CONSOLIDATED FINANCIAL STATEMENTS

PGE Polska Grupa Energetyczna S.A.
2022

year ended December 31, 2022
in accordance with IFRS (in PLNm)

Prowadzimy w zielonej zmianie

PGE GROUP'S SELECTED CONSOLIDATED FINANCIAL DATA

	Year ended December 31		Year ended December 31	
	2022	2021 *restated data**	2022	2021 *restated data**
	PLN million		EUR million	
Revenue from sales	**73,435**	**52,772**	**15,663**	**11,529**
Operating profit	4,299	5,123	917	1,119
Gross profit	4,110	4,871	877	1,064
Net profit	**3,390**	**3,945**	**723**	**862**
Net profit attributable to shareholders of the parent company	3,328	3,972	710	868
Comprehensive income	2,897	4,904	618	1,071
Net cash from operating activities	11,609	7,439	2,476	1,625
Net cash from investing activities	(7,296)	(4,367)	(1,556)	(954)
Net cash from financing activities	841	(528)	179	(115)
Net change in cash and equivalents	5,154	2,544	1,099	556
Net profit per share attributable to shareholders of the parent company (in PLN/EUR per share)	**1.56**	**2.12**	**0.33**	**0.46**
Diluted net profit per share attributable to shareholders of the parent company (in PLN/EUR per share)	**1.56**	**2.12**	**0.33**	**0.46**
Weighted average number of ordinary shares used to calculate profit per share	2,129,990,555	1,869,760,829	2,129,990,555	1,869,760,829

	As at		As at	
	December 31, 2022	December 31, 2021 *restated data**	December 31, 2022	December 31, 2021 *restated data**
	PLN million		EUR million	
Non-current assets	71,732	66,547	15,295	14,469
Current assets	34,027	22,714	7,255	4,938
Assets classified as held for sale	19	13	4	3
Total assets	**105,778**	**89,274**	**22,554**	**19,410**
Equity	54,383	48,291	11,596	10,499
Equity attributable to shareholders of the parent company	53,538	47,494	11,416	10,326
Share capital	**19,184**	**19,165**	**4,090**	**4,167**
Non-current liabilities	16,099	19,159	3,432	4,166
Current liabilities	35,296	21,824	7,526	4,745
Number of shares at the end of the reporting period	2,243,712,994	1,869,760,829	2,243,712,994	1,869,760,829
Book value per share (in PLN/EUR per share)	**23.86**	**25.40**	**5.09**	**5.52**
Diluted book value per share (in PLN/EUR per share)	**23.86**	**25.40**	**5.09**	**5.52**

** restatement of comparative data is described in note 5 of these consolidated financial statements*

The above financial data was converted into EUR in accordance with the following rules:

- *asset and equity and liability items - at the average exchange rate announced by the National Bank of Poland for December 31, 2022 - EURPLN 4.6899 and for December 31, 2021 - EURPLN 4.5994.*
- *items in the statement of comprehensive income and statement of cash flows - at an exchange rate constituting the arithmetic mean of the average exchange rates published by the National Bank of Poland for the last day of each month in the financial year from January 1, 2022 to December 31, 2022 - EURPLN 4.6883; for the period from January 1, 2021 to December 31, 2021 - EURPLN 4.5775.*

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CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Note	Year ended December 31, 2022	Year ended December 31, 2021 *restated data**
STATEMENT OF PROFIT OR LOSS			
REVENUE FROM SALES	*7.1*	**73,435**	**52,772**
Cost of sales	*7.2*	(67,694)	(49,163)
GROSS PROFIT ON SALES		**5,741**	**3,609**
Distribution and selling expenses	*7.2*	(2,012)	(1,515)
General and administrative expenses	*7.2*	(1,382)	(1,028)
Net other operating income/(costs)	*7.3*	1,952	4,057
OPERATING PROFIT		**4,299**	**5,123**
Net financial income / (costs), including:	*7.4*	(189)	(250)
Interest income calculated using the effective interest rate method		*458*	35
Share of profit/(loss) of entities accounted for using the equity method	*7.5*	-	(2)
GROSS PROFIT		**4,110**	**4,871**
Income tax	*8.1*	(720)	(926)
NET PROFIT		**3,390**	**3,945**
OTHER COMPREHENSIVE INCOME			
Items that may be reclassified to profit or loss in the future:		**(640)**	**623**
Valuation of debt financial instruments	*20.3*	(3)	12
Valuation of hedging instruments	*20.3*	(788)	757
Foreign exchange differences from translation of foreign entities		1	-
Deferred tax	*8.1*	150	(146)
Items that may not be reclassified to profit or loss in the future:		**147**	**336**
Actuarial gains and losses from valuation of provisions for employee benefits	*22*	179	404
Deferred tax	*8.1*	(33)	(77)
Share of profit of equity-accounted entities	*7.5*	1	9
NET OTHER INCOME		**(493)**	**959**
TOTAL COMPREHENSIVE INCOME		**2,897**	**4,904**
NET PROFIT/(LOSS) ATTRIBUTABLE TO:			
shareholders of the parent		3,328	3,972
non-controlling interests		62	(27)
COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
shareholders of the parent		2,836	4,929
non-controlling interests		61	(25)
NET PROFIT PER SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT COMPANY (IN PLN)	*20.7*	**1.56**	**2.12**
DILUTED NET PROFIT PER SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT COMPANY (IN PLN)	*20.7*	**1.56**	**2.12**

***** *restatement of comparative data is described in note 5 of these consolidated financial statements*

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note	As at December 31, 2022	As at December 31, 2021 *restated data**	As at January 1, 2021 *restated data**
Property, plant and equipment	*9*	64,388	61,125	61,986
Investment property	*10*	32	39	41
Intangible assets	*11*	726	682	646
Right-of-use assets	*12*	1,311	1,257	1,309
Financial receivables	*25.1.1*	223	204	191
Derivatives and other assets measured at fair value through profit or loss	*25.1.2*	608	364	132
Shares and other equity instruments		117	117	57
Shares accounted for using the equity method	*13*	180	156	152
Other non-current assets	*17.1*	850	873	839
CO_2 emission allowances for captive use	*16*	114	797	39
Deferred income tax assets	*14.1*	3,183	933	1,351
NON-CURRENT ASSETS		**71,732**	**66,547**	**66,743**
Inventories	*15*	4,918	2,189	3,123
CO_2 emission allowances for captive use	*16*	4,754	4,106	1,735
Income tax receivables		239	144	8
Derivatives and other assets measured at fair value through profit or loss	*25.1.2*	927	575	423
Trade and other financial receivables	*25.1.1*	9,083	7,727	4,812
Other current assets	*17.2*	2,219	1,240	799
Cash and cash equivalents	*18*	11,887	6,733	4,189
CURRENT ASSETS		**34,027**	**22,714**	**15,089**
ASSETS CLASSIFIED AS HELD FOR SALE		**19**	**13**	**7**
TOTAL ASSETS		**105,778**	**89,274**	**81,839**
Share capital	*20.1*	19,184	19,165	19,165
Reserve capital	*20.2*	25,049	20,154	18,410
Hedging reserve	*20.3*	(32)	609	(13)
Foreign exchange differences from translation	*20.4*	4	2	5
Retained earnings	*20.5*	9,333	7,564	4,951
EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT		**53,538**	**47,494**	**42,518**
Equity attributable to non-controlling interests	*20.6*	845	797	983
TOTAL EQUITY		**54,383**	**48,291**	**43,501**
Non-current provisions	*21*	6,363	8,559	11,207
Loans, borrowings, bonds and lease	*25.1.3*	6,799	8,666	10,025
Derivatives	*25.1.2*	305	1	385
Deferred income tax liabilities	*14.2*	1,002	402	345
Deferred income and government grants	*23.1*	1,011	881	833
Other financial liabilities	*25.1.4*	478	517	448
Other non-financial liabilities	*24.1*	141	133	65
NON-CURRENT LIABILITIES		**16,099**	**19,159**	**23,308**
Current provisions	*21*	21,223	12,600	7,311
Loans, borrowings, bonds and leases	*25.1.3*	2,137	2,160	1,384
Derivatives	*25.1.2*	1,629	82	63
Trade and other financial liabilities	*25.1.4*	6,707	4,601	3,504
Income tax liabilities		198	20	476
Deferred income and government grants	*23.2*	97	103	89
Other non-financial liabilities	*24.2*	3,305	2,258	2,203
CURRENT LIABILITIES		**35,296**	**21,824**	**15,030**
TOTAL LIABILITIES		**51,395**	**40,983**	**38,338**
TOTAL EQUITY AND LIABILITIES		**105,778**	**89,274**	**81,839**

*** *restatement of comparative data is described in note 5 of these consolidated financial statements*

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Share capital	Reserve capital	Hedging reserve	Foreign exchange differences from translation	Retained earnings	Total	Non-controlling interests	Total equity
Note	*20.1*		*20.2*					
JANUARY 1, 2022	**19,165**	**20,154**	**609**	**2**	**7,564**	**47,494**	**797**	**48,291**
Net profit for the reporting period	-	-	-	-	3,328	3,328	62	3,390
Other comprehensive income	-	-	(641)	2	147	(492)	(1)	(493)
COMPREHENSIVE INCOME	**-**	**-**	**(641)**	**2**	**3,475**	**2,836**	**61**	**2,897**
Allocation of profit from previous years	-	1,734	-	-	(1,734)	-	-	-
Dividend	-	-	-	-	-	-	(3)	(3)
Accounting for purchase of additional shares in subsidiaries	-	-	-	-	34	34	-	34
Reduction of nominal value of shares	(3,178)	3,178	-	-	-	-	-	-
Share capital increase	3,197	(17)	-	-	-	3,180	-	3,180
Changes in PGE Group	-	-	-	-	-	-	(10)	(10)
Other changes	-	-	-	-	(6)	(6)	-	(6)
DECEMBER 31, 2022	**19,184**	**25,049**	**(32)**	**4**	**9,333**	**53,538**	**845**	**54,383**

	Share capital	Reserve capital	Hedging reserve	Foreign exchange differences from translation	Retained earnings	Total	Non-controlling interests	Total equity
Note	*20.1*		*20.2*					
JANUARY 1, 2021	**19,165**	**18,410**	**(13)**	**5**	**4,951**	**42,518**	**983**	**43,501**
Net profit for the reporting period	-	-	-	-	3,972	3,972	(27)	3,945
Other comprehensive income	-	-	622	-	335	957	2	959
COMPREHENSIVE INCOME	**-**	**-**	**622**	**-**	**4,307**	**4,929**	**(25)**	**4,904**
Allocation of profit from previous years	-	1,744	-	-	(1,744)	-	-	-
Dividend	-	-	-	-	-	-	(2)	(2)
Changes in PGE Group	-	-	-	(2)	(18)	(20)	(155)	(175)
Settlement of purchase of additional shares in subsidiaries	-	-	-	-	(1)	(1)	(4)	(5)
Share of change in equity of jointly-controlled entities	-	-	-	-	72	72	-	72
Other changes	-	-	-	(1)	(3)	(4)	-	(4)
DECEMBER 31, 2021	**19,165**	**20,154**	**609**	**2**	**7,564**	**47,494**	**797**	**48,291**

