

POLISH FINANCIAL SUPERVISION AUTHORITY

Consolidated annual report RS 2018

(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 2018 comprising the period from 1 January 2018 to 31 December 2018 containing the consolidated financial statements according to International Financial Reporting Standards in PLN.

publication date: 14 March 2019

KGHM Polska Miedź Spółka Akcyjna (name of the issuer)		Basic materials (issuer branch title per the Warsaw Stock Exchange)
KGHM Polska Miedź S.A. (name of the issuer in brief)		LUBIN (city)
59 - 301 (postal code)		48 (number)
M. Skłodowskiej - Curie (street)		(+48) 76 7478 500 (fax)
(+48) 76 7478 200 (telephone)		www.kghm.com (www)
ir@kghm.com (e-mail)		390021764 (REGON)
692000013 (NIP)		

Deloitte Audyt Spółka z ograniczoną odpowiedzialnością Sp. k.
(auditing company)

SELECTED FINANCIAL DATA		in PLN mn		in EUR mn	
		from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
I.	Revenues from contracts with customers	20 526	20 358	4 811	4 796
II.	Profit on sales	2 591	3 811	607	898
III.	Profit before income tax	2 466	2 299	578	542
IV.	Profit for the period	1 658	1 525	388	359
V.	Profit for the period attributable to shareholders of the Parent Entity	1 657	1 568	388	369
VI.	Profit/(loss) for the period attributable to non-controlling interest	1	(43)	-	(10)
VII.	Other comprehensive net income	(298)	548	(70)	129
VIII.	Total comprehensive income	1 360	2 073	318	488
IX.	Total comprehensive income attributable to shareholders of the Parent Entity	1 359	2 120	318	499
X.	Total comprehensive income attributable to non-controlling interest	1	(47)	-	(11)
XI.	Number of shares issued	200 000 000	200 000 000	200 000 000	200 000 000
XII.	Earnings per ordinary share (in PLN/EUR) attributable to shareholders of the Parent Entity	8.29	7.84	1.96	1.85
XIII.	Net cash generated from operating activities	3 826	3 054	897	719
XIV.	Net cash used in investing activities	(3 539)	(3 340)	(829)	(787)
XV.	Net cash generated from financing activities	66	18	15	4
XVI.	Total net cash flow	353	(268)	83	(64)
XVII.	Non-current assets	29 375	26 515	6 831	6 357
XVIII.	Current assets	7 862	7 607	1 829	1 824
XIX.	Total assets	37 237	34 122	8 660	8 181
XX.	Non-current liabilities	12 147	10 878	2 825	2 608
XXI.	Current liabilities	5 865	5 459	1 364	1 309
XXII.	Equity	19 225	17 785	4 471	4 264
XXIII.	Equity attributable to shareholders of the Parent Entity	19 133	17 694	4 450	4 242
XXIV.	Equity attributable to non-controlling interest	92	91	21	22

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

	2018	2017
Average exchange rate for the period*	4.2669	4.2447
Exchange rate at the end of the period	4.3000	4.1709

*Exchange rates are arithmetical average of the current average exchange rates announced by the National Bank of Poland on the last day of each month respectively of 2018 and 2017

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 2018**

Lubin, March 2019

Table of contents

CONSOLIDATED STATEMENT OF PROFIT OR LOSS	4
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	5
CONSOLIDATED STATEMENT OF CASH FLOWS	6
CONSOLIDATED STATEMENT OF FINANCIAL POSITION	7
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY	8
Part 1 – General information	9
Note 1.1 Corporate information	9
Note 1.2 Basis of preparation and presentation.....	9
Note 1.3 Impact of new and amended standards and interpretations	12
Note 1.4 Published standards and interpretations, which are not yet in force and were not applied earlier by the Group.....	20
Part 2 – Information on segments and revenues	23
Note 2.1 Operating segments	23
Note 2.2 Financial results of reporting segments	26
Note 2.3 Revenues from contracts with customers of the Group – breakdown by products.....	29
Note 2.4 Revenues from contracts with customers of the Group – geographical breakdown reflecting the location of end clients	31
Note 2.5 Main customers	32
Note 2.6 Non-current assets – geographical breakdown.....	32
Part 3 – Impairment of assets	33
Part 4 – Explanatory notes to the statement of profit or loss	35
Note 4.1 Expenses by nature	35
Note 4.2 Other operating income and (costs)	36
Note 4.3 Finance income and (costs).....	36
Note 4.4 Recognition/ reversal of impairment losses on assets recognised in the statement of profit or loss.....	37
Part 5 – Taxation	38
Note 5.1 Income tax in the consolidated statement of profit or loss	38
Note 5.2 Other taxes	43
Note 5.3 Tax assets and liabilities.....	44
Part 6 – Involvement in joint ventures	45
Note 6.1 Joint ventures accounted for using the equity method	45
Note 6.2 Loans granted to joint ventures (Sierra Gorda S.C.M.)	47
Part 7 – Financial instruments and financial risk management	48
Note 7.1 Financial Instruments	48
Note 7.2 Derivatives	50
Note 7.3 Other financial instruments measured at fair value	53
Note 7.4 Other financial instruments measured at amortised cost	54
Note 7.5 Financial risk management.....	54
Part 8 – Borrowings and the management of liquidity and capital	68
Note 8.1 Capital management policy	68
Note 8.2 Equity	69
Note 8.3 Liquidity management policy	72
Note 8.4 Borrowings	74
Note 8.5 Cash and cash equivalents	77
Note 8.6 Contingent liabilities due to guarantees granted	77
Part 9 – Non-current assets and related liabilities	78
Note 9.1 Mining and metallurgical property, plant and equipment and intangible assets	78
Note 9.2 Other property, plant and equipment and intangible assets	82
Note 9.3 Depreciation/amortisation	84
Note 9.4 Provision for decommissioning costs of mines and other facilities	84
Note 9.5 Capitalised borrowing costs	84
Part 10 – Working capital	85
Note 10.1 Inventories.....	85
Note 10.2 Trade receivables.....	85
Note 10.3 Trade payables.....	86
Note 10.4 Changes in working capital.....	87
Part 11 – Employee benefits	88
Note 11.1 Employee benefits liabilities	89
Note 11.2 Changes in liabilities related to future employee benefits programs.....	90

Part 12 – Other notes	93
Note 12.1 Related party transactions	93
Note 12.2 Dividends paid	94
Note 12.3 Other assets	94
Note 12.4 Other liabilities	95
Note 12.5 Assets and liabilities not recognised in the statement of financial position	95
Note 12.6 Capital commitments related to property, plant and equipment and intangible assets	96
Note 12.7 The right of perpetual usufruct of land	96
Note 12.8 Employment structure	96
Note 12.9 Other adjustments in the statement of cash flows	96
Note 12.10 Remuneration of key managers	97
Note 12.11 Remuneration of the entity entitled to audit the financial statements and of entities related to it in PLN thousands	99
Note 12.12 Composition of the Group	100
Note 12.13 Subsequent events after the reporting period	104
Part 13 – Quarterly financial information of the Group	105
CONSOLIDATED STATEMENT OF PROFIT OR LOSS	105
Note 13.1 Expenses by nature	106
Note 13.2 Other operating income and (costs)	107
Note 13.3 Finance income/(costs)	108

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

		from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Note 2.3	Revenues from contracts with customers, including:	20 526	20 358
	from sales, for which the amount of revenue was not finally determined at the end of the reporting period (IFRS 15. 114)	1 423	N/A*
Note 4.1	Cost of sales	(16 555)	(15 204)
	Gross profit	3 971	5 154
Note 4.1	Selling costs and administrative expenses	(1 380)	(1 343)
	Profit on sales	2 591	3 811
Note 6.1	Share of losses of joint ventures accounted for using the equity method	(662)	(474)
Note 6.2	Gains due to the reversal of allowances for impairment on loans granted to joint ventures	733	-
Note 6.2	Interest income on loans granted to joint ventures calculated using the effective interest rate method	257	319
	Profit or loss on involvement in joint ventures	328	(155)
Note 4.2	Other operating income and (costs), including:	308	(2 377)
	Interest income calculated using the effective interest rate method	8	N/A*
Note 4.3	Finance income and (costs)	(761)	1 020
	Profit before income tax	2 466	2 299
Note 5.1	Income tax expense	(808)	(774)
	PROFIT FOR THE PERIOD	1 658	1 525
	Profit for the period attributable to:		
	Shareholders of the Parent Entity	1 657	1 568
	Non-controlling interest	1	(43)
	Weighted average number of ordinary shares (million)	200	200
	Basic/diluted earnings per share (in PLN)	8.29	7.84

* N/A- not applicable – items in which the following did not occur: measurement in accordance with principles arising from the application, from 1 January 2018, of IFRS 9, and the disclosure requirement of IFRS 15.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
	Profit for the period	1 658	1 525
Note 8.2.2	Measurement of hedging instruments net of the tax effect	283	308
Note 8.2.2	Measurement of available-for-sale financial assets net of the tax effect	N/A*	33
	Exchange differences from translation of foreign operations statements with a functional currency other than PLN	(162)	316
	Other comprehensive income, which will be reclassified to profit or loss	121	657
Note 8.2.2	Equity financial instruments measured, as a result of option election, at fair value through other comprehensive income, net of the tax effect	(159)	N/A*
	Actuarial (losses)/gains net of the tax effect	(260)	(109)
	Other comprehensive income which will not be reclassified to profit or loss	(419)	(109)
	Total other comprehensive net income	(298)	548
	TOTAL COMPREHENSIVE INCOME	1 360	2 073
	Total comprehensive income attributable to:		
	Shareholders of the Parent Entity	1 359	2 120
	Non-controlling interest	1	(47)

* N/A – not applicable – items which do not occur due to the change in classification, from 1 January 2018, of equity financial instruments in accordance with IFRS 9. Listed shares measured at fair value and unquoted shares measured at cost were in the category of available –for-sale financial assets.

CONSOLIDATED STATEMENT OF CASH FLOWS

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Cash flow from operating activities		
	2 466	2 299
Note 9.3	1 796	1 609
Note 6.1	662	474
Note 6.2	(733)	-
Note 6.2	(257)	(319)
	109	148
Note 4.4	69	503
	(36)	210
	593	1 461
	(629)	(1 251)
	244	(25)
	(121)	202
Note 12.9	62	(68)
	1 795	2 734
	(802)	(983)
Note 10.4	367	(996)
	3 826	3 054
Cash flow from investing activities		
Note 9.1.3	(2 609)	(2 527)
	(160)	(56)
	(266)	(269)
Note 6.1	(666)	(461)
	(83)	(123)
	(3 624)	(3 380)
	85	40
	(3 539)	(3 340)
Cash flow from financing activities		
	2 276	2 442
	19	6
	2 295	2 448
	(2 110)	(2 072)
Note 12.2	-	(200)
	(119)	(157)
	-	(1)
	(2 229)	(2 430)
	66	18
TOTAL NET CASH FLOW		
	353	(268)
	18	(6)
	586	860
Note 8.5	957	586

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at 31 December 2018	As at 31 December 2017
ASSETS		
	17 507	16 296
	1 657	1 447
Note 9.1	19 164	17 743
	2 789	2 679
	224	209
Note 9.2	3 013	2 888
Note 6.1	4	8
Note 6.2	5 199	3 889
	5 203	3 897
Note 7.1	320	110
Note 7.3	541	614
Note 7.4	716	762
	1 577	1 486
Note 5.1.1	309	389
Note 12.3	109	112
	29 375	26 515
Non-current assets		
Note 10.1	4 983	4 562
Note 10.2	799	1 522
	304	N/A*
Note 5.3	417	277
Note 7.1	301	196
Note 12.3	273	265
Note 12.3	132	199
Note 8.5	957	586
	7 862	7 607
	37 237	34 122
EQUITY AND LIABILITIES		
Note 8.2.1	2 000	2 000
Note 8.2.2	(444)	158
Note 8.2.2	2 005	2 427
Note 8.2.2	15 572	13 109
	19 133	17 694
	92	91
	19 225	17 785
Note 8.4.1	6 878	6 191
Note 7.1	162	208
Note 11.1	2 447	2 063
Note 9.4	1 564	1 351
Note 5.1.1	498	347
Note 12.4	598	718
	12 147	10 878
Note 8.4.1	1 071	965
Note 7.1	43	110
Note 10.3	2 053	1 823
Note 11.1	808	842
Note 5.3	585	630
	271	114
Note 12.4	1 034	975
	5 865	5 459
	18 012	16 337
	37 237	34 122

*N/A – not applicable – an item which in 2017 was not measured in accordance with principles arising from the application, from 1 January 2018, of IFRS 9.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

		Equity attributable to shareholders of the Parent Entity				Equity attributable to non-controlling interest	Total equity	
		Share capital	Other reserves from measurement of financial instruments	Accumulated other comprehensive income	Retained earnings			Total
As at 1 January 2017		2 000	(183)	2 216	11 739	15 772	139	15 911
Note 12.2	Dividend	-	-	-	(200)	(200)	-	(200)
	Transactions with non-controlling interest	-	-	-	2	2	(1)	1
	Transactions with owners	-	-	-	(198)	(198)	(1)	(199)
	Loss for the period	-	-	-	1 568	1 568	(43)	1 525
Note 8.2.2	Other comprehensive income	-	341	211	-	552	(4)	548
	Total comprehensive income	-	341	211	1 568	2 120	(47)	2 073
As at 31 December 2017		2 000	158	2 427	13 109	17 694	91	17 785
Note 1.3	Change in accounting policies – application of IFRS 9, IFRS 15	-	(726)	-	806	80	-	80
As at 1 January 2018		2 000	(568)	2 427	13 915	17 774	91	17 865
	Profit for the period	-	-	-	1 657	1 657	1	1 658
Note 8.2.2	Other comprehensive income	-	124	(422)	-	(298)	-	(298)
	Total comprehensive income	-	124	(422)	1 657	1 359	1	1 360
As at 31 December 2018		2 000	(444)	2 005	15 572	19 133	92	19 225

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, 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 the Management Board's Report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2018 (appendix 4).

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 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 KGHM INTERNATIONAL LTD. and KGHM AJAX MINING INC. for the exploration for and 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 2018 (point 2.4).

In 2018, the Parent Entity of the Group consolidated 75 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.).

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 2018 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 2018 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 13 March 2019.

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.

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
Consolidation principles	<p>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.</p> <p>Obtaining control of a subsidiary, which is a business, is accounted for using the acquisition method.</p> <p>Subsidiaries are fully consolidated from the date on which control is obtained to the date on which control is lost.</p> <p>Balances, incomes, expenses and unrealised gains from intra-group transactions, recognised in assets, are eliminated.</p>	<p>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.</p> <p>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.</p>
Fair value measurement	<p>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. The fair value hierarchy levels are as follows:</p> <p>Level 1 Value is based on inputs from active markets, as they are seen as the most reliable source of data.</p> <p>Level 2 Value is based on inputs other than from active markets, which are nevertheless observable (unbiased, measurable).</p> <p>Level 3 Value is based on unobservable inputs, used when it is not possible to acquire data from the first two measurement levels. It includes all measurements based on subjective inputs.</p>	<p>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.</p> <p>Certain assumptions and estimates are necessary to determine to which level of fair value hierarchy a given instrument should be classified.</p>
Financial statements of subsidiaries with a functional currency other than PLN	<p>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:</p> <p>(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,</p> <p>(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.</p> <p>Exchange differences from the translation of foreign operations statements are recognised in other comprehensive income of a given period.</p>	<p>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 subsidiaries of the subgroup KGHM INTERNATIONAL LTD. in which the US dollar (USD) is the functional currency.</p> <p>The balance of exchange differences from the translation of financial statements of the aforementioned entities:</p> <ul style="list-style-type: none"> • 2018 – PLN 2 656 million, • 2017 – PLN 2 818 million.

For a greater understanding of the data presented in the consolidated financial statements, important principles of measurement and accounting policies are presented in individual, detailed notes specified below:

Note	Title	Amount recognised in the financial statements		Accounting policies	Important estimates and judgements
		2018	2017		
2.3	Revenues from contracts with customers	20 526	20 358	X	
3.1	Impairment testing of the KGHM INTERNATIONAL LTD. Group's assets	733	(310)	X	X
4.4	(Recognition)/reversal of impairment losses	657	(553)		
5.1	Income tax	(808)	(774)	X	
5.1.1	Deferred income tax	(189)	42	X	X
5.3	Tax assets	417	277	X	
5.3	Tax liabilities	(585)	(630)	X	
6.1	Joint ventures accounted for using the equity method	4	8	X	X
6.2	Loans granted to joint ventures	5 199	3 889	X	X
7.2	Derivatives	416	(12)	X	
7.3	Other financial instruments measured at fair value	541	673	X	X
7.4	Other financial instruments measured at amortised cost	716	762	X	X
8.2	Equity	(19 225)	(17 785)	X	
8.4.1	Borrowings	(7 949)	(7 156)	X	
8.5	Cash and cash equivalents	957	586	X	
9.1	Mining and metallurgical property, plant and equipment and intangible assets	19 164	17 743	X	X
9.2	Other property, plant and equipment and intangible assets	3 013	2 888	X	
9.4	Provisions for decommissioning costs of mines and other facilities*	(1 576)	(1 360)	X	X
10.1	Inventories	4 983	4 562	X	X
10.2	Trade receivables	961	1 522	X	
10.3	Trade payables	(2 224)	(1 995)	X	
11.1	Employee benefits liabilities	(3 255)	(2 905)	X	X
12.3	Other assets	514	576	X	
12.4	Other liabilities	(1 632)	(1 693)	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 with the exception of accounting policies and measurement arising from the application of IFRS 9 and IFRS 15 from 1 January 2018.

Note 1.3 Impact of new and amended standards and interpretations

The International Accounting Standards Board approved the following new standards for use from 1 January 2018:

- IFRS 9 "Financial Instruments",
- IFRS 15 "Revenue from contracts with customers" and Amendments to IFRS 15, clarifying some of the standard's requirements,
- Amendments to IFRS 2, clarifying the Classification and Measurement of Share-based Payment Transactions,
- Amendments to IFRS 4, clarifying the Application of IFRS 9 with IFRS 4,
- Amendments to IAS 40, clarifying when assets are transferred to, or from, investment properties
- Annual Improvements to IFRS Standards, 2014-2016 Cycle, clarifying the scope of IAS 28 and IFRS 1,
- IFRIC 22, clarifying Foreign Currency Transactions and Advance Consideration.

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 and with the exception of IFRS 9 and IFRS 15, they will not have an impact on the Group's accounting policy or on the consolidated financial statements.

Impact of application of IFRS 9 and IFRS 15 on the Group's accounting policy and on the consolidated financial statements.

IFRS 9 Financial Instruments

The Group did not make early implementation of IFRS 9 and applied the requirements of IFRS 9 retrospectively for periods beginning on or after 1 January 2018. In accordance with the possibility provided by the standard, the Group decided against the restatement of comparative data. Changes in the measurement of financial assets and financial liabilities, as at the date of initial application of the standard, were recognised in retained earnings. Implementation of IFRS 9 resulted in a change in accounting policy with respect to the recognition, classification and measurement of financial assets, the measurement of financial liabilities and impairment losses on financial assets.

Selected accounting policy

Measurement of financial assets and financial liabilities

As at 1 January 2018, the Group classifies financial assets to the following categories:

- financial assets measured at amortised cost,
- financial assets measured at fair value through other comprehensive income,
- financial assets measured at fair value through profit or loss, or
- derivative hedging instruments.

Classification is made upon initial recognition of a given asset. Classification of debt financial assets depends on the business model for financial assets management and on the nature of the contractual cash flows (SPPI test) for a given financial asset.

The Group classifies the following assets to the category **assets measured at amortised cost**: trade receivables (except for sold receivables subject to factoring agreements and trade receivables priced upon M+ formula, i.e. for which the final price is set after the end of the reporting period), loans granted which pass the SPPI test, other receivables, deposits and cash and cash equivalents.

Financial assets measured at amortised cost are stated at amortised cost using the effective interest rate method, less allowance for impairment. Trade receivables with a maturity period of up to 12 months from the receivable origination date (i.e. with no financing element), and which are not subject to factoring, are not discounted and are measured at nominal value. In the case of purchased or originated credit-impaired (POCI) financial assets at the moment of initial recognition, such assets are measured at amortised cost using the effective interest rate adjusted for credit risk.

The following are classified to the category **assets measured at fair value through other comprehensive income**:

1. financial assets, if the following conditions are met:
 - they are held within a business model whose objective is to collect contractual cash flows due to holding and selling financial assets, and
 - the contractual terms give the right to receive cash flows on specified dates that are solely payments of principal and interest on the principal amount outstanding (i.e. the SPPI test was passed),

The impact of changes in fair value is recognised in other comprehensive income up to the moment of derecognition of an asset from the statement of financial position, when the accumulated profit/loss is recognised in the statement of profit or loss.

2. equity instruments which at initial recognition were irrevocably selected to be classified to this category. The selection option of measurement at fair value through other comprehensive income is not available for instruments held for trading.

Gains and losses, on both measurement and realisation of these assets, are recognised in other comprehensive income, with the exception of income on dividends received, which is recognised in the statement of profit or loss.

All financial instruments that were not classified as measured at amortised cost or measured at fair value through other comprehensive income, as well as those that the Group decided to classify as such in order to eliminate an accounting mismatch, are classified to the category **assets measured at fair value through profit or loss**.

The Group classifies the following to this category: trade receivables subject to factoring arrangements, trade receivables priced upon M+ formula, loans granted which did not pass the contractual cash flows test and derivatives which were classified as assets on the condition that they were not designated as hedging instruments.

Gains and losses on financial assets which are classified as financial assets measured at fair value through profit or loss are recognised in profit or loss in the period in which they arise (including interest income and dividend income).

The following are classified to **financial hedging instruments**: financial assets and financial liabilities representing designated financial instruments and qualifying for hedge accounting, measured at fair value reflecting all market and credit risk components.

As at 1 January 2018, the Group classifies financial liabilities to the following categories:

- financial liabilities measured at amortised cost,
- financial liabilities measured at fair value through profit or loss, or
- financial hedging instruments.

Liabilities measured at amortised cost include liabilities other than those measured at fair value through profit or loss (such as trade payables and bank and other loans), with the exception of:

- o financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition,
- o financial guarantee agreements, measured at the higher of the following amounts:
 - the amount of loss allowance for expected credit losses determined in accordance with IFRS 9;
 - the amount initially recognised (i.e. at fair value increased by transaction costs that may be directly attributed to a financial liability) less cumulative revenue recognised according to IFRS 15 *Revenue from contracts with customers*.

Liabilities measured at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated at their initial recognition to measurement at fair value through profit or loss.

Financial liabilities held for trading include derivatives which are not designated for hedge accounting purposes.

Impairment of financial assets

IFRS 9 introduces a new approach to estimating losses on financial assets measured at amortised cost and measured at fair value through other comprehensive income (other than equity instruments). This approach is based on indicating expected losses, regardless of whether or not there have occurred any indications of impairment.

