

ZMIENIAMY SIĘ  
DLA WAS



**ZEPAK**  
Energia dla Ciebie

**ZE PAK SA CAPITAL GROUP**

**OTHER INFORMATION TO EXTENDED CONSOLIDATED REPORT  
FOR 1ST QUARTER OF 2023**

*(This is a translation of the document issued originally in Polish language.  
The Polish original should be referred to in matters of interpretation.)*



MAY 30, 2023

## TABLE OF CONTENTS

1.	SELECTED FINANCIAL DATA .....	3
2.	DESCRIPTION OF THE GROUP .....	5
2.1.	basic information .....	5
2.2.	Structure .....	7
2.3.	Description of the changes in the Group's structure.....	9
2.4.	Composition of the Management Board.....	9
3.	SIGNIFICANT EVENTS AFFECTING THE OPERATIONS OF THE COMPANY AND THE GROUP .....	10
3.1.	Significant achievements and failures during the reporting period .....	10
3.2.	Other significant events of the reporting period, events after the balance sheet date and other information which are relevant for the assessment of the human resources, property, financial situation and ability of the Company and the Group to fulfil its obligations .....	18
4.	INFORMATION ON SIGNIFICANT PROCEEDINGS PENDING BEFORE A COURT, A BODY COMPETENT FOR ARBITRATION PROCEEDINGS OR A PUBLIC ADMINISTRATION BODY RELATED TO ZE PAK SA OR SUBSIDIARIES CONSOLIDATED UNDER THE GROUP .....	21
5.	INFORMATION REGARDING THE SHAREHOLDING STRUCTURE .....	22
5.1.	Shareholders holding, either directly or indirectly through subsidiaries, at least 5% of the total number of votes.....	22
5.2.	List of the shareholding structure of the management and supervising personnel .....	23
6.	OPINION OF THE MANAGEMENT BOARD ON THE POSSIBILITY OF EXECUTION OF FINANCIAL FORECASTS PUBLISHED EARLIER .....	23
7.	INFORMATION REGARDING THE PAID OR DECLARED DIVIDENDS.....	23
8.	INFORMATION ON THE CONCLUSION BY ZE PAK SA OR ENTITIES CONSOLIDATED UNDER THE GROUP OF SIGNIFICANT TRANSACTIONS WITH ENTITIES AFFILIATED PURSUANT TO CONDITIONS OTHER THAN MARKET CONDITIONS.....	23
9.	INFORMATION ON GRANTING BY ZE PAK SA OR ENTITIES CONSOLIDATED UNDER THE GROUP OF SIGNIFICANT GUARANTEES, SURETIES, CREDITS OR LOANS .....	24
10.	INFORMATION CONCERNING THE ISSUE, REDEMPTION, AND REPAYMENT OF NON-EQUITY AND CAPITAL SECURITIES .....	24
11.	FACTORS WHICH, IN THE MANAGEMENT BOARD'S OPINION, WILL AFFECT THE COMPANY'S RESULTS IN THE PERSPECTIVE OF AT LEAST ONE QUARTER.....	24
11.1.	Macro-economic trends in the Polish economy and the demand for electricity .....	24
11.2.	Regulatory environment .....	26
11.3.	Electricity prices.....	27
11.4.	Prices and supply of certificates of origin .....	29
11.5.	Extraction and supply costs of coal and other fuel .....	30
11.6.	CO <sub>2</sub> emission allowances costs .....	30
11.7.	Compensation for the stranded costs related to the termination of the „long-term Contract” („PPA”) for unit 9 in Elektrownia Pątnów (former Elektrownia Pątnów II sp. z o.o.).....	31
11.8.	Seasonality and meteorological conditions.....	31
11.9.	Investment expenses.....	32
11.10.	EUR/PLN exchange rate, the level of interest rates .....	32

## 1. SELECTED FINANCIAL DATA

<i>Selected consolidated financial data</i>	<i>Zloty thousand</i>	<i>Zloty thousand</i>	<i>Euro thousand</i>	<i>Euro thousand</i>
	<i>3 months 2023</i>	<i>3 months 2022</i>	<i>3 months 2023</i>	<i>3 months 2022</i>
	<i>period</i>	<i>period</i>	<i>period</i>	<i>period</i>
	<i>from 01.01.2023</i>	<i>from 01.01.2022</i>	<i>from 01.01.2023</i>	<i>from 01.01.2022</i>
	<i>to 31.03.2023</i>	<i>to 31.03.2022</i>	<i>to 31.03.2023</i>	<i>to 31.03.2022</i>
Sales revenue	1 151 605	996 286	244 996	214 384
Operating profit/loss	(391 322)	118 230	(83 251)	25 441
Profit/loss before tax	(413 645)	126 635	(88 000)	27 250
Net profit/loss for the period	(374 170)	103 482	(79 602)	22 268
Net profit attributable to equity holders of the parent	(375 797)	103 670	(79 948)	22 308
Total comprehensive income	(373 670)	103 333	(79 496)	22 236
Net cash flow from operating activities	(514 923)	(278 851)	(109 546)	(60 004)
Net cash flow from investing activities	(183 957)	(55 418)	(39 136)	(11 925)
Net cash flow from financing activities	72 347	149 547	15 391	32 180
Net increase / (decrease) in cash and cash equivalents	(626 533)	(184 722)	(133 291)	(39 749)
Net profit per share (in zloty/euro per share)	(7.39)	2.04	(1.57)	0.44
Weighted average number of shares	50 823 547	50 823 547	50 823 547	50 823 547
	<i>As at</i>	<i>As at</i>	<i>As at</i>	<i>As at</i>
	<i>31.03.2023</i>	<i>31.12.2022</i>	<i>31.03.2023</i>	<i>31.12.2022</i>
Total assets	5 082 639	4 539 455	1 087 079	967 921
Fixed assets	2 207 595	1 978 515	472 162	421 867
Current assets	2 875 044	2 560 940	614 917	546 054
Total equity	840 831	1 214 499	179 838	258 961
Share capital	101 647	101 647	21 740	21 674
Share capital attributable to equity holders of the parent	348 400	723 696	74 516	154 309
Total liabilities	4 241 808	3 324 956	907 242	708 961
Long-term liabilities	1 718 134	1 199 141	367 476	255 686
Short-term liabilities	2 523 674	2 125 815	539 766	453 275
Book value per share (in zloty/euro per share)	16.54	23.90	3.54	5.10
Weighted average number of shares	50 823 547	50 823 547	50 823 547	50 823 547

ZE PAK SA CAPITAL GROUP  
OTHER INFORMATION TO EXTENDED CONSOLIDATED REPORT FOR 1<sup>ST</sup> QUARTER OF 2023

<i>Selected financial data of ZE PAK SA</i>	<i>Zloty thousand</i>	<i>Zloty thousand</i>	<i>Euro thousand</i>	<i>Euro thousand</i>
	<i>3 months 2023 period from 01.01.2023 to 31.03.2023</i>	<i>3 months 2022 period from 01.01.2022 to 31.03.2022</i>	<i>3 months 2023 period from 01.01.2023 to 31.03.2023</i>	<i>3 months 2022 period from 01.01.2022 to 31.03.2022</i>
Net revenues from sales of products, goods and materials	739 183	714 053	157 256	153 652
Operating profit/loss	87 957	137 573	18 712	29 603
Profit/loss before tax	95 709	149 727	20 361	32 219
Net profit/loss for the period	88 036	126 731	18 729	27 270
Net cash flow from operating activities	(675 907)	(212 433)	(143 795)	(45 712)
Net cash flow from investing activities	50 550	20 808	10 754	4 478
Net cash flow from financing activities	(211)	15 321	(45)	3 297
Net cash flow together	(625 568)	(176 304)	(133 085)	(37 938)
Net profit per share (in zloty/euro per share)	1.73	2.49	0.37	0.54
Weighted average number of shares	50 823 547	50 823 547	50 823 547	50 823 547
	<i>As at 31.03.2023</i>	<i>As at 31.12.2022</i>	<i>As at 31.03.2023</i>	<i>As at 31.12.2022</i>
Total assets	3 082 138	2 784 643	659 210	593 753
Fixed assets	1 619 746	779 112	346 433	166 126
Current assets	1 462 392	2 005 531	312 778	427 628
Equity	1 496 457	1 408 421	320 064	300 309
Share capital	101 647	101 647	21 740	21 674
Liabilities and provisions for liabilities	1 585 681	1 376 222	339 147	293 444
Long-term liabilities	129	129	28	28
Short-term liabilities	143 142	106 282	30 615	22 662
Book value per share (in zloty/euro per share)	29.44	27.71	6.30	5.91
Weighted average number of shares	50 823 547	50 823 547	50 823 547	50 823 547

*Above financial data has been converted into EUR according to the following exchange rates:*

- *particular items of statement of comprehensive income (Profit & loss account) and statement of cash flows (Cash flow) – according to the exchange rate constituting an arithmetic average of average exchange rates set out by the National Bank of Poland at the end of every month of the reporting period starting from January 1, 2023 to March 31, 2023, which is 4.7005 EUR/PLN and from January 1, 2022 to March 31, 2022, which is 4.6472 EUR/PLN;*
- *particular items of the Statement of financial position (Balance sheet) according to average EUR/PLN exchange rate published by the National Bank of Poland as of March 31, 2023, i.e. 4.6755 EUR/PLN and as of December 30, 2022, i.e. 4.6899 EUR/PLN.*

## 2. DESCRIPTION OF THE GROUP

### 2.1. basic information

As of March 31, 2023, ZE PAK SA Capital Group (hereinafter referred to as the „Group”, „Capital Group”, Ze PAK SA Group”) is composed of a dominant entity ZE PAK SA, 35 subsidiaries and 8 jointly controlled companies, i.e. PAK Kopalnia Węgla Brunatnego Konin SA (hereinafter referred to as „PAK KWB Konin SA”), PAK – Polska Czysta Energia sp. z o.o. (hereinafter referred to as „PAK – PCE sp. z o.o.”), PAK – PCE Fotowoltaika sp. z o.o., PAK – PCE Wiatr sp. z o.o., PAK – PCE Biopaliwa i Wodór sp. z o.o. (hereinafter referred to as BiW sp. z o.o.), PAK – PCE Polski Autobus Wodorowy sp. z o.o., PAK – PCE Stacje H2 sp. z o.o. (formerly PAK – PCE Biogaz sp. z o.o.), PG Hydrogen sp. z o.o., Exion Hydrogen Polskie Elektrolizery sp. z o.o., PAK CCGT sp. z o.o., Farma Wiatrowa Kazimierz Biskupi 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., MESE sp. z o.o., Park Wiatrowy Pałczyn 1 sp. z o.o., Przedsiębiorstwo Remontowe PAK Serwis sp. z o.o. (hereinafter referred to as „PAK Serwis” sp. z o.o.), PAK – Volt SA, PAK Górnictwo sp. z o.o., Exion Hydrogen Belgium BV, PAK Pałnów sp. z o.o., 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., Ørsted Polska OF SPV 5 sp. z o.o., 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., Ørsted Polska OF SPV 9 sp. z o.o. (formerly Mawzorino Investments sp. s o.o.), Ørsted Polska OF SPV 10 sp. z o.o., PAK ATOM SA, PAK – PCE FW Okonek sp. z o.o., PAK – PCE FW Jastrowie sp. z o.o., Farma Wiatrowa Przyrów sp. z o.o., Great Wind sp. z o.o., Eviva Lębork sp. z o.o., Elektrownie Wiatrowe Dobra sp. z o.o. and Aquakon sp. z o.o. in liquidation. A detailed list is shown in Table 1.

The companies of the biggest importance for the Group due to their current scale of activity are: ZE PAK SA, dealing with production of electricity and heat and PAK KWB Konin SA, dealing with the lignite mining. The assets concentrated around PAK PCE sp. z o.o. which concentrates activities related to the generation of electricity from renewable sources, as well as production and use of green hydrogen, become more and more important. In addition to companies from the aforementioned main areas of activity, the Group also includes other companies that deal, among others, with the execution of construction and assembly works, maintenance works, service, production and trade activities aimed at satisfying the needs and comprehensive industry service.

The Group's generation assets include two power plants located in central Poland, in the Greater Poland Voivodship. Pałnów Power Plant produces energy using lignite in 4 power units with a total output capacity of 1,118 MW. Konin power plant, a former coal-fired power plant, uses today two biomass blocks with a total capacity of 105MW (50 MW and 55 MW) and produces electricity and heat from biomass. The Group also includes a photovoltaic farm with an installed capacity of 70 MWp, located in Brudzew commune.

The Group's mining assets are concentrated in PAK KWB Konin SA, which operates Józwin and Tomisławice open-pit mines.

The Group intends to conduct lignite mining and production activities no longer than until the end of 2024.

The vast majority of the Group's sales revenue is derived from sale of electricity. The Group also obtains revenues related to the Capacity Market mechanism as a result of winning capacity market auctions (primary market) and by taking over capacity obligations from other entities (secondary market). This is supplemented by revenues from sale of heat, contracts for construction repair services and certificates of energy origin. An additional source of sales revenues, depending on the level of production costs, energy prices on the market and production volume, are revenues from the termination of long-term contracts (Power Purchase Agreements) for the sale of electricity. The Group, having lignite mines in its structure, provides Pałnów power plant with an access to uninterrupted lignite supplies for own production installations located in the immediate vicinity of the mines. The vertically integrated Group enables optimization of coal inventories and supplies by coordinating coal mining with the demand for this fuel. Coal supplies are supplemented with contracts with external suppliers. The demand for biomass is covered on the basis of contracts concluded with external suppliers.

For many years, the Group operated on the basis of a business profile focusing on the production of electricity from lignite mined in nearby open-pit mines. However, this business model has limited chances of development in the future, given the pressure on high-carbon energy producers. Increasingly higher costs of CO<sub>2</sub> emissions and the conditions related to the emission of other substances (NO<sub>x</sub>, SO<sub>2</sub>, dust, mercury, etc.) make the Group decide to focus its future activities in the area of low-emission and emission neutral energy sources as well as the production and use of green hydrogen.

