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ZE PAK SA CAPITAL GROUP

CONSOLIDATED FINANCIAL STATEMENT
FOR THE YEAR CONCLUDED ON 31 DECEMBER 2022

27 APRIL 2023

(in PLN thousand)

CONSOLIDATED PROFIT AND LOSS ACCOUNT

for the year concluded on 31 December 2022

		Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Continuing operation			
Revenues, including:		**4 200 235**	**2 451 209**
Revenues from contracts with clients	*15.1*	4 014 061	2 190 817
Other revenues	*15.1*	186 174	260 392
Selling prime costs, including:	*15.6, 15.7*	(3 713 186)	(2 892 942)
Fixed and mining asset impairment write-down	*15.7*	-	*(620 170)*
Gross (Loss)/Profit on sales		**487 049**	**(441 733)**
Other operating revenues	*15.2*	41 752	64 007
Selling costs	*15.6, 15.7*	(14 376)	(6 091)
Overheads	*15.6, 15.7*	(151 973)	(119 720)
Other operating costs	*15.3*	(11 174)	(9 085)
(Loss)/Profit on operating activities		**351 278**	**(512 622)**
Financial revenues	*15.4*	56 639	11 782
Financial costs	*15.5*	(89 849)	(17 683)
Gross (Loss)/Profit		**318 068**	**(518 523)**
Income tax (tax burden)	*16*	(102 688)	201 119
Net (Loss)/Profit on continuing operations		**215 380**	**(317 404)**
Net (loss)/profit for the period		**215 380**	**(317 404)**
(Loss)/profit allocated to parent company shareholders		203 307	(316 999)
(Loss)/profit allocated to non-controlling interests		12 073	(405)

	Note	*31 December 2022*	*31 December 2021*
(Loss)/Profit per share (in PLN):			
Basic/diluted for the financial year on continued activities allocated to parent company shareholders	*18*	4.00	(6.24)

(in PLN thousand)

CONSOLIDATED FINANCIAL STATEMENT OF COMPREHENSIVE INCOME

for the year concluded on 31 December 2022

	Note	*Year concluded on 31 December 2022*	*Year concluded on 31 December 2021*
Net (loss)/profit for the period		**215 380**	**(317 404)**
Other comprehensive income			
Items subject to reclassification to profit(loss) in subsequent reporting periods:			
Cash flow hedges		-	-
Exchange rate differences related to foreign unit conversion		(9)	(33)
Income tax on other comprehensive income	*16.1*	-	-
Net other comprehensive income subject to reclassification to profit/(loss) in subsequent reporting periods		(9)	(33)
Item *not subject to reclassification to profit/(loss) in subsequent reporting periods:*			
Actuarial profits/(losses) on post-employment employee benefits		685	3 659
Income tax on other comprehensive income	*16.1*	(67)	(695)
Net other comprehensive income not subject to reclassification to profit/(loss) in subsequent reporting periods		618	2 964
Net other comprehensive income		**609**	**2 931**
Comprehensive income for the period		215 989	(314 473)
Comprehensive income allocated to parent company shareholders		203 916	(314 068)
Comprehensive income allocated to non-controlling interests		12 073	(405)

(in PLN thousand)

CONSOLIDATED STATEMENT OF FINANCIAL STANDING

as at 31 December 2022

	Note	*31 December 2022*	*31 December 2021*
ASSETS			
Fixed assets			
Tangible fixed assets	*20*	1 726 864	1 182 258
Right-of-use assets	*21*	61 425	45 856
Investment property		1 782	1 810
Intangible assets		9 034	2 383
Assets concerning stripping and other mining assets (long-term)	*23*	-	-
Goodwill	*24.1*	150 342	14 107
Other financial assets	*24.1*	10 103	8 515
Other non-financial assets	*24.2*	503	9 998
Deferred tax assets	*16.3*	18 462	8 769
Total fixed assets		**1 978 515**	**1 273 696**
Current assets			
Emission allowances	*22*	-	-
Inventories	*26*	120 972	74 241
Trade and other receivables	*27*	815 406	1 394 784
Income tax receivables		7 793	81
Short-term derivative financial instruments (assets)	*33.3*	19 824	10 540
Other financial assets	*24.1*	-	150
Other non-financial assets	*24.2*	130 112	50 129
Assets under contracts with clients	*15.8*	4 084	1 472
Cash and cash equivalents	*28*	1 462 749	506 669
Total current assets		**2 560 940**	**2 038 066**
TOTAL ASSETS		**4 539 455**	**3 311 762**

(in PLN thousand)

	Note	*31 December 2022*	*31 December 2021*
LIABILITIES AND EQUITY			
Equity			
Share capital	*29*	101 647	101 647
Supplementary capital	*30*	1 232 981	1 131 326
Other reserve capitals	*30.1*	3 472	3 472
Retained profits / Accumulated losses		(614 406)	(711 828)
Exchange rate differences related to foreign unit conversion		2	10
Equity allocated to parent company shareholders		**723 696**	**524 627**
Non-controlling interest equity	*30.3*	490 803	(395)
Total equity		**1 214 499**	**524 232**
Long-term liabilities			
Interest-bearing loans and borrowings	*31*	619 551	249 226
Employee benefits	*25.1*	23 949	27 155
Trade liabilities and other financial liabilities		258	467
Lease liabilities	*21*	57 172	41 515
Subsidies and income prepayments and accruals	*33.4*	28 926	4 317
Other provisions, and prepayments and accruals	*32*	440 356	439 105
Deferred income tax provisions	*16.3*	28 929	32 802
Total long-term liabilities		**1 199 141**	**794 587**
Short-term liabilities			
Trade liabilities and other financial liabilities	*33.1*	273 436	251 887
Lease liabilities	*21*	6 465	6 316
Current portion of interest-bearing loans and borrowings	*31*	488 176	202 545
Financial derivatives (liabilities)	*33.3*	-	3 606
Other non-financial liabilities	*33.2*	99 094	200 723
Income tax liabilities		3 077	663
Employee benefits	*25.1*	4 388	4 371
Subsidies and income prepayments and accruals		46	46
Liabilities under contracts with clients	*15.8*	4 226	3 680
Other short-term provisions and accruals	*32*	1 246 907	1 319 106
Total short-term liabilities		**2 125 815**	**1 992 943**
Total liabilities		**3 324 956**	**2 787 530**
TOTAL LIABILITIES AND EQUITY		**4 539 455**	**3 311 762**

(in PLN thousand)

CONSOLIDATED STATEMENT OF CASH FLOWS

for the year concluded on 31 December 2022

	Note	*Year concluded on 31 December 2022*	*Year concluded on 31 December 2021*
Cash flows from operating activities			
Gross (loss)/profit		318 068	(518 523)
Adjustments for:			
Depreciation and amortization	*28*	49 437	119 134
Interest and shares in profits		20 343	-
(Profit)/loss due to exchange rate differences		292	124
(Profit)/loss on investment activities		(616)	(25 244)
(Increase)/decrease in receivables	*28*	498 006	(1 021 512)
(Increase)/decrease in inventories		(46 731)	(6 382)
Increase/(decrease) in liabilities, except for loans and borrowings	*28*	(97 399)	225 541
Change in provisions, prepayments/accruals and employee benefits	*28*	1 207 345	1 246 268
Income tax paid		(121 635)	15 194
Expenses and inflow related to CO_2 allowances	*32.3.1*	(1 319 523)	(639 159)
Tangible fixed asset and mining asset impairment write-down		-	620 170
Other		(4 331)	(9 056)
Net cash from operating activities		**503 256**	**6 555**
Cash flows from investment activities			
Sale of tangible fixed assets		23 897	31 815
Acquisition of tangible fixed assets		(601 737)	(409 720)
Expenses and proceeds related to other financial assets		(73 819)	(13 321)
Received dividends		222	46
Other		261	(49)
Net cash from investment activities		**(651 176)**	**(391 229)**
Cash flows from financial activities			
Inflows from sales of non-controlling equity		478 730	
Repayment of financial lease liabilities		(727)	(290)
Proceeds from loans, borrowings and debt securities		945 589	492 639
Repayment of loans, borrowings and debt securities		(290 141)	(95 126)
Dividends paid-out		-	-
Interest paid		(30 129)	(3 741)
Other		678	-
Net cash from financial activities		**1 104 000**	**393 482**
Net increase/(decrease) in cash and cash equivalents		**956 080**	**8 808**
Cash at beginning of period		**506 669**	**497 861**
Cash at end of period	*28*	**1 462 749**	**506 669**

(in PLN thousand)

CONSOLIDATED STATEMENT OF EQUITY CHANGES

for the year concluded on 31 December 2022

	Share capital	*Supplementary capital*	*Other reserve capitals*	*Retained profits/Accumulated losses*	*Exchange rate differences related to foreign unit conversion*	*Total*	*Non-controlling interest equity*	*Total equity*
As at 1 January 2022	**101 647**	**1 131 326**	**3 472**	**(711 828)**	**10**	**524 627**	**(395)**	**524 232**
Net profit for the period	-	-	-	203 307	-	203 307	12 073	215 380
Total other comprehensive income	-	-	-	618	(9)	609	-	609
Comprehensive income for the period	**-**	**-**	**-**	**203 925**	**(9)**	**203 916**	**12 073**	**215 989**
Company acquisition	-	-	-	(4 452)	-	(4 452)	-	(4 452)
Transfer of profits by non-controlling interests to retained profits	-	-	-	(395)	-	(395)	395	-
Revaluation capital associated with liquidation and sale of fixed assets	-	101 655	-	(101 655)	-	-	-	-
Impairment write-downs against tangible assets	-	-	-	-	-	-	-	-
Other changes	-	-	-	(1)	1	-	478 730	478 730
As at 31 December 2022	**101 647**	**1 232 981**	**3 472**	**(614 406)**	**2**	**723 696**	**490 803**	**1 214 499**

The amount of 478 730 relates to the sale of minority stakes in companies. Transaction described in Note 2.

(in PLN thousand)

CONSOLIDATED STATEMENT OF EQUITY CHANGES

for the year concluded on 31 December 2021

	Share capital	*Supplementary capital*	*Other reserve capitals*	*Retained profits/Accumulated losses*	*Exchange rate differences related to foreign unit conversion*	*Total*	*Non-controlling interest equity*	*Total equity*
As at 1 January 2021	**101 647**	**1 124 376**	**3 472**	**(278 324)**	**43**	**951 214**	**(1 751)**	**949 463**
Net profit for the period	-	-	-	(316 999)	-	(316 999)	(405)	(317 404)
Total other comprehensive income	-	-	-	2 964	(33)	2 931	-	2 931
Comprehensive income for the period	**-**	**-**	**-**	**(314 035)**	**(33)**	**(314 068)**	**(405)**	**(314 473)**
Company acquisition	-	-	-	(342)	-	(342)	10	(332)
Transfer of profits by non-controlling interests to retained profits	-	-	-	(1 751)	-	(1 751)	1 751	-
Fixed asset liquidation	-	6 949	-	(6 949)	-	-	-	-
Impairment write-downs against tangible assets	-	-	-	(110 395)	-	(110 395)	-	(110 395)
Other changes	-	1	-	(32)	-	(31)	-	(31)
As at 31 December 2021	**101 647**	**1 131 326**	**3 472**	**(711 828)**	**10**	**524 627**	**(395)**	**524 232**

ACCOUNTING RULES (POLICIES) AND ADDITIONAL EXPLANATORY NOTES

1. General

The ZE PAK SA Capital Group (“Group”, “Capital Group”, “ZE PAK SA Group”) consists of ZE PAK SA (“parent company”, “Company”, “ZE PAK SA”) and its subsidiaries (see Note 2). The registration state is Poland. Address of company’s registered office: 62-510 Konin, ul. Kazimierska 45. Entity's seat address: 62-510 Konin ul. Kazimierska 45, Poland. Entity legal status: joint-stock company. Primary place of business: Poland.

The Group's consolidated financial statement covers the year concluded on 31 December 2022 and includes comparative data for the year concluded on 31 December 2021.

The parent company is entered into the Register of Entrepreneurs of the National Court Register kept by the District Court Poznań – Nowe Miasto and Wilda in Poznań, 9th Commercial Division of the National Court Register, under the KRS number 0000021374.

The parent company was assigned the statistical number (REGON) 310186795.

The duration of the parent and member companies of the Capital Group is unlimited.

The core business of the Group includes: generation and sales of electricity, generation and sales of heat (steam and hot water) and lignite extraction.

Mr Zygmunt Solorz indirectly holds Company shares representing a total of 65.96% of the Company’s share capital.

The Company has personal ties with other entities through Mr Zygmunt Solorz.

Argumenol Investment Company Limited is its directly superior entity.

The consolidated statement of the Elektrim SA Capital Group for 2022, as a higher-tier entity also contains the consolidated data of the ZE PAK SA Capital Group included herein.

(in PLN thousand)

2. Group composition

The Group consists of ZE PAK SA and the following subsidiaries:

Subsidiaries

Entity	*Registered office*	*Scope of activity*	*Group's share in capital, %*	
			As at 31 December 2022	*As at 31 December 2021*
"PAK–Polska Czysta Energia" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Activities of central companies, excluding financial holdings	59.59%	100.00%
"PAK Kopalnia Węgla Brunatnego Konin" SA	62-540 Kleczew ul. 600-lecia 9	Lignite extraction	100.00%	100.00%
"PAK Górnictwo" sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Repair and maintenance of machinery	100.00%	100.00%
Przedsiębiorstwo Remontowe "PAK SERWIS" sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Renovation and construction services	59.59%*	100.00%*
"PAK-Volt" SA	04-028 Warsaw Al. Stanów Zjednoczonych 61	Electricity sales	59.59%*	100.00%
"PAK–PCE Polski Autobus Wodorowy" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Bus manufacturing	59.59%*	100.00%*
"PAK – PCE Fotowoltaika" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%
„PAK–PCE Stacje H2" sp. z o.o. (formerly "PAK–PCE Biogaz" sp. z o.o.)	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PAK–PCE Biopaliwa i Wodór" sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Electricity generation	59.59%*	100.00%*
"PAK–PCE Wiatr" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PG Hydrogen" sp. z o.o.	02-673 Warsaw ul. Konstruktorska 4	Manufacturing of engines and turbines, excluding aviation and automotive engines	52.00%*	52.00%*
"Exion Hydrogen Polskie Elektrolizery" sp. z o.o.	80-701 Gdańsk ul. Ku Ujściu 19	Design and manufacturing of electrolysers	47.67%*	80.00%
"Exion Hydrogen Belgium" BV	Slachthuisstraat 120 Bus 12 2300 Turnhout	Design and manufacturing of electrolysers	47.67%*	80.00%*
"Farma Wiatrowa Kazimierz Biskupi" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Design and construction of wind farms	59.59%*	100.00%*
"PCE–OZE 1" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PCE–OZE 2" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PCE–OZE 3" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PCE–OZE 4" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PCE–OZE 5" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PCE–OZE 6" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	59.59%*	100.00%*
"PAK CCGT" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	100.00%	100.00%
"MESE" sp. z o.o.	04-028 Warsaw	Electricity generation	53.63%*	90.00%*

(in PLN thousand)

	Al. Stanów Zjednoczonych 61A			
"Park Wiatrowy Pałczyn 1" sp. z o.o.	70-479 Szczecin Al. Wojska Polskiego 68	Electricity generation – wind energy	59.59%*	100.00%*
"Park Wiatrowy Pałczyn 2" sp. z o.o.**	70-479 Szczecin Al. Wojska Polskiego 68	Electricity generation – wind energy	-	100.00%***
"PAK Pątnów" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation	100.00%	-
"Ørsted Polska OF SPV 1" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	60.00%**	-
"Ørsted Polska OF SPV 6" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	60.00%**	-
"PAK ATOM" SA	62-510 Konin ul. Kazimierska 45	Electricity generation	100.00%	-
"PAK–PCE FW Okonek" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation – wind energy	59.59%*	-
"PAK–PCE FW Jastrowie" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation – wind energy	59.59%*	-
"Farma Wiatrowa Przyrów" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation – wind energy	59.59%*	-
"Great Wind" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation – wind energy	59.59%*	-
"Eviva Lębork" sp. z o.o.	62-510 Konin ul. Kazimierska 45	Electricity generation – wind energy	59.59%*	-
"Elektrownie Wiatrowe Dobra" sp. z o.o.	91-862 Łódź ul. Warszawska 70A	Electricity generation – wind energy	59.59%*	-
"PAK Kopalnia Węgla Brunatnego Adamów"	62-700 Turek Warenka 23	Lignite extraction	100.00%	100.00%
"Aquakon" sp. z o.o. under liquidation	62-610 Sompolno Police	Company under liquidation	99.08%*	99.08%*

* *Entities where ZE PAK SA has an indirect share in the capital.*

** *Companies not significant from the perspective of the ZE PAK SA Group and not subject to consolidation.*

****On 28 November 2022, a merger between "Park Wiatrowy Pałczyn 1" sp. z o.o. (acquiring company) and "Park Wiatrowy Pałczyn 2" sp. z o.o. (acquired company) was enacted.*

Jointly controlled companies

"Ørsted Polska OF SPV 2" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	1.00%**	-
"Ørsted Polska OF SPV 3" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	1.00%**	-
"Ørsted Polska OF SPV 4" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	1.00%**	-
"Ørsted Polska OF SPV 5" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	1.00%**	-
"Ørsted Polska OF SPV 7" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	1.00%**	-
"Ørsted Polska OF SPV 8" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	50.00%**	-
"Ørsted Polska OF SPV 9" sp. z o.o. (formerly "Mawzorino Investments" sp. z o.o.)	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	50.00%**	-
"Ørsted Polska OF SPV 10" sp. z o.o.	00-801 Warsaw ul. Chmielna 73	Electricity generation - offshore wind energy	50.00%**	-

As of 31 December 2022, share in the general number of votes held by the Group in subsidiaries is equal to the Group's share in capitals of these subsidiaries.

On 28 February 2022, the Company acquired 100% of shares in PAK Pątnów sp. z o.o., PAK – PCE sp. z o.o. acquired 100% of shares in: Farma Wiatrowa Okonek sp. z o.o. and Farma Wiatrowa Jastrowie sp. z o.o., the shares held by ZE PAK SA in PAK-Volt SA, PAK – PCE Fotowoltaika sp. z o.o. and Exion Hydrogen Polskie Elektrolizery sp. z o.o. have been contributed in kind to PAK – PCE sp. z o.o.;

On 3 March 2022, PAK – PCE sp. z o.o. acquired 100% of shares in Farma Wiatrowa Przyrów sp. z o.o.;

On 8 March 2022, the Company acquired shares in 5 companies - 50% shares in each (companies named Ørsted Polska OF SPV 1 sp. z o.o., Ørsted Polska OF SPV 2 sp. z o.o., Ørsted Polska OF SPV 3 sp. z o.o., Ørsted Polska OF SPV 4 sp. z o.o. and Ørsted Polska OF SPV 5 sp. z o.o.).

On 13 April 2022, the Company and Ørsted Wind Power A/S (ORS) concluded an additional sales agreement regarding shares in another 5 project companies, resulting in the Company acquiring from ORS 50% of the shares in the share capital of the following companies: Ørsted Polska OF SPV 6 sp. z o.o., Ørsted Polska OF SPV 7 sp. z o.o., Ørsted Polska OF SPV 8 sp. z o.o., Mawzorino Investments sp. z o.o. (company name changed to Ørsted Polska OF SPV 9 sp. z o.o. on 24 May 2022) and Ørsted Polska OF SPV 10 sp. z o.o.;

On 10 June 2022, PAK – PCE sp. z o.o. acquired 100% of shares in Great Wind sp. z o.o.

On 27 July 2022, the contribution of all PP BiW share capital shares held by the Company and Cyfrowy Polsat SA as a contribution to cover the increased share capital of PAK – PCE sp. z o.o. was registered. Currently, the Company holds 59.59% of shares in PAK – PCE sp. z o.o. and Cyfrowy Polsat SA holds the remaining 40.40% of shares in PAK – PCE sp. z o.o.,

On 5 August 2022, the National Court Register registered a company named PAK – ATOM SA, which is a 100% subsidiary of ZE PAK SA.

On 29 August 2022, PAK – PCE sp. z o.o. transferred all the shares of Park Wiatrowy Pałczyn 2 sp. z o.o. to Park Wiatrowy Pałczyn 1 sp. z o.o. – change registered in the National Court Register on 7 September 2022. On 28 November 2022, a merger between "Park Wiatrowy Pałczyn 1 sp. z o.o." (acquiring company) and "Park Wiatrowy Pałczyn 2" sp. z o.o. (acquired company) was enacted.

On 29 August 2022, PAK – PCE sp. z o.o. acquired 100% of shares in the Eviva Lębork sp. z o.o. wind company – change registered in the National Court Register on 18 October 2022.

On 26 September 2022, as a result of a share capital increase in: Ørsted Polska OF SPV 1 sp. z o.o and Ørsted Polska OF SPV 6 sp. z o.o., the Company, as at the statement publication date, holds 60% of the shares in these companies. Simultaneously, following an increase in the share capital of Ørsted Polska OF SPV 2 sp. z o.o., Ørsted Polska OF SPV 3 sp. z o.o., Ørsted Polska OF SPV 4 sp. z o.o., Ørsted Polska OF SPV 5 sp. z o.o. and Ørsted Polska OF SPV 7 sp. z o.o., 99% of the shares in the companies were held at the date of publishing this statement by Ørsted Wind Power A/S with its seat in Fredericia, Denmark, with the other 1% held by ZE PAK SA.

On 19 October 2022, the plan to combine Group's companies – PAK KWB Konin SA (acquiring company) and PAK KWB Adamów SA (acquired company) was announced. The merger took place on 28 February 2023, i.e., on the date the merger was entered into the Register of Entrepreneurs, competent for the acquiring company's seat.

On 2 December 2022, PAK – Polska Czysta Energia sp. z o.o. acquired 100% of shares in Elektrownie Wiatrowe Dobra sp. z o.o.

Conclusion of further change orders to the preliminary sales contract involving shares in PAK – Polska Czysta Energia sp. z o.o. and the transfer of ownership of the Konin Power Plant organized part of the enterprise to PAK – PCE Biopaliwa i Wodór sp. z o.o.

On 20 December 2021, the Company and Cyfrowy Polsat SA concluded a preliminary contract for the sale of 67% of shares in PAK – Polska Czysta Energia sp. z o.o. On 30 March 2022, Change Order No. 1 to the aforementioned contract was concluded – it amended the end date (so-called long stop date) until which the parties assumed meeting all precedent conditions.

A number of legal actions took place in the period from April until May 2022, which resulted in Cyfrowy Polsat SA becoming the holder of 49% of the shares in the share capital of PAK – PCE Biopaliwa i Wodór sp. z o.o. ("PP BiW"), and the Company became the holder of 51% shares in the share capital of PP BiW. The change in the ownership structure of PP BiW entailed increasing its capital. The funds from increased capital were intended to acquire all energy activities from the Company implemented at the Konin Power Plant, involving in particular the generation of electricity from biomass, and constituting the organized part of the enterprise ("Konin Power Plant OPE").

On 16 May 2022, the Company and PP BiW concluded a contract, under which the ownership of the Konin Power Plant OPE was transferred to PP BiW. The value of the Konin Power Plant OPE was determined based on the measurement developed by Deloitte Advisory sp. z o.o. and the working capital, i.e., under the same conditions and at a same level as provided for in the contract dated 20 December 2021.

On 29 June 2022, the Company and Cyfrowy Polsat SA concluded another Change Order ("Change Order 2"), which shifts the long stop date and the date for completing one of the milestones the said contract, i.e., the transfer of the Konin Power Plant OPE. Change Order 2 was also concluded in relation to the failure to meet one of the conditions precedent associated with the transfer to PAK – PCE sp. z o.o. of the receivables of PAK – PCE sp. z o.o. subsidiaries, i.e., PCE – OZE 1-6, and a change in the manner and sequence of legal actions conducted under the contract.

The transfer of Konin Power Plant OPE ownership to PP BiW was completed on 1 July 2022.

On 27 July 2022, the contribution of all PP BiW share capital shares held by the Company and Cyfrowy Polsat SA as a contribution to cover the increased share capital of PAK – PCE sp. z o.o.

On 26 September 2022, the Company and Cyfrowy Polsat SA concluded another change order ("Change Order 3"), which amends the end date for obtaining the assumed share structure in PAK – PCE Sp. z o.o. The concluded Change Order 3 meant that the final objective planned by the Company and Cyfrowy Polsat SA in the contract for 20 December 2021, regarding Cyfrowy Polsat SA acquiring 67% of the shares in PAK – PCE Sp. z o.o. remains unchanged and is to be achieved by 5 January 2023. Currently, Cyfrowy Polsat SA holds 40.4% of shares in PAK – PCE sp. z o.o., and the Company holds the remaining 59.6% of shares in PAK – PCE sp. z o.o.

On 19 December 2022, the parties concluded a change order that covered the change of the end date (*so-called long-stop date*), by which all conditions precedent of the Contract should be met, which was moved from 5 January 2023 to 3 July 2023.

The total proceeds of the ZE PAK Capital Group in relation to the disposal of 67% of the PAK – PCE sp. z o.o. share capital and the transfer of ownership of the Konin Power Plant OPE to the PAK – PCE sp. z o.o. capital group (in the absence of prohibited outflows) will amount to PLN 807 624 246.00, including the adjustment arising from the working capital of Konin Power Plant OPE.

3. Parent company's Management Board composition

At the date of signing the statement, the Management Board of ZE PAK SA includes:

Piotr Woźny – President of the Management Board,

Zygmunt Artwik – Vice President of the Management Board,

Maciej Nietopiel – Vice President of the Management Board,

Andrzej Janiszowski – Vice President of the Management Board,

Katarzyna Sobierajska – Vice President of the Management Board.

There were no Management Board changes within the year concluded on 31 December 2022.

4. Approval of the financial statement

This consolidated financial statement was approved for publication by the Management Board on 27 April 2023.

5. Essential values based on professional judgement and estimates

5.1. War in Ukraine

On 24 February 2022, Russian troops entered Ukraine, thus triggering an armed conflict between these countries, Last year, the armed conflict in the immediate vicinity of Polish borders largely affects the social, economic and political situation, both in Poland and the entire region. Its impact is also significant from the perspective of the geopolitical balance of global forces.

Despite the fact that the Company concentrates its activities on the domestic market and there are no direct links with Russia and Ukraine, the impact of an armed conflict on the Company's operation is perceptible through indirect channels. Due to the fact that both countries play an important role as manufacturers and exporters of a wide range of goods, one of the first outcomes of the conflict was a significantly increased volatility on commodity and financial markets. This particularly applied to the energy raw material and agricultural sectors. The inability to forecast all consequences of the armed conflict in eastern Europe also made investors less eager to take risks,

High volatility of commodity markets (especially the energy and CO_2 allowances markets) means that the Company risks having to replenish open position margins on the futures markets.

In extreme situations, the high volatility within the futures market and the associated need to supplement deposits may lead to problems with ensuring adequate liquidity. Whereas a lower propensity to take risk in financial markets may lead to a worse measurement of assets and foreign currencies in such markets as Poland, which are in the immediate vicinity of war zones. This, in turn, may mean worse measurement of the Company's assets and increased operating expenses.

The scope of sanctions imposed on such countries as Russia or Belarus is also important from the perspective of Company's activities. This is due to the impact such sanctions have on trade in relation to specific goods, energy raw materials in particular. Russia is one of the largest gas and oil suppliers for Europe. Reduced supply of these raw materials clearly translates to electricity price level in Europe and Poland, primarily due to the cross-border electricity exchange. On the other hand, Belarus is a large supplier of biomass for the energy sector in Poland, and despite the fact that the Company has never imported biomass for its systems from Belarus, the absence of imports from that direction will lead to increased biomass prices on the domestic market, which also affects the prices of biomass supplied for the Group's systems.

More than a year since the outbreak of the armed conflict next to our eastern border, its impact on the economic situation and energy raw material prices seems significantly lower than in the initial phase. It looks as if the level of uncertainty regarding its escalation is diminishing. Supply shocks related to the inflow of raw materials from the east have been unloaded through supplies from other directions, while economic entities used the elapsed time to adapt their functional models to the new situation. The volatility associated with the prices of individual goods, currencies and assets has also decreased substantially. It seems that the current stage of the armed conflict, as well as the involvement of the international community and third-parties in the form of major powers, countries that shape the global geopolitical situation, increase the chances of reducing the intensity of military operations or working out a certain agreement in the future.

However, it is in the current situation to predict neither the scale of the ongoing armed conflict's future intensity nor its duration or all its consequences that can directly or indirectly affect the Company's activities. The Company monitors the development of the situation on an ongoing basis. It also took actions mitigating adverse consequences of the unstable situation. The Company increased, among others, the availability of different forms of securing its positions within the energy and CO_2 allowance futures market, while stabilizing also the situation related to biomass supplies. In the current situation, the Company evaluates the impact that the armed conflict has on its activities as minor. Whereas, in the reduced intensity of the conflict and the possibility of mutual economic opening of Ukraine and EU countries, the Company sees opportunities to establish cooperation in the broadly perceived energy sector. No additional adjustments and provisions on account of the situation in Ukraine were disclosed in this statement.

5.2. Professional judgement

The preparation of the consolidated financial statement of the Group requires, from the Management Board of the parent company, the judgements, estimates and assumptions, which affect the reported income, costs, assets, liabilities and the related notes and disclosures related to contingent liabilities. Uncertainty about these assumptions and estimates may result in the significant impairment of balance values of assets and liabilities in the future.

In the process of application of the rules (policies) of accounting, the Management Board made the following judgements that have the greatest impact on the reported balance values of assets and liabilities.

Lease agreements

The Group concludes agreements with regard to using such underlying assets as land, including perpetual usufruct, machinery and cars.

The application of IFRS 16 requires the Group to make various judgements, including, among others, determination, which agreements fall in line with the definition of lease, which parameters (among others, fee amount, lease term or interest rate) shall be applied to measure the lease liability or whether there are grounds for reassessing the lease term, discount rate or floating lease fees.

Definition of lease

In situation when the assessment whether a lease agreement is not unambiguous, the Group makes a professional judgement as to whether the definition of lease according to IFRS 16 is met. This particularly applies to cases, which require determining whether there is an identifiable asset, right to exchange on the part of the lessor or whether the leaseholder has the right to direct the use.

The scope of IFRS 16 does not cover lease agreements involving the exploration for or utilization of minerals, crude oil, natural gas and other similar non-renewable resources (IFRS 16.3.a). The Group has analysed the possibility to apply the aforementioned exclusion from the scope of IFRS 16 in relation to lease agreements covering land used to extract lignite or land reclamation after completing lignite extraction, including perpetual usufruct rights to land. The Group has assessed that the aforementioned exclusion only applies to concessions for the extraction of non-renewable natural resources, and not the land used for this purpose. As a result, the Group has recognized the right-of-use asses and a lease liability in relation to all land lease agreements, regardless of the objective and method of their use.

Non-lease components

The subject of the judgement involves determining whether a given agreement contains non-lease components, which according to the accounting policy chosen by the Group in relation to a given asset group, have to be separated or treated jointly with the lease component as a single lease component for the purposes of recognizing an agreement pursuant to IFRS 16.

