transfer	(3)	(7)	(9)	-	-	(6)	**(25)**
	Other changes	9	40	(6)	(9)	(3)	(98)	**(67)**
	As at 31 December 2021							
	Gross carrying amount	21 852	16 851	5 791	253	3 095	1 295	**49 137**
	Accumulated depreciation/amortisation	(10 438)	(8 859)	-	-	-	(333)	**(19 630)**
	Impairment losses	(2 766)	(806)	(61)	(186)	(1 664)	(25)	**(5 508)**
	Net carrying amount, of which:	**8 648**	**7 186**	**5 730**	**67**	**1 431**	**937**	**23 999**
	own fixed assets and intangible assets, of which:	**8 191**	**7 152**	**5 730**	**67**	**1 431**	**937**	**23 508**
	recognised in assets held for sale (disposal group)	-	-	-	-	119	-	119
	recognised as "mining and metallurgical property, plant and equipment and intangible assets"	8 191	7 152	5 730	67	1 312	937	23 389
	leased fixed assets (right-to-use), of which:	**457**	**34**	**-**	**-**	**-**	**-**	**491**
	recognised in assets held for sale (disposal group)	-	-	-	-	-	-	-
	recognised as "mining and metallurgical property, plant and equipment and intangible assets"	457	34	-	-	-	-	491

in PLN millions, unless otherwise stated

		Property, plant and equipment			Intangible assets			
		Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction	Water rights	Exploration and evaluation assets	Other	Total
	As at 31 December 2021							
	Gross carrying amount	21 852	16 851	5 791	253	3 095	1 295	**49 137**
	Accumulated depreciation/amortisation	(10 438)	(8 859)	-	-	-	(333)	**(19 630)**
	Impairment losses	(2 766)	(806)	(61)	(186)	(1 664)	(25)	**(5 508)**
	Net carrying amount, of which:	**8 648**	**7 186**	**5 730**	**67**	**1 431**	**937**	**23 999**
	own fixed assets and intangible assets, of which:	**8 191**	**7 152**	**5 730**	**67**	**1 431**	**937**	**23 508**
	recognised in assets held for sale (disposal group)	-	-	-	-	119	-	119
	recognised as “mining and metallurgical property, plant and equipment and intangible assets”	8 191	7 152	5 730	67	1 312	937	23 389
	leased fixed assets (right-to-use), of which:	**457**	**34**	**-**	**-**	**-**	**-**	**491**
	recognised in assets held for sale (disposal group)	-	-	-	-	-	-	-
	recognised as “mining and metallurgical property, plant and equipment and intangible assets”	457	34	-	-	-	-	491
	Changes in 2022 net							
	Settlement of fixed assets under construction	691	1 750	(2 441)	-	-	-	**-**
	Purchase	-	-	1 901	4	114	18	**2 037**
	Leases – new contracts, modification of existing contracts	133	12	-	-	-	-	**145**
	Stripping cost in surface mines	367	-	-	-	-	-	**367**
	Self-constructed	-	-	1 027	-	68	2	**1 097**
	Capitalised borrowing costs	-	-	182	-	42	2	**226**
Note 9.4	Change in provisions for decommissioning costs of mines and tailings storage facilities	(42)	-	-	-	-	-	**(42)**
Note 4.1	Depreciation/amortisation, of which:	(784)	(1 239)	-	**-**	**-**	(20)	**(2 043)**
	own fixed assets and intangible assets	(756)	(1 230)	-	-	-	(20)	**(2 006)**
	right-to-use (leased fixed assets)	(28)	(9)	-	-	-	-	**(37)**
Note 4.4	(Recognition)/reversal of impairment losses	-	(7)	(6)	-	(55)	(2)	**(70)**
	Exchange differences from the translation of statements of operations with a functional currency other than PLN	77	51	40	6	108	2	**284**
	Liquidation, sale, donations and free of charge transfer	(5)	(40)	(19)	-	-	(5)	**(69)**
	Settlement from fixed assets under construction into intangible assets	-	-	(38)	-	-	-	**(38)**
	As at the date of loss of control of a subsidiary	-	-	-	-	(125)	-	**(125)**
	Transfer of mining and metallurgical property, plant and equipment into other property, plant and equipment	-	-	(197)	-	-	-	**(197)**
	Other changes	(3)	(24)	(56)	(4)	94	88	**95**
	As at 31 December 2022							
	Gross carrying amount	23 383	17 466	6 147	274	3 480	1 411	**52 161**
	Accumulated depreciation/amortisation	(11 463)	(9 449)	-	-	-	(362)	**(21 274)**
	Impairment losses	(2 838)	(328)	(24)	(201)	(1 803)	(27)	**(5 221)**
	Net carrying amount, of which:	**9 082**	**7 689**	**6 123**	**73**	**1 677**	**1 022**	**25 666**
	own fixed assets and intangible assets	**8 521**	**7 652**	**6 123**	**73**	**1 677**	**1 022**	**25 068**
	leased fixed assets (right-to-use)	**561**	**37**	**-**	**-**	**-**	**-**	**598**

in PLN millions, unless otherwise stated

Note 9.1.1 Mining and metallurgical property, plant and equipment– major fixed assets under construction

	As at 31 December 2022	As at 31 December 2021
Deposit Access Program	3 318	2 796
Construction of the SW-4 shaft	589	565
Investment activity related to the development and operation of the Żelazny Most Tailings Storage Facility	280	424
Damówka pumping station with a backwater pipeline in the Tailings Division	145	131
BAT As – Installation for arsenic and mercury removal from gases before Solinox installation	117	113
Modernisation of the tankhouse at Głogów I Copper Smelter and Refinery – reconstruction of the roof and walls of the tankhouse	96	89

Note 9.1.2 Exploration and evaluation assets

Significant expenditures on exploration and evaluation assets are presented in the table below.

Operating segment	Description	As at 31 December 2022		As at 31 December 2021	
		Gross carrying amount	Impairment losses	Gross carrying amount	Impairment losses
KGHM INTERNATIONAL LTD.	Expenditures related to exploratory work, mainly within the Victoria project located in the Sudbury Basin in Canada	2 087	832	1 838	768
KGHM INTERNATIONAL LTD.	Expenditures related to exploratory work within the Ajax project	671	671	661	661

Note 9.1.3 Expenses related to mining and metallurgical assets

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Purchase	(2 037)	(2 133)
Self-constructed fixed assets	(1 097)	(733)
Stripping costs of surface mines	(367)	(537)
Costs of external financing	(226)	(173)
Change in liabilities due to purchases	(21)	100
Other	70	93
Total*	**(3 678)**	**(3 383)**

** Including expenses on exploration and evaluation assets in the amount of PLN 159 million (in 2021: PLN 91 million).*

Note 9.2 Other property, plant and equipment and intangible assets

Accounting policies

Other property, plant and equipment are recognised at cost less accumulated depreciation and accumulated impairment losses. Depreciation is done using the straight-line method.

For individual groups of fixed assets, the following useful lives have been adopted:

The Group	Total useful lives
Buildings	25-60 years
Technical equipment and machines	4-15 years
Motor vehicles	3-14 years
Other fixed assets	5-10 years

Intangible assets presented as "other intangible assets" include in particular: acquired property rights not related to mining operations and software. These assets are measured at cost less any accumulated amortisation and impairment losses.

Intangible assets are amortised using the straight-line method over their anticipated useful lives. The useful lives of the main groups of intangible assets are as follows:

The Group	Total useful lives
Acquired property rights not related to mining activities	5-50 years
Software	2-5 years
Other intangible assets	40-50 years

in PLN millions, unless otherwise stated

Other property, plant and equipment and intangible assets

		Property, plant and equipment				
		Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction	Intangible assets	Total
	As at 31 December 2020					
	Gross carrying amount	2 782	2 754	288	491	**6 315**
	Accumulated depreciation/amortisation	(899)	(1 549)	-	(207)	**(2 655)**
	Impairment losses	(340)	(178)	(1)	(143)	**(662)**
	Net carrying amount, of which	**1 543**	**1 027**	**287**	**141**	**2 998**
	own fixed assets and intangible assets	1 377	976	287	141	**2 781**
	leased fixed assets (right-to-use)	166	51	-	-	**217**
	Changes in 2021 net					
	Settlement of fixed assets under construction	83	385	(468)	-	**-**
	Purchase	-	-	307	138	**445**
	Self-constructed	-	-	78	1	**79**
	Leases – new contracts, modification of contracts	2	14	-	-	**16**
Note 4.1	Depreciation/amortisation, of which:	**(84)**	**(221)**	**-**	**(25)**	**(330)**
	own fixed assets and intangible assets	(83)	(203)	-	(25)	**(311)**
	right-to-use (leased fixed assets)	(1)	(18)	-	-	**(19)**
Note 4.4	(Recognition)/reversal of impairment losses	(55)	(81)	(4)	-	**(140)**
	Liquidation, sale, donations and free of charge transfer	-	-	-	(18)	**(18)**
	Reclassification to assets held for sale	(2)	-	-	-	**(2)**
	As at the date of loss of control of a subsidiary	-	-	-	-	**-**
	Other changes	11	-	11	13	**35**
	As at 31 December 2021					
	Gross carrying amount	2 897	3 058	216	624	**6 795**
	Accumulated depreciation/amortisation	(993)	(1 676)	-	(230)	**(2 899)**
	Impairment losses	(404)	(258)	(5)	(144)	**(811)**
	Net carrying amount, of which:	**1 500**	**1 124**	**211**	**250**	**3 085**
	own fixed assets and intangible assets, of which:	**1 334**	**1 078**	**211**	**250**	**2 873**
	recognised in assets held for sale (disposal group)	197	11	2	-	210
	recognised as “other property, plant and equipment and intangible assets”	1 137	1 067	209	250	2 663
	leased fixed assets (right-to-use), of which:	**166**	**46**	**-**	**-**	**212**

in PLN millions, unless otherwise stated

		Property, plant and equipment				
		Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction	Intangible assets	Total
	As at 31 December 2021					
	Gross carrying amount	2 897	3 058	216	624	**6 795**
	Accumulated depreciation/amortisation	(993)	(1 676)	-	(230)	**(2 899)**
	Impairment losses	(404)	(258)	(5)	(144)	**(811)**
	Net carrying amount, of which:	**1 500**	**1 124**	**211**	**250**	**3 085**
	own fixed assets and intangible assets, of which:	**1 334**	**1 078**	**211**	**250**	**2 873**
	recognised in assets held for sale (disposal group)	197	11	2	-	210
	recognised as “other property, plant and equipment and intangible assets”	1 137	1 067	209	250	2 663
	leased fixed assets (right-to-use), of which:	**166**	**46**	**-**	**-**	**212**
	recognised in assets held for sale (disposal group)	32	-	-	-	32
	recognised as “other property, plant and equipment and intangible assets”	134	46	-	-	180
	Changes in 2022 net					
	Settlement of fixed assets under construction	267	284	(551)	-	**-**
	Purchase	-	-	218	107	**325**
	Self-constructed	-	-	111	-	**111**
	Leases – new contracts, modification of contracts	4	16	-	-	**20**
Note 4.1	Depreciation/amortisation, of which:	(94)	(236)	-	(25)	**(355)**
	own fixed assets and intangible assets	(93)	(218)	-	(25)	**(336)**
	right-to-use (leased fixed assets)	(1)	(18)	-	-	**(19)**
Note 4.4	(Recognition)/reversal of impairment losses	(62)	(3)	(1)	(8)	**(74)**
	Liquidation, sale, donations and free of charge transfer	-	(9)	-	(32)	**(41)**
	Transfer from mining and metallurgical property, plant and equipment to other property, plant and equipment	-	-	197	-	**197**
	As at the date of loss of control of a subsidiary	(229)	(11)	(2)	-	**(242)**
	Other changes	7	18	(13)	(74)	**(62)**
	As at 31 December 2022					
	Gross carrying amount	2 919	3 194	176	620	**6 909**
	Accumulated depreciation/amortisation	(1 058)	(1 753)	-	(250)	**(3 061)**
	Impairment losses	(468)	(258)	(6)	(152)	**(884)**
	Net carrying amount, of which:	**1 393**	**1 183**	**170**	**218**	**2 964**
	own fixed assets and intangible assets	**1 263**	**1 140**	**170**	**-**	**2 573**
	leased fixed assets (right-to-use)	**130**	**43**	**-**	**-**	**173**

in PLN millions, unless otherwise stated

Note 9.3 Depreciation/amortisation

		Property, plant and equipment		Intangible assets	
		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021	from 1 January 2022 to 31 December 2022	From 1 January 2021 to 31 December 2021
Note 4.1	**Total**	**2 353**	**2 214**	**45**	**40**
	settled in profit or loss	2 198	2 086	41	37
	cost of manufacturing products	2 153	2 043	37	34
	administrative expenses	36	33	4	3
	selling costs	9	10	-	-
	being part of the manufacturing cost of assets	155	128	4	3

Note 9.4 Provision for decommissioning costs of mines and other facilities

Accounting policies

The provision for future decommissioning costs of mines and other technological facilities is recognised based on the estimated expected costs of decommissioning of such facilities and of restoring the sites to their original condition following the end of operations, which are made on the basis of ore extraction forecasts (for mining facilities), and technical-economic studies prepared either by specialist firms or by the Parent Entity.

In the case of surface mines, certain actions and costs may influence the scope of restoration work, such as costs of hauling barren rock, incurred during mine life and due to its operations, are recognised as operating costs being an integral part of the production process and are therefore excluded from costs that are a basis of calculating the provision for mine decommissioning.

Revaluation of this provision is made in two stages:

1) estimation of the costs of decommissioning mines to the current value in connection with the change in prices using the price change indices of construction-assembly production published by the Central Statistical Office.
2) discounting of the decommissioning costs to the current value using effective discount rates calculated based on the nominal interest rates and the inflation rate (quotient of the nominal rate and the inflation rate), whereby:
   – the nominal interest rate in the Parent Entity is based on the yield on treasury bonds at the end of the reporting period, with maturities nearest to the planned financial outflow and if there are no treasury bonds with maturities close to the planned financial outflows - the nominal interest rate is determined by the professional judgment of the Parent Entity's Management on the basis of the consistency of the adopted assumptions. In the KGHM INTERNATIONAL LTD. Group – it is the rate of return on investments in ten- and twenty-year treasury bills of the US Federal Reserve and the rate of return on investments in five–year treasury bonds issued by the governments of Canada and Chile.

Important estimates, assumptions and judgments

In 2022, the Parent Entity revised its approach to the discount rates used to estimate environmental provisions. At the end of the reporting period, with a bond yield of +/- 6.845% and inflation of +/- 13.1% (at the end of the comparable period, respectively +/-3.6% and +/-7.6%), the Parent Entity received and applied for the years 2022-2023 a negative real discount rate of -5.53% instead of a rate of "0". For the subsequent two measurement periods, that is for 2024 and 2025, the Parent Entity adopted inflation rates at the level of the NBP's forecast, that is 5.9% and 3.5%, respectively, and for subsequent periods, following the NBP's forecast - at the level of 2.5%, in line with the long-term inflation target. Moreover, for the first 10 years of measurement of the provision (that is to 2032), a risk-free rate of 6.845% (measurement of 10-year treasury bonds) was adopted, due to the fact that it is the only publicly available information on the risk-free rate for the subsequent 10 years, and pursuant to the adopted judgment, this rate was not modified. The Parent Entity will adjust the risk-free rate to the level of this rate announced at every subsequent end of the reporting period in order to measure the provision at those days.