Around PAK - PCE sp. z o.o. the structure of special purpose vehicles, which are to be responsible for activities in particular renewable energy technologies, is successively being built. Thanks to the planned sale transaction to Cyfrowy Polsat Group of the majority stake in the structure of PAK - PCE sp. z o.o., it is planned to acquire a strong capital partner that will be able to guarantee the implementation of a wide range of prospective investment projects in the area of renewable energy sources and the production and use of “green” Hydrogen.

Special purpose vehicle PAK CCGT sp. z o.o. is to be responsible for the preparation and implementation of the gas unit construction project at the former Adamów coal-fired power plant. The project won the market capacity auction and thus received support in the form of a 17-year power contract.

As part of its transformation activities, the Group is also active in the area of offshore wind farm construction projects. It is also planned to use the assets at Pątnów Power Plant for the potential construction of a nuclear power plant. Both of the above projects are developed in cooperation with external partners.

Apart from the Capital Group, the Company owns shares in Zakłady Pomiarowo-Badawcze Energetyki Energopomiar sp. z o.o. with headquarters in Gliwice and providing measurement, research and consultancy services regarding, among others power engineering. The Company holds 1 share in the aforementioned company with the nominal value of PLN 159 500.07 which constitutes 2.96% of the total capital.

In addition, the Company also holds shares in Huta Łaziska SA in arrangement bankruptcy, based in Łaziska Górne, specializing in the production of ferroalloys. These are B series shares - 3,277,025 with a nominal value of PLN 1.00 each and C series shares - 4,307,822 shares with a nominal value of PLN 1.00 each, which in total constitutes 11.19% of the share capital.

The main shareholder makes the Group affiliated with other entities, in which Zygmunt Solorz holds substantial direct or indirect share.

The structure of ZE PAK SA Group as at March 31, 2023 is shown in Figure 1.

## 2.2. Structure

Figure 1: Structure of the Group as of March 31, 2023

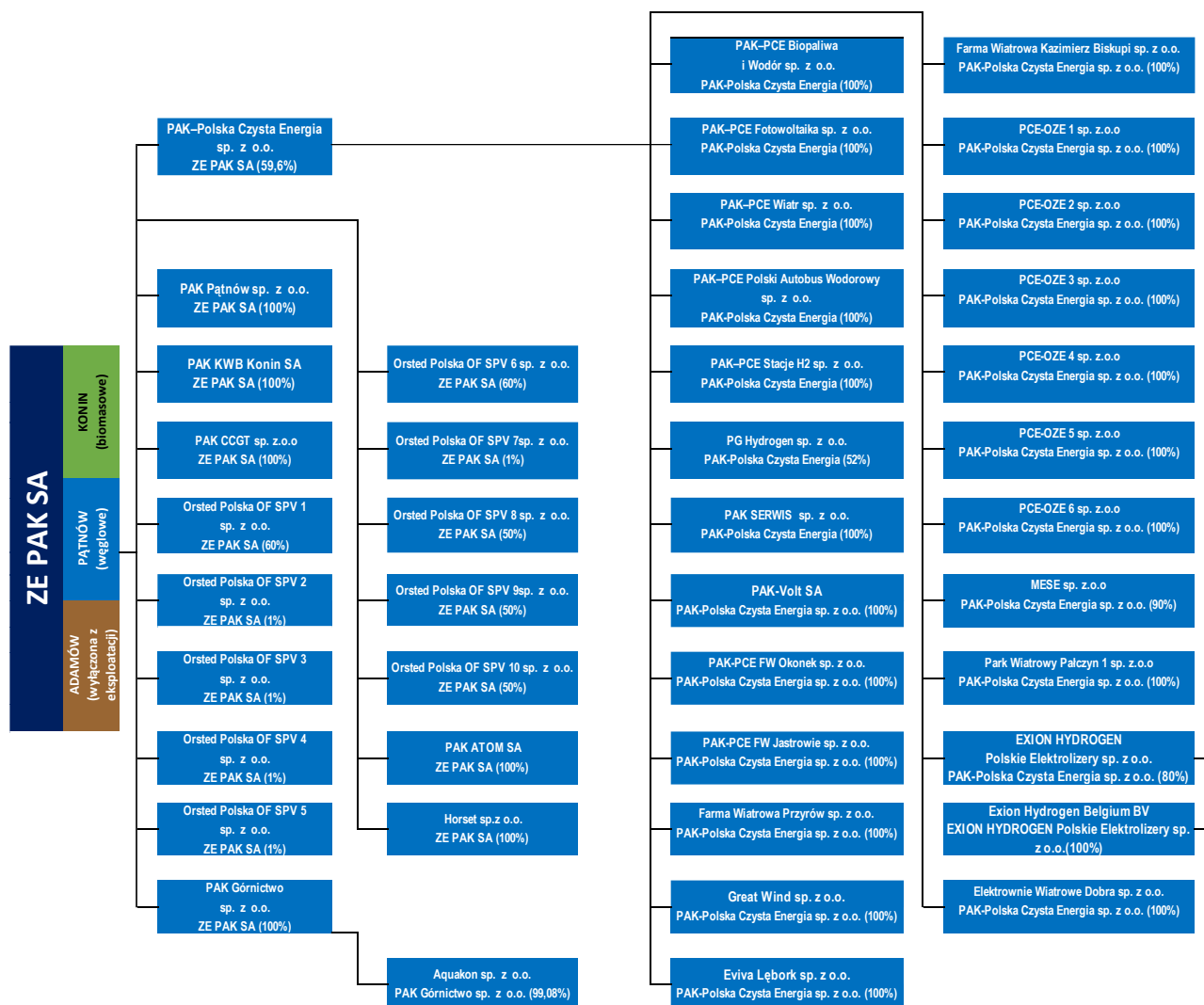


Table 1: Description of the Group's companies (excluding ZE PAK SA)

Entity	Registered office	Scope of operations	% Group's share in the capital	
			As at 31 March 2023	As at 31 December 2022
<b>Subsidiaries</b>				
„PAK-Polska Czysta Energia” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Activities of central companies, excluding financial holding companies	59.59%	59.59%
„PAK Kopalnia Węgla Brunatnego Konin” SA	62-540 Kleczew ul. 600-lecia 9	Lignite mining	100.00%	100.00%
„PAK Górnictwo” sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Repair and maintenance of machines	100.00%	100.00%
Przedsiębiorstwo Remontowe „PAK SERWIS” sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Construction and repair service	59.59%*	59.59%*
„PAK – Volt” SA	04-028 Warszawa Al. Stanów Zjednoczonych 61	Trade of electricity	59.59%*	59.59%*

ZE PAK SA CAPITAL GROUP  
OTHER INFORMATION TO EXTENDED CONSOLIDATED REPORT FOR 1<sup>ST</sup> QUARTER OF 2023

„PAK–PCE Polski Autobus Wodorowy” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Production of buses	59.59%*	59.59%*
„PAK–PCE Fotowoltaika” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PAK–PCE Stacje H2” sp. z o.o. (former „PAK – PCE Biogaz” sp. z o.o.)	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PAK–PCE Biopaliwa i Wodór” sp. z o.o.	62-510 Konin ul. Przemysłowa 158	Generation of electricity	59.59%*	59.59%*
„PAK–PCE Wiatr” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PG Hydrogen” sp. z o.o.	02-673 Warszawa ul. Konstruktorska 4	Manufacture of engines and turbines, except aircraft, car and motorcycle engines	52.00%*	52.00%*
„Exion Hydrogen Polskie Elektrolizery” sp. z o.o.	80-701 Gdańsk ul. Ku Ujściu 19	Design and production of electrolyzers	47.67%*	47.67%*
„Exion Hydrogen Belgium” BV	Slachthuisstraat 120 Bus 12 2300 Turnhout	Design and production of electrolyzers	47.67%*	47.67%*
„Farma Wiatrowa Kazimierz Biskupi” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Design and production of wind farms	59.59%*	59.59%*
„PCE–OZE 1” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PCE–OZE 2” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PCE–OZE 3” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PCE–OZE 4” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PCE–OZE 5” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PCE–OZE 6” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	59.59%*	59.59%*
„PAK CCGT” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	100.00%	100.00%
„MESE” sp. z o.o.	04-028 Warszawa Al. Stanów Zjednoczonych 61A	Generation of electricity	53.63%*	53.63%*
„Park Wiatrowy Pałczyn 1” sp. z o.o.**	70-479 Szczecin Al. Wojska Polskiego 68	Generation of electricity – wind power engineering	59.59%*	59.59%*
„PAK Pątnów” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity	100.00%	100.00%
„Ørsted Polska OF SPV 1” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	60.00%	60.00%
„Ørsted Polska OF SPV 6” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	60.00%	60.00%
„PAK ATOM” SA	62-510 Konin ul. Kazimierska 45	Generation of electricity	100.00%	100.00%
„PAK–PCE FW Okonek” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity – wind power engineering	59.59%*	59.59%*
„PAK–PCE FW Jastrowie” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity – wind power engineering	59.59%*	59.59%*
„Farma Wiatrowa Przyrów” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity – wind power engineering	59.59%*	59.59%*
„Great Wind” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity – wind power engineering	59.59%*	59.59%*



ZE PAK SA CAPITAL GROUP  
OTHER INFORMATION TO EXTENDED CONSOLIDATED REPORT FOR 1<sup>ST</sup> QUARTER OF 2023

„Eviva Łęborg” sp. z o.o.	62-510 Konin ul. Kazimierska 45	Generation of electricity – wind power engineering	59.59%*	59.59%*
„Elektrownie Wiatrowe Dobra” sp. z o.o.	91-862 Łódź ul. Warszawska 70A	Generation of electricity – wind power engineering	59.59%*	59.59%*
„Horset” sp. z o.o.	03057 Kijów/Ukraina ul. Smoleńska 31/33		100.00%	-
„Aquakon” sp. z o.o. in liquidation	62-610 Sompolno Police	In liquidation	99.08%*	99.08%*

**Jointly controlled companies**

„Ørsted Polska OF SPV 2” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	1,00%	1,00%
„Ørsted Polska OF SPV 3” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	1,00%	1,00%
„Ørsted Polska OF SPV 4” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	1,00%	1,00%
„Ørsted Polska OF SPV 5” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	1,00%	1,00%
„Ørsted Polska OF SPV 7” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	1,00%	1,00%
„Ørsted Polska OF SPV 8” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	50,00%	50,00%
„Ørsted Polska OF SPV 9” sp. z o.o. (former „Mawzorino Investments” sp. z o.o.)	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	50,00%	50,00%
„Ørsted Polska OF SPV 10” sp. z o.o.	00-801 Warszawa ul. Chmielna 73	Generation of electricity – offshore wind engineering	50,00%	50,00%

\* Entities with partial or total indirect share via other companies from ZE PAK Group.

\*\* On November 28, 2022, two companies merged: "Park Wiatrowy Palczyn 1" sp. z o.o. (acquiring company) and "Park Wiatrowy Palczyn 2" sp. z o.o. (acquired company).

As at 31, 2023, the share in the total number of votes held by the Group in subsidiaries is equal to the Group's share in the capital of these entities.

## 2.3. Description of the changes in the Group's structure

In the first quarter of 2023, the following changes took place in the Group's structure:

- 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.,
- On February 28, 2023, two companies merged: „PAK KWB Konin” SA (acquiring company) and „PAK KWB Adamów” SA (acquired company).

Already after the end of the reporting period, on 13 April 2023, PGE and ZE PAK signed the articles of association of PGE PAK Energia Jądrowa SA. The company's objective and task will be to participate in the construction of a nuclear plant in Konin/Pątnów in Wielkopolska.

On 14 April 2023, PAK – PCE Czysta Energia sp. z o.o. acquired 100% of the shares in the share capital of Eviva Drzezewo sp. z o.o., the task of which involves the construction and operation of a wind farm.

## 2.4. Composition of the Management Board

There have been no changes in the composition of the Management Board since the beginning of 2023. Both in the first quarter and as at the date of publication of this report, the composition of the Company's Management Board is as follows:

- 1) Piotr Woźny – President of the Management Board,
- 2) Zygmunt Artwik – Vice President of the Management Board,
- 3) Maciej Nietopiel – Vice President of the Management Board,
- 4) Andrzej Janiszowski – Vice President of the Management Board,
- 5) Katarzyna Sobierajska – Vice President of the management Board.

### **3. SIGNIFICANT EVENTS AFFECTING THE OPERATIONS OF THE COMPANY AND THE GROUP**

#### **3.1. Significant achievements and failures during the reporting period**

##### **Brief description of the achieved financial results**

In the first quarter of 2023, total sales revenue amounted to PLN 1,151,605 thousand and, compared to the first quarter of 2022, increased by PLN 155,319 thousand, i.e. by 15.59%.

The increase in total sales revenues in the first quarter of 2023 was mainly influenced by the increase in revenues from the sale of electricity due to a 107.50% higher price. At the same time, a decrease in the total sales volume by 45.57% was recorded, both from the sale of own and purchased energy. The lower amount of coal available for extraction in the mines supplying the Company contributed to the decrease in production. It should be noted that while net production based on coal decreased by 59.76%, net production of RES energy increased by 87.50%, mainly due to the operation of two biomass units at Konin power plant. The net production volumes of the Group's individual power plants are presented in Chart 3.

In the first quarter of 2023, revenues from the capacity market amounted to PLN 34,650 thousand and decreased by PLN 8,942 thousand, i.e. 20.51%, compared to the corresponding period of the previous year. Lower revenues are due to lower revenues realized within the secondary market.

In the first quarter of 2023, compared to the first quarter of 2022, revenues from the sale of property rights from certificates of origin for energy increased by PLN 3,045 thousand, i.e. by 14.90%. The higher volume of their production is responsible for the increase in revenues.

In the first quarter of 2023, revenues from LTC termination (termination of long-term power and electricity sales agreement) increased by PLN 13,934 thousand, i.e. 78.21%, as a result of achieving a lower margin on production from unit 9.