The Group applies the following models to determine impairment losses:

- the general model, and
- the simplified model.

Under the general model the Group monitors changes in the level of credit risk related to a given financial asset and classifies the financial asset to one of three stages of determining impairment losses:

Stage 1 – amount in respect of which there has not been a substantial increase in credit risk compared to an instrument's initial recognition and for which the amount of impairment is estimated for 12 month expected credit losses,

Stage 2 – amount in respect of which there has been a substantial increase in credit risk compared to an instrument's initial recognition and for which the amount of impairment is estimated for lifetime expected credit losses,

Stage 3 – amount reflecting impairment, for which the amount of impairment is set for lifetime expected credit losses.

Under the simplified model the Group estimates the expected credit loss up to the instrument's maturity.

In order to estimate expected credit loss the Group makes use of the following:

- under the general model – default probability levels, forecasted based on market quotations of credit derivative instruments, for entities with a given credit rating from the given sector,
- under the simplified model – the historic levels of repayment of receivables and a two-stage approach (quality and quantity) to accounting for the impact of macroeconomic conditions on the recovery rates.

The Group considers default payment where the receivable balance is 90 days past due.

The Group accounts for forward-looking information in the applied parameters of the expected credit losses estimation model by adjusting the base probability of default ratios (for receivables) or by calculating probability of default parameters based on current market quotations (for other financial assets).

The Group applies the simplified model to calculate the allowances for impairment of trade receivables. The general model is applied to the remaining types of financial assets, including debt financial assets measured at fair value through other comprehensive income.

Impairment losses on debt financial instruments measured at amortised cost (at the moment of initial recognition and calculated for each successive day ending a reporting period) are recognised in other operating costs. Gains (reversals of impairment loss) due to a decrease in the expected amount of the impairment are recognised in other operating income.

For purchased or originated credit impaired assets at the moment of initial recognition (POCI), favourable changes in expected credit losses are recognised as gains due to the reversal of impairment losses in other operating income.

Impairment losses on debt financial instruments measured at fair value through other comprehensive income are recognised in other operating costs in correspondence with other comprehensive income, while not reducing the carrying amount of a financial asset in the statement of financial position. Gains (reversals of impairment loss) due to a decrease in the amount of the expected credit loss are recognised in other operating income in correspondence with other comprehensive income.

Hedge accounting

The Group decided to apply hedge accounting arising from IFRS 9 from 1 January 2018.

Hedges include fair value hedges, cash flow hedges and hedges of net investment in foreign operations.

The Group does not use either fair value hedges or hedges of net investments in foreign operations. Hedging instruments are designated as cash flow hedges.

In a cash flow hedge, a derivative used as a hedging instrument is an instrument which:

- hedges the exposure to volatility of cash flows and is attributable to a particular type of risk associated with an asset or liability recognised in the statement of financial position, or a highly probable forecast transaction, and
- will affect profit or loss in the statement of profit or loss.

Gains and losses arising from changes in the fair value of cash flow hedging instruments are recognised in other comprehensive income, to the extent by which the given instrument represents an effective hedge of the associated hedged item. Moreover, the Group recognises, in other reserves from the measurement of hedging instruments, the portion of the gain or loss on the hedging instrument arising from changes in the time value of options, forward elements and currency margin (cross currency basis spread), with the provision that with respect to the latter two elements, the Group may each time select the method of recognition (through equity or directly to profit or loss).

The ineffective portion of a hedge is recognised in profit or loss as other operating income or other operating costs (in the case of hedges of cash flows from operating activities), and as finance income or finance costs (in the case of hedges of cash flows from financing activities).

Gains and losses originating from cash flow hedges are recognised in profit or loss at the time when the underlying hedged item affects profit or loss.

In particular, with respect to the gain or loss arising from changes in the time value of options, the forward element or currency margin, the reclassification from equity (from other comprehensive income) to profit or loss (as other operating income or other operating costs for hedges of cash flows from operating activities, and as finance income or finance costs for hedges of cash flows from financing activities) is carried out on a one-off basis, if realisation of the hedged item is related to a transaction, or is amortised over the lifetime of a hedging relationship, if realisation of a hedged item is effected over time.

The Group applies the following requirements of effectiveness to a hedging relationship:

- there is an economic relationship between the hedged item and the hedging instrument,
- the effect of credit risk does not dominate the fair value changes of a hedged item or a hedging instrument,
- the hedge ratio is the same as that resulting from the quantity (nominal) of the hedged item that the Group actually hedges and the quantity (nominal) of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

The following table summarises the impact of IFRS 9 on the change in the classification and measurement of the Group's financial instruments as at 1 January 2018.

(IFRS 7. 42I, 42J, 42O):

	Classification per IAS 39	Classification per IFRS 9	Carrying amount per IAS 39 - as at 31 December 2017	Carrying amount per IFRS 9 - as at 1 January 2018	Reference to explanations below the table
Financial assets					
Available-for-sale financial assets (equity instruments)	Available for sale	Fair value through other comprehensive income	673	709	(a)
Loans granted	Loans and receivables	Fair value through profit or loss	17	17	(b)
Loans granted	Loans and receivables	Amortised cost	3 892	3 892	(c)
Trade receivables - trade receivables subject to factoring arrangements and priced upon M+ formula	Loans and receivables	Fair value through profit or loss	782	798	(d)
Trade receivables - subject to impairment allowance due to expected impairment	Loans and receivables	Amortised cost	740	723	(e)
Other receivables - receivables due to the present value of future payments respecting financial guarantees	Loans and receivables	Amortised cost	67	100	(f)
Financial liabilities					
Other liabilities - liabilities due to financial guarantees	Financial liabilities measured at amortised cost	Initially recognised fair value, increased by transaction costs and unwinding of the initial discount to the measurement date and decreased by the amount of income recognised in profit or loss	-	37	(f)

The comments below concern the table summarising the impact of IFRS 9 on the change in classification and measurement of the Group's financial instruments as at 1 January 2018.

a) This item is comprised of equity instruments not held for trading, in accordance with IAS 39 classified as available-for-sale, which were measured at fair value (listed) and at cost (unquoted) by the Group. Because these instruments were not purchased in order to be traded, by the Parent Entity's decision, these assets will be measured at fair value through other comprehensive income, without the possibility of later transfer of gains or losses on these instruments to profit or loss. These equity instruments are presented in the financial statements in the item "Other financial instruments measured at fair value".

b) This item is comprised of loans granted which did not pass the SPPI (solely payments of principal and interest) test, because in the structure of financing the target recipient of funds, debt is changed at the last stage into capital (the amount of capital is material) pursuant to the methodology of classification of financial instruments. Due to the above, these assets are measured at fair value through profit or loss. These financial instruments are presented in the financial statements in the item "Other financial instruments measured at fair value".

c) This item is comprised of loans granted to joint ventures which have met two conditions: they are in a business model whose objective is to collect contractual cash flows due to holding financial assets, and have passed the SPPI test. They were classified to credit impaired financial assets at the moment of initial recognition and presented in the financial statements in the item „Loans granted to joint ventures“.

d) This item is comprised of trade receivables subject to non-recourse factoring agreements, which were classified to the held for sale (Model 3) business model, as well as trade receivables priced upon M+ formula, which did not pass the SPPI test because of the derivative embedded within the M+ pricing formula. Due to the aforementioned determinations, these trade receivables are measured at fair value through profit or loss. They are presented in the financial statements in the item "Trade receivables measured at fair value through profit or loss".

e) For trade receivables held to obtain contractual cash flows (Model 1) that passed the SPPI test and are measured at amortised cost, in order to determine the expected impairment the Group applied the simplified model and estimated the amount of the expected impairment during the life of the asset, applying a delay payments matrix based on historical data, reflecting the requirements of the standard with respect to current and forecasted economic conditions. These trade receivables are presented in the financial statements in the item "Trade receivables".

f) This item is comprised of guarantees granted to Sierra Gorda to secure its obligations arising from lease contracts and short-term bank loans. Receivables due to guarantees (passed SPPI test, assets held to acquire contractual cash flows) are measured at amortised cost and are recognised at the present value of future payments and then corrected by the unwinding of the discount effect and the amount of impairment due to expected credit losses in correspondence with the liability. The results of the measurement of financial guarantees are presented in the financial statements in the item "Other financial instruments measured at amortised cost", while the liabilities are presented in the item "Other liabilities".

With the exception of the aforementioned items of other financial assets and liabilities, there were no changes arising from changes in classification or changes in measurement of financial instruments.

The following table presents a reconciliation of **impairment allowances** estimated in accordance with IAS 39 as at 31 December 2017 with the amount of impairment allowances estimated in accordance with IFRS 9 as at 1 January 2018. Changes in impairment allowances estimated in accordance with IFRS 9 arise from a change in the classification of financial assets between the categories of financial assets measured at amortised cost and at fair value, as well as from the remeasurement of impairment allowances reflecting the requirements of the model of expected credit losses (IFRS 7.42P).

Category of assets	Amount of allowance per IAS 39 – as at 31 December 2017	Change due to change in classification	Change due to change in measurement	Amount of allowance per IFRS 9 – as at 1 January 2018
Loans and receivables (IAS 39) / Financial assets at amortised cost (IFRS 9)				
Loans granted	3 683	(3 683)	-	-
Trade receivables	47	-	17	64
Total	3 730	(3 683)	17	64
Available-for-sale assets (IAS 39) / Financial assets at fair value through other comprehensive income (IFRS 9)				
Available-for-sale financial assets	691	(691)	-	-
Total	691	(691)	-	-

IFRS 15 Revenue from contracts with customers

The Group applied IFRS 15 from 1 January 2018, pursuant to paragraph C3 (b) and C7 – retrospectively, with joint effect of the first application of the standard as an adjustment of the opening balance of retained earnings in 2018.

Selected accounting policy

In accordance with IFRS 15, as at 1 January 2018 the Group recognises revenue from contracts with customers when a Group entity satisfies a performance obligation by transferring a promised good or 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.

The Group recognises as a performance obligation every contractual promise to transfer to a customer a good or 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, a Group entity determines (based on contractual terms), whether the obligation will be performed over time or at a specified moment.

Revenues from the sale of products, merchandise and materials are recognised in profit or loss once at a point in time when the performance obligation is satisfied (in particular in accordance with the applied INCOTERMS principles).

Revenues from the sale of services are recognised 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 entity's performance to the extent that the entity performs its obligations,
- the Group entity 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,
- the Group entity's performance creates an asset without an alternative use to the Group entity and the entity has an enforceable right to payment for performance completed to date.

The allocation of a transaction price to each performance obligation is made based on a relative stand-alone selling price basis.

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.

Revenues from contracts with customers are recognised in the amount of the transaction price (including any discounts granted and rebates).

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 payment and the cash sale 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 client to the moment the client pays for these goods or services, and (ii) interest rates on a given market.

In the case of a sales transaction for which the price is set after the date of recognition of a given sale, the revenue is adjusted at the end of each reporting period by any change in the fair value of the relevant trade receivables.

Sales revenue is adjusted for the gain or loss on the settlement of 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.

Impact of the implementation of IFRS 15 on the consolidated financial statements

As part of the implementation of IFRS 15, the Group performed a comprehensive analysis of the impact of application of the standard on the consolidated financial statements.

While analysing the impact of IFRS 15, one so-called streaming arrangement was identified within the KGHM Polska Miedź S.A. Group (**Contract with Franco Nevada**), representing a source of financing available to companies operating in the mining sector, in the case of which the application of IFRS 15 has an impact on the method of recognition of revenues.

The implementation of IFRS 15 did not result in changes in the method of recognition of revenues from other contracts realised by the Group.

Contract with Franco Nevada

The contract (signed in 2008 between Quadra FNX Mining Ltd. and Franco Nevada) concerns the sale of half of the production of gold, platinum and palladium contained in the ore extracted during the lives of certain parts of deposits of the following mines: Morrison, McCreedy West and Podolsky (CGU Sudbury). Pursuant to the contract, Quadra FNX Mining Ltd. received a prepayment in the amount of CAD 400 million. Moreover, pursuant to the contract, the selling price for one ounce of gold equivalent is the lower of these two amounts: (a) a fixed amount for an ounce, increased by an indexation rate in each year, 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.

Variable consideration

Pursuant to IFRS 15, if the consideration set forth in a contract contains a variable amount, the Group estimates the amount of the consideration to which it will be entitled in exchange for transferring the promised good or service to the customer, and adds to the transaction price some or all of the amount of the variable consideration solely to the extent that it is highly probable that there will not occur a reversal of a substantial portion of the amount of the previously recognised accumulated revenue at a moment when uncertainty is removed as to the amount of the 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 enacts any changes to 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 element

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 purchaser (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.

Impact of the application of IFRS 15 on items of the statement of financial position and the statement of profit or loss as at 31 December 2018

	As at 31 December 2018	Impact of IFRS 15	As at 31 December 2018
	per IAS 11, 18		per IFRS 15
Consolidated statement of financial position			
Other non-current liabilities	673	(76)	597
Other current liabilities	1 054	(20)	1 034
Deferred tax liabilities	446	54	500
Retained earnings	14 812	42	14 854
	from 1 January 2018 to 31 December 2018	Impact of IFRS 15	from 1 January 2018 to 31 December 2018
	per IAS 11, 18		per IFRS 15
Consolidated statement of profit or loss			
Revenues from contracts with customers	20 479	47	20 526
Other operating income and (costs)	(295)	(21)	(316)
Income tax expense	(777)	(31)	(808)

The main reason of changes disclosed in the above table is the recognition of a significant financing element arising from the contract signed between Quadra FNX Mining Ltd. and Franco Nevada.

The impact of implementation of IFRS 9 (disclosure of IFRS 7.42L) and IFRS 15 on the items of the statement of financial position as at 1 January 2018, for which there was a change in classification or measurement, is presented below.

Impact of the implementation of IFRS 9 Financial Instruments and IFRS 15 Revenue from contracts with customers

	Applied standard IFRS/IAS	As at 31 December 2017 Carrying amount	Change due to change in classification	Change due to change in measurement	As at 1 January 2018 Carrying amount	Impact on retained earnings	Impact on other comprehensive income	Impact on equity
Available-for-sale financial assets	IAS 39	673	(673)	-	-	-	-	-
Financial assets measured at fair value through other comprehensive income	IFRS 9	-	673	36	709	-	36	36
Retained earnings - accumulated impairment losses on available-for-sale financial assets	IAS 39	(691)	691	-	-	691	-	691
Other reserves from measurement of financial instruments	IFRS 9	-	(691)	-	(691)	-	(691)	(691)
Loans granted	IAS 39/IFRS 9	3 909	(3 906)	-	3	-	-	-
Credit-impaired loans granted at the moment of initial recognition (POCI)	IFRS 9	-	3 889	-	3 889	-	-	-
Loans at fair value through profit or loss	IFRS 9	-	17	-	17	-	-	-
Trade receivables	IAS 39/ IFRS 9	1 522	(782)	(17)	723	(17)	-	(17)
Trade receivables measured at fair value through profit or loss	IFRS 9	-	782	16	798	16	-	16
Retained earnings – change in the time value of hedging instruments	IAS 39	(223)	223	-	-	223	-	223
Other reserves from measurement of hedging instruments	IFRS 9	-	(223)	-	(223)	-	(223)	(223)
Other receivables – receivables due to present value of future payments due to financial guarantees	IFRS 9	67	-	33	100	33	-	33
Other liabilities – liabilities due to financial guarantees	IFRS 9	-	-	37	37	(37)	-	(37)
Other non-current liabilities – liabilities due to Franco Nevada streaming contract	IFRS 15	410	-	(68)	342	68	-	68
Deferred tax on the aforementioned adjustments		-	-	(19)	(19)	(171)	152	(19)
Total impact						806	(726)	80

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

In these consolidated financial statements, the Group did not decide for earlier application of the published standards, interpretations or amendments to already existing standards prior to their effective date. With the exception of IFRS 16 presented below, other changes are not applicable to the Group's activities and will not have any impact on the consolidated financial statements.

IFRS 16

Basic information on the standard

Date of implementation and transitional rules

IFRS 16 will be effective for annual periods beginning on or after 1 January 2019 and has been adopted by the European Union. It supersedes the current standard IAS 17, interpretations IFRIC 4 and SIC 15 and 27. The Group will apply IFRS 16 from 1 January 2019.

Main changes introduced by the standard

The new standard introduces a single model for recognising a lease in a lessee's accounting books, conforming to the recognition of a finance lease under IAS 17. Pursuant to IFRS 16, an agreement is a lease or contains a lease if it transfers the rights to control the use of an identified asset for a given period in exchange for compensation.

The essential element differentiating the definition of a lease from IAS 17 and from IFRS 16 is the requirement to have control over the used, specific asset, indicated directly or indirectly in the agreement.

Transfer of the right to use takes place when we have an identified asset, with respect to which the lessee has the right to obtain substantially all of the economic benefits from its use, and controls the use of a given asset in a given period of time.

If the definition of a "lease" is met, the right to use an asset is recognised alongside a corresponding lease liability, set in the amount of future discounted payments – for the duration of a lease.

Expenses related to the use of lease assets, the majority of which were previously recognised in external services costs, will be currently classified as depreciation/amortisation and interest costs.

Usufruct rights are depreciated in accordance with IAS 16, while lease liabilities are settled using an effective interest rate.

The requirements of the new standard with respect to recognition and measurement by the lessor are similar to the requirements of IAS 17. A lease is classified as financial or operational, which is also in accordance with IFRS 16. Compared to IAS 17, the new standard changes the principles of classification of a sublease and requires the lessor to disclose additional information.

Impact of IFRS 16 on the financial statements

At the moment of preparation of these financial Statements the Group had completed the work related to implementation of the new standard IFRS 16. The project to implement IFRS 16 (project), was executed in three stages:

- stage I – analysis of all executed agreements for the purchase of services, regardless of current classification, the goal of which was to identify agreements based on which the Group companies use assets belonging to suppliers; in addition, this stage comprised the analysis of perpetual usufruct rights to land as well as land easements and transmission easements,

- stage II – the evaluation of each agreement identified in stage I in terms of its meeting the criteria to be recognised as a lease pursuant to IFRS 16,

- stage III - implementation of IFRS 16 based on the developed concept.

All agreements were subjected to analysis involving a finance lease, operating lease, rentals, leasing and perpetual usufruct rights to land as well as transmission easements and land easements. Also analysed were transactions involving purchased services (external service costs under operating activities) in terms of any occurrence of use of identified assets.

Under this project the Group carried out appropriate changes in accounting policy and operating procedures. Methods were developed and implemented for the proper identification of lease agreements and for gathering data needed in order to properly account for such transactions.

The Group decided to apply the standard from 1 January 2019. In accordance with the transition rules described in IFRS 16.C5 (b), the new principles will be applied retrospectively, and the accumulated impact of initial application of the new standard will be recognised in equity as at 1 January 2019. Consequently, comparable data for financial year 2018 will not be restated (the modified retrospective approach). At the moment of transition, the Group applied the practical expedient pursuant to which the Group entities were not required to reassess whether previously classified agreements contain a lease. The project which was undertaken during the implementation indicated that the new definition of a lease per IFRS 16 will not significantly change the scope of agreements meeting the definition of a lease.

Description of adjustments

a) Recognition of lease liabilities

Following the adoption of IFRS 16, the Group will recognise lease liabilities related to agreements which were previously classified as "operating leases" in accordance with IAS 17 Leases. These liabilities will be measured at the present value of lease payments due to be paid as at the date of commencement of the application of IFRS 16. For purposes of implementation of IFRS 16 and disclosure with respect to the impact of implementation of IFRS 16, discounting was applied using the lessee's incremental borrowing rate as at 1 January 2019.

At their date of initial recognition, lease payments contained in the measurement of lease liabilities comprise the following types of payments for the right to use the underlying asset for the life of the lease:

- fixed lease payments less any lease incentives,
- variable lease payments which are dependent on market indices or market interest rates,
- amounts expected to be payable by the lessee under guaranteed residual value,
- the strike price of a purchase option, if it is reasonably certain that the option will be exercised, and
- payment of contractual penalties for terminating the lease, if the lease period reflects the lessee's use of the option of terminating the lease.

For the purposes of calculating the discount rate under IFRS 16, the Group will apply an incremental borrowing rate reflecting the cost of financing which would be drawn to purchase the object of a given lease. To estimate the amount of the discount rate, the Group considered the following contractual parameters: the type and life of an agreement, the currency applied and the potential margin which would have to be paid to a financial institution to obtain financing.

As at 31 December 2018, the discount rates calculated by the Group was within the following ranges (depending on the life of the agreement):

- for PLN-denominated agreements: from 4.25% to 5.86%
- for EUR-denominated agreements: from 2.10% to 4.63%
- for USD-denominated agreements: from 5.42% to 6.08%
- for CAD-denominated agreements: from 4.70% to 5.75%

The Group makes use of expedients with respect to short-term leases (less than 12 months) as well as in the case of leases in respect of which the underlying asset has a low value (less than PLN 20 000) and for which agreements the Group will not recognise financial liabilities nor any respective right-to-use assets. These types of lease payments will be recognised as costs using the straight-line method during the life of the lease.

b) Recognition of right-to-use assets

Right-to-use assets are measured at cost.

The initial cost of a right-to-use asset comprises:

- the amount of the initial measurement of lease liabilities,
- any lease payments paid at the commencement date or earlier, less any lease incentives received,
- initial direct costs incurred by the lessee as a result of entering into a lease agreement,
- estimates of costs which are to be incurred by the lessee as a result of an obligation to disassemble and remove an underlying asset or to carry out renovation.

On the day of initial application, in the case of agreements previously classified as operating leases under IAS 17, right-to-use assets were measured by the Group at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments related to that lease, recognised in the statement of financial position directly preceding the date of the initial application of IFRS 16.

Following initial recognition, right-to use assets are depreciated under IAS 16 and are subjected to impairment testing pursuant to IAS 36.

c) Application of estimates

The implementation of IFRS 16 requires the making of certain estimates and calculations which effect the measurement of lease liabilities and of right-to-use assets. These include among others:

- determining which agreements are subject to IFRS 16,
- determining the remaining life of leases for agreements entered into before 1 January 2019 (including for agreements with unspecified lives or which may be prolonged),
- determining the marginal interest rates applied for the purpose of discounting future cash flows, and
- determining useful lives and the depreciation rates of right-to-use assets, recognised as at 1 January 2019.

d) Application of practical expedients

In applying IFRS 16 for the first time, the Group will apply the following practical expedients permitted by the standard:

- application of a single discount rate to a portfolio of leases with similar characteristics,
- assessment as to whether leases are onerous as defined by IAS 37 at the moment of implementation of the standard as an alternative to performing impairment testing of a leased asset,
- the treatment of operating lease agreements for which the remaining lease term is less than 12 months as at 1 January 2019 as short-term leases, and
- the use of hindsight (i.e. knowledge gained after the fact) in determining the lease period if the agreement contains options to prolong or terminate the lease.

e) Information on the financial impact of IFRS 16 on the consolidated financial statements in the period in which the Standard will be applied for the first time

As at 31 December 2018, the Group had non-cancellable, off-balance sheet operating lease liabilities in respect of the following agreements: perpetual usufruct of land, lease of land, lease of machines and equipment and other leases. As at 31 December 2018, their notional amount of PLN 1 360 million (detailed information is presented in note 12.5 and in note 12.7), of which the amount of PLN 1 350 million concerns lease agreements and in accordance with IFRS 16 excludes short-term leases and the lease of low value assets.