In turn, taking into account the high volatility of the risk-free rate that was in the last period, based on quotations of 10-year treasury bonds, the Parent Entity applied a professional judgment to determine this rate for the estimation of provisions falling after a period of 10 years from the end of the annual reporting period based on the historical observation of the ratio of the risk-free rate to the assumed inflation target. As a result of the judgement, the Parent Entity adopted the risk-free rate of 3.5% for the estimation of provision for 10 years from the end of the annual reporting period, which translated into a real discount rate of 0.98%.

In the current period, for the purpose of the measurement of the provision for mine decommissioning and other technological facilities located in the United States of America and Canada, a real discount rate at the level of 1.19% to 1.67% was adopted depending on the mine. In the comparable period a real discount rate of "0" was adopted due to the inflation remaining at the level of the nominal discount rate.

With regard to the costs of some activities carried out during the exploratory work of surface mines, which at the same time serve to restore (recultivate) such pits, the Group made a judgment and recognised that these costs are mostly

– the inflation rate is based on the forecast of future inflation used in the calculation of future employee benefits liabilities. A change in the discount rate or in the estimated decommissioning cost adjusts the value of the relevant item of a fixed asset, unless it exceeds the carrying amount of the item of a fixed asset (any surplus above this amount is recognised in other operating income). The increase in the provision due to the time lapse is recognised in finance costs. The provision for decommissioning costs of mines and other technological facilities includes the balance of the Mine Closure Fund and Tailings Storage Facility Restoration Fund, which the Parent Entity creates under separate regulations, i.e. the Act of 9 June 2011 Geological and Mining Law and the Act of 14 December 2012 on waste, respectively. The role of the Funds is to secure cash for the future realisation by the Parent Entity of its obligations related to the closure, decommissioning and restoration of mines and tailings storage facilities, by collecting them in the manner provided for by the laws. In the case of the Mine Closure Fund, the Parent Entity has separated a bank cash account to which it transfers cash equivalent to 3% of the depreciation charges on fixed assets of mines, determined in accordance with the provisions of the Income Tax Act. Details on the credit risk related to the cash accumulated on the separate account of Mine Closure Fund are presented in Note 7.5.2.4. In the case of Tailings Storage Facility Restoration Fund, in July 2022 the Parent Entity changed the form of securing the funds of this Fund, replacing a separate bank account with financial guarantees issued by the bank on demand of the Parent Entity, of which the Parent Entity is also a beneficiary. As at 31 December 2022, the amount of guarantees was PLN 98 million, and their value is updated on an annual basis. The Parent Entity strives to fully secure funds for the restoration of individual tailings storage facilities in the year, for which the liquidation and restoration schedule provides for the closure of a given tailings storage facility, by systematic increasing the value of these guarantees.	current production costs, because these activities primarily determine the current mine production and revenue generation, and their restoration is a secondary effect. Therefore, the costs of such activities are not included in the measurement of the restoration provision.

in PLN millions, unless otherwise stated

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
	Provisions at the beginning of the reporting period	**1 552**	**1 884**
Note 9.1	Changes in estimates recognised in fixed assets	(42)	(356)
	Reclassification of the balance of the Mine Closure Fund and Tailings Storage Facility Restoration Fund*	496	-
	Changes due to loss of control of subsidiaries	(91)	-
	Other	(22)	24
	Provisions at the end of the reporting period, of which:	**1 893**	**1 552**
	- non-current provisions, of which:	**1 859**	**1 531**
	recognised in liabilities related to disposal group	-	289
	recognised as "provisions for decommissioning costs of mines and other technological facilities"	1 859	1 242
	- current provisions, of which:	**34**	**21**
	recognised in liabilities related to disposal group	-	1
	recognised as "provisions for liabilities and other charges"	34	20

**Change in the presentation to the presentation together with the non-current part of Provision for decommissioning costs of mines and other facilities, which is a result of the change in judgment as to the period of expected cash outflows from the fund.*

Impact of the change in discount rate on the provision for decommissioning costs of mines and other technological facilities

	As at 31 December 2022	As at 31 December 2021
increase in discount rate by 1 percentage point	(341)	(338)
decrease in discount rate by 1 percentage point	795	4*

**Assuming that the discount rate cannot fall below 0%.*

Note 9.5 Capitalised borrowing costs

During the period from 1 January 2022 to 31 December 2022, the Group recognised PLN 228 million of borrowing costs in property, plant and equipment and intangible assets.
During the period from 1 January 2021 to 31 December 2021, the Group recognised PLN 173 million of borrowing costs in property, plant and equipment and intangible assets.
The capitalisation rate applied by the Group to determine borrowing costs in 2022 amounted to 4.45%, in 2021: 2.98%.

Note 9.6 Carrying amount of the assets of Group companies representing collateral of repayment of liabilities

	As at 31 December 2022	As at 31 December 2021
Buildings	136	308
Technical equipment and machines	33	38
Land	8	6
Total	**177**	**352**

The carrying amount of assets representing collateral of repayment of financial liabilities as at 31 December 2022 amounted to PLN 177 million, including the carrying amount of assets set as collaterals of repayment of external financing of the companies of the KGHM Polska Miedź S.A. Group as at 31 December 2022 amounted to PLN 117 million (as at 31 December 2021: PLN 352 million and PLN 217 million, respectively).

Note 9.7 Lease disclosures – the Group as a lessee

Accounting policies
As a lessee, the Group identifies leases in usufruct agreements, inter alia, land, perpetual usufruct right to land, and transmission easements, as well as technical equipment, machines, and transport vehicles. The Group applies a uniform lease accounting model, which assumes that the lessee recognises the right-to-use assets and lease liabilities related to all lease agreements, including exemptions. The Group does not recognise lease assets and liabilities in relation to: • short-term leases - for agreements without the option to purchase an asset, concluded for a period shorter than 12 months from the commencement of the agreement, including agreements concluded for an indefinite period with a short notice period if there is no reasonable certainty that the Group will not make use of termination. • leases in respect of which the underlying asset has a low value. In the case of an agreement that is or includes a lease, the Group recognises each lease component under the agreement as a lease, separately from non-lease components. The Group defines the lease period as covering the irrevocable period of the lease agreement, including periods for which the lease can be extended if it is reasonably certain that the Group will exercise that right, and the periods for which the lease can be terminated if it is reasonably certain that the Group will not exercise that right. The right-to-use assets and the measurement policy for these assets are presented in Note 9.1. The Group initially measures the lease liability at the present value of lease payments due to be paid as at the date of initial recognition, which include: fixed lease payments, variable lease payments which are dependent on an index or rate, amounts which the lessee is expected to pay under the guaranteed residual value, the strike price call option if it is reasonably certain that the lessee will exercise the option, and penalties for terminating the lease if the given lease period was set with the assumption that the lessee will terminate the agreement. In fixed lease payments, the Group also includes payments for the exclusion of land from forestry and agricultural production, if they relate to land used under lease agreements. The lease payments exclude variable payments made by the lessee to the lessor for the right to use the underlying asset during the lease period, which depend on external factors other than payments based on a rate or index. After the date the lease began, the Group measures the carrying amount of lease liabilities by: - an increase due to interest on lease liabilities, - a decrease due to paid lease payments, - an update due to reassessment or modification of a lease agreement. Lease liabilities are presented in Note 8. Lease rate - lease payments are discounted by the Group using the incremental borrowing rate of the lessee because generally speaking, the interest rate of a lease agreement is not readily determinable.

Important estimates, assumptions and judgments
Identification of non-lease components In the agreements for the lease of mining machinery, apart from the lease component, the Group identified non-lease components related to the provision of services other than the lease of assets. To separate the lease and non-lease components, the Group made a judgment, respectively allocating the remuneration for a given agreement to both components, based on the relative unit price of the lease component and the total unit price of the non-lease components. **Estimation of the incremental borrowing rate of the lease** For the purpose of calculating the discount rates under IFRS 16, the Group assumes that the discount rate should reflect the cost of financing that would be incurred to purchase the leased item. The Group calculates the incremental borrowing rates, for individual time ranges of lease agreements, on a quarterly basis and this rate is used to measure lease liabilities arising from lease agreements concluded or modified during a given quarter. The materiality threshold for leases of low-value of underlying assets is set at PLN 20 000.

in PLN millions, unless otherwise stated

Lease disclosures – the Group as a lessee

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 9.1 Note 9.2	Depreciation/amortisation cost	56	56
Note 4.3	Interest cost	9	13
	Short-term lease cost	7	6
	Cost associated with leases of low-value of underlying assets not recognised as short-term agreements	1	1
	Cost associated with variable lease payments not recognised in the measurement of lease liabilities	8	11
Note 8.4.2	Total cash outflows due to leases	93	100
Note 9.1 Note 9.2	Increase in right-to-use assets	165	54
		As at 31 December 2022	**As at 31 December 2021**
Note 9.1 Note 9.2	**Carrying amount of right-to-use assets (division by underlying assets in notes, pursuant to references), of which:**	**771**	**703**
	recognised in assets held for sale (disposal group)	-	32
	recognised as “mining and metallurgical property, plant and equipment and intangible assets” and “other property, plant and equipment and intangible assets”	771	671
Note 8.4.2	**Carrying amount of right-to-use liabilities, of which:**	**744**	**645**
	recognised in liabilities related to disposal group	-	16
	recognised as “borrowings, lease and debt securities”	744	629

In 2022, the Group did not enter into sales and leaseback transactions (in 2021 the value of such transactions amounted to PLN 11 million). These transactions were entered into in order to obtain funds to finance current operating activities of the Group’s subsidiaries.

As at 31 December 2022, the Group had lease agreements that contained extension options and termination options, and the estimated value of future cash outflows, to which the Group is potentially exposed and are not included in the measurement of lease liabilities amount to PLN 19 million and PLN 37 million respectively (as at 31 December 2021: PLN 19 million and PLN 41 million). The Group has lease agreements with guaranteed residual values, but they were included in the measurement of lease liabilities. Moreover, the Group has not yet started lease agreements, to which it is obliged as a lessee, and the value of future cash outflows in this respect amounts to PLN 10 million (as at 31 December 2021: PLN 59 million).

Note 9.8 Assets held for sale (disposal group) and liabilities associated with them

Accounting policies
Non-current assets (or disposal groups) are classified by the Group as held for sale, if their carrying amount will be recovered by the sale transaction rather than by the continued usage, contingent on their availability for immediate sale in their current condition and maintaining conditions that are customarily applied in the sale of these assets (or disposal groups) and their sale is highly probable. The sale is understood as highly probable if the Group is determined to fulfil the plan to sell an asset or a disposal group, actions were undertaken to actively search for a buyer, an asset is offered at cost, which is rational as compared to its current fair value, and the Group intends to sell an asset in a year from the classification day. Extension of the period required to conclude the sale by more than 1 year is possible only if the delay was caused by events or circumstances outside of the Group's control, and the Group itself may prove that it is determined to fulfil the plan to sell an asset. At the moment of reclassification, these assets are measured at the lower of the following values: the carrying amount or the fair value decreased by costs to sell. The difference between the measurement at fair value is recognised in other operating costs. At the moment of later measurement, the potential reversal of fair value is recognised in other operating income.

In the current period, a sale transaction was realised of assets held for sale (disposal group) and liabilities associated with them of companies S.C.M. Franke, Interferie S.A. and Interferie Medical SPA sp. z o.o. and a reclassification took place of assets held for sale (disposal group) and liabilities associated with them of Carlota Copper Company to continued operations. Details are described below.

Note 9.8.1 S.C.M. Franke and Carlota Copper Company

On 26 April 2022 subsidiaries of KGHM International Ltd., Franke Holdings Ltd. and Centenario Holdings Ltd., signed an agreement for the sale of 100% of the shares of the company Sociedad Contractual Minera Franke, being the owner of the Franke mine in Chile, to the company Minera Las Cenizas S.A. for the negotiated initial purchase price of USD 25 million.

In accordance with the sale agreement, the negotiated initial purchase price was adjusted by, among others, the change in net working capital, cash and borrowings between 31 March 2022 and the transaction date. The initial adjusted purchase price for 100% of the shares of S.C.M. Franke amounted to USD 23 million (payable in cash). The carrying amount of assets and liabilities that were subject to the sales transaction as at the transaction date amounted to USD 19 million.

Apart from the initial payment (initial purchase price), the pricing mechanism reflects contingent payments in the maximum amount of USD 45 million. Taking into account the probability of receiving these payments and the period of their realisation, they were measured at the discounted amount of USD 13 million and recognised in gain on disposal.

Gain on disposal of S.C.M. Franke was recognised in "Other operating income".

Settlement of the transaction for the sale of S.C.M. Franke

	USD mn	PLN mn
Initial purchase price	25	109
Change in net working capital, cash and borrowings between 31 March 2022 and 26 April 2022	(2)	(9)
Initial adjusted purchase price	**23**	**100**
Carrying amount of assets and liabilities that were subject to the sales transaction	19	86
Measurement of contingent payments at the date of disposal	13	60
Re-measurement of contingent payments at the reporting date	1	5
Gain on disposal	**18**	**79**
Exchange differences reclassified from other comprehensive income to gain on disposal	-	64
Gain on disposal in the consolidated statement of profit or loss	**-**	**143**

As at 30 June 2022, the criteria set forth in IFRS 5 under which Carlota Copper Company was classified as an asset held for sale were reassessed. As a result of the analysis conducted, the Management Board of the Parent Entity as at 30 June 2022 reclassified the assets and liabilities of the company back to continued activities, because the sale was not highly probable. The process of selling the mining assets of Carlota Copper Company was not completed.

In accordance with IFRS 5.27, the recoverable amount of the assets of Carlota Copper Company was determined immediately following the reclassification. There were no substantial differences compared to the carrying amount as at 30 June 2022.

in PLN millions, unless otherwise stated

In November 2022, the process of selling Carlota Copper Company was resumed, however, in the opinion of the Management Board of the Parent Entity, it is not advanced enough to conclude that the sale is highly probable. Therefore, as at 31 December 2022, the company's assets and related liabilities are not recognised as held for sale.

The activities of the companies S.C.M. Franke and Carlota Copper Company were presented as part of the segment KGHM INTERNATIONAL LTD.

The financial data of the above-mentioned companies were presented together with continued operations in the consolidated statement of profit or loss, in the consolidated statement of cash flows and explanatory notes to these statements because they do not represent a major line of business and they are not a part of a larger plan to dispose of a major line of business (IFRS 5.32 a and b).