Revenues from the sale of heat in the first quarter of 2023 amounted to PLN 36,839 thousand and were higher than those obtained in the first quarter of 2022 by PLN 18,376 thousand, i.e. 99.53%. The increase in revenues was driven by a higher price for heat with a slightly lower sales volume.

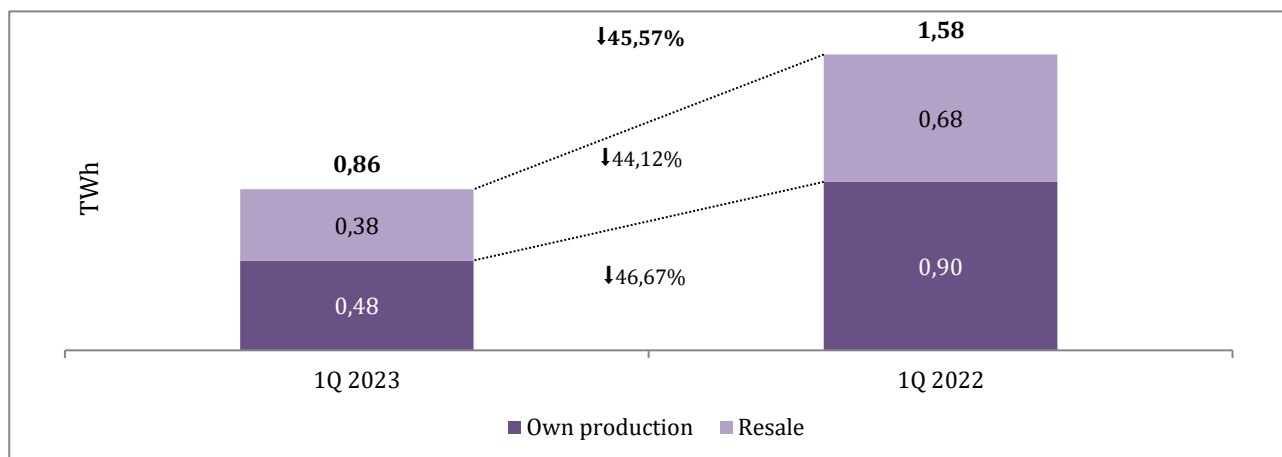
Revenue from construction contracts in the first quarter of 2023 compared to the revenue earned in the corresponding period of the previous year increased by PLN 14,917 thousand, i.e. by 331.71%. The increase in revenues in the analysed period was related to the implementation of projects with higher material and financial scopes.

Cost of sales in the first quarter of 2023 amounted to PLN 1,190,663 thousand and compared to the first quarter of 2022, it increased by PLN 332,065 thousand, i.e. by 38.68%. The increase in prime cost was mainly due to an increase in the provision for future recultivation of exploited open pits, an increase in fuel costs and the cost of the fee for the price difference fund introduced as a result of a package of regulations protecting consumers against excessive increases in energy prices in 2023. The decrease in the cost of electricity was influenced by the reduction of CO2 emission costs as a result of the reduction of energy production and the lower value of electricity purchased for resale.

Other operating income in the first quarter of 2023 amounted to PLN 5,156 thousand and was PLN 17,087 thousand lower than in the same period last year. The decrease in revenues is due to the lack of revenues from the demolition and sale of scrap metal and other materials, as well as lower revenues from the sale of non-financial assets.

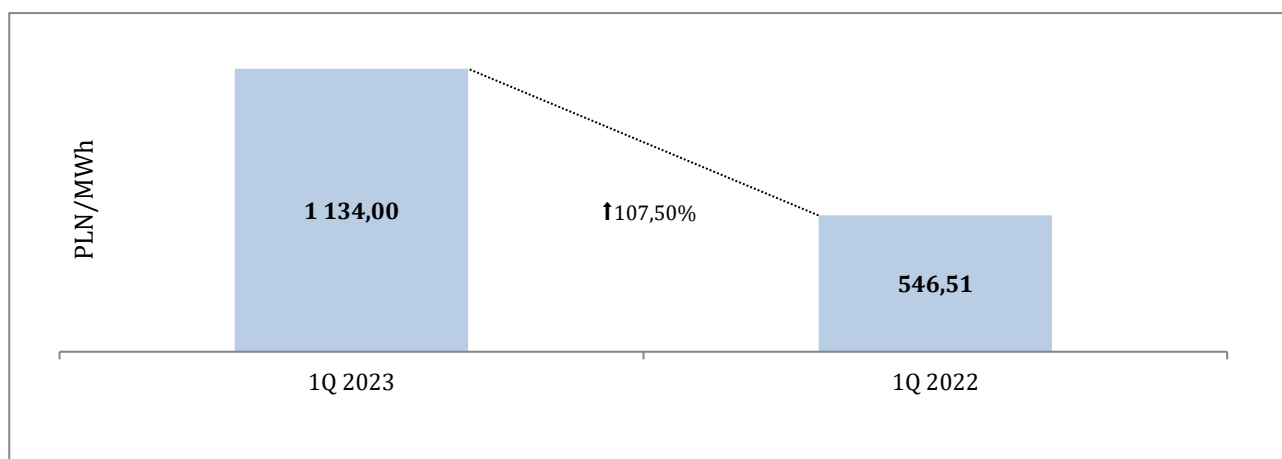
Selling costs in the first quarter of 2023 amounted to PLN 3,765 thousand and were PLN 351 thousand higher than those incurred in the corresponding period of the previous year as a result of costs related to the organization of the supply and sale of hydrogen.

Chart 1: Electricity sales



Source: Internal data

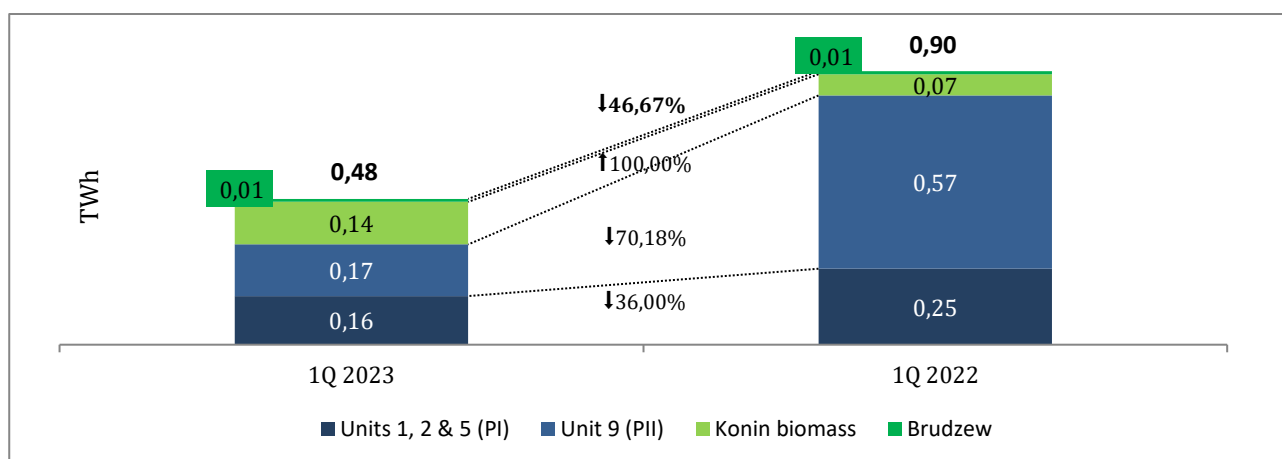
Chart 2: Average electricity prices\*



\* Average price, calculated as electricity sales revenues (own production, from resale and system service) divided by sales volume.

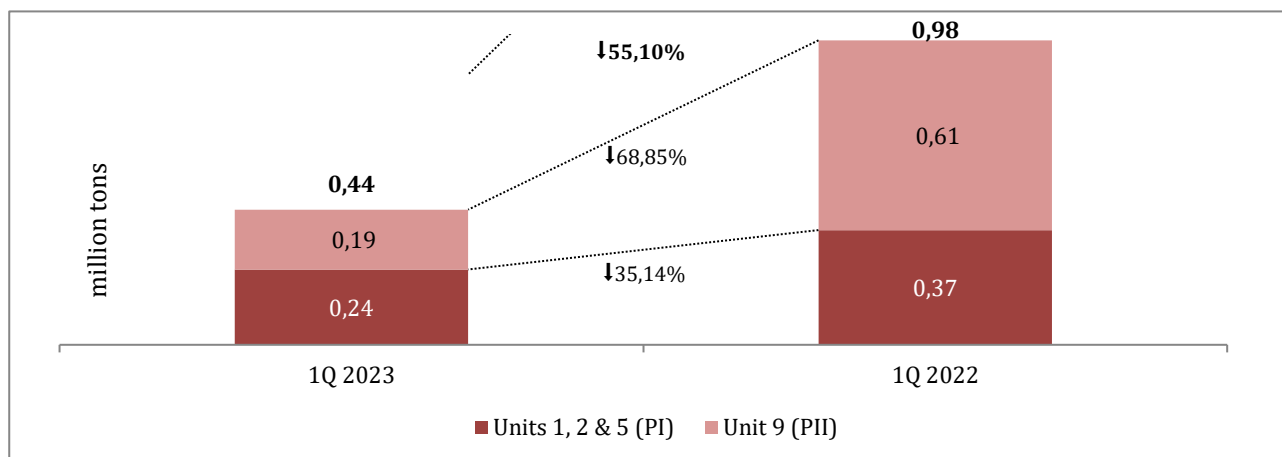
Source: Internal data

Chart 3: Net electricity production



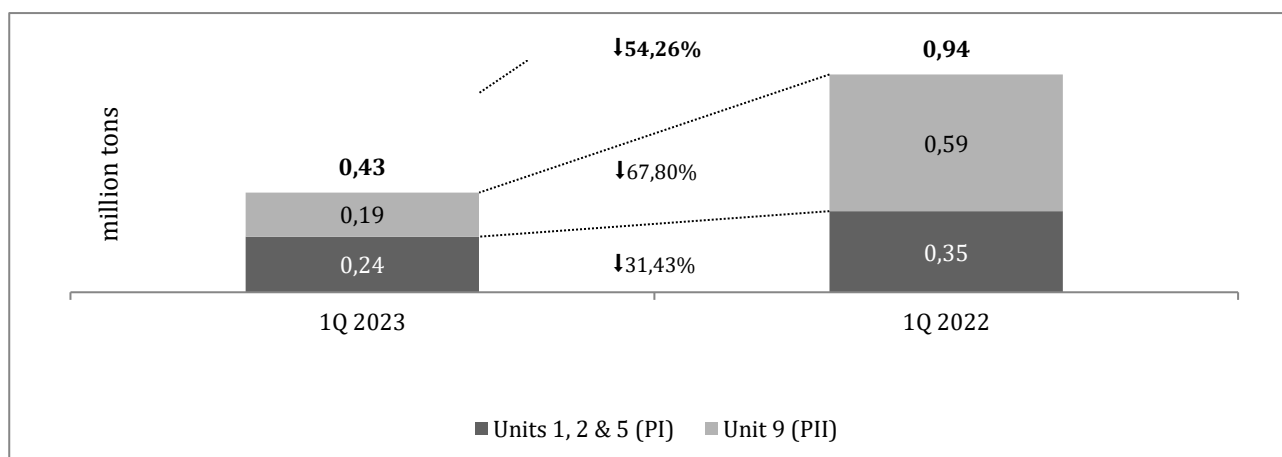
Source: Internal data

Chart 4: Lignite consumption



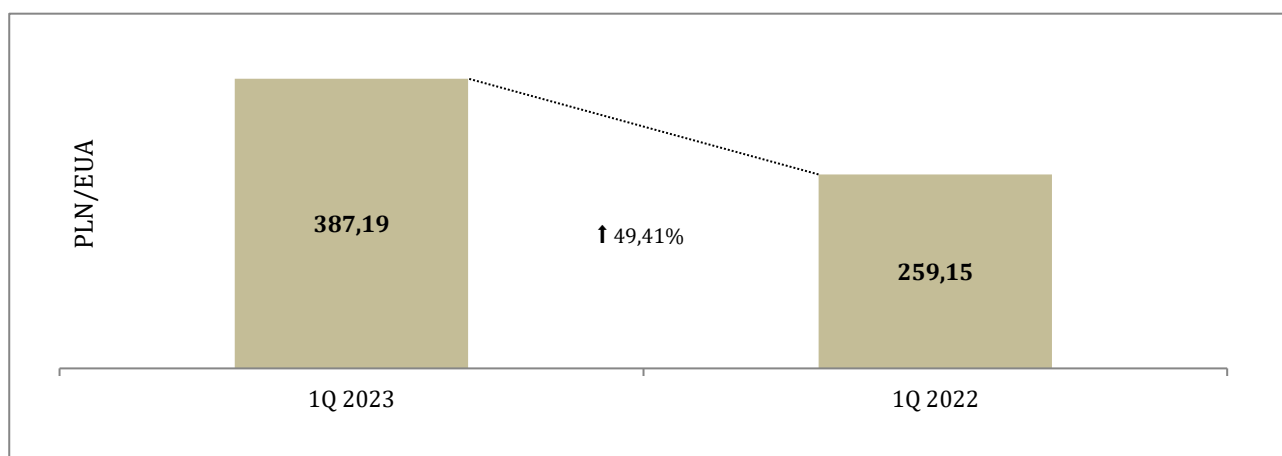
Source: Internal data

Chart 5: CO<sub>2</sub> Emission



Source: Internal data

Chart 6: Average prices of EUA purchase (European Union Allowances – CO<sub>2</sub> emission allowances)\*



\* Average price calculated as the cost of purchased EUA for a period concerned, divided by the volume of CO<sub>2</sub> emission.