CONSOLIDATED STATEMENT OF CASH FLOWS

	Note	Year ended December 31, 2022	Year ended December 31, 2021 *restated data**
CASH FLOWS FROM OPERATING ACTIVITIES			
Gross profit		**4,110**	**4,871**
Income tax paid		(2,168)	(1,273)
Adjustments for:			
Share of profit of equity-accounted entities		-	2
Depreciation, amortisation, disposal and impairment losses		4,362	4,412
Interest and dividend, net		286	312
Gains on investing activities	*27.1*	18	(363)
Change in receivables	*27.1*	(1,373)	(2,958)
Change in inventories	*27.1*	(2,727)	866
Change in CO_2 emission allowances for captive use		35	(3,129)
Change in liabilities, excluding loans and borrowings	*27.1*	3,005	1,418
Change in other non-financial assets, prepayments	*27.1*	(1,130)	(482)
Change in provisions	*27.1*	7,147	3,813
Other		44	(50)
NET CASH FROM OPERATING ACTIVITIES		**11,609**	**7,439**
CASH FLOWS FROM INVESTING ACTIVITIES			
Sale of property, plant and equipment and intangible assets		24	59
Purchase property, plant and equipment and intangible assets	*27.2*	(6,661)	(4,682)
Recognition of deposits with maturity over 3 months	*27.2*	(1,391)	(312)
Termination of deposits with maturity over 3 months	*27.2*	1,367	303
Purchase of financial assets		(4)	(60)
Purchase of fully consolidated entity, after offsetting acquired cash	*27.2*	(797)	-
Sale of subsidiary	*27.2*	111	368
Sale of other financial assets		23	63
Loss of control	*27.2*	(2)	(118)
Loans repaid		16	-
Other		18	12
NET CASH FROM INVESTING ACTIVITIES		**(7,296)**	**(4,367)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issue of shares	*27.3*	3 197	-
Proceeds from share issue for non-controlling interests	*27.3*	33	419
Proceeds from loans, borrowings	*27.3*	2,293	601
Repayment of loans, borrowings, leases	*27.3*	(4,352)	(1,233)
Dividends paid		(3)	(2)
Interest paid	*27.3*	(364)	(358)
Other		37	45
NET CASH FROM FINANCING ACTIVITIES		**841**	**(528)**
NET CHANGE IN CASH AND CASH EQUIVALENTS		**5,154**	**2,544**
Net exchange differences		*7*	*(17)*
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF PERIOD	*18*	**6,733**	**4,189**
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD	*18*	**11,887**	**6,733**

** restatement of comparative data is described in note 5 of these consolidated financial statements*

GENERAL INFORMATION, BASIS FOR PREPARATION OF FINANCIAL STATEMENTS AND OTHER EXPLANATORY INFORMATION

1. General information

1.1 Information on the parent

PGE Polska Grupa Energetyczna S.A. was founded on the basis of a notary deed of August 2, 1990 and registered in the District Court in Warsaw, XVI Commercial Department on September 28, 1990. The Company was registered in the National Court Register of the District Court for the capital city of Warsaw, XII Commercial Department, under no. KRS 0000059307. On April 6, 2022, an Extraordinary General Meeting adopted a resolution to change the Company's registered office to Lublin. On July 1, 2022, the change was registered in the National Court Register maintained by the District Court for Lublin-Wschód in Lublin, based in Świdnik, VI Commercial Division of the National Court Register, and the registered office is now located in Lublin at Aleja Kraśnicka 27 (Poland).

As at January 1, 2022, the composition of the Company's Management Board was as follows:

- Wojciech Dąbrowski – President of the Management Board,
- Wanda Buk – Vice-President of the Management Board,
- Paweł Cioch – Vice-President of the Management Board,
- Lechosław Rojewski – Vice-President of the Management Board,
- Paweł Śliwa – Vice-President of the Management Board,
- Ryszard Wasiłek – Vice-President of the Management Board.

On November 17, 2022, the Supervisory Board adopted a resolution to dismiss Mr. Paweł Cioch from the Management Board.

As at December 31, 2022 the Company's Management Board was as follows:

- Wojciech Dąbrowski – President of the Management Board,
- Wanda Buk – Vice-President of the Management Board,
- Lechosław Rojewski – Vice-President of the Management Board,
- Paweł Śliwa – Vice-President of the Management Board,
- Ryszard Wasiłek – Vice-President of the Management Board.

On January 4, 2023, the Supervisory Board adopted a resolution to appoint Mr. Rafał Włodarski to the Management Board as of January 9, 2023.

At the date on which these consolidated financial statements were published, the Company's Management Board was as follows:

- Wojciech Dąbrowski – President of the Management Board,
- Wanda Buk – Vice-President of the Management Board,
- Lechosław Rojewski – Vice-President of the Management Board,
- Paweł Śliwa – Vice-President of the Management Board,
- Ryszard Wasiłek – Vice-President of the Management Board,
- Rafał Włodarski – Vice-President of the Management Board.

Ownership structure

The parent's ownership structure was as follows:

	As at December 31, 2022	As at December 31, 2021
State Treasury	60.86%	57.39%
Other shareholders	39.14%	42.61%
Total	**100.00%**	**100.00%**

The ownership structure as at particular reporting dates was prepared on the basis of data available to the Company.

According to information known to the Company as of the date on which these financial statements were prepared, the State Treasury was the only shareholder with at least 5% of votes at the general meeting of PGE S.A.

As disclosed in note 33.3 to these financial statements, the Company in the present period reduced the nominal value of its shares and increased its share capital. The changes in the Company's share capital were registered at the National Court Register on May 18, 2022.

On May 20, 2022, the Company received a notification of a change in the total number of votes held by the State Treasury. As at the date of approval of this report for publication, the State Treasury holds 60.86% of the total number of votes. Taking into account the shares held by State Treasury subsidiary Towarzystwo Finansowe Silesia sp. z o.o., the State Treasury holds a total share of 61.70% in the total number of votes.

1.2 Information on PGE Group

PGE Group consists of the parent, PGE Polska Grupa Energetyczna S.A., along with 74 consolidated subsidiaries. Also subject to consolidation are 3 entities constituting joint operations, 2 associates and 1 jointly controlled entity. For additional information about the entities included in the consolidated financial statements please refer to note 1.3.

These consolidated financial statements of PGE Group cover the period from January 1, 2022 to December 31, 2022 and include comparative data for the period from January 1, 2021 to December 31, 2021.

The financial statements of all subordinated entities were prepared for the same reporting period as the financial statements of the parent company, using consistent accounting principles. Companies acquired in the course of the financial year were the exception, preparing financial data for the period from the moment when PGE Group obtained control.

PGE Group companies' core activities are as follows:

- production of electricity,
- distribution of electricity,
- wholesale and retail trade in electricity, energy origin rights, CO_2 emission allowances and natural gas,
- production and distribution of heat,
- provision of other services related to these activities

Business activities are conducted under appropriate concessions granted to specific PGE Group companies. PGE Group operates predominately in Poland.

Going concern

These financial statements were prepared under the assumption that the key Group companies will continue operating as a going concern for at least 12 months from the reporting date.

In 2021 ENESTA sp. z o.o. (currently ENESTA sp. z o.o. w restrukturyzacji) terminated unfavourable contracts for the supply of electricity and natural gas. In connection with this, as of December 31, 2021 a PLN 279 million provision for counterparty claims was created. Some counterparties took their claims to court in 2022. After unsuccessful attempts to reach an agreement with its counterparties, ENESTA filed for restructuring proceedings. On June 21, 2022, restructuring (sanitation) proceedings were opened. An inventory of receivables was filed with the court by September 30, 2022. A Restructuring Plan was filed with the court by the Administrator on December 21, 2022. On January 27, 2023, an order was issued approving the Restructuring Plan.

At the end of 2022 and in February 2023, judgements unfavourable to ENESTA were made in pending proceedings. The judgements established the existence and validity of contracts for the sale of electricity and natural gas. ENESTA therefore dissolved the provision made in 2021 for litigation. As a result of the need to continue to perform unfavourable sales contracts at the end of 2022, a provision of PLN 37 million was made for onerous contracts in 2023. In addition, provisions have been made for potential litigation in connection with the reserve sale implemented in 2022 by the vendor of last resort in the amount of PLN 56 million.

Revenue from sales invoiced by ENESTA during 2022, assuming that the termination of contracts was effective, was adjusted in accordance with final court judgements.

As at December 31, 2022, the value of ENESTA's assets and equity and liabilities is PLN 134 million and the value of equity is PLN (236 million) million.

Aside from the issue of ENESTA sp. z o.o. w restrukturyzacji, at the date of the approval of these financial statements, there is no evidence indicating that the going concern of significant Group companies is endangered.

1.3 PGE Group's composition

1.3.1 Fully consolidated direct and indirect subsidiaries

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2022	Stake held by Group entities as at December 31, 2021
	SEGMENT: SUPPLY			
1.	PGE Polska Grupa Energetyczna S.A. Warsaw	Parent		
2.	PGE Dom Maklerski S.A. Warsaw	PGE S.A.	100.00%	100.00%
3.	PGE Obrót S.A. Rzeszów	PGE S.A.	100.00%	100.00%
4.	ENESTA sp. z o.o. w restrukturyzacji Stalowa Wola	PGE Obrót S.A.	87.33%	87.33%
5.	PGE Paliwa sp. z o.o. Kraków	PGE EC S.A.	100.00%	100.00%
	SEGMENT: CONVENTIONAL GENERATION			
6.	PGE Górnictwo i Energetyka Konwencjonalna S.A. Bełchatów	PGE S.A.	100.00%	100.00%
7.	Elbest Security sp. z o.o. Bełchatów	PGE S.A.	100.00%	100.00%
8.	MegaSerwis sp. z o.o. Bogatynia	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
9.	ELMEN sp. z o.o. Rogowiec	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
10.	ELTUR-SERWIS sp. z o.o. Bogatynia	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
11.	BETRANS sp. z o.o. Kalisko	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
12.	BESTGUM POLSKA sp. z o.o. Rogowiec	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
13.	RAMB sp. z o.o. Piaski	PGE S.A. PGE GiEK S.A.	- 100.00%	100.00% -
14.	„Energoserwis – Kleszczów” sp. z o.o. Rogowiec	PGE S.A. PGE GiEK S.A.	51.00% -	- 51.00%
	SEGMENT: DISTRICT HEATING			
15.	PGE Energia Ciepła S.A. Warsaw	PGE S.A.	100.00%	100.00%
16.	PGE Toruń S.A. Toruń	PGE EC S.A.	95.22%	95.22%
	PGE Gaz Toruń sp. z o.o. Warsaw	PGE EC S.A.	-	100.00%
17.	Zespół Elektrociepłowni Wrocławskich KOGENERACJA S.A. Wrocław	PGE EC S.A.	58.07%	58.07%
18.	Elektrociepłownia Zielona Góra S.A. Zielona Góra	KOGENERACJA S.A.	98.40%	98.40%
19.	MEGAZEC sp. z o.o. Bydgoszcz	PGE S.A.	100.00%	100.00%
	Przedsiębiorstwo Energetyki Cieplnej sp. z o.o. Zgierz	PGE EC S.A.	-	100.00%
	SEGMENT: CIRCULAR ECONOMY			
20.	PGE Ekoserwis S.A. Wrocław	PGE S.A.	100.00%	100.00%
21.	EPORE S.A. Bogatynia	PGE GiEK S.A.	100.00%	100.00%
22.	ZOWER sp. z o.o. Rybnik	PGE Ekoserwis S.A.	100.00%	100.00%
	SEGMENT: RENEWABLES			
23.	PGE Energia Odnawialna S.A. Warsaw	PGE S.A.	100.00%	100.00%
24.	Elektrownia Wiatrowa Baltica-1 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
25.	Elektrownia Wiatrowa Baltica-4 sp. z o.o. Warsaw	PGE S.A.	66.19%	100.00%

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2022	Stake held by Group entities as at December 31, 2021
26.	Elektrownia Wiatrowa Baltica-5 sp. z o.o. Warsaw	PGE S.A.	66.19%	100.00%
27.	Elektrownia Wiatrowa Baltica-6 sp. z o.o. Warsaw	PGE S.A.	66.24%	100.00%
28.	Elektrownia Wiatrowa Baltica-9 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
29.	Elektrownia Wiatrowa Baltica-10 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
30.	Elektrownia Wiatrowa Baltica-11 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
31.	Elektrownia Wiatrowa Baltica-12 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
32.	Elektrownia Wiatrowa Baltica-8 sp. z o.o. (formerly PGE Baltica 1 sp. z o.o.) Warsaw	PGE S.A.	100.00%	100.00%
33.	PGE Baltica 2 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
34.	PGE Baltica 3 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
35.	PGE Baltica 4 sp. z o.o. Warsaw	PGE S.A.	55.04%	100.00%
36.	PGE Baltica 5 sp. z o.o. Warsaw	PGE Baltica 3 sp. z o.o.	100.00%	100.00%
37.	PGE Baltica 6 sp. z o.o. Warsaw	PGE Baltica 2 sp. z o.o.	100.00%	100.00%
38.	PGE Baltica sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
39.	PGE Klaster sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
	PGE Soleo 1 sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
40.	PGE Soleo 2 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
41.	PGE Soleo 3 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
	PGE Soleo 4 sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
	PGE Soleo 5 sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
	PGE Soleo 6 sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
	PGE Soleo 7 sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
42.	Mithra B sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
43.	Mithra D sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
44.	Mithra F sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
45.	Mithra G sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
46.	Mithra H sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
47.	Mithra I sp. z o.o. Warsaw	PGE EO S.A.	100.00%	-
48.	Mithra K sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
49.	Mithra M sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
50.	Mithra N sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
51.	Mithra O sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
52.	Mithra P sp. z o.o. Poznań	PGE EO S.A.	100.00%	-
	SEGMENT: DISTRIBUTION			-
53.	PGE Dystrybucja S.A. Lublin	PGE S.A.	100.00%	100.00%
	SEGMENT: OTHER ACTIVITY			
54.	PGE Systemy S.A. Warsaw	PGE S.A.	100.00%	100.00%
55.	PGE Sweden AB (publ) Stockholm	PGE S.A.	100.00%	100.00%