Lease agreement durations

The Group sets a lease term, taking into account the irrevocable period for which the Group has the right to use an underlying asset, together with:

- potential lease extension periods, if it might be sufficiently certainly assumed that the Group will exercise this right; and
- potential lease withdrawal periods, if it might be sufficiently certainly assumed that the Group will not exercise this right.

When assessing the irrevocable lease term and determining the lease term, the Group takes into account contractual provisions and future practices regarding the lease of specific asset type. In particular, the Group assumes the following when determining the lease term:

- in the case of perpetual usufruct of land, the lease term is determined as the remaining period of the decision's applicability;
- in the case of land lease from State Forests and private owners:

  - for definite-period agreements, the lease term is the period resulting from the agreement;

  - for indefinite-period agreements or agreements until specific events (e.g., until property acquisition), the Group estimates the lease period, taking into account, among others, the operation period for the open pit, for the purposes of which the Group uses leased land;
- for other lease agreements (car lease, vulcanizing press lease), the lease term is the period arising from the agreements, taking into account an individual extension option consideration.

The Group considers the use of the lease option for each agreement separately. In assessing the probability of using the agreement extension option, the Group considers all significant events and facts that lead to the occurrence of economic incentives behind exercising (or not) such an option, including, e.g., the significance of the underlying component from the perspective of the operating activity or agreement termination costs, including costs of reallocation and searching for a new lease subject that meets the needs of the tenant. In assessing the probability of exercising the option to withdraw from a lease, the Group considers all significant facts and events that lead to the occurrence of premises to exercise such an option.

Interest rate

The Group applies the following assumptions in relation to discount rate determination:

- The Group applies a lease interest rate in the case of agreements for which it can be easily determined (car lease).
- In the case of other lease agreements, the Group applies an incremental borrowing rate of the leaseholder.
- Currently, the Group's financing sources have a too short time horizon to be used in estimating the incremental borrowing rate of the leaseholder. The Group determines the rate by estimating:

- Risk-free rate based on publicly available data,
- Loan margin

- Discount rates vary depending on lease term.
- The Group only has lease agreements denominated in PLN, therefore there are no discount rate differences due to agreement currency.

5.3. Uncertainty of estimates

Basic assumptions concerning the future and other key sources of uncertainty occurring on a balance sheet date, to which vital risk of the significant adjustment of balance value of assets and liabilities in the next financial year are related, are discussed below. The Group adopted assumptions and estimates concerning the future on the basis of the knowledge possessed during development of the financial statement. Occurring assumptions and estimates may be subject to change due to future events resulting from market fluctuations or fluctuation not controlled by the Group. Such fluctuations are reflected in estimates or assumption at the moment of occurrence.

An inflation rate of 3.3% has been adopted to prepare the estimates. The table below shows the NBP inflation plan adopted to calculate its average level.

NBP inflation plan			NBP target inflation															
2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
13.1	5.9	3.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Fixed asset impairment

As a result of analyses conducted as for 31 December 2022, the Group identified the existence of circumstances, which would indicate possible loss in value of the asset components, in the form of the balance sheet net value of the Group's assets higher than the value of its market capitalisation. The Group conducted no value impairment tests of fixed assets. Detailed information on the conducted test is presented in note 20.1.

Legal provisions on supporting biomass units are currently the sources of uncertainty in terms of the changes in the prices of electricity and CO_2 allowances.

Provisions' evaluation due to employee benefits

Provisions due to employee benefits were estimated using actuarial methods. The assumptions adopted for that purpose were presented in the note 25.1.

Estimate was developed on the basis of following main assumptions:

• discount rate	6.87%
• projected inflation rate (average for the years 2023 – 2041)	3.3%
• projected wage growth rates	4.5%

Changes of financial indexes, which are the estimation basis would change the balance of the provisions by the amounts presented in the table below (in PLN thousand).

	(+) an increase of 1 percentage points	*(-) a decrease of 1 percentage points*
discount rate	(1 703)	1 913
wage growth rate	1 766	(1 587)

Discount rates and wage growth rates are sources of uncertainty.

Deferred tax asset

The Group recognizes the deferred tax asset based on an assumption that tax profit enabling its use will be achieved in the future. The deteriorations of the achieved tax results in the future could lead to a situation, in which this assumption would become unjustified. Deferred tax details have been described in Note 16.3.

Compensation for the termination of long-term capacity and electricity sales contracts

Note 34 presents the descriptions of essential contingent liabilities and essential law suits, including these concerning compensations for the termination of long-term capacity and electricity sales contracts.

The price of electricity on the income side and the price of purchasing CO_2 allowances on the cost side are the primary sources of uncertainty in estimating LTC compensations for individual years. These variables are beyond the Company's control. However, in general terms, i.e., in 2023 (end of compensation period), the Company will still receive the due compensation amount arising from the remaining limit. Only their distribution in individual years may change.

Revenue recognition

Long-term construction service contracts

The Group recognizes revenues from long-term construction contracts over time, measuring the degree of completely fulfilling this performance obligation. The Group applies an expenditure-based method. Use of this method requires the Group to survey the proportions of previously completed works against all services to be performed. Revenue is recognized based on the transaction price, excluding the amount that the Group collects on behalf of consortium partners when performing contracts as a consortium leader.

As at the balance sheet date, the Group updates the transaction price and the degree of fulfilling the performance obligation, i.e., the performance of a long-term construction contract. The projected contract-related loss is recognised as costs of the period, when it was recognised in accordance with IAS 37. The data on long-term construction contracts can be found in Note 15.8. The source of uncertainty may be a potential budget change; however, budgets were updated at the end of 2022 and all circumstances and facts known to the Group and related to contract performance were included.

Depreciation rates

The amount of depreciation rates is determined on the basis of the projected period of economic usability of tangible fixed asset components and intangible assets. The Group verifies accepted periods of economic usability on the basis of current estimates annually.

Right-of-use assets are depreciated over the economic useful life of the underlying asset, provided that the lease agreement transfers onto the Group the ownership of the underlying asset at the end of the lease term or the asset right-of-use cost takes into account the fact that the Group will exercise the call option. Otherwise, the Group depreciates the right-of-use asset starting on the lease commencement date until the end of the asset operation period or until the end of the lease term, whichever is earlier. Projected tangible fixed asset operation periods are the source of uncertainty.

Provision for the liquidation fixed tangible assets

The group creates provisions for the liquidation of tangible assets in the event of such an obligation or undertaking such a liability by the Group's management. The provision is created in the amount resulting from the received offers concerning liquidation of components of tangible fixed assets. The Group remeasures provisions at every balance sheet date. The value of the provision due to liquidation of components of tangible fixed assets is discounted on every balance sheet date. Future discount and inflation rates are the sources of uncertainty. Provisions are described in Note 12.24.

Provisions for the liquidation of ash storage yards

The Group is creating a provision for liquidation of ash storage yards due to a legal obligation resulting from the integrated permit. The basis of estimation are studies, technical and economic analyses developed by the Group, and received external bids for planned reclamation projects directions. At the end of each reporting period, the Group updates the value of the provision. As at the balance sheet date, the Management Board of ZE PAK SA estimated the value of reclamation costs to be incurred in the future, based on the knowledge on the area of ash storage yards and currently incurred costs of similar land reclamation. In calculating the provision, the Group adopted the following assumptions: discount rate at a level of 6.7%, and inflation rate at a level of 3.3%. Future discount and inflation rates are the sources of uncertainty.

The provision is described in note 32.3.2.

Reclamation provisions and other related to mining activity

The Group is creating provisions for both the reclamation costs related to current extraction of coal on a given open pit, and for final excavation costs. Provisions are created on the basis of estimates of future reclamation costs, as well as assumed start and finish dates of reclamation, based on the reports by independent experts estimating reclamation costs commissioned by the Management Board, as well as internal estimates of the Group, and are discounted at every balance sheet date. The Group adopted the following assumptions: discount rate at a level of 6.7%, inflation rate at a level of 3.3%. Future discount and inflation rates are the sources of uncertainty.

The provisions are described in note 32.3.3.

Provision for liabilities due to the emission of greenhouse gases and provisions for the redemption of certified emission reductions (EUA).

The Group recognizes provisions for liabilities on account of greenhouse gas emissions. A new settlement period for emission allowances started on 1 January 2021. It will end on 31 December 2021. The assumption of this period is free allocation of emission allowances (EUA) resulting from thermal energy production only pursuant to Art. 10c of Directive 2009/29/EC. Significant fluctuations of CO_2 emission allowance prices and legal regulations associated with EU's climate policy are a source of uncertainty.

Emissions in the ZE PAK SA Group in 2022 amounted to 3 427 588 tons of CO_2.

Emissions in the ZE PAK SA Group in 2021 amounted to 4 870 451 tons of CO_2.

3 427 588 EUAs for the year 2022 will be redeemed in 2023.

Details concerning the provision for greenhouse gas emission liabilities were presented in note 32.3.1.

Risks associated to climate change

The ZE PAK SA Group is aware of the ongoing climate change and, consequently, the associated direct and indirect risk, in terms of both regulations and operations, as well as business opportunities that the energy transitions opens up for the company. Therefore, the Group is planning actions associated with a thorough transformation of its business model towards sustainable economy in advance. This involves a direction towards environmentally sustainable actions, in line with EU systematics (so-called taxonomy) and meeting these criteria.

The international community, including EU Member States, in ratifying the Paris Agreement have committed to take actions aimed at stopping the global temperature rise, which results from the excessive, anthropological greenhouse gas emission. Adopted in 2015, it is the first universal, legally binding climate deal in history. As a result, EU countries committed to jointly take actions making EU economy in 2050 the first economy in the world to reach climate neutrality. This commitment determines the economic policy in terms of sustainable development, and thus, EU regulations. As a result, companies emitting significant amounts of greenhouse gases will come under increasing pressure - among others, it will be increasingly difficult for them to acquire funding for their activity, and the emission costs will continue to grow.

Traditionally, conventional generation assets of the Group, based on generating energy through lignite combustion, are of the high-emission type. Therefore, since they are becoming less and less profitable, they require replacing with more eco-friendly sources. Simultaneously, the already observed climate change consequences may additionally hinder functioning under a traditional model.

Thus, the ZE PAK SA Group, already several years ago, initiated first projects eventually included in the development directions of the strategy until 2030.

The directions of activities aimed at making the business model more sustainable have then been thoroughly described, also using measurable indicators, in the sustainable development strategy of the ZE PAK Group for the years 2023-2027. Business model transition falls in line with the directions outlined in EU systematics (so-called taxonomy), assuming, among others:

- complete and quick phase-out from lignite extraction and gradual decommissioning of the production based on this fuel in the baseline scenario by the end of 2024,
- significant investments in generation assets enabling energy generation based on low- and zero-emission sources described in the taxonomy, including wind and photovoltaics, and electricity and thermal energy generation based on biomass, fossil gas fuels and nuclear fuel, i.e., activities in line with the so-called EU systematics (taxonomy).
- development of activities in the field of production and utilization of green hydrogen fuel.

Climate change entails changes in the Group's strategy, as described in Note 11. The Group also considered the impact of climate factors on the financial statement and took these factors into account, among others, in non-financial asset impairment tests and the calculations of other provisions and prepayments/accruals.

6. Basis for the development of the consolidated financial statement

This consolidated financial statement was developed according to the historical cost principle, except for the derivatives and other financial instruments.

The carrying value of the recognised hedged assets and liabilities is adjusted against fair value changes, which may be attributed to the risk against which such assets and liabilities are hedged.

This consolidated financial statement is presented in Polish zloty ("PLN"), and all values, unless it was shown otherwise, are expressed in thousands of PLN.

6.1. Going concern assumption

The consolidated financial statement was developed with Group's going concern assumed for the foreseeable future, i.e., at least the next 12 months after the date of this financial statement.

6.2. Conformity statement

This consolidated financial statement was developed in conformity with the International Financial Reporting Standards ("IFRS"), approved by the EU ("EU IFRS").

EU IFRS comprises standards and interpretations adopted by the International Accounting Standards Board ("IASB") and the International Financial Reporting Interpretations Committee ("IFRIC").

The Group's companies keep their books of account in accordance with the policy (rules) specified in the Act of 29 September 1994 on accounting, consolidated text, 2021, item 217, as amended, ("Act"), and the regulations issued thereunder ("Polish accounting standards"). The consolidated financial statement includes adjustments, which are not included in the accounting books of the Group's units, introduced in order to make their financial statements comply with IFRS.

6.3. Functional currency and financial statements currency

The functional currency of the parent company and other companies included in this consolidated financial statement and the presentation currency of this consolidated financial statement is the Polish zloty.

7. Improvements in applied accounting policies and comparative data

The accounting (policy) rules applied for the development of this consolidated financial statement are coherent with the ones applied for the development of the Group's consolidated financial statement for the year concluded on 31 December 2021, except the application of the following improvements in Standards and interpretations:

- IFRS 3 Business combinations – updated references to Conceptual Framework, without a significant change in terms of its requirements;
- IAS 16 Property, plant and equipment – improvements forbid deducting the amounts from the sales of items generated in the course of preparing an asset for operation from the costs of generating tangible fixed assets. Instead, the revenues from sales and associated costs are recognized in the comprehensive income statement;
- IAS 37 Provisions, contingent liabilities and contingent assets – introduced improvement specify, which costs shall be included in assessing whether a contract will be loss-making – whether a contract is an onerous contract;
- Annual improvement program 2018-2020 – the improvements explain and clarify guidelines of the standards in terms of recognition and measurement: IFRS 1 "First-time adoption of the International Financial Reporting Standards", IFRS 9 "Financial instruments", IAS 41 "Agriculture" and illustrative examples to IFRS 16 "Leases".

The aforementioned improvements did not impact the financial statement.

8. New standards and interpretations, which have been issued, but are not yet effective

In relation to the consolidated financial statement, the Group did not decide to apply the following, published standards, interpretations or improvements to applicable standards, prior to their effective date:

- **IFRS 14 "Regulatory deferral accounts"**

Accounting and disclosure principles for regulatory deferred items. Pursuant to a decision of the European Union, the process of approving a preliminary standard version will not be initiated prior to the publishing of the final standard version.

- **Improvements in IFRS 10 and IAS 28**

Contains guidelines on sales or contribution of assets by an investor to an affiliated company or a joint venture. Work on approval have been postponed indefinitely.

- **IFRS 17 "Insurance contracts"**

IFRS 17 "Insurance contracts" was issued by the International Accounting Standards Board on 18 May 2017, whereas improvements to IFRS 17 were published on 25 June 2020. The new amended standard applies to annual periods beginning on 1 January 2023 or after this date.

IFRS 17 "Insurance contracts" will supersede the currently applicable IFRS 4, which permits a variety of practices with regard to insurance contract settlement. IFRS 17 will fundamentally change the accounting of all entities dealing with insurance and investment contracts.

- **Improvements to IAS 1 "Presentation of financial statements"**

Improvements apply to financial statement presentation – classification of both short- and long-term liabilities. The improvement shall come into force on 1 January 2023.

- **Improvements to IAS 1 "Presentation of financial statements"**

Improvements apply to financial statement presentation – disclosure in terms of the applied accounting policy. The improvement shall come into force on 1 January 2023.

- **Improvements to IAS 8 "Accounting policies, changes in accounting estimated and errors"**

Improvements apply to disclosures in terms of the applied accounting policy, including the change of estimated values and error adjustment. Improvement is effective as of 1 January 2023.

- **Improvements to IAS 12 "Income tax"**

Deferred tax associated with assets and liabilities resulting from a single transaction. The improvement shall come into force on 1 January 2023.

- **Improvements to IFRS 16 "Leases"**

Improvements apply to the method of measuring a sales transaction or leaseback liability. The improvement shall come into force on 1 January 2024.

At the date of approval of this consolidated financial statement for publication, the Management Board has not yet completed its work on evaluating the impact of introducing the aforementioned standards and interpretations on the Group's accounting principles (policy) in relation to the Group's operations or financial result.

The effective dates are dates arising from the wording of the standards announced by the International Financial Reporting Council. The dates of standard application within the European Union may differ from the dates of application arising from the wording of the standards and shall be announced upon approval for application by the European Union. The Group has not decided on an earlier application of any standard, interpretation or improvement, which has been published but has not yet come into force pursuant to the EU legislation.

9. Change in estimates

In the period covered by the financial statement, the following changes in estimates, affecting the values shown in the financial statements, occurred:

- estimates regarding the assumptions for the measurement of actuarial provisions,
- estimates in terms of the scope of assumptions regarding the measurement of derivative instruments,
- estimates in terms of the assumptions regarding the calculation of the revenue from LTC compensation,
- estimates in terms of the assumptions regarding the periods of economic usability of the capital work,
- estimates in terms of the realisation of deferred tax assets,
- estimates in terms of the scope of assumptions regarding the valuation of provisions for ash storage yard reclamation,
- estimates in terms of the assumptions for the valuation of the provision due to liquidation of tangible fixed assets,
- estimates in terms of the valuation of long-term contracts,
- estimates in terms of the scope of assumptions regarding the valuation of the reclamation provisions associated with mining activity
- estimates in terms of the scope of fixed asset impairment.
- estimates in terms of CO_2 emission allowance prices.

The effect of estimate changes on tangible fixed asset salvage value estimate was shown in Note 20.1

The impact of estimate changes on the value of actuarial provisions was presented in note 5.3.

In case of the derivatives (IRS) measurement, the change in estimates is due to interbank market changes of risk factors, i.e., the exchange rate and market interest rates. The description of used securities was included in note 40.3.1.

In the calculation of revenue due to stranded cost coverage compensation, the change in estimates relates primarily to changes in the energy sales and purchases princes on the Commodity Power Exchange and the balancing market, the volume of energy production and purchase of energy in order to meet sale plans, as well as the interest rate of the 5-year government bonds and the NBP deposit rate, affecting the discount rate. The value of the annual compensation adjustment for 2022 is (+) PLN 26.92 MM. The principles of recognizing revenues from compensations to cover stranded costs are described in note 12.26.1.

The period of economic usability of the fixed assets is subject to verification at the end of each reporting period based on the expected functionality period, verified against the Management Board's plans related to the modernisation, sale and liquidation of the main components of assets. The effect of the changes is recognized in the year in which the verification was performed. In 2021, the economic useful lives of fixed assets were adapted to the dates resulting from new directions of the ZE PAK SA Group strategy and were updated in 2022, as more thoroughly described in Note 11.

In relation to deferred tax assets, an analysis and, if required, impairment write-downs are prepared for each balance sheet day, as was further described in Note 16.3.

The description of the titles of the main recognized provisions and changes of provision items in the current and previous fiscal year was described in note 32.

Note 15.8 shows the values of revenues for construction contracts, taking into account the balance sheet measurement and the expected losses due to these contracts.

10. Seasonality of activities

The demand for electricity and heat, among consumers in particular, is subject to seasonal fluctuations. The practice so far has shown that electricity consumption was higher in the winter (mainly due to low temperatures and shorter days) and lower in the summer (due to the holiday period, higher ambient temperatures, and a longer day). A systematic increase in the demand for electricity in the summer has been recorded over the last few years, which is mainly caused by the rising number of operated air conditioners and cooling devices

Regardless of the aforementioned factors, the meteorological conditions are becoming increasingly important for the Group's production volume. Previously, the Group's activity was not significantly based on demand seasonality, and was continuous (basically) all-year-round, owing to low unit operating costs. Currently, given the increasing share of RES the energy production segment, including, primarily, wind sources and photovoltaics, when estimating the Group's production volume, weather conditions, with particular emphasis on wind in Q1 and Q4, and sun in Q2 and Q3 are gaining importance. However, the risk associated with seasonality and meteorological conditions is not crucial for the Group’s activities.

11. New directions of the ZE PAK SA Capital Group’s strategy

The ZE PAK SA Capital Group’s strategy direction are determined based on a systematic analysis of a wide spectrum of economic and process factors, such as, e.g., conventional fuel price trends, CO_2 emission allowance prices, mechanisms supporting various electricity and thermal energy production.

The ZE PAK SA Group directs its attention to the regulatory surroundings and technological progress in the broadly understood fields associated with the Group's activities. The aim of such an approach is optimizing investment projects, as well as directional – in terms of diversifying the fuel base and generation source technology, and detailed – related to improvements within existing generating units, and adaptation of generating equipment operation schedules. The Group strives to develop a long-term functioning model under conditions of adverse trends for high-emission power becoming evident in policies adopted at EU level, which is also reflected in forecasts of changes in the Polish energy mix.

Broadly understood legislative framework determined by the EU and Polish law provisions directly translate to the Group’s production capacity. Worn-out technical generating equipment, for which the analyses do not shown the usefulness of a modernization, will be gradually decommissioned pursuant to decisions taken. The operation method during the transitional period must be closely matched to their capabilities through choosing a dedicated exemption in environmental law: The optimal method for utilizing the available fuel base will also be additionally taken into account.

The Company is aware of the changes, especially the ones in the legislation and legal area, which take place within its surroundings. Legal regulations aimed at reducing emissions of CO_2, other gases (SO_2, NO_X) and dusts, as well as regulations regarding the renewable energy source sector comprise significant challenges for the Group’s companies. New environmental regulations arising from the introduction of BAT (Best Available Technology) conclusions that came into force in 2021, extend the catalogue of limited pollutions. It is noteworthy that investment activities and proper renovation management covering existing generating units and their associated pollution reduction equipment, result in a gradually reduced emissivity of produced electricity.

The development directions adopted by the Group mean, that the Group, on one hand gradually limits lignite-fired energy production until a total phase-out, and on the other, it develops projects associated with producing energy from low-emission and zero-emission sources, and intensifies actions aimed at generating and using “green” hydrogen. The directions of activities aimed at making the business model more sustainable have then been thoroughly described, also using measurable indicators, in the sustainable development strategy of the ZE PAK Group for the years 2023-2027. Business model transition falls in line with the directions outlined in EU systematics (so-called taxonomy), assuming, among others:

- complete and quick phase-out from lignite extraction and gradual decommissioning of the production based on this fuel in the baseline scenario by the end of 2024,
- significant investments in generation assets enabling energy generation based on low- and zero-emission sources described in the taxonomy, including wind and photovoltaics, and electricity and thermal energy generation based on biomass, fossil gas fuels and nuclear fuel, i.e., activities in line with the so-called EU systematics (taxonomy),
- development of activities in the field of production and utilization of green hydrogen fuel.

A structure of special purposes vehicles (SPV) that are to be responsible for the activities within individual technologies of renewable energy sources is been gradually constructed around PAK – PCE sp. z o.o. Owing to the planned sales of the majority stake in PAK – PCE sp. z o.o., to the Cyfrowy Polsat Group, it is planned to obtain a financially strong partner that will be able to ensure the implementation of a wide range of prospective investment projects in the field of renewable energy sources, as well as generation and utilization of “green” hydrogen.

The PAK CCGT sp. z o.o. special-purpose vehicle is to be responsible for preparing and implementing a project covering the construction of a gas-and-steam unit within the former coal-fired Adamów power plant. The project has won a capacity market auction and thus obtained support in the form of a 17-year capacity contract.

Within its transition-related operations, the Group is also active in the field of construction projects covering wind farms in the Baltic Sea (offshore). It is also planned to use the assets of the Pątnów Power Plant for the needs of a potential nuclear power plant construction. Both projects are developed in cooperation with third-parties.

12. Significant accounting rules

12.1. Consolidation rules

This consolidated financial statement includes the financial statement of ZE PAK S.A., as well as financial statements of its subsidiaries, developed for the year concluded on 31 December 2022. The financial statements of the entities controlled by it (subsidiaries), after taking into account the adjustments to ensure compliance with IFRS, are developed for the same reporting period as the parent company's statement, using consistent accounting rules, based on uniform accounting policies applied for transactions and economic events of a similar nature. In order to eliminate any differences in the applied accounting methods, adjustments are implemented.

All significant balances and transactions between the Group's entities, including unrealised profits arising from transactions within the Group, were entirely eliminated. Unrealised losses are eliminated, unless they prove the impairment.

Subsidiaries are subject to consolidation from the date on which they are controlled by the Group and cease to be consolidated from the date on which such control ends. Control of the parent company over an entity takes place when:

- it has power over a given entity,
- it is exposed to variable returns or has rights to variable returns due to its interest in a given entity,
- it has the possibility to use the power to shape the level of generated returns.

The company verifies the fact of having control over other entities, if the situation, which indicates a change in one or more of the above-mentioned control conditions, occurred.

If the company has less than a majority of the voting rights within an entity, but the held voting rights are sufficient to unilaterally manage the relevant activities of the entity, it means that it holds power over the entity. When assessing whether the voting rights in a given entity are sufficient to ensure power, the Company analyses all significant circumstances, including:

- the size of held voting rights block in comparison to the scale of shares and the degree of dispersion of voting rights held by other shareholders;
- potential voting rights held by the Company, other shareholders or other parties;
- rights under other contractual arrangements; and
- additional circumstances that may demonstrate that the Company has or does not have the possibility to manage relevant activities in the decision-making moments, including voting schemes observed during previous meetings of the shareholders.

Changes in the parent company's ownership that do not result in the loss of control of the subsidiary are recognised as equity transactions. In such cases, in order to reflect changes in relative shares in the subsidiary, the Group adjusts the balance value of the controlling and non-controlling shares. Any differences between the amount of the adjustment of non-controlling shares and the fair value of the paid or received amount are recognised in the equity and attributed to owners of the parent company.

12.2. Calculation of items denominated in a foreign currency

Transactions denominated in currencies other than PLN are calculated into Polish zloty using the exchange rate applicable on the date of conclusion of the transaction.

At the balance sheet date, assets and liabilities denominated in currencies other than PLN are calculated into Polish zloty using the average exchange rate determined for a given currency by the Polish National Bank at the end of the reporting period. The foreign exchange differences, which arise from the calculation, are respectively recognised in the financial revenue item (costs), or in cases of the rules (policy) of accounting, capitalised in the value of assets. Assets and non-monetary liabilities recognised at historical cost in a foreign currency are disclosed at the historical exchange rate of the transaction date. Assets and non-monetary liabilities recognised as per the fair value expressed in a foreign currency are converted to the fair value at the rate of the measurement date. Profits or losses arising from the recalculation of assets and non-monetary liabilities recognized within the fair value are recognised in accordance with the recognition of profit or loss, which arises from changes in the fair value (i.e., in other comprehensive income or profit or loss, respectively, depending on where the change in the fair value is recognised).

(in PLN thousand)

The following exchange rates were adopted for the purposes of the balance sheet valuation:

	31 December 2022	*31 December 2021*
EUR	4.6899	4.5994
GBP	5.2957	5.4846
USD	4.4018	4.0600

12.3. Tangible fixed assets

Tangible fixed assets are disclosed according by acquisition price / production cost less the redemption and impairment write-downs. The initial fixed asset value includes the acquisition price increased by all costs directly related to the acquisition and adaptation of the asset to a condition fit for operation. The cost also includes the cost of replacing the individual components of machinery and devices when incurred, if the recognition criteria are met. Any costs incurred after the date when a fixed asset is put into operation, such as the maintenance and repair costs, encumber the profit or loss when incurred.

The initial value includes the costs of disassembly, removal and restoration to the original state.

Fixed assets, at the time of their acquisition, are divided into components with a significant value to which a separate period of the economic usability can be attributed. The costs of general overhauls are also classified as components. The Group capitalizes only mandatory repairs arising from legal provisions, warranties and the like. The depreciation period for renovation components is the planned time to the next general overhaul of a given facility.

Land classified as mining land are subject to depreciation until reclassification to a different land type.

The redemption is calculated on a straight-line basis for an estimated useful life of a given component of assets, amounting to:

Type	**Period**
Land	8 - 10 years
Buildings and structures	2 - 27 years
Machinery and technical devices	2 - 27 years
Means of transport	2 - 10 years
Other fixed assets	2 - 27 years
General overhauls	3 - 4 years
Strategic spare parts	2 - 4 years

The final value, useful life and a depreciation method for the asset components are annually verified and, if necessary, – adjusted with effect from the beginning of the just ended financial year. Any changes resulting from the conducted review are recognised as a change in estimates.

A given item of the tangible fixed assets may be removed from the balance sheet after its sale, or if any economic benefits, arising from the further use of such a component of assets, are expected. Any profits or losses resulting from the removal of a given asset from the balance sheet (calculated as the difference between potential net income from the net sale and the carrying value of a given item) are recognised in the profit and loss of the period, in which such removal was enacted.

Commenced investments relate to capital work in progress (construction or assembly) and are reported in accordance with the acquisition or production costs reduced by potential impairment write-downs. The capital work in progress items are not subject to redemption until the completion of their construction and putting the fixed asset into operation. Value component of capital work in progress are also financial costs subject to capitalisation. The issue of their capitalisation is described in more detail in note 12.11.

12.3.1. Strategic spare parts

Inventories recognized as parts for strategic overhauls and failures of machinery and equipment are recognized under tangible fixed assets. The main criteria for recognizing materials under Tangible fixed assets are:

- key element for maintaining production continuity, the purchase of which is hindered due to the prolonged waiting process associated with a complex manufacturing process,
- element being an assembly or sub-assembly of a machine or device that will be used within the production process for more than one year,
- spare parts can be used solely for the correct operation of individual tangible fixed asset items.

Strategic spare parts are depreciated until their expected useful life expiry.

The impairment write-down is created for non-circulating materials over 3 years. The write-down is 100% for spare parts valued above PLN 100 thousand.

12.3.2. Fixed assets intended for sale

Fixed assets and their groups are deemed as intended for sale when their carrying value is recovered rather by means of a sale transaction than through their further use. This condition can be met only when the sale transaction is highly probable and the assets' component is available for immediate sale in its present condition. The classification of the assets' component as intended for sale assumes the intention of the company's management board to conduct the sale transaction within one year from the date of classification. The fixed assets classified as held for sale are measured at the lower of two values:

the carrying value or fair value less the costs related to the sale.

If the group wants to make a sale transaction, which resulted in losing control over its subsidiary, all assets and liabilities of this entity are classified as intended for sale, regardless of whether the Group keeps non-controlling shares after this transaction.

12.4. Investment property

Investment properties are initially recognized by acquisition price or production cost, taking into account the transaction costs. The carrying value of the investment properties includes the cost of replacing the individual components of the investment property at the time of its incurrence, if the recognition criteria are met, and it does not include costs of the day-to-day maintenance of these properties. After the initial recognition, the value of investment properties is reduced by redemption and impairment write-downs for the loss in value.

Investment properties are removed from the balance sheet upon their sale or permanent decommissioning of a given investment property, when no future benefits of its sale are expected. Any profits or losses arising from removal of the investment property from the balance sheet are recognised in the income statement of the period in which this removal took place.

The transfer of assets to investment properties is made when there is a change in their use confirmed by the owner ceasing to use the assets' component or the conclusion of an operating leasing agreement.

The Group presents post-mining lands for which the reclamation process was completed as investment properties. Such land, in accordance with the plans of companies conducting extraction activities, will be sold in the future.