For the aforementioned agreements, the Group measured the present value of assets used under these agreements and recognised, as at 1 January 2019, right-to-use assets in the amount of PLN 520 million and a corresponding lease liability in the same amount.

Off-balance sheet lease liabilities in the amount of PLN 1 360 million will be written-off.

In case of lease agreements which were previously classified as finance leases, the carrying amount of the right-to-use assets and lease liabilities as at 1 January 2019 will be equal to amounts measured in accordance with IAS 17.

In the case of agreements in which the Group companies are lessors, application of IFRS 16 will not necessitate the recognition of adjustments as at 1 January 2019.

Summary of the financial impact of the implementation of IFRS 16 (this only concerns lease agreements entered into or amended before 1 January 2019):

	As at 1 January 2019
Right-to-use assets – property, plant and equipment	520
Lease liability	520
	from 1 January 2019 to 31 December 2019
Estimated impact on the statement of comprehensive income:	
- decrease in costs due to taxes, charges and services	(59)
- increase in depreciation/amortisation	30
- increase in interest costs	21
Estimated impact on the statement of cash flows:	
- increase in net cash flows from operating activities	58
- decrease in net cash flows from financing activities	(58)

It is estimated that the annual cost of short-term lease agreements and the annual cost of lease agreements for low-value assets is immaterial.

Other standards and interpretations published but not yet in force are not applicable to the Group's activities nor will they have an impact. These are as follows:

- Amendments to IFRS 10 and IAS 28 with respect to the sale or contribution of assets between an investor and its associate or joint venture,
- IFRIC 23 interpretation on uncertainty over income tax treatments,
- IFRS 17 Insurance contracts,
- Amendments to IFRS 9 on debt financial assets with early repayment options, which could lead to the arising of a so-called negative compensation,
- Amendments to IAS 28 on long-term interests that form part of the net investments in associates and joint ventures,
- Annual improvements to IFRS Standards, 2015-2017 cycle,
- Amendments to IAS 19 on amendments, curtailments or settlements of plans of specified benefits,
- Revision of IFRS Conceptual Framework,
- Amendments to IFRS 3 on the Definition of a Business,
- Amendments to IAS 1 and IAS 8 on the Definition of Material.

The aforementioned standards, with the exception of IFRIC 23 and amendments to IFRS 9 are awaiting adoption by the European Union. The Group aims to apply all of the amendments at their effective dates

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, where the following mines, deposits or mining areas constitute the operating segments: Sudbury Basin, Robinson, Carlota, Franke and Ajax.	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, Ajax and other. In addition, the Management Board receives and analyses reports on the whole KGHM INTERNATIONAL LTD. Group. Operating segments are engaged in exploration and mining of copper, molybdenum, silver, gold and nickel 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.

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 2 Sp. z o.o., Future 3 Sp. z o.o., Future 4 Sp. z o.o., Future 5 Sp. z o.o., Future 6 Sp. z o.o. and Future 7 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.

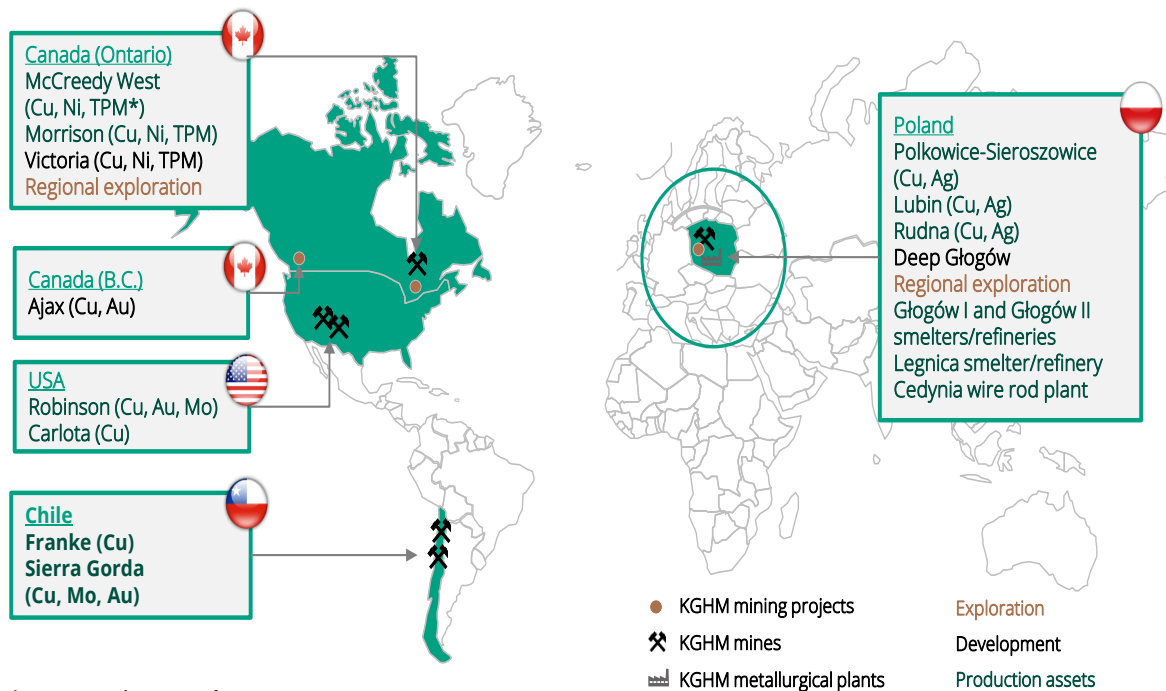
Each of the segments KGHM Polska Miedź S.A., KGHM INTERNATIONAL LTD. and Sierra Gorda S.C.M. have their own Management Board, which reports the results of their business activities to the Management Board of the Parent Entity.

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. 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 Transshipment Company
Chile	Aguas de la Sierra Limitada, Minera Carrizalillo Limitada, KGHM Chile SpA, Quadra FNX Holdings Chile Limitada, Sociedad Contractual Minera Franke
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	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 I FIZAN in liquidation, KGHM IV FIZAN, KGHM V FIZAN in liquidation, KGHM VI FIZAN, KGHM VII FIZAN, Polska Grupa Uzdrowisk Sp. z o.o.
Other activities	CENTROZŁOM WROCŁAW S.A., CUPRUM Development sp. z o.o., 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., PeBeKa Canada Inc., PHU "Lubinpex" Sp. z o.o., PMT Linie Kolejowe Sp. z o.o., PMT Linie Kolejowe 2 Sp. z o.o., Staropolanka Sp. z o.o., WMN "ŁABĘDY" S.A., Zagłębie Lubin S.A., OOO ZANAM VOSTOK

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



* TPM – precious metals

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 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 the investment in KGHM INTERNATIONAL LTD.) are measured at cost.
- 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 income tax (current and deferred), finance income and (costs), other operating income and costs, the share of losses of joint ventures accounted for using the equity method, impairment losses on interest in a joint venture, depreciation/amortisation and impairment losses on property, plant and equipment 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.

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.

Financial results of reporting segments for the comparable period

		from 1 January 2017 to 31 December 2017						
		KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data		Consolidated financial statements
						Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments****	
Note 2.3	Revenues from contracts with customers, of which:	16 024	2 602	1 993	6 478	(1 993)	(4 746)	20 358
	- inter-segment	276	-	-	4 465	-	(4 741)	-
	- external	15 748	2 602	1 993	2 013	(1 993)	(5)	20 358
	Segment result	1 323	(561)	(525)	38	525	725	1 525
	Additional information on significant revenue/cost items of the segment							
	Depreciation/amortisation recognised in profit or loss (Recognition)/reversal of impairment loss on non-current assets, including:	(1 035)	(351)	(465)	(234)	465	11	(1 609)
	Impairment loss on investments in subsidiaries	(330)	-	-	-	-	330	-
	Allowance for impairment of loans granted	(606)	(23)	-	-	-	606	(23)
	Share of losses of joint ventures accounted for using the equity method	-	(474)	-	-	-	-	(474)
	Deferred tax due to impairment losses on non-current assets	-	168	-	-	-	-	168
	Assets, including:	30 947	7 807	8 114	5 400	(8 114)	(10 032)	34 122
	Segment assets	30 947	7 807	8 114	5 400	(8 114)	(10 071)	34 083
	Joint ventures accounted for using the equity method	-	-	-	-	-	8	8
	Assets unallocated to segments	-	-	-	-	-	31	31
	Liabilities, including:	13 691	12 701	11 240	2 007	(11 240)	(12 062)	16 337
	Segment liabilities	13 691	12 701	11 240	2 007	(11 240)	(12 204)	16 195
	Liabilities unallocated to segments	-	-	-	-	-	142	142
	Other information							
	Cash expenditures on property, plant and equipment and intangible assets	1 991	549	564	253	(564)	3	2 796
	Production and cost data							
	Payable copper (kt)	522.0	81.0	53.4				
	Molybdenum (million pounds)	-	0.7	19.7				
	Silver (t)	1 218.1	1.6	14.4				
	TPM (koz t)	117.3	74.0	28.0				
	C1 cash cost of producing copper in concentrate (USD/lb)**	1.52	1.92	1.67				
	Adjusted EBITDA	4 160	707	609	277	-	-	5 753
	EBITDA margin***	26%	27%	31%	4%	-	-	26%

* 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.

*** Adjusted EBITDA to revenues from sales. For the purposes of calculating the Group's EBITDA margin (26%), the consolidated revenues from sales were increased by revenues from sales of the segment Sierra Gorda S.C.M.

[5 753 / (20 358 + 1 993) * 100]

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

Reconciliation of adjusted EBITDA

from 1 January 2018 to 31 December 2018

	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M. *	Other segments
Profit/(Loss) for the period	2 025	(308)	(767)	(41)
[–] Share of losses of joint ventures accounted for using the equity method	-	(658)	-	-
[–] Current and deferred income tax	(647)	(28)	(60)	(24)
[–] Depreciation/amortisation recognised in profit or loss	(1 119)	(461)	(546)	(225)
[–] Finance income and (costs)	(774)	(854)	(797)	(13)
[–] Other operating income and (costs)	1 149	971	3	29
[=] EBITDA	3 416	722	633	192
[–] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	-	-	-	(9)
Adjusted EBITDA	3 416	722	633	201

from 1 January 2018 to 31 December 2018

Profit/(loss) on sales (EBIT)	2 297	261	87	(33)
[–] Depreciation/amortisation recognised in profit or loss	(1 119)	(461)	(546)	(225)
[=] EBITDA	3 416	722	633	192
[–] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	-	-	-	(9)
[=] Adjusted EBITDA	3 416	722	633	201

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

Reconciliation of adjusted EBITDA

from 1 January 2017 to 31 December 2017

	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments
Profit/(Loss) for the period	1 323	(561)	(525)	38
[–] Share of losses of joint ventures accounted for using the equity method	-	(474)	-	-
[–] Current and deferred income tax	(831)	670	146	(26)
[–] Depreciation/amortisation recognised in profit or loss	(1 035)	(351)	(465)	(234)
[–] Finance income and (costs)	1 033	(948)	(781)	(7)
[–] Other operating income and (costs)	(2 004)	(422)	(34)	28
[=] EBITDA	4 160	964	609	277
[–] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	-	257	-	-
Adjusted EBITDA	4 160	707	609	277

from 1 January 2017 to 31 December 2017

Profit/(loss) on sales (EBIT)	3 125	613	144	43
[–] Depreciation/amortisation recognised in profit or loss	(1 035)	(351)	(465)	(234)
[=] EBITDA	4 160	964	609	277
[–] (Recognition)/reversal of impairment losses on non-current assets recognised in cost of sales, selling costs and administrative expenses	-	257	-	-
[=] Adjusted EBITDA	4 160	707	609	277

*55% share of the Group in the financial data of 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 2018:

- the segment KGHM Polska Miedź S.A. – in section 7,
- the segment KGHM INTERNATIONAL LTD. – in section 8,
- the segment Sierra Gorda S.C.M. – in section 9.

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

The Group generates revenues mainly from sales of copper, silver and gold. Other, smaller streams of revenues come from services provided and other products, merchandise and materials.

In accordance with IFRS 15, as at 1 January 2018 the Group recognises revenue from contracts with customers when a Group entity 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.

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, a Group entity determines (based on contractual terms), whether the obligation will be performed over time or at a specified moment.

Revenues from the sale of products, merchandise and materials are recognised in profit or loss once at a point in time when the performance obligation is satisfied (in particular in accordance with the applied INCOTERMS principles).

Revenues from the sale of services are recognised 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 entity's performance to the extent that the entity performs its obligations, or
- the Group entity 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 entity's performance creates an asset without an alternative use to the Group entity and the entity has an enforceable right to payment for performance completed to date.

The allocation of a transaction price to each performance obligation is made based on a relative stand-alone selling price.

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.

Revenues from contracts with customers are recognised in the amount of the transaction price (including any discounts granted and rebates).

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 case of sales transactions, for which the price is set after the date of recognition of a given sale, the revenue is adjusted at the end of each reporting period by any change in the fair value of the relevant trade receivables.

Sales revenue is adjusted for the gain or loss on the settlement of 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.

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

from 1 January 2018 to 31 December 2018

	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data		Consolidated data
					Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	
Copper	12 342	1 666	1 065	6	(1 065)	(21)	13 993
Silver	2 242	10	24	-	(24)	-	2 252
Gold	381	206	102	-	(102)	-	587
Services	88	771	-	2 117	-	(1 551)	1 425
Other	704	203	757	4 867	(757)	(3 505)	2 269
TOTAL	15 757	2 856	1 948	6 990	(1 948)	(5 077)	20 526

from 1 January 2017 to 31 December 2017

	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data		Consolidated data
					Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments	
Copper	12 213	1 702	1 182	8	(1 182)	(22)	13 901
Silver	2 441	16	29	-	(29)	-	2 457
Gold	556	187	134	-	(134)	-	743
Services	142	449	-	1 910	-	(1 399)	1 102
Other	672	248	648	4 560	(648)	(3 325)	2 155
TOTAL	16 024	2 602	1 993	6 478	(1 993)	(4 746)	20 358

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

Note 2.4 Revenues from contracts with customers of the Group – geographical breakdown reflecting the location of end clients

	from 1 January 2018 to 31 December 2018							from 1 January 2017 to 31 December 2017
	KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M.*	Other segments	Reconciliation items to consolidated data		Consolidated data	KGHM Polska Miedź S.A. Group
					Elimination of data of the segment Sierra Gorda S.C.M	Consolidation adjustments		
Poland	4 131	-	7	6 696	(7)	(5 073)	5 754	5 575
Austria	235	-	-	23	-	-	258	278
Bulgaria	14	-	-	11	-	-	25	26
Czechia	1 325	-	-	22	-	-	1 347	1 383
Denmark	57	-	-	1	-	-	58	71
Estonia	18	-	-	1	-	-	19	8
Finland	50	-	-	7	-	-	57	48
France	699	6	-	2	-	-	707	992
Spain	551	156	-	2	-	-	709	(3)
Netherlands	3	-	196	-	(196)	-	3	5
Germany	1 968	102	-	42	-	-	2 112	2 186
Romania	112	-	-	2	-	-	114	103
Slovakia	104	-	-	13	-	-	117	99
Slovenia	69	-	-	3	-	-	72	69
Sweden	41	-	-	26	-	-	67	74
Hungary	668	-	-	6	-	-	674	657
The United Kingdom	1 871	348	63	22	(63)	(2)	2 239	1 795
Italy	551	39	2	9	(2)	-	599	437
Bosnia and Hercegovina	32	-	-	-	-	-	32	40
Chile	-	17	15	-	(15)	-	17	60
China	2 001	459	766	-	(766)	-	2 460	2 990
India	-	-	27	-	(27)	-	-	156
Japan	3	153	477	-	(477)	-	156	6
Canada	1	736	3	-	(3)	(1)	736	770
South Korea	30	57	174	-	(174)	-	87	4
Russia	1	-	-	24	-	(1)	24	18
The United States of America	177	779	108	5	(108)	-	961	1 360
Switzerland	533	-	-	1	-	-	534	766
Turkey	323	-	-	9	-	-	332	273
Singapore	158	-	-	-	-	-	158	3
Argentina	-	-	19	-	(19)	-	-	-
Brazil	4	-	51	-	(51)	-	4	-
Oman	-	-	29	-	(29)	-	-	-
Other countries	27	4	11	63	(11)	-	94	109
TOTAL	15 757	2 856	1 948	6 990	(1 948)	(5 077)	20 526	20 358

Note 2.5 Main customers

In the period from 1 January 2018 to 31 December 2018 and in the comparable period the revenues from no single customer exceeded 10% of the sales revenue of the Group.

Note 2.6 Non-current assets – geographical breakdown**Property, plant and equipment, intangible assets and investment properties**

	As at 31 December 2018	As at 31 December 2017
Poland	19 652	18 430
Canada	1 151	1 055
The United States of America	1 118	989
Chile	335	236
TOTAL	22 256	20 710

The following were also recognised in non-current assets: joint ventures accounted for using the equity method, derivatives, other instruments measured at fair value, other financial and non-financial assets and deferred tax assets.

Part 3 – Impairment of assets

Note 3.1. Impairment testing of the KGHM INTERNATIONAL LTD. Group's assets

As at 31 December 2018, as a result of the identification of indications of possible change in the recoverable amounts of international assets of the KGHM INTERNATIONAL LTD. Group, such as: the Sudbury Basin, the Franke mine, involvement in joint venture Sierra Gorda, the Management Board of the Parent Entity tested these assets for impairment, identifying each of them as separate cash generating units (CGUs).

The key indication to perform impairment testing of assets was the significant change in technical and economic parameters of mining assets, such as mine lives, production volume, reserves and resources, assumed operating costs and the level of capital expenditures during a mine's life. To determine the recoverable amount of assets during the testing, the following were measured at fair value (less costs to sell) using the DCF method, i.e. the method of discounted cash flows: CGU Sudbury and involvement in Sierra Gorda and at the value in use of CGU Franke. The fair value was classified to level 3 of the fair value hierarchy.

BASIC MACROECONOMIC ASSUMPTIONS ADOPTED IN THE IMPAIRMENT TESTING			
Assumption	Level adopted for testing		
Copper price	<p>The price path for copper was set based on internal macroeconomic assumptions developed with the use of long-term forecasts available from financial and analytical institutions.</p> <p>A detailed forecast is being prepared for the period 2019-2023, while for the period 2024-2028 a technical adjustment of prices was applied between the last year of the detailed forecast, and 2029, from which a long-term metal price forecast of 6 614 USD/t (3.00 USD/lb) is being used. The long-term forecasted copper price has not changed as compared to the long-term price adopted for conducting testing as at 31 December 2017.</p>		
OTHER KEY ASSUMPTIONS USED FOR FAIR VALUE ESTIMATION OF ASSETS OF CGUs			
Assumption	Sierra Gorda	Sudbury	Franke
Mine life / forecast period	25	18	2
Level of copper production during mine life [kt]	4 372	276	37
Average operating margin during mine life	35%	57%	7%
Capital expenditures to be incurred during mine life [USD million]	2 219	1 630	4
Applied discount rate after taxation for assets in the operational phase	8%	8%	11%
Applied discount rate after taxation for assets in the pre-operational phase		11%	
Costs to sell	2%		
KEY FACTORS RESPONSIBLE FOR MODIFICATION OF TECHNICAL AND ECONOMIC ASSUMPTIONS			
Sierra Gorda	<p>Postponement to subsequent years of capital expenditures from 2017-2018 related to the debottlenecking program and from the oxide ore processing project. In the previous test, expenditures on the aforementioned projects were included in the period not covered by current assumptions. The update of the multi-year mine plan resulted in the prolongation of the mine's life by 3 years.</p>		
Sudbury	<p>On-going optimisation of the multi-year plan of KGHM's operating activities in the Sudbury Basin. Among others, as a result of the activities undertaken, the extraction of ore from the Morrison deposit is planned to be halted in the first quarter of 2019 along with a recommencement of production by the McCreedy West mine. The update of the multi-year plans resulted in an increase in capital expenditures, a change in the production volumes of individual metals and an extension of the production period by one year. The assumptions adopted for the Victoria project have not changed significantly as compared to the testing conducted as at 31 December 2017.</p>		
Franke	<p>Identification of additional deposits of oxide ore and an update of the mining plans, which allows for a prolongation of the mine's life by an additional production year.</p>		

The test carried out indicated justification to reverse a part of the allowance for impairment, recognised in prior years, on loans granted to the joint venture Sierra Gorda S.C.M.

CGU	Segment (Part 2)	Carrying amount		Recoverable amount		Reversal of allowance for impairment	
		USD mn	PLN mn	USD mn	PLN mn	USD mn	PLN mn
Sierra Gorda S.C.M.	Sierra Gorda S.C.M.	1 188	4 466	1 383	5 199	195	733

Reversal of an allowance for impairment was recognised in in "other operating income" of the consolidated statement of profit or loss.

Results of tests performed as at 31 December 2018 for CGU Sudbury and CGU Franke confirmed that their fair value is equal to their carrying amounts.

Note 3.2 Water rights - intangible assets not yet available for use

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 less 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 2018, the Group assessed the financial indicators and came to the conclusion that there is no need to recognise an impairment loss, as the estimated amount of water available for extraction did not change compared to the amount estimated as at 31 December 2017.

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

Note 4.1 Expenses by nature

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Note 9.3	1 903	1 684
Note 11.1	5 202	4 956
	7 097	7 460
	2 404	2 156
Note 5.2	1 671	1 765
	535	506
Note 4.4	(26)	(344)
	62	57
	54	34
Note 4.4	35	92
	103	157
	19 040	18 523
	653	571
	(375)	(1 079)
	(1 383)	(1 468)
	17 935	16 547
	16 555	15 204
	374	371
	1 006	972

Note 4.2 Other operating income and (costs)

		from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Note 7.1	Measurement and realisation of derivatives	216	231
	Interest income calculated using the effective interest rate method	8	N/A*
Note 7.1	Exchange differences on assets and liabilities other than borrowings	593	-
	Release of unused provisions	51	132
	Other	166	199
	Total other operating income	1 034	562
Note 7.1	Measurement and realisation of derivatives	(305)	(492)
Note 7.1	Exchange differences on assets and liabilities other than borrowings	-	(1 466)
Note 4.4	Impairment losses on financial instruments	(24)	N/A*
Note 4.4	Impairment loss on fixed assets under construction and intangible assets not yet available for use	(60)	(773)
	Provisions recognised	(183)	(52)
	Other	(154)	(156)
	Total other operating costs	(726)	(2 939)
	Other operating income and (costs)	308	(2 377)

* N/A – not applicable – items which were not measured in accordance with principles arising from the application, from 1 January 2018, of IFRS 9.