Source: Internal data

Table 2: List of consolidated sale revenues

	Zloty thousand 3 months period ended 31 March 2023	Zloty thousand 3 months period ended 31 March 2022	Zloty thousand change	%
				dynamics
Revenues from the sale of goods, including:	1 096 390	959 149	137 241	14.31
– Revenues from the sale of electricity (own)	579 278	482 866	96 412	19.97
– Revenues from the sale of traded electricity	392 310	382 463	9 847	2.57
– Revenues from the Capacity Market	34 650	43 592	(8 942)	(20.51)
– Revenues from the sale of heat	36 839	18 463	18 376	99.53
– Revenues from contracts for construction services	19 414	4 497	14 917	331.71
– Other sale revenues	33 899	27 268	6 631	24.32
Excise	(15)	(1 114)	1 099	98.65
Other revenues, including:	55 230	38 251	16 979	44.39
– Property rights on Energy certificates of origin	23 481	20 436	3 045	14.90
– Compensation for termination of LTC	31 749	17 815	13 934	78.21
<b>Total sale revenues</b>	<b>1 151 605</b>	<b>996 286</b>	<b>155 319</b>	<b>15.59</b>

Table 3: Selected items of the consolidated income statement

	Zloty thousand 3 months period ended 31 March 2023	Zloty thousand 3 months period ended 31 March 2022	Zloty thousand change	%
				dynamics
<b>Sales revenues</b>	<b>1 151 605</b>	<b>996 286</b>	<b>155 319</b>	<b>15.59</b>
Prime cost	(1 190 663)	(858 598)	(332 065)	(38.68)
Gross sales profit (loss)	(39 058)	137 688	(176 746)	-
Other operating revenues	5 156	22 243	(17 087)	(76.82)
Cost of sales	(3 765)	(3 414)	(351)	(10.28)
General and administrative expenses	(53 665)	(29 832)	(23 833)	(79.89)
Other operating costs	(299 990)	(8 455)	(291 535)	(3 448.08)
<b>Profit (loss) from operating activities</b>	<b>(391 322)</b>	<b>118 230</b>	<b>(509 552)</b>	<b>-</b>
Financial revenues	11 856	16 733	(4 877)	(29.15)
Financial costs	(34 179)	(8 328)	(25 851)	(310.41)
<b>Gross profit (loss)</b>	<b>(413 645)</b>	<b>126 635</b>	<b>(540 280)</b>	<b>-</b>
Income tax (tax load)	39 475	(23 153)	62 628	-
<b>Net profit (loss)</b>	<b>(374 170)</b>	<b>103 482</b>	<b>(477 652)</b>	<b>-</b>
Net other comprehensive income	500	(149)	649	-
<b>Comprehensive income</b>	<b>(373 670)</b>	<b>103 333</b>	<b>(477 003)</b>	<b>-</b>
<b>EBITDA*</b>	<b>(377 990)</b>	<b>128 999</b>	<b>(506 989)</b>	<b>-</b>

\* The Company defines and calculates EBITDA as the profit/(loss) on operating activities (calculated as the net profit/(loss) for the accounting year corrected by the (i) income tax (tax load), (ii) financial revenues, as well as (iii) financial costs) corrected by the depreciation (shown in the income statement), as well as impairment write-downs against tangible assets, intangible assets, and mining assets.

Table 4: Consolidated costs by type

	<i>Zloty thousand</i> <i>3 months period</i> <i>ended</i> <i>31 March</i> <i>2023</i>	<i>Zloty thousand</i> <i>3 months period</i> <i>ended</i> <i>31 March</i> <i>2022</i>	<i>Zloty thousand</i> <i>change</i>	<i>%</i> <i>dynamics</i>
Depreciation	13 332	10 769	2 563	23.80
Impairment write-down on inventory	1 392	3 202	(1 810)	(56.53)
Consumption of materials	190 726	93 472	97 254	104.05
Outsourcing	32 712	21 087	11 625	55.13
Taxes and fees excluding excise tax	114 986	32 648	82 338	252.20
Costs of CO <sub>2</sub> emissions	167 706	243 393	(75 687)	(31.10)
Costs of employee benefits	102 516	93 176	9 340	10.02
Other costs by type	267 501	9 775	257 726	2 636.58
Value of sold goods and materials and sold traded electricity	367 470	391 657	(24 187)	(6.18)
<b>Total costs by type</b>	<b>1 258 341</b>	<b>899 179</b>	<b>359 162</b>	<b>39.94</b>

Other operating expenses in the first quarter of 2023 amounted to PLN 299,990 thousand and increased compared to the first quarter of the previous year by PLN 291,535 thousand, i.e. 3,448.08%. The increase is mainly due to the increase in the provision by PLN 285,569 thousand for the future recultivation of open pits where coal mining has ended.

In the first quarter of 2023, ZE PAK SA Group realized a loss on operating activities in the amount of PLN 391,322 thousand. In the corresponding period of the previous year, a profit of PLN 118,230 thousand was realized.

In the first quarter of 2023, the results achieved were negatively affected by the negative result on financial activities in the amount of PLN 22,323 thousand related to higher costs of servicing the growing debt and realized foreign exchange losses.

The net loss in the first quarter of 2023 amounted to PLN 374,170 thousand compared to the net profit of PLN 103,482 thousand realized in the first quarter of the previous year.

### **Description of factors and events, particularly of an unusual nature, that have a significant impact on assets, liabilities, equity, net profit or loss or cash flows**

In the first quarter of 2023, the recultivation provision was increased. The provision relates to the mining segment and is related to the exploitation of lignite open pits and the estimated cost of recultivation of areas covered by mining activities after their completion. The basis for increasing the provision is a report on the costs of recultivation and development of excavations and post-mining areas, prepared by an independent advisor. The preparation of the documentation was commissioned due to the approaching date of the complete termination of mining operations and the need to update the assumptions taken into account when estimating the costs of recultivation of the land in use. The costs to which the provision relates are incurred by PAK Kopalnia Węgla Brunatnego Konin SA (a subsidiary of the Company) after the completion of the exploitation of opencast areas (both those whose exploitation has already been completed and reclamation is in progress, and those currently exploited).

The created provision resulted in a decrease in the consolidated EBITDA of ZE PAK SA Group by PLN 553,008 thousand and the consolidated net result by PLN 508,424 thousand.

The establishment of the provision did not affect the standalone financial results of ZE PAK SA.

### **Implementation of investment projects**

In the first quarter of 2023, ZE PAK SA Group continued the construction of several wind farms, e.g. in the commune of Kazimierz Biskupi, in the commune of Miłosław, Człuchów and Przyrów. Work was also continued on the extension of the 70 MWp farm in the Brudzew commune by another 12 MWp. Work is also underway to build a hydrogen bus factory. In addition, investment activity focused on the launch of projects related to the production and distribution of hydrogen, as well as preparatory work for the implementation of further renewable energy sources and the necessary tasks to ensure the maintenance of current efficiency and more effective use of the mining and generation assets held.

### ***Key investments in the implementation phase***

#### ***Construction of a hydrogen production plant with associated infrastructure at Konin power plant***

On July 26, 2022, the final decision on the construction of a hydrogen plant with a capacity of 2 tons of hydrogen per day was obtained.

Hydrogen will be produced in the process of electrolysis of water using energy from a renewable source.

The first step towards building a hydrogen plant at the Konin Power Plant was the conclusion on April 9, 2020 of a contract with Hydrogenics Europe N.V. Belgium to purchase an electrolyser that will initially produce hydrogen in the amount of 1000 kg H<sub>2</sub> / day. At a later stage, thanks to the modular construction of the hydrogen plant and preparation of the infrastructure, it will be possible to increase production capacity, depending on the demand for hydrogen. The original delivery date of the electrolyser indicated in the contract was in mid-2021, however due to reasons attributable to the supplier, resulting from force majeure, it was extended. From the end of September to mid-October 2022, the electrolyser with the power supply system and the compressor room with the hydrogen locomotive refuelling system were delivered.

Hydrogen plant construction involved:

- completing the foundation work for the process and feeder containers and a compressor plant with trailer filling station,
- completing the installation of power supplies and piping between containers, installation of cooling systems at the compressor and electrolysis plant and the so-called low and high hydrogen systems,
- completing the installation of the prefabricated electrical building and its equipment,
- constructing trailer filling stations,
- conducting the so-called "cold commissioning" of the electrolyser - the next step is to involve the suppliers to conducting "hot commissioning" of the compressor plant and electrolyser.

By mid-2023, it is planned to launch an electrolysis plant and a compressor station. In order to start commercial production of hydrogen, it will be necessary to carry out the process of integrating the basic devices in the superior control system and to carry out the acceptance of UDT, TDT, PSP, Sanepid and PINB.

In order to enable the supply of hydrogen to the hydrogen refuelling station, a mobile hydrogen storage facility capable of storing 371 kg of hydrogen was delivered in 2021 in an agreement with Wystrach GmbH Weeze in the first stage. In December 2021, a contract was also concluded with Wystrach for the supply of two more hydrogen trucks capable of storing hydrogen in the amount of 1024 kg each – the delivery was completed. Then in May 2022 and September 2022 contracts were concluded for the delivery of another seven hydrogen cars with the completion date in 2023.

#### ***Construction of a wind farm in the Kazimierz Biskupi commune***

The shares in Farma Wiatrowa Kazimierz Biskupi (Kazimierz Biskupi Wind Farm) were purchased together with a wind farm project consisting of 7 turbines with a total capacity of 17.5 MW. The general contractor of the contract to build and commission the wind farm is PAK Serwis sp. z o.o. and the supplier of the seven wind turbines is Siemens Gamesa Renewables Energy. The construction site was handed over to the contractor on 22 February 2022. The construction of the Farma Wiatrowa Kazimierz Biskupi involved:

- Completing work associated with the construction of service yards, foundations, access roads and temporary infrastructure required for the delivery and installation of the wind turbines;
- Completing the construction of MV cable lines and the GPO (Main Take-off Point) substation;
- Obtaining a GPO substation permit to use;
- Completing the installation of all 7 wind turbines;
- Obtaining an EON permit enabling the energization of the wind park;

Initial commissioning of the wind turbines and testing of the wind farm is currently being conducted out by Siemens Gamesa. Simultaneously, decommissioning of the temporary infrastructure is also ongoing and work is being implemented to obtain a wind turbine permit to use and a licence to generate electricity from the Kazimierz Biskupi project.

#### ***Construction of a wind farm in the Miłosław commune***

Shares in Park Wiatrowy Pałczyn 1 and Park Wiatrowy Pałczyn 2 were purchased together with the Miłosław wind farm project consisting of 4 turbines with a total capacity of 9.6 MW. The general contractor of the contract for the construction and commissioning of the wind power plant is Vortex Energy Polska sp. z o.o. and the supplier of four wind turbines is Nordex.

Work associated with the construction of service yards, foundations, access roads and temporary infrastructure required for the delivery and installation of the wind turbines was completed. MV cable lines were laid. Nordex completed the installation of all 4 wind turbines.

Advanced work is currently ongoing to energise the wind park and commission the wind turbines. The next step is to obtain a permit to use and a licence to generate electricity from the Miłosław project.

#### ***Construction of a wind farm in the Przyrów commune***

Shares in Farma Wiatrowa Przyrów were purchased in Q1 2022. The project involves the construction of 14 Nordex N117 wind turbines with a target capacity of 50.4 MW.

The contract for the supply of the turbines was signed in June 2022, and the BoP (Balance of Plant) contractor was selected in December 2022. At the same time, the development of technical documentation related to obtaining the construction permit for the GPO FW Przyrów - GPZ Julianka HV line was commissioned. The process of securing missing legal titles to the land on which the temporary and permanent road elements will be located is currently ongoing.

Construction work commenced in February 2023, with access roads, manoeuvring areas, foundations and MV cable lines currently under construction. Work on the GPO is scheduled to start in May 2023.

#### ***Construction of a wind farm in the Człuchów commune***

Shares in Great Wind were purchased in June 2022 along with a wind farm project consisting of 33 turbines with a total capacity of 72.6 MW - PAK – PCE's largest investment project to date. The General Contractor of the wind farm is Onde, one of the leaders in RES industry projects in Poland, and the Danish company Vestas is the turbine supplier, while the entity responsible for acting as Contract Engineer is Neo Energy Group.

Construction work under the Głędowo (Człuchów) wind farm project started in August 2022. All foundations for the wind turbines have been completed. The final construction work related to access roads, wind turbine yards and MV cable lines are currently ongoing, while the construction of the GPO substation and MV lines is implemented simultaneously. The schedule assumes that the Głędowo (Człuchów) WF will be commissioned in mid-2024.

#### ***Construction of a hydrogen bus factory***

Already in August 2021, PAK – PCE Polski Autobus Wodorowy sp. z o.o. received a positive decision from the Agencja Rozwoju Przemysłu SA (Industrial Development Agency) regarding support for the implementation of a new investment project within the Special Economic Zone EURO-PARK MIELEC. The project will involve the construction of a manufacturing plant for buses powered by hydrogen cells, together with an office building and associated infrastructure.

On 29 September 2021, the company purchased land for the construction of a future hydrogen bus factory in the Economic Activity Zone in Świdnik. Mostostal Puławy SA was selected as the contractor for the task. A contract with this company was concluded by PAK - PCE Polski Autobus Wodorowy sp. z o.o. on 15 June 2022.

On 23 August 2022, PAK – PCE Polski Autobus Wodorowy sp. z o.o. obtained a construction permit for the plant.

On 22 December 2022, PAK – PCE Polski Autobus Wodorowy sp. z o.o., concluded a loan agreement with the National Fund for Environmental Protection and Water Management ("NFOŚiGW"), under which the NFOŚiGW granted a preferential loan of up to PLN 50 million to Polski Autobus Wodorowy. The loan is intended to finance the construction of a plant for the production of innovative hydrogen-powered buses in Świdnik.

The planned construction work completion date was set for Q3 2023.

In March 2023, PAK - PCE Polski Autobus Wodorowy sp. z o.o. concluded the first contract with the City of Rybnik for the production and delivery of 20 hydrogen buses with a deadline of 240 days from the date of signing the contract.

#### ***Stand-alone energy supply for a single-family house***

The project involves developing a concept and technical selection of equipment for a self-sufficient stand-alone system supplying electricity, heat, domestic hot water to single-family houses with low energy consumption and passive houses.