12.5. Assets concerning overburden stripping and other mining assets

Assets concerning overburden stripping and other mining assets include activated costs incurred in the pre-production phase of the mine, in particular, expenditure associated with the opening excavation.

In the initial asset value, the Group includes discounted decommissioning costs, i.e., reclamation, to the extent in which it applies to the overburden stripped within the work associated with the creation of an opening excavation, which, pursuant to applicable law, are subject to decommissioning after ceasing operations. The principles of liquidation costs recognition and measurement are presented in Note 32.3.3.

The asset initial value also includes costs associated with the creation of provisions for significant, one-off costs linked to land where open pit work is ongoing, e.g., road demolition and reconstruction, liquidation of cemeteries, relocation of public buildings.

In any case, the Group settles activated costs on a straight-line basis over the period of the economic usability of individual open pits (the exploitation period adopted for particular open pits). The straight-line method was applied because the deposits are exploited pursuant to a schedule, evenly throughout the entire license period. The adopted depreciation periods and methods are periodically reviewed, at least at the end of each financial year. Assets related to the overburden stripping and other mining assets with the economic usability of less than 12 months are classified under short-term assets. Economic useful life periods for individual open pits are as follows:

Tomisławice open pit until 2024.

Write-down against settlement of mining assets is recognised as operating costs under depreciation costs.

In 2021, the value of assets related to overburden stripping and other mining assets has been fully written-off and these assets are not disclosed in the balance for 31 December 2022 and 31 December 2021.

12.6. Expenses related to exploration and evaluation of mineral resources

In the item related to assets connected with overburden stripping and other mining assets, the Group also presents expenses related to the exploration and evaluation of mineral resources.

The Group activates expenses related to the exploration and evaluation of mineral resources until the end of exploration works. The next step is to verify if the identified resources demonstrate the technical feasibility and economic viability of extracting. In the absence of viability of extracting, all the incurred expenses are written off under other operating costs.

Within the costs associated with the exploration and evaluation of mineral resources, the following element can be distinguished, among other things:

- topographical, geological, geochemical and geophysical analyses,
- drilling,
- open-pit mining works,
- sampling,
- acquisition of rights to explore.

Mineral resource evaluation and exploration assets are measured at the cost less the accumulated impairment write-downs.

Mandatory single unit (project) impairment tests are conducted by the Group upon demonstrating technical feasibility and commercial viability of mineral resource extraction, when the facts and circumstances indicate that the carrying amount of the assets related to the exploration and evaluation of mineral resource may exceed their recoverable amount. Potential write-downs are recognized prior to a reclassification resulting from the demonstration of a technical feasibility and economic viability of extracting mineral resources.

12.7. Intangible assets

Intangible assets acquired in a separate transaction or created (if they meet the recognition criteria for development costs) are measured at initial recognition respectively at their acquisition price or production cost. The acquisition price of intangible assets acquired in a business combination transaction is equal to their fair value at the date of the combination. Following the initial recognition, intangible assets are stated at their acquisition price or production cost reduced by the redemption and value impairment write-downs. The expenses incurred on the intangible assets produced internally, except for the activated assets incurred on the development works, are not activated and are recognised in the costs for the period, in which they were incurred.

Intangible assets are depreciated over the period of use and are subjected to the value impairment tests whenever there are premises indicating their value loss. The depreciation period and method of intangible assets with a definite useful life are verified at least at the end of each fiscal year. Changes in the expected useful life or the expected method of consuming the economic benefits from a given component of assets are recognised through a change of the period or depreciation method, and treated as changes in estimates. Depreciation write-downs for components of intangible assets with a definite useful life are recognised in the profit or loss in the expense of the category, which corresponds the function of a given component of intangible assets.

Usufruct periods are verified annually and, if necessary, adjusted with effect from the beginning of the just ended financial year. Any changes resulting from the conducted review are recognised as a change in estimates.

A summary of the policies applied in relation to the Group's intangible assets is as follows:

	Concessions, patents and licenses	*Computer software*	*Other*
Periods of use	5 years	2 years	5 years

Applied depreciation method	Straight-line method	Straight-line method	Straight-line method
Internally produced or acquired	Acquired	Acquired	Acquired
Impairment test	The annual assessment of whether there are any prerequisites indicating the occurrence of the loss in value.	The annual assessment of whether there are any prerequisites indicating the occurrence of the loss in value.	The annual assessment of whether there are any prerequisites indicating the occurrence of the loss in value.

Profits or losses resulting from removal of intangible assets from the balance sheet are valued according to the difference between the income from the net sales and the carrying value of a given asset component and are recognised in the profit or loss, when they are removed from the balance sheet.

The company also shows the CO_2 emission allowances received or acquired for own needs, as intangible assets. A detailed description of the accounting policy in respect of CO_2 emission allowances was included in note 12.25.

12.8. Lease

The Group as a leaseholder

Lease, rental, tenancy and other agreements granting the Group a right to use assets that meet the definition of a lease pursuant to IFRS 16 are recognized as right-of-use assets related to underlying assets and as other liabilities related to lease fees.

The Group is the leaseholder in the event of lease agreements for machinery and cars, and a land user, including under perpetual usufruct.

The Group applies exemptions provided for in IFRS 16 and does not recognize right-of-use assets in the case of short-term leases and leases involving low-value assets. Short-term leases are defined as leases, the term of which, as at the commencement date, is not longer than 12 months (including potential lease extension periods, if one can assume, with sufficient certainty, that the leaseholder will exercise this option). Low-value assets are new ones, when their value does not exceed USD 5 000.

For all individual lease agreements that meet the criteria of a lease, the Group sets:

- the lease period commencement date, when the lessor makes the underlying asset available,
- lease term that covers the irrevocable period over which the Group has the right to use the underlying asset, together with periods of potential lease extension, if it can be reasonably assumed that the leaseholder will exercise this right, and including periods when the lease can be withdrawn, if it can be reasonable assumed that the leaseholder will not exercise this right,
- lease fees, and
- a discount rate that is the lease interest rate (e.g., in the case of car lease agreements) or, if the lease interest rate is not easily available, the incremental borrowing rate of the Group, construed as the interest cost of a loan that the Group would have to incur when taking out a loan for the purchase of a given asset and with appropriate collateral.

As at the lease commencement date, the Group measures the right-of-use asset at cost. Right-of-use asset cost includes:

- lease liability initial measurement,
- payments made to the lessor prior to or at the day of lease commencement, less the lease incentives received,
- initial direct costs incurred by the Group,
- estimated costs that will be incurred by the Group on account of dismantling and removing an asset, restoration of land where the asset is located or restoration of the asset to the state required by the lease agreement terms and conditions. Dismantling cost liability is recognized and measured pursuant to IAS 37 “Provisions, contingent liabilities and contingent assets”.

Right-of-use asset measurement in a later period is conducted by the Group using a cost model - i.e., at a cost reduced by the redemption and accumulated impairment write-downs, and adjusted in relation to revaluation of the lease liability, which reflects lease changes that do not result in the need to recognize a separate lease component.

Assets used pursuant to an agreement that meets the definition of a lease are redeemed on a straight-line basis over the lease agreement term or underlying asset period of use, whichever is shorter, unless the Group is sufficiently certain that it will obtain the ownership prior to the expiry of the lease term – in such a case, the right of use depreciates, starting on the lease commencement day until the end of the asset's period of use.

Right-of-use assets are subject to regulation in terms of impairment pursuant to IAS 36 "Impairment of assets".

As at the lease term commencement date, the Group measures the lease liability value at present lease payment value that are to be made within the lease period and include:

- fixed lease payments (including in-substance fixed lease payments) less the lease incentives received from the lessor,
- variable lease payments that depend on the index or rate, originally measured using an index or rate in the amount applicable at the lease commencement date,
- call option exercise price, if it can be reasonably assumed that the leaseholder will exercise this option,
- cash penalties for premature lease agreement termination, if when determining the lease period, it was assumed that the leaseholder would exercise the option to withdraw from the lease,
- amounts the payment of which by the leaseholder are expected in relation to the residual value guarantee.

Variable payments that do not depend on the index or rate and do not have a determined minimum level are included in the lease liability value. These payments are recognized in the income statement for the period of an event that makes them due.

After the commencement date, the lease liability is measured using an effective interest rate.

The leaseholder separately recognizes right-of-use asset depreciation and lease liability interest.

The leaseholder updates the lease liability measurement upon the occurrence of specific events (e.g., changes in relation to the lease term, future lease payments arising from a change in the index or rate applied to determine such payments). As a rule of thumb, the leaseholder recognizes a lease liability revaluation as a right-of-use asset value adjustment.

If the agreement covers service components considered by the Group as immaterial in the perspective of the entire contract, the Group applies a practical solution that involves a joint approach towards lease and non-lease components as a single lease component and treating payments assigned to non-lease components also as lease payments.

12.9. Valuation to fair value

The Group measures financial instruments such as debt/capital instruments and derivative instruments at fair value, on each balance sheet date. In addition, the fair value of financial instruments measured in accordance with the depreciated cost was included in note 41.

The fair value is defined as the price that would be received from sale of an asset or paid in order to transfer a liability in the transaction conducted on normal sale conditions of a component of assets between market participants at the valuation date in the current market conditions. The fair value measurement is based on the assumption that the sale transaction of a component of assets or the transfer of a liability occurs either:

- on the main market for a given component of assets or liability,
- in the event of absence of a principal market, in the market, which is most advantageous for the asset or liability.

Both the main and the most advantageous markets must be available to the Group.

The fair value of an asset or liability is measured under the assumption that market participants, when determining the price of a component of assets or liability, act in their best economic interest.

The fair value of a component of non-financial assets takes into account the market participant's ability to generate economic benefits by making the greatest and the best use of the component of assets or its sale to another market participant that would provide the greatest and the best use of this component of assets.

The Group uses valuation techniques that are relevant to the circumstances and for which sufficient data to determine the fair value, with maximum use of relevant observable input data and minimal use of unobservable input data, are available.

All assets and liabilities that are measured at fair value, or their fair value is disclosed in the financial statement, are classified in the fair value hierarchy as described below on the basis of the lowest level of input that is significant to the valuation of fair value treated as a whole:

- Level 1 – Quoted (unadjusted) market prices on the active market for identical assets and liabilities,

- Level 2 – Valuation techniques, for which the lowest level of input data, which is significant for the valuation of the fair value as a whole, is directly or indirectly observable,
- Level 3 – Valuation techniques, for which the lowest level of input data, which is significant for the valuation of the fair value as a whole, is unobservable.

At each balance sheet date, in the event of assets and liabilities existing per each balance sheet date in the financial statement, the Group evaluates whether there were transfers between levels of the hierarchy through a re-assessment of the classification into different levels, following the materiality of input data from the lowest level, which is essential for the valuation to the fair value treated as a whole.

Summary of essential procedures for the measurement at fair value

The Management Board of the Group determines the rules and procedures for both, the systematic valuation of non-listed financial assets to the fair value, as well as one-time valuations, e.g., in case of assets intended for sale within a discontinued activity.

In order to determine the fair value, independent experts are engaged to perform the valuation of significant assets and financial liabilities measured at the fair value. Internal measurement models are also employed.

In order to perform the above measurements, independent experts, unrelated to the Group and holding qualifications appropriate to conduct such valuations, as well as having current experience in such measurements in locations, where there are assets of the Group, are engaged.

For the purposes of disclosure of the measurement results of the fair value, the Group established classes of assets and liabilities based on the type, characteristics and risks of the various components of assets and liabilities and the level in the fair value hierarchy, as described above.

12.10. Impairment of non-financial fixed assets

At the balance sheet date, the Group assesses whether there are any prerequisites indicating that loss in value of any non-financial fixed asset may have occurred. In the event when there are such prerequisites or in case of the necessity to conduct an annual impairment test, the Group estimates the recoverable value of a given asset or a cash generating unit, which the asset belongs to.

The recoverable value of an asset or a cash generating unit corresponds to the fair value reduced of effecting the sale of the given component of assets or respectively the cash generating unit, or its value in use, depending on which one is higher. The recoverable value is determined for an individual asset, unless a given asset does not independently generate cash inflows that are largely independent of those generated by other assets or groups of assets. If the carrying value of an asset is higher than its recoverable value, the loss in value occurs, and the write-down to the determined recoverable value is made.

In assessing the value in use, the projected cash flows are discounted to their current value using a discount rate prior to entailing the effects of taxation reflecting the current estimated value of money in time as well as the risk typical for a given asset. Impairment write-downs for the loss in value of assets used in the continued activity is recognised in the category of costs, which are consistent with the function of the asset, in case of which the loss in value was identified.

At each balance sheet date, the Group assesses whether there are any prerequisites indicating that the impairment write-down for the loss in value, which was recognised in previous periods, in relation to a given asset, is unnecessary and should be reduced. If such prerequisites exist, the Group estimates the recoverable value of the asset. The previously recognised impairment write-down for the loss in value is reversed only if, from the time of recognition of the impairment write-down, a change of the estimated values applied to determine the recoverable value of a given component asset occurred and there was a discontinuation of premises indicating impairment. In this case, the carrying value of the asset is increased to its recoverable value. The increased amount cannot exceed the carrying value of the asset that would have been determined (after depreciation) if, in the previous years, the impairment write-down for the loss in value, in relation to this asset, was not recognised. A reversal of the impairment write-down for the loss in value of the component of assets is immediately recognised as a cost reduction. After the reversal of the impairment write-down, in the following periods, the depreciation write-down related to a given asset is adjusted in a way, which within the remaining period of use of this asset allows to systematically write down the verified the carrying value of the asset decreased with the residual value.

12.11. Borrowing costs

Borrowing costs are capitalised as part of the fixed asset production cost. Borrowing costs consist of interests calculated using the effective interest rate method, financial encumbrances due to financial lease agreements and foreign exchange differences resulting from the external financing up to the amount corresponding to the adjustment of the interest cost. In terms of foreign exchange differences, the cumulative approach is applied.

12.12. Financial assets

Financial assets are initially recognized at fair value.

After the initial recognition. the Company classifies financial assets into the following measurement categories:

- measured at amortized cost
- measured at fair value through profit or loss
- measured at fair value through other comprehensive income.

The classification depends on the financial asset management model and contractual cash flow conditions adopted by the Company.

The Group has been applying IFRS 9 since its effective date, without converting comparative data.

- **Classification and measurement**

All financial assets previously measured at fair value will continue to be measured at fair value. Trade receivables are retained to obtain contractual cash flows. The Group does not hold any trade receivables subject to factoring. The Group utilizes a practical exemption and does not identify significant funding elements for trade receivables shorter than 12 months.

Financial assets are recognized in the financial standing statement when the Group becomes a party to a binding contract. The acquisition and sale of the financial assets are recognised at the transaction date. At the time of the initial recognition, a financial asset is measured at fair value, increased, in case of the asset not classified as the measured at fair value by the financial result, with the transaction costs, which can be directly attributed to the acquisition.

The financial asset is removed from the balance sheet when the Group loses control over the contractual rights that comprise a given financial instrument; it usually occurs when the instrument is sold or when all the cash flows attributed to a given instrument are transferred to an independent third party

In the situation, in which the Group:

- has a legally enforceable right to compensate the recognised amounts and
- intends to settle on a net basis, or at the same time to realise the asset and settle the liability

a financial asset and financial liability are compensated and presented in the financial statement in the net amount.

The framework agreement described in IAS 32.50 does not constitute grounds for compensation, if both of the above-described criteria are not met.

12.13. Impairment of financial assets

Pursuant to IFRS 9, an entity measures a write-off for credit loss in the amount equal to a 12-month expected credit loss or credit loss expected throughout the life of a financial instrument. In the case of trade (supplies and services) receivables, the Group applies a simplified approach and measures a write-off for expected credit loss in the amount equal to expected credit loss throughout their entire lifetime.

For the purposes of estimating expected credit loss, IFRS 9 indicates the legitimacy of applying both historical data related to the repayment capacity, as well as reliable data available at the balance sheet date that may increase the precision of estimating expected credit loss in future periods.

The Company has identified the following classes of financial assets for which, pursuant to IFRS 9, it has estimated the impact of expected credit loss on the financial statement:

- Trade receivables,

- Other receivables, including LTC settlements,
- Deposits, bonds and bank investments,
- Cash.

In relation to trade receivables, it is assumed that data on the repayment capacity can be applied to estimate the future credit risk, therefore, credit loss has been estimated using historical data on ageing ranges of trade receivables and their realization. For the purposes of estimating the expected loss in relation to other financial assets, the insolvency risk was determined based on other data, in particular the credibility assessment conducted by rating agencies or assigned to counterparties as part of an internal credit risk assessment process, adjusted for the purposes of default probability.

12.14. Other non-financial assets

The group recognises prepayments as other non-financial assets, if the following conditions are met:

- they result from past events – expenses incurred for the operational purpose of entities,
- their extent can be reliably determined,
- they will result in the impact of economic benefits to the entities in the future,
- they apply to future reporting periods.

Write-offs of cost prepayments can occur appropriately to the passage of time and the amount of benefits. The time and method of settlement is justified by the nature of settled costs, taking into account the precautionary principle.

At the end of the reporting period, the Group verifies the active prepayments of costs in order to check whether the degree of certainty associated with the achievement of economic benefits by the entity, after the expiry of the current financial period, is sufficient to show a given item as a component of assets.

During the reporting period, the subject of prepayments is, among others:

- property insurance costs,
- costs of current charges for perpetual usufruct of lands,
- social fund deductions,
- subscriptions,
- other costs related to future reporting periods.

Other non-financial assets include, in particular, the public and law settlement receivables (except for the CIT settlements, which are presented in a separate item of the financial statement), as well as advance payments provided for future purchases. As they are non-monetary assets, advance payments are not subject to discount.

12.15. Financial derivatives and hedges

The derivatives used by the Group in order to hedge against the risk related to the changes of interest rates and exchange rates are mainly the currency forward contracts and contracts for the interest rates change (interest rate swaps). Such derivatives are measured at fair value. Derivatives are stated as assets when their fair value is positive, and as liabilities – when their value is negative.

Profits or losses due to fair value changes of derivatives, which do not comply with the hedge accounting principles are directly stated in the net financial result of the financial year.

The fair value of currency forward contracts is determined by the reference to the current forward rates for contracts with a similar maturity date. The fair value of contracts for interest rate swaps is determined by reference to the market value of similar instruments.

Within the hedge accounting, securities are classified as:

- cash flow hedges securing against the changes in cash flows, which can be attributed to a specific kind of risk related to a recognised component of assets, liability or forecast transaction, or
- hedging of a currency risk related to a substantiated future liability is settled as a cash flow hedge.

At the establishment of a hedge, the Group formally determines and documents the hedging relationship as well as the risk management objective and strategy for establishing the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the characteristics of the hedged risk as well as a method of assessing the hedge instrument effectiveness in the compensation for the risk of changes in cash flows related to the hedged risk.

It is expected that the hedge will be highly effective in the compensation for changes in cash flows resulting from the hedged risk. Hedge effectiveness is constantly assessed to determine whether it is highly effective within all the reporting periods for which it was established.

In addition, the Group secures the cash flow associated with purchasing CO^2 emission allowances in the form of short-term forward contracts. Furthermore, the Group secures cash flows related to electricity purchase. Due to the fact that contracts for the purchase of non-financial assets are concluded in order to secure own needs, they are excluded from the scope of IFRS 9.

12.15.1.Cash flow hedge

The cash flow hedge is a hedge against the exposure to variability in cash flows, which can be attributed to a specific type of risk related to a recognised component of assets, liability or highly probable planned transaction, and which could influence profit or loss. The part of profits or losses related to the hedge instrument, which constitutes an effective security is recognised in other comprehensive income, and an ineffective part is recognised in profit or loss.

If a hedged planned transaction subsequently results in the recognition of a component of financial assets or a financial liability, the associated profits or losses, which were included in other comprehensive income and accumulated in equity, are transferred to the income statement within the same period, or in the periods, during which the acquired component of assets or liability affect profit or loss.

If hedging the planned transaction subsequently results in the recognition of a component of non-financial assets or non-financial liability, or the planned transaction related to a component of non-financial assets or non-financial liability becomes a substantiated future liability, to which the fair value hedge will be applied, then, the profits or losses that were recognised in other comprehensive income are excluded from the equity and included in the acquisition price or other carrying value of the component of assets of liability.

The profits or losses resulting from changes of the fair value of derivatives, which do not meet the conditions for the application of hedge accounting principles are directly recognised in the net financial result for the current period.

The Group discontinues to use the hedge accounting principles when the hedging instrument expires or was sold, its use terminated or it was executed, or the hedge no longer meets the conditions, which allow the application of hedge accounting principles to it. In such a case, the total profit or loss on a hedging instrument, which were recognised under other comprehensive income and accumulated in the equity are still disclosed under equity until the forecast transaction takes place.

If the Group no longer expects that the forecast transaction will occur, then the total net profit or loss, accumulated in the equity, are charged to the net financial result for the current period.

12.16. Inventories

Inventories include production fuel, non-strategic spare parts and other materials and energy certificates of origin. Spare parts presented as inventories are annually subjected to impairment write-downs, which reflect the technological and economic wear of these parts. A description of strategic spare parts recognized as tangible fixed assets can be found in Note 12.3.1.

Inventories are measured at the acquisition price/production cost or the achievable net sale price, whichever is lower.

The Group applies the weighted average method to determine the inventory disposal value.

The achievable net sale price is an estimated sale price in the ordinary course of business, decreased with costs of completion as well as the estimated costs necessary to complete the sale.

As at the balance sheet date, the Group measures all inventories at cost (i.e., initial value) not higher than the net sales price, analysing the inventories value in terms of impairment. A potential impairment write-down is recognized as selling prime costs.

Energy certificates of origin

As Inventories, the Group recognizes energy certificates of origin purchased for redemption and further resale, as well as produced internally. These rights are transferable and constitute an exchange-traded commodity.

Energy origin certificates received free of charge on account of production from renewable, gas, and co-generation sources (green and red certificates) are recognized for the first recognition moment at fair value upon the fact of their receipt is substantiated, i.e., at the end of the month of their production. The fair value is a reflection of the market situation, i.e., listings on the polish power exchange (TGE). Certificate acquisition free of charge is recognized in correspondence with other income. The Group sells surplus of the certificates disclosed as inventories.

Purchased energy certificates of origin are recognized as inventories at acquisition price.

The outflows of energy origin certificates are measured according to the FIFO method.

The Group is obliged to obtain energy certificates of origin and submit them for redemption by 30 June of the year following the accounting year.

In the absence of a sufficient number of certificates at the reporting date that are required to satisfy the obligations imposed by the Energy Law and the Act on energy efficiency, the Group establishes provisions for the redemption of energy certificates of origin and energy efficiency certificates or for payment of substitute fees. See Note 32.

12.17. Trade and other receivables

Trade receivables

Trade receivables are initially measured at fair value. After the initial recognition, trade and other receivables of financial nature are measured at depreciated costs, using the effective interest rate (all trade receivables meet the SPPI test and are retained to recover contractual flows), taking into account impairment write-downs. Trade receivables are retained to obtain contractual cash flows, and the Group does not sell trade receivables under the factoring process.

The Group utilizes a practical exemption and does not identify significant funding elements for trade receivables shorter than 12 months. Trade receivables with a maturity date shorter than 12 months from the origination date (i.e., not containing a financing element) are not discounted and are measured at face value.

Pursuant to IFRS 9, in the case of trade (supplies and services) receivables, the Group has applied a simplified approach and measures a write-off for expected credit loss in the amount equal to expected credit loss throughout their entire lifetime, employing a provision matrix, calculating the default factors based on historical data.

For the purposes of estimating expected credit loss pursuant to IFRS 9, the Group has used both historical data related to the repayment capacity, as well as reliable data available at the balance sheet date that may increase the precision of estimating expected credit loss in future periods. The historical analysis covers a 5-year period. The main recipients include several large and reputable entities from the power sector. In relation to trade receivables, it is assumed that data on the repayment capacity can be applied to estimate the future credit risk, therefore, credit loss has been estimated using historical data on ageing ranges of trade receivables and their realization. The Group applies an individual analysis to all recipients. Receivables are not insured.

The Group has classified trade receivables under Level 2 of the financial asset classification with relation to their impairment provided for by IFRS 9, except for receivables with identified impairment – these were classified as Level 3. According to the Group, the moment of impairment is the moment of handing receivables over for debt collection, however not later than on the 90th day after them becoming overdue. Uncollectible receivables are written-off into costs upon being declared uncollectible, i.e., when there is no justified expectation in terms of their collection.

Other financial assets

MPDF (mining plant decommissioning fund)

Pursuant to the Act of 9 June 2011 (consolidated text, Dz.U. of 2021, item 1420, 2269) Geological and Mining Law, the Company is obliged to established a decommissioning fund. The objective of the said fund is to secure and cover the costs associated with the liquidation of mining activity results in areas subject to the mining process. The Company makes periodic write-offs in amounts arising from the act and transfers the cash in this respect to a separate bank account. Expenditure from this fund may be allocated to the areas of decommissioned open pits after prior approval of the Mining Office that approves a mining facility decommissioning plan. A mining facility decommissioning write-off is 10% of the mining fee for an exhausted mine.

Deposits and shares in other entities

These include deposits and shares in other entities that are not assessed in terms of impairment.

Other receivables

Other receivables that are not a financial instrument as per IFRS 9, include employee settlement receivables, in particular.

Advance payments for future purchases of tangible fixed assets, intangible assets and inventories are recognized under other non-financial assets. The advance payments are presented according to the nature of the assets, to which they relate – respectively, as fixed or current assets. As non-monetary assets, the advance payments are not subject to discount.

Budgetary receivables are presented as other non-financial assets, except for the receivables due to corporate income tax, which constitute a separate item in the financial statement.

Other receivables that do not constitute financial assets as at the end of a reporting period are measured at the amount due.

12.18. Cash and cash equivalents

Cash and short-term deposits in the balance sheet comprise cash at bank and in hand, as well as short-term deposits with the original maturity date that does not exceed three months.

The balance of cash and cash equivalents in the consolidated statement of cash flows consists of the above-mentioned cash and cash equivalents.

The Group classifies cash and cash equivalents as financial assets measured at depreciated cost, taking into account impairment write-downs determined pursuant to the expected loss model. For the purposes of estimating the expected loss in relation to cash, the insolvency risk was determined based on other data, in particular the credibility assessment conducted by rating agencies or assigned to counterparties as part of an internal credit risk assessment process, adjusted for the purposes of default probability.

The analysis showed that assets exhibit low credit risk as of the reporting date. The Group has applied a simplification permitted by the standard and the impairment write-down has been determined based on 12-month credit losses. Write-down calculation indicated an insignificant impairment write-down amount.

12.19. Interest-bearing bank loans, borrowing and debt securities

At the time of the initial recognition, all bank credits, loans and debt securities are recognised in the fair value, decreased by transaction costs associated with obtaining a credit or loan.

After the initial recognition, the interest-bearing loans, borrowings and debt securities are measured at depreciated costs, using the effective interest rate method.

While determining the depreciated cost, the costs associated with obtaining a loan or borrowing, as well as discounts or premiums achieved in connection with the liability are taken into account.

Revenues and costs are recognised under profit or loss, when the liabilities are removed from the balance, and also as a result of the settlement with the effective interest rate method.

12.20. Trade liabilities and other financial liabilities

Short-term liabilities include trade liabilities and other financial liabilities that fall due within 12 months of the day ending the reporting period. Liabilities are initially recognized at fair value; however, this measurement corresponds to the amount payable or of the liability, while in the later period, the financial liabilities are recognized at depreciated costs, applying the effective interest rate method (in the case of trade liabilities, this corresponds to the payable amount), while other liabilities of non-financial nature are recognized at amount payable.

The Group excludes a financial liability from its balance when the liability expired – i.e., when the contractual obligation was fulfilled, redeemed or terminated. Replacing the existing debt instrument with the instrument of essentially different conditions made between the same entities is recognised by the Group as termination of the original financial liability and recognition of a new financial liability. Similarly, significant modifications of the contractual provisions concerning an existing financial liability are recognised by the Group as termination of the original one and recognition of a new financial liability. The difference of reference carrying values arising due to the replacement is shown under profit or loss.

12.21. Other non-financial liabilities

Other non-financial liabilities include, in particular, liabilities for the value added tax, other public-legal liabilities (except for liabilities due to the corporate income tax, which is recognised in a separate item of the financial statement), as well as liabilities for the received advance payments, which will be settled by the supply of goods, services or fixed assets. Other non-financial liabilities are recognised as the payable amount.

12.22. Special employee funds

According to Polish business practice, entities are entitled to contribute to a social fund and other special funds. The transferred amounts are recognized as period operating costs in a statement pursuant to IFRS.

12.23. Own share payments

Share-based payments are a transfer of equity instruments of the entity or their equivalents made by the entity or its shareholders to the third parties (including employees), who provided goods and services to a given company, unless the transfer is made for the purpose that is other than paying for goods and services provided for the entity.

The Group includes goods and services received or acquired within the framework of the share-based payment transactions in the equity instruments as well as the corresponding increase in the equity when it obtains these goods and services. If the goods or services obtained or acquired within the framework of the share-based payment transactions are not classified to be recognised as assets, the entity includes them as the cost.

The Group evaluates the obtained goods or services and the corresponding increase in the equity in the fair value of the obtained goods or services, unless it is impossible to reliably estimate their fair value. If the group is unable to reliably estimate the fair value of the obtained goods or services, it indirectly determines their value and the corresponding increase in equity by the reference to the fair value of the granted equity instruments.

12.24. Provisions

Provisions are created when the Group is burdened with the existing liability (the legal or customary expected one) resulting from past events, and when it is probable that the fulfilment of this liability will result in the necessity of the economic benefits outflow, and the amount of this liability can be reliably estimated. If the Group expects that the costs covered by the provision will be reimbursed, for example under the insurance contract, then the reimbursement is recognised as a separate component of assets, but only when it is virtually certain that the reimbursement of this will actually occur. The costs related to a given provision are stated in the income statement after the reduction by any reimbursement.

When the monetary value has a significant over time, the value of the provision is determined by discounting the forecast future cash flows against the current value, using the discount rate reflecting the current market estimates of the monetary value over time and the potential risk related to a given liability. If a discounting method was applied, then the increase in liabilities due to elapsed time is recognised under financial costs.

In particular, the Group creates the following provisions:

- **provisions for post-employment employee benefits, as well as jubilee awards**

In accordance with the remuneration systems, the Group's employees are entitled to the following benefits:

- retirement or disability benefits, payable at the time of retirement,
- survival benefits for families of deceased employees,
- coal benefits for employees of PAK KWB Konin SA and PAK KWB Adamów SA.

The amount of benefits depends on the number of years of employment and the average salary of an employee. The Group creates provisions for these future liabilities for the purpose of allocating costs to the periods that they concern. The current value of these liabilities at each balance sheet date is calculated by an independent actuary. The accumulated liabilities are equal to the discounted payments, which will be made in the future, taking into account the rotation of employment and they relate to the balance sheet date. Demographic information and information about the employment rotation are based on historical data. Profits and losses on actuarial calculations are recognised under other total income.

The cost of the created provision is disclosed in the income statement under selling prime costs and overheads.