Financial data of the companies S.C.M. Franke and Carlota Copper Company are presented in the tables below:

Main groups of assets and liabilities classified to disposal Group	As at 26 April 2022 (sale date – date of loss of control)	As at 31 December 2021 (presentation under assets and liabilities classified to disposal Group)	
	S.C.M. Franke	S.C.M. Franke	Carlota Copper Company
ASSETS			
Mining and metallurgical intangible assets	125	116	3
Other financial instruments measured at amortised cost	2	3	-
Non-current assets	**127**	**119**	**3**
Inventories	91	87	62
Trade receivables, including:	14	13	-
trade receivables measured at fair value through profit or loss	14	13	-
Tax assets	5	3	-
Other non-financial assets	15	3	-
Cash and cash equivalents	8	5	-
Current assets	**133**	**111**	**62**
TOTAL ASSETS IN DISPOSAL GROUP	**260**	**230**	**65**
LIABILITIES			
Borrowings, leases and debt securities	-	-	1
Provisions for decommissioning costs of mines and other technological facilities	91	75	214
Non-current liabilities	**91**	**75**	**215**
Borrowings, leases and debt securities	1	2	1
Trade payables	58	26	7
Employee benefits liabilities	6	5	3
Tax liabilities	1	1	-
Provisions for liabilities and other charges	-	-	1
Other liabilities	18	21	4
Current liabilities	**84**	**55**	**16**
TOTAL LIABILITIES IN DISPOSAL GROUP	**175**	**130**	**231**

in PLN millions, unless otherwise stated

Statement of profit or loss of operations held for sale

	from 1 January 2022 to 26 April 2022	from 1 January 2021 to 31 December 2021	
	S.C.M. Franke	S.C.M. Franke	Carlota Copper Company
Revenues	132	497	209
Costs	(197)	(443)	(111)
Profit/(loss) on operating activities	**(65)**	**54**	**98**
Finance costs	(1)	(3)	(5)
Profit/(loss) before income tax	**(66)**	**51**	**93**
Income tax expense	-	-	-
PROFIT/(LOSS) FOR THE PERIOD	**(66)**	**51**	**93**

Cash flow of operations held for sale

	from 1 January 2022 to 26 April 2022	from 1 January 2021 to 31 December 2021	
	S.C.M. Franke	S.C.M. Franke	Carlota Copper Company
Net cash generated from/(used in) operating activities, including:	(40)	(7)	11
change in provision for decommissioning of mines	*10*	*(6)*	*(5)*
Net cash used in investing activities	-	(5)	(10)
Net cash generated from/(used in) financing activities	42	(2)	(2)
TOTAL NET CASH FLOW	**2**	**(14)**	**(1)**

Note 9.8.2 Interferie S.A. and Interferie Medical SPA Sp. z o.o.

On 21 February 2022, KGHM Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych (hereafter: the Fund), with 100% of its Investment Certificates held by KGHM Polska Miedź S.A., sold all of its directly held shares in the company Interferie Medical SPA Sp. z o.o. with its head office in Legnica, that is 41 309 shares representing 67.37% of the share capital and the same percent of votes at the shareholders' meeting to Polski Holding Hotelowy sp. z o.o. The Fund's indirect subsidiary – INTERFERIE S.A. – held the remaining 32.63% of the share capital of the company Interferie Medical SPA Sp. z o.o.

On 28 February 2022, as a result of the settlement of the call for the sale of shares of INTERFERIE S.A. (hereafter "the company"), announced by Polski Holding Hotelowy sp. z o.o., the portfolio companies of the Fund: Fundusz Hotele 01 Sp. z o.o. S.K.A. and Fundusz Hotele 01 Sp. z o.o sold all of their shares in the company, that is in total 10 152 625 shares, representing 69.71% of the share capital and the same percent of votes at the general meeting.

Due to the above, neither the Parent Entity nor any entities of the Group has any shares in the companies: INTERFERIE S.A. and Interferie Medical SPA Sp. z o.o.

The total sale price for the shares of both companies (payable in cash) amounted to PLN 167 million and exceeded the value of net assets attributable to the Group by PLN 37 million. The result on the sale (income) was recognised in the item „Other operating income".

The activities of the companies Interferie S.A. and Interferie Medical SPA Spółka z o.o. were presented in the segment - Other segments.

The financial data of the above-mentioned companies were presented together with continued operations in the consolidated statement of profit or loss, the consolidated statement of cash flows and explanatory notes to these statements because they do not represent a major line of business and they are not a part of a larger plan to dispose of a major line of business (IFRS 5.32 a and b).

in PLN millions, unless otherwise stated

Financial data of the companies INTERFERIE S.A. and Interferie Medical SPA Sp. z o.o. are presented in the tables below:

Main groups of assets and liabilities classified as held for sale

	As at 28 February 2022	As at 31 December 2021
ASSETS		
Other property, plant and equipment	244	244
Other property, plant and equipment and intangible assets	244	244
Non-current assets	**244**	**244**
Inventories	1	1
Trade receivables	2	2
Tax assets	1	1
Other non-financial assets	3	-
Cash and cash equivalents	15	15
Current assets	**22**	**19**
TOTAL ASSETS IN DISPOSAL GROUP	**266**	**263**
LIABILITIES		
Borrowings, leases and debt securities	65	65
Employee benefits liabilities	1	1
Other liabilities	6	3
Non-current liabilities	**72**	**69**
Borrowings, leases and debt securities	12	16
Trade payables	6	7
Employee benefits liabilities	1	4
Tax liabilities	4	1
Other liabilities	5	4
Current liabilities	**28**	**32**
TOTAL LIABILITIES IN DISPOSAL GROUP	**100**	**101**

Statement of profit or loss of operations held for sale

	from 1 January 2022 to 28 February 2022	from 1 January 2021 to 31 December 2021
Revenues	14	71
Costs	(15)	(68)
Profit/(loss) on operating activities	**(1)**	**3**
Finance costs	-	(2)
Profit/(loss) before income tax	**(1)**	**1**
Income tax expense	-	-
PROFIT/(LOSS) FOR THE PERIOD	**(1)**	**1**

Cash flow of operations held for sale

	from 1 January 2022 to 28 February 2022	from 1 January 2021 to 31 December 2021
Net cash generated from operating activities	1	4
Net cash used in investing activities	(1)	(11)
Net cash generated from financing activities	-	17
TOTAL NET CASH FLOW	**-**	**10**

Note 9.8.3 The Oxide project in the KGHM INTERNATIONAL LTD. Group

In the fourth quarter of 2021, an agreement for the sale of the Oxide project, which was held by the subsidiary KGHM Chile SpA, to Sierra Gorda S.C.M. was concluded between KGHM Polska Miedź S.A. and the second partner in the joint venture Sierra Gorda S.C.M. – Sumitomo (Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation). On 15 December 2021 the sales agreement was signed, with the sale date set at 1 January 2022.

As at 31 December 2021 the Oxide project was reclassified from intangible assets not yet available for use (assets related to exploration and evaluation of mineral resources) to non-current assets held for sale in the amount of PLN 176 million.

The cash inflow from the sale transaction took place on 4 March 2022. The profit on the sale in the amount of PLN 135 million was recognised in the item “Other operating income”.
Pursuant to the accounting policy adopted by the Group, the Group’s share in unrealised profit on the transaction between the Group and the entity accounted for using the equity method, decreased the profit due to this transaction in correspondence with the carrying amount of the Group’s interest in this entity. Since as at 31 December 2022 the carrying amount of the Group’s interest in the joint venture Sierra Gorda S.C.M. amounts to PLN 0, elimination of the unrealised profit proportionally to the Group’s interest (55%) will be recognised when the carrying amount of the Group’s interest in Sierra Gorda S.C.M. will be above the level of PLN 0.

Note 9.8.4 KGHM TOWARZYSTWO FUNDUSZY INWESTYCYJNYCH S.A.

As at 31 December 2022, the Group identified the assets and related liabilities of the subsidiary - KGHM TOWARZYSTWO FUNDUSZY INWESTYCYJNYCH S.A. as held for sale due to the fulfilment of the criteria set in IFRS 5 (i.e. they are available for immediate sale in their current state, the sale is highly probable, and it is expected that it will take place within 1 year from the date of classification as held for sale). Due to their insignificant value, these assets and liabilities were not separated in the statement of financial position to separate items "Assets held for sale (disposal group)" and "Liabilities associated with disposal group".

Note 9.8.5 Property, plant and equipment of Mercus Logistyka Sp. z o.o.

As at 31 December 2022, the Group identified property, plant and equipment of a subsidiary Mercus Logistyka Sp. z o.o. as held for sale due to the fulfilment of the criteria set in IFRS 5 (i.e. they are available for immediate sale in their current state, the sale is highly probable, and it is expected that it will take place within 1 year from the date of classification as held for sale). Due to their insignificant value, these assets were not separated in the statement of financial position to a separate item "Assets held for sale (disposal group)".

in PLN millions, unless otherwise stated

Part 10 – Working capital

Note 10.1 Inventories

Accounting policies	Important estimates, assumptions and judgments
The Group measures inventories at cost, not higher than the sales price less costs of completing production and costs to sell. Any differences in the value of finished goods constitutes a write-down and is recognised in the costs of sold products. The costs of inventories of finished goods, half-finished goods and work in progress include costs directly related to the production and variable and fixed indirect costs of production, assigned respectively. Fixed indirect costs of production are allocated on the basis of the normal level of production capacity utilisation. The valuation of the inventory component disposal is made according to the weighted average purchase price and the weighted average actual production cost. The Group also classifies as inventories stand-by spare parts that do not meet the criteria for recognition as property, plant and equipment in accordance with IAS 16 par. 7 and in accordance with the principles of capitalization of significant components, adopted in the accounting principles of the Parent Entity, where a materiality threshold of at least PLN 300 thousand has been set, for which the spare parts are analysed in terms of meeting the capitalization criteria of IAS 16. In relation to above, stand-by spare parts are in particular recognised as inventories, the value of which is insignificant or are not replaced at regular intervals, or which, after their installation, due to the failure of a spare part in an item of property, plant and equipment, will not contribute to obtain higher economic benefits from further use of this component, than those assumed at the moment of initial recognition of the component and putting it into use. The costs of such stand-by spare parts as a current maintenance costs of assets are recognized in profit or loss as they are used up.	In the consolidated financial statements the volume of those inventories of the KGHM INTERNATIONAL LTD. Group which arise from the leaching process, is determined based on the estimated recovery of metal from ore. The nature of the process of leaching copper from ore limits the precision of monitoring the level of inventories arising during this process. In subsequent reporting periods, adjustments are made to the estimated recovery of copper from the leaching of ore in a given reporting period to the level of production achieved in the subsequent period. As at 31 December 2022 the provisionally-set value of inventories amounted to PLN 38 million (as at 31 December 2021, PLN 99 million). The Group measures inventories at cost, not higher than the net realisable value. The Group determines the net sales price of copper at the end of the reporting period on the basis of forward LME (London Metal Exchange) curve for the metal, set for months in which the sale of copper inventories will be made.

in PLN millions, unless otherwise stated

		As at 31 December 2022	As at 31 December 2021
	Materials	2 084	1 562
	Half-finished goods and work in progress	4 835	3 494
	Finished products	1 777	1 195
	Merchandise	206	236
Note 10.4	**Total carrying amount of inventories, of which:**	**8 902**	**6 487**
	recognised in assets held for sale (disposal group)	-	150
	recognised as "inventories"	8 902	6 337

	Write-down of inventories during the reporting period	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 4.4	Write-down recognised in cost of sales*	(79)	(47)
	Write-down reversed in cost of sales**	55	88

Maturities of inventories	As at 31 December 2022	As at 31 December 2021
Maturity over the 12 months from the end of the reporting period	426	216
Maturity of up to 12 months from the end of the reporting period	8 476	6 271

** Including PLN 44 million due to a write-down recognised in KGHM INTERNATIONAL LTD. in 2022 since the cost was higher than the net realisable value.*
*** Including PLN 67 million due to a write-down reversed in KGHM INTERNATIONAL LTD. in 2021 due to the cessation of indications resulting in a write-down of inventory in previous periods, that is a change in estimates (an increase) of estimated copper production quantities from the heap leach.*

As at 31 December 2022 and in the comparable period, the value of inventories with a maturity of over 12 months mainly includes stand-by inventories of materials and spare parts to maintain production continuity and the finished rhenium product. Moreover, the KGHM INTERNATIONAL LTD. Group has an inventory of ore which will be used in the period of over 12 months concurrently with the higher quality ore extracted in the current period.

in PLN millions, unless otherwise stated

Note 10.2 Trade receivables

Accounting policies
Trade receivables are initially recognised at the transaction price (unless the receivables contains a significant financial component subject to separation and therefore the receivables are initially recognised at fair value). After initial recognition, trade receivables are measured as follows: – Receivables not transferred to non-recourse factoring and not based on the M+ pricing formula: at amortised cost while taking into account the loss allowance for expected credit losses (ECL). Trade receivables with maturity dates of less than 12 months are not discounted. – Receivables transferred to non-recourse factoring: at fair value through profit or loss, where the fair value is determined in the amount of their carrying amount less the factor's compensation, which include, among others, interest costs and risk assumption costs. Because of the short duration between the transferral of receivables to the factor and its payment and due to the low credit risk of the counterparty (factor), the fair value of these receivables does not include the impact of these factors. Receivables transferred to non-recourse factoring are obligatorily designated to the category of financial assets measured at fair value through profit or loss, because they were classified to a business model in which cash flows are realised solely by selling financial assets. – Receivables based on the M+ pricing formula: at fair value through profit or loss, where fair value is set as the nominal value (i.e. at the price in the invoice), adjusted by the impact of market and credit risks. Adjustment due to the market risk is calculated as the difference between the current market price for a given pricing period in the future (the period in which there will be a final determination of the settlement price) and the receivables' price recognised in the accounting books (multiplied by the sales volume). Adjustment due to the credit risk is calculated analogously to the calculation of expected credit losses for trade receivables measured at amortised cost. Receivables based on the M+ pricing formula are obligatorily designated to the category of financial assets measured at fair value through profit or loss, because these receivables do not pass the SPPI contractual cash flow test (solely payments of principal and interest) because of the element of variable price after the date of initial recognition of the receivables. Receivables measured at fair value may be measured based on the applied M+ pricing formula as well as due to transferral to factoring. The measurements are carried out independently of each other. The result of both measurements is recognised in the profit or loss in other operating income/(costs).

The Group is exposed to the credit risk and currency risk related to trade receivables. Credit risk management and assessment of the credit quality of receivables is presented in Note 7.5.2.3. Information on currency risk is presented in Note 7.5.1.3.