A contract with the Energy Centre at the Stanisław Staszic AGH University of Science and Technology in Kraków was concluded in June 2020. The contract covers a project entitled "Stand-alone single-family supply with electricity and heat, based on own renewable energy sources, using hydrogen as an energy carrier and storage".

The equipment required to create a stand-alone model for the supply of energy and heat to a single-family house was purchased – a complete electrolyser assembly, hydrogen storage tanks, fuel cells, and a household PV power plant. The initial operation phase of the assembled stand-alone power system designed for a single-family house is currently in progress. In June 2022, Energoprojekt-Katowice was commissioned with developing a demonstrator design for the project



“Stand-alone single-family supply with electricity and heat, based on own renewable energy sources, using hydrogen as an energy carrier and storage”. This project will constitute ground for the construction of a single-family dwelling model in the form of a container building, which can be moved to different locations to demonstrate the stand-alone supply system for a single-family house. A demonstrator concept and multi-discipline technical designs have been developed. The next step will involve selecting a vendor for a demonstrator container and trailer, together with the designed demonstrator.

#### ***Construction of a photovoltaic farm in the Przykona commune***

Design work associated with the construction of another photovoltaic farm with a rated capacity of approximately 200 MWp, located within the former Adamów opencast site in the Przykona commune is ongoing. A resolution of the Przykona Commune Council entered into force on 23 August 2021. It concerns the local spatial development plan. The adopted plan establishes the designation of the land for the construction of a photovoltaic power plant together with accompanying infrastructure. An environmental decision was obtained on 5 January 2022 and became legally binding on February 3. The connection conditions including the 600 MWe class gas-steam unit were obtained on 31 March 2022. The next administrative approval to be obtained will be the construction permit.

#### ***Construction of a photovoltaic farm in the Brudzew commune (expansion of an existing farm)***

The project was acquired by the group in July 2022. A 12.4 MWp power plant was designed on the land acquired from the developer, owing to the Land Development Conditions and the Environmental Decisions obtained by the developer. Final construction permits were obtained and in January 2023 the construction site was handed over to a consortium of ESOLEO sp. z o.o. (Warsaw) and PAK Serwis sp. z o.o. (Konin).

The farm under construction will be connected to the GPO substation used for the Brudzew 70 MWp photovoltaic farm, as the second part of this investment project. On 30 December 2022, an annex to the connection agreement was concluded with ENERGA-Operator Gdańsk, adjusting the Connection Conditions to enable energy consumption from the farm.

Photovoltaic modules and inverters have been delivered, supporting structure and table assembly work has been complete and the installation of photovoltaic modules and inverters is ongoing. Internal roads have been graded and the sand bed and first layer of substructure have been completed. The foundation of two transformer stations is ready. Another four are prepared for setting, and MV cables have been laid. The project should be commissioned in the Q3 2023.

#### ***Construction of the Adamów CCGT gas and steam unit***

A decision about the preparation of project consisting in the construction of Adamów gas and steam unit with a capacity of up to 600 MWe was made in 2022. Thanks to gas fuel, the new power plant will be characterised by the lowest emissions among conventional energy sources, and its high operational availability and flexibility will enable effective stabilisation of electricity production from renewable sources and the Polish power system. The operation of the power plant unit will be adapted to cooperate with the Przykona photovoltaic farm. The cooperation of both units will be planned so that the total output capacity never exceeds 600 MWe.

The investment project is implemented at the site of the former Adamów coal-fired power plant, which has been cleared and prepared for the construction of the new gas-steam unit. Preliminary bids for construction and maintenance contracts were received in November 2022 and are expected to be concluded in Q3 2023. Administrative approvals needed to commence construction are currently being obtained. In 2022, the unit won a capacity market auction, offering 493 MW of availability for a period of 17 years as of 2026.

### ***Construction of public hydrogen refuelling stations***

The entity dedicated to the implementation of the project is PAK PCE Stacje H2.

The main objective of the project is to build a network of publicly accessible hydrogen refuelling stations, enabling the supply of hydrogen on the basis of equal treatment to each owner of a vehicle using electric energy generated from hydrogen in the fuel cells installed in it. The investment implementation plan assumes the construction of stationary stations in the following locations: Warsaw, Gdańsk, Gdynia, Wrocław, Lublin, Rybnik.

In 2022, land lease agreements were signed for stations to be located in Gdynia, Lublin, Wrocław, Rybnik, Gdańsk and Warsaw.

Entities from ZE PAK Group are responsible for the performance of all tasks related to the preparation of technical documentation, selection of the contractor and supervision over the implementation of the investment process. As a result of the design work, a concept for the implementation of the project was developed, consisting in the construction of a network of hydrogen fuel filling stations, as well as design documentation. On the basis of the prepared documentation, permits were obtained for the construction of stations in Warsaw, Rybnik, Wrocław and Gdynia. At the same time, a supplier of the basic technological infrastructure was selected, which was the company NEL Hydrogen A/S. On the basis of the prepared design documentation, the main contractor for construction and assembly works in the locations of Warsaw and Rybnik was selected through a tender. In the fourth quarter of 2022, the construction of the station in Warsaw began. At the turn of the second and third quarter of 2023, it is planned to complete the investment in this location and put it into operation.

On February 21, 2023, the Company concluded a subsidy agreement with the National Fund for Environmental Protection and Water Management, under which the Company will receive a subsidy of PLN 20 million, which it will allocate to the construction of publicly accessible hydrogen refuelling stations in five cities in Poland (Rybnik, Gdynia, Gdansk, Wrocław, Lublin).

In February 2023, the construction of the station in Rybnik was also started, the completion of the investment in this location is planned for the third quarter of 2023.

Selection of the contractor and commencement of construction works in the cities of Gdańsk, Gdynia and Wrocław is planned for Q2/Q3 of this year.

In 2022, the Company also ordered 4 mobile hydrogen refuelling stations, mainly intended for buses. The first of them was handed over in the first quarter of 2023, the next three are planned to be handed over in the second and third quarter of 2023.

## **3.2. Other significant events of the reporting period, events after the balance sheet date and other information which are relevant for the assessment of the human resources, property, financial situation and ability of the Company and the Group to fulfil its obligations**

### **Significant events during the reporting period**

#### ***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.

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. for the manufacture and delivery of hydrogen-powered electric buses***

On 3 February 2023, PAK – PCE Polski Autobus Wodorowy sp. z o.o. received information from the Rybnik City Hall regarding the results of the public procurement procedure for the “Purchase of 20 hydrogen-powered electric buses”, in which the ordering party announced the selection of the bid by PAK – PCE Polski Autobus Wodorowy sp. z o.o. as the most advantageous contractor for the above-mentioned task.

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

According to the provisions of the contract, the remuneration for the performance of the contract subject 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 for 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.

Following the concluded agreement, PGE and ZE PAK signed the Articles of Association of PGE PAK Energia Jądrowa SA on 13 April 2023. PGE and ZE PAK will each hold 50% of the shares in PGE PAK Energia Jądrowa, thus preserving and safeguarding the State Treasury's interest in the 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 SA 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.

## **Significant events after the balance sheet date**

### ***Change in the composition of the Supervisory Board of ZE PAK SA***

On April 13, 2023, Mr. Maciej Stec submitted a statement of resignation from the function of a Member of the Supervisory Board of ZE PAK SA. The reason for his resignation was the planned appointment to the Management Board of PGE PAK Energia Jądrowa S.A. based in Konin.

### ***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 Łębork sp. z o.o. project company with its seat in Słupsk.

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

The investment projects involve 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 sp. z o.o. concluded a loan agreement with Cyfrowy Polsat S.A., with its seat in Warsaw. Under the agreement, PAK – PCE sp. z o.o. 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.

### ***Park Wiatrowy Pałczyn 1 sp. z o.o. concluding a loan agreement with BANK POLSKA KASA OPIEKI SA***

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.

### ***Integrated permit - repeal of the appealed decision of the Minister of Climate and Environment***

On May 22, 2023, in open court, the judgment of the Provincial Administrative Court in Warsaw was announced, in which the Provincial Administrative Court repealed the decision of the Minister of Climate of November 21, 2022 (DIŚ-III.415.63.2021) appealed by the Greenpeace Polska Foundation - ref. IV SA/Wa 167/23. At the same time, the Provincial Administrative Court in Warsaw - did not repeal and did not annul the decision of the first instance authority, i.e. the decision of the Marshal (of October 2, 2020 on adapting the integrated permit for the operation of the Fuel Combustion Installation at Pałnów and Konin Power Plants to the requirements of the BAT conclusions, granting a derogation from the emission limit values) and the decision of the Marshal of Wielkopolska Region of December 30, 2021, reference number DSK-III.7222.93.2021 and the decision of the Marshal of December 30, 2021, reference number DSK-III.7222.191.2021.

The above means that the Company may still use the granted exemptions from emission limit values and operate generation assets at Pątnów Power Plant and Konin Power Plant.

The judgment is not final. The Company will make a decision as to whether to file a cassation complaint within the statutory deadline for its submission. Currently, the company is waiting for the Provincial Administrative Court to deliver a written justification for this judgment.

***Integrated permit – dismissal of Greenpeace Polska's complaint against the decision of the Minister of Climate and Environment***

On May 24, 2023 in open court, the judgment of the Provincial Administrative Court was announced in Warsaw, where the Provincial Administrative Court dismissed the complaint filed by the Greenpeace Polska Foundation against the decision of the Minister of Climate and Environment of November 21, 2022, reference number: DIŚ-III.435.12.2020.AŻ.1. File number: IV SA/Wa 166/23. The contested decision confirmed the possibility for the installation of 474 MW power unit (former Elektrownia Pątnów II Sp. z o.o., today owned by ZE PAK SA) to derogate from the emission limit values set out in the BAT conclusions until August 17, 2024. These derogations were previously established in the decision of the Marshal of Wielkopolskie Voivodeship.

In the oral justification of the judgment, the Provincial Administrative Court stated that:

- the decision of the Minister of Climate, contrary to the allegations, does not violate the law to the extent justifying its repeal,
- allegations of procedural and substantive law did not deserve to be taken into account,
- the material collected in the case allowed the Minister of Climate to make a decision, and the conditions of application of the above-mentioned provisions, questioned by the Greenpeace Polska Foundation, derogations have been met.

The judgment of the Provincial Administrative Court means that the Company may operate 474 MW power unit with the application of the above-mentioned derogations.

The judgment is not final, each party has the right to file a cassation complaint with the Supreme Administrative Court. The company will submit an application for preparation and delivery by the Provincial Administrative Court of the justification of the judgment issued.

#### **4. INFORMATION ON SIGNIFICANT PROCEEDINGS PENDING BEFORE A COURT, A BODY COMPETENT FOR ARBITRATION PROCEEDINGS OR A PUBLIC ADMINISTRATION BODY RELATED TO ZE PAK SA OR SUBSIDIARIES CONSOLIDATED UNDER THE GROUP**

ZE PAK SA and the companies consolidated within the Group were not a party in proceedings pending before court, competent arbitration authority or public administration authority in the first quarter of 2023, whose single or total value would exceed 10% of ZE PAK SA's equity with the exception of those described below.

***Proceedings on an environmental decision issued to PAK KWB Konin SA concerning lignite deposit in Tomisławice***

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 Wierzbinek Commune issued an environmental decision regarding the lignite open cast. On 5 December 2008, this decision was contested by nine physical persons supported by the Greenpeace organisation due to alleged major infringement of the regulations of the law. On 25 March 2009, the Self-government Appeal Court dismissed the application to reverse the environmental decision. The plaintiffs applied for the 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 ruled that the environmental decision, pursuant to which the license for the extraction of lignite at Tomisławice deposit was granted, infringes the regulations of the law in a major manner. PAK KWBK SA and the Self-government Appeal Court submitted an appeal against this judgement. On 21 March 2012, the Supreme Administrative Court overturned the contested decision of the Provincial Administrative Court in Poznań and referred the matter for reconsideration. On 6 November 2012, the Provincial Administrative Court in Poznań announced the decision repealing the decision of the Self-government Appeal Court of 25 March 2009 refusing to declare the invalidity of the environmental decision issued on 7 August 2007 by the Head of Wierzbinek Commune, related to the extraction of lignite from Tomisławice open pit by PAK KWBK SA. On 7 January 2013, PAK KWBK Konin SA submitted a cassation appeal from the described decision.

After the review on the hearing on 7 October 2014, the Supreme Administrative Court dismissed the cassation appeal of PAK Kopalnia Węgla Brunatnego Konin SA from the judgement of the Provincial Administrative Court in Poznań of 6 November 2012 repealing the decision of the Self-government Appeal Court in Konin of 25 March 2009 refusing the annulment of the environmental decision issued on 7 August 2007 by the Head of Wierzbinek Commune related to the extraction of lignite from Tomisławice open pit.

Dismissal of the cassation appeal of PAK Kopalnia Węgla Brunatnego 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<sup>th</sup> January 2019 the Local Government Appeal Court in Konin issued a decision refusing to annul the environmental decision issued on August 7, 2007 by the Head of Wierzbinek Commune related to the exploitation of Tomisławice lignite open pit. Subsequently, the Government Appeal Court upheld its decision, from which a complaint was filed with Poznań Administrative Court.

On June 19, 2020 the Company received information on the issuance, in closed session by the Provincial Administrative Court in Poznań, of a judgment dismissing the complaint against the decision of the Local Government Appeals Board in Konin regarding refusal to annul the environmental decision issued on August 7, 2007 by the Head of Wierzbinek Commune associated with the exploitation of Tomisławice lignite mine.

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

Against the judgment of the Provincial Administrative Court in Poznań of June 18, 2020, the Greenpeace Polska Foundation with its registered office in Warsaw and Józef Imbierski filed a cassation complaint to the Supreme Administrative Court. On October 26, 2020, PAK KWB Konin filed a response to the cassation complaint, requesting its dismissal. A hearing date has not yet been set in this case.

## 5. INFORMATION REGARDING THE SHAREHOLDING STRUCTURE

Share capital of ZE PAK is represented by 50 823 547 shares. Shares are ordinary. Each share gives right to one vote at General Meeting of Shareholders.