- **provisions for presenting energy certificates of origin for redemption**

The provision for the obligation to submit for redemption the certificates of origin of energy produced in renewable energy sources or peak-load co-generation is recognised as follows:

- in the part covered by the certificates of origin held at the balance sheet date – in the value of the held certificates,
- in the part not covered by the certificates of origin at the balance sheet date – at the lower value of the market value of the certificates required to fulfil the obligation at the balance sheet date, and a possible penalty.

The cost of the created provisions is presented in the income statement under selling prime cost.

- **provisions for liabilities associated with CO_2 emission allowances**

CO2 emission allowances (European Union Allowances – EUA) and their equivalents acquired or received free of charge are recognized in the financial statement as allowances intended for own purposes under intangible assets. These allowances are measured at acquisition price (allowances received free of charge at zero value). The provision for liabilities due to the emission of greenhouse gases covered by the emission allowance system is created only when the actual production emission shows a shortage of emission allowances in respect of the allowances granted for the entire reporting period. This provision is created according to the FIFO principle. The cost of established provisions is disclosed under operating activity of the income statement and is recorded under selling prime costs of the calculation system, and under taxes and fees in the comparative system.

The provision is created by net liabilities method, in the amount of:

- in the part covered by the allowances held at the balance sheet date – in the value of the held allowances, i.e., at the acquisition price (in the case of purchases at carrying value), received in the zero value.
- in the part not covered by the allowances on the balance sheet date – at the lower of the market values of the allowances required to satisfy the obligation and a possible penalty.
- in the part for which forward transactions were purchased with next year realization.

- **Provisions for liquidation of ash storage yards**

The Group is creating a provision for liquidation of ash storage yards due to a legal obligation resulting from the integrated permit. This provision is established based on estimated future costs of storage yard reclamation resulting from studies and technical-economic analyses, developed by a third-party expert.

The Group recognizes an asset and ash storage yard reclamation provisions at a discounted value of estimated reclamation costs to be incurred in the future. In the subsequent periods the asset is subject to straight-line depreciation over the estimated operation period of the ash storage yard. Simultaneously, over the subsequent period the Group recognizes an increase in the provisions resulting from the discount unwinding effect in correspondence with financial costs. Potential future changes in the reclamation cost adjust correct asset and provision value.

Commencing the reclamation of a part of the combustion waste and solid waste storage yard for the Zachodnia open pit is planned for H2 2023 (soil-covered part). The reclamation of the remaining part of this storage yard is planned for 2024. Commencing the reclamation of the combustion waste storage yard for the Gosławice open pit is planned for H2 2023 (soil-covered part). The remaining part of this storage yard is not currently planned for reclamation. It will store waste from the PAK – PCE Biopaliwa i Wodór sp. z o.o. company. Commencing the reclamation of a part of the Northern Combustion Waste storage yard is planned for 2024. The remaining part of this storage yard will be shut down and reclaimed after coal phase-out of ZE PAK SA power plants.

In calculating the provision, the Group adopted the following assumptions: discount rate at a level of 6.84%, inflation rate at a level of 5.8%.

The cost of the created provision is presented in the income statement under selling costs.

- **reclamation provisions and other associated with mining activity**

  - the provision for liquidation of mining facilities and areas

Pursuant to the Geological and Mining Law act, companies conducting extraction activities are obliged to reclaim the areas of extraction works. Therefore, the Group creates the provision for both costs of area reclamation related to current coal extraction on within a given open pit and costs of the final excavation reclamation in the state of advancement of coal extraction in individual open pits on every reporting date.

The provision for the final excavation reclamation is created in correspondence with the asset (in the part in which it relates to the initial excavation, based on the volume of final excavation), and in correspondence with the income statement (in the remaining part, taking into account the state of advancement of coal extraction in individual open pits on a given reporting date). In correspondence with the asset, the Group also creates a provision for an external dump reclamation. The provision for reclamation costs associated current coal mining is created in correspondence with the income statement.

The provision is created on the basis of estimation of future reclamation costs based on reports by independent experts estimating reclamation costs ordered by the management boards of companies conducting extraction activities. Estimates concerning projected reclamation costs are analysed periodically; on every reporting date, the volume of provision is verified in accordance with current assumptions in terms of the discount and inflation rates, and the extraction volume. The provision write-down related to extraction within a given year charges operating costs (other costs by type), and the difference resulting from the provision discount from previous years influences financial costs. The use of the provision is settled in correspondence with financial costs at the end of every reporting period.

- The provision for costs related to the preparation of exploitation areas

The Group, within conducted activities, is obliged to restore to the original condition or to rebuild damages caused by the mine operations. Therefore, the Group establishes a provision for projected costs that it is obliged to incur under concluded agreements. Estimates concerning projected costs related to mining plant operations are updated at every reporting date. The creation of the provision is recognised as other mining assets. In calculating the provisions, the Group adopted the following assumptions: discount rate at a level of 6.7%, inflation rate at a level of 3.3%.

The cost of the created provision is presented in the income statement under selling costs.

12.25. CO^2 emission allowances

Due to their zero value, the CO_2 emission allowances intended for own needs and received free of charge are not disclosed in the financial standing statement. The emission allowances and their equivalents purchased by the Group for own needs are recognised as intangible assets. These allowances are measured at the acquisition price. The provision for liabilities due to the emission of greenhouse gases covered by the emission allowance system is created only when the actual production emission shows a shortage of emission allowances in respect of the allowances granted for the entire reporting period. This provision is created according to the FIFO principle.

The cost of the created provision is presented in the income statement under selling costs.

12.26. Revenues

The Group applies a five-step method for recognizing/disclosing revenues on customer contracts, i.e.:

1: Identification of customer contracts;

2: Identification of contractual performance obligations;

3: Transaction price determination;

4: Assigning a transaction price to contractual performance obligations;

5: Recognizing revenues upon obligation fulfilment by an entity.

Pursuant to IFRS 15, revenues are recognized at the amount of remuneration, which – pursuant to the entity's expectations – is due to the entity for transferring promised goods or services to the customer.

The Group's companies operate in the sectors of electricity generation and sales, heat generation and sales, lignite extraction, and maintenance and repair/construction services.

Sales revenue structure by type and the recognition method in the Group are as follows:

Revenues from sales of commodities:

- revenues from sales of electricity (in-house production and traded)
- revenues from sales of thermal energy,
- revenues from sales of other goods, products and materials are recognized upon completing the sale/transfer transaction.

Revenues from energy sales:

Revenues from the sales of electricity and heat are recognized by the Group at the end of each billing period, which is not longer than one month, according to the volume of electricity and heat supplied to a customer within a given billing period. The Company recognizes revenues over a period of time and employs a simplification regarding revenue recognition according to invoicing, since it reflects the degree of obligation performance at the reporting date. Sales prices result from concluded contracts, tariffs or their value at the Polish Power Exchange. The Group acts as an agent in relation to excise tax, therefore, the excise tax reduces sales revenues.

Revenues from sales of other services in the energy sector:

The Groups area of activity also includes services aimed, in particular, at satisfying the needs and comprehensive services for the power industry. The primary service recipients are entities involved in electricity generation and transmission. The services provided under these contracts are services provided over time. Contract performance periods range from 2 months to 6 years, although these are often 1-2 year contracts. Contracts do not include obligations to provide more than one service under each of the contracts. Scope of work extensions do not lead to a new obligation. The entity recognizes revenues over time, measuring the degree of complete service obligation fulfilment, using an outlay-based method, comparing the outlays incurred so far to the total outlay expected to be required to perform the contract.

Contracts performed by the Group are characterized by a fixed price. If the scope of work is extended, it does not lead to a separate obligation – additionally conducted tasks constitute an integral part of the Company's obligation.

The Group does not have any unfulfilled performance obligations with a lead time of more than 12 months.

Capacity market revenues

Starting from 1 January 2021, the Company has been recognizing capacity market revenues. Revenues from the capacity market are revenues on account of performing capacity contracts (obligations) concluded pursuant to Auction 2021 (primary market) and the performance of the capacity obligation arising from agreements concluded within the secondary market. The capacity market is a market mechanism aimed at ensuring stable electricity supply in the long term. After each month ends, the ZE PAK SA Capital Group is entitled to remuneration from PSE S.A. for the performance of the capacity obligation. As a result, the Group's companies that are capacity providers to PSE SA recognize revenues from capacity market transactions each month.

Other revenues:

Other revenues include:

- compensation for LTC termination is recognized as revenues from electricity sales, and the compensation revenue is successively recognized as earned compensation rights at the end of each financial year, until the end of their validity period. Per each revenue recognition moment, the Group determines a factor for estimated stranded costs to the total amount of received, returned and expected discounted annual advance payments (including the previously received advance payments). The revenue amount for a given financial year is the product of the index and previously received advance payments adjusted by annual impairments, decreased by the revenues for compensation recognized in the previous years. See also policies described below.
- revenues associated with property rights to energy certificates of origin are recognized upon their production; certificates of origin held for sale are recognized as revenues upon completed sales transaction. Upon their subsequent sales via the Polish Power Exchange (TGE), the sales invoice is recognized under *Other revenues*, while the costs of certificates sold are recognized as an adjustment of these revenues.
- subsidies

12.26.1. Revenues from compensation for stranded costs

The Group receives compensation for the coverage of stranded costs pursuant to the Act of 29 June 2007 on the principles of covering costs incurred by producers in relation to premature termination of long-term capacity and electricity sale agreements. Revenue from compensation is recognized successively to earned compensation rights at the end of each financial year, until the end of their validity period.

Per each revenue recognition moment, the Group determines a factor for estimated stranded costs to the total amount of received, returned and expected discounted annual advance payments (including the previously received advance payments). The amount of revenue for a given financial year is the product of the index and received advance payments, corrected against annual adjustments and less the recognised in previous years income for compensations.

The difference between the total amount of recognized income and the total amount of received advance payments up to the total amount of stranded costs is recognised by the Group as:

- receivables, in the case of a negative difference between the total amount of received advance payments and the recognized compensation revenues,
- liabilities, in the case of a positive difference between the total amount of received advance payments and the recognized compensation revenues.

12.27. Costs

Sales prime costs

The prime cost includes:

- the production cost incurred during the reporting period, adjusted for the change in the level of products (finished products, semi-finished products and production in progress), as well as adjusted for the cost of manufacturing products for own needs,
- the value of goods and materials sold according to the acquisition prices,
- the creation of tangible fixed asset, intangible asset and inventory impairment write-downs,

Production costs, which can be directly allocated to the revenues achieved by entities, impact the financial result of the entities for the reporting period, in which the revenues occurred.

Production costs, which can be only indirectly allocated to the revenues and other benefits achieved by the entities, influence the financial result of the entities in the part, in which they relate to a given reporting period, providing their adequacy to the revenues and other economic benefits, including the valuation of fixed assets and inventories.

12.28. Other operating revenues and costs

Other operating income and costs include items mainly related to:

- the disposal of tangible fixed assets, intangible assets,
- the creation and reversal of provisions, except for the provisions related to the financial operations or included in operating expenses,
- free transfer or receipt, including through donation of assets, as well as cash.
- compensations, penalties and fines, as well as other costs not related to usual business activity.

12.29. Government subsidies

In the event of a justified certainty that a subsidy will be granted and all the associated requirements will be satisfied, then the government subsidies are recognized at fair value.

If a subsidy relates to a given cost item, then it is recognized as revenue in a manner commensurate with the costs the subsidy is intended to compensate. If the subsidy relates to an asset component, then its fair value is recognized as future revenues and then, gradually, through equal annual write-downs, recognized as profit or loss over the estimated period of use of the associated asset component.

If the Group receives non-monetary subsidies, both the asset and subsidy are recognised at face value and gradually, through equal annual write-offs, are included in profit or loss during the estimated useful life of the received asset.

12.30. RES auctions won

The Group classifies RES-based electricity production auctions pursuant to IAS 20, as asset-related subsidies. The basic condition is for the eligible entity to acquire, construct or otherwise acquire long-term assets. A government subsidy is not recognized until it is not sufficiently certain that the entity will satisfy the conditions concerning it and that the subsidy will be received. A received subsidy is then recognized in the income statement for the period, in which related costs are recognized.

12.31. Revenues and financial costs

In particular, revenues and financial costs include the revenues and costs related to:

- disposal of financial assets,

- revaluation of financial instruments, except for financial assets measured at fair value, the revaluation effects of which are included in the revaluation capital,
- interest (including the valuation effect with the amortised cost),
- changes in the value of the provision resulting from the fact of approaching the date of incurring the cost (the discount unwinding effect),
- foreign exchange differences, which are a result of the operations performed during the reporting period and the balance sheet valuation of assets and liabilities at the end of the reporting period, except for the foreign exchange differences recognised in the initial value of the fixed asset, to the extent in which they are considered as an adjustment of the interest costs and foreign exchange differences,
- other items connected with the financial activity of the company.

Revenues and costs related to exchange rate differences are disclosed post-compensation.

The revenues and costs related to interest are successively recognized as they accumulate, taking into account the effective interest rate method in relation to the net carrying value of a given financial instrument, based on the concept of materiality.

Dividends are recognised at the time of establishment of the shareholders' or stakeholders' rights to these dividends.

12.32. Taxes

The income tax for the reporting period includes the current and deferred tax. Tax is recognized in the income statement, except for the extent in which it directly relates to items recognized under other comprehensive income or equity. In such a case, the tax is also recognized accordingly under other comprehensive income or equity.

12.32.1. Current tax

Liabilities and receivables related to current tax for the current period and previous periods are measured in the amount of expected payment to tax authorities (subject to return from tax authorities), using tax rates and regulations, which were legally or actually applicable at the balance sheet date.

12.32.2. Deferred tax

Deferred income tax liability and asset arising from temporary differences between the values of assets and liabilities and their book value in the consolidated financial statement – recognized at full value, using the balance sheet method.

The provision for deferred tax is recognised in reference to all positive temporary differences:

- except for a situation when the deferred tax provision arises from the initial recognition of goodwill or of the asset or liability on a transaction other than a combination of entities, and at the time of its conclusion have no influence on neither the gross financial result, nor the taxable income or tax loss; and
- in case of positive temporary differences resulting from investments in subsidiaries or affiliates and shares in joint ventures – except for situations where temporary difference reversal dates are subject to the investor's control and it is probable that temporary differences will not be reversed in the predictable future.

The deferred tax assets are recognised in relation to all negative temporary differences, as well as unused tax credits and unused tax losses transferred to future years, to the extent that it is probable that the taxable income, which allow to use the above-mentioned differences, assets and losses, will be achieved:

- except for situations when deferred tax assets associated with negative transition differences resulting from the initial recognition of the asset or liability for a transaction other than a combination of the entities, and at the time of its conclusion have no influence on the gross financial result, nor on the taxable income or tax loss; and
- in case of negative temporary differences resulting from investing in subsidiaries or affiliates and shares in joint ventures, the deferred tax asset is recognised in the balance sheet only to the amount that it is probable in the predictable future, that the above-mentioned temporary differences will be reversed and the taxable income, which enables negative temporary differences to be deducted, will be achieved.

The carrying value of the deferred tax asset is reviewed at every balance sheet date and reduced to the extent that it is no longer probable that the taxable income sufficient for a partial or complete realisation of the deferred tax asset will be achieved.

An unrecognised deferred tax asset is re-assessed as at each balance sheet date, and is recognised in the amount reflecting the likelihood of achieving future taxable income allowing to recover this asset.

Deferred tax asset and deferred tax provisions are evaluated with the use of tax rates that are expected to be applicable in the period, in which the asset is realised or the provision is reversed, the basis for which will be tax rates (and tax regulations) applicable at the balance sheet date or those which will certainly be effective as at the balance sheet date in the future.

Income tax on items recognised outside profit or loss is recognised outside profit or loss: in other comprehensive income related to items recognised in other comprehensive income or directly in the equity relating to items recognised directly in the equity.

Group companies mutually compensate deferred income tax assets with deferred income tax provisions, only and solely when they have an executable legal right to compensate receivables against current tax liabilities, and deferred income tax is related to the same taxpayer and the same tax authority.

12.32.3. Value added tax and excise duty

Revenues, costs, assets and liabilities are recognised after deducting the value added tax, except for:

- when value added tax paid at the time of the asses or service purchase is impossible to be recovered from tax authorities; it is then recognised as part of the acquisition price of the asset or as a cost item part; and
- receivables and liabilities, which are disclosed taking into account the amount of value added tax.

The net value added tax recoverable or payable to tax authorities is included in the financial statement as part of receivables or liabilities.

The net value added tax and excise tax recoverable or payable to tax authorities are included in the financial statement as parts of receivables or liabilities.

12.33. Net earnings per share

The net earnings per share for each period is calculated by dividing the net profit for a given period by the weighted average number of shares in a given reporting period.

12.34. Acquisition under joint control

A situation, in which a particular transaction or economic phenomenon, requiring inclusion in the statement drawn up in accordance with IFRS, are not regulated by the provisions of the various standards, was settled by IAS 8 clause 10–12. These provisions impose on the entity, which draws up the statement in accordance with IFRS, the obligation to create its own list of accounting rules, indicating the characteristics of the following accounting principles: a faithful presentation of the financial position, results of operations and cash flows, reflection of the substance of the transaction, neutrality, caution and completeness in all aspects.

According to the analyses conducted by the Group, the commonly used method for the settlement of such transactions is a pooling of interests method, and such a method was applied by the Company. This method is based on the assumption that merging entities, both before and after the transaction, are controlled by the same shareholder, and therefore the consolidated financial statement reflects the continuity of joint control and does not reflect any changes in the value of net assets to fair values (or recognition of new assets), or the valuation of the company's value, since none of the merging entities is not actually acquired. The settlement takes place on the day of the merger and the previous data is not adjusted.

13. Acquisitions of ventures

The following companies were acquired in the period from 1 January 2022 to 31 December 2022:

- Elektrownia Wiatrowa Dobra sp. z o.o.
- Eviva Lębork sp. z o.o.

- Farma Wiatrowa Przyrów sp. z o.o.
- Great Wind sp. z o.o.
- Farma Wiatrowa Jastrowie sp. z o.o
- Farma Wiatrowa Okonek sp. z o.o.

The acquisition of the aforementioned companies does not have a significant impact on the consolidated financial statement for 2022. The Group employs a temporary deferral of the obligation to settle goodwill against these transactions. The management board believes that the acquisition prices correspond to fair value and no impairment tests were conducted. The amount resulting from an initially settlement is shown in Note 24.1.

14. Operating segments

For management purposes, the Group was divided into parts based on products manufactured and services provided.

Thus, the following operating segments were distinguished:

- The Generation Segment covering production of electricity from both conventional sources (including co-generation) and through biomass combustion and co-combustion. Basic fuels used by the Generation Segment are lignite and biomass. The Generation Segment includes the following entities:
  - ZE PAK S.A.
  - PAK – Polska Czysta Energia sp. z o.o.
  - PAK – PCE Fotowoltaika sp. z o.o.
  - PAK – PCE Biogaz sp. z o.o.
  - PAK – PCE Biopaliwa i Wodór sp. z o.o.
  - PAK – PCE Wiatr sp. z o.o.
  - PCE – OZE 1 sp. z o.o.
  - PCE – OZE 2 sp. z o.o.
  - PCE – OZE 3 sp. z o.o.
  - PCE – OZE 4 sp. z o.o.
  - PCE – OZE 5 sp. z o.o.
  - PCE – OZE 6 sp. z o.o.
  - PAK CCGT sp. z o.o.
  - Park Wiatrowy Pałczyn 1 sp. z o.o.
  - Farma Wiatrowa Kazimierz Biskupi sp. z o.o.
  - Elektrownia Wiatrowa Dobra sp. z o.o.
  - Eviva Lębork sp. z o.o.
  - Farma Wiatrowa Przyrów sp. z o.o.
  - Great Wind sp. z o.o.
  - Farma Wiatrowa Jastrowie sp. z o.o.
  - Farma Wiatrowa Okonek sp. z o.o.
- The Extraction Segment, which covers lignite mining. The following entities operate under the Extraction Segment within the ZE PAK SA Capital Group:
  - “PAK Kopalnia Węgla Brunatnego Konin” SA
  - “PAK Kopalnia Węgla Brunatnego Adamów” SA
- The Renovation Segment, which provides construction and repair services. This Segment covers activities of the Przedsiębiorstwo Remontowe “PAK SERWIS” Sp. z o.o.
- The Sales Segment provides electricity sales services. The “PAK-Volt SA” company belongs to the Sales Segment.

The ZE PAK SA Group also conducts other types of activities, which have been included in the “Other” column. It contains the activities of other companies throughout 2022.

(in PLN thousand)

Transaction prices used in transactions between operating segments are determined on an arm's length basis, similarly to transactions with non-related parties. None of the Group's operating segments has been merged with another segment in order to create the aforementioned operating segments for reporting purposes.

Revenues from transactions between segments are eliminated in the consolidation process.

The body making key decisions within the Group is the Management Board of ZE PAK SA. The Management Board separately monitors the segments' operating activity results in order to decide on allocation of resources, evaluation of allocation's outcomes, and activity results. The basis to assess operating results is the profit or loss from operating activities and EBITDA. EBITDA shall be viewed as a supplement and not replacement for the operating results reported pursuant to IFRS. EBITDA is a useful indicator of the ability to incur and service debt. The EBITDA level is not defined by the IFRS and can be calculated differently by other entities. The reconciliation and definitions applied by the ZE PAK SA Group for determining these measures are presented below.

The Group defines EBITDA as net profit excluding financial costs and revenues, income tax, depreciation and impairment write-downs on fixed assets and mining assets.

Total EBITDA for the entire ZE PAK SA Capital Group:

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Net (loss)/profit	215 380	(317 404)
Financial revenues	-56 639	-11 782
Financial costs	+89 849	+17 683
Income tax	+102 688	-201 119
Depreciation and impairment write-downs	+39 993	+755 701
EBITDA	391 271	243 079

Main recipients:

- Towarowa Giełda Energii SA — PLN 2 113 921 thousand, which amounts to 50.5% of the total sales revenues
- Polskie Sieci Elektroenergetyczne SA — PLN 192 601 thousand, which amounts to 4.6% of the total sales revenues

Revenues from sales to the aforementioned recipients are included in the "Generation" segment.

Segment results for the years concluded on 31 December 2022 and 31 December 2021 are presented below:

(in PLN thousand)

Year concluded on 31 December 2022

	Generation	Extraction	Renovation	Sales	Other	Consolidation adjustments	Total
Revenues from sales to external clients	2 772 909	2 349	64 777	1 354 224	5 976	-	4 200 235
Revenues from inter-segment sales	345 723	524 774	134 359	635	132 374	(1 137 865)	-
Sales revenues	**3 118 632**	**527 123**	**199 136**	**1 354 859**	**138 350**	**(1 137 865)**	**4 200 235**
Sales prime costs	(2 760 867)	(484 622)	(182 854)	(1 307 534)	(122 598)	1 145 289	(3 713 186)
Gross profit/(loss) on sales	**357 765**	**42 501**	**16 282**	**47 325**	**15 752**	**7 424**	**487 049**
Other operating revenues	6 831	37 199	259	287	2 577	(5 401)	41 752
Selling costs	(2 096)	-	-	(7 270)	(5 010)	-	(14 376)
Overheads	(81 186)	(39 987)	(11 593)	(3 812)	(15 395)	-	(151 973)
Other operating costs	(6 825)	(1 375)	(294)	(2 464)	(418)	202	(11 174)
Financial revenues	64 202	4 679	573	1 049	4 483	(18 347)	56 639
Financial costs	(74 243)	(19 366)	(451)	(6 429)	(3 908)	14 548	(89 849)
Gross profit/(loss)	**264 448**	**23 651**	**4 776**	**28 686**	**(1 919)**	**(1 574)**	**318 068**
Income tax (tax burden)	(95 377)	332	(1 145)	(4 528)	(1 585)	(385)	(102 688)
Net profit/(loss) on continuing operations	**169 071**	**23 983**	**3 631**	**24 158**	**(3 504)**	**(1 959)**	**215 380**
Profit/(loss) on operating activities, excl. financial operations and income tax	**274 489**	**38 338**	**4 654**	**34 066**	**(2 494)**	**2 225**	**351 278**
Depreciation and amortization	40 067	5 209	2 283	11	3 802	(1 888)	49 484
Impairment write-down	(16 001)	6 510	-	-	-	-	(9 491)
EBITDA	**298 555**	**50 057**	**6 937**	**34 077**	**1 308**	**337**	**391 271**

(in PLN thousand)

Year concluded on 31 December 2021

	Generation	Extraction	Renovation	Sales	Other	Consolidation adjustments	Total
Revenues from sales to external clients	2 124 698	6 855	57 193	255 742	6 721	-	2 451 209
Revenues from inter-segment sales	121 403	477 007	133 145	141	140 932	(872 628)	-
Sales revenues	**2 246 101**	**483 862**	**190 338**	**255 883**	**147 653**	**(872 628)**	**2 451 209**
Selling prime costs	(2 651 428)	(541 023)	(165 418)	(255 800)	(137 002)	857 729	(2 892 942)
Gross profit/(loss) on sales	**(405 327)**	**(57 161)**	**24 920**	**83**	**10 651**	**(14 899)**	**(441 733)**
Other operating revenues	22 268	95 574	1 823	2 108	1 109	(58 875)	64 007
Selling costs	(2 320)	-	-	(2 374)	(1 397)	-	(6 091)
Overheads	(55 130)	(41 708)	(10 888)	(3 329)	(8 665)	-	(119 720)
Other operating costs	(3 059)	(5 396)	(491)	(81)	(149)	91	(9 085)
Financial revenues	13 489	543	148	7	33	(2 438)	11 782
Financial costs	(17 465)	(8 799)	(240)	(294)	(509)	9 624	(17 683)
Gross profit/(loss)	**(447 544)**	**(16 947)**	**15 272**	**(3 880)**	**1 073**	**(66 497)**	**(518 523)**
Income tax (tax burden)	278 033	(75 490)	(3 444)	281	(1 147)	2 886	201 119
Net profit/(loss) on continuing operations	**(169 511)**	**(92 437)**	**11 828**	**(3 599)**	**(74)**	**(63 611)**	**(317 404)**
Profit/(loss) on operating activities, excl. financial operations and income tax	**(443 568)**	**(8 691)**	**15 364**	**(3 593)**	**1 549**	**(73 683)**	**(512 622)**
Depreciation and amortization	113 805	14 085	2 464	11	4 148	1 018	135 531
Impairment write-down	535 126	74 715	-	-	-	10 329	620 170
EBITDA	**205 363**	**80 109**	**17 828**	**(3 582)**	**5 697**	**(62 336)**	**243 079**

(in PLN thousand)

15. Revenues and costs

15.1. Revenues from contracts with clients

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Material structure		
Revenues from the sale of goods and services, including:		
Revenues from the sale of own-production electricity	1 943 487	1 477 306
Revenues from sales of electric energy from trade	1 683 761	388 116
Revenues from sales of thermal energy	75 384	54 733
Capacity market revenues	160 008	185 793
Other sales revenues	106 233	45 423
Revenues from construction service contracts	49 034	41 090
Revenues from sales of goods and services	**4 017 907**	**2 192 461**
Excise duty	(3 846)	(1 644)
Total revenues from sales of goods and services, including excise duty tax	**4 014 061**	**2 190 817**
Property rights on energy certificates of origin, including:	58 496	89 818
Revenues from the production of green certificates	*55 471*	*74 531*
Profit on sales of energy certificates of origin	*3 025*	*15 287*
Compensation for termination of long-term contracts	127 678	170 574
Total revenues	**4 200 235**	**2 451 209**

The largest components of the “Other sales revenues” items are revenues from the sales of gas amounting to PLN 74 271 thousand, materials amounting to PLN 5 829 thousand and PSE service amounting to PLN 12 266 thousand.

Territorial structure	*Year concluded on 31 December 2022*	*Year concluded on 31 December 2021*
Poland	4 173 340	2 434 702
EU countries	26 895	16 507
Extra-EU	-	-
Total sales revenues	4 200 235	2 451 209

Revenues realized instantly	4 131 423	2 394 856
Revenues realized over the period	68 812	56 353

15.2. Other operating revenues

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Revenues from sales of CO_2 allowances	-	7 792
Compensation revenues	1 883	796
Redemption of a receivable impairment write-down	523	570
Subsidy settlement	68	3 645

(in PLN thousand)

Revenues from scrap sales and demolition	29 204	-
Profit on the disposal of non-financial fixed assets	4 521	46 240
Termination of the cost and loss provision, and liability redemption	326	3 200
Other	5 227	1 764
Other total operating revenues	41 752	64 007

The main component of the "Profit from the disposal of non-financial fixed assets" is the sale of KWB Adamów SA land. The largest component of the "Other" item is the other sales revenues at PAK KWB Konin SA amounting to PLN 2 302 thousand.

15.3. Other operating costs

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Loss on sale of tangible fixed assets	-	561
Provision creation	1 543	1 102
Costs of shortages and damages	804	371
Receivables impairment write-down	1 789	267
Litigation and enforcement proceeding costs	49	175
Energy sector damage	156	189
Donations	1 233	89
Costs of fixed asset liquidation	-	1 514
Compensatory pensions	157	599
Other	5 443	4 218
Total other operating expenses	11 174	9 085

15.4. Financial revenues

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Revenues from interest	20 218	349
Positive foreign exchange differences	(583)	96
Measurement of exchange rate (forward) and interest rate (IRS) hedging instruments	32 877	10 540
Other	4 127	797
Total financial revenues	56 639	11 782

15.5. Financial costs

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Interest	59 300	5 310
Negative foreign exchange differences	6 303	2 634
Power unit decommissioning provision discount	2 180	304
Investment revaluation	6 995	1 901
Land reclamation provision discount	9 460	6 241

(in PLN thousand)

Other	5 611	1 293
Total financial costs	89 849	17 683

The "Other" item for 2022 mainly includes the measurement at depreciated costs of PLN 2 020 thousand and bank commissions of PLN 403 thousand.

15.6. Costs by type

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Depreciation and amortization	49 484	135 531
Impairment write-downs against tangible assets	(9 491)	620 170
Impairment write-downs against inventory	6 550	13 137
Consumption of materials	579 766	322 888
Outsourcing	144 428	104 335
Taxes and fees excluding excise tax	135 846	160 588
CO_2 emission costs	1 074 838	792 344
Employee benefit costs, including:	397 281	369 764
Remuneration	*316 302*	*290 031*
Social insurance and other benefits	*80 979*	*79 733*
Other costs by type	18 162	25 277
Value of goods and materials sold and of sold energy purchased in trade	1 528 020	493 874
Total costs by type	3 924 884	3 037 908
Items recognized in prime cost of sales	3 713 186	2 892 942
Items recognized in selling costs	14 376	6 091
Items recognized in overheads	151 973	119 720
Change in product stock	44 846	19 060
Costs of generating house-load services	503	95

The fixed asset impairment write-down is a net amount. Details regarding impairment write-downs can be found in Note 15.7.

Price Difference Payment Fund write-offs

The Group's companies are subject to an obligation of providing write-offs to the Price Difference Payment Fund pursuant to Art. 21 of the Act of 27 October 2022 on emergency measures aimed at limiting electricity prices and supporting certain consumers (Dz. U. of 2022, item 2243) – as electricity producers and power utilities conducting business activity in the field of electricity trading.