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2022	Stake held by Group entities as at December 31, 2021
56.	PGE Synergia sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
	„Elbest" sp. z o.o. Bełchatów	PGE S.A.	-	100.00%
57.	ELBIS sp. z o.o. Rogowiec	PGE S.A.	100.00%	100.00%
58.	PGE Inwest 2 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
59.	PGE Ventures sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
60.	PGE Gryfino 2050 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
61.	PGE Inwest 9 sp. z o.o. (currently PGE Obsługa Klienta sp. z o.o.) Warsaw	PGE S.A.	100.00%	100.00%
62.	PGE Inwest 10 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
63.	PGE Inwest 11 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
64.	PGE Inwest 12 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
65.	PGE Asekuracja S.A. (formerly PGE Inwest 13 S.A.) Warsaw	PGE S.A.	100.00%	100.00%
66.	PGE Inwest 14 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
67.	PGE Nowa Energia sp. z o.o. w likwidacji Warsaw	PGE S.A.	100.00%	100.00%
	Towarzystwo Funduszy Inwestycyjnych Energia S.A. Warsaw	PGE S.A.	-	100.00%
68.	Rybnik 2050 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
69.	PGE Inwest 20 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
70.	PGE Inwest 21 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
71.	PGE Inwest 22 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
72.	PGE Inwest 23 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
73.	PGE Inwest 24 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
74.	PGE Inwest 25 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
	BIO-ENERGIA sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
	Przedsiębiorstwo Transportowo-Usługowe „ETRA" sp. z o.o. Białystok	PGE Dystrybucja S.A.	-	100.00%
75.	Energetyczne Systemy Pomiarowe sp. z o.o. Białystok	PGE Dystrybucja S.A.	100.00%	100.00%
	Przedsiębiorstwo Usługowo-Handlowe TOREC sp. z o.o. Toruń	PGE Toruń S.A.	-	51.05%
	4Mobility S.A. Warsaw	PGE Nowa Energia sp. z o.o. w likwidacji	-	51.47%
	PIMERGE S.A. Wrocław	PGE Ventures sp. z o.o.	-	89.87%

The table above includes the following changes in the structure of PGE Group companies subject to full consolidation which took place during the year ended December 31, 2022:

- The merger of PGE EC S.A. (acquiring company) and Przedsiębiorstwo Energetyki Cieplnej sp. z o.o. (acquired company) was registered at the National Court Register on November 2, 2022. The merger had no impact on these consolidated financial statements of PGE Group.
- On February 4, 2022 PGE EO S.A. purchased 100% of shares in Mithra A sp. z o.o., Mithra B sp. z o.o., Mithra L sp. z o.o. and Mithra V sp. z o.o., which own 7 PV projects with a total capacity of 26 MW, for the total price of PLN 18.7 million. The merger of PGE EO S.A. (acquiring company) and Mithra A, Mithra L and Mithra V (acquired companies) was registered at the National Court Register on December 30, 2022. The clearing of the acquisition is described in note 1.4 of these financial statements.
- On March 4, 2022 an agreement was performed to sell all Elbest sp. z o.o. shares held by PGE S.A. to Polski Holding Hotelowy sp. z o.o. The gain on this company's sale at the level of the consolidated financial statements was PLN 19 million.

- The merger of PGE Dystrybucja S.A. (acquiring company) and Przedsiębiorstwo Transportowo-Usługowe "ETRA" sp. z o.o. (acquired company) was registered at the National Court Register on November 2, 2022. The merger had no impact on these consolidated financial statements of PGE Group.
- On March 31, 2022, an Extraordinary General Meeting of PGE Nowa Energia sp. z o.o. adopted a resolution to dissolve PGE Nowa Energia sp. z o.o. and appoint a liquidator to carry out liquidation.
- All shares in PHU Torec sp. z o.o. held by PGE Toruń S.A. were sold on April 21, 2022. The loss on this company's sale at the level of the consolidated financial statements was PLN 3 million.
- The merger of PGE EO S.A. (acquiring company) and Bio-Energia sp. z o.o. (acquired company) was registered at the National Court Register on November 2, 2022. The merger had no impact on these consolidated financial statements of PGE Group.
- Because of the submitted motions to put the company into bankruptcy, PIMERGE S.A. was removed from consolidation at the beginning of 2022. The loss on this at the level of the consolidated financial statements was PLN 1 million.
- On April 1, 2022, PGE EO S.A. and Vanadium Holdco Limited executed a conditional share purchase agreement as a result of which PGE EO S.A. committed to acquiring 100% of shares in Collfield Investments, which owns 100% of shares in three SPVs operating three wind farms with a total capacity of 84.2 MW. The transaction value was PLN 939 million. On 21 June 2022, the transfer of ownership of shares to PGE EO S.A. took place. On 30 December 2022, the merger of PGE EO S.A. (acquiring company) and the acquired companies. The clearing of the acquisition is described in note 1.4 of these financial statements.
- On 15 July 2022, an agreement for the sale of all shares held by PGE S.A. in TFI Energia to PZU S.A. was executed. The gain on the sale of shares in TFI Energia S.A. at the level of the consolidated financial statements amounted to PLN 4 million.
- An increase in the share capital of 4Mobility S.A. was registered on July 15, 2022. All new shares were offered by private subscription exclusively to EFF B.V., based in Maastricht - the current shareholder of 4Mobility S.A. As a result of the share capital increase, the equity interest of PGE Nowa Energia sp. z o.o. decreased from 51.47% to 37.93%, meaning that 4Mobility S.A. is no longer a PGE Group subsidiary.
- On 25 July 2022, the ownership of 33.8% of shares held by PGE S.A. in EWB 4, EWB 5 and EWB 6 was transferred to ENEA S.A. The gain on the sale of 33.8% of shares in the indicated companies, which was recognised at the level of the consolidated financial statements, amounted to approximately EUR 800 thousand.
- The ownership of 44.96% of shares held by PGE S.A. in PGE Baltica 4 was transferred to Tauron Polska Energia S.A. on September 27, 2022. The result on sale of the 44.96% of shares in PGE Baltica 4, which was recognised at the level of consolidated financial statements, was approx. PLN 250 thousand.
- The merger of PGE EC S.A. (acquiring company) and PGE Gaz Toruń sp. z o.o. (acquired company) was registered at the National Court Register on November 2, 2022. The merger had no impact on these consolidated financial statements of PGE Group.
- On December 9, 2022, PGE EO S.A. entered into agreements to purchase 100% of the shares in Mithra D sp. z o.o., Mithra F sp. z o.o., Mithra G sp. z o.o., Mithra H sp. z o.o., Mithra I sp. z o.o, Mithra K sp. z o.o., Mithra M sp. z o.o., Mithra N sp. z o.o., Mithra O sp. z o.o., Mithra P sp. z o.o. with 28 photovoltaic projects with a total capacity of 59 MW. The transaction value was PLN 21.1 million. The clearing of the acquisition is described in note 1.4 of these financial statements.
- The merger of PGE EO S.A. (acquiring company) and PGE Soleo 4 sp. z o.o., PGE Soleo 5 sp. z o.o., PGE Soleo 6 sp. z o.o. oraz PGE Soleo 7sp. z o.o. (acquired companies) was registered at the National Court Register on December 30, 2022. The merger had no impact on these consolidated financial statements of PGE Group.

Transactions after the reporting period

As described in note 33.6 of these financial statements, a preliminary agreement for the purchase of shares in PKPE Holding sp. z o.o. was concluded on December 28, 2022. Implementation of the transaction will be possible once the conditions precedent have been met.

1.3.2 Joint ventures that are subject to consolidation as regards the assets, equity and liabilities, revenues and costs attributable to PGE Group

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2022	Stake held by Group entities as at December 31, 2021
	SEGMENT: RENEWABLES			
1.	Elektrownia Wiatrowa Baltica-2 sp. z o.o. Warsaw	PGE Baltica 6 sp. z o.o.	50.00%	50.00%
2.	Elektrownia Wiatrowa Baltica-3 sp. z o.o. Warsaw	PGE Baltica 5 sp. z o.o.	50.00%	50.00%
3.	PGE Soleo Kleszczów sp. z o.o. Kleszczów	PGE EO S.A.	50.00%	-

On May 12, 2022, the increase of the share capital of PGE Soleo 1 sp. z o.o. (currently PGE Soleo Kleszczów sp. z o.o.) was registered with the National Court Register, through the creation of 4,100 new shares with a nominal value of PLN 1,000 each. The share capital increase was recognised as follows: PGE EO S.A. acquired 2,000 of the new-issue shares in exchange for a PLN 2 million cash contribution, while the Municipality of Kleszczów acquired 2,100 of the new-issue shares and paid PLN 2.1 million.

As a result of the above transaction, PGE EO S.A. and Kleszczów Municipality hold shares representing 50% of share capital each, and PGE Soleo 1 sp. z o.o. is no longer a PGE Group subsidiary but a joint venture subject to consolidation to the extent of assets and liabilities, revenues and costs attributable to PGE Group.

In May 2021, Ørsted acquired stakes in the increased share capital of Elektrownia Wiatrowa Baltica - 2 sp. z o.o. and Elektrownia Wiatrowa Baltica - 3 sp. z o.o. Following this transaction, Ørsted Group became a 50% shareholder in EWB2 and EWB3. In effect, PGE Group lost control over these two companies.

As a result of the transaction and the signed agreements, the shareholders have joint control over EWB2 and EWB3. Decisions regarding all major activities require unanimous consent from the shareholders. At the same time, based on professional judgement, PGE Group assessed that as a result of the agreements signed the shareholders have the right to essentially all of the economic benefits that will be generated by the companies' assets and will generally be their only source of revenue. According to PGE Group, starting from the date on which the stakes were acquired by Ørsted (as mentioned above), EWB2 and EWB3 constitute a joint operation in the meaning of IFRS Joint Arrangements, in connection with which in these financial statements PGE Group recognises its 50% stake in the assets, liabilities, revenues and costs of the jointly controlled entities.

1.3.3 The following associates and jointly controlled entities are subject to consolidation using the equity method:

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2022	Stake held by Group entities as at December 31, 2021
1.	Polimex Mostostal S.A. Warsaw	PGE S.A.	16.26%	16.40%
2.	PEC Bogatynia S.A. Bogatynia	PGE EC S.A.	34.93%	34.93%
3.	Energopomiar sp. z o.o. Gliwice	PGE Group companies	49.79%	49.79%
	Polska Grupa Górnicza S.A. Katowice	PGE GiEK S.A.	-	15.32%

Three tranches of the call options were exercised in the first half of 2022, as a result of which PGE S.A. acquired 500,000 shares of Polimex Mostostal S.A. In effect, PGE S.A.'s stake in Polimex Mostostal S.A. increased from 16.40% to 16.48%. On September 27, 2022, the conversion of bonds into shares took place and, as a result of this transaction, PGE S.A.'s shareholding decreased to 16.26%.

On October 25, 2022, the agreement on the sale of shares in Polska Grupa Górnicza S.A. was executed. Pursuant to the agreement, PGE GiEK S.A. sold all its shares in PGG to the State Treasury at a price of

PLN 1 for all shares held. The value of the investment in PGG has been fully written down and therefore the sale transaction has no material impact on these consolidated financial statements of PGE Group.