The following table presents the carrying amounts of trade receivables and the loss allowances for expected credit losses:

		As at 31 December 2022	As at 31 December 2021
	Trade receivables measured at amortised cost - gross value	466	435
	Loss allowance for expected credit losses	(39)	(36)
	Trade receivables measured at amortised cost - net value	427	399
	Trade receivables measured at fair value	751	627
Note 10.4	**Total, of which:**	**1 178**	**1 026**
	recognised in assets held for sale (disposal group)	-	15
	recognised as "trade receivables" and "other financial instruments measured at amortised cost"	1 178	1 011

in PLN millions, unless otherwise stated

Note 10.3 Trade and similar payables

Accounting policies
Trade and similar payables are initially recognised at fair value less transaction cost and are measured at amortised cost at the end of the reporting period. Accrued interest due to repayment of payables at a later date, in particular transferred to reverse factoring, is recognised in profit or loss, in the item "finance costs".
Important estimates, assumptions and judgments
Trade and similar payables presented in the statement of financial position also contain trade payables transferred to reverse factoring, which are in the category of "similar". Moreover, the item "similar liabilities" also includes intra-group trade payables transferred by the debtor to the factor, for which the debtor received payment from the factor. At the moment of transfer of the liabilities to reverse factoring, the Parent Entity recognises payables towards the factor, who due to the subrogation of receivables, from the legal point of view, assumes the rights and obligations common for trade payables. Since the reverse factoring is not directly regulated by IFRS, and as a result of the ambiguous nature of transactions, it was necessary for the Parent Entity to make an important judgment on the presentation of balances of payables transferred to factoring in the statement of financial position and the presentation of transactions in the statement of cash flows. The Parent Entity's judgement according to which the presentation of these balances in the statement of financial position under the item „Trade and similar payables" was confirmed by the IFRS Interpretations Committee in December 2020. The Parent Entity indicates that the actual deadline for the payment of trade payables covered by reverse factoring agreements is longer (up to 180 days) than the deadline for the payment of other trade payables which are not transferred to factoring, which usually amounts to 60 days, and it may indicate a change in the nature of these payables from trade to debt. However, this feature was assessed by the Parent Entity as insufficient to consider that the nature of the payables changed completely when the trade payables were transferred to reverse factoring. Apart from the above criterion, no other terms of payables covered by reverse factoring differ from the terms of other trade payables.

		As at 31 December 2022	As at 31 December 2021
	Non-current trade payables	186	187
	Current trade payables	3 076	2 919
	Current similar payables – reverse factoring	18	95
Note 10.4	**Trade and similar payables, of which:**	**3 280**	**3 201**
	recognised in liabilities related to disposal group	-	40
	recognised as "trade and similar payables" and "other non-current liabilities"	3 280	3 161

In 2022, the factors' total participation limit in the Group amounted to PLN 1 553 million (including PLN 1500 million in the Parent Entity). Currently, the Parent Entity has two agreements for the provision of factoring services which was implemented in 2019 in order to make it possible for suppliers to receive repayment of receivables faster, as part of the standard procurement process executed by the Parent Entity, alongside an extension of payment dates of payables by the Parent Entity to the factor. In the current year, because of the good liquidity situation of the Parent Entity, there were no reasons to use this form of settlement, and as at 31 December 2022 no liabilities were transferred to the factors and no trade payables were covered by reverse factoring. In the current financial year, Group companies transferred to the factors payables in the total amount of PLN 72 million (in the year ended 31 December 2021, the Parent Entity transferred to the factor payables in the amount PLN 988 million, Group companies transferred payables in the amount of PLN 67 million). As at 31 December 2022, trade payables in Group companies covered by reverse factoring amounted to PLN 18 million (as at 31 December 2021, in the Parent Entity - PLN 55 million, in Group companies – PLN 40 million). In the current financial year, the Group made payments towards the factors in the amount of PLN 150 million (in the financial year ended 31 December 2021: PLN 2 213 million). Interest costs accrued and paid towards the factor in 2022 amounted to PLN 3 million (in 2021: PLN 9 million).

Repayment dates of receivables due to reverse factoring do not exceed 12 months, and consequently all payables transferred to reverse factoring are presented as short-term.
The item trade payables contains payables due to the purchase and construction of fixed and intangible assets which, as at 31 December 2022, amounted to PLN 185 million in the non-current part and PLN 627 million in the current part (as at 31 December 2021, PLN 186 million and PLN 649 million, respectively).
The Group is exposed to currency risk arising from trade payables and to liquidity risk. Information on currency risk is presented in Note 7.5.1.3 and on liquidity risk in Note 8.3.1.
The fair value of trade payables approximates their carrying amount.

Note 10.4 Changes in working capital

Accounting policies
Cash flows arising from interest on reverse factoring transactions are presented in cash flows from financing activities. The actually repaid principal amounts of receivables transferred to reverse factoring to a factor are presented in cash flows from operating activities, and partially also from investment activities. Moreover, the Parent Entity, as regards changes in working capital in the statement of cash flows, presented a separate line "Change in trade payables transferred to factoring" for the purposes of clear and transparent presentation.

Important estimates, assumptions and judgments

The Parent Entity implemented reverse factoring in the period ended on 31 December 2019 (more information may be found in Note 10.3).
Since market practice with respect to the presentation of reverse factoring transactions in the statement of cash flows is not uniform, the Management Board had to apply its own judgment in this regard. In the case of these transactions, the Parent Entity had to make an assessment as to whether expenses related to payments towards the factor should be classified to cash flows from operating activities or to cash flows from financing activities in the statement of cash flows. Pursuant to IAS 7.11, an entity should present cash flows from operating, investing and financing activities in a manner which is most appropriate to its business, because it provides information that allows users of financial statements to assess the impact of those activities on the financial position of the entity and the amount of its cash and cash equivalents.

Due to the above, in the Parent Entity's view:
- presentation of the repayment of the principal amounts of receivables in the reverse factoring in cash flows from operating activities is compliant with the objective of individual transaction elements and consistent with the presentation of these transactions in the statement of financial position. When legal subrogation of receivables is made by the factor, from a legal standpoint he assumes the rights and responsibilities characteristic for trade receivables. Only cash flows from the repayment of principal amounts of receivables from liabilities due to the purchase and construction of fixed assets and intangible assets are presented under investing activities (more information may be found in Note 10.3).
- however, the financial aspect related to the factoring transaction is indicated in the presentation of interest in financing activities. This is consistent with recognising this interest in financing costs in the statement of profit or loss pursuant to the accounting policy adopted by the Parent Entity for the presentation of interest cost of reverse factoring in the financial activities.

in PLN millions, unless otherwise stated

	Inventories	Trade receivables	Trade payables	Similar payables	Working capital
As at 1 January 2022	(6 487)	(1 026)	3 106	95	**(4 312)**
As at 31 December 2022	(8 902)	(1 178)	3 262	18	**(6 800)**
Change in the statement of financial position	**(2 415)**	**(152)**	**156**	**(77)**	**(2 488)**
Exchange differences from translation of statements of operations with a functional currency other than PLN	43	16	(17)	-	**42**
Depreciation/amortisation recognised in inventories	117	-	-	-	**117**
Change in liabilities due to purchase of property, plant and equipment and intangible assets	-	-	41	-	**41**
Reclassification to property, plant and equipment	(10)	-	-	-	**(10)**
Reclassification from property, plant and equipment	16	-	-	-	**16**
As at a date of loss of control	(94)	(20)	79	-	**(35)**
Adjustments	**72**	**(4)**	**103**	**-**	**171**
Change in the statement of cash flows	**(2 343)**	**(156)**	**259**	**(77)**	**(2 317)**

	Inventories	Trade receivables	Trade payables	Similar payables	Working capital
As at 1 January 2021	(4 459)	(869)	2 498	1 264	**(1 566)**
As at 31 December 2021	(6 487)	(1 026)	3 106	95	**(4 312)**
Change in the statement of financial position	**(2 028)**	**(157)**	**608**	**(1 169)**	**(2 746)**
Exchange differences from translation of statements of operations with a functional currency other than PLN	41	20	(15)	-	**46**
Depreciation/amortisation recognised in inventories	91	-	-	-	**91**
Change in liabilities due to purchase of property, plant and equipment and intangible assets	-	-	(176)	54	**(122)**
Change in liabilities due to interest on reverse factoring	-	-	-	1	**1**
Reclassification to property, plant and equipment	(37)	-	-	-	**(37)**
Adjustments	**95**	**20**	**(191)**	**55**	**(21)**
Change in the statement of cash flows, including:	**(1 933)**	**(137)**	**417**	**(1 114)**	**(2 767)**
assets held for sale (disposal group) and liabilities related to disposal group	**13**	**(26)**	**(34)**	**-**	**(47)**

in PLN millions, unless otherwise stated

Part 11 – Employee benefits

Note 11.1 Employee benefits liabilities

Accounting policies

The Group is obliged to pay specified benefits following the period of employment (retirement benefits due to one-off retirement-disability rights, post-mortem benefits and the coal equivalent) and other long-term benefits (jubilee bonuses), in accordance with the Collective Labour Agreement.
The amount of the liabilities due to both of these benefits is estimated at the end of the reporting period by an independent actuary using the projected unit credit method.
The present value of liabilities from these benefits is determined by discounting estimated future cash outflow using the yield on treasury bonds expressed in the currency of the future benefits payments, with maturities similar to the date of settlement for liabilities.
Actuarial gains and losses from the measurement of specified benefits following the period of employment are recognised in other comprehensive income in the period in which they arose. Actuarial gains/losses from the measurement of other benefits (benefits due to jubilee bonuses) are recognised in profit or loss.

Significant estimates and assumptions

The carrying amount of the liability due to future employee benefits is equal to the present value of the liabilities due to defined benefits. The amount of the liability depends on many factors, which are used as assumptions in the actuarial method. Any changes to the assumptions may impact the carrying amount of the liability. Discount rates are one of the basic parameters for measuring the liability. At the end of the reporting period, based on the opinion of an independent actuary, an appropriate discount rate for the Group's companies is used for setting the present value of estimated future cash outflow due to these benefits. In setting the discount rate for the reporting period, the actuary applies yields of State Treasury bonds available at the balance sheet date, with maturities approximate to the average maturities of measured liabilities.

Other macroeconomic assumptions used to measure liabilities due to future employee benefits, such as the inflation rate or the minimum salary, are based on current market conditions.

Pursuant to IAS 19 paragraph 78, actuarial assumptions adopted for measurement of employee benefits in the Group are consistent because they reflect the economic relationships between factors such as inflation, a salary growth rate, a discount rate and a coal price growth rate. The additional analysis of assumptions prepared by the Parent Entity determined that the balance of provisions achieved using the adopted assumptions as to the salary growth and coal price growth could be achieved using the alternative paths of price growth of 6.0% and coal price growth of 6.25%. Taking into account the adopted finance discount rate of 6.75% it should be noted that the assumptions adopted for the measurement are consistent, pursuant to IAS 19 paragraph 78.

The assumptions used for measurement as at 31 December 2022 are presented in Note 11.2.

The sensitivity of future employee benefits liabilities to changes in the assumptions was set based on the amounts of the Parent Entity's liabilities (the Parent Entity's liabilities represent 91% of the Group's liabilities in the current year and 88% in the previous year). In the remaining Group companies, due to the immaterial amounts of liabilities in this regard, the impact of changes of the basic parameters adopted for the calculation of provisions on future employee benefits liabilities in the consolidated financial statements would be immaterial.

Impact of changes in the indicators on the balance of liabilities (the Parent Entity)

	As at 31 December 2022	As at 31 December 2021
an increase in the discount rate by 1 percentage point	(231)	(242)
a decrease in the discount rate by 1 percentage point	278	308
an increase in the coal price growth rate and an increase in the salary growth rate by 1 percentage point	299	228
a decrease in the coal price growth rate and a decrease in the salary growth rate by 1 percentage point	(227)	(177)

in PLN millions, unless otherwise stated

Components of the item: employee benefits liabilities

		As at 31 December 2022	As at 31 December 2021
	Non-current	2 621	2 307
	Current	272	161
Note 11.2	**Total liabilities due to future employee benefits programs, of which:**	**2 893**	**2 468**
	recognised in liabilities related to disposal group	**-**	**1**
	recognised as “employee benefits liabilities”	**2 893**	**2 467**
	Employee remuneration liabilities	358	297
	Social security liabilities	296	272
	Accruals (unused annual leave, bonuses, other)	773	719
	Other current employee liabilities, of which:	**1 427**	**1 288**
	recognised in liabilities related to disposal group	**-**	**12**
	recognised as “employee benefits liabilities”	**1 427**	**1 276**
	Total employee benefits liabilities	**4 320**	**3 756**

Employee benefits expenses

		from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
	Remuneration	5 370	4 725
	Costs of social security and other benefits	1 784	1 578
	Costs of future benefits	179	140
Note 4.1	**Employee benefits expenses**	**7 333**	**6 443**

in PLN millions, unless otherwise stated

Note 11.2 Changes in liabilities related to future employee benefits programs

		Total liabilities	Jubilee awards	Retirement and disability benefits	Coal equivalent	Other benefits
	As at 1 January 2021	**3 169**	**585**	**485**	**1 966**	**133**
Note 11.1	Total costs recognised in profit or loss	**140**	25	39	66	10
	Interest costs	**41**	7	6	26	2
	Current service costs	**128**	47	33	40	8
	Actuarial gains recognised in profit or loss	**(29)**	(29)	-	-	-
Note 8.2.2	Actuarial gains recognised in other comprehensive income	**(694)**	-	(45)	(628)	(21)
	Benefits paid	**(147)**	(58)	(37)	(50)	(2)
	As at 31 December 2021, of which:	**2 468**	**552**	**442**	**1 354**	**120**
	recognised in liabilities related to disposal group	1	-	1	-	-
	recognised as "employee benefits liabilities"	2 467	552	441	1 354	120
Note 11.1	Total costs recognised in profit or loss	**179**	52	44	72	11
	Interest costs	**88**	19	16	49	4
	Current service costs	**98**	40	28	23	7
	Actuarial gains recognised in profit or loss	**(7)**	(7)	**-**	-	-
Note 8.2.2	Actuarial (gains)/losses recognised in other comprehensive income	**422**	-	(20)	480	(38)
	Benefits paid	**(175)**	(68)	(33)	(70)	(4)
	Changes due to loss of control of subsidiaries	**(1)**	-	(1)	-	-
	As at 31 December 2022, of which:	**2 893**	**536**	**432**	**1 836**	**89**
	recognised in liabilities related to disposal group	-	-	-	-	-
	recognised as "employee benefits liabilities"	2 893	536	432	1 836	89

As at 31 December	2022	2021	2020	2019	2018
Present value of liabilities due to employee benefits	**2 893**	2 468	3 169	2 770	2 618

in PLN millions, unless otherwise stated

Main actuarial assumptions (of the Parent Entity) adopted for measurement as at 31 December 2022:

	2023	2024	2025	2026	2027 and beyond
- discount rate	6.75%	6.75%	6.75%	6.75%	6.75%
- coal price growth rate*	87.90%	5.90%	3.50%	2.50%	2.50%
- rate of growth of the lowest salary	19.60%	5.70%	5.00%	4.00%	4.00%
- expected inflation	13.10%	5.90%	3.50%	2.50%	2.50%
- future expected increase in salary	16.00%	9.00%	5.00%	4.00%	4.00%

** The increase in coal prices in 2023 was presented as an average for all Divisions of the Parent Entity. At the end of 2022, coal prices in individual Divisions which are the basis for setting the benefit ranged from 996.60 PLN/t to 1 792.00 PLN/t. In 2023 there will be an adjustment of coal prices to a uniform level of 2 150 PLN/t, and in 2024 and subsequent years the coal price growth rate was adopted at the level of expected inflation.*

Main actuarial assumptions (of the Parent Entity) adopted for measurement as at 31 December 2021:

	2022	2023	2024	2025	2026 and beyond
- discount rate	3.60%	3.60%	3.60%	3.60%	3.60%
- coal price growth rate*	10.00%	3.60%	2.50%	2.50%	2.50%
- rate of growth of the lowest salary	7.50%	5.10%	4.00%	4.00%	4.00%
- expected inflation	7.60%	3.60%	2.50%	2.50%	2.50%
- future expected increase in salary	8.00%	6.50%	4.00%	4.00%	4.00%

** At the end of 2021, coal prices in individual Divisions of the Parent Entity which are the basis for setting the coal benefit ranged from 887.95 PLN/t to 983.60 PLN/t. In 2022 an assumption of a 10% increase in coal prices was adopted, and in 2023 and subsequent years the coal price growth rate was adopted at the level of expected inflation.*

The change in actuarial gains/losses was caused by a change in the assumptions in respect of the increase in the discount rate, the increase in coal prices and future expected increase in salary.
For purposes of reassessment of the liabilities at the end of the current period, the parameters assumed were based on available forecasts of inflation, analysis of coal prices rates and of the lowest salary rates, and also based on the anticipated profitability of long-term treasury bonds.