Note 4.3 Finance income and (costs)

		from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Note 7.1	Exchange differences on borrowings	-	1 251
Note 7.1	Measurement of derivatives	11	-
	Total income	11	1 251
Note 7.1	Interest on borrowings	(93)	(96)
	Unwinding of the discount of provisions effect	(50)	(50)
	Bank fees and charges on borrowings	(15)	(44)
Note 7.1	Measurement of derivatives	-	(30)
Note 7.1	Exchange differences on borrowings	(593)	-
	Other	(21)	(11)
	Total costs	(772)	(231)
	Finance income and (costs)	(761)	1 020

Note 4.4 Recognition/ reversal of impairment losses on assets recognised in the statement of profit or loss

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Impairment losses on assets recognised in:		
cost of sales, of which:		
	63	150
	35	92
	28	37
	-	21
	84	798
other operating costs, of which:		
Note 4.1 impairment losses on fixed assets under construction and intangible assets not yet available for use	60	773
Note 4.2 allowance for impairment of loans per IAS 39	-	23
Note 4.2 allowance for impairment of trade receivables - per IFRS 9	19	-
Note 4.2 allowance for impairment of other financial receivables	5	2
Impairment losses, total	147	948
Reversal of impairment losses on assets, recognised in:		
cost of sales, of which:		
	56	351
Note 4.1 impairment loss on property, plant and equipment and intangible assets	26	344
	30	5
	-	2
Note 6.2 gains due to reversal of allowances for impairment of loans granted to joint ventures	733	-
other operating income, of which:		
	15	44
	-	41
	11	-
	2	3
	2	-
Reversal of impairment losses, total	804	395

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 tax and deferred tax.
Current income tax is calculated in accordance with current tax laws.

Income tax

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Current income tax	642	977
Note 5.1.1 Deferred income tax	165	(117)
Tax adjustments for prior periods	1	(86)
Income tax	808	774

In 2018, the Group's entities paid income tax in the amount of PLN 802 million (in 2017: PLN 983 million) to appropriate tax offices.

The table below presents an identification of differences between income tax from profit before 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 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Profit before income tax	2 466	2 299
Tax calculated using the Parent Entity's rate (2018: 19%, 2017: 19%)	469	437
Effect of applying other tax rates abroad	(217)	(177)
Tax effect of non-taxable income	(288)	(340)
Tax effect of expenses not deductible for tax purposes, including:	515	547
minerals extraction tax, which is not deductible for corporate income tax purposes	317	335
Deductible temporary differences on which deferred tax assets were not recognised	345	659
Utilisation of previously-unrecognised tax losses	(30)	(352)
Other	14	-
Income tax in profit or loss [effective tax rate amounted to 32.8% of profit before income tax (in 2017: 33.7% of profit before income tax)]	808	774

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.

Note 5.1.1 Deferred income tax

Accounting policies	Significant estimates and assumptions
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The probability of realising the deferred tax assets with future tax income is based on the budgets of the companies of the Group. Companies of the Group recognise 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.</p> <p>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.</p>

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Deferred income tax at the beginning of the period, of which:	42	(52)
Deferred tax assets	389	511
Deferred tax liabilities	(347)	(563)
Change in accounting policies – application of IFRS 9 and IFRS 15, of which:	(19)	N/A*
Deferred tax assets	(83)	N/A*
Deferred tax liabilities	64	N/A*
Deferred tax assets at the beginning of the period after application of IFRS 9 and IFRS 15, of which:	23	N/A*
Deferred tax assets	389	N/A*
Deferred tax liabilities	(366)	N/A*
Deferred income tax during the period:	(212)	94
Recognised in profit or loss	(165)	117
Recognised in correspondence with current tax assets	(64)	-
Recognised in other comprehensive income	25	(55)
Exchange differences from translation of foreign operations statements with a functional currency other than PLN	(8)	32
Deferred income tax at the end of the period, of which:	(189)	42
Deferred tax assets	309	389
Deferred tax liabilities	(498)	(347)

* N/A – not applicable – items which were not measured in accordance with principles arising from the application, from 1 January 2018, of IFRS 9.

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

	Deferred tax assets		Deferred tax liabilities	
	As at 31 December 2018	As at 31 December 2017	As at 31 December 2018	As at 31 December 2017
Maturity over the 12 months from the end of the reporting period	254	120	479	329
Maturity of up to 12 months from the end of the reporting period	55	269	18	18
Total	309	389	498	347

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 2018				As at 31 December 2017			
	Unused tax losses	Expiry date	Unused tax credits	Expiry date	Unused tax losses	Expiry date	Unused tax credits	Expiry date
Luxembourg	3 483	2020	-	-	3 619	2020	-	-
Chile	939	undefined	-	-	924	undefined	-	-
Canada	818	2026-2038	59	2017-2021	515	2032-2037	44	2015-2021
Other	256	-	-	-	188	-	132	-
Total	5 496		59		5 246		176	

As at 31 December 2018, the Parent Entity did not recognise deferred tax liabilities on taxable temporary differences in the amount of PLN 965 million (as at 31 December 2017: PLN 1 185 million) related to investments in subsidiaries and shares in joint ventures, as the conditions stipulated in IAS 12.39 were met.

Deferred tax assets	Credited/(Charged)				As at 31 December 2017	Change in accounting policies – application of IFRS 9 and IFRS 15	Credited/(Charged)				As at 31 December 2018
	As at 1 January 2017	profit or loss	other comprehensive income	exchange differences from translation of foreign operations statements with a functional currency other than PLN			As at 1 January 2018	profit or loss	Other comprehensive income and current tax assets	exchange differences from translation of foreign operations statements with a functional currency other than PLN	
Provision for decommissioning of mines and other technological facilities	156	6	-	-	162	-	162	49	-	-	211
Measurement of forward transactions	84	-	-	-	84	(70)	14	-	-	-	14
Difference between the depreciation rates of property, plant and equipment for accounting and tax purposes	79	(10)	-	-	69	-	69	(8)	-	-	61
Future employee benefits	379	12	26	-	417	-	417	19	61	-	497
Equity instruments measured at fair value	110	(2)	-	-	108	(16)	92	-	30	-	122
Other	690	3	(31)	(23)	639	3	642	102	(33)*	14	725
Total	1 498	9	(5)	(23)	1 479	(83)	1 396	162	58	14	1 630

* The amount includes PLN (64) million tax credit used by the KGHM International Ltd. Group as a result of a tax reform in USA (decrease in deferred tax assets in correspondence with current tax assets).

Deferred tax liabilities	(Credited)/Charged					Change in accounting policies - application of IFRS 9 and IFRS 15	(Credited)/Charged				
	As at 1 January 2017	profit or loss	other comprehensive income	exchange differences from translation of foreign operations statements with a functional currency other than PLN	As at 31 December 2017		As at 1 January 2018	profit or loss	other comprehensive income	exchange differences from translation of foreign operations statements with a functional currency other than PLN	As at 31 December 2018
Measurement of forward transactions	42	-	-	-	42	(27)	15	1	-	-	16
Re-measurement of hedging instruments	-	-	43	-	43	(42)	1	-	63	-	64
Difference between the depreciation rates of property, plant and equipment for accounting and tax purposes	1 024	36	-	(44)	1 016	-	1 016	196	-	16	1 228
Adjustments due to fair value measurement of KGHM INTERNATIONAL LTD. including realisation of adjustments to the end of the reporting period	167	(148)	-	(18)	1	-	1	-	-	-	1
Other	317	4	7	7	335	5	340	130	34	6	510
Total	1 550	(108)	50	(55)	1 437	(64)	1 373	327	97	22	1 819

Note 5.2 Other taxes

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017	Basis for calculating tax	Tax rate	Presentation in the consolidated statement of profit or loss
Minerals extraction tax, of which:	1 671	1 765			
- copper	1 373	1 407	Amount of copper in produced concentrate, expressed in tonnes	tax rate calculated for every reporting period *	Taxes and charges in expenses by nature (note 4.1.)
- silver	298	358	Amount of silver in produced concentrate, expressed in kilograms		

* in accordance with conditions specified by the Act dated 2 March 2012 on the minerals extraction tax.

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 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Poland	484	456
Real estate tax	202	188
Royalties	108	110
Excise tax	39	41
Environmental fees	19	19
Other taxes and charges	116	98
Other countries	72	44
Total	556	500

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 2018	As at 31 December 2017
Current corporate income tax assets	142	41
Assets due to taxes, social and health insurance and other benefits	275	236
Tax assets	417	277

	As at 31 December 2018	As at 31 December 2017
Current corporate income tax liabilities	14	88
Liabilities due to taxes, social and health insurance and other benefits	571	542
Tax liabilities	585	630

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 the interest 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 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 the amount proportional to the investor's share in these profits/losses.

If there are any indications of impairment, an investment is tested for impairment by calculating the recoverable amount in accordance with the policy presented in Part 3.

Loans granted to joint ventures do not meet the criteria of recognition as net investments in a joint venture.

Significant estimates and assumptions

Joint control

The Group classifies Sierra Gorda S.C.M. 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.

Note 6.1 Joint ventures accounted for using the equity method

	2018			2017		
	Sierra Gorda S.C.M.	Other entities	Total	Sierra Gorda S.C.M.	Other entities	Total
As at 1 January	-	8	8	-	27	27
Acquisition of shares	666	-	666	461	-	461
Share of losses of joint ventures accounted for using the equity method	(658)	(4)	(662)	(474)	-	(474)
Liquidation of a joint venture	-	-	-	-	(19)	(19)
Exchange differences from the translation of foreign operation statements with a functional currency other than PLN	(8)	-	(8)	13	-	13
As at 31 December	-	4	4	-	8	8

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
The Group's share (55%) of loss for the period, of which:	(767)	(525)
recognised share of joint ventures' loss	(658)	(474)
unrecognised share of joint ventures' loss	(109)	(51)

Information on entities accounted for using the equity method

	Main place of business	% of share capital held by the Group	% of voting power	Value of the investment in the consolidated statement of financial position	
				As at 31 December 2018	As at 31 December 2017
Jointly controlled entities					
Sierra Gorda S.C.M.	Chile	55	50	-	-
Other	Poland	49	50	4	8
Total				4	8

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

	As at 31 December 2018	As at 31 December 2017
Non-current assets	14 649	13 524
Current assets, including:	1 444	1 228
Cash and cash equivalents	364	358
Non-current liabilities, including:	19 458	17 928
Liabilities due to bank loans	1 128	1 915
Liabilities due to loans granted by jointly-controlling entities	16 583	14 244
Current liabilities, including:	2 979	2 509
Liabilities due to bank loans	552	533
Fair value of net assets	(6 344)	(5 685)
The Group's share in net assets (55%)	(3 489)	(3 126)
Cumulatively unrecognised share of losses of Sierra Gorda S.C.M.	4 976	4 867
Balance of impairment loss on interest in Sierra Gorda S.C.M.	(671)	(671)
Adjustment by the value of unrealised gains	(110)	(110)
Exchange differences from the translation of changes of investment in Sierra Gorda S.C.M. using exchange rates from prior periods	(706)	(960)
Value of the investment in the consolidated statement of financial position	-	-
	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Sales revenue	3 542	3 623
Depreciation/amortisation	(993)	(845)
Interest costs	(1 441)	(1 419)
Other incomes/(costs)	(2 393)	(2 579)
Loss before income tax	(1 285)	(1 220)
Income tax	(109)	265
Loss for the period	(1 394)	(955)
Total comprehensive income	(1 394)	(955)

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

	As at 31 December 2018	As at 31 December 2017
Group's share in commitments (investment and operating)	2 501	2 248
Group's share in the total amount of future minimal payments due to leasing agreements for mining equipment	709	777
Note 8.6 Guarantees granted by the Group	1 815	1 740

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

Accounting policies	Significant estimates and assumptions
Loans granted to Sierra Gorda S.C.M., classified in accordance with IFRS 9 in the category "measured at amortised cost" are initially recognised at fair value adjusted by direct costs associated with the loan and are measured at the reporting date at amortised cost using the effective interest rate, reflecting impairment. Loans are classified as loans measured at amortised cost if they met two conditions: they are in a business model whose objective is to collect contractual cash flows due to holding financial assets, and have passed the SPPI (solely payments of principal and interest) test.	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. The start of repayment of loans by Sierra Gorda S.C.M. will depend on the company's financial standing. It is assumed in the long-term plans of Sierra Gorda S.C.M. that the loans will be repaid with interest. 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

	2018	2017
As at 1 January	3 889	4 313
Accrued interest	257	319
Note 4.4 Gains due to the reversal of allowances for impairment of loans	733	-
Exchange differences from the translation of foreign operation statements with a functional currency other than PLN	320	(743)
As at 31 December	5 199	3 889

Part 7 – Financial instruments and financial risk management

Note 7.1 Financial Instruments

		As at 31 December 2018				As at 31 December 2017					
		At fair value through other comprehensive income	At fair value through profit or loss	At amortised cost	Hedging instruments	Total	Available-for-sale	At fair value through profit or loss	Loans and receivables	Hedging instruments	Total
Financial assets:											
- as at 31 December 2018 – in accordance with IFRS 9,											
- as at 31 December 2017 – in accordance with IAS 39.											
Non-current		526	27	5 915	308	6 776	614	11	4 651	99	5 375
Note 6.2	Loans granted to joint ventures	-	-	5 199	-	5 199	-	-	3 889	-	3 889
Note 7.2	Derivatives	-	12	-	308	320	-	11	-	99	110
Note 7.3	Other financial instruments measured at fair value	526	15	-	-	541	614	-	-	-	614
Note 7.4	Other financial instruments measured at amortised cost	-	-	716	-	716	-	-	762	-	762
Current		-	328	1 717	285	2 330	59	1	2 314	195	2 569
Note 10.2	Trade receivables	-	304	495	-	799	-	-	1 522	-	1 522
Note 7.2	Derivatives	-	16	-	285	301	-	1	-	195	196
Note 8.5	Cash and cash equivalents	-	-	957	-	957	-	-	586	-	586
Note 12.3	Other financial assets	-	8	265	-	273	59	-	206	-	265
Total		526	355	7 632	593	9 106	673	12	6 965	294	7 944

		As at 31 December 2018				As at 31 December 2017			
		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
Financial liabilities:									
- as at 31 December 2018 – in accordance with IFRS 9,									
- as at 31 December 2017 – in accordance with IAS 39.									
Non-current		133	7 080	29	7 242	137	6 398	71	6 606
Note 8.4.1	Borrowings	-	6 878	-	6 878	-	6 191	-	6 191
Note 7.2	Derivatives	133	-	29	162	137	-	71	208
	Other financial liabilities	-	202	-	202	-	207	-	207
Current		37	3 240	6	3 283	48	2 913	62	3 023
Note 8.4.1	Borrowings	-	1 071	-	1 071	-	965	-	965
Note 7.2	Derivatives	37	-	6	43	48	-	62	110
	Trade payables	-	2 053	-	2 053	-	1 823	-	1 823
	Other financial liabilities	-	116	-	116	-	125	-	125
Total		170	10 320	35	10 525	185	9 311	133	9 629

Gains/(losses) on financial instruments

		from 1 January 2018 to 31 December 2018 in accordance with IFRS 9		Financial assets measured at fair value through other comprehensive income	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
		Dividends income	1	-	-	-	-	-	1
		Interest income	-	-	265	-	-	-	265
Note 6.2		Gains due to the reversal of allowances for impairment on loans granted to joint ventures	-	-	733	-	-	-	733
Note 4.3		Interest costs	-	-	-	-	(93)	-	(93)
Note 4.2		Foreign exchange gains/(losses)	-	93	753	-	(253)	-	593
Note 4.3		Foreign exchange losses	-	-	-	-	(593)	-	(593)
Note 4.4		Impairment losses	-	-	(11)	-	-	-	(11)
Note 7.2		Revenues from contracts with customers	(17)	-	-	-	-	125	108
Note 4.2		Gains on measurement and realisation of derivatives	-	216	-	-	-	-	216
Note 4.2		Losses on measurement and realisation of derivatives	-	(305)	-	-	-	-	(305)
Note 4.3		Gains on measurement of derivatives	-	11	-	-	-	-	11
Note 4.3		Fees and charges on bank loans drawn	-	-	-	-	(15)	-	(15)
		Other losses	-	-	(13)	-	(9)	-	(22)
		Total net gain/(loss)	(16)	15	1 727	(963)	(963)	125	888

		from 1 January 2017 to 31 December 2017 in accordance with IAS 39		Available-for-sale financial assets	Financial assets/liabilities measured at fair value through profit or loss	Loans and financial receivables	Financial liabilities measured at amortised cost	Hedging instruments	Total
		Dividends income	1	-	-	-	-	-	1
		Interest income	-	-	331	-	-	-	331
Note 4.3		Interest costs	-	-	-	-	(96)	-	(96)
Note 4.2		Foreign exchange losses	-	-	(1 051)	-	(415)	-	(1 466)
Note 4.3		Foreign exchange gains	-	-	-	-	1 251	-	1 251
Note 4.4		Impairment losses	-	-	(43)	-	-	-	(43)
Note 7.2		Revenues from contracts with customers	-	-	-	-	-	16	16
Note 4.2		Gains on measurement and realisation of derivatives	-	231	-	-	-	-	231
Note 4.2		Losses on measurement and realisation of derivatives	-	(492)	-	-	-	-	(492)
Note 4.3		Losses on measurement of derivatives	-	(30)	-	-	-	-	(30)
Note 4.3		Fees and charges on bank loans drawn	-	-	-	-	(44)	-	(44)
		Other losses	-	-	(20)	-	(9)	-	(29)
		Total net gain/(loss)	1	(291)	(783)	(783)	687	16	(370)

The fair value hierarchy of financial instruments

Classes of financial instruments	As at 31 December 2018		As at 31 December 2017	
	Level 1	Level 2	Level 1	Level 2
Loans granted	15	-	-	-
Listed shares	427	-	617	-
Unquoted shares	-	99	-	56
Trade receivables	-	304	-	N/A*
Other financial assets	-	8	-	1
Derivatives, of which:	-	416	-	(12)
Assets	-	621	-	306
Liabilities	-	(205)	-	(318)

* N/A – not applicable – an item which was not measured in accordance with principles arising from the application, from 1 January 2018, of IFRS 9.

Note 7.2 Derivatives**Accounting policies**

Derivatives are classified as financial assets/liabilities held for sale, unless they have not been designated as hedging instruments.

Regular way purchases or sales of derivatives are recognised at the trade date.

Derivatives are initially recognised at fair value and are measured at fair value at the end of the reporting period. Derivatives not designated as hedges at the end of the reporting period are measured at fair value, with recognition of the gains/losses on measurement in profit or loss.

Within 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 are derivatives as well as bank 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.

The Parent Entity may use natural currency risk hedging through the use of hedge accounting for bank 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 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.

The Parent Entity ceases to account for derivatives 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.

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

Type of derivative	As at 31 December 2018					As at 31 December 2017				
	Financial assets		Financial liabilities		Net total	Financial assets		Financial liabilities		Net total
	Non-current	Current	Non-current	Current		Non-current	Current	Non-current	Current	
Derivatives – Commodity contracts - Metals - Copper										
Options - seagull	245	143	(10)	(1)	377	33	6	(71)	(62)	(94)
Options - collar	11	104	-	(1)	114	-	-	-	-	-
Derivatives – Currency contracts										
Options USD - collar	52	38	(19)	(4)	67	66	189	-	-	255
TOTAL HEDGING INSTRUMENTS	308	285	(29)	(6)	558	99	195	(71)	(62)	161

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

Type of derivative	As at 31 December 2018					As at 31 December 2017				
	Financial assets		Financial liabilities		Net total	Financial assets		Financial liabilities		Net total
	Non-current	Current	Non-current	Current		Non-current	Current	Non-current	Current	
Derivatives – Commodity contracts - Metals - Copper										
Options – seagull	-	-	(39)	(5)	(44)	-	-	(2)	-	(2)
QP adjustment swap transactions	-	4	-	-	4	-	-	-	-	-
Derivatives – Commodity contracts - Metals - Gold										
QP adjustment swap transactions	-	2	-	(2)	-	-	-	-	-	-
Derivatives – Currency contracts										
Collar and forward/swap EUR	1	1	(1)	(1)	-	1	1	-	-	2
Sold put options USD	-	-	-	-	-	-	-	(11)	(12)	(23)
Derivatives – Interest rate										
Options – purchased CAP	11	9	-	-	20	10	-	-	-	10
Embedded derivatives										
Acid and water supply contracts	-	-	(93)	(29)	(122)	-	-	(124)	(36)	(160)
TOTAL TRADE INSTRUMENTS	12	16	(133)	(37)	(142)	11	1	(137)	(48)	(173)

As at 31 December 2018, counterparty credit risk (CVA – credit value adjustment, for assets) and own credit risk (DVA – debit value adjustment, for liabilities) were not recognised in the measurement of derivatives (hedging and trade) due to their immateriality.

in PLN millions, unless otherwise stated

Open <u>hedging derivatives</u>	Notional Copper [t] Currency [USD million]	Avg. weighted price/exchange rate [USD/t] [USD/PLN]	Maturity/ settlement period		Period of profit/loss impact	
			from	to	from	to
			Copper – seagull	120 000	6 634 - 8 579	Jan 19
Copper – collar	36 000	6 733 - 8 333	Jan 19	Dec 19	Feb 19	Jan 20
Currency - collar	1 260	3.54 - 4.33	Jan 19	Dec 20	Jan 19	Dec 20

The fair value measurement of derivatives was classified under level 2 of the fair value hierarchy (i.e. measurement which applies observable inputs other than quoted prices):

- In the case of forward currency purchase or sell transactions, the forward prices from the maturity dates of individual transactions were used to determine their fair value. The forward price for currency exchange rates is 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.
- In the case of forward commodity purchase or sell transactions, the Parent Entity uses forward prices from the maturity dates of individual transactions to determine their fair value. At the end of the reporting period, in the case of copper, official closing prices from the London Metal Exchange are used, and with respect to silver and gold, the fixing price set by the London Bullion Market Association. Volatility ratios and forward price curves given by the Reuters system are used to calculate derivatives at the end of the reporting period. Levy approximation to the Black-Scholes model is used for Asian options pricing on commodity markets.

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.