Pursuant to Art. 24 and Art. 39 of the said act, write-offs shall be provided for each calendar month in relation to the period from 1 December 2022 until 31 December 2023.

For December 2022, ZE PAK S.A. was obliged to provide a write-off amounting to PLN 414 thousand related to trading and PLN 675 thousand related to production, while PAK Volt SA was obliged to submit a write-off amounting to PLN 153 thousand related to trading. These amounts have been recognized in the comprehensive income statement. These amounts are accrued in the month when the obligation arises.

(in PLN thousand)

15.7. Depreciation costs and impairment write-down recognized under profit or loss

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Items recognized as production costs of products sold:		
Fixed asset depreciation	44 257	122 725
Mining asset depreciation	-	8 522
Intangible asset depreciation	1 071	631
Right-of-use asset depreciation	3 861	3 354
Tangible fixed asset impairment, including:	(9 491)	576 207
Write-down creation	*6 510*	*576 207*
Write-down utilization in connection with decommissioning	*(16 001)*	-
Mining asset impairment (write-down creation)	-	43 963
Inventory impairment	6 550	13 137
	46 248	768 539
Items recognized in overheads		
Fixed asset depreciation	146	130
Intangible asset depreciation	149	169
Impairment of tangible fixed assets (write-down creation)	-	-
	46 543	299

Reversal of write-downs related to discontinuing investments in the steam and gas unit at the Konin Power Plant.

Impairment write-down recognition

ZE PAK SA fixed asset impairment	(16 001)	654 662
PAK KWB Konin SA fixed asset impairment	6 510	74 715
Spare part write-downs	-	10 503
Writing down margin and National Pledge Fund (KFZ) depreciation	-	10 329
Part recognized in revaluation capital	-	(110 395)
Subsidy settlement	-	(19 644)
Write-down recognized in cost by type	(9 491)	620 170

15.8. Construction service contracts

The Group performs contracts, which are settled in the course of the work – by way of issuing partial invoices in accordance with work progress and a final invoice after work completion.

The services provided under these contracts are services provided over time. Contract performance periods range from 2 months to 6 years, although these are often 1-2 year contracts. Partial invoices with a payment deadline of usually 30 days are issued in the course of the contracts. In the case of certain high-value contracts, the Group has the option to receive an advance payment. Advance payments are settled through partial invoices and a final invoice.

The revenues for 2022 did not include the part of the revenues, for which the obligations to provide a service had already been recognized in previous reporting periods.

(in PLN thousand)

Assets and liabilities related to concluded contracts for construction and installation services

The change in contract valuation applies to both changes associated with concluded contract change orders and the level of contractual work progress.

Outstanding service obligations

The total realizable price of the transaction allocated to obligations of providing services, which were not fulfilled (or partially fulfilled) at the end of the reporting period:	*31 December 2020*	*31 December 2021*
- up to 1 year	130 801	20 183
Total	130 801	20 183

PLN 130 801 thousand is the value of concluded and pending contracts, as at 21 December 2022.

	31 December 2022	*31 December 2021*
Gross amount due from ordering parties on account of contractual work:	4 084	1 472
Gross amount payable to ordering parties on account of contractual work:	4 226	3 680

16. Income tax

16.1. Tax burden

The tax burden main components for the 6-month period concluded on 31 December 2022 and 31 December 2021 are as follows:

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Recognized in profit or loss		
Current income tax		
Current income tax liabilities	120 540	3 974
Deferred income tax		
Associated with the creation and reversal of temporary differences	(17 687)	(204 903)
Other changes	(165)	(190)
Tax burden in consolidated profit or loss	**102 688**	**(201 119)**
Included in the consolidated statement of comprehensive income		
Tax on net profit/(loss) from revaluation of cash flow hedges		-
Tax on actuarial profit/loss	(67)	(695)
Tax benefit/(tax burden) recognized in other comprehensive income	**(67)**	**(695)**

16.2. Effective tax rate reconciliation

A reconciliation of income tax on gross financial result before tax at the statutory tax rate, with income tax calculated at the Group's effective tax rate for the year ended 31 December 2022 and 31 December 2021 is as follows:

(in PLN thousand)

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Gross profit before tax on continuing operations	**318 068**	**(518 523)**
Tax according to the statutory tax rate applicable in Poland of 19%	60 433	(98 531)
Costs not included in the financial result for the current year	(21 979)	-
Adjustments for current tax from previous years	5 028	(8)
Tax losses not recognized	-	-
Use of previously unrecognized tax losses	(3 096)	(7 610)
Establishment of a previous year tax loss asset	-	(41 410)
Fixed costs not constituting tax-deductible costs	3 495	18 871
Fixed revenues not constituting a tax base	(1 488)	10 910
Change in liability with a different tax rate in Germany	311	194
Tax on the sale of an organized part of the enterprise	72 002	-
Release of provisions for differences between tax and carrying depreciation	-	(155 365)
Writing-off an asset for inventory impairment write-down	-	9 340
Writing-off a financial asset	-	(3 017)
Asset reversal from provisions	-	87 510
Other	(12 018)	(22 003)
Tax as per the effective tax rate	102 688	(201 119)
Income tax within the income statement	**102 688**	**(201 119)**

(in PLN thousand)

16.3. Deferred income tax

Deferred income tax results from the following positions:

			Consolidated income statement for the year concluded on	
	31 December 2022	*31 December 2021*	*31 December 2022*	*31 December 2021*
Deferred tax asset				
Balance sheet provisions	8 476	10 238	(1 762)	(50 670)
Assets concerning overburden stripping and other mining assets	-	-	-	(4 811)
Interest and foreign exchange differences	1 709	938	771	936
Hedging instruments	-	-	-	-
Valuation of uncompleted construction service contracts	3 318	1 934	1 384	424
Tax loss from previous years	-	41 410	(41 410)	31 218
Inventories impairment write-down	234	3 263	(3 029)	(3 267)
Liability impairment write-down	2 464	2 347	117	1 415
Fixed asset impairment write-down	3 027	-	3 027	-
Difference between the balance sheet and tax value of fixed assets	1 805	-	1 805	(16 103)
Settlements with employees	670	573	97	(5 116)
Other	7 036	3 252	3 784	(2 199)
Total	28 739	63 955	(35 216)	(48 173)
Deferred tax provisions				
Difference between the balance sheet and tax value of fixed assets	19 572	60 183	(40 611)	(256 794)

(in PLN thousand)

Receivable on account of LTC	7 067	14 861	(7 794)	(1 081)
Energy certificates	5 469	6 322	(853)	2 011
Interest and foreign exchange differences	2	967	(965)	458
Valuation of uncompleted construction service contracts	3 081	1 544	1 537	1 043
Acquired CO_2 emission allowances	-	-	-	
Other	4 015	4 111	(96)	2 241
Total	39 206	87 988	(48 782)	(252 122)

After consolidating *balances at Capital Group company level, deferred tax is presented as*:				
Asset:	**18 462**	**8 769**		
Provision:	**28 929**	**32 802**		
Deferred income tax burden:				
- in correspondence with total income			88	51
- in correspondence with the financial result			(16 514)	11 174

(in PLN thousand)

The table below shows tax losses in the Group's companies:

	2018	*2019*	*2020*	*2021*	*2022*
PAK KWB Adamów SA	64 548*	-	14 448*	64 549*	19 225*
PAK KWB Konin SA	46 834*	12 573*	34 147*	7 815*	36 253*
ZE PAK SA	58 776*	53 818*	23 350*	-	-
PAK Górnictwo sp. z o.o.	-	2 807*	-	-	-
PAK – PCE Fotowoltaika sp. z o.o.	-	-	-	1 348*	-
Total tax losses	170 158	69 198	71 945	73 712	55 478
Total tax losses against which the asset is recognized	-	-	-	-	-
Deferred tax asset	-	-	-	-	-
Settlement year	2023	2024	2025	2026	2027

As a result of a previous year's analysis, we created a tax loss asset at ZE PAK SA in the amount of PLN 41 410 thousand, related to selling the organised part of the Konin Power Plant enterprise, which generated a profit allowing us to utilise losses from previous years.

In 2022, the Group used tax losses in the amount of PLN 228 379 thousand when settling corporate income tax for the current period, as shown in the table below:

ZE PAK SA	217 947
PAK-VOLT SA	9 084
PAK – PCE Fotowoltaika sp. z o.o.	1 348
Total used tax losses in 2022	228 379

Tax losses of PLN 446 768 remain to be used. Companies do not create tax loss assets due to the short operating period of the Companies.

**no deferred income tax assets identified*

17. MFŚS liabilities and social assets

Act of 4 March 1994 on the Company Employee Benefit Fund as amended, stipulates that the Company Employee Benefit Fund shall be established by employers employing over 50 full-time employees. The Company establishes such a fund and makes periodic write-offs based on amounts agreed with trade unions. In addition, the Group's Companies contribute certain social assets to the Fund. The objective of the Fund is to finance social activities, loans granted to the Group's companies and other social costs.

ZE PAK SA and PAK Serwis Sp. z o.o. jointly establish an Inter-Company Employee Benefit Fund (MFŚS), and other Group's companies obliged to establish a fund, establish it on their own.

The Group has compensated Fund's assets against its liabilities towards the Fund, since these assets do not constitute the Group's separate assets.

In the light of the above, the net balance as at 31 December 2022 is PLN 3 851 thousand (PLN 4 702 thousand as at 31 December 2021, respectively).

The tables below show an analysis of the Fund's assets, liabilities and costs.

	31 December 2022	*31 December 2021*
Loans granted to employee	3 403	4 320
Cash	4 339	3 777
Fund-related liabilities	(3 855)	(3 395)
Balance after compensation	3 887	4 702

(in PLN thousand)

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Fund write-offs in the financial year	2 335	2 324

18. Earnings per share

Basic profit per a single share is calculated through dividing the net profit for the period per ordinary shareholders of the parent company by the weighted average number of issued ordinary shares occurring throughout the entire period,

Diluted earnings per share is calculated through dividing the net earnings per period allocated to ordinary shareholders by the weighted average number of ordinary shares issued within the period, adjusted by the weighted average of ordinary shares that would be issued when converting all dilutive potential equity instruments into ordinary shares.

The data regarding earnings and shares used to calculate the basic and diluted earnings per share is shown below:

	31 December 2022	*31 December 2021*
Net profit from continuing operations allocated to parent company shareholders	203 307	(316 999)
Profit from discontinued operations allocated to parent company shareholders	-	-
Net profit allocated to ordinary shareholders, applied to calculate diluted earnings per share	203 307	(316 999)
Weighted average number of ordinary shares, applied to calculate the basic and diluted earnings per share	50 823 547	50 823 547

The table below shows earnings per share in PLN, for the years concluded on 31 December 2022 and 31 December 2021, presented in the income statement.

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Basic and diluted earnings for the financial year, allocated to parent company shareholders	4.00	(6.24)
Basic and diluted earnings from continuing operations, allocated to parent company shareholders	4.00	(6.24)

In the period between the balance sheet date and the day of signing this financial statement there were no other transactions concerning ordinary shares or potential ordinary shares.

19. Dividends paid and proposed for payment

ZE PAK SA did not pay or declare any dividend in 2022.

(in PLN thousand)

20. Tangible fixed assets

Year concluded on 31 December 2022

	*Lands, including perpetual usufruct rights**	*Buildings and structures*	*Technical equipment*	*Means of transport*	*Other fixed assets*	*Capital work in progress*	*Total*
Gross value as at 1 January 2022	247 822	2 079 896	5 027 263	54 855	34 901	314 069	7 758 806
Direct purchase	2 530	5 819	11 635	1 089	1 018	578 641	600 732
Company acquisition	178	-	-	-	-	22 223	22 401
Renovations	-	-	(288)	-	-	-	(288)
Transfer from capital work in progress	9 194	23 981	209 163	781	1 019	(244 138)	-
Sales and liquidation	(1 092)	(129 660)	(339 359)	(15 359)	(1 809)	(63 908)	(551 187)
Reclassification	8	(8)	300	-	1 754	6 153	8 207
Gross value as at 31 December 2022	258 640	1 980 028	4 908 714	41 366	36 883	613 040	7 838 671
Redemption and impairment write-downs as at 1 January 2022	53 041	1 882 107	4 474 644	51 483	24 933	90 340	6 576 548
Impairment write-down for the period	4 684	9 293	27 538	1 248	1 884	(244)	44 403
Impairment write-down (creation)	-	5 024	1 354	-	-	(15 869)	(9 491)
Sales and liquidation	(939)	(128 017)	(334 399)	(12 889)	(1 779)	(21 630)	(499 653)
Redemption and impairment write-downs as at 31 December 2022	56 786	1 768 407	4 169 137	39 842	25 038	52 597	6 111 807
Net value as at 1 January 2022	194 781	197 789	552 619	3 372	9 968	223 729	1 182 258
Net value as at 31 December 2022	201 854	211 621	739 577	1 524	11 845	560 443	1 726 864

Capital work in progress primarily include outlays related to renewable energy sources.

**this item also includes land exploited for extraction of minerals with the opencast method*

(in PLN thousand)

Year concluded on 31 December 2021

	*Lands, including perpetual usufruct rights**	*Buildings and structures*	*Technical equipment*	*Means of transport*	*Other fixed assets*	*Capital work in progress*	*Total*
Gross value as at 01 January 2021	227 051	2 041 008	4 958 644	62 817	33 561	194 765	7 517 846
Direct purchase	11 355	-	3 920	355	1 689	346 107	363 426
Company acquisition	-	35	78	-	183	2 722	3 018
Renovations	-	-	(288)	-	-	(233)	(521)
Transfer from capital work in progress	16 023	48 102	157 367	196	222	(221 910)	-
Sales and liquidation	(6 607)	(9 249)	(92 458)	(8 513)	(754)	(1 537)	(119 118)
Reclassification	-	-	-	-	-	535	535
Advance payment settlement	-	-	-	-	-	(6 380)	(6 380)
Gross value as at 31 December 2021	247 822	2 079 896	5 027 263	54 855	34 901	314 069	7 758 806
Redemption and impairment write-downs as at 01 January 2021	53 801	1 635 308	4 021 745	55 656	23 534	67 141	5 857 185
Impairment write-down for the period	4 278	32 391	82 399	2 258	1 529	-	122 855
Impairment write-down (creation)	-	223 234	458 598	620	595	23 199	706 246
Sales and liquidation	(5 038)	(8 826)	(88 098)	(7 051)	(725)	-	(109 738)
Redemption and impairment write-downs as at 31 December 2021	53 041	1 882 107	4 474 644	51 483	24 933	90 340	6 576 548
Net value as at 1 January 2021	173 250	405 700	936 899	7 161	10 027	127 624	1 660 661
Net value as at 31 December 2021	194 781	197 789	552 619	3 372	9 968	223 729	1 182 258

**this item also includes land exploited for extraction of minerals with the opencast method*

Tangible fixed assets also include strategic spare parts that are depreciated.

The value of capitalized borrowing costs in the year concluded on 31 December 2022 amounted to PLN 6 128 thousand (PLN 1 602 thousand in the year concluded on 31 December 2021). The capitalization rate was 36%, calculated as a percentage of total financial costs related to general loans.

20.1. Value impairment test involving the assets of the ZE PAK SA Capital Group

Identification of cash-generating units (CGUs)

According to IAS 36: “A cash-generating unit (CGU) is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. If there is any indication that an asset may be impaired, recoverable amount shall be estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, an entity shall determine the recoverable amount of the cash-generating unit to which the asset belongs (the asset’s cash-generating unit).

When distinguishing CGUs within the Group’s company’s, the independent generation of cash flows in terms of the functioning of individual companies was analysed and additional premises, used to updated financial projections were taken into account.

The following CGU was separated within ZE PAK SA:

- “CGU Pątnów Power Plant” for lignite-based energy (covering units No. 1, 2, 5 and 9);
- “CGU Konin Power Plant” for biomass-based green energy.

On 1 July 2022, the Konin Power Plant was sold as OPE to PAK – PCE Biopaliwa i Wodór sp. z o.o. The sales transaction involving the Konin Power Plant OPE was based on the following contracts concluded between ZE PAK SA as the “Seller” and PAK – PCE Biopaliwa i Wodór sp. z o.o. as the “Buyer”:

1) Conditional Sales Contract for an Organized Part of Enterprise dated 16 May 2022 – Not. Deed Rep.A No. 4788/2022
2) Organized Part of Enterprise Transfer Contract dated 1 July 2022 – Not. Deed Rep.A No. 6568/2022.

In the light of the above, as at 1 July, ZE PAK SA structures still include “CGU Pątnów Power Plant”, while “CGU Konin Power Plant” remains within the PAK – PCE Biopaliwa i Wodór sp. z o.o. Company.

In 2022, PAK KWB Konin SA's lignite mine conducted its operations at the Jóźwin, Tomisławice and Drzewce open pits, while PAK KWB Adamów SA has remained a company in liquidation as of 14 September 2020. On 5 October 2022, the Extraordinary General Meeting of PAK KWB Adamów SA in liquidation adopted Resolution No. 1 on the abrogation of the Company's liquidation and consequently decided on the Company's continued existence and operation on a general basis. On 19 October 2022, the Management Board of PAK KWB Adamów SA adopted a resolution on the Merger of PAK KWB Adamów SA (acquired company) and PAK KWB Konin SA (acquiring company), and on the adoption of a Merger Plan (an annex to the Merger Plan was adopted on 24 November). The Merger Plan was announced on 26 October 2022, and the Annex dated 28 November 2022 was posted on the websites of each of the merging companies.
As of 28 February 2023 ("Merger Date"), PAK Kopalnia Węgla Brunatnego Konin Spółka Akcyjna merged with PAK Kopalnia Węgla Brunatnego Adamów Spółka Akcyjna. The merger was effected pursuant to Article 492(1) cl. 1 of the Code of Commercial Companies, through the acquisitions of the Acquired Company by the Acquiring Company, i.e., through the transfer of all assets of PAK KWB Adamów S.A. - Acquired Company to PAK KWB Konin S.A. - Acquiring Company, in exchange for shares granted to ZE PAK S.A. by PAK KWB Konin S.A. (merger by acquisition).

A significant part of the fixed assets of the companies: PAK KWB Konin SA and PAK KWB Adamów SA has been so far written-off, and the fixed assets reported in the consolidated financial statement mainly include land measured at fair value.

In relation to these companies, i.e., PAK KWB Konin SA and PAK KWB Adamów SA, as cash-generating units, there were no identified groups of assets generating independent cash inflows, since the revenues generated by individual asset groups are, for some reason, very closely connected with each other. As a result, a mine is expected to provide power plants with a certain amount of coal; it is irrelevant, which open pit it originates from. As a result, coal is supplied to power plants from several open pits interchangeably. Also, the organisational structure and registration systems are subordinated to such an established production target. An additional factor that determines CGU separation was the update strategy of the ZE PAK SA Group, which assumed accelerating the decommissioning of coal-related activities on one hand, and developing RES-related operations on the other. Furthermore, 2022 was the first full year of electricity generation by the PV farm in Brudzew.

The arguments above prejudged distinguishing the following cash-generating units within the ZE PAK SA Capital Group:

- fixed assets (generating) of ZE PAK SA – Pątnów Power Plant ("CGU Pątnów Power Plant" – black energy) – units No. 1, 2, 5 (so-called Pątnów I Power Plant) and unit No. 9 (formerly the so-called Pątnów II Power Plant) recognized as a single CGU due to process and commercial links;
- fixed assets (generating) PAK – PCE Biopaliwa i Wodór Sp. z o.o. – Konin Power Plant ("CGU Elektrownia Konin" – green biomass energy);
- fixed assets (generating) of PAK PCE Fotowoltaika – photovoltaic farm ("CGU Brudzew Photovoltaics")
- fixed assets (extraction) and mining assets of PAK KWB Konin SA related to Jóźwin, Tomisławice and Drzewce open pits ("CGU PAK KWB Konin").

Moreover, the remaining CGUs were separated within the following segments: Renovations, Sales, and Others.

Analysis of premises to conduct value impairment tests as at 31 December 2022

Pursuant to IAS 36, at the end of every reporting period the Management Board evaluates whether there are any premises indicating that fixed assets may have been impaired. In case of identifying such premises, the Group estimates a recoverable value of such assets. Therefore, in each case the Group analyses the premises that might affect an asset value impairment, and determines cash-generating units within the Group's companies.

The Management Board took into account the following premises:

- periodic maintenance of Parent Company's stock market capitalization in 2021 and 2022 below the net asset carrying amount;
- Regulation of the Council of Ministers of 8 November 2022 on the method for price limit calculation.

Individual CGUs were analysed:

- CGUs associated with generating the so-called black electricity, i.e., "CGU Pątnów Power Plant) – baseline operation scenarios assume the operation of all Pątnów Power Plant units until the end of 2024. The previous scenario assumed the operation of coal-fired units No. 1, 2 and 5 at the Pątnów Power Plant until 2024, and the 474 MW unit (formerly Pątnów II Power Plant) was supposed to operate longer than until 2030. The Group has adopted a baseline operating scenario for its coal-fired units until 2024, which is the deadline until which these assets are eligible for support in the form of the capacity market mechanism. The Company perceives the current market situation in terms of the relationship between the prices of energy and CO_2 emission allowances as highly volatile and risky. The coal extraction and generation activity after 2024 will have to entail undertaking a number of investments, including ones enabling further operation of the Tomisławice open pit and adapting the 474 MW unit to environmental requirements. The Company sees opportunities in incurring such investment outlays and extending the operation of such coal-related assets after 2024, however, closely associates taking such actions on introducing a support mechanism after 2024 that would mitigate the risk of operating the Group's generation assets planned for decommissioning. Due to the fact that the Group's coal-fired units cannot currently participate under such a mechanism after 2024, the Company, guided by the principle of reasonable expectations, shortened the operating period of coal related extraction and generation assets. Simultaneously, the Company does not rule out changing the expected operating period of coal assets if a satisfactory support mechanism is established after 2024. Based on the conducted tests as at 31 December 2021 and taking into account the aforementioned factors, it was concluded that there was a need for a write-off in the "CGU Pątnów Power Plant" segment in the amount of PLN 654 661.9, i.e., up to the land value. In connection with the Regulation of the Council of Ministers of 8 November 2022 on the method for price limit calculation published on 9 November, the Company analysed the provisions set out in the Regulation and its outcomes, in particular, in relation to the costs incurred by the Company and the impact of maximum energy sales price limits set in the Regulation on the profitability of the Company's production activities in 2023. Due to the fact that a significant part of the assets under "CGU Pątnów Power Plant" has already been written-off, the Group withdrew for testing these assets on 31 December 2022.
- CGUs associated with coal extraction – mining assets have been already written-off up to the land fair value, therefore, the Group does not recognize a need to test these assets;
- CGUs associated with green electricity generation, i.e., "CGU Konin Power Plant" – renewable biomass energy. Generating energy from a renewable source is in line with EU's climate policy that is aimed at a radical

(in PLN thousand)

reconstruction of the economy towards a growing utilization of renewable energy sources. Furthermore, there is an evident growing demand for generation from biomass units for qualification reasons – as a RES that stabilizes the production of non-controllable wind and PV farm modules. The Company has also analysed the stipulations in the Regulation of the Council of Ministers dated 8 November 2022 on the method for price limit calculation. It should be stressed that the sale value of the Konin Power Plant in the form of OPE to PAK – PCE Biopaliwa i Wodór Sp. z o.o. significantly exceeds the asset book value. Therefore, the Group decided to waive testing these assets.

- CGU Brudzew Photovoltaics - it should be stressed that energy sales were previously secured pursuant to a sales contract concluded on 12 March 2021 between PAK – PCE Fotowoltaika sp. z o.o and Polkomtel sp. z o.o. In turn, on 30 March 2023, an Agreement was signed that terminated an electricity sales agreement of 12 March 2021 between PAK – PCE Fotowoltaika sp. z o.o. and Polkomtel sp. z o.o. The termination of the agreement became effective on 31 March 2023 and resulted from a change in the electricity generation and trading management model within the Polsat Plus Group, leading to a designation of another entity from the capital group responsible for the purchase of electricity generated in a renewable energy source operated by generators from the Polsat Plus Group or associated with the Polsat Plus Group. On the same day, 30 March 2023, the Agreement for the sale of electricity generated in a renewable energy source was concluded between PAK – PCE Fotowoltaika sp. z o.o. and PAK VOLT SA. The Agreement is intended to stabilise the relations between the Parties through its duration and the permanence of the sales legal relationship, which is to ensure a specific supply volume at an agreed price, thus providing, among other things, funds for the repayment of the Seller's liabilities to Banks, and guaranteeing the recipient electricity from a renewable energy source, which will allow it to achieve its energy transition objectives;

Due to guaranteeing energy take-off receipt at a price that ensures profitability for the repayment of loan obligations, asset testing was abandoned.

21. Right-of-use assets and lease liabilities

As of 1 January 2019, the Group has been applying IFRS 16 “Leases” for the first time. According to this standard, the groups balance sheet recognizes right-of-use assets and lease liabilities.

The Group as a leaseholder

The Group is a party to lease agreements in terms of underlying assets, such as:

- land, including perpetual usufruct rights,
- motor vehicles,
- machines.

Lease agreements are concluded for a period of 4 to 14 years and indefinitely, and the perpetual usufruct rights have been granted for a period of 40 to 100 years. Lease fees are indexed pursuant to the act on land management.

The lease period for motor vehicles is 2 to 5 years.

The lease period for machines (vulcanizing presses) is 2 to 5 years. The agreement is based on the underlying asset after the lease period ends.

All lease agreements are concluded in PLN.

Lease liability maturity analysis:

	31 December 2022	*31 December 2021*
Up to 1 year	7 366	6 315
1 - 3 years	15 716	14 208
3 - 5 years	13 930	8 364
Over 5 years	139 658	124 039
Total, acc. to non-discounted payments	176 670	152 926
Book value	63 637	47 830

Amounts recognized in the cash flow statement

(in PLN thousand)

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Total cash outflow	6 314	6 330

Right-of-use

Right-of-use assets include assets utilized pursuant to land lease agreements, perpetual usufruct right to land and financial lease at PAK KWB Konin SA, PAK KWB Adamów SA, Exion Hydrogen sp. z o.o., Farma Wiatrowa Kazimierz Biskupi sp. z o.o., Stacje H2 sp. z o.o.

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Gross value as at 1 January	67 296	67 296
Redemption on 1 January	(21 440)	(18 086)
Net value as at 1 January	45 856	49 210
Increases	19 430	-
Depreciation for the period	(3 861)	(3 354)
As at the end of the period	61 425	45 856

Additional qualitative and quantitative information on lease-related activities

In connection with concluded lease agreements, the Group is potentially exposed to future cash outflows that have not been included in the measurement of lease-related liabilities. This includes risk resulting from:

- floating lease fees,
- lease extension and lease termination option,
- guaranteed residual value, and
- non-commenced leases, to which the leaseholder is obliged.

Floating lease fees

Current lease agreements do not contain floating lease fees

Extension option

Until the date of publishing this statement, the Group did not conclude any lease agreements that contain extension options.

22. Intangible assets

Long-term intangible assets

	31 December 2022	*31 December 2021*
Patents and licenses	2 569	2 150
Software	6 350	233
Other	115	-
Net value as at 31 December	9 034	2 383

Emission allowances

	31 December 2022	*31 December 2021*

	Certified emission reduction units (EUA)	*Certified emission reduction units (EUA)*
Gross value as at 1 January	44 128	3 565
Sales	-	(24 022)
Transferred as collateral to IRGIT	(36 180)	(44 128)
Purchase	1 248 195	707 200
EUA redemption	(1 256 143)	(642 615)
Net value as at 31 December	-	-

23. Assets concerning overburden stripping and other mining assets

	31 December 2022	*31 December 2021*
Balance as at 1 January	-	52 291
Increase	-	-
Reductions	-	(43 769)
Impairment write-down	-	-
Depreciation for the period	-	(8 522)
Balance as at 31 December	-	-
long-term	-	-
short-term	-	-

24. Other assets

24.1. Other financial assets

	31 December 2022	*31 December 2021*
Deposits and investments	-	1
MPDF* deposits and investments	4 646	3 983
Shares	4 112	345
Deposits	1 007	
Loans granted	318	
Goodwill	13 778	
Amount resulting from initial acquisition settlement, including:	136 564	14 107
Farma Wiatrowa Przyrów sp. z o.o.	*16 200*	-
Great Wind sp. z o.o.	*76 127*	-
Elektrownie Wiatrowe Dobra sp. z o.o.	*4 713*	-
Eviva Lębork sp. z o.o.	*39 524*	-
Other	20	4 336
Other total financial assets	160 445	22 772

(in PLN thousand)

Short-term	-	150
Long-term	160 445	22 622

**MPDF – mining plant decommissioning fund*

Establishing a mining plant decommissioning fund arises from the Geological and Mining Law act.

The acquisition of the Kazimierz Biskupi Wind Farm in 2021 at PLN 14 107 thousand was recognized as goodwill.

	Farma Wiatrowa Przyrów sp. z o.o.	*Great Wind sp. z o.o.*	*Elektrownie Wiatrowe Dobra sp.z o.o.*	*Eviva Lębork sp. z o.o.*	*Farma Wiatrowa Jastrowie sp. z o.o.*	*Farma Wiatrowa Okonek sp. z o.o.*	*Ørsted Polska OF SPV 1 and 6*	*Total*
	100%	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	
Net cash acquired with the subsidiary	28	-	-	-	-	-	-	28
Cash paid	16 210	46 326	4 718	-	5	5	3 870	71 134
Net cash outflow	16 182	46 326	4 718	-	5	5	3 870	71 106

From the date of acquisition, Farma Wiatrowa Przyrów sp. z o.o. generated a loss of PLN 253 thousand, Great Wind sp. z o.o. generated a loss of PLN 7 056, Eviva Lębork sp. z o.o. generated a loss of PLN 906 thousand, Elektrownie Wiatrowe Dobra sp. z o.o. generated a loss of PLN 13 thousand, Farma Wiatrowa Jastrowie sp. z o.o. generated a loss of PLN 27 thousand and Farma Wiatrowa Okonek sp. z o.o. generated a loss of PLN 28 thousand, disclosed in the comprehensive income statement for the reporting period (data before consolidation exclusions). The acquired companies did not generate any revenue for the period from the acquisition date to the end of the reporting period.

The Management Board believes that the prices of acquired companies correspond to their fair value, and financial models do not demonstrate their impairment.

For practical reasons, the acquisition of the aforementioned companies is a preliminary settlement and will be subject to verification within 12 months from the acquisition date.

24.2. Other non-financial assets

	31 December 2022	*31 December 2021*
VAT receivables	96 491	39 992
Insurance	3 582	46
Other budget receivables	336	3
Other prepayments and accruals	4 723	2 000
Research and development work	10 916	5 485
Advance payments for supplies	13 386	1 105
Advance payments for capital work in progress	-	8 944
Other	1 181	2 552
Other non-financial assets, total	130 615	60 127
Short-term	130 112	50 129
Long-term	503	9 998

The largest component of other prepayments item in 2022 are the prepayments related to measurement of properties intended for sale, owned by PAK KWB Konin SA, in the amount of PLN 691 thousand. Costs are charged upon the sale of property that the measurement related to. The amount of PLN 861 thousand relates to motor insurance at PAK KWB Konin SA.