### 5.1. Shareholders holding, either directly or indirectly through subsidiaries, at least 5% of the total number of votes

*Table 4: List of shareholders holding, either directly or indirectly through subsidiaries, at least 5% of the total number of votes at the Company's General Meeting as of the date of submission of this report. The list made according to the information available to the Company on the basis of the submission of notifications on the acquisition / disposal of shares*

<i>Shareholder</i>	<i>Pcs</i> <i>Number of shares and</i> <i>corresponding number of votes</i> <i>at the General Meeting</i>	<i>%</i> <i>Share in the total</i> <i>number of</i> <i>votes/shares</i>
<b>Zygmunt Solorz (indirectly) through:</b>	<b>33 523 911</b>	<b>65.96</b>
– <i>Argumenol Investment Company Limited</i>	<i>33 523 911</i>	<i>65.96</i>
<b>Nationale – Nederlanden OFE</b>	<b>4 503 242</b>	<b>8.86</b>
<b>OFE PZU „Złota Jesień”</b>	<b>4 635 719</b>	<b>9.12</b>
<b>PTE Allianz Polska SA</b>	<b>3 491 456</b>	<b>6.87</b>

The structure of shareholders holding, directly or indirectly through subsidiaries, at least 5% of the total number of votes as at the date of submitting this quarterly report differs from the corresponding list as at the date of submitting the last periodic report. This difference results from the change in the share capital and the total number of votes of ZE PAK SA on the accounts of Allianz OFE, managed by PTE Allianz Polska SA, which took place on May 12, 2023, as a result of the liquidation of the Second Allianz Polska Otwarty Fundusz Emerytalny in by transferring its assets to Allianz OFE.

The Company has no knowledge of any agreements that may result in future changes in the proportions of shares held by the current shareholders.

## 5.2. List of the shareholding structure of the management and supervising personnel

Below there is the status of the Company's shares held by managing and supervising persons as at the date of submitting this semi-annual report and as at the day of submitting the previous periodic report (to the best of the Company's knowledge, based on notifications of purchase / sale of shares).

*Table 5: Status of the Company's shares held by the managing persons*

<i>Name</i>	<i>ZE PAK SA shares as at the day of submitting this report</i>	<i>ZE PAK SA shares as at the day of submitting the previous report</i>
Piotr Woźny	0	0
Zygmunt Artwik	0	0
Maciej Nietopiel	0	0
Andrzej Janiszowski	0	0
Katarzyna Sobierajska	0	0

*Table 6: Status of the Company's shares held by supervising persons*

<i>Name</i>	<i>ZE PAK SA shares as at the day of submitting this report</i>	<i>ZE PAK SA shares as at the day of submitting the previous report</i>
Zygmunt Solorz	0	0
Tobias Solorz	0	0
Piotr Żak	0	0
Wiesław Walendziak	0	0
Tomasz Szeląg	0	0
Henryk Sobierajski	0	0
Sławomir Zakrzewski	0	0
Alojzy Z. Nowak	0	0
Jarosław Grzesiak	0	0

## 6. OPINION OF THE MANAGEMENT BOARD ON THE POSSIBILITY OF EXECUTION OF FINANCIAL FORECASTS PUBLISHED EARLIER

ZE PAK SA has not published any financial forecasts.

## 7. INFORMATION REGARDING THE PAID OR DECLARED DIVIDENDS

The Company did not pay or declare dividend payment in the first quarter of 2023.

## 8. INFORMATION ON THE CONCLUSION BY ZE PAK SA OR ENTITIES CONSOLIDATED UNDER THE GROUP OF SIGNIFICANT TRANSACTIONS WITH ENTITIES AFFILIATED PURSUANT TO CONDITIONS OTHER THAN MARKET CONDITIONS

ZE PAK SA and companies consolidated under the Group have not concluded transactions with entities affiliated pursuant to conditions other than market conditions in the first quarter of 2023.

## **9. INFORMATION ON GRANTING BY ZE PAK SA OR ENTITIES CONSOLIDATED UNDER THE GROUP OF SIGNIFICANT GUARANTEES, SURETIES, CREDITS OR LOANS**

On February 28, 2023, a company from the ZE PAK SA Group granted a promissory note guarantee in the amount of PLN 20,000 thousand to the National Fund for Environmental Protection and Water Management for PAK-PCE Stacje H2 sp. z o.o. in connection with the subsidy received from the National Fund for Environmental Protection and Water Management by PAK-PCE Stacje H2 in the amount of PLN 20,000 thousand for the investment in the hydrogen project.

A Group company, PAK-Polska Czysta Energia sp. z o.o. granted on January 31, 2023 a loan to PAK PCE Fotowoltaika sp. z o.o. in the amount of PLN 11,000 thousand, repayable by the end of March 2036. The loan is intended for the implementation of an investment project in renewable energy sources (RES) in the form of a photovoltaic power plant.

## **10. INFORMATION CONCERNING THE ISSUE, REDEMPTION, AND REPAYMENT OF NON-EQUITY AND CAPITAL SECURITIES**

In the first quarter of 2023, the companies of ZE PAK SA Capital Group did not issue or redeem non-equity and equity securities.

## **11. FACTORS WHICH, IN THE MANAGEMENT BOARD'S OPINION, WILL AFFECT THE COMPANY'S RESULTS IN THE PERSPECTIVE OF AT LEAST ONE QUARTER**

The process of forecasting future results of the ZE PAK Capital Group must include a wide range of factors occurring actually, potentially or theoretically, existent in the branch and markets in which the Company conducts its operations. These include both internal factors as well as factors with their source in the environment. In the view of the Board, they can be divided into factors which constantly influence the Group's functioning as well as those which appear incidentally in the period which is embraced by a given periodical report.

The most important factors which constantly affect the Company's results include the following:

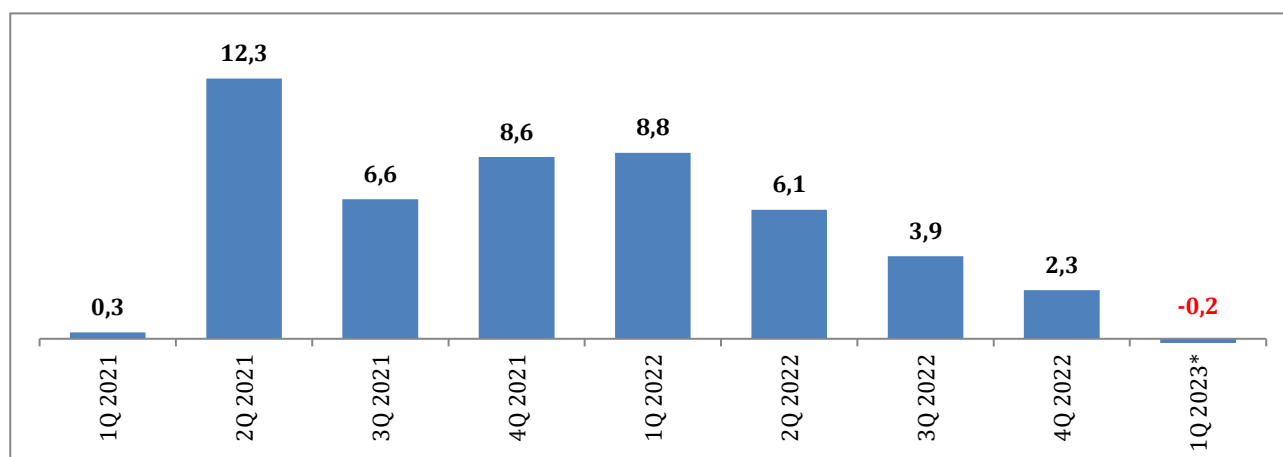
- macro-economic trends in the Polish economy and the demand for electricity;
- regulatory environment;
- electricity prices;
- prices and supply of certificates of origin;
- fuel costs, coal extraction costs;
- CO<sub>2</sub> allowances costs;
- compensation for the stranded costs related to the termination of PPA for unit 9 in Elektrownia Pątnów II;
- seasonality and meteorological conditions;
- investment expenses;
- EUR/PLN exchange rate and interest rates level.

### **11.1. Macro-economic trends in the Polish economy and the demand for electricity**

When conducting activities within the territory of Poland and obtaining most revenues from the sale of electricity, it is necessary to take into consideration the macro-economic trends in the Polish economy. A very significant factor is the increase in the real GDP and industrial production in Poland, the development of the service sector as well as the increase in individual consumption. All of the aforementioned factors significantly affect the demand for electricity and its consumption.



Chart 7: GDP dynamics [%] in relations to analogous quarter of the previous year (yearly average fixed prices)



\* The so-called quick estimate of gross domestic product in the first quarter of 2023, seasonally unadjusted, at constant average annual prices of the previous year.

Source: Own elaboration based on CSO data

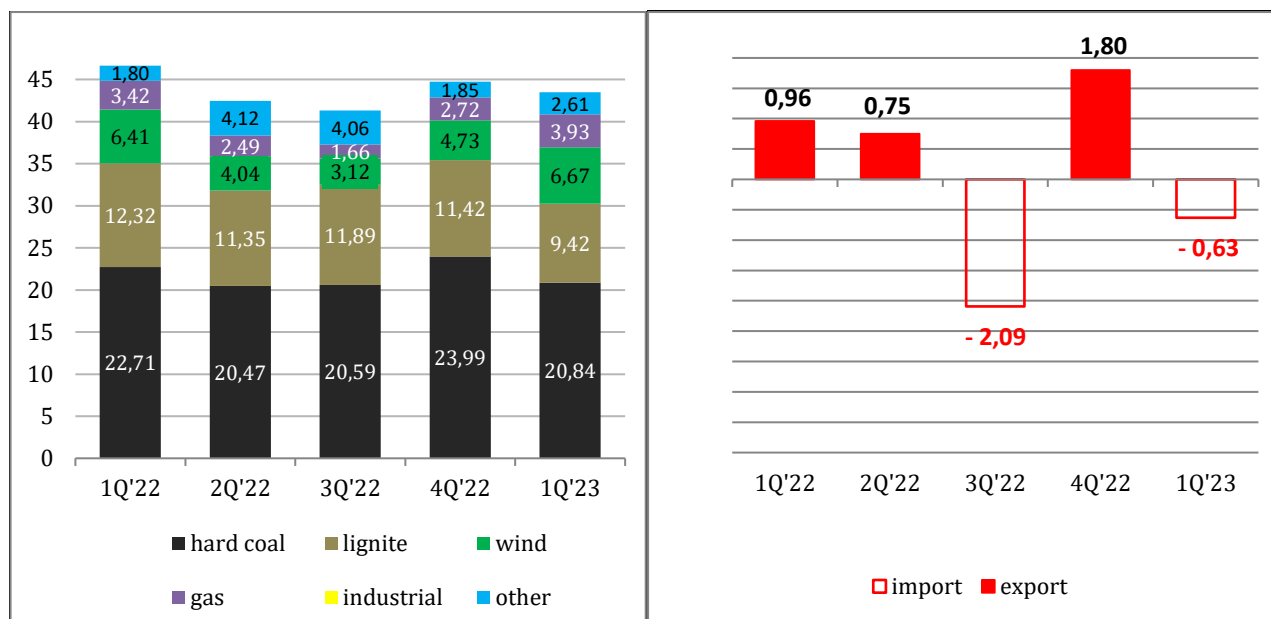
According to the quick estimate, the seasonally unadjusted gross domestic product (GDP) in the first quarter of 2023 decreased in real terms by 0.2% y/y compared to an increase by 8.8% in the correspondence period of 2022.

The data is preliminary and may be subject to revision, in accordance with the revision policy applied in quarterly national accounts, at the time of preparation of the first regular estimate of GDP for Q1 2023, which will be published on May 31, 2023.

Data on the functioning of the National Power System and the Balancing Market, presented by Polskie Sieci Elektroenergetyczne SA, indicate that gross domestic electricity consumption in the first quarter of 2023 amounted to 44.10<sup>1</sup> TWh and decreased by 3.47% compared to the first quarter of the previous year. In the first quarter of 2023, gross production of electricity amounted to 43.47 TWh, which means a decrease by 6.8% compared to the same period of the previous year. Hard coal-fired power plants had the largest share in the production structure, production from hard coal amounted to 20.84 TWh. 9.42 TWh were produced from lignite, which means a q/q decrease in production based on both hard coal and lignite. Wind farms produced 6.67 TWh, which is 4.11% more than in the corresponding period of the previous year. However, the generation from gas-fired power plants increased by 25.51% q/q (production at 3.93 TWh). The foreign exchange balance in the first quarter of 2023 amounted to 0.63 TWh on the import side.

<sup>1</sup> Table nr 3. Structure of electricity production in domestic power plants, amounts of electricity exchanged with foreign countries and domestic energy consumption - monthly amounts and from the beginning of the year - gross amounts.

Chart 8: Structure of electricity generation and the balance of the electricity exchange with foreign countries (gross amounts) – TWh



Source: Own elaboration based on PSE data

## 11.2. Regulatory environment

Entities operating on the electricity market operate in a regulatory environment that is subject to constant change, mainly through the impact of EU law on national law. The most important legal regulations to which electricity producers are subject are the Energy Law Act, including provisions on the obligation to sell energy on stock exchange markets, the Act on renewable energy sources, defining the principles of support for specific energy generation technologies, the Act on Environmental Protection Law, which defines the principles sustainable use of the environment. The above laws transpose into the Polish legal order directives and regulations of the European Commission as well as international conventions regarding, among others rules for the single wholesale electricity market, environmental protection and climate change (including CO<sub>2</sub> emissions). Tax law, interpretations and recommendations issued in particular by the Energy Regulatory Office should also be taken into account. Any changes in the above-mentioned areas may be of great importance for the Group's operations. Regulatory risk is one of the most significant electricity generators in the industry.

Significant factors that may affect the financial results of ZE PAK SA are issues related to the functioning of the capacity market.