1.4 Accounting for new acquisitions of subsidiaries

Accounting for the Collfield Investments acquisition

On June 21, 2022, PGE EO S.A. purchased from Vanadium Holdco Limited 100% of the shares in Collfield Investments sp. z o.o., which holds 100% of the shares in three special purpose vehicles (Future Energy sp. z o.o., Radzyn Clean Energy Poland sp. z o.o., Elwiatr Pruszyński sp. z o.o.) operating three wind farms with a total capacity of 84.2 MW.

In accordance with the requirements of IFRS 3 *Business combinations*, an analysis was made as to whether the assets and liabilities acquired meet the definition of a business and the transaction should be accounted for under IFRS 3 as a business combination, or whether the assets acquired do not constitute a business and the transaction should be accounted for as an asset acquisition.

After a concentration test, the Group concluded that the transaction constituted an asset acquisition and was recognised as such in these consolidated financial statements.

The transaction value was PLN 939 million. The amount of PLN 344 million was used to pay for the shares, and PLN 595 million concerned a subrogation of liabilities. The assets acquired are fixed assets consisting mainly of wind turbines and technical infrastructure including foundations, roads and yards, as well as power derivation components - MV and HV cables and a substation.

Accounting for the Mithra acquisitions

On February 4, 2022 PGE EO S.A. purchased 100% of shares in Mithra A sp. z o.o., Mithra B sp. z o.o., Mithra L sp. z o.o. and Mithra V sp. z o.o., which own 7 PV projects with a total capacity of 26 MW, for the total price of PLN 18.7 million. The purchase of shares in the individual companies took place under separate agreements, but their structure and transaction formula were analogous.

On December 9, 2022, PGE EO S.A. entered into agreements to purchase 100% of the shares in Mithra D sp. z o.o., Mithra F sp. z o.o., Mithra G sp. z o.o., Mithra H sp. z o.o., Mithra I sp. z o.o, Mithra K sp. z o.o., Mithra M sp. z o.o., Mithra N sp. z o.o., Mithra O sp. z o.o., Mithra P sp. z o.o., with 28 photovoltaic projects with a total capacity of 59 MW. The transaction value was PLN 21.1 million.

The purchase of shares in the individual companies took place under separate agreements, but their structure and transaction formula were analogous.

In accordance with the requirements of IFRS 3 Business combinations, an analysis was made as to whether the assets and liabilities acquired meet the definition of a business and the transaction should be accounted for under IFRS 3 as a business combination, or whether the assets acquired do not constitute a business and the transaction should be accounted for as an asset acquisition.

After a concentration test, the Group concluded that the transaction constituted an asset acquisition and was recognised as such in these consolidated financial statements.

For all of the above transactions, the assets acquired are the documentation of photovoltaic farm projects: technical conditions for connection, design maps, environmental reports, land lease agreements, administrative fees, etc. Individual items vary from company to company depending on the progress of the projects

2. Basis for preparation of financial statements

2.1 Statement of compliance

These consolidated financial statements were prepared in accordance with International Financial Reporting Standards as adopted by the European Union. IFRS comprise standards and interpretations, approved by the International Accounting Standards Board and the IFRS Interpretations Committee.

2.2 Presentation and functional currency

The parent's functional currency and the presentation currency of these consolidated financial statements is the Polish zloty (PLN). All amounts are in PLN millions (PLNm), unless indicated otherwise.

For the purpose of translation of items denominated in currency other than PLN as at the reporting date the following exchange rates were applied:

	December 31, 2022	December 31, 2021
USD	4.4018	4.0600
EUR	4.6899	4.5994

2.3 New standards and interpretations published, not yet effective

The following standards, amendments to existing standards and interpretations are not yet endorsed by the European Union or are not effective as at January 1, 2022:

Standard	Description of changes	Effective date
IFRS 14 Regulatory Deferral Accounts	Accounting and disclosure principles for regulatory deferral accounts.	In accordance with a decision by the European Commission, the approval process for the standard in its preliminary version will not begin before the final version is published.
Amendments to IFRS 10 and IAS 28	Contains guidelines on the sale or contribution of assets between an investor and its joint venture or associate.	Postponed indefinitely
IFRS 17 Insurance contracts	Defines a new approach to recognising revenue and profit/loss in the period in which insurance services are provided	January 1, 2023
Amendments to IFRS 17 Insurance Contracts	First-time Adoption of IFRS 17 and IFRS 9 - Comparative Data	January 1, 2023
Amendments to IAS 1	The changes concern presentation of financial statements - Classification of Liabilities as Current or Non-current	January 1, 2023
Amendments to IAS 1	The amendments concern the presentation of financial statements - disclosures regarding the applied accounting policy	January 1, 2023
Amendments to IAS 8	The amendments concerning disclosures regarding the applied accounting policy, including changes in estimated values and correcting errors	January 1, 2023
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023
Amendments to IFRS 16	The changes relate to how liabilities concerning sale and leaseback transactions are measured	January 1, 2024

PGE Group intends to adopt the above-mentioned new standards and amendments to IFRS standards and interpretations published by the International Accounting Standards Board, but not effective as at the reporting date, in accordance with their effective date.

These regulations will not have a material impact on PGE Group's future financial statements.

2.4 Professional judgement of management and estimates

In the process of applying accounting rules with regards to the below issues, management has made judgements and estimates that affect the amounts presented in the consolidated financial statements, including in other explanatory information. The estimates are based on the best knowledge of the Management Board relating to current and future operations and events in particular areas. Detailed information on the assumptions made is presented below or in respective explanatory notes.

- During the reporting period, the Group conducted asset impairment tests as of June 30, 2022. The test results are described in note 3 to these financial statements.
- Estimates of the recoverable amount of property, plant and equipment are based on a number of significant assumptions, the appearance of which is uncertain and mostly beyond PGE Group's control. The Group believes that it has assumed the most accurate volumes and values. Nevertheless, realisation of the particular assumptions may diverge from the ones established by the Group.

- Provisions are liabilities of uncertain amount or timing. During the reporting period, the Group changed estimates regarding the validity or amounts of some provisions.
  In particular, during the reporting period a provision for land rehabilitation and a provision for employee benefits were updated due to an increase in the discount rate and inflation. Details are presented in note 21 to these financial statements.
- Uncertainties concerning tax settlements are described in note 30 to these consolidated financial statements.
- The Group makes significant estimates in respect of the recognised contingent liabilities, details are set out in note 28 of these financial statements.
- The valuation of financial instruments is based on a number of assumptions and estimates on the basis of the data available at the time of preparing the financial statements. Changes in these assumptions and estimates may affect the future financial statements of PGE Group. Note 25.1.2 provides information on the impact of the valuation of financial instruments on profit or loss and other comprehensive income.
- In view of the crisis situation in the electricity market in 2022, a number of legal regulations came into force, which made it necessary for PGE Group side to make revenue and cost estimates for coal compensation, compensation and price adjustments resulting from the Act for households, the contribution for the Price Difference Payment Fund resulting from the Emergency Measures Act in 2023. These estimates are described in greater detail in notes 33.4 and 33.5 to these financial statements.
- Some of the sales revenue described in detail in note 7.1 of these consolidated financial statements is invoiced based on cyclical readings of metering and billing systems. This results in the need for an overestimation of sales revenue in relation to supplies for which PGE Group does not have readings from metering equipment at the reporting date.
- No significant extensions in the payment of receivables or problems with liquidity resulting from the COVID-19 pandemic were observed as of the reporting date. Following the pandemic's outbreak, in 2020 the Group updated its models for estimating expected credit losses. For the purposes of estimating the expected credit losses, counterparties were split into two groups: strategic counterparties, which have been internally assigned ratings based on a scoring model, and other counterparties, for which expected credit losses are estimated based on a provisions matrix. For the first group of counterparties, the basis for calculating expected credit losses was changed. Losses are currently calculated on the basis of Credit Default Swap (CDS) prices, while for the other group of counterparties percentage coefficients in each time interval of the provisions matrix were updated to a level corresponding to the current recovery rate for receivables.

3. Impairment tests on property, plant and equipment, intangible assets, right-of-use assets and goodwill

Property, plant and equipment is PGE Group's most significant group of assets. Due to variable macroeconomic conditions PGE Group regularly verifies indications of impairment for its assets. When assessing the market situation PGE Group uses both its own analytical tools and independent think tanks' support. In previous reporting periods, PGE Group recognised substantial impairment allowances of property, plant and equipment of Conventional Generation segment and the Renewables segment. An impairment loss that had been recognised in the Renewables segment was also completely reversed in previous reporting periods.

In the current reporting period, the Group analysed the rationale and identified factors that could have significantly contributed to a change in the value of non-current assets held in the above segments and in PGE Gryfino 2050 sp. z o.o.

External factors

- PGE's market capitalisation remaining below net asset book value.
- Global energy crisis, which is characterised by rising levels of fuel, electricity and CO_2 prices and levels of volatility hitherto unobserved. This crisis was exacerbated by Russia's invasion of Ukraine on 24 February 2022 and the emergence of the risk of coal and gas shortages in Europe:
  - The average electricity price for forward contracts for the year ahead (Y+1) in 2022 was 1,112 PLN/MWh, i.e. 188% higher than in 2021;
  - CO_2 prices, after a sharp collapse triggered by the pandemic outbreak in mid-March 2020, began to recover until a sharp increase began in November 2021. In 2022, the average weighted price of the EUA DEC 22 instrument was 80.85 EUR/t and was significantly higher (50%) than the average price of EUA DEC 21 observed in 2021;

  - The average price of hard coal at ARA ports in monthly follow-on contracts in 2022 was 253 USD/t, up 234% compared to 2021,
  - The average price of natural gas in futures contracts with delivery in 2022 was 118 EUR/MWh, an increase of 293% compared to 2021.

- The Act of October 27, 2022 on emergency measures to reduce electricity price levels and support certain consumers in 2023 requires generating entities to make payments to the Price Difference Payment Fund for each month from December 2022 to December 2023. These funds are intended to cover the difference between the maximum energy price adopted in the Act and the contractual or reference price to be paid to electricity sellers in the form of compensation.

As a result of the analysis of the above-mentioned rationale, the Group carried out asset impairment tests as at 31 December 2022 for the segments Conventional Generation, Renewables, the Heat segment to which goodwill is allocated, PGE Gryfino 2050 sp. z o.o. and EW Baltica 2 sp. z o.o. and EW Baltica 3 sp. z o.o. to which goodwill is allocated. No need to recognise impairment losses or reverse all that is needed for the aforementioned segments and companies is observed.

Macroeconomic assumptions

The key price assumptions, i.e. the price of electricity, CO_2 emission allowances, hard coal, natural gas, and assumptions related to production at most of the Group's installations were derived from a study prepared by an independent expert, taking into account own estimates based on the current market situation for the first three years of the forecast.

Electricity price forecasts assume a growth trend in 2024 relative to 2023 prices, followed by an average annual decrease of approx. 22.4% in 2025-2026 relative to 2024, and an average annual increase of approx. 5.6% in 2027-2030.

Price projections for CO_2 emission allowances assume an increase in 2024 relative to 2023, followed by an average annual decline in 2025-2026 at approx. 14.9% relative to 2024, and an average annual increase between 2027 and 2029 of approx. 14.6%. A slight decrease is expected in 2030, in comparison with 2029, followed by stable growth at approx. 3.7% annually until 2040.

Hard coal price forecasts assume an average annual decline of about 28.9% between 2024 and 2026 relative to 2023 prices, followed by an average annual increase of approx. 2.4% until 2040.

The forecasts for natural gas prices expect an annual average decrease of approx. 38.6% in 2024-2026 relative to 2023, followed by an average annual growth of approx. 3.8% in subsequent years.

The price forecasts for certificates of energy origin expect an average annual decrease of approx. 9.6% in 2024-2031 relative to 2023, which is related to the decreasing obligation to redeem these certificates.