(in PLN thousand)

25. Employee benefits

Under 'employee benefits', the Group discloses a provision for retirement and disability benefits, jubilee awards and other benefits, split into long- and short-term portions.

25.1. Retirement benefits and other post-employment benefits

The Group's entities pay retirement and other post-employment benefits to retiring employees in the amount determined by the Collective Labour Agreement. Therefore, the Group, based on a measurement by a professional actuarial firm, creates a provision for the present value of the liability for severance payments and other benefits.

The amount of this provision and a reconciliation showing the changes throughout the financial period is shown in the table below:

Profits and losses on the settlement of the benefit plan relate to the final settlement of provisions at PAK KWB Adamów SA.

	Provisions for pension/retirement and post-mortem benefits	Jubilee awards	Electricity subsidies/coal allowances	Total
As at 1 January 2022	**23 363**	**-**	**8 163**	**31 526**
Current employment costs	240	-	567	807
Interest costs	748	-	261	1 009
Actuarial profits and losses	933	-	(1 629)	(696)
Benefits paid	(3 025)	-	(1 266)	(4 291)
Future employment costs*	(18)	-	-	(18)
As at 31 December 2022	**22 241**	**-**	**6 096**	**28 337**
Long-term provisions	18 863	-	5 086	23 949
Short-term provisions	3 378	-	1 010	4 388

	Provisions for pension/retirement and post-mortem benefits	Jubilee awards	Electricity subsidies/coal allowances	Total
As at 1 January 2021	**26 949**	**628**	**19 830**	**47 407**
Current employment costs	1 433	37	1 043	2 513
Interest costs	323	8	238	569
Actuarial profits and losses	(1 976)	-	(1 683)	(3 659)
Benefits paid	(2 934)	(156)	(1 284)	(4 374)
Future employment costs*	181	-	-	181
Profit and loss on benefit scheme settlement	(613)	(517)	(9 981)	(11 111)
As at 31 December 2021	**23 363**	**-**	**8 163**	**31 526**
Long-term provisions	20 213	-	6 942	27 155
Short-term provisions	3 150	-	1 221	4 371

**Past employment costs arise from significant changes in employment of some Companies or other significant changes.*

The main assumptions adopted by the actuary as at the balance sheet date to calculate the liability amount are as follows:

(in PLN thousand)

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
discount rate	6,7%	3,2%
projected inflation rate	3,3%	2,5%
projected wage growth rate	4,5%	2,5%

NBP inflation plan			NBP target inflation															
2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
13.1	5.9	3.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

26. Inventories

	31 December 2022	*31 December 2021*
Production fuel	10 997	9 410
Other materials and non-strategic spare parts	55 990	26 262
Energy certificates of origin	53 985	38 569
Total inventories according the purchase price (production cost) or obtainable net value, whichever is lower	120 972	74 241

Energy certificates of origin associated to energy production from renewable energy sources are reported according to fair value at the end of the month, in which the renewable sources energy was produced.

As at 31 December 2022, the ZE PAK SA held 13 214.029 MWh of green certificates associated with generated green energy verified by ERO. From 1 January 2022 until 31 December 2022, the Company received 265 684.855 MWh of generation certificates for October, November and December 2021, and January, February, March, April, May and June 2022. During this period there was no application submitted, due to the fact that as of July 1, property rights were transferred to PAK – PCE Biopaliwa i Wodór Sp. z o.o. 268 763.877 MWh were sold in this period at TGE SA, resulting in a revenue of PLN 52 106 thousand. 1 439.252 MWh for 2021 and 577.697 MWh for H1 2022 were redeemed during this period.

As at 31 December 2022, Biopaliwa i Wodór sp. z o.o. held 48 659.422 MWh of green certificates associated with generated green energy verified by ERO. From 1 July 2022 until 31 December 2022, the Company received 79 566.853 MWh for generation in July, August and September of 2022. An application for October 2022 covering an amount of 39 133.374 MWh was submitted during this period. 30 907.431 MWh were sold in this period at TGE SA, resulting in a revenue of PLN 5 918 thousand.

An important component of the ‘other materials’ item and ‘non-strategic spare parts’ are materials, semi-finished products and tools required to manufacture hydrogen buses.

Spare parts constitute inventories for the purposes of ongoing repairs and servicing.

27. Trade and other receivables

	31 December 2022	*31 December 2021*
Trade receivables	345 762	222 477
Compensation receivables in connection with LTC termination	37 292	78 748
Receivables related to hedging energy purchases on the balancing market	5 785	2 558
Other receivables	426 567	1 091 001
Net receivables	815 406	1 394 784
Receivables impairment write-down	26 113	25 327

(in PLN thousand)

Gross receivables	841 519	1 420 111

As at 31 December 2022, in the *other receivables* row the Group primarily reports receivables related to deposits securing transactions on the Polish Power Exchange (TGE) and purchasing CO_2 emission allowance units (EUAs) in the amount of PLN 353 231 thousand and a deposit associated with grid connection in the amount of PLN 21 199 thousand.

The entire receivable impairment write-down concerns individual receivables.

Default rates:

	31 December 2022	*31 December 2021*
Within	0.00%	0.00%
< 30 days	0.01%	0.00%
30 – 60 days	24.07%	1.04%
60 – 90 days	71.86%	9.39%
More than 90 days	100%	100%

The increase in insolvency rates results from unpaid receivables in the 30 – 90 day range.

Trade receivables do not bear interest and usually have a 14-day payment deadline.

The Group has an appropriate policy in terms of selling only to verified clients. The top management believes that this removes additional credit risk above the risk determined by the bad debt impairment write-down, relevant to the Group's trade receivables.

As at 31 December 2022, trade receivables and other receivables in the amount of PLN 26 113 thousand (PLN 25 327 thousand as at 31 December 2021) were written off. Impairment write-down changes were as follows:

	31 December 2022	*31 December 2021*
Write-down for	25 327	46 105
Increase	1 311	9 290
Utilization	(9)	(1)
Release	(516)	(30 067)
Write-down for	26 113	25 327

Below is an analysis of trade and other receivables that were overdue as at 31 December 2022, and as at 31 December 2021, but not deemed uncollectible and not written off. The write-off balance mainly consists of receivables from several counterparties, which have been historically written off at 100% (IFRS 9 Level 3). The Group has identified a high probability of uncollectibility of the written-off receivables.

			Expired, but recoverable				
	Together, excl. write-off	Not expired	<30 days	30-60 days	60-90 days	90-120 days	>120 days
31 December 2022	815 406	738 543	62 146	1 551	232	39	12 895
31 December 2021	1 394 784	1 369 260	17 531	890	10	180	6 913

28. Cash and cash equivalents

Cash at bank bears interest at floating rates, which depend on the interest rate on one-day bank deposits. Short-term deposits are submitted for various periods; from one day to three months, depending on the current Group's demand for cash and bear fixed interest rates. The fair value of cash and cash equivalents as at 31 December 2022 amounts to PLN 1 462 749 thousand (as at 31 December 2021: PLN 506 669 thousand).

The balance of cash and cash equivalents reported in the consolidated cash flow statement consisted of the following items:

(in PLN thousand)

Cash structure

	31 December 2022	*31 December 2021*
Cash at bank and in hand	1 462 749	494 847
Short-term deposits up to 3 months	-	11 822
Total balance of cash and cash equivalents:	1 462 749	506 669

Explanation of balance sheet item changes and changes in items recognized in the cash flow statement

	31 December 2022	*31 December 2021*
Depreciation and amortization:		
Depreciation and amortization demonstrated in the income statement	49 484	135 531
Subsidy settlement	(47)	(16 397)
Depreciation and amortization demonstrated in the cash flow statement	49 437	119 134

	31 December 2022	*31 December 2021*
Receivables:		
Balance sheet change in trade and other receivables	579 379	(1 009 728)
Balance sheet change in other long-term and short-term non-financial assets	(70 488)	(20 158)
Balance sheet date in receivables due from ordering parties under long-term contracts	(2 612)	(189)
Change in advance payments for capital work in progress	(8 247)	7 749
Other changes	(26)	814
Change in the receivables demonstrated in the cash flow statement	498 006	(1 021 512)

	31 December 2022	*31 December 2021*
Liabilities:		
Balance sheet change in trade liabilities and other long- and short-term financial liabilities	21 340	58 845
Balance sheet change in other non-financial liabilities	(101 629)	122 571
Balance sheet date in receivables due to ordering parties under long-term contracts	545	(2 999)
Change in liabilities due to investment account settlements	(19 778)	39 420
Redemption of debt securities	-	
New lease agreements and repayment of lease liabilities	(727)	4 027
Other changes	2 850	3 677

(in PLN thousand)

Change in the liabilities demonstrated in the cash flow statement	(97 399)	225 541

	31 December 2022	*31 December 2021*
Change in provisions, prepayments/accruals and employee benefits		
Change in provisions and prepayments/accruals	(46 339)	615 146
Change in long- and short-term employee benefits	(3 189)	(15 881)
Change in provision for EUA redemption	1 256 143	642 615
Change in provision and other items recognized as other comprehensive income	685	3 659
Other changes	45	729
Change in provisions, prepayments/accruals and employee benefits	1 207 345	1 246 268

	31 December 2022	*31 December 2021*
Inventories		
Balance sheet change in inventory	(46 731)	(6 382)
Change in inventories demonstrated in the cash flow statement	(46 731)	(6 382)

29. Basic capital and supplementary/reserve capitals

29.1. Basic capital

Share capital	*31 December 2022*	*31 December 2021*
50 823 547 shares with a face value of PLN 2 each	101 647	101 647

29.1.1. Nominal value of 1 share

All issued shares have a face value of PLN 2 and have been fully paid.

29.1.2. Shareholder rights

The shares of all series are equally privileged in terms of dividend and return on capital.

29.1.3. Significant share shareholders

	31 December 2022	*31 December 2021*
Argumenol Investment Company Limited		
share in capital	65.96%	65.96%

(in PLN thousand)

share in votes	65.96%	65.96%
Nationale - Nederlanden OFE		
share in capital	8.86%	8.86%
share in votes	8.86%	8.86%
OFE PZU Złota Jesień		
share in capital	9.12%	9.12%
share in votes	9.12%	9.12%
PTE Allianz Polska SA		
share in capital	7.32%	-
share in votes	7.32%	-
Others		
share in capital	8.74%	16.06%
share in votes	8.74%	16.06%
	100.00%	100.00%

The structure of shareholders holding, directly or indirectly through subsidiaries, at least 5% of the total number of votes as at the date of submission of this annual report for 2022 differs from the corresponding list of the periodic report for 2021. The difference is due to an increase in the shareholding in share capital and the total number of votes of ZE PAK SA in the accounts of Allianz OFE, Allianz DFE and Drugi Allianz OFE above 5%, which resulted from a merger of 30 December 2022 between Powszechne Towarzystwo Emerytalne Allianz Polska SA managing Allianz Polska Otwarty Fundusz Emerytalny, managing Allianz Polska Dobrowolny Fundusz Emerytalny with Aviva Powszechne Towarzystwo Emerytalne, Aviva Santander Spółka Akcyjna, managing the Drugi Allianz Polska Otwarty Fundusz Emerytalny, pursuant to Art. 69 in connection with Article 87(1) cl.2b of the Act on public offering and conditions for introducing financial instruments to organised trading and on public companies.

The Company is not aware of any agreements, which would result in future changes in the shareholding structure of the current shareholders.

Shareholders holding more than 5% of the share capital and number of votes according to the Company's knowledge based on notifications provided by shareholders.

30. Supplementary capital

As at 31 December 2022, the structure of origin of the supplementary capital amounting to PLN 1 232 981 is as follows:

• sales of shares above their face value	380 030
• established pursuant to the statute above the statutory (minimum) value	617 397
• other, including:	235 554
- merger with PAK Odsiarczanie sp. z o.o. and PAK Holdco sp. z o.o.	66 126
- revaluation capital associated with liquidation and sales of fixed assets in previous years	67 773
- revaluation capital associated with liquidation and sales of fixed assets in 2022	101 655

30.1. Other reserve capitals

ZE PAK SA was established as a result of the commercialisation of the State Enterprise Zespół Elektrowni PAK implemented based on the Act of 13 July 1990 on privatisation of state enterprises. Disclosed in the Company's balance sheet as part of the reserve capital – the so-called Privatisation Fund – was established by the State Enterprise Zespół Elektrowni PAK on the basis of the Act of 31 January 1989 on the financial management of state enterprises.

(in PLN thousand)

The supplementary capital value comprises the Privatisation Fund in the amount of PLN 3 472 thousand, which was created from using the profit from 1994 and based on the resolution of the Extraordinary General Meeting of the newly established Company.

The funds accumulated in this fund were to be allocated for employees to purchase from the State Treasury shares following the transformation of the enterprise into a company and its privatisation (purchase of up to 10% of shares at half the price). The Act of 30 August 1996 on commercialisation and privatisation of state enterprises, introduced in 1996, granted employees the right to acquire, free of charge, 15% of the company's shares belonging to the State Treasury, therefore, the purposes of the privatisation fund ceased to exist, however, the capital in company's liabilities remained.

30.2. Undistributed financial result and dividend payout restrictions

Undistributed profit also includes the amount not subject to distribution, which means that they cannot be paid as dividends. These are:

- Retained profits/losses of subsidiaries attributable to parent company shareholder,
- differences in the value of retained profits between the statutory and IFRS statements of the parent company,
- an 8% equivalent of the statutory capital profit write-off and other write-off made on the basis of applicable provisions in the subsidiaries' agreements.

As at 31 December 2022, the full amount of undistributed financial result in the Group (including the equivalent of the supplementary and reserve capitals created as part of profit distributions in previous years) is subject to a restriction on the payment of dividends. This assumption is based on the following considerations:

- Statutory financial statements of all companies comprising the ZE PAK SA Capital Group are developed pursuant to Polish accounting standards. The dividend may be paid based on the financial result determined in a separate annual financial statement prepared for statutory purposes.
- Pursuant to the requirements of the Code of Commercial Companies, a parent company is obliged to establish a capital reserve to cover losses. At least 8% of the profit for a given financial year as shown in the company's individual financial statements is transferred to this capital category until its amount reaches at least one-third of the entity's share capital. The General Meeting decides on the utilization of supplementary and reserve capital; however, only a portion of the supplementary capital amounting to a third of the share capital may be used to cover the loss disclosed in an individual financial statement of the parent company and is not subject to distribution for other purposes.

As at 31 December 2022, there are no other restrictions on the payment of dividends.

30.3. Non-controlling interest

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Beginning of period	(395)	
Company acquisition - determination of non-controlling interest as at acquisition date	-	30 981
Employee share scheme - original settlement adjustment	-	(955)
Results of subsidiaries in a given year - allocation to non-controlling interests	12 073	(405)
Transfer of profits by non-controlling interests to retained profits	395	
PUT option settlement - recognition of employee share buy-back obligation	-	(30 016)
Sale of shares at PAK Polska Czysta Energia sp. z o.o.	478 730	-

(in PLN thousand)

Total	490 803	(395)

Allocation of result to non-controlling interests

In the consolidated financial statements, 15% of the result of PAK KWB Adamów SA and 15% of the result of PAK KWB Konin SA for the period from 19 July 2012 to 31 December 2013 and for the period from 1 January 2014 to 31 December 2014 were allocated as profit attributable to non-controlling shareholders. In 2015, 2016, 2017 and 2018, in connection with the ongoing employee share buy-back process, the profit attributable to non-controlling shareholders was allocated proportionally to the volume of the non-controlling shareholders' interests.

The Company's obligation to redeem employee shares was recognised at the date of taking control, and refers to situations in which employees have the option of selling shares. According to the selected policy, non-controlling interests received result allocation and other comprehensive incomes in the subsequent reporting periods. At the end of every reporting period, the adjustment of non-controlling interest took place, as if they were acquired while simultaneously recognising the liability due to the option to redeem shares. The difference between the value of the non-controlling shares derecognized at the reporting date and the recognized financial liability was included as retained profits. As of 31 December 2021, the obligation of ZE PAK SA to buy back employee shares has expired. The amount allocated to non-controlling shareholders results from the sale of 40.41% of shares in PAK Polska Czysta Energia sp. z o.o. and its subsidiaries in the amount of PLN 478 730 thousand and the allocation of the results of these companies in the amount of PLN 12 073 thousand.

Recognition of ZE PAK SA's liability to purchase the remaining shares of PAK KWB Konin SA and PAK KWB Adamów SA

Pursuant to IFRS, ZE PAK SA recognised, as at the date of taking control over PAK KWB Konin SA and PAK KWB Adamów SA, an obligation to purchase the shares in PAK KWB Konin SA and PAK KWB Adamów SA held by non-controlling interests.

In the agreement covering the sale of shares in KWB Konin SA and KWB Adamów SA, concluded between ZE PAK SA and the State Treasury on 28 May 2012 (hereinafter the "Share Purchase Agreement"), under the terms and conditions set out in the agreement ZE PAK SA made an irrevocable offer to the State Treasury to purchase from the State Treasury the remaining shares in both mines that will not be acquired from the State Treasury by eligible employees or their legal successors under the Act of 30 August 1996 on Commercialisation and Certain Rights of Employees. Pursuant to the provisions of that Act, eligible employees of KWB Konin SA and KWB Adamów SA were entitled to acquire, free of charge, up to 15% of the company's shares taken up by the State Treasury on the date of entry of the respective company into the register. Pursuant to the Share Purchase Agreement, the purchase by ZE PAK SA from the State Treasury of the remaining mine shares, not taken up by the entitled employees or their legal successors, will be effected at a price per share equal to the price per share of KWB Konin SA and KWB Adamów SA, respectively, in the transaction covering the sale by the State Treasury of 85% of the shares in KWB Konin SA and KWB Adamów SA to ZE PAK SA, indexed at the consumer price index announced by the President of the Central Statistical Office. In accordance with the Share Purchase Agreement, the offer to purchase the remaining shares in KWB Konin SA and KWB Adamów SA made by ZE PAK SA to the State Treasury, referred to above, was binding until 28 February 2017. The remaining shares in KWB Konin SA and KWB Adamów SA were purchased from the State Treasury.

In addition, pursuant to the Share Sale Agreement, ZE PAK SA undertook, on the terms and under conditions stipulated therein, to submit to the entitled employees of KWB Konin SA and KWB Adamów SA, who acquired shares from the State Treasury free of charge under the Act of 30 August 1996 on Commercialisation and Certain Rights of Employees, an offer to buy back these shares at a price per share equal to the price per share of KWB Konin SA and KWB Adamów SA, respectively, in the transaction for the sale by the State Treasury of 85% of shares in KWB Konin SA and KWB Adamów SA to ZE PAK SA. By fulfilling this obligation after the expiry of the deadline for the prohibition on trading in employee shares set out in Article 38(3) of the Act of 30 August 1996 on Commercialisation and Certain Entitlements of Employees, ZE PAK SA commenced the process of employee share buy-back, which involves ZE PAK SA offering to buy back the shares of PAK KWB Konin SA and PAK KWB Adamów SA from persons who expressed interest in selling their shares under the terms and conditions set out in the Share Purchase Agreement. At the end of 2016, as a result of the said buy-back process, the majority of employee shares in PAK KWB Konin SA and PAK KWB Adamów SA had been acquired. ZE PAK SA still plans to purchase employee shares in PAK KWB Konin SA and PAK KWB Adamów SA and continues the buy-back process at the price offered so far.

As at 31 December 2022, the Management Board of ZE PAK SA believes that the obligation to buy back the employee shares of PAK KWB Konin SA and PAK KWB Adamów SA has expired.

(in PLN thousand)

31. Interest-bearing bank loans and borrowings

Long-term	*Due date*	*31 December 2022*	*31 December 2021*
Investment loan at Pekao SA in the amount of PLN 160 000 thousand, interest rate at WIBOR 3M + bank margin (PAK PCE SA Biopaliwa i Wodór)	31/12/2030	115 682	107 030
Term investment loan from the consortium of PKO BP, Pekao SA and mBank SA banks in the amount of PLN 138 000 thousand, interest rate at WIBOR 1 M + bank margin (PAK – PCE Fotowoltaika sp. z o.o.)	31/12/2035	112 060	124 173
Investment loan at Bank Gospodarstwa Krajowego in the amount of PLN 165 000 thousand, interest rate at WIBOR 3M + bank margin (Farma Wiatrowa Kazimierz Biskupi)	20/12/2038	77 525	-
Loan from Cyfrowy Polsat SA up to PLN 60 000 thousand or its equivalent in EUR, interest rate at WIBOR 3M or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	52 356	10 932
Loan from Cyfrowy Polsat SA up to EUR 15 000 thousand or its equivalent in PLN, interest rate at WIBOR 1Y or EURIBOR 1Y + margin (Exion Hydrogen Polskie Elektrolizery sp. z o.o.)	31/12/2026	30 890	7 053
Loan from Cyfrowy Polsat SA up to PLN 69 600 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	10 963	-
Loan from Cyfrowy Polsat SA up to PLN 34 000 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	18 785	-
Loan from Cyfrowy Polsat SA up to PLN 11 500 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	12 393	-
Loan from Cyfrowy Polsat SA up to PLN 6 750 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	7 231	-
Loan from Cyfrowy Polsat SA up to PLN 236 400 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	91 405	-
Loan from Cyfrowy Polsat SA up to EUR 10 300 thousand or its equivalent in PLN, interest rate at EURIBOR 3M + margin or WIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	8 670	-
Loan from Cyfrowy Polsat SA up to PLN 160 000 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	28 427	-
Loan from Cyfrowy Polsat SA up to PLN 77 900 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	31/12/2025	53 164	-

(in PLN thousand)

Loans from Vortex Energy Polska sp. z o.o. in the amount of PLN 19 thousand, interest rate at 2.5% per annum (Park Wiatrowy Pałczyn 1 sp. z o.o.)	22/12/2036	-	19
Loans from Vortex Energy Polska sp. z o.o. in the amount of PLN 19 thousand, interest rate at 2.5% per annum (Park Wiatrowy Pałczyn 1 sp. z o.o.)	22/12/2036	-	19
TOTAL		**619 551**	**249 226**

(in PLN thousand)

Short-term	*Due date*	*31 December 2022*	*31 December 2021*
Loan from Cyfrowy Polsat SA in the amount of PLN 86 000 thousand, interest rate at WIBOR 3M + bank margin (PAK – Volt S.A.)	30/6/2023	63 961	-
Loan from Cyfrowy Polsat SA up to PLN 63 200 thousand or its equivalent in EUR, interest rate at WIBOR 3M + margin or EURIBOR 3M + margin (PAK – Polska Czysta Energia sp. z o.o.)	30/6/2023	66 623	-
Investment loan at Pekao SA in the amount of PLN 160 000 thousand, interest rate at WIBOR 3M + bank margin (PAK PCE SA Biopaliwa i Wodór)	31/12/2030	29 482	13 249
Term investment loan from the consortium of PKO BP, Pekao SA and mBank SA banks in the amount of PLN 138 000 thousand, interest rate at WIBOR 1 M + bank margin (PAK – PCE Fotowoltaika sp. z o.o.)	31/12/2035	18 737	13 068
VAT working capital facility at PKO BP and Pekao SA in the amount of PLN 37 000 thousand, interest rate at WIBOR 1M + bank margin (PAK – PCE Fotowoltaika sp. z o.o.)	30/6/2022	-	1 841
Overdraft facility at Santander Bank Polska SA in the amount of PLN 10 000 thousand, interest rate at WIBOR 1M + bank margin (PAK-Volt SA)	30/6/2022	-	195
Bank loan at EFG Bank AG Zurich in the amount of PLN 300 000 thousand, interest rate at WIBOR + bank margin (PAK – Polska Czysta Energia sp. z o.o.)	on demand	309 311	174 135
Loan in the amount of PLN 58 thousand from Galeon sp. z o.o., interest rate at WIBOR 6M (PG Hydrogen sp. z o.o.)	6/9/2022	62	57
TOTAL		**488 176**	**202 545**

Change in loans and borrowings for the year concluded on 31 December 2022

	Bank loans	*Investment loans*	*Borrowings*	*Total*
Balance as at 1 January	174 332	259 361	18 078	451 771
Raising	135 169	117 172	693 248	945 589
Repayment, incl.:	(190)	(43 656)	(276 424)	(320 270)
Capital repayment	(190)	(23 555)	(266 396)	(290 141)
Interest repayment	-	(20 050)	(10 028)	(30 078)
Commission paid	-	(51)	-	(51)
Valuation change	-	508	-	508
As at the end of the year	309 311	353 486	444 930	1 107 727

Change in loans and borrowings for the year concluded on 31 December 2021

	Bank loans	*Investment loans*	*Borrowings*	*Total*
Balance as at 1 January	55 003	-	-	55 003
Raising	175 011	303 294	18 078	496 383

(in PLN thousand)

Repayment, incl.:	(55 682)	(43 098)	-	(98 780)
Capital repayment	(55 003)	(40 036)	-	(95 039)
Interest repayment	(679)	(1 862)	-	(2 541)
Commission paid	-	(1 200)	-	(1 200)
Valuation change	-	(835)	-	(835)
As at the end of the year	174 332	259 361	18 078	451 771

As at 31 December 2022, three companies in the Group, i.e., PAK – PCE Fotowoltaika sp. z o.o., PAK – PCE Biopaliwa i Wodór sp. z o.o. and Farma Wiatrowa Kazimierz Biskupi sp. z o.o., have financial covenant stipulations set out in their loan agreements.

PAK – PCE Biopaliwa i Wodór sp. z o.o. has a term loan agreement in force, which includes two financial covenants based on data from the individual financial statement of PAK – PCE Biopaliwa i Wodór sp. z o.o. Both the total net debt to EBITDA ratio (benchmark of max. 3.50) and the DSCR ratio for (benchmark of min. 1.20) are met as at the date of the ratio testing, i.e., 31 December 2022.

PAK – PCE Fotowoltaika sp. z o.o. has a valid term loan agreement and a VAT credit agreement with a consortium of banks: PKO BP SA, Pekao SA and mBank SA, which includes one financial indicator based on data from the PAK – PCE Fotowoltaika sp. z o.o. individual statement. The DSCR indicator (reference level of min. 1.10) is met as at the date of the indicator test, i.e., 31 December 2022.

Farma Wiatrowa Kazimierz Biskupi sp. z o.o. has a binding term loan and VAT loan agreement with Bank Gospodarstwa Krajowego, which includes one financial indicator based on data from the individual statement by Farma Wiatrowa Kazimierz Biskupi sp. z o.o. The debt service coverage ratio calculated at each financial liability control date cannot be lower than 1.10. The first control (calculation) date of the ratio will be after the expiry of full 12 months from the Wind Farm construction completion date, since there is no obligation to test the ratio as at 31 December 2022.

Loans are measured at depreciated cost.

32. Provisions as well as prepayments and accruals

32.1. Accruals

	31 December 2022	*31 December 2021*
Provision for bonuses and holiday leaves	22 482	24 378
Insurance company compensation	886	804
Financial statement audit	420	290
Other	1 430	1 728
Total	25 218	27 200
Short-term	25 218	27 200
Long-term	-	-

Provisions for retirement benefits and other post-employment benefits are reported by the Group under “Employee benefits” of the financial position statement, broken down into long- and short-term. Details regarding these provisions can be found in Note 25.1.

The main components of the “Other” item are provisions for penalties imposed upon exceeding the amount of ash released into the atmosphere in 2015, amounting to PLN 1 190 thousand. At the request of the Group, the Provincial Environmental Protection Inspector set a date to defer the payment of the aforementioned penalty to 31 March 2023, pursuant to the implementation of individual stages of the “Preparation of Adamów Power Plant lands for new investments” project.

(in PLN thousand)

32.2. Changes in provisions

	EUA redemption provision	*Provision for the return of CO_2 emission allowances*	*Provision for fixed asset liquidation costs*	*Provision for liquidation of ash landfills*	*Provision for the redemption of energy certificates of origin*	*Provision for reclaiming mining areas*	*Other*	*Total*
As at 1 January 2022	1 233 534	7 097	20 614	74 906	13 053	362 050	19 757	1 731 011
increase	1 154 221	275	261	-	29 670	26 251	42 541	1 253 219
reductions, incl.:	(1 233 534)	(7 372)	-	(2 681)	(16 855)	(29 610)	(32 133)	(1 322 185)
Utilization	*(1 233 534)*	*(7 372)*		(2 681)	(996)	(2 305)	-	*(1 246 888)*
Release	-	-	-	-	(15 859)	(27 305)	*(32 133)*	*(75 297)*
As at 31 December 2022	1 154 221	-	20 875	72 225	25 868	358 691	30 165	1 662 045
Long-term	-	-	20 875	72 225	-	336 506	10 750	440 356
Short-term	1 154 221	-	-	-	25 868	22 185	19 415	1 221 689
As at 1 January 2021	640 512	7 038	18 451	67 313	11 245	351 779	18 942	1 115 280
increase	1 233 460	59	2 163	9 031	12 616	30 224	7 161	1 294 714
reductions, incl.:	(640 438)	-	-	(1 438)	(10 808)	(19 953)	(6 346)	(678 983)
Utilization	*(640 438)*	-	-	*(1 438)*	*(10 808)*	(19 953)	(43)	(656 327)
Release	-	-	-	-	-	-	(6 303)	(22 656)
As at 31 December 2021	1 233 534	7 097	20 614	74 906	13 053	362 050	19 757	1 731 011
Long-term	-	-	20 614	74 906	-	342 454	1 131	439 105
Short-term	1 233 534	7 097	-	-	13 053	19 596	18 626	1 291 906

32.3. Description of essential provision titles

32.3.1. Provisions for liabilities on account of greenhouse gas emissions (EUA)

The Group recognizes the provision for redeeming GHG emission allowances. The provision is established in correlation to the selling prime cost. As at 31 December 2022, the created provision amounted to PLN 1 154 221 thousand.

Carbon dioxide emission allowances

A new settlement period for emission allowances came into force on 1 January 2021. It will end on 31 December 2030. The assumption of this period is free allocation of emission allowances (EUA) resulting from thermal energy production only pursuant to Art. 10a of Directive 2009/29/EC. In 2022, the Group will receive a negligible amount of free CO_2 emission allowances, i.e., 11 825 EUAs, resulting from allocation to heat generation. Therefore, virtually the entire amount of emission allowances required by the ZE PAK SA Group must be purchased on the secondary market.