On December 16, 2021, as a result of the main auction for the delivery year 2026, carried out according to the parameters specified in *Regulation of the Minister of Climate of August 6, 2022 on parameters of the main auction for the delivery year 2025 and parameters of additional auctions for the delivery year 2022*, PAK CCGT sp. z o.o. concluded a capacity contract for 17 years of supply, contracting 493 MW of the capacity obligation at the base price of PLN 400.39 / kW / year. The value of the concluded capacity contract for the first year of deliveries for 2026 is PLN 197,392,270.00. The provisions of the regulation supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council on the framework for recognizing economic activity as environmentally sustainable by including the transitional activity clause in the production of electricity from fossil gas fuels and nuclear will be important for obtaining financing for this investment.

Work on this document was carried out last year, and the draft for further consultations was approved by the European Commission on February 2, 2022. Poland sought recognition of both fuels, as they will play the role of stabilizing the system's operation while abandoning coal. The new legislation adds nuclear and gas-fired power plants to the "taxonomy" rulebook from 2023. Attempts to eliminate these regulations in July 2022 were blocked by the European Parliament, which recognized gas and nuclear as environmentally sustainable by issuing Commission Delegated Regulation (EU) 2022/1214 of March 9, 2022 amending Delegated Regulation (EU) 2021/ 2139 for business activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 for public disclosure of specific information for these business activities.

An important event for the financial results of the Company in the regulatory environment is the reform of the balancing market, which has been underway since 2019, when intensive work began to adapt the balancing market to the

requirements of European law. In May 2020, the document Polish Plan for the Implementation of Reforms in the Balancing Market was adopted, which was a milestone in works on the reform of the balancing market. As a result of adopting the provisions of the plan, the balancing market reform will be carried out in two stages, and ultimately it is to introduce, among others, scarcity pricing mechanism, as well as major changes in system services and settlements on the balancing market. In the first quarter of 2023, Polskie Sieci Elektroenergetyczne SA, acting as the Power Transmission System Operator (TSO) in the territory of the Republic of Poland, started the process of social consultations on the draft of new Balancing Conditions, based on: Commission Regulation (EU) 2017/2195 of November 23, 2017 establishing the balancing guidelines, lasting from February 22, 2023 to May 5, 2023. The implementation of complex changes will be a very complicated process, requiring the work of the entire sector, including companies providing IT solutions. Implementation of new rules to the market will require in-depth knowledge and implementation of new solutions in the Company. The implemented changes include a huge reform of the balancing market, which will introduce e.g. new market architecture, as well as new market-based rules for selling balancing capacity, new scarcity pricing rules, new RB settlement rules and other start-up payment rules (which disappear as a separate settlement item). The planned date of entry into force of these changes is 1 January 2024. Due to the changes in progress and the lack of knowledge about their final shape (document under consultation), at the moment it is very difficult to assess their impact on the Group's financial results.

In the first quarter of 2023, a number of regulations are still in force aimed at reducing energy prices, including the regulation of the Minister of Climate and Environment of September 27, 2022 amending the regulation on detailed conditions for the operation of the power system, which as of October 1, 2022, introduced changes to the rules for offering electricity on the Balancing Market operated by PSE SA by establishing the rules for bidding on the Balancing Market with regard to the maximum price resulting from variable generation costs (MaxCO). As a result of the introduced regulation, prices on the balancing market, and thus prices on the Polish Power Exchange, were adjusted downwards and prices are still at a lower level than in the previous year. Until the end of 2023, the Act of October 27, 2022 on extraordinary measures aimed at limiting electricity prices and support for certain consumers in 2023 and the implementing regulation to this act - Regulation of November 8, 2022 on the method of calculating the limit prices. For the results of the ZE PAK SA Group, the provisions regarding the Price Difference Fund are particularly important, which obliged the Group companies generating and/or trading energy, starting from December 1, 2022 to the end of 2023, to make write-offs to the Price Difference Fund, the amount of which is all revenues resulting from concluded contracts for the sale of electricity above the price limit, determined in accordance with the principles set out in the above-mentioned regulation. The regulation package is the result of extraordinary legislative work aimed at limiting the "excessive", as defined by the legislator, revenues of companies in the power sector. Due to the fact that the electricity prices at which the Group sells its production are the most important factors indicated by the Company as having an impact on its financial results, the extraordinary legislative solutions adopted by the Polish legislator, which are and, as practice shows, will be subject to further revisions of the legislator, will undoubtedly affect the financial results of the ZE PAK SA Capital Group. Subsequent amendments to this Act and the Executive Order extend the scope of write-offs. The amendment to the Act of February 8, 2023 extended the scope of the write-down to include revenues from guarantees of origin within the meaning of the Act of February 20, 2015 on renewable energy sources (Journal of Laws of 2022, items 1378, 1383, 2370 and 2687) and for settlements related to the sale of electricity, including in particular financial instruments within the meaning of the Act of 29 July 2005 on trading in financial instruments (Journal of Laws of 2022, items 1500, 1488, 1933, 2185 and 2640 and of 2023 r. item 180). A uniform interpretation of the provisions and its impact on the financial results of companies from the power sector, including Group companies, has not yet been developed, therefore it is difficult to estimate the impact of these regulations on the Group's financial results.

Among the important issues in the regulatory environment, work on the reform of the ETS system, which is currently underway in the EU authorities, is also important. As part of the Fit for 55 Package, the Council adopted key legal acts, i.e.: review of the ETS Directive, amendment of the Regulation on monitoring, reporting and verification of emissions from maritime transport, review of the ETS Directive in agriculture, Regulation establishing the Social Climate Fund, Regulation establishing CBAM. The legal acts will be signed by the Council and the European Parliament and published in the Official Journal of the EU before entering into force. The new provisions of the ETS Directive increase from 55% to 62% the reduction of CO<sub>2</sub> emissions for 2030 in the sectors covered by the system, compared to 2005 levels. The changes include changes in the functioning of the Market Stability Reserve (MSR) - in March 2023, the EU Council adopted a separate decision extending the higher annual allowance consumption rate (24%) for the period after 2023. Any possible changes to the ETS may affect the level of quotations of EUA units. The latest version of the Act on the greenhouse gas emission allowance trading system has been in force since March 18, 2023 (Journal of Laws 2023.589).

### **11.3. Electricity prices**

The company generates the vast majority of revenues from the production and sale of electricity, therefore the risk of changing the price at which it sells electricity is of key importance for the level of revenues generated by the Group.

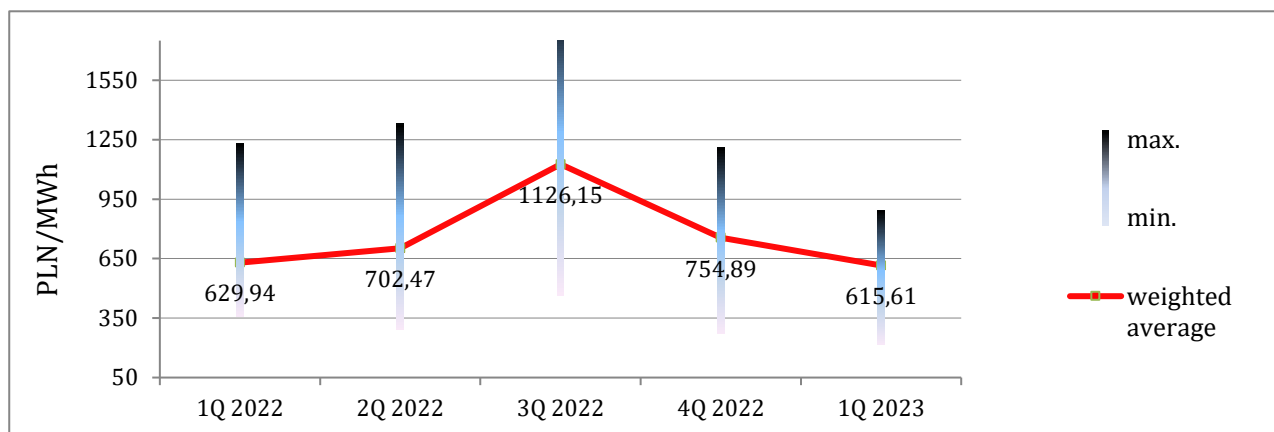
After a long-term upward trend, lasting from the second quarter of 2020 on the day-ahead market at TGE SA, the first quarter of 2023 is another quarter in a row following the fourth quarter of 2022 in a downward trend.

The average price in the first quarter of 2023 was lower than the average price in the fourth quarter of 2022 by PLN 139.28/MW (the price peak was PLN 895.29/MWh on January 24, 2023), while the turnover in the first quarter of 2023 was higher by over 74% compared to the previous quarter (i.e. Q4 2022).

The average price from the TGeBase indices on the Day-Ahead Market at TGE SA for the first quarter of 2023 was PLN 615.61/MWh, which means a decrease compared to the first quarter of 2022 by PLN 14.33/MWh, i.e. by approx. 2.27%.

Price drops in the first quarter of 2023 continue to result from the intervention of the Council (EU) on high energy prices on energy markets in the European Union, which resulted in the introduction of a regulation of the Minister of Economy, which defines the minimum mechanism for energy producers to apply maximum prices (MaxCO) in submitted balancing offers, and the intervention of the Polish government in the form of the adoption of a number of legislative documents, including: the Act of October 27, 2022 on emergency measures aimed at limiting electricity prices and support for certain consumers in 2023. In addition, the situation of lower prices was caused by increased RES generation with a total production record on 17 March this year of 12 GW according to the data of the National Power System (including wind farms 6,948 MW and photovoltaic farms 5,061 MW) and single records of production from wind farms of February 20, 2023 - 7,832.8 MW and solar farms - 7,339 MW on March 29, 2023.

Chart 9: Electricity prices (TGeBASE)

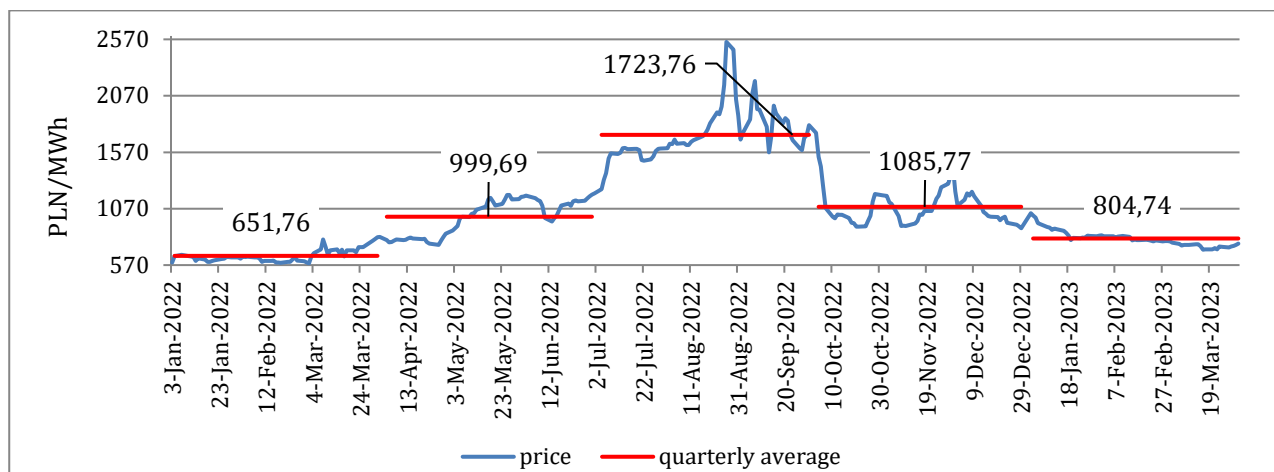


Source: Own elaboration based on TGE data

The arithmetic average of daily settlement prices for the reference futures contract BASE\_Y-24 in the first quarter of 2023 was PLN 804.74/MWh, which means a decrease in relation to the BASE\_Y-23 futures contract quoted in the fourth quarter of 2022 by PLN 281.03 /MWh, i.e. by approximately 25.9%, which gives a similar trend as in the case of the spot market (Day-Ahead Market/Intraday Market). The volume of transactions concluded on TGE SA on the futures product BASE-Y-24 is still in a downward trend. In the first quarter of 2023, the turnover amounted to 4.02 TWh, which, compared to the fourth quarter of 2022, means a decrease in the trading volume by 5.06 TWh, i.e. by over 55%.

The reasons for the decrease in the volume of concluded transactions can be found in the amendment to the Energy Law in the field of the so-called the exchange obligation, i.e. the obligation to publicly sell electricity, which completely abolished the exchange obligation, giving market participants the freedom to choose where transactions are concluded.

Chart 10: The price of the futures contract for the supply of electricity (band) for the next year



Source: Own elaboration based on TGE data

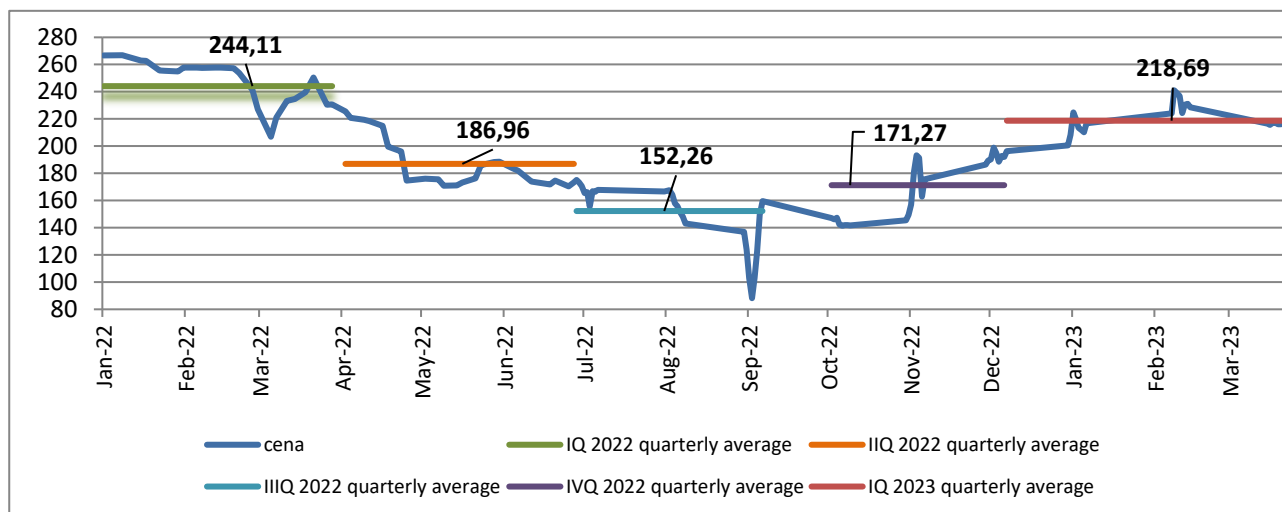
### 11.4. Prices and supply of certificates of origin

One of the power units of the ZE PAK SA Group dedicated to biomass combustion is entitled to green certificates. The number of obtained certificates of origin depends on the level of generation and is sold to other market participants. However, biomass unit generation largely depends on the green certificates market price levels. During periods, when the total generated biomass energy and green certificate prices do not ensure reaching the assumed financial effect, the generation may be decreased or halted, which also automatically decreases the amount of generated green certificates. Due to the fact that the level of income generated from the sale of certificates of origin is lower than the level of revenues generated from the sale of electricity, the risk of price changes for certificates of origin also has a smaller impact on results than, for example, the risk of changes in energy prices, however the level of green certificates' prices is important for BiW sp. z o.o.