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Statement of profit or loss		
Revenues from contracts with customers	125	16
Other operating and finance income/costs:	(78)	(291)
On realisation of derivatives	(141)	(8)
On measurement of derivatives	63	(283)
Impact of derivatives and hedging instruments on profit or loss for the period	47	(275)
Statement of other comprehensive income		
Impact of hedging transactions	349	381
Note 8.2.2 Impact of measurement of hedging transactions (effective portion)	318	397
Note 8.2.2 Reclassification to sales revenues due to realisation of a hedged item	31	(16)
TOTAL COMPREHENSIVE INCOME *	396	106

* The Parent Entity decided to implement IFRS 9 (including new hedge accounting principles) as at 1 January 2018 without adjusting comparative data, which means that the data concerning 2017 presented in the financial statements for 2018 are not comparable.

Note 7.3 Other financial instruments measured at fair value**Accounting policies**

The item "financial instruments measured at fair value" includes financial assets classified, in accordance with IFRS 9, to:

- equity instruments comprised of shares not held for trading, which were selected to be measured at fair value through other comprehensive income,
- loans granted measured at fair value through profit or loss.

Financial assets measured at fair value through other comprehensive income 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.

With regard to equity instruments not held for trading, in respect of which, at the moment of initial recognition were irrevocably selected to recognise gains/losses from measurement in other comprehensive income, the amounts presented in other comprehensive income are not later transferred to profit or loss. Dividends from such investments are recognised in profit or loss.

Financial assets measured at fair value through profit or loss are initially recognised at fair value, and at the end of the reporting period they are measured at fair value, and the gains/losses from measurement are recognised in profit or loss.

Listed shares are measured based on the closing price as at the end of the reporting period. The translation of shares expressed in a foreign currency is performed according to the accounting policies described in Note 1.3.

	As at 31 December 2018	As at 31 December 2017
Shares in companies listed on a stock exchange (Warsaw Stock Exchange and TSX Venture Exchange)	427	617
Unquoted shares	99	56
Loans granted	15	-
Other financial instruments measured at fair value	541	673

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 non-observable data).

Due to investments in listed companies, the Group is exposed to price risk. In accordance with applied principles arising from the requirements of IFRS 9, from 1 January 2018, the Group classified all equity instruments it has as at 1 January 2018 as assets measured at fair value through other comprehensive income and, pursuant to IFRS 9, changes in fair value (including impairment) are recognised in other comprehensive income. As a result of the above, the Group is not exposed to the risk of a change in profit or loss caused by changes in the share prices of these companies. Detailed information is presented in Note 1.4.1.4 (a) (iii).

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

	As at 31 December 2018	Percentage change of share price		As at 31 December 2017	Percentage change of share price	
	Carrying amount	55%	-24%	Carrying amount	34%	-10%
		Other comprehensive income	Other comprehensive income		Other comprehensive income	Profit or loss
Listed shares	427	237	(103)	617	211	(61)

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 the reporting period) on profit or loss and other comprehensive income.

Potential movements in share prices at the end of the reporting period were determined at the level of maximum deviations in a given year.

Note 7.4 Other financial instruments measured at amortised cost

Accounting policies	Major estimates
<p>The item other financial instruments measured at amortised cost includes financial assets designated to cover the costs of decommissioning mines and restoring tailings storage facilities (accounting policy with respect to the obligation to decommission mines and restore tailings storage facilities is presented in Note 9.4) and other financial assets not classified to other items.</p> <p>Assets included, in accordance with IFRS 9, in the category "measured at amortised cost", are initially recognised at fair value and measured at amortised cost at the reporting date using the effective interest rate, reflecting impairment.</p>	<p>Sensitivity analysis of the risk of changes in interest rates of cash accumulated on bank accounts of the Mine Closure Fund and Tailings Storage Facility Restoration Fund and of investments in debt securities is presented in Note 7.5.1.4.</p>

	As at 31 December 2018	As at 31 December 2017
Non-current financial assets designated for decommissioning mines and restoring tailings storage facilities	430	403
Cash held in the Mine Closure Fund and Tailings Storage Facility Restoration Fund	364	342
Debt securities	66	61
Other non-current financial receivables, including:	286	359
Management fee for Sierra Gorda S.C.M.	160	308
Other loans granted	8	20
Total	716	762

Note 7.1

As at 31 December 2018, non-current financial assets for decommissioning mines and the restoration of tailings storage facilities were presented by cash and debt securities in the amount of PLN 430 million (2017: PLN 403 million) 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.

Other non-current financial assets designated for decommissioning mines and restoring tailings storage facilities are exposed to the credit risk described in Note 7.5.2.4.

Details regarding measurement 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 debt securities,
 - 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 their 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 the KGHM INTERNATIONAL LTD. is of the greatest significance and impact on 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:

	Grupa	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 exposures 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 individual entities' 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 evaluating the market value 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 hedged 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 budgeted results. 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 volume 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 using 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.

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 years 2017-2018 is presented in the table below:

	2018			2017		
	Net	Sales	Purchases	Net	Sales	Purchases
Copper [t]	464 795	592 274	127 479	436 737	586 391	149 654
Silver [t]	1 216	1 234	18	1 163	1 185	22

The notional amount of copper price hedging strategies settled in 2018 represented approx. 19% (in 2017: 23%) of the total sales of this metal realised by the Parent Entity (it represented approx. 25% of net sales in 2018 and 32% in 2017). In 2018 revenues from silver sales were not hedged by derivatives.

With respect to strategic management of market risk in 2018, the Parent Entity implemented copper price hedging transactions with a total notional amount of 126 thousand tonnes and a maturity period from July 2018 to December 2020 (of which: 114 thousand tonnes were in respect of hedging revenues from sales of copper in years 2019-2020). Collar and seagull options structures were implemented (Asian options). In 2018 the Company did not implement derivatives transactions on the silver market.

In addition, in 2018 the Parent Entity began the management of a net trading position in order to react to changes in contractual agreements with customers, non-standard pricing terms in metals sales and purchases of copper-bearing materials. In the fourth quarter of 2018 QP adjustment swap transactions were entered into on the copper and gold markets with maturity to June 2019.

As a result, as at 31 December 2018 the Parent Entity held open derivatives transactions on the copper market for 168 thousand tonnes (of which: 156 thousand tonnes came from strategic management of market risk, while 12 thousand tonnes came from the management of a net trading position).

The condensed table of open derivatives transactions held by the Parent Entity on the copper market as at 31 December 2018, entered into as part of the strategic management of market risk, is presented below (the hedged notional in the presented periods is allocated evenly on a monthly basis).

	Instrument	Notional [tonnes]	Option strike price			Average weighted premium [USD/t]	Effective hedge price [USD/t]	Hedge limited to [USD/t]	Participation limited to [USD/t]
			Sold put option [USD/t]	Purchased put option [USD/t]	Sold call option [USD/t]				
1st half of 2019	Seagull	21 000	4 700	6 200	8 000	-226	5 974	4 700	8 000
	Seagull	12 000	5 000	6 900	9 000	-250	6 650	5 000	9 000
	Collar	6 000		6 800	8 400	-250	6 550		8 400
	Collar	12 000		6 700	8 300	-228	6 472		8 300
2nd half of 2019	Seagull	21 000	4 700	6 200	8 000	-226	5 974	4 700	8 000
	Seagull	12 000	5 000	6 900	9 000	-250	6 650	5 000	9 000
	Collar	6 000		6 800	8 400	-250	6 550		8 400
	Collar	12 000		6 700	8 300	-228	6 472		8 300

in PLN millions, unless otherwise stated

TOTAL 2019		102 000							
Seagull	24 000	5 000	6 900	9 000	-250	6 650	5 000	9 000	
Seagull	4 920	5 000	6 900	8 800	-250	6 650	5 000	8 800	
Seagull	25 080	5 000	6 800	8 700	-220	6 580	5 000	8 700	
TOTAL 2020		54 000							

In 2018, neither KGHM INTERNATIONAL LTD. nor any of the mining companies implemented any forward transactions on the commodity market. As at 31 December 2018, the risk of changes in metals prices was also related to derivatives embedded in the long-term contracts for supply of sulphuric acid and water.

The sensitivity analysis of the Company for risk of changes in copper prices as at 31 December 2018 is presented in the table below:

Financial assets and liabilities	Value at risk [PLN million]	Carrying amount 31.12.2018 [PLN million]	Copper price change [USD/t]			
			7 352 (+24%)		4 573 (-23%)	
			Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income
Derivatives - copper	451	451	35	(456)	(148)	668
Embedded derivatives	(122)	(122)	(45)	-	(44)	-
Impact on profit or loss			(10)		(192)	
Impact on other comprehensive income				(456)		668

The sensitivity analysis of the Company for risk of changes in copper prices as at 31 December 2017 is presented in the table below:

Financial assets and liabilities	Value at risk [PLN million]	Carrying amount 31.12.2017 [PLN million]	Copper price change [USD/t]			
			9 064 (+26%)		5 380 (-25%)	
			Profit or loss	Other comprehensive income	Profit or loss	Other comprehensive income
Derivatives - copper	(96)	(96)	29	(523)	131	190
Embedded derivatives	(160)	(160)	(64)	-	59	-
Impact on profit or loss			(35)		190	
Impact on other comprehensive income				(523)		190

In order to determine the potential movements in metals prices for purposes of sensitivity analysis of commodity risk factors (copper), 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 concerning 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 derives also from items in the consolidated statement of financial position denominated in foreign currencies, which under the existing accounting regulations must be, upon settlement or periodic valuation, including the translation of foreign operations statements, translated 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. 32% (in 2017: 26%) of the total revenues from sales of copper and silver realised by the Parent Entity in 2018.

In 2018 the Parent Entity implemented transactions hedging against a change in the USD/PLN exchange rate with a notional amount of USD 1 710 million and maturity falling from April 2018 to December 2020 (of which: transactions hedging revenues in the amount of USD 1 080 million were in respect of the period from January 2019 to December 2020). On the currency market put options (European options) were purchased and collar options structures (European options) were entered into.

As at 31 December 2018, the Parent Entity held an open hedging position in derivatives for USD 1 260 million of planned revenues from sales of metals.

As for managing currency risk which may arise from bank loans, the Parent Entity applies natural hedging by borrowing in currencies in which it has revenues. As at 31 December 2018, following their translation to PLN, the bank loans and the investment loans which were drawn in USD amounted to PLN 7 655 million (as at 31 December 2017: PLN 6 935 million).

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 2018 is not presented, due to its immateriality for the Group.

The condensed table of open transactions in derivatives held by the Parent Entity on the currency market as at 31 December 2018 is presented below (the hedged notional in the presented periods is allocated evenly on a monthly basis).

Instrument	Notional [USD million]	Option strike price			Average weighted premium [PLN for USD 1]	Effective hedge price [USD/PLN]	Hedge limited to [USD/PLN]	Participation limited to [USD/PLN]	
		sold put option [USD/PLN]	purchased put option [USD/PLN]	sold call option [USD/PLN]					
1st half	Seagull	180	3.24	3.80	4.84	0.02	3.82	3.24	4.84
1st half	Collar	180		3.50	4.25	-0.06	3.44		4.25
2nd half	Collar	360		3.50	4.25	-0.05	3.45		4.25
TOTAL 2019		720							
1st half	Collar	360		3.50	4.25	-0.06	3.44		4.25
2nd half	Collar	180		3.50	4.25	-0.04	3.46		4.25
TOTAL 2020		540							

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 is presented in the tables below.

Financial instruments	Value at risk as at 31 December 2018				
	total PLN million	USD million	EUR million	CAD million	GBP million
Shares	4	-	-	1	-
Trade receivables	690	144	28	10	1
Cash and cash equivalents	819	157	24	6	23
Loans granted to joint ventures	5 199	1 383	-	-	-
Other financial assets	429	92	1	23	3
Derivatives *	416	93	-	-	-
Trade payables	(649)	(105)	(50)	(13)	(1)
Borrowings	(7 830)	(2 037)	(39)	-	-
Other financial liabilities	(56)	(6)	(1)	-	(6)

*Transactions on the commodities and interest rate markets 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 on the currency market which are denominated solely in PLN.

Financial instruments	Value at risk as at 31 December 2017				
	total PLN million	USD million	EUR million	CAD million	GBP million
Shares	6	-	-	2	-
Trade receivables	1 110	264	28	16	7
Cash and cash equivalents	478	95	22	14	3
Loans granted to joint ventures	3 889	1 117	-	-	-
Other financial assets	547	119	-	22	2
Derivatives *	(12)	(70)	-	-	-
Trade payables	(604)	(105)	(45)	(18)	-
Borrowings	(7 043)	(1 992)	(26)	-	-
Other financial liabilities	(8)	(1)	(1)	-	-

*Transactions on the commodities and interest rate markets 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 on the currency market which are denominated solely in PLN.

The sensitivity analysis of the Group to currency risk as at 31 December of each year is presented in the tables below:

2018	Value at risk	Carrying amount 31.12.2018	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	
			4.27 (+13%)		3.24 (-14%)		4.68 (+9%)	3.99 (-7%)	3.15 (+14%)	2.42 (-12%)	5.47 (+14%)	4.23 (-12%)
Financial assets and liabilities	[PLN million]	[PLN million]	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	4	526	-	-	-	-	-	-	-	-	-	-
Trade receivables	690	961	59	-	(61)	-	9	(7)	3	(3)	-	-
Cash and cash equivalents	819	957	64	-	(67)	-	7	(6)	2	(2)	13	(10)
Loans granted to joint ventures	5 199	5 199	567	-	(589)	-	-	-	-	-	-	-
Other financial assets	429	1 004	38	-	(39)	-	-	-	7	(6)	2	(2)
Derivatives	416	416	(19)	(156)	7	327	(8)	7	-	-	-	-
Trade payables	(649)	(2 224)	(43)	-	44	-	(16)	13	(4)	4	(1)	1
Borrowings	(7 830)	(7 949)	(835)	-	864	-	(12)	10	-	-	-	-
Other financial liabilities	(56)	(147)	(3)	-	3	-	-	-	-	-	(3)	3
Impact on profit or loss			(172)		162		(20)	17	8	(7)	11	(8)
Impact on other comprehensive income				(156)		327						

2017	Value at risk	Carrying amount 31.12.2017	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	
			4.00 (+15%)		2.99 (-14%)		4.58 (+10%)	3.87 (-7%)	3.16 (+14%)	2.44 (-12%)	5.39 (+15%)	4.15 (-12%)
Financial assets and liabilities	[PLN million]	[PLN million]	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	6	614	-	-	-	-	-	-	1	(1)	-	-
Trade receivables	1 100	1 522	110	-	(104)	-	9	(7)	5	(4)	4	(3)
Cash and cash equivalents	478	586	40	-	(38)	-	7	(5)	4	(4)	2	(1)
Loans granted to joint ventures	3 889	3 889	467	-	(442)	-	-	-	-	-	-	-
Other financial assets	547	1 027	57	-	(54)	-	-	-	7	(6)	1	(1)
Derivatives	(12)	(12)	50	(238)	(24)	181	(4)	4	-	-	-	-
Trade payables	(604)	(1 995)	(44)	-	41	-	(15)	11	(6)	5	-	-
Borrowings	(7 043)	(7 156)	(833)	-	789	-	(9)	6	-	-	-	-
Other financial liabilities	(8)	(160)	(1)	-	1	-	-	-	-	-	-	-
Impact on profit or loss			(154)		169		(12)	9	11	(10)	7	(5)
Impact on other comprehensive income				(238)		181						

In order to determine the potential movements 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.

Note 7.5.1.4 Interest rate risk

In 2018 the Group was exposed to the risk of changes in interest rates due to loans granted to joint ventures, investing cash 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 2018			As at 31 December 2017		
	Cash flow risk	Fair value risk	Total	Cash flow risk	Fair value risk	Total
Cash and cash equivalents	1 315*	-	1 315	923*	-	923
Loans granted	-	15	15	-	3 909	3 909
Note 7.1 Borrowings	(5 112)**	(2 810)	(7 922)	(5 179)**	(1 967)	(7 146)

* Presented amounts include cash accumulated in special purpose funds: Mine Closure Fund and Tailings Storage Facility Restoration Fund

** Presented amounts include the preparation fee paid which decreases financial liabilities due to bank loans.

In 2018, the Parent Entity did not implement any new derivative transactions hedging against an increase of the interest rate (LIBOR USD). However, in the first half of 2018 the Parent Entity drew a bank loan in the amount of USD 150 million, based on a fixed interest rate and the first instalment, in the amount of USD 65 million, of the loan granted in December 2017 by the European Investment Bank, also based on a fixed interest rate, and therefore hedging itself against the interest rate risk (natural hedging).

A condensed table of open transactions in derivatives on the interest rate market as at 31 December 2018 is presented below (maturity dates of options fall at the end of subsequent quarters).

Instrument	Notional [USD million]	Option strike price [LIBOR 3M]	Average weighted premium		Effective hedge level
			[USD for USD 1 million hedged]	[%]	[LIBOR 3M]
Purchase of interest rate cap options QUARTERLY IN 2019	1 000	2.50%	381	0.15%	2.65%
Purchase of interest rate cap options QUARTERLY IN 2020	1 000	2.50%	381	0.15%	2.65%

The table below presents the sensitivity analysis of the Group to interest rate risk with respect to positions with variable interest rates.

	2018		2017	
	+1.25%	-0.5%	2.0%	-0.5%
Cash and cash equivalents	14	(5)	12	(3)
Borrowings	(77)	26	(104)	26
Derivatives – interest rate	95	(19)	150	(8)
Total impact on profit/loss	32	2	58	15

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 derivatives and of loans designated as hedging instruments under hedge accounting, 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 as at 31 December 2018.

relation type risk type instrument type - hedged item	Balance of other comprehensive income due to cash flow hedging for relations:		Change in the value of hedged item in the period	Change in the value of hedging instrument in the period
	remaining in hedge accounting	for which hedge accounting was ceased		
	Cash flow hedging			
Commodity risk (copper)				
Options - Sales revenue	322	-	(411)	411
Currency risk (USD)				
Options - Sales revenue	13	-	53	(53)
Loans - Sales revenue	-	(129)	-	-
Total	335	(129)	(358)	358

The table below presents information on the impact of hedge accounting on profit or loss and other comprehensive income.

relation type risk type instrument type	Profit or (loss) due to hedging for the reporting period recognised in other comprehensive income	Amount reclassified from other comprehensive income to profit or loss as a reclassification adjustment, due to the realisation of a hedged item in the period	Item of the statement of profit or loss with a reclassification adjustment				
				Cash flow hedging			
				Commodity risk (copper)			
Options	488	(78)	- revenues from contracts with customers - other operating income and (costs)				
Currency risk (USD)							
Options	(170)	63	- revenues from contracts with customers - other operating income and (costs)				
Loans	-	(16)	- revenues from contracts with customers				
Total	318	(31)					

The following table contains information on changes in other comprehensive income in the period in connection with the application of hedge accounting.

Cash flow hedging

	Other comprehensive income due to cash flow hedging		
	Effective value	Cost of hedging	Total
	Effective portions of changes in the fair value of hedging instruments due to hedged risk - intrinsic value of option	time value of option	
Other comprehensive income - transactions hedging against commodity and currency risk - as at 1 January 2018	81	(224)	(143)
Impact of measurement of hedging transactions (effective part)	322	(4)	318
Reclassification to profit or loss due to realisation of hedged item	(125)	156	31
Reclassification to profit or loss due to lack of expectations of occurrence of hedged future cash flow	-	-	-
Other comprehensive income - transactions hedging against commodity and currency risk - as at 31 December 2018	278	(72)	206

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 sale 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 bank 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 and on assets measured at fair value through other comprehensive income arising from debt instruments. 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 (other than trade receivables).

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 stage it is classified to, an impairment loss is estimated for a 12-month period (stage 1) or in the horizon of lifetime (stage 2 and stage 3). The absolute indicator of default is an overdue period of more than 90 days.

Under the simplified model the Group 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 2018, the total amount of free and restricted cash and cash equivalents of PLN 955 million was held in bank accounts and in short-term deposits. 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. In the Parent Entity and KGHM INTERNATIONAL LTD., the credit risk in this regard is monitored through the ongoing 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 2018	As at 31 December 2017
Highest	AAA to AA- according to S&P and Fitch, and from Aaa to Aa3 according to Moody's	15%	27%
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	77%	60%
Medium	from BBB+ to BBB- according to S&P and Fitch, and from Baa1 to Baa3 according to Moody's	8%	13%

* Weighed by amount of deposits.

As at 31 December 2018, the maximum share of one bank in relation to the level of cash allocated by the Group amounted to 24% (as at 31 December 2017: 36%).

Note 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 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 2018	As at 31 December 2017
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	99%	100%
Medium	from BBB+ to BBB- according to S&P and Fitch, and from Baa1 to Baa3 according to Moody's	1%	-

* Weighed by positive fair value of open and unsettled derivatives.

Taking into consideration the fair value of open derivative transactions entered into by the Group and the fair value of unsettled derivatives, as at 31 December 2018 the maximum single entity share of the amount exposed to credit risk arising from these transactions amounted to 22%, i.e. PLN 121 million (as at 31 December 2017: 47%, i.e. PLN 124 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 framework agreements entered into with its customers) to the level of the positive balance of fair value measurement of transactions in derivatives with a given counterparty. Moreover, the resulting credit risk is continuously monitored by the review of the credit ratings and is limited by striving to diversify the portfolio while implementing hedging strategies.

Despite the concentration of credit risk associated with derivatives' transactions, the Parent Entity has determined that, due to its cooperation only 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 fair value of open derivatives of the Group (excluding the embedded derivatives) and receivables due to unsettled derivatives are presented by the main counterparties in the table below.

	2018			2017		
	Financial receivables	Financial liabilities	Net	Financial receivables	Financial liabilities	Net
Counterparty 1	141	(19)	122	77	-27	50
Counterparty 2	109	(13)	96	5	-26	-21
Counterparty 3	97	(11)	86	6	-27	-21
Counterparty 4	80	(10)	70	3	-24	-21
Other	201	(29)	172	216	-54	162
Total	628	(82)	546	307	(158)	149
open derivatives	620	(82)	538	306	(158)	148
unsettled derivatives	8	-	8	1	-	1

Note 7.5.2.3 Credit risk related to trade receivables

The following Group companies have significant trade receivables: the KGHM INTERNATIONAL LTD. Group PLN 447 million, KGHM Polska Miedź S.A. PLN 270 million, CENTROZŁOM WROCLAW S.A. PLN 84 million, NITROERG S.A. PLN 34 million, WPEC w Legnicy S.A. PLN 28 million, „MCZ” S.A. PLN 20 million and KGHM Metraco S.A. PLN 13 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 and requiring collateral. 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, long-term customers, while sales of products to new customers are mostly based on prepayments or trade financing instruments which wholly 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 merchandise 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 2018 the Parent Entity had secured 75% of its trade receivables (as at 31 December 2017, 95%).

Moreover, the Parent Entity enters into net settlement framework agreements, when it recognises both receivables and liabilities with the same client.

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.

Clients concentration As at 31 December 2018 the balance of receivables from the 7 largest clients represents 28% of trade receivables (2017: 63%). 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 clients, as well as to the securing used, the level of credit risk is low.