The forecast for revenue from the capacity market for 2023-2027 is based on the results of completed main and additional auctions for these delivery periods, taking into account the joint balancing mechanism at PGE Group companies. From 2028, the forecast was developed by a team of experts at PGE S.A. on the basis of assumptions concerning estimated future flows for generating units, based on, inter alia, results of completed auctions and forecasts from an external expert. As of 1 July 2025, all Capacity Market Entities that have entered into capacity contracts after 31 December 2019 (i.e. for contracts entered into in the Main Auction for the delivery year 2025 onwards) will be subject to an emissions criterion of 550g CO_2/kWh (so-called EPS 550), which will effectively exclude all coal units from participating in subsequent Capacity Market auctions.

Unit availability was estimated based on repair plans, taking into account statistical failure rates.

Weighted average cost of capital

The year 2022 in the energy and related products market remained under strong pressure from the post-Covid rebound in economies around the world as well as changes in financial markets, where tighter monetary policy is being pursued. In addition, there is a war in Ukraine, which has created additional risks to the availability of hydrocarbons from the east. These factors have caused major disruption and abruptly changed trends in financial and commodity markets. One important element of the market that has been affected is the discount rate (weighted average cost of capital) adopted for asset impairment testing. According PGE Group, the determination of a fixed cost of capital for the following years on the basis of the market characteristics of the last period is not justified, therefore it was decided that in the first years of the projection the situation is influenced by current events, while in the following years the weighted average cost of capital will approach the average of the last 11 years (covering the full business cycle since the last crisis in the financial and commodity markets).

Climate-related issues

In July 2021, the European Commission published the Fit for 55 legislative package, which intends to, inter alia, reduce GHG emissions in the EU by 55% (previously by 40%) by 2030, relative to 1990. In line with the expectations of market participants, the EU ETS reform included in the package should result in a considerable increase in the prices of CO_2 emission allowances, which in practice already took place in 2021. The high prices of CO_2 allowances also continued in 2022. The changes introduced may adversely affect the margins earned by high-carbon generating units, particularly to the extent that the increase in the price of CO_2 allowances is not passed on in the price at which these units sell the electricity or heat produced.

The 2050 Decarbonisation Plan for the District Heating segment was adopted at PGE Group in December 2022, aiming to fulfil regulatory requirements in the energy industry and retain the existing generation potential in the long-term in order to meet customer needs. The Decarbonisation Plan operationalises objectives specified directly in PGE Group's strategy and in the District Heating segment strategy implementation plan. The plan identifies the locations where the transformation of manufacturing assets will take place, the timing of major activities, planned expenditures and effects. Generation capacity transition via new low- or zero-carbon generating units is planned for the 2030 horizon, and climate neutrality for the 2050 horizon. To this end, the District Heating segment is gradually replacing old coal-fired sources with new low-emission sources fired with gas and oil. The new generating units will be characterised by greater operational flexibility and reliability. This is contributing to lower emissions in the cities where they will be built. Between 2023 and 2029, most of the locations where PGE Group's district heating assets are located will be commissioned with installations that will result in a complete or significant shift away from coal fuel. Gas, municipal waste, biomass, waste heat and renewable energy will be used to produce heat in the new and modernised district heating units. The decarbonisation plan was taken into account when estimating the value in use of the generation assets of the District Heating segment.

Conventional Generation segment assets. The divestment of coal assets to the National Energy Security Agency is planned. This issue is provided with a description in note 33.2 to these financial statements.

The aforementioned changes mean that a decrease in the volume of production from conventional generation is expected and a decrease in margins generated by these assets in the future. As a consequence, this results in a reduction of expenditures (CAPEX and OPEX) for the maintenance of coal assets, which additionally affects the expected decline in profitability through the gradual deterioration of the availability of these units. At the same time, these legislative and market changes are encouraging the development of zero- and low-carbon sources, which, when the Group invests in these particular technologies, positively translates into the value in use of the assets under test. It should also be kept in mind that fossil fuel-based generation facilities, in the face of the uncertainty of RES generation (driven by environmental factors: water, wind, solar), are still needed in the electricity system to balance it.

Material changes in the regulatory environment, both in terms of domestic and foreign regulations, which affect or will affect the operations of PGE Group, are described in note 4.5. Regulatory environment in the Management Board report on PGE Group's activities in the year ended on December 31, 2022.

More information on climate risks is presented in note 26.4 of these financial statements.

Climate issues are included in the assumptions used for impairment testing to the best of the Group's knowledge, with the support of an external, independent expert. PGE Group is monitoring the market and regulatory situation on an on-going basis. The current record levels of fuel, electricity and CO_2 prices and their hitherto unobserved levels of volatility mean that the PGE Group faces considerable uncertainty about future developments. This is why, in the long term, the Group has decided to leave the assumptions developed by the independent think tank adopted for the impairment tests carried out in 2021. These assumptions have been adjusted for own estimates for the first three years of the forecast so as to account for the best present knowledge of the situation in energy markets. Future changes on the electricity market may differ from the current assumptions, which may lead to substantial changes in PGE Group's financial situation and results. They will be recognised in future financial statements.

3.1 Description of assumptions for the Conventional Generation segment

Impairment tests were conducted on December 31, 2022, on cash generating units basis by establishing their recoverable amounts. Determining fair value for very large groups of assets for which there is no active market and there are few comparable transactions is very difficult in practice. In the case of complete power plants and mines for which a value on the local market should be determined there are no observable fair values. Accordingly, the recoverable amount of the assets under review was determined based on an estimate of their value in use using the discounted net cash flow method on the basis of financial projections prepared for the period from January 2023 to the end of their useful life. According to the Group, financial projections longer than five years are justified due to significant and long-term effects of projected changes in the regulatory environment. Using longer projections, recoverable amounts may be determined more reliably.

Detailed segment assumptions

Presented below are the key assumptions having impact on estimates of the useful value of CGU:

- classify the following as one CGU due to technological links:
  - Branch KWB Bełchatów and Branch Elektrownia Bełchatów,
  - Branch KWB Turów and Branch Elektrownia Turów,
- consider Elektrownia Opole, Elektrownia Rybnik and Elektrownia Dolna Odra as three separate CGUs,
- adopt the following assumptions about going concern:
  - until 2036 for the Bełchatów complex, based on a shut-down date for all units accepted by the trade unions and adopted for the purposes of the Just Transition Plan for Łódzkie Voivodship,
  - until 2044 for the Turów complex, based on a decision prolonging the mining concession to 2044, dated April 28, 2021,
- take into account work cost optimisation resulting from current work plans, among other things,
- maintain production capacities as a result of replacement-type investments,
- adopt varied levels of WACC after tax for the projection period, depending on the CGU, in accordance with an individually estimated level of risk:
  - for 2023-2025: average annual level for each CGU of 8.30% - 9.30%,
  - for 2026-2036: average annual level for each CGU of 6.73% - 7.64%,

As at December 31, 2022, the value of tested property, plant and equipment and intangible assets at PGE GiEK S.A. amounted to PLN 28,774 million. This value does not include CGUs for which the useful value of tested assets is negative. As a result of an asset impairment test, the Group concluded that there is no need to recognise or reverse impairment losses on these assets. The absence of the need to release impairment losses is related to the fact that the future financial flows of PGE GiEK S.A. are subject to uncertainties and the realisation of assumptions, which in a significant part are beyond the control of PGE's CGUs. Therefore, in the Group's view, there is no reason to reverse impairment losses recognised in previous reporting periods.

Sensitivity analysis

In accordance with IAS 36 Impairment, the Group carried out a sensitivity analysis for generating units in the Conventional Generation segment.

Presented below is the impact of changes in key assumptions on the useful value of assets in the Conventional Generation segment as at December 31, 2022.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in electricity prices throughout the forecast period	1%	2,880	-
	-1%	-	2,993

A decline in electricity price by 1% would have caused a PLN 3.0 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5pp	-	648
	-0.5pp	699	-

An increase in WACC by 0.5 percentage points would have caused a PLN 0.6 billion decrease in the useful value of assets.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Changes in prices for CO2 emission allowances	1%	-	1,367
	- 1%	1,305	-

An increase in the price of CO_2 emission allowances by 1% would have caused an approx. PLN 1.4 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in price of hard coal	1%	-	291
	- 1%	292	-

An increase in the price of hard coal by 1% would have caused an approx. PLN 0.3 billion decrease in useful value.

Climate matters

The future of the Polish energy market is determined by the European Union's climate policy, and developments in the electricity market through 2050 will be influenced by the European Green Deal ("EGD"), which aims to achieve EU climate neutrality by 2050. One of the most important steps towards achieving climate neutrality was the European Council's acceptance in December 2020 of a new binding EU target to reduce net greenhouse gas emissions by at least 55% by 2030 relative to 1990 levels. The consequence of a higher CO_2 emission reduction target is the growing cost of CO_2 emission allowances, which may have a negative impact on the results of the Conventional Generation segment and PGE Group. The macroeconomic assumptions adopted for the impairment tests take into account the new higher CO_2 emission reduction target in 2030 and, as a result, the increasing level of CO_2 emission allowance prices in the long term.

PGE Group's business environment is characterised by high volatility and is dependent on macroeconomic, market and regulatory conditions, and any changes thereto may have a substantial impact on PGE Group's financial situation and financial results. This is why the aforementioned assumptions and others used in estimating the useful value of assets are periodically analysed and verified. Any changes will be recognised in future financial statements.

3.2 Description of assumptions for the District Heating segment

Impairment tests on non-current assets were conducted as of December 31, 2022, on cash generating units basis by establishing their recoverable amounts. Determining fair value for very large groups of assets for which there is no active market and there are few comparable transactions is very difficult in practice. In the case of complete power plants and mines for which a value on the local market should be determined there are no observable fair values. Accordingly, the recoverable amount of the assets analysed was determined based on an estimate of their value in use using the discounted net cash flow method on the basis of financial projections prepared for the period from 2023 to the end of 2030. According to the Group, financial projections longer than five years are justified due to significant and long-term effects of projected changes in the regulatory environment. Using longer projections, recoverable amounts may be determined more reliably. For generating units with expected periods of economic useful lives in excess of 2030, a residual value was determined for the remaining service time.

The energy market, and especially the heat market, is a regulated market in Poland and as such is subject to numerous regulations and cannot be freely shaped on the basis of business decisions alone. The Energy Law's goals include taking effective regulatory action to ensure energy security. This means that the regulatory environment is intended to ensure a stable operation of heat suppliers in a given area to meet the long-term needs of consumers. According to the Energy Law, the Energy Regulatory Office President may, in extreme cases, even order an energy company to carry out activities covered by a concession (for a period not longer than 2 years), if the public interest so requires. If this is a loss-making activity, the energy company is entitled to loss coverage from the State Treasury.

As such, the Group does not use a finite CGU lifecycle due to the regulatory environment which limits the possibility of discontinuation. Due to the above, impairment tests assumed the continuation of operations (in the form of residual value), while maintaining expenditures at a replacement level, in the long-term due to, inter alia, social interest in the form of ensuring heat supply. With respect to the generation assets covered by the Decarbonisation Plan, replacement investments relate to the transition of generation capacity (to gas-fired assets) via the use of new low- or zero-carbon generation units, which means that the cash generated by these assets is taken into account in the impairment tests.

Climate matters

The 2050 Decarbonisation Plan for the District Heating segment was adopted at PGE Group in December 2021, aiming to fulfil regulatory requirements in the energy industry and retain the existing generation potential in the long-term in order to meet customer needs. The Decarbonisation Plan operationalises objectives specified directly in PGE Group's strategy and in the District Heating segment strategy implementation plan. The plan identifies the locations where the transformation of manufacturing assets will take place, the timing of major activities, planned expenditures and effects. Generation capacity transition via new low- or zero-carbon generating units is planned for the 2030 horizon, and climate neutrality for the 2050 horizon.