Actuarial gains/losses as at 31 December 2022 versus assumptions adopted as at 31 December 2021

Change in financial assumptions	(7)
Change in demographic assumptions	(40)
Other changes	462
Total actuarial (gains)/losses	**415**

Actuarial gains/losses as at 31 December 2021 versus assumptions adopted as at 31 December 2020

Change in financial assumptions	(713)
Change in demographic assumptions	(111)
Other changes	101
Total actuarial (gains)/losses	**(723)**

in PLN millions, unless otherwise stated

Maturity profile of future employee benefits liabilities

Year of maturity:	**Total liabilities**	Jubilee awards	Retirement and disability benefits	Coal equivalent	Other benefits
2023	**272**	68	64	129	11
2024	**251**	54	63	129	5
2025	**198**	48	22	123	5
2026	**189**	44	26	114	5
2027	**173**	42	21	105	5
Other years	**1 810**	282	234	1 236	58
Total liabilities in the statement of financial position as at 31 December 2022	**2 893**	**538**	**430**	**1 836**	**89**

Maturity profile of future employee benefits liabilities

Year of maturity:	**Total liabilities**	Jubilee awards	Retirement and disability benefits	Coal equivalent	Other benefits
2022	**161**	57	39	55	10
2023	**191**	52	69	66	4
2024	**129**	41	20	64	4
2025	**126**	41	20	60	5
2026	**125**	39	24	57	5
Other years	**1 736**	324	270	1 052	90
Total liabilities in the statement of financial position as at 31 December 2021	**2 468**	**554**	**442**	**1 354**	**118**

in PLN millions, unless otherwise stated

Part 12 – Other notes

Note 12.1 Related party transactions

The accounting policies and significant estimates and assumptions presented in Parts 2 and 10 are applicable to transactions entered into with related parties.
The transactions between the Group and related parties include transactions with:

- the joint venture Sierra Gorda S.C.M.,
- entities controlled or jointly controlled by the State Treasury or over which it has significant influence, and
- the management board and the supervisory board (remuneration) – Note 12.9.

Operating income from related entities

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Revenues from sales of products, merchandise and materials to a joint venture	38	23
Interest income on loans granted to a joint venture	582	494
Revenues from other transactions with a joint venture	376	69
Revenues from other transactions with other related parties	11	11
Total	**1 007**	**597**

Purchase from related entities

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Purchase of services, merchandise and materials	32	30
Other purchase transactions	3	2
Total	**35**	**32**

Trade and other receivables from related parties

	As at 31 December 2022	As at 31 December 2021
From the joint venture Sierra Gorda S.C.M. (loans)	9 603	8 314
From the joint venture Sierra Gorda S.C.M. (other)	69	66
From other related parties	5	3
Total	**9 677**	**8 383**

Trade and other payables towards related parties

	As at 31 December 2022	As at 31 December 2021
Towards joint venture	58	58
Towards other related parties	2	1
Total	**60**	**59**

The State Treasury is an entity controlling KGHM Polska Miedź S.A. at the highest level. The Company makes use of the exemption to disclose a detailed scope of information on transactions with the Polish Government and entities controlled or jointly controlled by the Polish Government, or over which the Polish Government has significant influence (IAS 24.25).

Pursuant to the scope of IAS 24.26, as at 31 December 2022 and in the period from 1 January to 31 December 2022, the Group realised the following transactions with the Polish Government and entities controlled or jointly controlled by the Polish Government, unusual due to their nature or amount:

- due to an agreement on setting mining usufruct for the extraction of mineral resources and for the exploration for and assessment of mineral resources – balance of payables in the amount of PLN 229 million (as at 31 December 2021: PLN 228 million); including payables due to mining usufruct for the extraction of mineral resources recognised in costs in the amount of PLN 31 million (as at 31 December 2021: PLN 30 million),
- due to a reverse factoring agreement with the company PEKAO FAKTORING SP. Z O.O. – a payable in the amount of PLN 18 million, interest costs in the amount of PLN 3 million (as at 31 December 2021, payables in the amount of PLN 68 million and interest costs for the period from 1 January to 31 December 2021 in the amount of PLN 6 million),

- other transactions and economic operations related to spot currency exchange, depositing cash, granting bank loans, guarantees, and letters of credit (including documentary letters of credit), running bank accounts, processing of a documentary collection, servicing of special purpose funds and entering into transactions on the forward currency market with banks related to the State Treasury,
- due to disposal towards Polski Holding Hotelowy sp. z o.o. of all shares in the company INTERFERIE S.A. and Interferie Medical SPA sp. z o.o., revenues in the amount of PLN 167 million, details were presented in Note 9.8.2.

State Treasury companies may purchase bonds issued by KGHM Polska Miedź S.A.

The remaining transactions between the Group and the Polish Government and with entities controlled or jointly controlled by the Polish Government, or over which the government has significant influence, were within the scope of ordinary, daily economic operations. These transactions concerned the following:

- the purchase of goods (energy, fuels, services) to meet the needs of current operating activities. In the period from 1 January to 31 December 2022, the turnover from these transactions amounted to PLN 2 914 million (from 1 January to 31 December 2021: PLN 1 663 million), and, as at 31 December 2022, the unsettled balance of liabilities from these transactions amounted to PLN 340 million (as at 31 December 2021: PLN 224 million),
- sales to Polish State Treasury Companies. In the period from 1 January to 31 December 2022, the turnover from these sales amounted to PLN 430 million (from 1 January to 31 December 2021: PLN 146 million), and, as at 31 December 2022, the unsettled balance of receivables from these transactions amounted to PLN 241 million (as at 31 December 2021: PLN 24 million).

Note 12.2 Dividends paid

In accordance with Resolution No. 6/2022 of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 21 June 2022 regarding the appropriation of profit for the year ended 31 December 2021, the profit in the amount of PLN 5 169 million was appropriated as follows: as a shareholders dividend in the amount of PLN 600 million (PLN 3.00 per share) and transfer of PLN 4 569 million to the Company's reserve capital. The Ordinary General Meeting of KGHM Polska Miedź S.A. set the dividend date for 2021 at 7 July 2022 and the dividend payment date for 2021 at 14 July 2022.

In accordance with Resolution No. 7/2021 of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 7 June 2021 regarding the appropriation of profit for the year ended 31 December 2020, the profit in the amount of PLN 1 779 million was appropriated as follows: as a shareholders dividend in the amount of PLN 300 million (PLN 1.50 per share) and transfer of PLN 1 479 million to the Company's reserve capital. The Ordinary General Meeting of KGHM Polska Miedź S.A. set a dividend date for 2020 at 21 June 2021 and a dividend payment date for 2020 at 29 June 2021.

All shares of the Parent Entity are ordinary shares.

As at the date of publication, no decision was made as to the payment of dividend or appropriation of profit for 2022.

in PLN millions, unless otherwise stated

Note 12.3 Other assets

Accounting policies
Receivables not constituting financial assets are initially recognised at nominal value, and at the end of the reporting period they are measured in the amount receivable.

		As at 31 December 2022	As at 31 December 2021
	Other non-current non-financial assets	**220**	**161**
	Investment property	106	105
	Prepayments	14	5
	Non-financial advances	30	23
	Receivables due to overpayment of property tax	69	25
	Other	1	3
	Other current assets, of which:	**623**	**337**
Note 7.1	**Financial**	**337**	**172**
	Amounts retained (collateral) due to long-term construction contracts	13	10
	Receivables due to guarantees granted	29	20
	Receivables due to settled derivatives	37	10
	Receivables due to compensation for energy-intensive sector due to allocation of the costs of purchasing CO2 emission rights to the price of electricity	98	41
	Receivables due to settlement of the Franco Nevada streaming contract	113	34
	Other	47	57
	Non-financial	**286**	**165**
	Non-financial advances	108	46
	Receivables due to measurement of long-term contracts	99	62
	Receivables due to property and personal insurance	26	15
	Other	53	42
	Other non-current and current assets, total, of which:	**843**	**498**
	recognised in assets held for sale (disposal group)	-	3
	recognised as “other financial assets” and “other non-financial assets”	835	495

in PLN millions, unless otherwise stated

Note 12.4 Other liabilities

Accounting policies
Other financial liabilities are initially recognised at fair value less transaction costs, and at the end of the reporting period they are measured at amortised cost.

	As at 31 December 2022	As at 31 December 2021
Deferred income, including:	238	355
Liabilities due to Franco Nevada streaming contract	137	210
Trade payables	186	187
Other liabilities	119	78
Other liabilities – non-current, of which:	**543**	**620**
recognised in liabilities related to disposal group	-	3
recognised as "other liabilities"	543	617
Special purpose funds*	-	412
Deferred income, including:	134	147
Trade payables	87	106
Non-current assets received free of charge	2	5
Accruals, including:	976	830
Provision for purchase of property rights related to consumed electricity	83	98
Charges for discharging gases and dusts to the air	391	260
Other accounted costs, proportional to achieved revenues, which are future liabilities estimated on the basis of contracts entered into	220	196
Liabilities due to settled derivatives	34	159
Other financial liabilities	123	99
Other non-financial liabilities	62	43
Other liabilities – current, of which:	**1 329**	**1 690**
recognised in liabilities related to disposal group	-	29
recognised as "other liabilities"	1 329	1 661
Total – non-current and current liabilities	**1 872**	**2 310**

** Change in the presentation: to the presentation together with the non-current part of the Provision for decommissioning costs of mines and other facilities, which is a result of the change in judgment as to the period of expected cash outflows from the fund, disclosure in Note 9.4.*

in PLN millions, unless otherwise stated

Note 12.5 Assets and liabilities not recognised in the statement of financial position

The value of contingent assets and liabilities and other liabilities not recognised in the statement of financial position were determined based on estimates.

		As at 31 December 2022	As at 31 December 2021
	Contingent assets	**366**	**509**
	Guarantees received	195	325
	Promissory notes receivables	147	134
	Other	24	50
	Contingent liabilities	**452**	**466**
Note 8.6	Guarantees and letters of credit	187	179
Note 8.6	Promissory note payables	170	173
	Property tax on underground mine workings	34	47
	Other	61	67
	Other liabilities not recognised in the statement of financial position	**34**	**99**
	Liabilities towards local government entities due to expansion of the tailings storage facility	34	99

Note 12.6 Capital commitments related to property, plant and equipment and intangible assets

Capital commitments incurred in the reporting period, but not yet recognised in the consolidated statement of financial position, were as follows:

	As at 31 December 2022	As at 31 December 2021
Capital commitments due to the purchase of:		
property, plant and equipment	1 390	1 056
intangible assets	18	26
Total capital commitments	**1 408**	**1 082**

The Group's share in capital commitments of joint ventures accounted for using the equity method (Sierra Gorda S.C.M.) is presented in Note 6.1.

Note 12.7 Employment structure

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
White-collar employees	10 650	10 618
Blue-collar employees	23 004	22 884
Total (full-time)	**33 654**	**33 502**

Note 12.8 Other adjustments in the statement of cash flows

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Losses on measurement and realisation of derivatives related to sources of external financing	19	10
Other	10	(9)
Total	**29**	**1**

Note 12.9. Remuneration of key managers

Remuneration of members of the Management Board (in PLN thousands)	from 1 January 2022 to 31 December 2022				
	Period when function served	Remuneration for the period of service as a member of the Management Board	Remuneration after the period of service as a member of the Management Board	Benefits due to termination of employment	Total earnings
Members of the Management Board serving in the function as at 31 December 2022					
Tomasz Zdzikot	01.09-31.12	373	-	-	**373**
Mirosław Kidoń	10.12-31.12	64	-	-	**64**
Marek Pietrzak	01.01-31.12	1 079	-	-	**1 079**
Marek Świder	15.03-31.12	836	-	-	**836**
Mateusz Wodejko	21.12-31.12	32	-	-	**32**
Members of the Management Board not serving in the function as at 31 December 2022					
Marcin Chludziński	01.01-11.10	1 939	-	435	**2 374**
Adam Bugajczuk	01.01-31.08	1 667	-	-	**1 667**
Paweł Gruza	01.01-09.08	1 604	-	163	**1 767**
Andrzej Kensbok	01.01-06.12	1 679	-	298	**1 977**
Katarzyna Kreczmańska-Gigol	-	-	277	-	**277**
Jerzy Paluchniak	01.09-11.10	120	-	-	**120**
Radosław Stach	-	-	277	-	**277**
Dariusz Świderski	01.01-21.02	148	600	14	**762**
TOTAL		**9 541**	**1 154**	**910**	**11 605**

Remuneration of members of the Management Board (in PLN thousands)	from 1 January 2021 to 31 December 2021				
	Period when function served	Remuneration for the period of service as a member of the Management Board	Remuneration after the period of service as a member of the Management Board	Benefits due to termination of employment	Total earnings
Members of the Management Board serving in the function as at 31 December 2021					
Marcin Chludziński	01.01-31.12	2 220	-	-	**2 220**
Adam Bugajczuk	01.01-31.12	1 886	-	-	**1 886**
Paweł Gruza	01.01-31.12	1 881	-	-	**1 881**
Andrzej Kensbok	16.04-31.12	698	-	-	**698**
Marek Pietrzak	26.10-31.12	177	-	-	**177**
Dariusz Świderski	15.05-31.12	603	-	-	**603**
Members of the Management Board not serving in the function as at 31 December 2021					
Katarzyna Kreczmańska-Gigol	01.01-15.04	1 193	-	475	**1 668**
Radosław Stach	01.01-15.04	1 189	-	41	**1 230**
TOTAL		**9 847**	**-**	**516**	**10 363**

Remuneration of members of the Supervisory Board (in PLN thousands)	from 1 January 2022 to 31 December 2022			
	Period when function served	Current employee benefits	Current benefits due to serving in the function	Total earnings
Members of the Supervisory Board serving in the function as at 31 December 2022				
Agnieszka Winnik - Kalemba	01.01-31.12	-	164	**164**
Katarzyna Krupa	01.01-31.12	-	149	**149**
Wojciech Zarzycki	22.06-31.12	-	78	**78**
Józef Czyczerski	01.01-31.12	203	150	**353**
Przemysław Darowski	01.01-31.12	109	149	**258**
Andrzej Kisielewicz	01.01-31.12	-	149	**149**
Bogusław Szarek	01.01-31.12	372	149	**521**
Marek Wojtków	07.10-31.12	-	35	**35**
Radosław Zimroz	07.10-31.12	-	35	**35**
Piotr Ziubroniewicz	24.11-31.12	-	15	**15**
Members of the Supervisory Board not serving in the function as at 31 December 2022				
Piotr Dytko	22.06-07.10	-	44	**44**
Jarosław Janas	01.01-21.06	-	71	**71**
Robert Kaleta	01.01-07.10	-	115	**115**
Bartosz Piechota	01.01-21.06	-	71	**71**
TOTAL		**684**	**1 374**	**2 058**

Remuneration of members of the Supervisory Board (in PLN thousands)	from 1 January 2021 to 31 December 2021			
	Period when function served	Current employee benefits	Current benefits due to serving in the function	Total earnings
Members of the Supervisory Board serving in the function as at 31 December 2021				
Agnieszka Winnik - Kalemba	01.01-31.12	-	142	**142**
Katarzyna Krupa	06.07-31.12	-	66	**66**
Jarosław Janas	01.01-31.12	-	136	**136**
Józef Czyczerski	01.01-31.12	186	136	**322**
Przemysław Darowski	01.01-31.12	104	136	**240**
Robert Kaleta	06.07-31.12	-	66	**66**
Andrzej Kisielewicz	01.01-31.12	-	144	**144**
Bartosz Piechota	01.01-31.12	-	136	**136**
Bogusław Szarek	01.01-31.12	265	136	**401**
Members of the Supervisory Board not serving in the function as at 31 December 2021				
Katarzyna Lewandowska	01.01-20.04	-	42	**42**
Marek Pietrzak	01.01-25.10	-	111	**111**
TOTAL		**555**	**1 251**	**1 806**

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Current employee benefits of other key managers (in PLN thousands)	3 496	3 934

Based on the definition of key management personnel according to IAS 24 and based on an analysis of the rights and scope of responsibilities of members of management bodies of the KGHM Polska Miedź S.A. Group arising from corporate documents and from management contracts, the members of the Board of Directors of KGHM INTERNATIONAL LTD. and the President of the Board of Directors of KGHM INTERNATIONAL LTD. were recognised as other key managers of the Group.