As at 1 January 2022, the ZE PAK SA Group held 408 264 EUAs. EUAs were held by IRGIT in KOBIZE as collateral for electricity trading. In Q1 2022, ZE PAK SA purchased concluded futures contracts for MAR22 in the amount of 4 355 000 EUAs. EUA balance as at 31 March 2022 was 4 763 264 EUAs, including 4 355 000 EUAs in the KOBIZE account and 408 264 in the IRGIT account. In 2022, ZE PAK received 165 000 EUAs under contracts purchased for the purposes of 2021 and 11 825 EUAs as free EUAs received on account of thermal energy generation by the Konin Power Plant. CO_2 emissions at ZE PAK in 2021 amounted to 4 871 977 tonnes. In order to redeem CO_2 emissions, ZE PAK applied for a return of 340 152 EUAs to IRGIT. Thus, ZE PAK held 4 871 977 EUAs in KOBIZE accounts. After redeeming CO_2 emissions for 2021, there were zero EUAs in the KOBIZE account, and 68 113 EUA deposited in the IRGIT account – corresponding to EUA amounts as at 30 June 2022.

In Q3 2022, ZE PAK purchased 71 500 CO_2 emission allowances on the spot market, which were transferred to IRGIT as collateral. As at 30 September 2022, ZE PAK's EUA balance was 139 613 EUAs with zero EUAs in KOBIZE and 139 613 EUAs in IRGIT.

In Q4 2022, ZE PAK purchased 100,000 EUAs under forward contracts from mBank for the purposes of 2022 emissions. In December, 2 016 EUAs were received as free EUAs for the Konin System, thus the Konin System received 13 841 free EUAs for 2022. As at 31 December 2022, the EUA balance at ZE PAK is 141 629 EUAs, of which 2 016 EUAs are in KOBIZE and 139 613 EUAs are in IRGIT.

The provision is established in correlation to the selling prime cost.

Carbon dioxide emission allowances in the year concluded on 31 December 2022

		ZE PAK S.A.	
	CO_2 emission (in tonnes)*	3 427 588	
		volume (in tonnes)	*amount (PLN thousand)*
EUAs	Balance at the start of period	-	-
	Acquired	4 591 500	1 248 195
	Received free	13 841	-
	Transferred as collateral to IRGIT	(71 500)	(36 180)
	Return on IRGIT collateral	340 152	44 128
	Redemption for 2021	(4 871 977)	(1 256 143)
	Balance at the end of period	2 016	-
	Left to be acquired	3 425 572	1 233 534

Expenses and proceeds associated with CO_2 emission allowances in the cash flow statement amount to PLN 1 319 523 thousand.

Carbon dioxide emission allowances in the year concluded on 31 December 2021

		ZE PAK S.A.

	CO_2 emission (in tonnes)*	4 870 451	
		volume (in tonnes)	*amount (PLN thousand)*
EUA	Balance at the start of period	88 998	3 565
	Acquired	6 034 000	707 199
	Received free	12 138	-
	Sales	(216 000)	(24 021)
	Exchange	(408 265)	(44 128)
	Redemption for 2020	(5 510 871)	(642 615)
	Balance at the end of period	-	-
	Left to be acquired	4 870 451	1 233 534

**Physical redemption of emission allowances for a given year is conducted in the first months of the following year.*

32.3.2. Provision for reclamation of ash storage yards and costs of fixed asset liquidation

The Group is creating a provision for future costs of land reclamation, pursuant to the legal obligation arising from "Integrated permits". Data developed by a third-party expert constitute grounds for provision estimation. The provision amount is estimated and verified at each balance sheet date, pursuant to estimated costs to be incurred in the future and discounts. As at 31 December 2022, the created provision amounted to PLN 72 225 thousand. Descriptions of the established provision can be found in Notes 5 and 12.

Due to the legal obligation to liquidate fixed assets after their period of operation, the Group is creating a provision for projected future costs, which will be required to be incurred in relation to the fulfilment of this obligation. As at 31 December 2022, the provision due to this amounted to PLN 20 875 thousand. The provision is established in correlation to the selling prime cost. The discount amount recognized in the financial costs is PLN 2 180 thousand.

The current environmental permits (Integrated Permit for waste storage yards, Waste storage yard Operation Manual approved by the Marshal of the Wielkopolskie Province) have been issued for ZE PAK SA. ZE PAK SA is the administrator of the storage yard and is obliged to conduct environmental monitoring around the storage yard and its reclamation. The storage yard stores lignite and biomass combustion waste. Coal combustion waste volumes are larger than from biomass combustion. ZE PAK SA does not envisage changing the storage yard administrator at the moment. However, the process of shutting down a part of the Gosławice open pit combustion waste storage yard (approximately 100 ha) has begun. The reclamation process of this section should be completed around 2026. The remaining part of this storage yard is currently not planned for reclamation. Waste from Biopaliwa i Wodór sp. z o.o. will be stored there. Waste from Biopaliwa i Wodór sp. z o.o. is transferred to ZE PAK SA under a contract.

32.3.3. Reclamation provisions and other related to mining activity

PAK KWB Konin SA and PAK KWB Adamów SA are obliged to reclaim areas of extraction works pursuant to the Geological and Mining Law act. Therefore, the Group is creating a provision for both the area reclamation costs related to current coal extraction within a given open pit and for the reclamation of a final excavation pursuant to the coal extraction progress of individual open pits at the balance sheet date.

The provision is created based on future reclamation cost estimates on the basis of reports by independent experts estimating reclamation costs, as commissioned by the Management Board. Estimates concerning projected reclamation costs are analysed periodically; however, at every reporting date, the size of provision is verified in accordance with current assumptions on the discount and inflation rates, and the size of extraction.

As part of their activities, PAK KWB Konin SA and PAK KWB Adamów SA are obliged to restore to the original condition or to rebuild damages caused by mine operations. Therefore, the Group establishes a provision for projected costs that it is obliged to incur under concluded agreements. Estimates concerning projected costs related to mining plant operations are updated at every reporting date.

The provision for the decommissioning of facilities and reclamation of mining areas, and the preparation of exploration areas at PAK KWB Konin SA and PAK KWB Adamów SA, according to the status as at 31 December 2022, amounted to PLN 358 691 thousand and decreased in comparison with the year concluded on 31 December 2021 by PLN 3 359 thousand. In calculating the provision, the Group adopted the following assumptions: discount rate at a level of 6.7%, and inflation rate at a level of 3.3%.

(in PLN thousand)

The provision is established in correlation to the selling prime cost. The discount rate recognized in the financial costs was PLN 9 460 thousand.

32.3.4. Provision for the redemption of energy certificates of origin

In association to the sales of electricity to final consumers, the Group is obliged to redeem a specified number of certificates of origin concerning energy from renewable energy sources, gas, and peak load co-generation. As at 31 December 2022, the provision established for this purpose amounted to PLN 25 868 thousand. The provision is established in correlation to the selling prime cost.

32.3.5. Other provisions

The main items in other provisions as at 31 December 2022 at PAK KWB Konin SA are provisions for mining damage in the amount of PLN 329 thousand, provisions for pending court proceedings in the amount of PLN 1 523 thousand; at PAK KWB Adamów SA under liquidation these are provisions for permanent exclusion from forestry production of lands for the final reservoir after the Adamów open pit in the amount of PLN 15 828 thousand and provisions for court proceedings in the amount of PLN 524 thousand. The provisions for mining damage and the provision for fixed production decommissioning are established in correlation with the selling prime cost, and the provisions for pending court proceedings in correlation with other operating costs. The main component at PAK – PCE sp. z o.o. is deferred revenues associated with purchasing receivables in the amount of PLN 24 656 thousand. The main component at Eviva Lębork sp. z o.o. are lease-related prepayments and accruals amounting to PLN 9 340 thousand.

33. Trade liabilities, other liabilities, and prepayments and accruals

33.1. Trade liabilities and other financial liabilities (short-term)

	31 December 2022	*31 December 2021*
Trade liabilities:	222 025	142 717
Other liabilities:		
Investment liabilities	26 511	9 689
Employee remuneration liabilities	16 328	15 187
Security liabilities	1 849	79 028
Other liabilities	6 723	5 266
Total	273 436	251 887

As at 31 December 2022, in the row “Other liabilities” the Group primarily reports liabilities related to settlements with employees and pay-roll deductions amounting to PLN 549 thousand, as well as settlements on account of bid bond in the amount of PLN 916 thousand.

Principles and payment terms regarding financial liabilities above:

Trade liabilities do not bear interest and are usually settled within either 14-day or 30-day periods. Interest-related liabilities are usually settled within either monthly or quarterly periods during the entire financial year.

33.2. Other non-financial liabilities

	31 December 2022	*31 December 2021*
VAT liabilities	34 576	155 539
Environmental fee liabilities	6 013	10 486
Excise duty liabilities	1 053	544
Social insurance liabilities	21 493	19 264
Personal income tax	4 507	4 712

(in PLN thousand)

Other budget liabilities	2 185	3 174
Advance payments for supplies	25 607	550
Service fee	3 079	5 726
Other	581	728
Total	99 094	200 723

Liabilities related to environmental charges concern charges for air pollution, waste storage, intake of water and wastewater disposal. The settlement period is one year.

Liabilities related to mining fees concern charges for an extracted mineral pursuant to the Geological and Mining Law. The settlement period is six months.

The main components of the “Other” item are liabilities to PFRON in the amount of PLN 314 thousand.

33.3. Derivative financial instruments

	31 December 2022	*31 December 2021*
Interest rate hedging instruments (IRS SWAP) (assets)	19 824	10 540
Exchange rate hedging instruments (forwards) (liabilities)	-	3 606
Total	19 824	14 146
short-term – assets	19 824	10 540
short-term – liabilities	-	3 606

All EUR/PLN forwards were settled within the Group at the end of March 2023.

33.4. Subsidies and long-term deferred income (long-term)

	31 December 2022	*31 December 2021*
Difference on receivable purchase	24 656	-
Long-term subsidies	224	271
Other	4 046	4 046
Total	28 926	4 317

The main component of the “Other” item comprises lands received from the District Starosty and Commune free-of-charge in the amount of PLN 3 895 thousand.

34. Contingent liabilities and the description of essential court proceedings

In addition to the liabilities described in notes 34.1 and 35, as at 31 December 2022 the Group did not have other contingent liabilities, granted guarantees, and sureties.

34.1. Court proceedings.

Proceedings in the case of an environmental decision issued with respect to PAK KWB Konin SA concerning the Tomisławice lignite deposit

PAK KWB Konin SA is a party in the administrative proceedings related to the environmental decision regarding the lignite deposit in Tomisławice. On 7 August 2007, the Head of the Wierzbinek Commune issued an environmental decision regarding the lignite open pit. On 5 December 2008, this decision was contested by nine natural persons supported by the Greenpeace foundation due to alleged gross infringement of legal regulations. On 25 March 2009, the Self-government Appeal Court dismissed the application to reverse the environmental decision. The plaintiffs applied for a judicial review. On 4 May 2009, after the judicial review, the Self-government Appeal Court sustained its previous decision. The plaintiffs again appealed against the environmental decision. On 5 May 2010, the Provincial Administrative Court in Poznań decided that the environmental decision, pursuant to which the license for the extraction of lignite at the Tomisławice deposit was granted, was a gross breach of legal regulations. PAK KWB Konin SA and the Self-government Appeal Court submitted an appeal against this judgement. On 21 March 2012, the Supreme Administrative Court revoked the contested decision of the Provincial Administrative Court in Poznań and referred the case to judicial review. On 6 November 2012, the Provincial Administrative Court in Poznań announced the decision revoking the decision of the Self-government Appeal Court of 25 March 2009 on dismissing the statement of invalidity of the environmental decision issued on 7 August 2007 by the Head of the Wierzbinek Commune, related to the extraction of lignite from the Tomisławice open cast by PAK KWB Konin S.A. On 7 January 2013, PAK KWB Konin S.A. submitted a cassation appeal against the described judgement.

After examination during a hearing on 7 October 2014, the Supreme Administrative Court dismissed PAK KWB Konin SA's cassation appeal against the judgement of the Provincial Administrative Court in Poznań of 6 November 2012 revoking the decision of the Self-government Appeal Court in Konin of 25 March 2009 dismissing the statement of invalidity of the environmental decision issued on 7 August 2007 by the Head of the Wierzbinek Commune, related to the extraction of lignite from the Tomisławice open cast.

Dismissal of the cassation appeal by PAK KWB Konin SA means that the judgement of the Provincial Administrative Court in Poznań of 6 November 2012 became legally binding, and the case regarding the statement of invalidity of the environmental decision will be examined again by the Self-government Appeal Court. On 18 January 2019, the Self-government Appeal Court in Konin issued a decision refusing to deem the environmental decision issued on 7 August 2007 by the Head of the Wierzbinek Commune and associated with the operation of the lignite open pit in Tomisławice as invalid. Next, the Court upheld its decision against which an appeal at the Provincial Administrative Court in Poznań had been filed.

Therefore, the decision of the Self-government Appeal Court means that the environmental decision issued by the Head of the Wierzbinek Commune still remains in legal circulation. The decision is not binding and final. A petition for a judicial review by the Self-government Appeal Court in Konin was submitted.

On 19 June 2020, the Company was informed that a closed-door hearing at the Provincial Administrative Court in Poznań resulted in a judgement dismissing the appeal against the decision of the Self-government Appeal Court in Konin regarding the refusal to deem the environmental decision issued on 7 August 2007 by the Head of the Wierzbinek Commune and associated with the operation of the lignite open pit in Tomisławice as invalid.

Therefore, the judgement of the Provincial Administrative Court in Poznań, dated 18 June 2020 means that the environmental decision issued by the Head of the Wierzbinek Commune on 7 August 2007 still remains in legal circulation.

The Greenpeace Polska Foundation with its registered office in Warsaw and Józef Imbiorski filed a cassation appeal against the judgement of the Provincial Administrative Court in Poznań of 18 June 2020 to the Supreme Administrative Court. On 26 October 2020, PAK KWB Konin submitted a response to the cassation appeal, filing for dismissal. A hearing date in this case is still to be set.

BAT conclusions entering into force

The Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions for establishing best available techniques (BAT) conclusions for large combustion plants, under Directive 2010/75/EU of the European Parliament and of the Council is in force as of 18 August 2021. Integrated permits for all energy combustion facilities currently operated at ZE PAK SA have been adapted to the requirements of BAT Conclusions, taking into account individual deviations from limit emission values. The Company conducts its generation activities in line with the permissible emission limits arising from the IED Directive and BAT Conclusions. Constant emission monitoring systems, expanded according to BAT 4 requirements, constitute grounds for the verification of ZE

(in PLN thousand)

PAK SA's fulfilment of the requirements set out in the Commission Implementing Decision (EU) 2017/1442 on emissions of pollutants into the air. At the date of signing this statement, there are no pending court proceedings associated with BAT.

34.2. Contingent liabilities associated with power plant decommissioning

The obligation to conduct decommissioning and land reclaiming arises from integrated permits for operating fuel combustion systems at Pątnów and Konin power plants belonging to ZE PAK SA. In the event of terminating their activities, the aforementioned entities shall be obliged to decommission all facilities and equipment of the system, in accordance with the requirements set out in the construction law. After decommissioning, the area of the plant shall be developed pursuant to arrangements with the local government authority. In particular, a facility and equipment decommissioning schedule shall be prepared and should take into account environmental protection requirements, primarily in relation to waste management.

The Adamów Power Plant has already terminated its activities and is currently undergoing the decommissioning of the system located there. The end date for the operation of systems located in Pątnów can also be specified due to strategic directions announced last year. The end period for the operation of older units in Pątnów can be set at the end of 2024, and the newer 474 MW unit (former Pątnów II Power Plant), assuming an effective support system is in place, could be operated until 2030 at the latest. Based on experience associated with decommissioning the Adamów power plant, the interest and value of placed bids, it should be reasonably assumed that the value of dismantled equipment, scrap and aggregate from decommissioned plants is able to cover the unit decommissioning and reclaiming costs.

35. Liability payment securities

In order to secure the payment of liabilities, the Group employs numerous forms of securities. Mortgages and registered pledges are the most common ones.

As at 31 December 2022 and 31 December 2021, the Group had the following liabilities secured against its assets and other securities related to liability payments:

Liabilities secured by assets

Agreement	*Security type*	*31/12/2022* *Security amount*	*Currency*	*31/12/2021* *Security amount*	*Currency*
Agreement with Alior Bank SA of 25 July 2019 for a non-revolving credit in the amount of PLN 66 700 thousand for PAK KWB Konin SA	Registered pledge on machinery and equipment	-	-	Up to 141 400	PLN
Debt limit agreement with Alior Bank SA of 20 November 2013 for the amount of PLN 4 000 thousand for PAK KWB Konin SA	Power of attorney covering bank accounts at Alior Bank SA	-	-	Up to 4 000	PLN
	Cash deposit at Alior Bank SA	Up to 4 000	PLN	Up to 4 000	PLN
Term investment loan agreement at Pekao SA for PLN 160 000 thousand for PAK PCE Biopaliwa i Wodór Sp. z o.o.	First priority financial and registered pledge on PAK PCE Biopaliwa i Wodór bank accounts at Pekao SA	Up to 192 000	PLN	Up to 192 000	PLN
	First priority mortgage on Konin Power Plant real estate	Up to 192 000	PLN	Up to 192 000	PLN

(in PLN thousand)

	Power of attorney covering bank accounts at Pekao SA	Up to 160 000	PLN	Up to 160 000	PLN
	Transfer of future and current claims, rights and receivables of the Assignor on account of insurance and heat supply contracts	Up to 160 000	PLN	Up to 160 000	PLN
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 192 000	PLN	Up to 192 000	PLN
Multi-purpose credit limit agreement at Pekao SA for PLN 25 000 thousand for PAK PCE Biopaliwa i Wodór Sp. z o.o.	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 37 500	PLN	-	-
	Power of attorney covering bank accounts at Pekao SA	Up to 25 000	PLN	-	-
Multi-purpose credit limit agreement at Pekao SA for PLN 50 000 thousand for ZE PAK SA	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 75 000	PLN	Up to 150 000	PLN
	Power of attorney covering bank accounts at Pekao SA	Up to 50 000	PLN	Up to 100 000	PLN
Bank guarantee line agreement at Pekao SA for PLN 80 000 thousand for ZE PAK SA	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 120 000	PLN	Up to 120 000	PLN
	Power of attorney covering bank accounts at Pekao SA	Up to 80 000	PLN	Up to 80 000	PLN
	Cash deposit at Pekao SA	Up to 4 000	PLN	-	-
Overdraft facility agreement at Santander Bank Polska SA for PLN 45 000 thousand for ZE PAK SA	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	-	-	Up to 54 000	PLN
Bank guarantee limit agreement at Santander Bank Polska SA for PLN 100 000 thousand for ZE PAK SA	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 120 000	PLN	Up to 60 000	PLN

(in PLN thousand)

Bank guarantee agreement at mBank SA for PLN 1 650 thousand for Farma Wiatrowa Kazimierz Biskupi Sp. z o.o.	Security deposit in cash	Up to 1 650	PLN	Up to 1 650	PLN
Investment loan agreement at Bank Gospodarstwa Krajowego in the amount of PLN 165 000 thousand for Farma Wiatrowa Kazimierz Biskupi Sp. z o.o.	financial and registered pledges for 100% of the shares in Farma Wiatrowa Kazimierz Biskupi	Up to 247 500	PLN	-	-
	registered pledge on assets and property rights of Farma Wiatrowa Kazimierz Biskupi	Up to 247 500	PLN	-	-
	financial and registered pledges on receivables under the Bank Account Agreement	Up to 247 500	PLN	-	-
	transfer to cash receivable collateral under specific Project Documents, Overrun Cost Payment Guarantee and insurance contracts	Up to 247 500	PLN	-	-
	power of attorney to bank accounts pursuant to the Power of Attorney to Bank Accounts	Up to 247 500	PLN	-	-
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 by Farma Wiatrowa Kazimierz Biskupi in the form of a notarial deed	Up to 247 500	PLN	-	-
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure by a Shareholder (PAK – PCE) in the form of a notarial deed	Up to 247 500	PLN	-	-
	a guarantee of payment of Overrun Costs pursuant to the Overrun Cost Payment Guarantee	Up to 13 500	PLN	-	-
Multi-purpose credit limit agreement at Pekao SA for PLN 20 000 thousand for PR PAK SERWIS Sp. z o.o.	Power of attorney covering bank accounts at Pekao SA	Up to 20 000	PLN	Up to 20 000	PLN
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure in the form of a notarial deed	Up to 30 000	PLN	Up to 30 000	PLN
	Transfer of receivables from commercial contracts for a minimum of 50% of the limit amount	Up to 96 549	PLN	Up to 149 094	PLN
Framework agreement at mBank SA for PLN 3 300 thousand for PR PAK SERWIS Sp. z o.o.	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure by PR PAK SERWIS Sp. z o.o.	Up to 15 000	PLN	Up to 15 000	PLN

(in PLN thousand)

	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure by ZE PAK SA	Up to 11 000	PLN	Up to 11 000	PLN
Term investment loan and VAT loan agreement at PKO BP SA, Pekao SA and mBank SA for PLN 175 000 thousand for PAK – PCE Fotowoltaika Sp. z o.o.	First priority financial and registered pledge on PAK – PCE Fotowoltaika's bank accounts at PKO BP, Pekao SA and mBank SA	Up to 262 500	PLN	Up to 262 500	PLN
	First priority contractual joint mortgage on PAK – PCE Fotowoltaika's properties	Up to 262 500	PLN	Up to 262 500	PLN
	Second priority mortgage on PAK – PCE Fotowoltaika's real estate to secure IRS hedging contract liabilities and associated transactions at PKO BP SA, Pekao SA and mBank SA	Up to 12 000 (PKO BP SA) Up to 12 000 (Pekao SA) Up to 7 500 (mBank SA)	PLN PLN PLN	Up to 12 000 (PKO BP SA) Up to 12 000 (Pekao SA) Up to 7 500 (mBank SA)	PLN PLN PLN
	First priority registered pledge on assets and rights of PAK – PCE Fotowoltaika at PKO BP SA	Up to 262 500	PLN	Up to 262 500	PLN
	First priority financial and registered pledge on all PAK – PCE Fotowoltaika's share capital shares at PKO BP, Pekao SA and mBank SA	Up to 262 500	PLN	Up to 262 500	PLN
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure by ZE PAK (as a guarantor) for securing liabilities under a syndicated loan agreement and IRS hedging contracts with associated transactions for PKO BP SA	Up to 10 000	PLN	Up to 10 000	PLN
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure to PAK – PCE Fotowoltaika, for securing liabilities under a syndicated loan agreement and IRS hedging contracts with associated transactions at PKO BP SA, Pekao SA and mBank SA	Up to 117 750 (PKO BP SA) Up to 117 750 (Pekao SA) Up to 58 500 (mBank SA)	PLN PLN PLN	Up to 117 750 (PKO BP SA) Up to 117 750 (Pekao SA) Up to 58 500 (mBank SA)	PLN PLN PLN
	Declaration on submission to the writ of execution pursuant to Art. 777(1) cl. 5 of the Code of Civil Procedure, by PAK-Polska Czysta Energia, using held shares in PAK-PCE	Up to 117 750 (PKO BP SA) Up to 117 750 (Pekao SA) Up to 58 500	PLN PLN PLN	-	-

(in PLN thousand)

	Fotowoltaika, to secure liabilities under a syndicated loan agreement and IRS hedging contracts with associated transactions at PKO BP SA, Pekao SA and mBank SA	(mBank SA)			
	Power of attorney to PAK – PCE Fotowoltaika's bank accounts at Pekao SA, PKO BP SA and mBank SA	Up to 175 000	PLN	Up to 175 000	PLN
	Assignment of receivables under each of the insurance policies in relation to the Project and assignment of receivables under Material Project Documents	Up to 175 000	PLN	Up to 175 000	PLN
	Surety by ZE PAK SA up to PLN 10.0 MM	Up to 10 000	PLN	Up to 10 000	PLN
Agreement for co-financing in the form of a preferential loan with the National Fund for Environmental Protection and Water Management in the amount of PLN 50 000 to PAK – PCE Polski Autobus Wodorowy Sp. z o.o.	deposit promissory note, ZE PAK SA's promissory note surety, contractual mortgage for properties up to 125% of the loan amount, registered pledge on movables, assignment of insurance contract rights.	Up to 50 000	PLN	-	-

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Other securities of liability payments

Granted guarantees

Guarantee type	31 December 2022 Security amount	Currency	31 December 2021 Security amount	Currency
Performance bond	6 120	PLN	3 386	PLN
Bid bond payment guarantee	480	PLN	50	PLN
Defect and failure removal guarantee	4 429 673	PLN EUR	4 273 577	PLN EUR
Advance payment return/payment guarantees (including TGE/IRGIT transaction securing guarantees)	174 349 161 878	PLN EUR	485 650 30 559	PLN EUR

In addition, the Group applies assignments under sales agreements and assignments under insurance policies as payment securities.

The table below shows granted sureties in total.

	31 December 2022	Currency	31 December 2021	Currency
Intra-group sureties	-	PLN	62 400	PLN
Sureties granted to extra-Group entities	111 762 4 809	PLN EUR	34 262 756	PLN
Total granted sureties	**111 762** **4 809**	**PLN** **EUR**	**96 662** **756**	**PLN**

(in PLN thousand)

Granted and obtained sureties

The table below shows received sureties in total.

	31 December 2022	*Currency*	*31 December 2021*	*Currency*
Intra-group sureties	-	PLN	62 400	PLN
Sureties received from extra-Group entities	14 978	PLN	14 978	PLN
Total received sureties	**14 978**	**PLN**	**77 378**	**PLN**

36. Received guarantees

Guarantee type	*31 December 2022* *Security amount*	*Currency*	*31 December 2021* *Security amount*	*currency*
Performance bond	2 355 85 817	PLN EUR	26 287 33 683	PLN EUR
Defect and failure removal guarantee	8 736 -	PLN EUR	2 377 -	PLN EUR
Advance payment guarantees	- 2 704	PLN EUR	231 -	PLN EUR

37. Information on affiliates

The following table shows total amounts of material transactions with affiliated entities (controlled by the same majority owner) for the current and previous financial years. Mr Zygmunt Solorz indirectly holds Company shares representing a total of 65.96% of the Company’s share capital. The Group has personal ties with other entities through Mr Zygmunt Solorz.

Affiliated entity		*Sales to affiliated entities*	*Purchases from affiliated entities*	*Receivables from affiliated entities*	*Liabilities to affiliated entities*
Elektrim S.A.	2022	-	120	-	-
	2021	-	120	-	-
Megadex Development sp. z o.o.	2022	90	-	3	-
	2021	58	-	4	-
Megadex Expo sp. z o.o.	2022	-	-	-	-
	2021	339	-	-	-
Polkomtel sp. z o.o.	2022	289 181	21 717	40 255	2 634
	2021	98 484	6 052	8 486	1 491
Laris Investments sp. z o.o.	2022	1 295	-	202	-
	2021	492	579	21	-
Laris Technologies sp. z o.o.	2022	7 587	-	1 250	-
	2021	2 546	-	189	-
CPE sp. z o.o.	2022	-	808	3	112
	2021	1	394	-	145
Plus Flota sp. z o.o.	2022	-	2 471	-	442

(in PLN thousand)

	2021	-	1 415	-	160
Cyfrowy Polsat S.A.	2022	13 854	474	3 254	114
	2021	3 392	4	706	-
Esoleo sp. z o.o.	2022	20	650	-	1 330
	2021	2 410	124 711	-	1 330
Netia S.A.	2022	34 171	12	5 948	-
	2021	-	-	-	-
TK Telekom sp. z o.o.	2022	3 180	-	297	-
	2021	-	-	-	-
Petrotel sp. z o.o.	2022	418	-	71	-
	2021	-	-	-	-
Maciej Nietopiel	2022	-	240	-	25
	2021	-	490	-	25
Tomasz Zadroga	2022	-	-	-	25
	2021	-	240	-	25
KD Management Krzysztof Dziaduszyński	2022	-	1 250	-	6
	2021	-	60	-	6
Doradztwo Strategiczne Maciej Koński	2022	-	600	-	400
	2021	-	300	-	31
Paweł Markowski	2022	-	330	-	34
	2021	-	330	-	34
Impact Paweł Lisowski	2022	-	330	-	34
	2021	-	330	-	34
Andrzej Janiszowski	2022	-	300	-	31
	2021	-	550	-	-
Total	**2022**	**349 796**	**29 302**	**51 283**	**5 187**
	2021	**107 721**	**135 575**	**9 406**	**3 281**

Elektrim SA is the parent company for the ZE PAK SA Group. Other companies are subsidiaries or affiliates of Elektrim SA.

Transactions with Polkomtel sp. z o.o. mainly concern electricity sales.

Transactions with affiliated entities are concluded on an arm's length basis.

The table above includes data on commercial transactions. In addition, as at 31 December 2022, there were loan liabilities to Polsat Cyfrowy SA in the amount of PLN 444 868 thousand. The liabilities are detailed in Note 31.

37.1. Loan granted to a Management Board member

Both in the financial year concluded on 31 December 2022, and the one concluded on 31 December 2021, the Parent Company did not grant any loans and similar benefits to members of management and supervisory bodies.

(in PLN thousand)

37.2. Other transactions with Management Board members

Both in the financial year concluded on 31 December 2022, and in the one concluded on 31 December 2021, there were no transactions with members of the management and supervisory bodies, except for the ones described in Note 37.

37.3. Remuneration of the Group's senior management

37.3.1. Remuneration paid or payable to the members of the Group's Management Board and Supervisory Board

	Year concluded on *31 December 2022*	Year concluded on *31 December 2021*
Parent company Management Board		
Short-term employee benefits	3 103	4 375
Post-employment benefits	-	-
Benefits on account of employment termination	-	1
Remuneration for consulting services	-	490
Parent company Supervisory Board		
Short-term employee benefits	1 372	1 244
Management Boards of subsidiaries		
Short-term employee benefits	3 663	3 356
Post-employment benefits	246	-
Remuneration for consulting services	-	1 260
Supervisory Board of subsidiaries		
Short-term employee benefits	9	6
Total	8 393	10 732

37.3.2. Remuneration paid or payable to other top management members

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Short-term employee benefits	12 540	11 259
Jubilee awards	-	58
Post-employment benefits	-	13
Benefits on account of employment termination	45	254
Total amount of remuneration paid to top management members (except for members of the Management Board and the Supervisory Board)	12 585	11 584

The top management includes directors and higher-tier managers.

38. Information on remuneration of the statutory auditor or the entity entitled to audit financial statements

The following table presents the remuneration for the entity entitled to audit financial statements, paid or due for the year concluded on 31 December 2022, and for the year concluded on 31 December 2021, divided by types of services:

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*

Obligatory testing and review of an individual and consolidated financial statement	760	720
Other services	28	28
Total	788	748

39. Goals and rules of financial risk management

Main financial instruments employed by the Group include bank loans, loans granted by affiliates and other institutions, cash and short-term deposits. The main goal of these financial instruments is to obtain funds for the Group's activities. The Group also has other financial instruments, such as trade receivables and liabilities created directly within its conducted activities.

The main kinds of risk resulting from the Group's financial instruments include the interest rate risk, liquidity risk, foreign currency risk and credit risk. The Management Board verifies and consults the rules of managing each of these kinds of risk – these rules are discussed briefly below. The Group also monitors the market price risk regarding all its held financial instruments.

39.1. Interest rate risk

The Group's potential exposure to the risk of interest rate changes mainly concerns long-term financial liabilities.