Detailed segment assumptions

Presented below are the key assumptions having impact on estimates of the useful value of CGU:

- specific units of PGE EC S.A. being considered as separate CGU Branch no. 1 in Kraków (CHP Kraków), Branch Wybrzeże (CHP Gdańsk, CHP Gdynia), Branch in Rzeszów (CHP Rzeszów), Branch in Lublin (CHP in Lublin Wrotków), Branch in Bydgoszcz (CHP Bydgoszcz I, CHP Bydgoszcz II), Branch in Gorzów Wielkopolski (CHP in Gorzów Wielkopolski), Branch in Zgierz (CHP in Zgierz), Branch in Kielce (CHP in Kielce), Branch in Szczecin (CHP in Szczecin, CHP in Pomorzany, district heating network in Gryfino);
- three production facilities owned by KOGENERACJA S.A. being considered as one CGU: CHP Wrocław, CHP Czechnica, CHP Zawidawie;
- for the period from 2023 it is assumed that PGE Group producers do not receive free-of-charge allocations of CO_2 emission allowances for the production of electricity;
- taking account of the allocation of free CO_2 emission allowances in the period 2023-2030 for system district heating and high-efficiency cogeneration. Member States may apply for a 30% free allocation of emission allowances for heat in the period from 2022 to 2030, with the 30% value relating to the gas benchmark and district heating supply for municipal purposes,
- assumption for conventional plants that during the residual period there will be support from the capacity market or equivalent;
- take into account the support system for high-efficiency cogeneration in the forecast horizon and in the residual period: for existing units, support was assumed in the form of guaranteed bonus and, if the financing gap condition is met, individual guaranteed bonus; a cogeneration bonus is to be granted to new gas units;
- maintain production capacities as a result of replacement-type investments. For generating assets in respect of which actions have been taken to implement the Decarbonisation Plan, replacement expenditures represent the transition of generation assets to gas-fired assets. The decarbonisation plan encompasses the following locations: Kraków, Gdańsk, Gdynia, Wrocław, Bydgoszcz, Kielce, Zgierz;
- taking into account development investments, for projects with a high level of advancement, minimum inclusion in the Company's approved investment plan;
- adopt WACC after tax for the projection period at different levels:
    - for 2023-2025: average annual level of 8.30%
    - for 2026-2030: average annual level of 6.73%

As at December 31, 2021, the value of tested property, plant and equipment in the District Heating segment was PLN 4,181 million, and goodwill amounted to PLN 192 million. As a result of an asset impairment test, the Group concluded that there is no need to recognise or reverse impairment losses on these assets.

Sensitivity analysis

In accordance with IAS 36 Impairment, the Group carried out a sensitivity analysis for generating units in the District Heating segment.

Presented below is the impact of changes in key assumptions on the useful value of assets in the District Heating segment as at December 31, 2022, using the ceteris paribus principle.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in electricity prices throughout the forecast period	1%	673	-
	-1%	-	673

A decline in electricity price by 1% would have caused a PLN 0.7 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5pp	-	2,797
	-0.5pp	3,225	-

An increase in WACC by 0.5 percentage points would have caused an approx. PLN 2.9 billion decrease in the useful value of assets.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in price of hard coal	+0.5pp	-	72
	-0.5pp	72	-

An increase in the price of hard coal by 1% would have caused an approx. PLN 0.7 billion decrease in useful value.

PGE Group's business environment is characterised by high volatility and is dependent on macroeconomic, market and regulatory conditions, and any changes thereto may have a substantial impact on PGE Group's financial situation and financial results. This is why the aforementioned assumptions and others used in estimating the useful value of assets are periodically analysed and verified. Any changes will be recognised in future financial statements.

3.3 Description of assumptions for the Renewables segment

Impairment tests were conducted on December 31, 2022, on cash generating units basis by establishing their recoverable amounts. The recoverable value of the analysed assets was estimated on the basis of discounted net cash flow method which relied on the financial projections prepared for the assumed useful life of the particular CGU in the case of wind farms or for 2023-2030 in the case of other CGUs. For those CGUs whose assumed economic life extends beyond 2030, a residual value was determined after the detailed forecast period. According to the Group, financial projections longer than five years are justified because the property, plant and equipment used by the Group have significantly longer useful lives and also due to considerable and long-term effects of projected changes in the regulatory environment included in the detailed forecast.

Detailed assumptions

Presented below are the key assumptions having impact on estimates of the useful value of CGUs:

- classification as a separate CGU of the following:
  - pumped-storage plants (one CGU for all plants due to their shared economic nature);
  - other hydropower plants (one CGU for all plants due to their shared economic nature);
  - individual wind farms (separate CGU for each wind farm due to different operational periods);
- production of electricity and energy origin rights were estimated based on historic data, adjusted by the availability of units;
- unit availability was estimated based on repair plans, taking into account statistical failure rates;
- revenue from regulatory system services until mid-2025 were estimated based on the currently functioning system of remuneration for these services, from mid-2025 it is expected that the market mechanism for contracting regulatory services will start functioning, the revenues from which have been estimated based on PGE Group's internal analyses;
- maintain production capacities as a result of replacement-type investments;
- adopt WACC after tax for the projection period at different levels:
  - for 2023-2025: average annual level of 8.30%
  - for 2026-2030: average level of 6.73%

As at December 31, 2022, the value of tested property, plant and equipment in the Renewables segment was PLN 2,417 million. As at December 31, 2022, the estimated value of the tested tangible assets of the wind farms acquired on June 21, 2022 was PLN 640 million. The total value of property, plant and equipment tested amounted to PLN 3,057 million. As a result of an asset impairment test, the Group concluded that there is no need to recognise or reverse impairment losses on these assets.

Sensitivity analysis

A sensitivity analysis showed that factors such as WACC and electricity prices have a considerable impact on estimated useful value. The results of this sensitivity analysis concern all CGUs owned by PGE EO S.A.

The impact of changes in factors using the ceteris paribus principle having a significant impact throughout the projection period on the projected cash flows and therefore also on the estimated value in use is presented below.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in electricity prices throughout the forecast period	1%	101	-
	-1%	-	101

A decline in electricity price by 1% would have caused a PLN 0.1 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5pp	-	1,324
	-0.5pp	1,659	-

A 0.5 percentage point increase in the WACC over the entire forecast period would result in a reduction in the value in use of assets of around PLN 1.3 billion.

Impairment tests on the non-current assets of CGU PGE Klaster sp. z o.o.

Impairment tests were conducted on December 31, 2022, on cash generating unit basis by establishing their recoverable amounts. The recoverable value of the analysed assets was estimated on the basis of discounted net cash flow method which relied on the financial projections prepared for the assumed useful life of the wind farms.

Detailed assumptions

- production of electricity is assumed on the basis of assumptions for the investment model,
- include the settlement with Zarządca Rozliczeń for the volume of electricity production covered by the auction system up to 2035,
- adopt WACC after tax for the projection period at different levels:
  - adopt WACC in the period of support in the form of auction price for 2023-2027 at 6.22% and for 2028-2035 at 5.16%.
  - over the remaining projection period, after the end of the support period, at 5.56%.

As at December 31, 2022, the value of tested property, plant and equipment and intangible assets at PGE Klaster Sp. z o.o. amounted to PLN 677 million. As a result of an asset impairment test, the Group concluded that there is no need to recognise impairment losses on these assets.

Sensitivity analysis

In accordance with IAS 36, the Group performed a sensitivity analysis for PGE Klaster sp. z o.o.'s wind farms. The impact of a change in the WACC using the ceteris paribus principle on the value in use of assets at December 31, 2022, is shown below:

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5pp	-	21
	-0.5pp	14	-

An increase in WACC by 0.5 percentage point throughout the forecast period would have caused a PLN 21 million decrease in the useful value of assets.

3.4 Description of assumptions for the gas and steam unit construction project in Nowy Czarnów being implemented by PGE Gryfino 2050 sp. z o.o.

Impairment tests were conducted on December 31, 2022, on cash generating unit basis by establishing their recoverable amounts. Determining fair value for very large groups of assets for which there is no active market and there are few comparable transactions is very difficult in practice. In the case of complete power plants for which a value on the local market should be determined there are no observable fair values. Given the above, the recoverable amount of the assets under review was determined based on an estimate of their value in use using the discounted net cash flow method on the basis of financial projections prepared for the period from January 2023 to the end of their useful life. According to the Group, financial projections longer than five years are justified due to significant and long-term effects of projected changes in the regulatory environment. Using longer projections, recoverable amounts may be determined more reliably.

Presented below are the key assumptions having impact on estimates of the useful value of the assets being tested:

- Nominal power and average efficiency of units assumed in accordance with the parameters guaranteed in the Contract with the Contractor;
- Operating period: 25 (benchmark life of CCGT units);
- Capital expenditure: for 2023-2024 is assumed in accordance with PGE Group's Investment Plan and concluded contracts for the implementation of the unit;
- Adoption of a weighted average after-tax cost of capital differentiated for each CGU, according to the individually assessed level of risk and varying over time at an annual average of 8.12%.

As at December 31, 2022, the value of tested property, plant and equipment at PGE Gryfino 2050 Sp. z o.o. amounted to PLN 2,961 million. As a result of an asset impairment test, the Group concluded that that no impairment losses needed to be recognised for these assets.

Sensitivity analysis

In accordance with IAS 36 *Impairment*, the Group carried out a sensitivity analysis for PGE Gryfino 2050 sp. z o.o.

The impact of a change in key assumptions using the ceteris paribus principle on the value in use of assets as at December 31, 2022 for assets owned by PGE Gryfino 2050 Sp. z o.o. is shown below.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in electricity prices throughout the forecast period	1%	296	-
	-1%	-	296

A decline in electricity price by 1% would have caused a PLN 0.3 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5pp	-	306
	-0.5pp	287	-

An increase in WACC by 0.5 percentage points would have caused a PLN 0.3 billion decrease in the useful value of assets.

PGE Group's business environment is characterised by high volatility and is dependent on macroeconomic, market and regulatory conditions, and any changes thereto may have a substantial impact on PGE Group's financial situation and financial results. This is why the aforementioned assumptions and others used in estimating the useful value of assets are periodically analysed and verified. Any changes will be recognised in future financial statements.

3.5 Description of assumptions for the Wind Energy project

In 2021, Ørsted acquired stakes in the increased share capital of Elektrownia Wiatrowa Baltica - 2 sp. z o.o. and Elektrownia Wiatrowa Baltica - 3 sp. z o.o. Following this transaction, Ørsted Group became a 50% shareholder in EWB2 and EWB3. In effect, PGE Group lost control over these two companies. Based on agreements executed between PGE Group and Ørsted Group companies, Elektrownia Wiatrowa Baltica - 2 sp. z o.o. and Elektrownia Wiatrowa Baltica - 3 sp. z o.o. constitute a joint operation in the meaning of IFRS 11 Joint Arrangements. As a resulting of accounting for the loss of control, goodwill of PLN 81 million were recognised in the consolidated financial statements.

Impairment tests on goodwill were conducted as of December 31, 2022, by establishing the recoverable amounts of assets. The recoverable value of the analysed assets was estimated on the basis of discounted net cash flow method which relied on the financial projections prepared for the assumed useful life of the particular CGU.

The EWB2 and EWB3 projects are at an advanced stage of development.

Detailed assumptions

Presented below are the key assumptions having impact on estimates of the useful value of CGU:

- Revenue: EWB2 and EWB3 projects are entitled to public support in the form of a bilateral contract for difference (right to cover the negative balance) for a period of 25 years from the first day of electricity generation and injection into the grid under the awarded concession:
    - The support price is expressed in 2021 values (as a result of amendments made to the Offshore Act by the Act of 15 December 2022 on the special protection of certain consumers of gaseous fuels in 2023) and is subject to annual indexation in accordance with the average annual CPI published by the Central Statistical Office,
    - The European Commission issued a positive decision in the individual support notification process and the price set by the EC was accepted in December 2022 by the Energy Regulatory Office - confirming a support level of 319.60 PLN/MWh.
- Capital expenditure and operating costs have been estimated by the JO partners (PGE and Ørsted) based on their internal competences and experience in the implementation of analogous investments, taking into account information obtained in the process of on-going procurement proceedings.
- Development expenditure includes, inter alia, external costs and the cost of re-invoiced Ørsted and PGE staff hours.
- Energy production was estimated based on:
    - Data collected during a measurement campaign in the immediate vicinity of the EWB2 and EWB3 offshore wind farm area, as well as data from long-term sources, which made it possible to determine the long-term average wind speed in the project area.
    - Productivity characteristics for the selected turbine model and the planned distribution of turbines on water bodies.
    - Energy conversion and transformation losses and equipment availability.