Note 12.10 Remuneration of the entity entitled to audit the financial statements and of entities related to it in PLN thousands

	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Companies of the PricewaterhouseCoopers group, total	**5 429**	**4 376**
From the contract for the review and audit of financial statements and contracts for assurance services, of which:	**5 330**	**4 207**
audit of annual financial statements	4 307	3 626
assurance services, of which:	1 023	581
review of financial statements	818	508
other assurance services	205	73
From realisation of other contracts	**99**	**169**

in PLN millions, unless otherwise stated

Note 12.11 Composition of the Group

Company	Head office	% of Group's share As at 31 December 2022	% of Group's share As at 31 December 2021
BIPROMET S.A.	Katowice	100	100
CBJ sp. z o.o.	Lubin	100	100
CENTROZŁOM WROCŁAW S.A.	Wrocław	100	100
CUPRUM Zdrowie sp. z o.o. (formerly CUPRUM Nieruchomości sp. z o.o.)	Wrocław	100	100
"Energetyka" sp. z o.o.	Lubin	100	100
Fundusz Hotele 01 Sp. z o.o.	Wrocław	100	100
Fundusz Hotele 01 Sp. z o.o. S.K.A.	Wrocław	100	100
INOVA Spółka z o.o.	Lubin	100	100
INTERFERIE S.A.	Legnica	-	69.71
Interferie Medical SPA Sp. z o.o.	Legnica	-	90.12
KGHM CUPRUM sp. z o.o. – CBR	Wrocław	100	100
CUPRUM Development sp. z o.o.	Wrocław	100	100
KGHM Kupfer AG	Weißwasser	100	100
KGHM VII FIZAN	Wrocław	-	100
KGHM Metraco S.A.	Legnica	100	100
KGHM (SHANGHAI) COPPER TRADING CO., LTD.	Shanghai	100	100
KGHM TFI S.A.	Wrocław	100	100
KGHM ZANAM S.A.	Polkowice	100	100
"MIEDZIOWE CENTRUM ZDROWIA" S.A.	Lubin	100	100
NITROERG S.A.	Bieruń	87.12	87.12
NITROERG SERWIS Sp. z o.o.	Wilków	87.12	87.12
PeBeKa S.A.	Lubin	100	100
MERCUS Logistyka sp. z o.o.	Polkowice	100	100
PHU "Lubinpex" Sp. z o.o.	Lubin	100	100
Future 1 Sp. z o.o.	Lubin	100	100
KGHM Centrum Analityki Sp. z o.o.	Lubin	100	100
Future 3 Sp. z o.o.	Lubin	100	100
Future 4 Sp. z o.o.	Lubin	100	100
Future 5 Sp. z o.o.	Lubin	100	100
Future 7 Sp. z o.o. in liquidation	Lubin	-	100
PMT Linie Kolejowe Sp. z o.o.	Owczary	100	100
POL-MIEDŹ TRANS Sp. z o.o.	Lubin	100	100
Polska Grupa Uzdrowisk Sp. z o.o.	Wrocław	100	100
Uzdrowisko Cieplice Sp. z o.o.-Grupa PGU	Jelenia Góra	98.85	98.85
Uzdrowiska Kłodzkie S.A. - Grupa PGU	Polanica Zdrój	100	100
Uzdrowisko Połczyn Grupa PGU S.A.	Połczyn Zdrój	100	100
Uzdrowisko Świeradów-Czerniawa Sp. z o.o.-Grupa PGU	Świeradów Zdrój	99.4	99.4
WMN "ŁABĘDY" S.A.	Gliwice	84.98	84.98
WPEC w Legnicy S.A.	Legnica	100	100
Zagłębie Lubin S.A.	Lubin	100	100
OOO ZANAM VOSTOK	Gay (Russia)	100	100
TUW Cuprum	Lubin	99.49	100

in PLN millions, unless otherwise stated

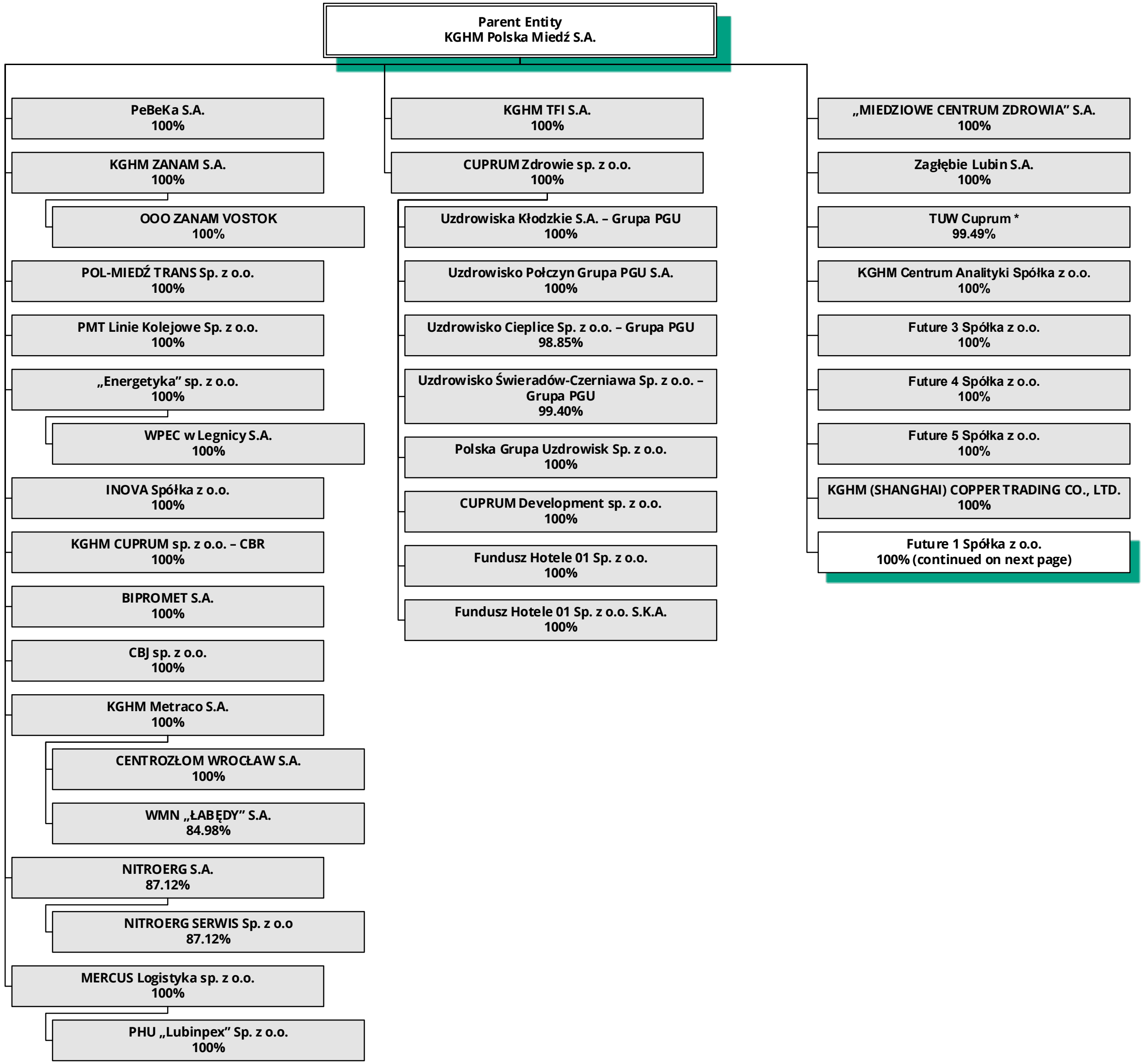
Company	Head office	% of Group's share As at 31 December 2022	As at 31 December 2021
KGHM INTERNATIONAL LTD. Group			
KGHM INTERNATIONAL LTD.	Canada	100	100
KGHM AJAX MINING INC.	Canada	80	80
Sugarloaf Ranches Ltd.	Canada	80	80
KGHMI HOLDINGS LTD.	Canada	100	100
Quadra FNX Holdings Chile Limitada	Chile	100	100
Aguas de la Sierra Limitada	Chile	100	100
Quadra FNX FFI S.à r.l.	Luxembourg	100	100
Robinson Holdings (USA) Ltd.	USA	100	100
Wendover Bulk Transhipment Company	USA	100	100
Robinson Nevada Mining Company	USA	100	100
Carlota Holdings Company	USA	100	100
Carlota Copper Company	USA	100	100
FNX Mining Company Inc.	Canada	100	100
DMC Mining Services Ltd.	Canada	100	100
Quadra FNX Holdings Partnership	Canada	100	100
DMC Mining Services Mexico, S.A. de C.V. (*formerly Raise Boring Mining Services, S.A. de C.V.*)	Mexico	100	100
FNX Mining Company USA Inc.	USA	100	100
DMC Mining Services Corporation	USA	100	100
Centenario Holdings Ltd.	Canada	100	100
Minera Carrizalillo SpA	Chile	100	100
KGHM Chile SpA	Chile	100	100
FRANKE HOLDINGS LTD.	Canada	100	100
Sociedad Contractual Minera Franke	Chile	-	100
0899196 B.C. Ltd.	Canada	100	100
DMC Mining Services (UK) Ltd.	The United Kingdom	100	100
DMC Mining Services Colombia SAS	Colombia	100	100
DMC Mining Services Chile SpA	Chile	100	100

Changes in the organisational structure of the KGHM Polska Miedź S.A. Group

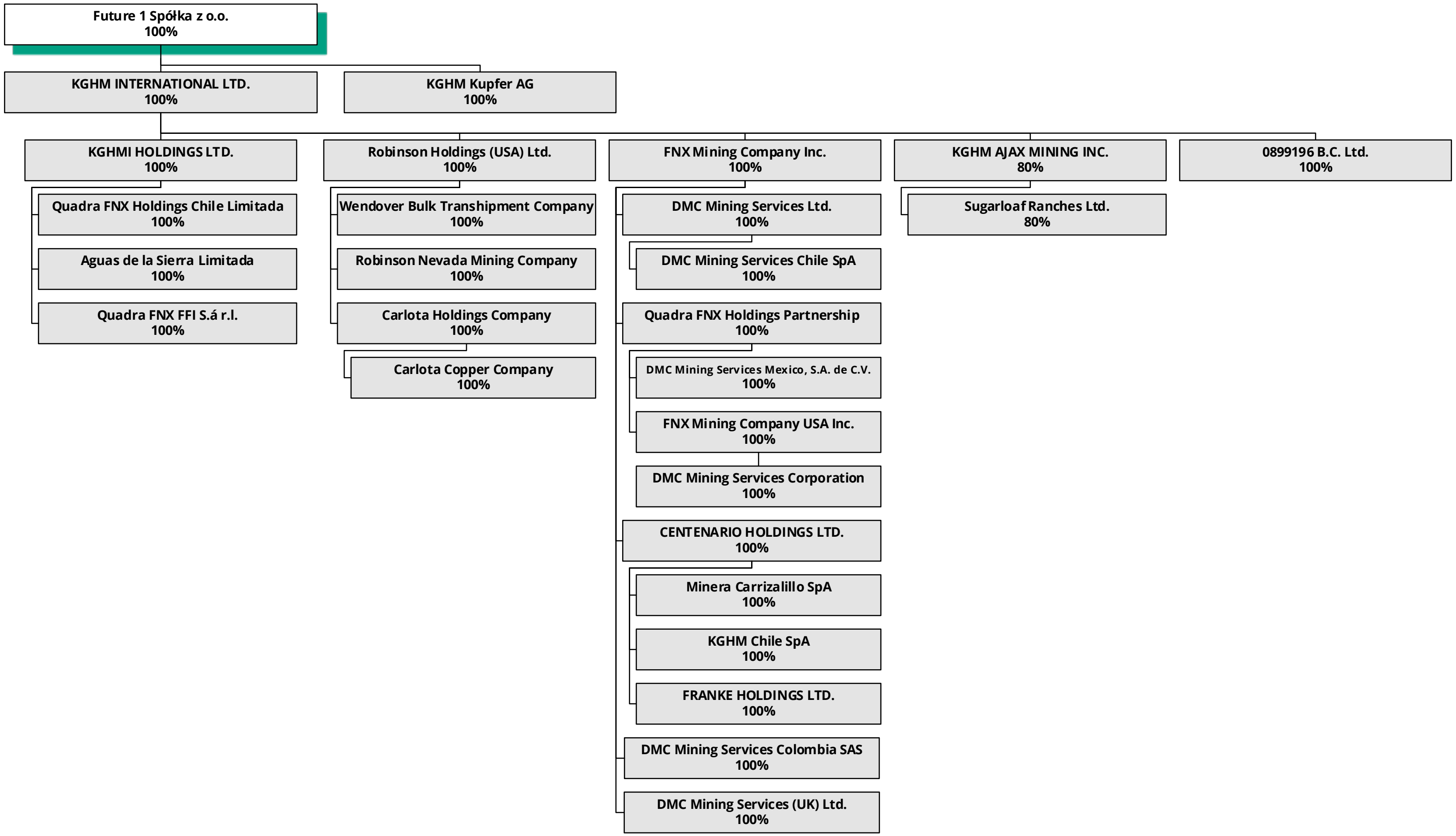
As a result of the reorganisation process of the Group, which was advanced in the second half of 2022, the following events took place within the portfolio companies of the KGHM VII FIZAN Fund:

- on 20 July 2022, the Extraordinary Shareholders' Meeting of the direct subsidiary CUPRUM Nieruchomości sp. z o.o. increased the share capital of this entity by the amount of PLN 368 million. All of the shares in the increased share capital were acquired by KGHM Polska Miedź S.A. At the same time, the name of the company was changed from CUPRUM Nieruchomości sp. z o.o. to CUPRUM Zdrowie sp. z o.o.;
- from 27 July to 1 August 2022, KGHM VII FIZAN carried out sales to the company CUPRUM Nieruchomości sp. z o.o. of shares in all portfolio companies of the Fund, including four spa companies: Uzdrowiska Kłodzkie S.A. - Grupa PGU, Uzdrowisko Połczyn Grupa PGU S.A., Uzdrowisko Cieplice Sp. z o.o. - Grupa PGU, Uzdrowisko Świeradów - Czerniawa Sp. z o.o. – Grupa PGU;
- following the reorganisation, KGHM VII FIZAN acquired from KGHM Polska Miedź S.A., on the Parent Entity's demand, 100% of Investment Certificates of the Fund for the amount of PLN 367 million and on 22 November 2022, KGHM VII FIZAN was liquidated.