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 2018	As at 31 December 2017
Poland	35%	31%
European Union (excluding Poland)	9%	10%
Asia	13%	40%
Other countries	43%	19%

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 moment of recognition of a receivable in the statement of financial position and is updated at every subsequent reporting period ending date, depending on the number of days a given receivable is overdue. For the purpose of estimating the expected credit loss on trade receivables, the Group applies a provision matrix, estimated based on historical levels of a customer's payments of receivables. The Group takes into account segmentation of counterparties due to the level of credit risk by estimating and applying different provision matrices for individual Group companies. The Group defines default as being a failure by a customer to meet its liabilities after a period of 90 days from due date. The Group takes into account forward-looking information in the applied parameters of the model for estimating expected losses, by adjusting the base coefficients of insolvency probability.

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

	Gross amount
Gross amount as at 1 January 2018	1 569
Change in the balance of receivables	(840)
Utilisation of a loss allowance in the period	(15)
Note 10.2 Gross amount as at 31 December 2018	714

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

	Amount of allowance
Loss allowance for expected credit losses as at 1 January 2018	64
Change in allowance in the period recognised in profit or loss	8
Utilisation of a loss allowance in the period	(15)
Note 10.2 Loss allowance for expected credit losses as at 31 December 2018	57

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

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, due to the recognised impairment at the moment of initial recognition, were classified as POCI for the purposes of calculation of expected credit losses. Due to the identified indications, in 2018 the Group performed impairment testing of mining assets and recognised a reversal of impairment loss on loans granted in the amount of PLN 733 million as at 31 December 2018. Details on the results of the test are presented in part 3 of this report.

The following table presents the change in the period in the gross value of loans granted measured at amortised cost.

	Gross amount
Gross amount as at 1 January 2018	3 889
Interest accrued calculated using the effective interest rate	257
Gains on reversal of impairment	733
Exchange differences	320
Gross amount as at 31 December 2018	5 199

The basis for accruing interest on loans measured at amortised cost is the gross amount less any allowance for impairment.

Note 7.5.2.5 Credit risk related to other financial assets

The most significant item in other financial assets is cash accumulated on bank deposits in the special purpose funds: Mine Closure Fund and Tailings Storage Facility Restoration Fund in the amount of PLN 366 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 table below presents 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 and restoration of tailing storage facilities, according to the credit ratings of financial institutions holding special purpose deposits.

Rating level		As at 31 December 2018	As at 31 December 2017
Highest	AAA to AA- according to S&P and Fitch, and from Aaa to Aa3 according to Moody's	13%	94%
Medium-high	from A+ to A- according to S&P and Fitch, and from A1 to A3 according to Moody's	87%	6%

Part 8 - Borrowings and the management of liquidity and capital

Note 8.1 Capital management policy

Capital management in the Group is aimed at securing funds for business development and maintaining the appropriate level of liquidity.

In accordance with market practice, the Group monitors its capital, among others on the basis of ratios presented in the table below:

Ratios:	Calculations:	2018	2017
Net Debt/EBITDA	relation of net debt to EBITDA	1.6	1.3
Net Debt	borrowings and finance lease liabilities less free cash and short term investments with a maturity of up to 1 year	7 000	6 577
EBITDA*	profit on sales plus depreciation/amortisation recognised in profit or loss and impairment losses on non-current assets	4 339	5 144
Equity ratio	relation of equity less intangible assets to total assets	0.5	0.5
Equity	assets of the Group after deducting all of its liabilities	19 225	17 785
Intangible assets	identifiable non-cash items of assets without a physical form	1 881	1 656
Equity less intangible assets		17 344	16 129
Total assets	sum of non-current and current assets	37 237	34 122

* adjusted EBITDA for the period of 12 months ended on the last day of the reporting period and does not include the 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 covenants and which is comprised of the following items:

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Profit on sales	2 591	3 811
Interest income on loans granted to joint ventures	257	319
Other operating income and (costs)	308	(2 377)
Adjusted operating profit*	3 156	1 753

* presented amount does not include the reversal of allowances for impairment of loans granted to joint ventures

In order to maintain financial liquidity and the creditworthiness to acquire external financing at an optimum cost, the Group aims to maintain the *equity ratio* at a level of not less than 0.5, and the *ratio of Net Debt/EBITDA* at a level of up to 2.0.

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 effects.

Accumulated other comprehensive income consists of exchange differences from the translation of foreign operations statements with a functional currency other than PLN (Note 1.2) and actuarial gains/losses on post-employment benefits less any deferred tax effect (note 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 2018 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 2018 and 31 December 2017 there were no changes in either registered share capital or in the number of issued shares.

In 2018, Aviva Otwarty Fundusz Emerytalny Aviva BZ WBK and Otwarty Fundusz Emerytalny PZU „Złota Jesień” exceeded the 5% threshold in the total number of votes at the General Meeting of the Parent Entity.

In 2017 there were no changes in the ownership of significant blocks of shares of KGHM Polska Miedź S.A.

As far as the Parent Entity is aware, as at 31 December 2018, the Parent Entity's shareholder structure was as follows:

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%
Otwarty Fundusz Emerytalny PZU „Złota Jesień”	10 099 003	100 990 030	5.05%
Aviva Otwarty Fundusz Emerytalny Aviva BZ WBK	10 039 684	100 396 840	5.02%
Other shareholders	106 167 059	1 061 670 590	53.09%
Total	200 000 000	2 000 000 000	100.00%

On 18 February 2019, the Parent Entity was notified that the share of Otwarty Fundusz Emerytalny PZU „Złota Jesień” decreased below the 5% in the total number of votes at the General Meeting of KGHM Polska Miedź S.A. The Parent Entity's shareholder structure as at the date of signing of these financial statements was as follows:

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 BZ WBK	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%

Note 8.2.2 Changes of other equity items

	Other reserves from measurement of financial instruments			Accumulated other comprehensive income	Retained earnings
	Other reserves from measurement of available-for-sale financial assets	Other reserves from measurement of future cash flow hedging financial instruments	Other reserves from measurement of financial instruments, total		
As at 1 January 2017	60	(243)	(183)	2 216	11 739
Dividend	-	-	-	-	(200)
Transactions with non-controlling interest	-	-	-	-	2
Transactions with owners	-	-	-	-	(198)
Profit for the period	-	-	-	-	1 568
Changes due to the settlement of available-for-sale financial assets	(2)	-	(2)	-	-
Fair value losses on available-for-sale financial assets	5	-	5	-	-
Gains on measurement of available-for-sale financial assets after prior impairment	37	-	37	-	-
Note 7.2 Impact of effective cash flow hedging transactions entered into	-	397	397	-	-
Note 7.2 Amount transferred to profit or loss - due to the settlement of hedging instruments	-	(16)	(16)	-	-
Note 11.2 Actuarial losses on post-employment benefits	-	-	-	(134)	-
Exchange differences from the translation of foreign operations statements with a functional currency other than PLN	-	-	-	320	-
Note 5.1.1 Deferred income tax	(7)	(73)	(80)	25	-
Other comprehensive income	33	308	341	211	-
Total comprehensive income	33	308	341	211	1 568
As at 31 December 2017	93	65	158	2 427	13 109

	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	Accumulated other comprehensive income	Retained earnings
As at 31 December 2017	93	65	158	2 427	13 109
Change in accounting policies – application of IFRS 9, IFRS 15	(545)	(181)	(726)	-	806
As at 1 January 2018	(452)	(116)	(568)	2 427	13 915
Profit for the period	-	-	-	-	1 657
Fair value losses on financial assets measured at fair value through other comprehensive income	(189)	-	(189)	-	-
Note 7.2 Impact of effective cash flow hedging transactions entered into	-	318	318	-	-
Note 7.2 Amount transferred to profit or loss	-	31	31	-	-
Note 11.2 Actuarial losses on post-employment benefits	-	-	-	(322)	-
Exchange differences from the translation of foreign operations statements with a functional currency other than PLN	-	-	-	(161)	-
Note 5.1.1 Deferred income tax	30	(66)	(36)	61	-
Other comprehensive income	(159)	283	124	(422)	-
Total comprehensive income	(159)	283	124	(422)	1 657
As at 31 December 2018	(611)	167	(444)	2 005	15 572

Based on the Act of 15 September 2000, 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 2018 the statutory reserve capital in the Group's entities amounts to PLN 766 million, of which PLN 660 million relates to the Parent Entity.

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 comprehensively describes processes of managing the financial liquidity in the Group, which are realised by Group companies, while organisation, coordination and supervision over the realisation 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 is cash pooling – local in PLN, USD and EUR and international - in USD. 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 the fourth quarter of 2018, the Management Board of the Parent Entity carried out a review of the Strategy of KGHM, the goal of which was to ensure uniformity with the current market environment and with the needs of the KGHM Polska Miedź S.A. Group. As a result of the assumptions adopted with respect to ensuring long-term financial stability, actions are underway aimed at developing mechanisms supporting further growth in this regard:

- basing the financial structure of the Group on diversified and long term financing sources,
- restricting the need for net working capital in the Group, and
- effective management of market and credit risk in the Group.

Note 8.3.1 Contractual maturities for financial liabilities**Financial liabilities – as at 31 December 2018**

Financial liabilities	Contractual maturities from the end of the reporting period			Total (without discounting)	Carrying amount
	up to 12 months	1-3 years	over 3 years		
Borrowings	1 071	4 755	2 405	8 231	7 949
Trade payables	2 053	27	357	2 437	2 224
Derivatives – Currency contracts*	1	1	-	2	25
Derivatives – Commodity contracts – Metals*	-	-	-	-	58
Embedded derivatives	34	74	30	138	122
Other financial liabilities	116	15	18	149	147
Total financial liabilities by maturity	3 275	4 872	2 810	10 957	

Financial liabilities – as at 31 December 2017

Financial liabilities	Contractual maturities from the end of the reporting period			Total (without discounting)	Carrying amount
	up to 12 months	1-3 years	over 3 years		
Borrowings	1 012	1 275	5 181	7 468	7 156
Trade payables	1 823	21	370	2 214	1 995
Derivatives – Currency contracts*	-	1	-	1	25
Derivatives – Commodity contracts – Metals*	4	-	-	4	134
Embedded derivatives	42	85	57	184	160
Other financial liabilities	126	23	23	172	160
Total financial liabilities by maturity	3 007	1 405	5 631	10 043	

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

Note 8.4 Borrowings**Accounting policies**

Liabilities arising from borrowings are initially recognised at fair value less transaction costs and are measured at amortised cost at the end of the reporting period. Accrued interest is recognised in finance costs, unless it is capitalised in the value of property, plant and equipment or intangible assets.

Note 8.4.1 Net debt

	As at 31 December 2018	As at 31 December 2017
Bank loans *	4 766	4 341
Loans	2 094	1 845
Other	18	5
Note 7.1 Non-current liabilities due to borrowings	6 878	6 191
Bank loans	910	838
Loans	152	122
Other	9	5
Note 7.1 Current liabilities due to borrowings	1 071	965
Total borrowings	7 949	7 156
Note 8.5 Free cash and cash equivalents	949	579
Net debt	7 000	6 577

* Presented amounts include the preparation fee paid in the amount of PLN 15 million which decreases financial liabilities due to bank loans (in 2017: PLN 21 million).

Borrowings by currency (translated into PLN) and by type of interest rate

	As at 31 December 2018	As at 31 December 2017
PLN/WIBOR	86	99
EUR/EURIBOR	169	110
USD/LIBOR*	4 874	5 016
PLN/fixed	28	2
USD/fixed	2 780	1 940
Total	7 937	7 167

* Presented amounts include the preparation fee paid in the amount of PLN 15 million which decreases financial liabilities due to bank loans (in 2017: PLN 21 million)

In 2018, liabilities due to borrowing increased, mainly as a result of a higher USD/PLN exchange rate. In the current part, under bilateral agreements signed with banks, the Group has a constant and ongoing access to credit and overdraft facilities with maturities of up to 2 years. Due to the fact that they are successively extended for subsequent periods, the Group considers the liquidity risk connected to the received short-term bank loans as low.

Note 8.4.2 Net debt changes

Liabilities due to borrowing	As at 31 December 2017	Cash flows	Accrued interest	Exchange differences	Other changes	As at 31 December 2018
Bank loans	5 179	(172)	217	452	-	5 676
Loans	1 967	69	65	145	-	2 246
Other	10	(11)	1	-	27	27
Total debt	7 156	(114)	283	597	27	7 949
Free cash and cash equivalents	579	370				949
Net debt	6 577					7 000

Liabilities due to borrowing	As at 31 December 2016	Cash flows	Accrued interest	Exchange differences	Other changes	As at 31 December 2017
Bank loans	6 391	(374)	138	(983)	7	5 179
Loans	1 684	565	56	(338)	-	1 967
Other	23	(14)	-	-	1	10
Total debt	8 098	177	194	(1 321)	8	7 156
Free cash and cash equivalents	836	(257)				579
Net debt	7 262					6 577

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

Note 8.4.3 Detailed information concerning the main sources of borrowings

As at 31 December 2018, the Group had open credit lines and loans with a total balance of available financing in the amount of PLN 16 023 million, out of which PLN 7 937 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 2 500 million, obtained on the basis of a financing agreement concluded by the Parent Entity with a syndicate of banks in 2014 with a maturity of 9 July 2021. The funds acquired through this credit facility are used to finance general corporate purposes, including continued advancement of investment projects. Interest is based on LIBOR plus a 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 commonly stipulated in such type of agreements.

	2018	2018	2017
	Amount granted	Amount used	Amount used
	9 399	4 136*	3 483*

* Presented amounts include the preparation fee paid in the amount of PLN 15 million which decreases financial liabilities due to bank loans (in 2017: PLN 21 million).

Investment loans

Loans, including loans granted to the Parent Entity by the European Investment Bank in the total amount of PLN 2 900 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 Company investment projects related to modernisation of metallurgy and development of the Żelazny Most tailings storage facility.

2. Investment loan in the amount of PLN 900 million granted by the European investment Bank in December 2017 with a financing period of 12 years, and the availability of instalments for a period of 22 months from the date of signing. In the first half of 2018, the Parent Entity drew an instalment in the amount of USD 65 million with the payback period expiring on 28 June 2030. 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 can be used in the form of non-revolving instalments in PLN, EUR or USD, with either a fixed or variable interest rate.

The loan agreements with the European Investment Bank oblige the Company to comply with the financial and non-financial covenants commonly stipulated in such types of agreements.

	2018	2018	2017
	Amount granted	Amount used	Amount used
	2 932	2 246	1 967

Other bank loans

Bilateral bank loans granted to Group companies in the total amount of PLN 3 692 million, used for financing working capital, and which are a tool supporting the management of financial liquidity and for financing the advanced investment projects. The funds under open lines of credit are available in PLN, USD and EUR, with interest based on variable WIBOR, LIBOR and EURIBOR plus a margin.

	2018	2018	2017
	Amount granted	Amount used	Amount used
	3 692	1 555	1 727

Total bank and other loans	16 023	7 937*	7 177
-----------------------------------	---------------	---------------	--------------

* Presented amounts include the preparation fee paid in the amount of PLN 15 million which decreases financial liabilities due to bank loans (in 2017: PLN 21 million).

These sources fully cover the current, medium and long-term liquidity needs of the Group.

The syndicated credit in the amount of USD 2 500 million, the investment loans in the amount of PLN 2 900 million and bilateral bank loans granted to the Parent Entity in the amount of PLN 3 454 million, are unsecured.

Repayment of other liabilities of the Group due to bilateral bank loans and other loans in the amount of PLN 270 million are secured amongst others by proxy rights to bank accounts, statements on submitting to an enforcement regime, contractual mortgages, registered pledges or the assignment of receivables.

Note 8.5 Cash and cash equivalents**Accounting policies**

Cash and cash equivalents includes mainly cash in bank accounts and deposits with original maturities of up to three months from the date of their placement (the same applies to the statement of cash flows). Cash is calculated at amortised cost using effective interest rate method.

	as at 31 December 2018	as at 31 December 2017
Cash in bank accounts	626	314
Other financial assets with a maturity of up to 3 months from the date of acquisition - deposits	329	263
Other cash	2	9
Total	957	586

Note 8.6 Contingent liabilities due to guarantees granted

Guarantees and letters of credit are an essential financial liquidity management tool of the Group, thanks to which the Group's companies and the joint venture Sierra Gorda S.C.M. do not have to use cash in order to secure their obligations towards other entities.

Information on contingent liabilities may be found in Note 12.5.

As at 31 December 2018, the Group held contingent liabilities due to guarantees and letters of credit granted in the total amount of PLN 2 878 million and due to promissory note liabilities in the amount of PLN 178 million.

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

Sierra Gorda S.C.M. – securing the performance of concluded agreements in the amount of PLN 1 815 million:

- a letter of credit of PLN 517 million (USD 138 million) granted as security for the proper performance of a long-term contract for the off-take of electricity (as at 31 December 2017 in the amount of PLN 479 million (or USD 138 million)),
- PLN 125 million (USD 33 million) as corporate guarantees set as security on the payment of concluded lease agreements (as at 31 December 2017 in the amount of PLN 174 million (or USD 50 million)*),
- PLN 496 million (USD 132 million) as corporate guarantees securing repayment of short-term working capital facilities (as at 31 December 2017 in the amount of PLN 460 million (or USD 132 million)*),
- PLN 677 million (USD 180 million) as a corporate guarantee securing repayment of a specified part of payment to guarantees set by Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation, securing repayment of a corporate credit drawn by the joint venture Sierra Gorda S.C.M. (as at 31 December 2017 in the amount of PLN 627 million (or USD 180 million)).

Other entities, including the Parent Entity:

- PLN 401 million (USD 93 million, CAD 18 million and PLN 3 million) securing the restoration costs of the Robinson mine, the Podolsky mine and the Victoria project and obligations related to proper execution of concluded agreements (as at 31 December 2017 in the amount of PLN 380 million, or USD 93 million, CAD 20 million and PLN 1 million),
- securing the proper execution of future environmental obligations of the Parent Entity related to the obligation to restore terrain, following the conclusion of operations of the Żelazny Most tailings storage facility – PLN 160 million in the form of a bank guarantee (as at 31 December 2017 in the amount of PLN 160 million) and PLN 160 million in the form of an own promissory note (as at 31 December 2017 in the amount of PLN 160 million),
- PLN 188 million (USD 50 million) securing the proper execution by DMC Mining Services (UK) Ltd. and DMC Mining Services Ltd. of the contract for shaft sinking under the project conducted in the United Kingdom (guarantees granted in the first half of 2018).

Based on knowledge held, at the end of the reporting period the Group assessed the probability of payments resulting from contingent liabilities related to:

- Sierra Gorda S.C.M. – as moderately low,
- other entities of the Group - as low.

** As part of the analysis of the impact of IFRS 9 on the financial statements with respect to the financial guarantees granted to Sierra Gorda S.C.M., in the Group's opinion it is necessary to recognise the aforementioned guarantees in the accounting books as per paragraph 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. Stripping costs of surface mines and machines, technical equipment, motor vehicles and other movable fixed assets are also included in mining and metallurgical property, plant and equipment.

Property, plant and equipment are recognised at cost less accumulated depreciation and accumulated impairment losses (the policy regarding impairment is presented in Part 3).

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, as well as of other facilities which, in accordance with binding laws, must be decommissioned upon the conclusion of activities. Principles of recognition and measurement of decommissioning costs are presented in note 9.4.

The initial cost is 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 assets.

Items of property, plant and equipment (excluding 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 extracted ore from a deposit or 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 mine construction, as well as 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.

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

Group	Total useful lives
Buildings	25-90 years
Primary mine tunnels	22-90 years
Backfilling, drainage and firefighting pipelines	6-90 years
Electricity, signal and optical fiber cables	10-70 years
Stripping costs	
Technical equipment, machines	4-15 years
Motor vehicles	3-14 years
Other fixed assets, including tools and equipment	5-10 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.

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:

- work on 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 on the application for mine operating concessions; and
- equipment usage costs (property, plant and equipment) used in exploratory work.

Exploration and evaluation assets are measured at cost less accumulated impairment losses.

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 and assumptions

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 is subject to depreciation using the natural method as at 31 December 2018 amounted to PLN 1 346 million (as at 31 December 2017, PLN 1 286 million).

Mining and metallurgical property, plant and equipment and intangible assets

	Property, plant and equipment			Intangible assets			Total
	Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction	Water rights	Exploration and evaluation assets	Other	
As at 1 January 2017							
Gross carrying amount	15 669	12 422	4 447	260	3 001	698	36 497
Accumulated depreciation/amortisation	(7 550)	(5 974)	-	-	-	(251)	(13 775)
Impairment losses	(3 007)	(783)	(7)	(148)	(1 059)	(27)	(5 031)
Net carrying amount	5 112	5 665	4 440	112	1 942	420	17 691
Changes in 2017 net							
Settlement of fixed assets under construction	1 106	1 573	(2 679)	(1)	-	1	-
Purchases	-	-	1 252	1	70	43	1 366
Stripping cost in surface mines	319	-	-	-	-	-	319
Self-constructed	-	-	790	-	25	4	819
Note 9.4 Change in provisions for decommissioning costs	41	-	-	-	-	-	41
Note 4.1 Depreciation/amortisation	(540)	(837)	-	-	-	(15)	(1 392)
Note 4.4 Impairment losses	(85)	(76)	(1)	-	(695)	(3)	(860)
Exchange differences from the translation of foreign operations statements with a functional currency other than PLN	(102)	(46)	(15)	(14)	(298)	(3)	(478)
Other changes	(1)	(8)	31	(68)	(73)	(1)	(120)
As at 31 December 2017							
Gross carrying amount	15 711	13 014	3 824	50	2 574	700	35 873
Accumulated depreciation/amortisation	(7 452)	(6 090)	-	-	-	(232)	(13 774)
Impairment losses	(2 131)	(574)	(6)	(20)	(1 603)	(22)	(4 356)
Net carrying amount	6 128	6 350	3 818	30	971	446	17 743
Changes in 2018 net							
Settlement of fixed assets under construction	512	1 226	(1 738)	(2)	-	2	-
Purchases	-	-	1 300	2	45	29	1 376
Stripping cost in surface mines	298	-	-	-	-	-	298
Self-constructed	-	-	882	-	12	-	894
Note 9.4 Change in provisions for decommissioning costs	173	-	-	-	-	-	173
Note 4.1 Depreciation/amortisation	(657)	(940)	-	-	-	(16)	(1 613)
Note 4.4 (Recognition)/reversal of impairment losses	(22)	13	(7)	(37)	(12)	(5)	(70)
Exchange differences from the translation of foreign operations statements with a functional currency other than PLN	50	21	10	-	-	2	83
Other changes	15	28	47	72	74	44	280
As at 31 December 2018							
Gross carrying amount	17 186	14 041	4 318	237	2 736	785	39 303
Accumulated depreciation/amortisation	(8 284)	(6 700)	-	-	-	(259)	(15 243)
Impairment losses	(2 405)	(643)	(6)	(172)	(1 646)	(24)	(4 896)
Net carrying amount	6 497	6 698	4 312	65	1 090	502	19 164

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

	As at 31 December 2018	As at 31 December 2017
Deposit Access Program - Deep Głogów (Głogów Głęboki - Przemysłowy)	1 650	1 012
Construction of the SW-4 shaft	582	554
Investment activity related to development and operation of the Żelazny Most Tailings Storage Facility	498	382
Metallurgy Development Program	373	744
Investments related to infrastructural development in the mines	206	197
Change in the L-VI shaft's function to a material-transport shaft	203	110
Pyrometallurgy Modernisation Program	16	194

Note 9.1.2 Exploration and evaluation assets

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

Operating segment	Description	As at 31 December 2018	As at 31 December 2017
KGHM INTERNATIONAL LTD.	Expenditures related to exploratory work, mainly within the Victoria project located in the Sudbury Basin in Canada	1 496	1 476
KGHM INTERNATIONAL LTD.	Expenditures related to exploratory work within the Ajax project	573	573

Note 9.1.3 Expenses related to mining and metallurgical assets

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Purchases	(1 376)	(1 366)
Self-constructed fixed assets	(894)	(819)
Stripping costs of surface mines	(298)	(319)
Change in liabilities due to purchases	84	19
Other	(125)	(42)
Total	(2 609)	(2 527)

Note 9.2 Other property, plant and equipment and intangible assets

Accounting policies

Other property, plant and equipment and intangible assets are recognised at cost less accumulated depreciation/amortisation and accumulated impairment losses (the policy regarding impairment is presented in Part 3). 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

The useful lives of the main groups of intangible assets are as follows:

- acquired property rights not related to mining activities: 5 - 50 years;
- software: 2 - 5 years; and
- other intangible assets: 40 - 50 years.