As at December 31, 2022, the value of the tested property, plant and equipment of EW Baltica 2 Sp. z o.o. and EW Baltica 3 Sp. z o.o. amounted to PLN 305 million and goodwill to PLN 81 million. As a result of the asset impairment test, the Group estimated an excess of the value in use of the assets tested over the carrying amount, and therefore concluded that no impairment losses needed to be recognised for these assets.

3.6 Distribution segment's property, plant and equipment

As at the reporting date the carrying amount of property, plant and equipment related to distribution activities amounted to approx. PLN 22 billion and represented approx. 32% of total consolidated property, plant and equipment. Their recoverable amount depends mainly on tariffs granted by President of the Energy Regulatory Office. Regulated revenue (tariff) which is determined annually provides covering justified costs: operating costs, depreciation and amortisation, taxes, purchase of energy to cover balancing difference and transferred costs. It provides also a return on equity involved in the distribution activity at a justified level. Return on equity and depreciation charges are dependent on the so called Regulatory Asset Base.

As at the date of preparation of these consolidated financial statements, PGE Group did not identify any indications for impairment of property, plant and equipment allocated to Distribution segment.

4. Selected accounting rules

These financial statements are prepared using the historic cost approach, with the following exceptions:

- CO_2 emission allowances acquired in order to generate a profit from fluctuations in market prices, which are measured at fair value less cost to sell;
- financial instruments measured at fair value;
- impaired assets.

These consolidated financial statements of the PGE Group have been prepared on the basis of the financial statements of the parent company, financial statements of its subsidiaries, associates and joint ventures. The financial statements of consolidated entities are prepared for the same reporting period, based on unified accounting principles.

All balances, income and expenses arising between the Group entities and unrealized gains from intra-group transactions, were fully eliminated.

Subsidiaries are consolidated from the date of taking control over them by the Group until the date on which control ends. Control by a parent company occurs when this company owns, directly or indirectly through its subsidiaries, more than half of votes in the entity unless it is possible to prove that such ownership does not constitute control. Exercising control occurs when the company, due to its involvement in another entity holds the rights to variable financial results and has the power to influence the amount of financial results by controlling the entity. Exercising control may also occur when the parent company does not own half of votes in a subsidiary.

Accounting for the formation of PGE Group and later Group transformations in the consolidated financial statements

Issues related to the mergers and acquisitions of business units are generally regulated by International Financial Reporting Standard 3 *Business Combinations*. However, the scope of this standard does not include transactions among entities under common control. The entities that later formed PGE Group were controlled by the State Treasury. This transaction thus, according to the Company, meets the definition of transaction under joint control and is therefore excluded from IFRS 3.

The aforementioned mergers of the entities under common control were accounted for by the pooling of interests method and thus the consolidated financial statements reflect the fact of the common control continuity and does not present the changes in the net asset value to fair value (or recognition of new assets), or valuation of the goodwill.

Further mergers and acquisitions within PGE Group were recognised as transactions concluded between jointly controlled entities, therefore should be accounted within the equity of PGE Group, not affecting the goodwill.

The purchase of companies from third parties is accounted for using the acquisition method in line with IFRS 3.

Joint contractual arrangements and joint control

In connection with participation in a joint venture (a joint contractual arrangement giving the right to the net assets of the arrangement), in these financial statements this stake is recognised as investment and is accounted for using the equity method.

In connection with participation in a joint operation, each partner recognises its share of assets and liabilities, revenue and costs.

Joint control is the contractually agreed sharing of control in the framework of the contractual arrangement, which exists only when decisions about relevant activities require the unanimous consent of the parties who share control.

Investments in associates

Associates are entities over which the parent company directly, or through the subsidiary, has significant influence and that are neither controlled nor jointly controlled. Investments in associates are recognised using the equity method.

Valuation of fair values of acquired assets and liabilities, goodwill calculation

PGE Group identifies acquired assets and liabilities, measures their fair value and recognizes goodwill or gain on bargain purchase in accordance with IFRS 3 Business combinations. Valuation is based on a number of assumptions, which include inter alia: application of appropriate valuation method, management's plans relating to the use of acquired assets, financial projections (including price forecasts influencing main positions of revenues and expenses), changes in laws and regulations and other. On the other hand, accounting for the transaction is also influenced by the appropriate determination of the purchase price (including the contingent part). Assumptions applied may significantly impact fair values of acquired assets and liabilities, and calculation of goodwill or gain on bargain purchase. Goodwill is tested for impairment together with the respective cash generating units.

Translation of items denominated in foreign currencies

Transactions denominated in foreign currencies are translated into PLN at the rate on the transaction date. As at the reporting date:

- monetary items are converted using a simplified approach at the closing rate published by the National Bank of Poland,
- non-monetary items are valued at historical cost in foreign currency at an exchange rate on the day of the transaction;
- non-monetary items measured at fair value in foreign currency are translated at an exchange rate on the day of fair value valuation.

Foreign exchange differences resulting from translation are recognised in profit or loss or, in cases specified in the accounting policies applied, recorded in the value of assets.
Exchange differences resulting from translation of non-monetary items, such as equity instruments measured at fair value through profit or loss, are recognised as a change in fair value. Exchange differences arising from non-monetary items, such as equity instruments classified as financial assets available for sale, are recognised in other comprehensive income. Exchange differences arising from the translation of assets and liabilities of foreign entities denominated in a functional currency other than the parent's functional currency are recognised in a separate item of equity - "Exchange differences from translation."

5. Changes in accounting principles and data presentation

New standards and interpretations that went into force on January 1, 2022

The accounting principles (policy) applied in preparing these financial statements are consistent with those applied in preparing the financial statements for 2021, except for the amendment to IAS 16, as described below. The following amendments to IFRSs are applied in these financial statements in line with their effective dates. With the exception of the amendment to IAS 16, the following amendments did not have a material impact on the presented and disclosed financial information or were not applicable to the Group's transactions:

- Amendments resulting from IFRS annual improvement cycle 2018-2020 - amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41, mainly concerning clarifications and wording;
- Amendments to IFRS 3 - amendments concerning references to conceptual assumptions;
- Amendments to IAS 16 - amendments concerning proceeds from property, plant and equipment before intended use;
- Amendments to IAS 37 - Onerous Contracts — Cost of Fulfilling a Contract;
- Amendments to IFRS 16 - amendments concerning rent concessions in connection with COVID-19.

The Group decided not to apply early any standard, interpretation or amendment that was published but is not yet effective in the light of EU regulations.

Proceeds from trial start-up

In accordance with the requirements of IAS 16 effective from January 1, 2022, revenue from the sale of items generated in the course of bringing an item of property, plant and equipment to the location and condition necessary to enable it to operate properly and the costs of such items are recognised in the statement of profit and loss. IAS 16 requires retrospective application of the regulation described above, but only in respect of property, plant and equipment that was placed in service in the earliest period presented in the financial statements.

This regulation applies to revenue from the trial start-up of the power unit, which was generated in the first quarter of 2021 by PGE GiEK S.A., Elektrownia Turów Branch. According to the accounting policy in place in 2021, revenue from the so-called trial start-up reduced the cost of production of the power unit, but the amount of revenue that reduces the cost of production of the asset could not exceed the amount of the cost of verification (testing). In accordance with the accounting policy in place in 2021, in the first quarter of 2021 expenses related to the construction of the power unit were recognised as costs related to the trial start-up as well as revenue from the sale of electricity from the trial start-up in the amount of PLN 42 million. The surplus of revenue from the sale of electricity from trial start-up over the costs incurred amounted to PLN 9 million and was recognised in the statement of profit and loss.

In order to make the data for 2021 comparable, revenue from electricity sales and own costs of sales were increased by PLN 42 million. The change had no impact on the financial result.

Settlement of so-called energy collisions

In the current reporting period, PGE Group made changes to the accounting policies applied regarding the presentation and accounting for energy collisions.

The principle of accounting for energy collision removal operations has been changed. Up to now, the removal of collisions was treated as the replacement of assets without economic effect, and the outstanding value of collisions in the statement of financial position reduced the value of fixed assets.

After the rule change, collision removal operations are accounted for as liquidation of existing assets and acceptance of new assets. The value of assets received free of charge as a result of collision removal is presented in deferred income.

The impact of the change on the presentation of balance sheet items has only been recognised in the statement of financial position without a full value adjustment to the comparative figures. This event increased total assets and equity and liabilities by PLN 308 million as at December 31, 2021 and by PLN 245 million as at January 1, 2021 and had no impact on equity.

The change in the rules for recording de-collision operations also affected the measurement of the value of de-collision accruals, but the Group did not retrospectively value-adjust the data, despite having made reasonable efforts and actions to do so, due to the impossibility of doing so in practice. This results in the impossibility of reliably estimating the impact of a change in accounting policy on the comparative information in the financial statements.

Exchange differences in the statement of cash flows

To ensure greater consistency in the financial data presented, PGE Group decided to change the presentation of accrued exchange differences on cash. The accrued exchange differences are now presented in operating activities and, due to the change applied, the cash balance in the statement of cash flows is consistent with the cash balance in the statement of financial position. The data for the comparative period was appropriately restated.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Year ended December 31, 2021 *published data*	Change in presentation - trial start-up	Year ended December 31, 2021 *restated data*
REVENUE FROM SALES	**52,730**	**42**	**52,772**
Cost of sales	(49,121)	(42)	(49,163)
GROSS PROFIT ON SALES	**3,609**	**-**	**3,609**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at December 31, 2021 *published data*	Change in presentation collisions	As at December 31, 2021 *restated data*
NON-CURRENT ASSETS	**66,239**	**308**	**66,547**
Property, plant and equipment	60,817	308	61,125
TOTAL ASSETS	**88,966**	**308**	**89,274**
NON-CURRENT LIABILITIES	**18,878**	**281**	**19,159**
Deferred income and government grants	600	281	881
CURRENT LIABILITIES	**21,797**	**27**	**21,824**
Deferred income and government grants	76	27	103
TOTAL LIABILITIES	**40,675**	**308**	**40,983**
TOTAL EQUITY AND LIABILITIES	**88,966**	**308**	**89,274**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at January 1, 2021 *published data*	Change in presentation collisions	As at January 1, 2021 *restated data*
NON-CURRENT ASSETS	**66,498**	**245**	**66,743**
Property, plant and equipment	61,741	245	61,986
TOTAL ASSETS	**81,594**	**245**	**81,839**
NON-CURRENT LIABILITIES	**23,075**	**233**	**23,308**
Deferred income and government grants	600	233	833
CURRENT LIABILITIES	**15,018**	**12**	**15,030**
Deferred income and government grants	77	12	89
TOTAL LIABILITIES	**38,093**	**245**	**38,338**
TOTAL EQUITY AND LIABILITIES	**81,594**	**245**	**81,839**

CONSOLIDATED STATEMENT OF CASH FLOWS

	Year ended December 31, 2021 *published data*	Change in presentation accumulated exchange differences	Year ended December 31, 2021 *restated data*
CASH FLOWS FROM OPERATING ACTIVITIES			
Other	(33)	(17)	(50)
NET CASH FROM OPERATING ACTIVITIES	**7,456**	(17)	7,439
NET CHANGE IN CASH AND CASH EQUIVALENTS	**2,561**	**(17)**	**2,544**
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF PERIOD	**4,173**	**16**	**4,189**
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD	**6,734**	**(1)**	**6,733**

EXPLANATORY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

EXPLANATORY NOTES TO OPERATING SEGMENTS

6. Information on operating segments

ACCOUNTING POLICIES

Operating segments

An operating segment is a component of the Group:

- that engages in business activities in connection with which it may earn revenues and incur expenses (including revenue and expenses related to transactions with other components of the same entity),
- whose operating results are regularly reviewed by the entity’s chief operating decision maker in the Group to make decisions about resources to be allocated to the segment and assess its performance,
- for which discrete financial information is available.

Segment revenues are revenues, including both sales to external customers and inter-segment transfers within the Group that are presented in profit or loss of the Group and can be directly attributed to the segment together with a relevant portion of revenue that can be allocated on a reasonable basis to the segment.

Segment costs are costs comprising the cost of sales to external customers and the cost of transactions with other segments within the Group that result from the segment's operating activities and can be directly attributed to that segment along with an appropriate portion of the entity's costs that can be allocated to the segment on a reasonable basis.