Diagram of the KGHM Polska Miedź S.A. Group as at 31 December 2022



** Unit excluded from consolidation due to its insignificant impact on the consolidated financial statements.*



Future 1 Spółka z o.o. 100%
KGHM INTERNATIONAL LTD. 100%
KGHM Kupfer AG 100%
KGHMI HOLDINGS LTD. 100%
Quadra FNX Holdings Chile Limitada 100%
Aguas de la Sierra Limitada 100%
Quadra FNX FFI S.á r.l. 100%
Robinson Holdings (USA) Ltd. 100%
Wendover Bulk Transhipment Company 100%
Robinson Nevada Mining Company 100%
Carlota Holdings Company 100%
Carlota Copper Company 100%
FNX Mining Company Inc. 100%
DMC Mining Services Ltd. 100%
DMC Mining Services Chile SpA 100%
Quadra FNX Holdings Partnership 100%
DMC Mining Services Mexico, S.A. de C.V. 100%
FNX Mining Company USA Inc. 100%
DMC Mining Services Corporation 100%
CENTENARIO HOLDINGS LTD. 100%
Minera Carrizalillo SpA 100%
KGHM Chile SpA 100%
FRANKE HOLDINGS LTD. 100%
DMC Mining Services Colombia SAS 100%
DMC Mining Services (UK) Ltd. 100%
KGHM AJAX MINING INC. 80%
Sugarloaf Ranches Ltd. 80%
0899196 B.C. Ltd. 100%

Note 12.12 Information on the impact of Covid-19 and the war in Ukraine on the Company's and Group's operations

The greatest impact on the operations and results of the KGHM Polska Miedź S.A. Group is from the Parent Entity and, to a lesser extent, the KGHM INTERNATIONAL LTD. Group.

KEY RISK CATEGORIES

The most significant risk factors related to the COVID-19 pandemic and the war in Ukraine impacting the Company's and Group's activities are:

- increased absenteeism amongst employees of the core production line as a result of subsequent waves of infection by the SARS-CoV-2 virus,
- further increase in the prices of fuels and energy carriers,
- interruptions in the supply chain and the availability of materials (e.g. steel), fuels and energy on international markets,
- interruptions and logistical restrictions as regards international transport,
- restrictions in certain sales markets, a drop in demand and optimisation of inventories of raw materials and finished products amongst customers,
- the global economic slowdown,
- potential exceptional legal changes,
- volatility in copper, silver and molybdenum prices,
- volatility in molybdenum prices,
- volatility in the USD/PLN exchange rate,
- volatility in electrolytic copper production costs, including in particular due to the minerals extraction tax, changes in the value of purchased copper-bearing materials consumed and volatility in prices of energy carriers and electricity,
- the increase in prices of materials and services due to the observed high inflation, and
- the general uncertainty on financial markets and the economic effects of the crisis.

Evaluation of the key categories of risk which are impacted by the coronavirus pandemic and the war in Ukraine is performed by the on-going monitoring of selected information in the areas of production, sales, supply chains, personnel management and finance, in order to support the verification and assessment process of the current financial and operating situation of KGHM Polska Miedź S.A.

IMPACT ON THE METALS MARKET AND SHARES PRICE

From the Group's point of view, an effect of the COVID-19 pandemic and the war in Ukraine is an increase in market risk related to volatility in metals prices and market indices. The Company's share price at the end of 2022 increased by 45% compared to the price at the end of the third quarter of 2022, decreased by 9% compared to the end of 2021 and at the close of trading on 30 December 2022 amounted to PLN 126.75. During the same periods the WIG index increased by 14% and fell by 17%, while the WIG20 index increased by 30% and fell by 21%. As a result of changes in the share price of KGHM, the Company's capitalisation decreased from PLN 27.88 billion at the end of 2021 to PLN 25.35 billion at the end of 2022.
After a stable first half of 2022, when the average price of copper amounted to 9 761 USD/t, the price decreased by 18.6% compared to the average price of copper in the second quarter of 2022. From November 2022, an upward trend was recorded and in the fourth quarter of 2022 the average price of copper increased by 3.3.% compared to the average price of copper in the third quarter of 2022. The average price of copper in 2022 amounted to 8 797 USD/t, which was at the level assumed in the budget.

IMPACT ON THE FUELS AND ENERGY CARRIERS MARKETS AND ON THE AVAILABILITY OF RAW AND OTHER MATERIALS

The potential continuation of increases in prices of fuels and energy carriers may still be the main factor generating a further increase in the cost of sales, selling costs and administrative expenses.

While individual deviations have been observed in the availability of raw and other materials, at present the KGHM Polska Miedź S.A. Group is still not experiencing a substantial negative impact of these fluctuations on its operations. Taking into consideration the continuity of supply of energy carriers (natural gas, coal, coke), at present the KGHM Polska Miedź S.A. Group is not experiencing any negative impact from the suspension of Russian natural gas, coal and coke deliveries, and is fully capable of maintaining the continuity of the core production business and other production processes.

KGHM Polska Miedź S.A., as one of the largest electricity consumers in the country, has been diversifying its demand for electricity for many years according to an effective strategy developed over the years, which includes self-generation. The purchase is realised under bilateral contracts, framework agreements with many suppliers and on the Polish Power Exchange (these contracts are not financial instruments under IFRS). The policy for the purchase of electricity and gaseous fuel has been advanced for years under the Standing Commission for the purchase of electricity, gaseous fuel and property rights.

Nevertheless, regardless of the lack of a significantly negative impact of the aforementioned limitations on the Group's activities, the Parent Entity recorded a negative impact of the price increases on the fuels and energy carriers market, which ultimately resulted in deviations from budget targets for 2022, on the cost side of KGHM Polska Miedź S.A. Details on the results of the operating segments may be found in sections 8-11 of the Management Board's report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2022.

IMPACT ON THE SPA ACTIVITIES OF THE GROUP

The increased number of patients with the SARS-CoV-2 virus omicron variant recorded at the start of 2022, and in subsequent months the war in Ukraine, caused a temporary decline in the number of reservations and customer stays in the spa facilities. Nonetheless, beginning at the turn of April and May 2022, the situation systematically improved and stabilised. Starting from 16 May 2022, the state of pandemic was rescinded and was replaced by the state of pandemic threat, which remains in force until rescinded. In the fourth quarter of 2022 no direct negative impact of COVID-19 was recorded on the functioning of the market in which these companies operate. Therefore, the financial forecasts of these companies for 2023 and subsequent years do not assume restrictions of their operations or any temporary suspensions in the operations of their spa facilities.

The spa companies involved in curative activities, which are financed from public funds, take advantage of the protection arising from the law on particular solutions aimed at protecting consumers of natural gas due to the situation on the natural gas market. The protection provided by this law will be in force to the end of 2023. The financial obligations of the spas to their creditors and lessors in the fourth quarter of 2022 were regulated on time, while the improved results, despite the higher-than-expected costs of electricity, natural gas and debt servicing, had a positive impact on meeting the conditions included in the investment loan agreement with the bank Pekao S.A.

As a result of the funds received from the 2.0 Shield for Large Enterprises from the Polish Development Fund (PDF, Polski Fundusz Rozwoju S.A.) for periods in which the operations were shut down, in August 2022 Uzdrowisko Połczyn Grupa PGU S.A. and Uzdrowiska Kłodzkie S.A. – Grupa PGU settled the obtained support and received permission for remission of the loan. Other companies which received subsidies under the PDF's Financial Shield program for the small and medium-sized enterprises sector are awaiting the decision of the PDF as to the settlement of the support.

IMPACT ON THE ACTIVITIES OF THE PARENT ENTITY AND OTHER COMPANIES OF THE GROUP

The pandemic situation caused by COVID-19 did not have a significant impact on the operations of the Group. At the date of publication of this report the Management Board of the Parent Entity estimates the risk of loss of going concern caused by COVID-19 to still be low.

The geopolitical situation associated with the direct aggression of Russia against Ukraine and the implemented system of sanctions does not currently limit the operations of the Group, while the risk of interruptions to the operational continuity of the Group in this regard continues to be considered as low.

Despite the high inflation observed in the global economy, resulting in the tightening of the monetary policy, the demand for the Group's key products did not deteriorate significantly in the fourth quarter of 2022. The metal prices were characterised by an upward dynamic resulting, among others, from the depreciation of the US dollar. In addition, the easing of the "zero COVID" policy by the Chinese authorities gave rise to the expectation of increased consumption of metals in China in 2023, which also had a positive impact on the increase in metal prices at the end of 2022.

In the following year, the main sources of risk for economic development will be the high level of inflation and Russia's aggression against Ukraine, which may result in an economic slowdown in key industries for metal consumption (e.g. construction). Currently, it is not possible to estimate the impact of these factors on the potential net result, however the situation is continuously being monitored and simultaneously possible mitigation measures are being used.

In terms of the availability of capital and the level of debt, the Group holds no bank loans drawn from institutions threatened with sanctions.

With respect to exchange differences (the measurement of balance sheet items denominated in foreign currencies), a weakening of the PLN may increase foreign exchange gains (unrealised) due to the fact that the amount of the loans granted by KGHM in USD is higher than the amount of borrowings in USD.

With regard to other companies of the KGHM Polska Miedź S.A. Group, the situation in Ukraine in 2022 did not have a significant impact on the operating results generated by these entities.

PREVENTIVE ACTIONS IN THE GROUP

In KGHM Polska Miedź S.A. as well as in all international mines of the KGHM Polska Miedź S.A. Group and Sierra Gorda S.C.M., thanks to the implementation of a variety of preventative measures there were no production stoppages which would have been directly attributable to the pandemic and the war in Ukraine. As a result, the Group's production of copper, silver and molybdenum in 2022 was higher than the level assumed in the budget.

For years, KGHM Polska Miedź S.A. has applied procedures related to the monitoring of repayment of receivables. The timeliness of payments by customers is subject to daily reporting, while any recorded interruptions in cash flows from customers are immediately explained. In terms of sales, currently the majority of customers do not report significantly negative impact from the previous waves of the pandemic on their activities, thanks to which the trade receivables towards the Parent Entity are paid on time, while deliveries are sent to customers without major interruptions.

The strategy of diversification of suppliers applied by the entire KGHM Polska Miedź S.A. Group and the use of alternative solutions at the present time effectively mitigate the risk of interruptions in the supply chains of raw and other materials.

The Group is fully capable of meeting its financial obligations. The financial resources held by the Group and the obtained borrowings guarantee its continued financial liquidity. The financing structure of the Group on the level of the Parent Entity based on long-term and diversified sources of financing, provided the Company and the Group with long-term financial stability by maintaining a stable spread of debt maturities and optimising its cost.

Due to the centralisation of the process of obtaining external financing for the needs of the entire Group, in order to transfer liquidity within the Group, a debt instrument in the form of owners loans is used to support the investment process, and the Group uses local and international cash pooling to service its daily operations.

Currently, the Parent Entity does not identify a significant risk of a breach in the financial terms (so-called "covenants") contained in external financing agreements, related to the COVID-19 pandemic and the war in Ukraine.

The Group continues to advance its investment projects in accordance with established schedules and therefore does not identify any increase in risk related to their continuation due to the effects of the coronavirus pandemic and the war in Ukraine.

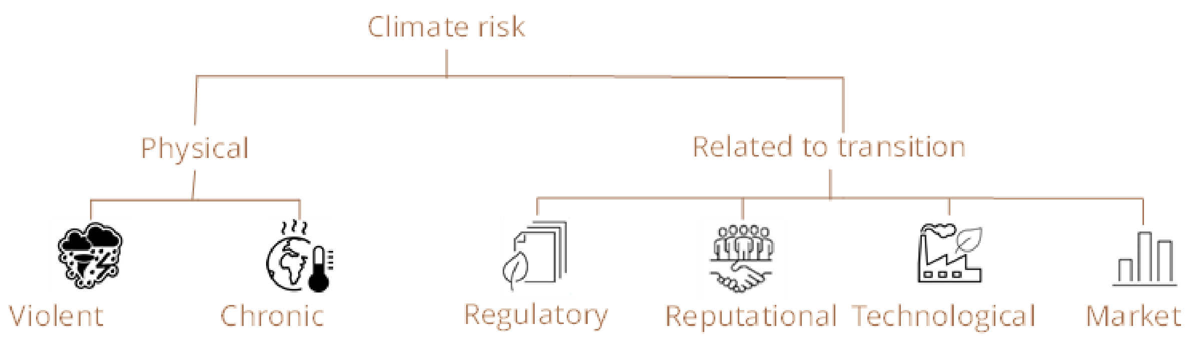
During the reporting period there were no interruptions in the continuity of the Group's operations caused by infections of this virus amongst the employees and no substantially higher level of absenteeism amongst employees was recorded.

In the Company, the process continued of implementing a comprehensive business continuity management system, which also enables a detailed breakdown of the scope of actions undertaken as regards managing corporate risk in terms of the risk of a catastrophic impact and the small probability of their occurrence.
Taking into consideration the risk of appearance of new mutations of the SARS-CoV-2 virus and the next wave of the COVID-19 pandemic observed in China, there is still uncertainty as to the potential development of the pandemic situation in the world, in particular as to the consequence of its impact on the economic and social situation in Poland and globally. From the start of the COVID-19 pandemic, China maintained a restrictive "zero covid" policy, and in the fourth quarter of 2022 it decided to lift most of the restrictions. The expected economic recovery, given the improved pandemic situation so far, was slowed down by the Russia's aggression against Ukraine with an impact on food security, high prices of energy and the Producer Price Index, as well as problems with access to synthetic fertilizers. With respect to stability and the continuity of energy carriers supply chains, the directions of energy-climate geopolitics will be of importance, especially in the context of gaining independence by European countries from Russian deliveries of natural gas and coal and the effects of the plan adopted by the EU Member States to reduce natural gas consumption in winter. The Parent Entity continuously monitors the international economic situation in order to assess its potential negative impact on the KGHM Polska Miedź S.A. Group and to take anticipative actions to mitigate this impact.