Other property, plant and equipment and intangible assets

	Property, plant and equipment			Intangible assets	Total
	Buildings and land	Technical equipment, machines, motor vehicles and other fixed assets	Fixed assets under construction		
As at 1 January 2017					
Gross carrying amount	2 252	2 187	60	504	5 003
Accumulated depreciation/amortisation	(559)	(1 123)	-	(177)	(1 859)
Impairment losses	(213)	(12)	(1)	(119)	(345)
Net carrying amount	1 480	1 052	59	208	2 799
Changes in 2017 net					
Settlement of fixed assets under construction	131	161	(292)	-	-
Purchases	-	-	240	16	256
Self-constructed	-	-	46	-	46
Note 4.1 Depreciation/amortisation	(76)	(198)	-	(18)	(292)
Note 4.4 (Recognition)/reversal of impairment losses	28	-	-	(5)	23
Other changes	(42)	1	89	8	56
As at 31 December 2017					
Gross carrying amount	2 292	2 287	141	522	5 242
Accumulated depreciation/amortisation	(608)	(1 260)	-	(189)	(2 057)
Impairment losses	(163)	(11)	1	(124)	(297)
Net carrying amount	1 521	1 016	142	209	2 888
Changes in 2018 net					
Settlement of fixed assets under construction	159	176	(335)	-	-
Purchases	-	-	172	36	208
Self-constructed	-	-	112	-	112
Note 4.1 Depreciation/amortisation	(83)	(187)	-	(20)	(290)
Note 4.4 (Recognition)/reversal of impairment losses	9	(8)	-	-	1
Other changes	(23)	14	104	(1)	94
As at 31 December 2018					
Gross carrying amount	2 440	2 331	194	555	5 520
Accumulated depreciation/amortisation	(696)	(1 301)	-	(207)	(2 204)
Impairment losses	(161)	(19)	1	(124)	(303)
Net carrying amount	1 583	1 011	195	224	3 013

Note 9.3 Depreciation/amortisation

	Property, plant and equipment		Intangible assets	
	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Note 4.1 Total	1 867	1 651	36	33
settled in profit or loss	1 762	1 578	34	31
cost of manufacturing products	1 726	1 550	29	26
administrative expenses	26	18	5	5
selling costs	10	10	-	-
being part of the manufacturing cost of assets	105	73	2	2

Note 9.4 Provision for decommissioning costs of mines and other facilities

Accounting policies	Important estimates and assumptions												
<p>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, 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.</p> <p>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, and any surplus above this amount is recognised in other operating income.</p>	<p>These provisions represent the estimated future decommissioning costs of mines and other technological facilities discounted to present value. Revaluation of this provision at the end of the reporting period is affected by the following indicators:</p> <p>1) in the Parent Entity:</p> <ol style="list-style-type: none"> the index of changes in prices in the construction-assembly sector published by the Central Statistical Office (GUS), the forecasted discount rate calculated based on the yield on treasury bonds with maturities nearest to the planned financial outflow. <p>2) in the KGHM INTERNATIONAL LTD. Group:</p> <ol style="list-style-type: none"> the rate of return on investments in US 10 and 20 year treasury notes of the Federal Reserve of the United States of America, and the rate of return on investments in 5-year government bonds issued by the governments of Canada and Chile. <p>The yield on treasury bonds and the inflation rate are set separately for future periods, i.e. for the first, second and third years, and jointly for periods from the fourth year.</p> <p>In the KGHM Polska Miedź S.A. Group, in order to estimate provisions for the decommissioning costs of mines and other technological facilities located in individual countries, the following discount rates were applied:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">2018</th> <th style="text-align: center;">2017</th> </tr> </thead> <tbody> <tr> <td>- in Poland</td> <td style="text-align: center;">0.31 %</td> <td style="text-align: center;">1.03 %</td> </tr> <tr> <td>- in the United States</td> <td style="text-align: center;">0.69% - 0.87%</td> <td style="text-align: center;">0.33% - 0.58%</td> </tr> <tr> <td>- in Canada</td> <td style="text-align: center;">0.00% - 0.18%</td> <td style="text-align: center;">0.04% - 0.26%</td> </tr> </tbody> </table>		2018	2017	- in Poland	0.31 %	1.03 %	- in the United States	0.69% - 0.87%	0.33% - 0.58%	- in Canada	0.00% - 0.18%	0.04% - 0.26%
	2018	2017											
- in Poland	0.31 %	1.03 %											
- in the United States	0.69% - 0.87%	0.33% - 0.58%											
- in Canada	0.00% - 0.18%	0.04% - 0.26%											

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Provisions at the beginning of the reporting period	1 360	1 500
Note 9.1 Changes in estimates recognised in fixed assets	173	41
Other	43	(181)
Provisions at the end of the reporting period including:	1 576	1 360
- non-current provisions	1 564	1 351
- current provisions	12	9

Note 9.5 Capitalised borrowing costs

During the period from 1 January 2018 to 31 December 2018, the Group recognised PLN 177 million of borrowing costs in property, plant and equipment and intangible assets (during the period from 1 January 2017 to 31 December 2017: PLN 80 million).

The capitalisation rate applied with respect to the loan from the Syndicate of Banks and loans from other banks amounted to 100%, and 50.63% with respect to the loan from the European Investment Bank.

Part 10 – Working capital

Note 10.1 Inventories

Accounting policies	Significant estimates and assumptions
<p>The Group measures inventories at cost, not higher than the sales price less costs of completing production and costs to sell.</p> <p>Inventory disposals are measured at weighted average cost.</p>	<p>In the consolidated financial statements the amount 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.</p> <p>As at 31 December 2018 the provisionally-set value of inventories amounted to PLN 55 million (as at 31 December 2017, PLN 47 million).</p>

	As at 31 December 2018	As at 31 December 2017
Materials	727	722
Half-finished goods and work in progress	3 239	3 104
Finished products	805	561
Merchandise	212	175
Total net carrying amount of inventories	4 983	4 562
Note 4.4 Write-down of inventories during the reporting period	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Write-down recognised in cost of sales	(28)	(37)
Write-down reversed in cost of sales	30	5
Maturities of inventories	As at 31 December 2018	As at 31 December 2017
Maturity over the 12 months from the end of the reporting period	289	126
Maturity of up to 12 months from the end of the reporting period	4 694	4 436

Note 10.2 Trade receivables

Accounting policies
<p>Trade receivables are initially recognised at the transaction price. After initial recognition, receivables are measured:</p> <ul style="list-style-type: none"> - receivables not transferred to full factoring: at amortised cost while taking into account loss allowance for expected credit losses (trade receivables with maturity dates of less than 12 months are not discounted), - receivables transferred to full factoring: at fair value through profit or loss, while, because of the short duration between the recognition of receivables and transferral to the factor and due to the low credit risk of the counterparty (factor), the fair value of these receivables is approximate to the carrying amount, - receivables priced upon the M+ formula: value is set as the nominal value (i.e. at the cost 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 (a period in which there will be a final settlement of the 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.

The Group is exposed to the credit risk and currency risk arising from 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 amount of expected credit losses:

	As at 31 December 2018	As at 31 December 2017
Trade receivables measured at amortised cost - gross value	714	1 569
Loss allowance for expected credit losses (lifetime) - under IFRS 9	(57)	-
Allowance for impairment - under IAS 39	-	(47)
Trade receivables measured at amortised cost - net value	657	1 522
Trade receivables measured at fair value, including:	304	-
transferred to factoring	70	-
priced upon M+ formula	234	-
Total	961	1 522

Note 10.3 Trade payables

Accounting policies

Trade payables are initially recognised at fair value and are measured at amortised cost at the end of the reporting period. Trade payables with maturity dates of less than 12 months are not discounted.

	As at 31 December 2018	As at 31 December 2017
Non-current trade payables	171	172
Current trade payables	2 053	1 823
Trade payables	2 224	1 995

The item trade payables contains payables due to the purchase and construction of fixed assets and intangible assets which, as at 31 December 2018, amounted to PLN 163 million in the non-current part and PLN 565 million in the current part (as at 31 December 2017, respectively PLN 163 million and PLN 398 million).

The Group is exposed to currency risk arising from trade payables and liquidity risk. Information on currency risk is presented in Note 7.5.1.3 and the liquidity risk in Note 8.3.1.

The fair value of trade payables approximates the carrying amount.

Note 10.4 Changes in working capital

	Inventories	Trade receivables	Trade payables	Total working capital
As at 31 December 2017	(4 562)	(1 522)	1 995	(4 089)
Change in accounting policies – application of IFRS 9	-	2	-	2
As at 1 January 2018, after application of IFRS 9	(4 562)	(1 520)	1 995	(4 087)
As at 31 December 2018	(4 983)	(961)	2 224	(3 720)
Change in the statement of financial position	(421)	559	229	367
Exchange differences from translation of foreign operations statements with a functional currency other than PLN	32	27	(13)	46
Depreciation/amortisation recognised in inventories	95	-	-	95
Liabilities due to purchase of property, plant and equipment and intangible assets	-	-	(141)	(141)
Other	-	-	-	-
Adjustments	127	27	(154)	-
Change in the statement of cash flows	(294)	586	75	367

	Inventories	Trade receivables	Trade payables	Total working capital
As at 1 January 2017	(3 497)	(1 292)	1 613	(3 176)
As at 31 December 2017	(4 562)	(1 522)	1 995	(4 089)
Change in the statement of financial position	(1 065)	(230)	382	(913)
Exchange differences from translation of foreign operations statements with a functional currency other than PLN	(66)	(64)	30	(100)
Depreciation/amortisation recognised in inventories	64	-	-	64
Liabilities due to purchase of property, plant and equipment and intangible assets	-	-	(39)	(39)
Other	-	-	(8)	(8)
Adjustments	(2)	(64)	(17)	(83)
Change in the statement of cash flows	(1 067)	(294)	365	(996)

Part 11 – Employee benefits

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 interest rates 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. Interest 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 extrapolates current interest rates of government bonds along the profitability curve expressed in the currency of the future benefits payments, to obtain a discount rate enabling the discounting of payments with maturities which are longer than the maturities of the bonds.

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. The assumptions used to measure liabilities as at 31 December 2018 are presented in Note 11.2.

The sensitivity of future employee benefits liabilities to changes in assumptions was set based on the amounts of the Parent Entity's liabilities. 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 (Parent Entity)

	As at 31 December 2018	As at 31 December 2017
an increase in the discount rate by 1 percentage point	(316)	(252)
a decrease in the discount rate by 1 percentage point	421	331
an increase in coal price increase rate and an increase in salary increase rate by 1 percentage point	411	347
a decrease in coal price increase rate and a decrease in salary increase rate by 1 percentage point	(316)	(255)

Note 11.1 Employee benefits liabilities**Components of the item: employee benefits liabilities**

	As at 31 December 2018	As at 31 December 2017
Non-current	2 447	2 063
Current	171	141
Total liabilities due to future employee benefits programs	2 618	2 204
Employee remuneration liabilities	256	235
Accruals (unused annual leave, bonuses, other)	381	466
Other current employee liabilities	637	701
Total employee benefits liabilities	3 255	2 905

Employee benefits expenses

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Remuneration	3 723	3 568
Costs of social security and other benefits	1 247	1 205
Costs of future benefits	232	183
Employee benefits expenses	5 202	4 956

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 2017	2 007	367	315	1 239	86
Note 11.1 Total costs recognised in profit or loss	183	79	29	70	5
Interest costs	71	13	11	45	2
Current service costs	74	28	18	25	3
Actuarial losses recognised in profit or loss	38	38	-	-	-
Note 8.2.2 Actuarial losses/ (gains) recognised in other comprehensive income	134	-	27	126	(19)
Benefits paid	(120)	(46)	(30)	(41)	(3)
As at 31 December 2017	2 204	400	341	1 394	69
Note 11.1 Total costs recognised in profit or loss	232	122	31	74	5
Interest costs	74	13	12	47	2
Current service costs	80	31	19	27	3
Actuarial losses recognised in profit or loss	78	78	-	-	-
Note 8.2.2 Actuarial losses recognised in other comprehensive income	322	-	59	237	26
Benefits paid	(140)	(54)	(36)	(46)	(4)
As at 31 December 2018	2 618	468	395	1 659	96
As at 31 December	2018	2017	2016	2015	2014
Present value of liabilities due to employee benefits	2 618	2 204	2 007	2 105	2 146

Main actuarial assumptions as at 31 December 2018:

	2019	2020	2021	2022	2023 and beyond
- discount rate	2.82%	2.82%	2.82%	2.82%	2.82%
- coal price increase rate	8.70%	3.00%	3.00%	3.00%	3.00%
- lowest salary increase rate	7.14%	4.89%	5.08%	4.00%	4.00%
- expected inflation	3.20%	2.90%	2.50%	2.50%	2.50%
- future expected increase in salary	5.60%	5.00%	4.80%	3.90%	3.90%

Main actuarial assumptions as at 31 December 2017:

	2018	2019	2020	2021	2022 and beyond
- discount rate	3.35%	3.35%	3.35%	3.35%	3.35%
- coal price increase rate	5.00%	3.20%	3.00%	3.00%	3.00%
- lowest salary increase rate	0.00%	4.20%	4.00%	4.00%	4.00%
- expected inflation	2.30%	2.70%	2.50%	2.50%	2.50%
- future expected increase in salary	5.10%	2.70%	2.50%	2.50%	2.50%

The change in actuarial gains/losses was caused by a change in the assumptions in respect of the decrease of the discount rate, the increase in coal prices and the increase in the lowest 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 2018 versus assumptions adopted as at 31 December 2017

Change in financial assumptions	296
Change in demographic assumptions	(57)
Other changes	161
Total actuarial losses	400

Actuarial (gains)/losses as at 31 December 2017 versus assumptions adopted as at 31 December 2016

Change in financial assumptions	53
Change in demographic assumptions	86
Other changes	33
Total actuarial losses/(gains)	172

Maturity profile of employee benefits liabilities

Year of maturity:	Total liabilities	jubilee awards	retirement and disability benefits	coal equivalent	other benefits
2019	170	51	61	53	5
2020	167	43	58	63	3
2021	114	33	16	61	4
2022	108	31	13	60	4
2023	109	31	16	58	4
Other years	1 950	279	231	1 364	76
Total liabilities in the statement of financial position as at 31 December 2018	2 618	468	395	1 659	96

Year of maturity:	Total liabilities	jubilee awards	retirement and disability benefits	coal equivalent	other benefits
2018	130	48	34	45	3
2019	175	41	80	52	2
2020	98	30	15	51	2
2021	93	27	14	50	2
2022	105	33	20	48	4
Other years	1 603	221	178	1 148	56
Total liabilities in the statement of financial position as at 31 December 2017	2 204	400	341	1 394	69

Part 12 – Other notes

Note 12.1 Related party transactions

The accounting policies and significant estimates and assumptions presented in Part 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,
- 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 12.11.

Operating income from related entities

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Revenues from sales of products, merchandise and materials to a joint venture	16	33
Interest income on a loan granted to a joint venture	257	319
Revenues from other transactions with a joint venture	33	43
Revenues from other transactions with other related parties	9	16
Total	315	411

Purchases from related entities

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Purchase of services, merchandise and materials from other related parties	18	17
Other purchase transactions from other related parties	2	2
Total	20	19

Trade and other receivables from related parties

	As at 31 December 2018	As at 31 December 2017
From the joint venture Sierra Gorda S.C.M. (loans)	5 199	3 889
From the joint venture Sierra Gorda S.C.M. (other)	447	461
From other related parties	3	3
Total	5 649	4 353

Trade and other payables towards related parties

	As at 31 December 2018	As at 31 December 2017
Towards joint ventures	24	13
Towards other related parties	2	1
Total	26	14

Pursuant to IAS 24, the Group is obliged to disclose unsettled balances, including payables towards the Polish Government and entities controlled or jointly controlled by the Polish Government, or over which the Polish Government has significant influence.

As at 31 December 2018, balances of unsettled payables concerned the agreements necessary to conduct principal operating activities of the Parent Entity in the amount of PLN 200 million (as at 31 December 2017: PLN 202 million) due to:

- setting mining usufruct for the extraction of ore – fixed fees and setting mining usufruct for the exploration for and assessment of deposits – total in the amount of PLN 170 million (as at 31 December 2017: PLN 171 million),
- setting mining usufruct for the extraction of ore – variable part of the fee (recognised in costs) in the amount of PLN 30 million (as at 31 December 2017: PLN 31 million),

In the current and comparable periods, no other individual transactions were identified which would be considered as significant in terms of unusual scope and amount.

The remaining transactions, which were collectively significant, 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 normal, daily economic operations, carried out at arm's length. These transactions concerned the following:

- the purchase of goods to meet the needs of current operating activities. In the period from 1 January to 31 December 2018, the turnover from these transactions amounted to PLN 1 217 million (from 1 January to 31 December 2017: PLN 991 million), and, as at 31 December 2018, the unsettled balance of liabilities from these transactions amounted to PLN 158 million (as at 31 December 2017: PLN 107 million),
- sales to Polish State Treasury Companies. In the period from 1 January to 31 December 2018, the turnover from these sales amounted to PLN 57 million (from 1 January to 31 December 2017: PLN 82 million), and, as at 31 December 2018, the unsettled balance of receivables from these transactions amounted to PLN 8 million (as at 31 December 2017: PLN 7 million).

Note 12.2 Dividends paid

In accordance with Resolution No. 10/2018 of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 6 July 2018 regarding appropriation of the profit for financial year 2017, the entirety of the profit was transferred to the Parent Entity's reserve capital.

In the comparable period, in accordance with Resolution No. 7/2017 of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 21 June 2017 regarding the dividend payout from prior years' profits, setting the dividend date and the dividend payment date, the amount of PLN 200 million was allocated as a shareholder dividend, representing PLN 1.00 per share.

The dividend date (the day on which the right to dividend is set) was set at 14 July 2017 with the dividend being paid in two instalments: 17 August 2017 – the amount of PLN 100 million (representing PLN 0.50 per share) and 16 November 2017 – the amount of PLN 100 million (representing PLN 0.50 per share).

All shares of the Parent Entity are ordinary shares.

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.
Accounting policies concerning financial assets were described in Part 7.

	As at 31 December 2018	As at 31 December 2017
Other non-current non-financial assets	109	112
Investment property	78	79
Prepayments	16	19
Other	15	14
Other current assets, of which:	405	464
Financial assets	273	265
Available-for-sale financial assets	-	59
Amounts retained (collateral) due to long-term construction contracts	43	42
Other	230	164
Non-financial assets	132	199
Non-financial prepayments	44	47
Other	88	152
Other non-current and current assets, total	514	576

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 2018	As at 31 December 2017
Liabilities due to Franco Nevada streaming contract - accruals	289	410
Trade payables	171	172
Other accruals	97	91
Other liabilities	41	45
Other liabilities - non-current	598	718
Special funds	337	310
Deferred income	116	113
Accruals*	355	312
Other financial liabilities	116	125
Other non-financial liabilities	110	115
Other liabilities - current	1 034	975
Total - non-current and current liabilities	1 632	1 693

*These accruals are due to purchase costs of cogeneration property rights of consumed electricity, fees for the discharging of gases and dusts to the atmosphere and other recognised operating costs.

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 2018	As at 31 December 2017
Contingent assets	565	529
Guarantees received	250	215
Promissory notes receivables	121	121
Other	194	193
Contingent liabilities	3 240	2 798
Note 8.6 Guarantees and letters of credit	2 878	2 325
Note 8.6 A promissory note	178	173
Liabilities due to implementation of projects and inventions	17	117
Other	167	183
Other liabilities not recognised in the statement of financial position	470	488
Liabilities towards local government entities due to expansion of the tailings storage facility	113	117
Liabilities due to operating leases	357	371

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 statement of financial position, were as follows (as at 31 December of a given year):

	As at 31 December 2018	As at 31 December 2017
Capital commitments due to the purchase of:		
property, plant and equipment	2 818	2 478
intangible assets	45	60
Total capital commitments	2 863	2 538

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 [Joint ventures accounted for using the equity method].

Note 12.7 The right of perpetual usufruct of land

The Parent Entity and the Group's Polish subsidiaries obtained the right of perpetual usufruct of land mostly free of charge on the basis of laws in force. The land subject to perpetual usufruct is industrial area related to the core business activities, which also includes protective zones in which environmental quality standards have been exceeded as a result of the activities carried out.

Due to the nature of the use of the above-mentioned land, as at 31 December 2018 the Group had not determined fair values for these perpetual usufruct rights.

The table below contains information on future payments due to the right of perpetual usufruct of land.

	As at 31 December 2018	As at 31 December 2017
Under one year	16	14
From one to five years	78	59
Over five years	909	793
Total amount of future contingent payments due to the right of perpetual usufruct of land	1 003	866

The Group's liabilities due to the right of perpetual usufruct of land, which were not recognised in the statement of financial position, were estimated on the basis of annual payment rates resulting from recent administrative decisions and the useful life of the land subject to this right.