Due to the pending process of implementing a new reference index on the Polish market and, ultimately, replacing the currently applied WIBOR interest rate reference index with it, the Group does not identify any risk in this respect. The Group's financial contracts contain provisions in terms of exercising "fall-back clauses", meaning that the contracts contain rules for their continuation if the reference index is not developed. A new interest rate will be determined based on these provisions.

Interest rate risk – sensitivity to changes

In the interest rate risk sensitivity analysis, the Group employs a parallel shift of the interest rate curve by a potential change of reference interest rates during the coming year. For the purposes of the interest rate risk sensitivity analysis, average reference interest rate levels in a given year were used. The scale of potential interest rate changes was estimated based on implied volatilities of ATMF ("At-the-Money-Forward; forward option to determine the volatility of financial instruments) options for an interest rate quoted on the interbank currency market, for which the Group has the exposure to interest rate risk from the balance sheet date.

(in PLN thousand)

Financial instrument classes	31 December 2022		Analysis of the interest rate risk sensitivity as at 31 December 2022							
			WIBOR				EURIBOR			
			WIBOR + 113 bp.		WIBOR - 113 bp.		EURIBOR + 124.7 bp.		EURIBOR – 124.7 bp.	
	carrying amount	value at risk	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income
Other financial assets	160 445	4 648	53	-	(53)	-	-	-	-	-
Trade and other receivables	815 406	-	-	-	-	-	-	-	-	-
Derivative financial instruments	19 824	19 824	224	-	(224)	-	-	-	-	-
Cash and cash equivalents	1 462 749	1 462 749	6 069	-	(6 069)	-	11 544	-	(11 544)	-
Interest-bearing loans and borrowings	(1 107 727)	(1 107 727)	(12 517)	-	12 517	-	-	-	-	-
Trade liabilities and other financial liabilities	(257 915)	-	-	-	-	-	-	-	-	-
Lease liabilities	(63 637)	(63 637)	(719)	-	719	-	-	-	-	-
Derivative financial instruments	-	-	-	-	-	-	-	-	-	-
Total	**1 029 145**	**315 857**	**(6 891)**	**-**	**6 891**	**-**	**11 544**	**-**	**(11 544)**	**-**

Lease liabilities relate primarily to the presentation of perpetual usufruct of land pursuant to IFRS 16

(in PLN thousand)

Financial instrument classes	31 December 2021		Analysis of the interest rate risk sensitivity as at 31 December 2021							
			WIBOR				EURIBOR			
			WIBOR + 12 bp.		WIBOR - 12 bp.		EURIBOR + 58,43 bp.		EURIBOR - 58.43 bp.	
	carrying amount	value at risk	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income	Profit/loss	Other comprehensive income
Other financial assets	22 772	3 983	5	-	(5)	-	-	-	-	-
Trade and other receivables	1 394 784	-	-	-	-	-	-	-	-	-
Derivative financial instruments	10 540	10 540	13	-	(13)	-	-	-	-	-
Cash and cash equivalents	506 669	506 669	323	-	(323)	-	1 386	-	(1 386)	-
Interest-bearing loans and borrowings	(451 771)	(451 771)	(542)	-	542	-	-	-	-	-
Trade liabilities and other financial liabilities	(252 354)	-	-	-	-	-	-	-	-	-
Lease liabilities	(47 830)	-	-	-	-	-	-	-	-	-
Derivative financial instruments	(3 606)	(3 606)	(4)	-	4	-	-	-	-	-
Total	**1 179 204**	**65 815**	**(205)**	**-**	**205**	**-**	**1 386**	**-**	**(1 386)**	**-**

39.2. Currency risk

The Group is exposed to the currency risk associated with concluded transactions.

As at 31 December 2022, none of the Group’s companies had active instruments employed to mitigate the foreign exchange risk (e.g., forward EUR/PLN transactions).

(in PLN thousand)

Potential currency rate changes were calculated based on annual volatilities implied for currency options quoted on the interbank market for a given pair of currencies as at the balance sheet date.

The Group identifies the exposure to EUR/PLN exchange rate changes. The table below shows the gross financial result sensitivity to reasonable exchange rate changes, assuming non-variability of other risk factors for these financial instrument classes exposed to the exchange rate change risk.

	31 December 2022		***Analysis of the currency risk sensitivity as at 31 December 2022***			
			EUR/PLN			
Financial instrument classes			**EUR/PLN exchange rate + 8.415%**		**EUR/PLN exchange rate - 8.415%**	
			5.0846		**4.2952**	
	carrying amount	*value at risk*	***Profit/loss***	***Other comprehensive income***	***Profit/loss***	***Other comprehensive income***
Other financial assets	160 445	-	-	-	-	-
Trade and other receivables	815 406	23 402	1 969	-	(1 969)	-
Derivative financial instruments	19 824	-	-	-	-	-
Cash and cash equivalents	1 462 749	925 709	77 898	-	(77 898)	-
Interest-bearing loans and borrowings	(1 107 727)	-	-	-	-	-
Trade liabilities and other financial liabilities	(257 915)	(6 439)	(542)	-	542	-
Lease liabilities	(63 637)	-	-	-	-	-
Derivative financial instruments	-	-	-	-	-	-
Total	**1 029 145**	**942 672**	**79 325**	**-**	**(79 325)**	**-**

Lease liabilities relate primarily to the presentation of perpetual usufruct of land pursuant to IFRS 16

(in PLN thousand)

Financial instrument classes	***31 December 2021***		***Analysis of the currency risk sensitivity as at 31 December 2021***			
			EUR/PLN			
			EUR/PLN exchange rate + 5.825%		**EUR/PLN exchange rate - 5.825%**	
			4.8673		**4.3315**	
	carrying amount	***value at risk***	***Profit/loss***	***Other comprehensive income***	***Profit/loss***	***Other comprehensive income***
Other financial assets	22 772	-	-	-	-	-
Trade and other receivables	1 394 784	3 848	224	-	(224)	-
Derivative financial instruments	10 540	-	-	-	-	-
Cash and cash equivalents	506 669	237 211	13 818	-	(13 818)	-
Interest-bearing loans and borrowings	(451 771)	-	-	-	-	-
Trade liabilities and other financial liabilities	(252 354)	(2 997)	(175)	-	175	-
Lease liabilities	(47 830)	-	-	-	-	-
Derivative financial instruments	(3 606)	(3 606)	(210)	-	210	-
Total	**1 179 204**	**234 456**	**13 657**	**-**	**(13 657)**	**-**

39.3. Raw material price risk

The Group is exposed to the influence and the adverse impact of risk factors associated with the volatility of cash flows and a financial result due to the changes in commodity prices. The exposure to the raw material price risk is reflected by the volume of purchases of basic raw materials, which are mostly lignite, as well as forest and agricultural biomass.

The volume and consumption costs related to main raw materials purchased from suppliers are presented in the table below:

	2022		*2021*	
	Volume (tons)	*Consumption cost (PLN thousand)*	*Volume (tons)*	*Consumption cost (PLN thousand)*
Fuel:				
Lignite	493 453	51 787	420 329	37 433
Forest biomass	679 963	322 646	439 399	76 402
Agricultural biomass	40 458	15 434	49 544	9 358
Heating oil	5 419	30 989	9 509	19 077
Sorbent	58 409	8 576	94 853	6 742

Significant risk factors are also costs related to purchasing CO_2 emission allowances and electricity.

	2022		*2021*	
	CO_2 emissions (tons)	*Emission cost (PLN thousand)*	*CO_2 emissions (tons)*	*Emission cost (PLN thousand)*
CO_2 emission costs	3 427 588	1 176 830	4 870 451	792 344

	2022		*2021*	
	Amount (MWh)	*Purchase cost (PLN thousand)*	*Amount (MWh)*	*Purchase cost (PLN thousand)*
Electricity purchase	2 549 139	1 409 037	1 394 491	444 163

39.4. Credit risk

The credit risk is a potential credit event, which may be materialised in the form of such factors as a counterparty's insolvency, partial repayment of receivables, significant delay in the repayment of receivables or another unforeseen derogation from contractual terms.

The Group concludes transactions only with reputable companies of good credit rating. All clients who want to use trade credits are subject to initial verification procedures. Furthermore, owing to ongoing monitoring of receivables, the Group's exposure to the risk of unrecoverable receivables is insignificant. Receivables exceeding 10% of the Group's receivable balance are reported by two counterparties:

1. Counterparty 1 – receivables in the amount of PLN 41 198 thousand
2. Counterparty 2 – receivables in the amount of PLN 40 069 thousand

The main consumer of the Group's electricity is the Towarowa Giełda Energii SA. Transactions concluded on the exchange market are settled on a day-to-day basis, which minimises the credit risk. For this reason, the Group does not employ additional securities arising from the receivable concentration phenomenon.

(in PLN thousand)

In relation to other financial assets of the Group, such as cash and its equivalents, financial assets available for sale, and certain derivatives, the Group's credit risk arises as a result of the inability of payment by the other party to the agreement, and the maximum exposure to this risk is equal to the carrying value of these derivatives.

The Group analyses and mitigates the credit risk associated with cash through ongoing monitoring of financial institution ratings and mitigates the risk of concentrated surplus cash in a single financial institution, through its internal risk management rules.

Long-term ratings granted to banks where the Group holds cash:

Bank name	*Rating awarded by a Rating Agency*		
	Fitch	S&P	Moody's
PEKAO SA	BBB	BBB+	A2
PKO BP	-	-	A2
BGK	A-	-	-
mBank	BBB-	BBB	-
Bank Millennium	-	-	Baa3
Santander Bank Polska	BBB+	-	A3
Alior Bank	BB	BB	-
BNP Paribas Bank Polska	-	-	A+

Cash of the PAK Capital Group as at 31 December 2022, broken down into individual bank credit ratings:

Rating level by individual rating agencies			*Cash amount as at 31 December 2022*
Moody's	*S&P*	*Fitch*	
Aaa	AAA	AAA	-
Aa1	AA+	AA+	-
Aa2	AA	AA	-
Aa3	AA-	AA-	-
A1	A+	A+	4
A2	A	A	13,077
A3	A-	A-	1 007 009
Baa1	BBB+	BBB+	213 516
Baa2	BBB	BBB	176 351
Baa3	BBB-	BBB-	47 865
Ba1	BB+	BB+	-
Ba2	BB	BB	3 553
Ba3	BB-	BB-	260
B1	B+	B+	-
B2	B	B	-
B3	B-	B-	-
Caa1	CCC+	CCC	-
Caa2	CCC		-
Caa3	CCC-		-
Ca	CC		-

	C		-
C	D	DDD	-
–		DD	-
–		D	-
TOTAL			1 461 635

39.5. Liquidity risk

The Group monitors the no-fund risk by means of a tool for periodic liquidity planning. This tool takes into account the maturity/due dates of both investments and financial assets (e.g., receivable accounts, other financial assets), as well as projected cash flows from operating activities.

The Group's objective is to maintain the balance between financing continuity and flexibility through employing various financing sources, such as overdraft facilities, bank credits, bonds, priority shares and financial lease agreements.

Risks associated with conducted business, including liquidity risks and the ability to generate adequate cash flows, are also described in Note 4.1 regarding the Group's going concern assumption.

The table below shows financial liabilities of the Group as at 31 December 2022 and 31 December 2021, by maturity date and based on contractual non-discounted payments.

(in PLN thousand)

31 December 2022	*Less than 3 months*	*3 - 12 months*	*1 - 5 years*	*Over 5 years*	*Total*
Interest-bearing loans and borrowings	6 671	708 341	455 130	108 832	1 278 974
Trade liabilities and other financial liabilities	237 666	35 770	253	5	273 694
Lease liabilities	5 247	1 218	27 992	29 180	63 637
Derivative financial instruments	-	-	-	-	-
Total	**249 584**	**745 329**	**483 375**	**138 017**	**1 616 305**

31 December 2021	*Less than 3 months*	*3 - 12 months*	*1 - 5 years*	*Over 5 years*	*Total*
Interest-bearing loans and borrowings	1 982	190 694	134 043	123 943	450 662
Trade liabilities and other financial liabilities	217 263	34 624	463	4	252 354
Lease liabilities	5 388	927	23 488	18 027	47 830
Derivative financial instruments	-	675 706	-	-	675 706
Total	**224 633**	**901 951**	**157 994**	**141 974**	**1 426 552**

The derivatives shown in the tables above were presented as gross values of non-discounted payments. However, these contracts can be settled either in gross or net amounts.

The tables below show reconciliation of these values against the carrying values of derivatives:

31 December 2022	*On demand*	*Less than 3 months*	*3 - 12 months*	*1 - 5 years*	*Over 5 years*	*Total*
Current net market value (currency forwards and)	**-**	**-**	**-**	**-**	**-**	**-**

31 December 2021	*On demand*	*Less than 3 months*	*3 - 12 months*	*1 - 5 years*	*Over 5 years*	*Total*
Current net market value (currency forwards)	**-**	**10 540**	**-**	**-**	**-**	**10 540**

(in PLN thousand)

40. Financial instruments

40.1. Carrying value of particular financial instrument classes

The table below shows a list of the Group's financial instruments, broken down into individual asset and liability classes and categories, pursuant to IFRS 9.

Financial assets	Category pursuant to IFRS 9	*31 December 2022*	*31 December 2021*
Other financial assets	FAaAC	160 445	22 772
Trade and other receivables	FAaAC	815 406	1 394 784
Derivative financial instruments	MaFVtFR	19 824	10 540
Cash and cash equivalents	FAaAC	1 462 749	506 669
Financial liabilities			
Interest-bearing bank loans and borrowings, including:		1 107 727	451 771
Long-term	OFLaAC	619 551	249 226
Short-term	OFLaAC	488 176	202 545
Trade liabilities and other financial liabilities	OFLaAC	273 694	252 354
Lease liabilities	OFLaAC	63 637	47 830
Derivative financial instruments	MaFVtFR	-	3 606

Abbreviations used:

MaFVtFR – Financial assets/liabilities measured at fair value through financial result/capitals
OFLaAC – Other financial liabilities at amortised cost
FAaAC – Financial asset at amortised cost

As at 31 December 2022 and 31 December 2021, the Group held the following financial instruments measured at fair value:

(in PLN thousand)

	31 December 2022	*Level 1*	*Level 2*	*Level 3*
Asset-hedging derivatives	-	-	19 824	-
Liability-hedging derivatives	-	-	-	-

	31 December 2021	*Level 1*	*Level 2*	*Level 3*
Asset-hedging derivatives	-	-	10 450	-
Liability-hedging derivatives	-	-	3 606	-

As at 31 December 2022 and 31 December 2021, the fair value of financial instruments other than derivatives, did not significantly differ from carrying values, primarily due to the fact that in the case of short-term instruments, the discount effect was not significant and that related transactions are concluded under market terms; for this reason, the fair value of the said financial instruments has been presented as the carrying value.

The measurement of interest-bearing loans and borrowings after initial recognition is concluded pursuant to the amortized cost method, taking into account contractual costs associated with obtaining a given loan or borrowing, as well as the discount and obtained bonuses.

As at 31 December 2022, the derivatives, forward currency purchase transactions, were measured at fair value. The difference in discounted future cash flows between the forward price at the measurement date and the transaction price as per the quotations prepared by an appropriate bank, multiplied by foreign currency contract face value is calculated for the purposes of measuring currency contracts. The measurement of these instruments was classified as level 2 in the fair value measurement hierarchy.

In the year concluded on 31 December 2022 and the one concluded on 31 December 2021, there we no shifts between level 1 and level 2 of the fair value hierarchy, and none of the instruments were shifted to level 3 of the fair value hierarchy.

(in PLN thousand)

40.2. Items of revenues, costs, profits and losses included in the income statement, divided by financial instrument categories

Year concluded on 31 December 2022

	Revenues/(costs) related to interest (including depreciated cost measurement effect)	*Profits/(losses) on foreign exchange differences*	*Release/(creation) of impairment write-downs*	*Profits/(losses) on derivative instruments*	*Other*	*Total*
Financial assets						
Cash and cash equivalents	20 218	(583)	-	-	-	19 635
Other short-term financial assets	-	-	-	-	-	-
Trade receivables	79	-	-	-	-	79
Other receivables	4 048	-	-	-	-	4 048
Derivatives	-	-	-	32 877	-	32 877
Financial liabilities						
Loan and borrowing liabilities (short- and long-term)	(59 251)	(5 428)	-	-	-	(64 679)
Trade liabilities	(49)	(875)	-	-	-	(924)
Other financial liabilities (excl. instruments)	-	-	-	-	-	-
Derivatives	-	-	-	(6 995)	-	(6 995)
Other liabilities	(5 611)	-	-	-	(11 640)	(17 251)
Total	(40 566)	(6 886)	-	25 882	(11 640)	(33 210)

(in PLN thousand)

Year concluded on 31 December 2021

	Revenues/(costs) related to interest (including depreciated cost measurement effect)	*Profits/(losses) on foreign exchange differences*	*Release/(creation) of impairment write-downs*	*Profits/(losses) on derivative instruments*	*Other*	*Total*
Financial assets						
Cash and cash equivalents	1 268	(195)	-	-	-	1 073
Other short-term financial assets	(1 029)	-	-	-	-	(1 029)
Trade receivables	-	-	-	-	747	747
Other receivables	110	-	-	-	46	156
Derivatives	-	-	-	4 865	-	4 865
Financial liabilities						
Loan and borrowing liabilities (short- and long-term)	238	(21)	-	-	(598)	(381)
Trade liabilities	(44)	(2 322)	-	-	-	(2 366)
Other financial liabilities (excl. instruments)	(2)	-	(53 544)	-	(343)	(53 889)
Derivatives	-	-	-	-	-	-
Other liabilities	(92)	-	(6 528)	-	(251)	(6 871)
Total	449	(2 538)	(60 072)	4 865	(399)	(57 695)

(in PLN thousand)

40.3. Financial instrument interest rate risk

The table below shows the Group's exposure to the interest rate risk and the concentration of this risk broken down into currencies and interest type.

	Interest type	*Carrying value on 31 December 2022*	*Carrying value on 31 December 2021*
Financial assets exposed to the interest rate risk - PLN	Fixed	-	-
	Floating	541 688	273 441
Financial assets exposed to the interest rate risk - other currencies	Fixed	-	-
	Floating	925 709	237 211
Financial liabilities exposed to the interest rate risk - PLN	Fixed	-	-
	Floating	1 107 726	451 771
Financial liabilities exposed to the interest rate risk - other currencies	Fixed	-	-
	Floating	-	-
Net exposure - PLN	Fixed	-	-
	Floating	(566 038)	(178 330)
Net exposure - other currencies	Fixed	-	-
	Floating	925 709	237 211

The interest rate of floating-rate financial instruments is updated in periods shorter than one year. The interest on fixed-rate financial instruments is constant throughout the entire period up to the maturity/due date of these instruments. Other financial instruments of the Group, not included in the tables above, do not bear interest and, thus, are not subject to the interest rate risk.

40.3.1. Collaterals

As at 31 December 2022, none of the Group's companies had active instruments employed to mitigate the foreign exchange risk (e.g., forward EUR/PLN transactions). Currency purchase SPOT transactions are not measured since they do not concern the purchase of CO_2 emission allowances for own use subject to redemption.

Type of concluded transactions	*Currency pair*	*Transaction amount (face value PLN thous.) 31 December 2022*	*Net market value (fair value in PLN thous.) 31 December 2022*	*Maturity date*
Forward transactions of EUR currency purchase (forward)	-	-	-	-

Type of concluded transactions	*Currency pair*	*Transaction amount (face value in EUR thous.) 31 December 2021*	*Net market value (fair value in PLN thous.) 31 December 2021*	*Maturity date*
Forward transactions of EUR currency purchase (forward)	(EUR/PLN)	144 800	675 706	March 2022

The Group also secures the risk of changing CO_2 emission allowance prices using forward transactions to purchase the allowances for its own needs. The tables below show the summary of forward transactions active as at 31 December 2022 and 31 December 2021.

31 December 2022

Type of concluded transactions	*Number of purchased allowances*	*Total face value of transactions in thousand EUR*	*Transaction currency*	*Maturity date*
Forward transactions	5 579 000	423 967	EUR	Up to one year
Forward transactions	12	932	EUR	Over one year

31 December 2021

Type of concluded transactions	*Number of purchased allowances*	*Total face value of transactions in thousand EUR*	*Transaction currency*	*Maturity date*
Forward transactions	4 892 000	270 762	EUR	Up to one year
Forward transactions	2 295 000	133 541	EUR	Over one year

41. Capital management

The main goal of the Group’s capital management is to maintain a good credit rating and safe equity ratios, which would support the Group's operating activities and increase the value for its shareholders.

The Group manages the capital structure, and amends it due to changes in the economic conditions. In the period concluded on 31 December 2022 and on 31 December 2021, there were no amendments to goals, rules and processes applicable in this field.

The Group monitors the balance of its capitals using leverage ratio, which is calculated as a relation of net debt to the sum of capitals plus net debt. Expected leverage ratio for the Group should be a maximum of 40%. The Group’s net debts include interest-bearing loans and borrowings, trade and other liabilities, minus cash and cash equivalents. Capital includes equity less the supplementary capitals on account of unrealised net profits.

	31 December 2022	*31 December 2021*
Interest-bearing loans and borrowings	1 107 727	451 771
Financial derivatives (liabilities)	-	3 606
Trade liabilities and other financial liabilities	273 694	252 354
Minus cash and cash equivalents	1 462 749	506 669
Net debt	**(81 328)**	**201 062**
Equity	1 214 499	524 232
Capital from the revaluation of hedging instruments	-	-
Total capital	1 214 499	524 232
Net capital and debt	**1 133 171**	**725 294**
Leverage ratio	(7.18%)	27.72%

42. Employment structure

Average employment in the Group for the years concluded on 31 December 2022 and 31 December 2021 was as follows:

	Year concluded on 31 December 2022	*Year concluded on 31 December 2021*
Parent company Management Board	5	5

(in PLN thousand)

Management Boards of Group companies	9	9
Administration	106	101
Sales	42	83
Production	2 715	3 037
Others	396	374
Total	3 273	3 609

43. Significant events after the balance sheet date

Signing of a letter of intent regarding cooperation in the field of investment aimed at improving water retention and the development of renewable and nuclear energy

On 26 January 2023, ZE PAK SA, the Poznań University of Life Sciences and Polish Waters concluded in Poznań a letter of intent related to establishing cooperation with regards to conducting environmental research and analyses, as well as technical solutions aimed at improving the environmental condition in the region of the Konin-Turek energy basin, with particular focus of new investments by ZE PAK S.A. in renewable and nuclear energy.

Preventing adverse climate change documented by the results of scientific research, and ensuring energy security require conducting a properly prepare energy transition. An answer to such a challenge is the development of nuclear energy and support for energy from renewable sources.

The agreement concluded in Poznań is aimed at establishing cooperation with relation to the ongoing energy transition at ZE PAK S.A., using the substantive and technical potential of the letter's signatories in relation to environmental and technical studies covering planned investment projects. In particular, the joint actions are to be undertaken in the field of assessing the nuclear power plant site, reconstructing water resources in Eastern Wielkopolska, and the ongoing revitalization of mining and industrial areas. The area of cooperation will involve, among others, joint actions towards:

- shaping new ecosystems within degraded and devastated areas;
- reconstructing water resources in Eastern Wielkopolska and incorporating ZE PAK S.A.'s post-mining sites to the existing hydrographic network, which will contribute to improve water relations in the region and provide a new function (retention and anti-flood) for created post-mining reservoirs;
- assessing the potential nuclear power plant site in Pątnów;
- using post-mining areas for producing energy from renewable sources.

The implementation of the presented objectives is to bring benefits for the widest possible group of stakeholders, with particular focus on water and energy security of Poland. The actions taken fall in line with the objectives and recommendations in terms of limiting the adverse environmental impact, development of alternative fuels and energy efficiency improvement, set out in documents at national and EU levels.

Conclusion of a contract by PAK – PCE Polski Autobus Wodorowy sp. z o.o. of a contract for the execution and supply of hydrogen-powered electric buses

On 3 February 2023, PAK – PCE Polski Autobus Wodorowy sp. z o.o. received information from the Rybnik City Council on the results of the public procurement procedure for the "Purchase of 20 hydrogen-powered electric buses", wherein the Ordering Party informed of selecting the bid by PAK – PCE Polski Autobus Wodorowy sp. z o.o. as the most advantageous in relation to the aforementioned task.

The contract for the construction and supply of hydrogen buses was concluded with the City of Rybnik on 28 March 2023.

According to the provisions of the contract, the remuneration for contract subject performance was set at PLN 66.1 million gross and will be settled for each bus separately after signing the final acceptance protocol - delivery of the bus.

The order completion date is set at 240 days from concluding the contract. The warranty of good performance pursuant to the contract will be granted for 73 months.

Reliable and timely performance of the contract subject is secured by liquidated damages.

Other contractual provisions do not significantly deviate from these traditionally used in such contracts.

PAK – PCE Stacje H2 sp. z o.o. concluding a co-financing contract in the form of a subsidy with the National Fund for Environmental Protection and Water Management

On 21 February 2023, PAK – PCE Stacje H2 sp. z o.o. concluded a contract for co-financing in the form of a subsidy with the National Fund for Environmental Protection and Water Management ("NFOŚiGW"), under which the company will receive a subsidy of PLN 20 million, to be allocated to build a network of publicly accessible hydrogen refuelling stations in five Polish cities. The subsidy was provided under the NFOŚiGW priority programme "Support for electric vehicle charging and hydrogen refuelling infrastructure", which aims to develop infrastructure reducing the number of polluting vehicles and thus improving air quality.

The stations are to be built by 30 June 2024. Their construction is to enable refuelling hydrogen-fuelled vehicles. Thus, hydrogen is becoming an alternative to traditional, emission-intensive fossil fuels used in transport. The planned total project implementation costs are PLN 57.4 MM.

Conclusion of an agreement and the establishment of a new joint company PGE PAK Energia Jądrowa - construction of a nuclear power plant in Konin/Pątnów in Wielkopolska

On 7 March 2023, the Company and PGE Polska Grupa Energetyczna S.A. with its seat in Lublin concluded a preliminary agreement on the establishment of a joint special-purpose company in the form of a joint-stock company with its seat in Konin, to commence direct cooperation with regards to the construction of a nuclear power plant based on the Korean APR1400 technology.

On 13 April 2023, as a follow-up to the concluded agreement, PGE and ZE PAK signed the articles of association of the PGE PAK Energia Jądrowa S.A. company. PGE and ZE PAK will hold 50% of the shares in PGE PAK Energia Jądrowa, which will allow to preserve and secure the State Treasury's interest in this project. The objective and task of the company will be to participate in the planned construction of the nuclear power plant in Konin/Pątnów in Wielkopolska. The power plant is treated as a joint venture between PGE PAK Energia Jądrowa S.A. and the Korean KHNP. The investment project will be implemented based on a safe and proven technology of ARP 1400 reactors.

The task of PGE PAK Energia Jądrowa is to develop three investment project elements, namely, the feasibility study, site and land survey, and an environmental impact assessment for the purposes of the planned nuclear power plant construction.

According to the assumptions, PGE PAK Energia Jądrowa S.A. will represent Poland at all project stages, including the implementation of site and environmental studies, funding acquisition and the development, jointly with the Korean side, of a detailed project schedule, as well as at subsequent stages of obtaining permits and administrative decisions.

Acquiring shares in Horset sp. z o.o.

Already after the end of the reporting period, i.e., on 25 January 2023, the Company acquired 100% of share in Horset sp. z o.o., a Ukrainian-law company with its seat in Kiev – the change has not yet been registered by the National Court Register.

Park Wiatrowy Pałczyn 1 sp. z o.o. concluding a loan agreement with BANK POLSKA KASA OPIEKI S.A.

On 20 April 2023, Park Wiatrowy Pałczyn 1 sp. z o.o. (Pałczyn 1) concluded a loan agreement with BANK POLSKA KASA OPIEKI, pursuant to which the bank granted Pałczyn 1 an investment loan of up to PLN 95.5 MM and a VAT loan of up to PLN 5 MM. Loans are intended to finance and refinance the construction costs of a wind farm with a combined installed capacity of 9.6 MW, located in Miłosław commune in the Wielkopolskie province.

Pursuant to the agreement, Park Wiatrowy Pałczyn 1, as the borrower, undertook to make an own fund contribution in the amount of at least PLN 23.9 MM. The final repayment date for the investment loan is 20 December 2038, while the final repayment date for the VAT loan is 31 December 2023. The interest rate applicable to each loan use is equal to the annual interest rate, which is the total of the margin set out in the agreement and an appropriate WIBOR rate. The bank shall be entitled to commissions on behalf of granting the loans, the amount of which has been set at a level not different than market rates.

Other obligations of the debtor under the agreement do not differ from these commonly applied within similar loan transactions, in terms of maintaining selected financial indices at a level specified by the contract in particular.

The contract entails establishing securities in the form of a financial and registered pledge on shares in Park Wiatrowy Pałczyn 1 Sp. z o.o., a financial and registered pledge on bank accounts and a power of attorney to each of the said bank accounts, a registered pledge on company's assets, assignment under contracts constituting material project documentation, assignments under insurance policies and declarations by Park Wiatrowy Pałczyn 1 Sp. z o.o. on submission to the writ of execution pursuant to Art. 777 (1) cl. 5 and 6 of the Code of Civil Procedure.

Acquisition of a wind project and conclusion of a loan agreement by PAK-Polska Czysta Energia sp. z o.o.

On 14 April 2023, PAK-Polska Czysta Energia sp. z o.o. purchased from Polish Wind Holdings B.V., a company established and operating under the laws of the Kingdom of the Netherlands, 100% shares in the share capital of the Eviva Lębork sp. z o.o. design firm with its seat in Słupsk.

PAK – PCE acquired project company shares from the seller as part of an investment project that involves executing an RES system within the Główczyce, Damnica and Potęgowo communes, Słupsk district, Pomorskie province.

The investment project involves the construction of a wind farm complex with an effective capacity of 88 MW. Wind conditions in this region enable estimating annual farm output at approx. 240 GWh. The project has already been granted a set of administrative permits that enable commencing construction work on the wind turbines. The planned investment project commissioning date is Q4 2025. The total estimated investment expenditure associated with the acquisition and implementation of the investment project will amount to PLN 920 MM.

In the light of acquiring the project company, PAK – PCE concluded a loan agreement with Cyfrowy Polsat S.A., with its seat in Warsaw. Under the agreement, PAK – PCE was granted a loan of up to PLN 99 MM, to be paid in Polish zloty or Euros, on terms specified therein. Pursuant to the provisions of the agreement, the loan repayment date has been set at 31 December 2025. The financial terms and other terms of the Agreement do not deviate from market terms.

Konin, 27 April 2023

SIGNATURES:

Piotr Woźny
President of the Management Board: ………………………………………………………..

Zygmunt Artwik
Vice-President of the Management Board ....

Maciej Nietopiel
Vice-President of the Management Board ....

Andrzej Janiszowski
Vice-President of the Management Board ....

Katarzyna Sobierajska
Vice-President of the Management Board …………………………………………………………

Aneta Desecka
Chief Accountant ....