In the fourth quarter of 2022, the prices of green certificates began to gradually increase. This trend continued until the first quarter of 2023. In January 2023, the volume-weighted average price on the sessions of the Property Rights Market for the PMOZE\_A instrument was PLN 211.51/MWh, which means a decrease by PLN 50.15/MWh compared to January 2022 and an increase compared to December 2022 by PLN 21.21/MWh. On January 5, 2023, the first transaction was concluded on the Property Rights Futures Market. The trading volume was 1,000 MWh. It was the month in which the first transaction was concluded since the launch of this market on the OTF platform in 2020. On working Tuesdays and Thursdays, futures instruments with the delivery of property rights are traded on this market, similar to those delivered through the purchase of the PMOZE\_A instrument listed on the spot market (RPM). Quotations on the RTPM include four futures instruments at each session, i.e. with delivery in the coming periods, which are the third Thursdays in May and November. Therefore, on January 5, instruments with delivery in May 2023 (instrument code: F-OZE\_05-23), November 2023 (F-OZE\_11-23), May 2024 (F-OZE\_05-24) and November 2024 (F-RES\_11-24). All instruments listed on the RTPM are financial instruments as defined by MiFID2. The first transaction was concluded with delivery in May 2024 (instrument F-OZE\_05-24), for the volume of 1000 MWh (1 futures contract) and at the price of PLN 205.00/MWh.

In February, the session price increased to PLN 232.37/MWh, but in March it fell again to PLN 214.59/MWh. In the first quarter of 2023, the average quarterly price of certificates of origin for energy produced from RES was PLN 218.69/MWh and compared to the same quarter of the previous year, this price decreased by PLN 25.42. In the first quarter of 2023, a slight stabilization of prices can be observed compared to the decreases that took place in 2022, which were caused by the proposal of the Ministry of Climate and Environment, which planned in 2023 to significantly reduce the obligation to share green energy from redeemed certificates of origin, the so-called green certificates from 18.5% in 2022 to only 10% in 2023. As a consequence, however, this level was reduced to 12% (Regulation of the Minister of Climate and Environment of July 13, 2022).

Chart 11: Average price of certificates of origin for RES produced electricity



Source: Own elaboration based on TGE data

## 11.5. Extraction and supply costs of coal and other fuel

A fuel cost is the important part of the costs related to the electricity and heat generation in ZE PAK SA Group's companies. The prices of fuel largely determine the competitiveness of particular electricity production processes. ZE PAK SA power plants produce most of their electricity from brown coal, but they also use forest and agricultural biomass. Furthermore, heavy and light heating oil is used in minimum quantities for heating purposes in the process of electricity production.

Currently, the main supplier of coal to ZE PAK SA is PAK KWB Konin SA. This is supplemented by deliveries from external entities from outside the Group. There is also an exposure to price fluctuations of other fuels, mainly biomass, the price and availability of which will become more and more important due to the ongoing technological start-up of a new biomass unit at Konin Power Plant. The level of costs related to lignite mining is also important for the financial result, which largely depends on factors beyond the Company's direct control, such as e.g. the geological conditions of the deposits in the final stage of their exploitation.

The deposits exploited by the Group's mines have a certain abundance. The possibility of achieving the assumed level of electricity production depends on the extraction capacity and the quality of coal mined in the currently exploited deposits. Currently, no significant investments are being implemented in the coal mining segment that would lead to an increase in extraction, in the coming years one should expect a significant decrease in the volumes of extracted coal due to the end of operation of two out of three lignite open pits currently in operation. The Company intends to gradually move away from coal-based power generation and focus more and more on low-carbon and carbon neutral electricity generation projects. The implementation of the project to build a gas and steam unit at Adamów Power Plant, which was the subject of the capacity market auction won in December 2021, will mean an increase in the importance of gaseous fuel in the balance of energy supplies for the Group in the future.

## 11.6. CO<sub>2</sub> emission allowances costs

The activities in the scope of generating electricity and heat from conventional sources are associated with the need to incur the CO<sub>2</sub> emission costs. In view of the fact that these costs represent an important item in the structure of the costs incurred by the producers of energy from lignite, the impact of emitted quantities of CO<sub>2</sub> and the risk of price changes of CO<sub>2</sub> emission allowances (EUA) is of great importance to the activities' results.

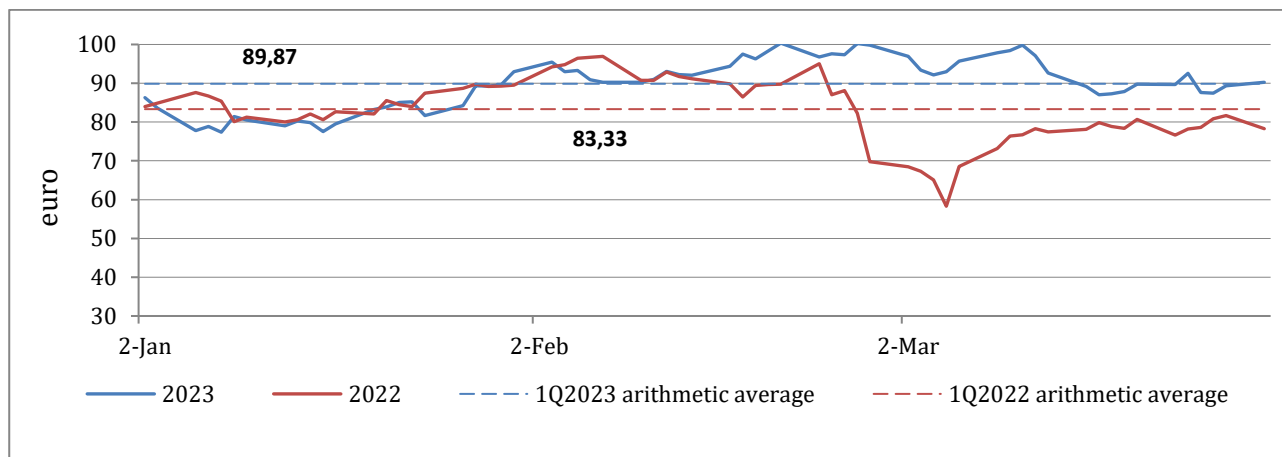
In 2023, the Group will receive the minimum amount of free CO<sub>2</sub> emission allowances in relation to the demand, i.e. 13,476 EUAs, resulting from the allocation for heat production. Therefore, virtually the entire amount of emission allowances needed by the ZE PAK SA Group must be purchased on the secondary market.

In the first quarter of 2023, the EUA price ranged from EUR 77 to EUR 100. In the first half of January 2023, the average EUA price was EUR 80/EUA, while in the second half it increased by EUR 6 on average to EUR 86/EUA. The increase in EUA prices was probably dictated by the information about the delay in the process of issuing free allowances for 2023. In February 2023, the price of emission allowances continued to increase, reaching the price of EUR 100 on February 21, 2023 - for the first time in history, the price of CO<sub>2</sub> emission allowances exceeded the level of EUR 100.

On February 9, 2023, the Council of the European Union reached an agreement on the establishment of a carbon tax under the Fit for 55 program, which had a direct impact on the increase in EUA prices. In the first half of March 2023, the price remained at a high level of EUR 95/EUA, and then fell to around EUR 90.

The arithmetic average of EUA quotations in the first quarter of 2023 amounted to EUR 89.87, while in 2022 it was EUR 83.33, which means an increase of EUR 6.54, i.e. 7.85% q/q.

*Chart 12: Price of the futures for the supply of EUA*



Source: Own elaboration based on ICE data

### 11.7. Compensation for the stranded costs related to the termination of the „long-term Contract” („PPA”) for unit 9 in Elektrownia Pątnów (former Elektrownia Pątnów II sp. z o.o.)

The long-term contract for the sale of power and electricity (PPA) was concluded between Elektrownia Pątnów II sp. z o.o. and Polskie Sieci Elektroenergetyczne SA. The contract was a long-term agreement in the scope of supply of electricity according to the established price formula.

Due to the early termination (on 1 April 2008) of PPA, pursuant to the Act of PPA, the Company is entitled to receive sufficient compensation. The amount of compensation is estimated according to an applicable formula specified in the Act. The Company is covered by the said act by the end of 2025. The mechanism determining the amount of revenues related to compensation for stranded costs largely functions on the basis of offsetting, therefore the risk related to the level of revenues from this source is to a certain extent dependent on other types of risk affecting the level of costs and revenues, e.g. energy prices or prices of allowances for emissions.

On December 30, 2020, Elektrownia Pątnów II sp. z o.o. was incorporated into ZE PAK SA by way of general succession. The merger of the companies does not affect the right of ZE PAK SA to apply for compensation for stranded costs.

### 11.8. Seasonality and meteorological conditions

The demand for electricity and heat, especially among consumers, is subject to season fluctuation. So far, the practice showed that the consumption of electricity was higher in the winter (mainly due to low temperatures and shorter days) and lowered in the summer (due to the summer period, higher ambient temperatures, and a longer day). In the last couple of years, there is an increase in the demand for electricity in the summer, which is caused mostly by the rising number of used cooling devices and air conditioning.

Irrespective of the factors described above, meteorological conditions are becoming more and more important for ZE PAK Group production level. In the past, the operations of the Group were not subject to significant seasonality of demand, due to low costs, the work of blocks was carried out continuously (in the basis) for almost a whole year. Currently, taking into account the growing share of RES in the segment of energy producers, including primarily wind sources as well as increasing photovoltaic production, when estimating the volume of production of ZE PAK SA, weather conditions are becoming more and more important, with particular emphasis on wind and solar conditions. It should be taken into account that in the periods when the weather conditions are favourable for RES production, the demand for the production from ZE PAK conventional power plants may periodically decrease, similarly in the periods of lower RES production, it may increase.

The risk related to seasonality and meteorological conditions in the first quarter of 2023 was not a key factor in the Company's activity.

## **11.9. Investment expenses**

Activities in the mining and electricity generating sectors require significant capital expenditure. The Group's generation assets require periodic repairs and ongoing modernization, both due to the tightening of environmental protection requirements and the need to increase the efficiency of electricity production. The expected increased level of capital expenditure related to the Group's plans to implement projects in the area of energy production from low-emission and carbon-neutral sources as well as the production and use of "green" hydrogen should be taken into account. The level of capital expenditure will still have a significant impact and is expected to continue to have a significant effect on operating results, debt levels and cash flow. Delays in implementation, changes to the investment program and budget overruns can have a serious impact on future capital expenditures, as well as on results, financial standing and development prospects.

## **11.10. EUR/PLN exchange rate, the level of interest rates**

Despite the fact that the Group conducts its activities in Poland, where it incurs costs and gains revenues in zloty, there is a couple of significant factors which make the financial results dependent on the exchange rate of EUR/PLN and the level of WIBOR interest rates. The most important factors include:

- transactions connected with EUA purchase are settled in EURO,
- one of the companies from the renovation segment - PAK Serwis sp. z o.o., carries out a part of its orders outside Poland, settling them in euro,
- the companies in the Group use debt financing based on a variable interest rate.

The Group has financial liabilities, mainly credits and loans with variable interest rates. The Group's exposure to the risk of changes in interest rates relates mainly to long-term financial liabilities related to the financing of investments in PAK PCE BiW Sp. z o.o., Farma Wiatrowa Kazimierz Biskupi, Farma Wiatrowa Pałczyn sp. z o.o. and PAK – PCE Fotowoltaika sp. z o.o. In order to minimize the interest rate risk, the Group has entered into interest rate swaps (interest rate swaps) under which it agrees to exchange, at specified intervals, the difference between the amount of fixed and floating interest rates on the agreed principal amount. These transactions are intended to secure contracted financial liabilities and concern 50% of the syndicated loan PAK - PCE Fotowoltaika sp. z o.o. for the construction of Brudzew photovoltaic farm and a 50% investment loan from PAK-PCE BiW sp. z o.o. for the modernization of the K7 boiler at Konin Power Plant, based on the variable WIBOR rate. IRS instruments were used to hedge.

The Group companies periodically use instruments to limit the risk arising from exchange rate fluctuations, e.g. for part of the flows related to the purchase of CO2 emission allowances. Forwards are used to hedge the exchange rate. Management Boards monitor the financial and market situation on an ongoing basis, and if necessary, they may decide on the need to use financial instruments to hedge against currency risk. In accordance with the principles applied in ZE PAK SA Group, any transactions will be collateral and will be matched to the hedged item in terms of volume and maturity. The decision to choose a hedging instrument will also take into account: price, market liquidity, product simplicity, ease of valuation and accounting, and flexibility.

*Konin, May 30, 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 .....