Note 12.13 Risk and hazards associated with climate change

The KGHM Polska Miedź S.A. Group is a conscious and responsible participant in the energy transition and adaptation to climate changes and the management of climate risk are of key importance to it. The Group continuously evaluates the risk associated with the climate and the impact on its operations under the process of Corporate Risk Management of the KGHM Polska Miedź S.A. Group, which was described in more detail in the Management Board's report on the activities of KGHM POLSKA MIEDŹ S.A. and of the KGHM POLSKA MIEDŹ S.A. Group in 2022, Section 2.6. Risk Management.

The negative impact of climate change on the activities of the Group is analysed using the classification presented below.



The Group is exposed to physical climate risk, arising from specified events, in particular related to violent and chronic weather phenomena resulting from changes in the climate, such as storms, floods, fires or heat waves, as well as permanent changes in weather patterns, which could impact the operations of the Group, among others, through disruptions in the supply chain, the continuity of the core business and an increase in operating costs directly related to the core business as well as through more difficult working conditions.

The climate risk related to the transition, to which the Group is exposed, arises from the need to adapt the economy to gradual climate change. This risk category comprises questions related to legal requirements, technological progress towards a low-carbon economy and changes in demand and supply for certain products and services, whose production is associated with the climate risk as well as the growing expectations of stakeholders regarding the Group as to the reduction of its impact on the climate. A detailed description of identified, key climate risks associated with the negative impact of climate changes on the activities of the Group, including parameters used in their assessment and actions undertaken by the Group to mitigate their impact, is presented in the Management Board's report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2022, Section 3.3. Approach to climate risk management.

While assessing the impact of identified climate risks on the Group's activities, in particular the volatile costs of CO_2 emission rights, the increase in costs of electricity, costs associated with research and additional expenditures on development of internal energy sources, the following areas were subjected to detailed assessment:

- adopted periods of economic utility of fixed assets and their residual values,
- analysis of the existence of indications of the possibility of impairment of property, plant and equipment and intangible assets,
- assumptions which are a part of the measurement of loans granted,
- revaluation of the provision for future decommissioning costs of mines and other technological facilities,
- revaluation of provisions for additional costs of sales, selling costs and administrative expenses,
- liabilities and liabilities due to guarantees associated with potential fines and environmental penalties.

As a result of the aforementioned work, as at 31 December 2022 no significant impact of climate risk on the aforementioned areas was identified.

Note 12.14 Subsequent events

Notification on a crossing of the 5% threshold in the total number of votes

On 6 January 2023, the Management Board of KGHM Polska Miedź S.A. announced that the Company received a notification from Powszechne Towarzystwo Emerytalne Allianz Polska S.A. dated 5 January 2023.

According to the notification received, Powszechne Towarzystwo Emerytalne Allianz Polska S.A. which manages Allianz Polska Otwarty Fundusz Emerytalny („Allianz OFE"), which in turn manages Allianz Polska Dobrowolny Fundusz Emerytalny („Allianz DFE") as a result of a merger performed on 30 December 2022, with the company Aviva Powszechne Towarzystwo Emerytalne Aviva Santander Spółka Akcyjna which manages Drugi Allianz Polska Otwarty Fundusz Emerytalny („Drugi Allianz OFE"), the interest held in the share capital and the total number of votes in the Company on the accounts of Allianz OFE, Allianz DFE and Drugi Allianz OFE crossed the threshold of 5%.

Prior to the merger, in total on the accounts of Allianz OFE and Allianz DFE there were 1 741 592 shares, representing 0.87% of the Company's share capital and granting the right to 1 741 592 of the votes amounting to 0.87% of the total number of votes at the Company's General Meeting.

On the account of Drugi Allianz OFE there were 10 499 861 shares, representing 5.25% of the Company's share capital and granting the right to 10 499 861 of the votes amounting to 5.25% of the total number of votes at the Company's General Meeting.

Following the merger, in total on the accounts of Allianz OFE, Allianz DFE and Drugi Allianz OFE there was an increase to 12 241 453 shares, representing 6.12% of the Company's share capital and granting the right to 12 241 453 of the votes amounting to 6.12% of the total number of votes at the Company's General Meeting.

Annexes signed to bank guarantees

On 3 February 2023, BNP Paribas Bank Polska S.A., at the Parent Entity's request, issued annexes to bank guarantees issued pursuant to art 137 section 2 of the Act of 14 December 2012 on waste (unified text: Journal of Laws of 2022, item 699). In order to create a tailings storage facility restoration fund, which increased the total value of guarantees from the amount of PLN 98 million to PLN 120 million, with maturity falling on 15 February 2024.

Drawing of an instalment of the unsecured, revolving syndicated credit facility

On 6 February 2023, the Parent Entity drew an instalment of the unsecured, revolving syndicated facility under the agreement signed on 20 December 2019 with the syndicate of banks. The liability in the amount of USD 50 million (or PLN 219 million per the NBP exchange rate from the drawing date) was drawn for the period of 2 weeks, and after that period it was extended by 1 month. The credit facility's interest is based on LIBOR rate plus a margin.

Issuance of a bank guarantee to secure liabilities

On 14 February 2023, at the Parent Entity's request, a bank guarantee was issued to secure liabilities arising from a surety agreement signed between KGHM Polska Miedź S.A., Dom Maklerski Banku Ochrony Środowiska S.A. and Izba Rozliczeniowa Giełd Towarowych S.A., aimed at assuring by the Parent Entity the liabilities of Dom Maklerski due to the settlement of transactions to purchase electricity at the Polish Power Exchange (Towarowa Giełda Energii), up to the total amount of PLN 150 million, with maturity falling on 31 March 2023.

Loan granted by the Parent Entity to KGHM INTERNATIONAL LTD.

On 23 February 2023, a loan agreement was entered into between KGHM Polska Miedź S.A. and KGHM INTERNATIONAL LTD. in the amount of USD 105.5 million (PLN 473 million, 4.4879 USD/PLN) for the advancement of the Victoria project. The loan's interest was set at arm's length. The agreement expires on 31 December 2033.

Drawing of an instalment from the European Investment Bank

On 6 March 2023, the Parent Entity drew an instalment of the investment loan from the European Investment Bank under the agreement signed on 11 December 2017. The liability in the amount of USD 99 million, which is the equivalent of the available financing in the amount of PLN 440 million, was drawn for the period of 12 years. Funds acquired under this instalment are used to continue investment projects advanced by KGHM Polska Miedź S.A.

Conclusion of an agreement for sale of shares of KGHM TFI S.A.

On 13 March 2023, KGHM Polska Miedź S.A. concluded an Agreement for the sale of 100% of the shares of KGHM TOWARZYSTWO FUNDUSZY INWESTYCYJNYCH SPÓŁKA AKCYJNA ("Shares") with Agencja Rozwoju Przemysłu S.A. ("Buyer"). The sale of the Shares was contingent on meeting the conditions precedent, among others no objections raised by the Polish Financial Supervision Authority. The ownership rights to the Shares will be transferred to the Buyer at the moment an appropriate entry is made in the Share Register. The sale of the Shares is the last stage of the reorganisation under the Group's structure, which comprised the liquidation of closed-end, non-public investment funds. KGHM TFI S.A. has not managed any funds since 20 December 2022, that is from the date of deregistration of the KGHM VII FIZAN fund.

As at the end of the reporting period, the value of net assets of KGHM TFI S.A. amounted to PLN 2 million. The subsidiary's assets and liabilities associated with them were not reclassified to "Assets held for sale (disposal group)" and "Liabilities associated with disposal group", details in Note 9.8.4.

Part 13 – Quarterly financial information of the Group

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

		from 1 October 2022 to 31 December 2022	from 1 October 2021 to 31 December 2021	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Note 2.3	Revenues from contracts with customers	8 151	8 068	33 847	29 803
Note 4.1	Cost of sales	(6 898)	(6 745)	(27 541)	(23 529)
	Gross profit	**1 253**	**1 323**	**6 306**	**6 274**
Note 4.1	Selling costs and administrative expenses	(595)	(484)	(1 962)	(1 564)
	Profit on sales	**658**	**839**	**4 344**	**4 710**
Note 6.2	Gains due to the reversal of allowances for impairment of loans granted to a joint venture	90	725	873	2 380
Note 6.2	Interest income on loans granted to a joint venture calculated using the effective interest rate method	105	172	582	494
	Profit or loss on involvement in a joint venture	195	897	1 455	2 874
Note 4.2	Other operating income, including:	24	348	1 881	1 757
	other interest calculated using the effective interest rate method	13	-	54	1
	reversal of impairment losses on financial instruments	1	9	5	27
	Other operating costs, including:	(1 676)	(268)	(919)	(1 046)
	impairment losses on financial instruments	-	(10)	(5)	(13)
	Finance income	537	35	148	70
Note 4.3	Finance costs	(114)	(132)	(420)	(541)
	Profit/(loss) before income tax	**(376)**	**1 719**	**6 489**	**7 824**
Note 5.1	Income tax expense	(117)	(326)	(1 715)	(1 669)
	PROFIT/(LOSS) FOR THE PERIOD	**(493)**	**1 393**	**4 774**	**6 155**
	Profit/(loss) for the period attributable to:				
	Shareholders of the Parent Entity	(494)	1 394	4 772	6 156
	Non-controlling interest	1	(1)	2	(1)
	Weighted average number of ordinary shares (million)	**200**	**200**	**200**	**200**
	Basic/diluted earnings per share (in PLN)	**(2.47)**	**6.97**	**23.86**	**30.78**

in PLN millions, unless otherwise stated

Explanatory notes to the consolidated statement of profit or loss

Note 13.1 Expenses by nature

	from 1 October 2022 to 31 December 2022	from 1 October 2021 to 31 December 2021	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Depreciation of property, plant and equipment and amortisation of intangible assets	663	526	2 398	2 254
Employee benefits expenses	2 009	1 692	7 333	6 443
Materials and energy, including:	4 045	3 110	15 876	11 962
purchased metal-bearing materials	2 158	1 769	8 859	7 132
External services	800	721	2 604	2 200
Minerals extraction tax	746	1 009	3 046	3 548
Other taxes and charges	249	(34)	786	661
Reversal of impairment losses on property, plant and equipment and intangible assets	(2)	3	(3)	(42)
Reversal of write-down of inventories	(15)	(31)	(55)	(88)
Advertising costs and representation expenses	34	25	89	72
Property and personal insurance	22	20	80	76
Impairment losses on property, plant and equipment and intangible assets	36	319	83	340
Write-down of inventories	34	18	74	47
Other costs	20	28	77	64
Total expenses by nature	**8 641**	**7 406**	**32 388**	**27 537**
Cost of merchandise and materials sold (+)	136	215	792	790
Change in inventories of finished goods and work in progress (+/-)	(827)	112	(2 008)	(1 544)
Cost of products for internal use of the Group (-)	(457)	(504)	(1 669)	(1 690)
Total cost of sales, selling costs and administrative expenses, of which:	**7 493**	**7 229**	**29 503**	**25 093**
Cost of sales	6 898	6 745	27 541	23 529
Selling costs	149	120	560	450
Administrative expenses	446	364	1 402	1 114

in PLN millions, unless otherwise stated

Note 13.2 Other operating income and (costs)

	from 1 October 2022 to 31 December 2022	from 1 October 2021 to 31 December 2021	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Gains on derivatives, of which:	(12)	59	270	383
measurement	(61)	(31)	109	208
realisation	49	90	161	175
Interest income calculated using the effective interest rate method	13	-	54	1
Exchange differences on assets and liabilities other than borrowings	-	218	949	994
Reversal of impairment losses on fixed assets under construction	-	2	-	2
Reversal of impairment losses on financial instruments	1	9	5	27
Provisions released	(36)	(1)	62	34
Gain on disposal of intangible assets	(1)	-	134	1
Gain on disposal of property, plant and equipment	-	8	-	57
Gain on disposal of subsidiaries	7	-	180	-
Government grants received	5	11	19	24
Income from servicing of letters of credit and guarantees	-	-	28	66
Compensation, fines and penalties received	3	10	66	34
Compensation received due to the purchase of electricity for 2020	-	-	-	39
Other	44	32	114	95
Total other operating income	**24**	**348**	**1 881**	**1 757**
Losses on derivatives, of which:	(113)	(176)	(490)	(768)
measurement	(10)	3	(116)	(141)
realisation	(103)	(179)	(374)	(627)
Impairment losses on financial instruments	-	(10)	(5)	(13)
Fair value losses on financial assets	11	34	(58)	(39)
Impairment losses on fixed assets under construction and intangible assets not yet available for use	(58)	(27)	(64)	(38)
Exchange differences on assets and liabilities other than borrowings	(1 519)	-	-	-
Provisions recognised	69	(45)	(27)	(88)
Financial support granted to municipalities	(1)	-	(100)	-
Losses on disposal of property, plant and equipment	(17)	-	(26)	-
Donations granted	(21)	(15)	(55)	(33)
Other	(27)	(29)	(94)	(67)
Total other operating costs	**(1 676)**	**(268)**	**(919)**	**(1 046)**
Other operating income/(costs)	**(1 652)**	**80**	**962**	**711**

in PLN millions, unless otherwise stated

Note 13.3 Finance income/(costs)

	from 1 October 2022 to 31 December 2022	from 1 October 2021 to 31 December 2021	from 1 January 2022 to 31 December 2022	from 1 January 2021 to 31 December 2021
Exchange differences on measurement and realisation of borrowings	438	-	-	-
Gains on derivatives - realisation	83	35	130	70
Settlement of a transaction hedging against interest rate risk due to the issue of bonds with a variable interest rate	16	-	18	-
Total finance income	**537**	**35**	**148**	**70**
Interest on borrowings, including:	(3)	(29)	(18)	(94)
Leases	(2)	(3)	(9)	(13)
Unwinding of the discount of provisions effect	(6)	(4)	(21)	(15)
Bank fees and charges on borrowings	(6)	(6)	(29)	(25)
Losses on derivatives, of which:	(98)	(41)	(149)	(80)
measurement	-	-	-	(1)
realisation	(98)	(41)	(149)	(79)
Exchange differences on measurement and realisation of borrowings	-	(44)	(179)	(299)
Other	(1)	(8)	(24)	(28)
Total finance costs	**(114)**	**(132)**	**(420)**	**(541)**
Finance income /(costs)	**423**	**(97)**	**(272)**	**(471)**

SIGNATURES OF ALL MEMBERS OF THE MANAGEMENT BOARD

These financial statements were authorised for issue on 21 March 2023.

President
of the Management Board

Tomasz Zdzikot

Vice President
of the Management Board

Mateusz Wodejko

Vice President
of the Management Board

Marek Pietrzak

Vice President
of the Management Board

Mirosław Kidoń

Vice President
of the Management Board

Marek Świder

SIGNATURE OF PERSON RESPONSIBLE FOR ACCOUNTING

Executive Director
of Accounting Services Centre
Chief Accountant

Agnieszka Sinior