Note 12.8 Employment structure

	As at 31 December 2018	As at 31 December 2017
White-collar employees	10 450	10 369
Blue-collar employees	23 118	22 997
Total (full-time equivalent)	33 568	33 366

Note 12.9 Other adjustments in the statement of cash flows

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Change in other receivables and liabilities	20	(78)
Reclassification of other comprehensive income to profit or loss as a result of realisation of hedging derivatives	31	(16)
Losses on the sale of property, plant and equipment and intangible assets	10	28
Other	1	(2)
Total	62	(68)

Note 12.10 Remuneration of key managers

Remuneration of members of the Management Board (in PLN thousands)	from 1 January 2018 to 31 December 2018				Total earnings
	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	
Members of the Management Board serving in the function as at 31 December 2018					
Marcin Chludziński	06.07-31.12	405	-	-	405
Radosław Stach	06.07-31.12	362	-	-	362
Katarzyna Kreczmańska-Gigol	06.07-31.12	380	-	-	380
Adam Bugajczuk	24.08-31.12	263	-	-	263
Paweł Gruza	10.09-31.12	230	-	-	230
Members of the Management Board non-serving in the function as at 31 December 2018					
Stefan Świątkowski	01.01-06.07	456	-	421	877
Rafał Pawełczak	01.01-06.07	456	-	421	877
Ryszard Jaśkowski	01.01-06.07	441	-	101	542
Radosław Domagalski - Łabędzki	01.01-10.03	171	-	427	598
Michał Jezioro	01.01-10.03	165	-	427	592
Piotr Walczak	-	-	-	124	124
TOTAL		3 329	-	1 921	5 250
Remuneration of members of the Management Board (in PLN thousands)	from 1 January 2017 to 31 December 2017				Total earnings
	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	
Members of the Management Board serving in the function as at 31 December 2017					
Radosław Domagalski - Łabędzki	01.01-31.12	1 353	-	-	1 353
Michał Jezioro	01.01-31.12	1 223	-	-	1 223
Stefan Świątkowski	01.01-31.12	1 695	-	-	1 695
Rafał Pawełczak	03.02-31.12	1 167	-	-	1 167
Ryszard Jaśkowski	24.07-31.12	348	-	-	348
Members of the Management Board non-serving in the function as at 31 December 2017					
Jacek Rawecki	01.01-03.02	136	420	528	1 084
Piotr Walczak	01.01-31.05	703	559	391	1 653
Krzysztof Skóra	-	-	316	386	702
Mirosław Biliński	-	-	185	256	441
Herbert Wirth	-	-	-	411	411
Jarosław Romanowski	-	-	-	46	46
Marcin Chmielewski	-	-	-	329	329
Mirosław Laskowski	-	-	92	-	92
Adam Sawicki	-	-	107	-	107
Jacek Kardela	-	-	-	329	329
TOTAL		6 625	1 679	2 676	10 980

Remuneration of members of the Supervisory Board (in PLN thousands)	from 1 January 2018 to 31 December 2018			
	Period when function served	Current employee benefits	Current benefits due to service	Total earnings
Members of the Supervisory Board serving in the function as at 31 December 2018				
Andrzej Kisielewicz	06.07-31.12	-	60	60
Leszek Banaszak	06.07-31.12	-	55	55
Bogusław Szarek	01.01-31.12	221	114	335
Jarosław Janas	06.07-31.12	-	55	55
Marek Pietrzak	01.01-31.12	-	114	114
Agnieszka Winnik -Kalemba	01.01-31.12	-	114	114
Ireneusz Pasis	06.07-31.12	122	55	177
Józef Czyczerski	01.01-31.12	135	114	249
Bartosz Piechota	06.07-31.12	-	55	55
Janusz Marcin Kowalski	01.01-31.12	-	114	114
Members of the Supervisory Board non-serving in the function as at 31 December 2018				
Leszek Hajdacki	01.01-06.07	109	59	168
Dominik Hunek	01.01-06.07	-	65	65
Michał Czarnik	01.01-06.07	-	59	59
Jarosław Witkowski	01.01-06.07	-	59	59
Wojciech Andrzej Myślecki	01.01-03.04	-	30	30
TOTAL		587	1 122	1 709

Remuneration of members of the Supervisory Board (in PLN thousands)	from 1 January 2017 to 31 December 2017			
	Period when function served	Current employee benefits	Current benefits due to service	Total earnings
Members of the Supervisory Board serving in the function as at 31 December 2017				
Dominik Hunek	01.01-31.12	-	138	138
Józef Czyczerski	01.01-31.12	129	125	254
Leszek Hajdacki	01.01-31.12	237	125	362
Bogusław Szarek	01.01-31.12	254	168	422
Michał Czarnik	01.01-31.12	-	131	131
Jarosław Witkowski	01.01-31.12	-	131	131
Wojciech Andrzej Myślecki	01.01-31.12	-	129	129
Marek Pietrzak	01.01-31.12	-	129	129
Agnieszka Winnik-Kalemba	01.01-31.12	-	126	126
Janusz Marcin Kowalski	21.06-31.12	-	56	56
TOTAL		620	1 258	1 878

	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Current employee benefits of other key managers (in PLN thousands)	3 773	4 397

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 managers of the 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 Management Board of KGHM INTERNATIONAL LTD. were recognised as other key managers of the Group.

Note 12.11 Remuneration of the entity entitled to audit the financial statements and of entities related to it in PLN thousands

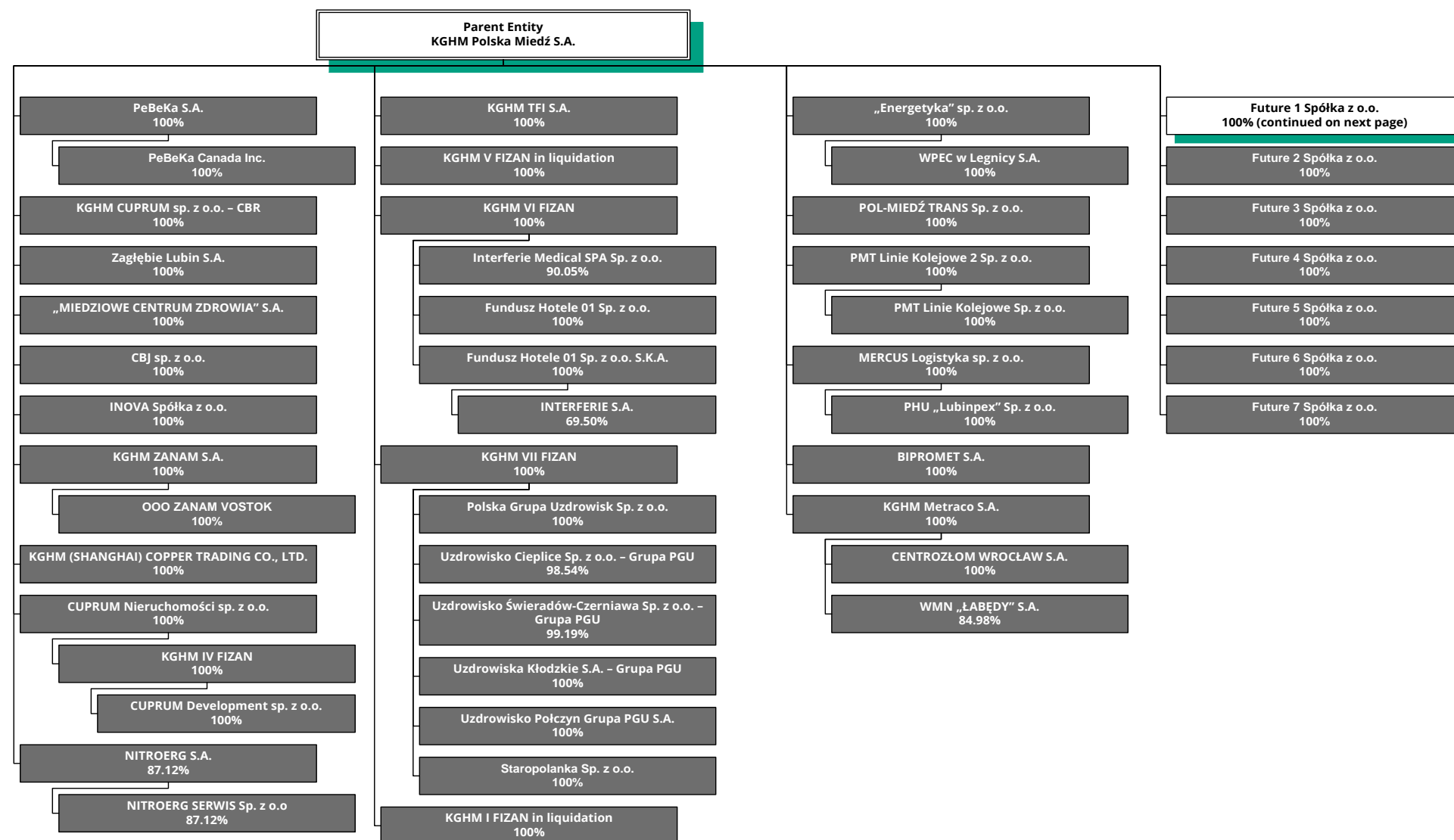
	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Companies of the Deloitte Group	4 338	5 000
From the contract for the review and audit of financial statements, of which due to:	4 321	3 809
audit of annual financial statements	3 768	3 098
assurance services, of which:	553	711
review of financial statements	502	668
other assurance services	51	43
From other contracts	17	1 191

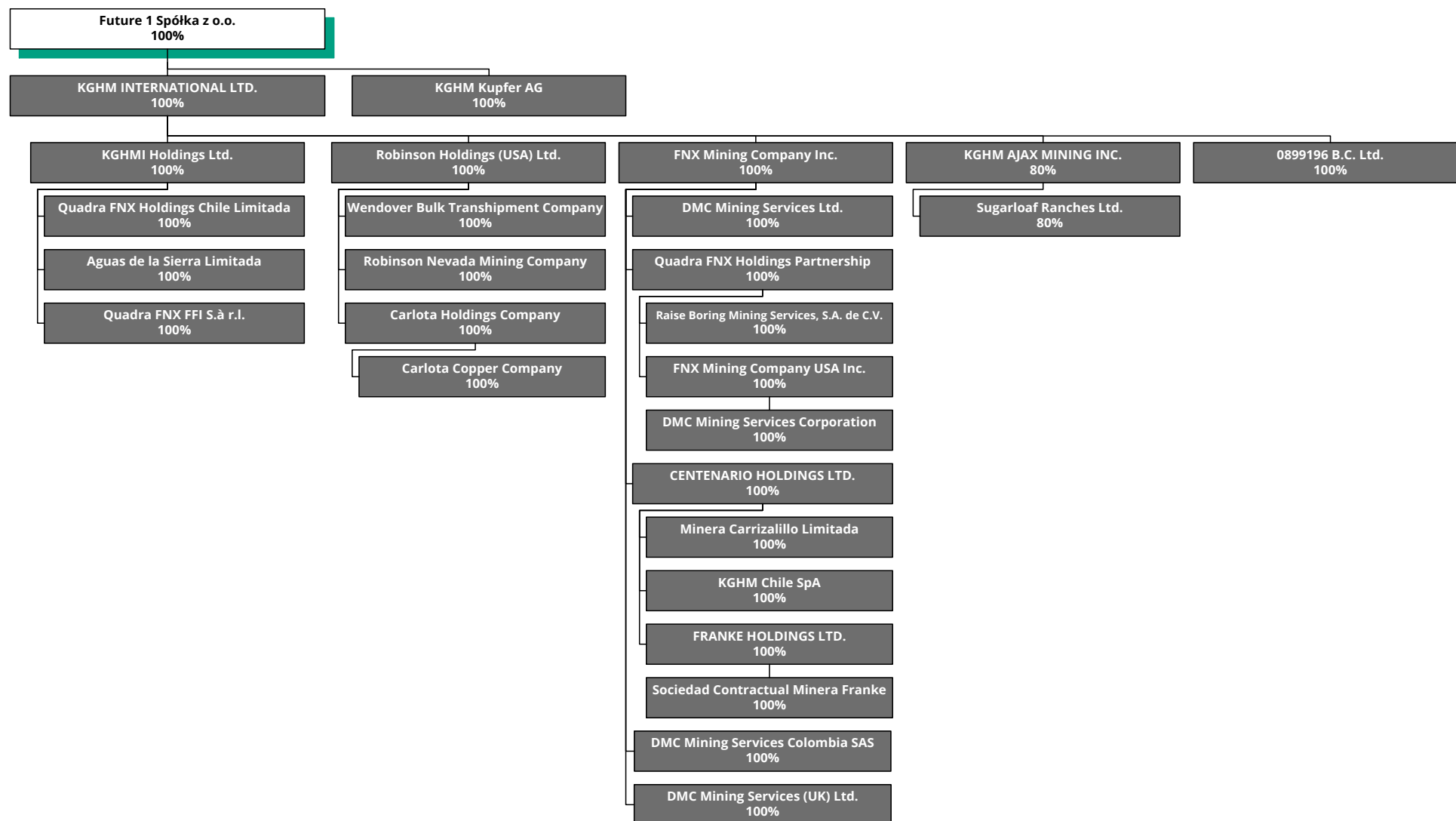
Note 12.12 Composition of the Group

Company	Head office	% of Group's share	
		As at 31 December 2018	As at 31 December 2017
BIPROMET S.A.	Katowice	100	100
CBJ sp. z o.o.	Lubin	100	100
CENTROZŁOM WROCŁAW S.A.	Wrocław	100	100
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	69.5	69.5
Interferie Medical SPA Sp. z o.o.	Legnica	90.05	90.05
KGHM CUPRUM sp. z o.o. - CBR	Wrocław	100	100
CUPRUM DEVELOPMENT sp. z o.o.	Wrocław	100	100
KGHM Kupfer AG	Berlin	100	100
KGHM I FIZAN in liquidation	Wrocław	100	100
KGHM IV FIZAN	Wrocław	100	100
KGHM V FIZAN in liquidation	Wrocław	100	100
KGHM VI FIZAN	Wrocław	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
PeBeKa Canada Inc.	Vancouver	100	100
MERCUS Logistyka sp. z o.o.	Polkowice	100	100
PHU "Lubinpex" Sp. z o.o.	Lubin	100	100
Staropolanka Sp. z o.o.	Polanica Zdrój	100	100
PMT Linie Kolejowe 2 Sp. z o.o.	Owczary	100	100
Future 1 Sp. z o.o.	Lubin	100	100
Future 2 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 6 Sp. z o.o.	Lubin	100	100
Future 7 Sp. z o.o.	Lubin	100	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	98.53	98.53
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	99.12	99.12
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

Company	Head office	% of Group's share	
		As at 31 December 2018	As at 31 December 2017
KGHM INTERNATIONAL LTD. Group			
KGHM INTERNATIONAL LTD.	Vancouver, Canada	100	100
KGHM AJAX MINING INC.	Vancouver, Canada	80	80
Sugarloaf Ranches Ltd.	Vancouver, Canada	80	80
Malmbjerg Molybdenum A/S in liquidation	Greenland	-	100
KGHMI Holdings LTD.	Vancouver, 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.	Nevada, USA	100	100
Wendover Bulk Transshipment Company	Nevada, USA	100	100
Robinson Nevada Mining Company	Nevada, USA	100	100
Carlota Holdings Company	Nevada, USA	100	100
Carlota Copper Company	Nevada, USA	100	100
FNX Mining Company Inc.	Ontario, Canada	100	100
DMC Mining Services Ltd.	Vancouver, Canada	100	100
Quadra FNX Holdings Partnership	Vancouver, Canada	100	100
Raise Boring Mining Services, S.A. de C.V.	Mexico	100	100
FNX Mining Company USA Inc.	Nevada, USA	100	100
DMC Mining Services Corporation	Nevada, USA	100	100
CENTENARIO HOLDINGS LTD.	Vancouver, Canada	100	100
Minera Carrizalillo Limitada	Chile	100	100
KGHM Chile SpA	Chile	100	100
FRANKE HOLDINGS LTD.	Vancouver, Canada	100	100
Sociedad Contractual Minera Franke	Chile	100	100
0899196 B.C. Ltd.	Vancouver, Canada	100	100
DMC Mining Services (UK) Ltd.	The United Kingdom	100	100
DMC Mining Service Colombia SAS	Colombia	100	100

Diagram of the KGHM Polska Miedź S.A. Group as at 31 December 2018





Note 12.13 Subsequent events after the reporting period

Extension of the deadline for repayment of a bank loan

On 1 February 2019, the Parent Entity extended the period of availability of the USD 100 million credit line in Bank Gospodarstwa Krajowego to 2 February 2020. Interest on the credit is based on LIBOR plus a margin.

Signing of financing agreements

On 13 February 2019, the Parent Entity signed an overdraft credit agreement for the amount of PLN 100 million with Bank Pekao S.A. in Warsaw. Interest on the credit is based on WIBOR plus a margin. The credit's period of availability expires on 13 February 2020.

On 27 February 2019, the Parent Entity signed an unsecured, working capital facility agreement with Bank Gospodarstwa Krajowego with a financing period of up to 84 months, as a revolving credit line in the amount of USD 450 million for a period of 60 months, with the option to transform it into a non-revolving credit after 60 months. Interest on the credit is based on LIBOR plus a margin.

Part 13 – Quarterly financial information of the Group

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

	from 1 October 2018 to 31 December 2018	from 1 October 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017	
Note 2.3	Revenues from contracts with customers, including:	5 739	5 871	20 526	20 358
	from sales, for which the amount of revenue was not finally determined at the end of the reporting period (IFRS 15. 114)	341	N/A*	1 423	N/A*
Note 4.1	Cost of sales	(4 753)	(4 415)	(16 555)	(15 204)
	Gross profit	986	1 456	3 971	5 154
Note 4.1	Selling costs and administrative expenses	(394)	(386)	(1 380)	(1 343)
	Profit on sales	592	1 070	2 591	3 811
Note 6.1	Share of losses of joint ventures accounted for using the equity method	(404)	(259)	(662)	(474)
Note 6.2	Gains due to the reversal of allowances for impairment on loans granted to joint ventures	733	-	733	-
Note 6.2	Interest income on loans granted to joint ventures calculated using the effective interest rate method	65	79	257	319
	Profit or loss on involvement in joint ventures	394	(180)	328	(155)
Note 4.2	Other operating income and (costs), including:	129	(1 315)	308	(2 377)
	interest income calculated using the effective interest rate method	2	N/A*	8	N/A*
Note 4.3	Finance income and (costs)	(241)	288	(761)	1 020
	Profit before income tax	874	(137)	2 466	2 299
Note 5.1	Income tax expense	(192)	3	(808)	(774)
	PROFIT/(LOSS) FOR THE PERIOD	682	(134)	1 658	1 525
	Profit/(Loss) for the period attributable to:				
	Shareholders of the Parent Entity	684	(87)	1 657	1 568
	Non-controlling interest	(2)	(47)	1	(43)
	Weighted average number of ordinary shares (million)	200	200	200	200
	Basic/diluted earnings per share (in PLN)	3.42	(0.44)	8.29	7.84

* N/A – not applicable – items in which the following did not occur: measurement in accordance with principles arising from the application, from 1 January 2018, of IFRS 9, and the disclosure requirement of IFRS 15.

Explanatory notes to the consolidated statement of profit or loss

Note 13.1 Expenses by nature

	from 1 October 2018 to 31 December 2018	from 1 October 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Depreciation of property, plant and equipment and amortisation of intangible assets	478	447	1 903	1 684
Employee benefits expenses	1 332	1 338	5 202	4 956
Materials and energy	2 007	1 874	7 097	7 460
External services	683	626	2 404	2 156
Minerals extraction tax	374	456	1 671	1 765
Other taxes and charges	130	118	535	506
Reversal of impairment losses on property, plant and equipment and intangible assets	(26)	(344)	(26)	(344)
Advertising costs and representation expenses	24	19	62	57
Property and personal insurance	14	9	54	34
Impairment losses on property, plant and equipment and intangible assets	35	92	35	92
Other costs	16	58	103	157
Total expenses by nature	5 067	4 693	19 040	18 523
Cost of merchandise and materials sold (+)	131	134	653	571
Change in inventories of finished goods and work in progress (+/-)	395	379	(375)	(1 079)
Cost of products for internal use of the Group (-) (mainly stripping costs of surface mines)	(446)	(405)	(1 383)	(1 468)
Total cost of sales, selling costs and administrative expenses, including:	5 147	4 801	17 935	16 547
Cost of sales	4 753	4 415	16 555	15 204
Selling costs	102	104	374	371
Administrative expenses	292	282	1 006	972

Note 13.2 Other operating income and (costs)

	from 1 October 2018 to 31 December 2018	from 1 October 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Measurement and realisation of derivatives	69	1	216	231
interest income calculated using the effective interest rate method	2	N/A*	8	N/A*
Exchange differences on assets and liabilities other than borrowings	215	-	593	-
Release of unused provisions	22	82	51	132
Other	39	89	166	199
Total other operating income	347	172	1 034	562
Measurement and realisation of derivatives	(105)	(216)	(305)	(492)
Exchange differences on assets and liabilities other than borrowings	-	(390)	-	(1 466)
Impairment losses on financial instruments	(18)	N/A*	(24)	N/A*
impairment losses on fixed assets under construction and intangible assets not yet available for use	(46)	(772)	(60)	(773)
Provisions recognised	(18)	(31)	(183)	(52)
Other	(31)	(78)	(154)	(156)
Total other operating costs	(218)	(1 487)	(726)	(2 939)
Other operating income/(costs)	129	(1 315)	308	(2 377)

* N/A – not applicable – items which were not measured in accordance with principles arising from the application, from 1 January 2018, of IFRS 9.

Note 13.3 Finance income/(costs)

	from 1 October 2018 to 31 December 2018	from 1 October 2017 to 31 December 2017	from 1 January 2018 to 31 December 2018	from 1 January 2017 to 31 December 2017
Exchange differences on borrowings	-	336	-	1 251
Measurement of derivatives	(17)	-	11	-
Total finance income	(17)	336	11	1 251
Interest on borrowings	(1)	(21)	(93)	(96)
Unwinding of the discount of provisions effect	(44)	(43)	(50)	(50)
Bank fees and charges on borrowings	9	(12)	(15)	(44)
Measurement of derivatives	-	-	-	(30)
Exchange differences on borrowings	(206)	-	(593)	-
Other	18	28	(21)	(11)
Total finance costs	(224)	(48)	(772)	(231)
Finance income and (costs)	(241)	288	(761)	1 020

SIGNATURES OF ALL MEMBERS OF THE MANAGEMENT BOARD OF THE PARENT ENTITY

These financial statements were authorised for issue on 13 March 2019.

President
of the Management Board

Marcin Chludziński

Vice President
of the Management Board

Adam Bugajczuk

Vice President
of the Management Board

Paweł Gruza

Vice President
of the Management Board

Katarzyna Kreczmańska-Gigol

Vice President
of the Management Board

Radosław Stach

SIGNATURE OF PERSON RESPONSIBLE FOR ACCOUNTING

Executive Director
of Accounting Services Center
Chief Accountant

Łukasz Stelmach