Segment result is a difference between revenues and expenses of the segment.

Segment assets are those operating assets that are used by that segment in its operating activity and that can be directly attributed to the segment or can be allocated on a reasonable basis to the segment. Segment liabilities are those operating liabilities that result from operating activities of the segment and can be directly attributed to the segment or can be allocated on a reasonable basis to the segment.

Segment assets and liabilities do not include settlements connected with income tax.

Segment liabilities are operating liabilities arising from the segment's operating activities that are directly attributable to the segment or

can be assigned to this segment on reasonable grounds.

Segment liabilities do not include income tax liabilities.

Segment liabilities include, for example, trade payables, other payables, accrued expenses, advances received from customers, and provisions for claims relating to goods supplied and services rendered.

Liabilities of the segment whose activities are not primarily financial activities do not include loans and similar liabilities.

PGE Group companies conduct their business activities based on relevant concessions, including primarily concession on: production, trading and distribution of electricity, generation, transmission and distribution of heat, granted by the President of Energy Regulatory Office and concessions for the extraction of lignite deposits, granted by the Minister of the Environment. Concessions are generally issued for a period between 10 and 50 years. PGE Group's key concessions expire in 2024-2044.

Relevant assets are assigned to concessions for lignite mining and generation and distribution of electricity and heat, as presented in detailed information on operating segments. For its concessions concerning electricity and heat, the Group pays annual fees dependent on the level of turnover, while lignite mining operations under concessions are subject to extraction fees depending on the current rate and volume of output as well as mining use fees. In 2022, PGE Group’s concessions costs amounted to approx. PLN 15 million (PLN 16 million in 2021), exploitation charges and mining usufruct charges amount to PLN 157 million in 2021 and PLN 135 million in 2021.

PGE Group presents information on operating segments in the current and comparative reporting period in accordance with IFRS 8 *Operating Segments*. The Group's segment reporting is based on the following operating segments:

- Conventional Generation, comprising the exploration and production of lignite, conventional generation of electricity and ancillary services.
- District Heating, comprising the generation of electricity from cogeneration sources and the transmission and distribution of heating.
- Renewables, comprising the generation of electricity in pumped-storage power plants and from renewable sources.
- Supply, comprising selling and buying electricity and natural gas on wholesale markets, emissions trading, buying and supplying fuels as well as selling electricity and providing services to end users.
- Distribution, comprising management over local distribution networks and transmission of electricity.
- Circular Economy, comprising management of the by-products of combustion.
- Other operations, comprising services provided by subsidiaries for the Group, e.g. capital raising, IT services, accounting and HR, and transport services and investments in startups. The segment also includes companies in charge of the construction of new low-carbon generation units.

Organisation and management over PGE Group is based on segment reporting separated by nature of the products and services provided. Each segment represents a strategic business unit that offers distinct goods and serves different markets. Entities assigned to operating segments are described in note 1.3 of these consolidated financial statements. As a rule, inter-segment transactions are disclosed as if they were concluded with third parties – under market conditions. When analysing the results of business segments the management of PGE Group focuses mainly on EBITDA.

Seasonality of business segments

The key factors influencing demand for electricity and heat are: atmospheric factors - air temperature, wind power, rainfall, socio-economic factors - number of energy consumers, prices of energy carriers, economic development of GDP, and technological factors - technological progress, manufacturing technology of individual products. Each of these factors has an impact on technical and economic conditions of production, distribution and transmission of energy carriers, thus influence the results obtained by PGE Group.

The level of electricity sales varies throughout the year, depending especially on weather conditions - air temperature, length of the day. Growth in electricity demand is particularly evident in winter periods, while lower demand is observed during the summer months. Moreover, seasonal changes are evident among selected groups of end users. Seasonality effects are more significant for households than for the industrial sector.

In the Renewables segment, electricity is generated from natural resources such as water, wind and sun. Weather conditions are an important factor affecting electricity generation in this segment.

The sale of heat depends in particular on air temperature and are higher in winter and lower in summer.

6.1 Information on operating segments

Information on operating segments for 2022

	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
STATEMENT OF PROFIT OR LOSS									
Sales to external customers	32,864	5,345	2,220	26,093	6,723	153	29	8	73,435
Inter-segment sales	3,596	2,345	1,181	20,473	80	201	288	(28,164)	-
TOTAL SEGMENT REVENUE	**36,460**	**7,690**	**3,401**	**46,566**	**6,803**	**354**	**317**	**(28,156)**	**73,435**
Cost of sales	(36,262)	(8,097)	(1,784)	(42,533)	(4,886)	(256)	(275)	26,399	(67,694)
EBIT	**127**	**(713)**	**1,440**	**2,010**	**1,616**	**28**	**6**	**(215)**	**4,299**
Depreciation, amortisation, disposal and impairment losses recognised in profit or loss	1,938	752	355	33	1,234	9	51	(14)	4,358
EBITDA	**2,065**	**39**	**1,795**	**2,043**	**2,850**	**37**	**57**	**(229)**	**8,657**
GROSS PROFIT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4,110**
Income tax	-	-	-	-	-	-	-	-	(720)
NET PROFIT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,390**
ASSETS AND LIABILITIES									
Segment assets excluding property, plant and equipment, intangible assets, investment properties, right-of-use assets and trade receivables	6,926	1,998	300	3,018	60	13	296	244	12,855
Property, plant and equipment, intangible assets, investment properties, right-of-use assets and trade receivables	29,259	7,626	4,673	313	21,333	69	3,210	(26)	66,457
Trade receivables	1,262	1,242	274	7,744	1,308	84	49	(5,446)	6,517
Shares accounted for using the equity method	-	-	-	-	-	-	-		180
Unallocated assets	-	-	-	-	-	-	-		19,769
TOTAL ASSETS	**-**	**-**	**-**	**-**	**-**	**-**	**-**		**105,778**
Segment liabilities excluding trade liabilities	25,261	3,514	863	6,907	2,552	57	78	(3,011)	36,221
Trade liabilities	1,681	1,612	119	5,124	437	67	45	(5,981)	3,104
Unallocated liabilities	-	-	-	-	-	-	-		12,070
TOTAL LIABILITIES	**-**	**-**	**-**	**-**	**-**	**-**	**-**		**51,395**
OTHER INFORMATION ON BUSINESS SEGMENT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Capital expenditures	745	1,140	458	14	2,572	16	2,195	(104)	7,036
Increases in right-of-use assets	5	-	-	3	4	-	5	-	17
TOTAL INVESTMENT EXPENDITURES	**750**	**1,140**	**458**	**17**	**2,576**	**16**	**2,200**	**(104)**	**7,053**
Acquisition of property, plant and equipment, intangible assets and investment properties as part of acquisition of new companies	-	-	1,116	-	-	-	-	-	1,116
Impairment losses on financial and non-financial assets	618	(111)	-	144	16	(1)	2	11	679
Other non-monetary expenses*	17,496	2,205	(89)	1,041	24	10	25	(244)	20,468

** Non-monetary expenses include mainly changes in provisions such as: rehabilitation provision, provision for CO_2 emission rights, provision for seniority bonuses, employee tariff and non-financial liabilities concerning employee benefits that are recognised in profit or loss and other comprehensive income.*

Information on operating segments for 2021

restated data	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
STATEMENT OF PROFIT OR LOSS									
Sales to external customers	18,772	4,019	1,050	22,260	6,415	137	110	9	52,772
Inter-segment sales	9,992	2,220	622	15,963	77	174	322	(29,370)	-
TOTAL SEGMENT REVENUE	**28,764**	**6,239**	**1,672**	**38,223**	**6,492**	**311**	**432**	**(29,361)**	**52,772**
Cost of sales	(29,956)	(5,690)	(912)	(35,496)	(4,738)	(227)	(383)	28,239	(49,163)
EBIT	**1,998**	**104**	**686**	**794**	**1,559**	**36**	**(2)**	**(52)**	**5,123**
Depreciation, amortisation, disposal and impairment losses recognised in profit or loss	2,080	701	330	33	1,220	9	62	(23)	4,412
EBITDA	**4,078**	**805**	**1,016**	**827**	**2,779**	**45**	**60**	**(75)**	**9,535**
GROSS PROFIT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4,871**
Income tax	-	-	-	-	-	-	-	-	(926)
NET PROFIT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,945**
ASSETS AND LIABILITIES	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Segment assets excluding property, plant and equipment, intangible assets, investment properties, right-of-use assets and trade receivables	5,961	1,433	127	1,250	40	10	685	(301)	9,205
Property, plant and equipment, intangible assets, investment properties, right-of-use assets and trade receivables	31,097	7,247	4,111	325	19,857	61	1,163	(758)	63,103
Trade receivables	7,383	1,399	358	11,025	958	71	59	(17,044)	4,209
Shares accounted for using the equity method	-	-	-	-	-	-	-	-	156
Unallocated assets	-	-	-	-	-	-	-	-	12,601
TOTAL ASSETS	-	-	-	-	-	-	-	-	**89,274**
Segment liabilities, except for trade liabilities	18,776	2,742	578	5,705	2,243	50	274	(2,324)	28,044
Trade liabilities	5,648	1,821	133	10,888	402	51	30	(17,365)	1,608
Unallocated liabilities	-	-	-	-	-	-	-	-	11,331
TOTAL LIABILITIES	-	-	-	-	-	-	-	-	**40,983**
OTHER INFORMATION ON BUSINESS SEGMENT	-	-	-	-	-	-	-	-	-
Capital expenditures	1,758	608	189	8	1,354	9	838	(116)	4,648
Increases in right-of-use assets	1	2	-	-	4	-	7	-	14
TOTAL INVESTMENT EXPENDITURES	**1,759**	**610**	**189**	**8**	**1,358**	**9**	**845**	**(116)**	**4,662**
Acquisition of property, plant and equipment, intangible assets and investment properties as part of acquisition of new companies	-	-	81	-	-	-	-	-	81
Impairment losses on financial and non-financial assets	219	128	(45)	(26)	6	-	1	6	289
Other non-monetary expenses*	9,185	1,362	19	1,417	(109)	1	19	(95)	11,799

** Non-monetary changes include mainly changes in provisions such as: rehabilitation provision, provision for CO_2 emission allowances, provision for seniority bonuses, employee tariff and non-financial liabilities concerning employee benefits that are recognised in profit or loss and other comprehensive income.*

6.2 Information on geographical areas

Geographic distribution of sales revenue for 2022 and 2021 is as follows:

	Year ended December 31, 2022	Year ended December 31, 2021 *restated data*
REVENUES FROM OPERATING ACTIVITIES		
Domestic market	73,406	47,498
EU countries	29	5,233
Other countries	-	41
TOTAL REVENUE FROM SALE	**73,435**	**52,772**

Geographic distribution of assets for the year ended December 31, 2022 and December 31, 2021 is as follows:

	As at December 31, 2022	As at December 31, 2021 *restated data*
OTHER INFORMATION ON AREA		
Domestic market	85,826	76,481
EU countries	3	36
TOTAL SEGMENT ASSETS	**85,829**	**76,517**
Domestic market	19,696	12,528
EU countries	73	73
TOTAL UNALLOCATED ASSETS	**19,769**	**12,601**
Domestic market	180	156
SHARES ACCOUNTED FOR UNDER THE EQUITY METHOD, TOTAL	**180**	**156**
TOTAL ASSETS	**105,778**	**89,274**

EXPLANATORY NOTES TO THE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

7. Revenue and costs

7.1 Revenue from sales

ACCOUNTING POLICIES

Revenue from contracts with customers

Revenue is recognised so as to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Revenue is recognised when the performance obligation is met, i.e. goods (product) are provided to the customer. The transfer of the goods occurs when the customer gains control of the goods.

The Group recognises revenue from a contract with a client only if all of the following criteria are met:

- the parties have executed a contract (in written or verbal form or in accordance with customary trade practices) and are obligated to perform their duties;
- the Group is able to identify the rights of each of the parties with regard to the goods or services that are to be transferred;
- the Group is able to identify terms of payment for the goods or services that are to be transferred;
- the contract has commercial substances;
- it is probable that the entity will receive the consideration to which it is entitled to in exchange for the goods or services when these are delivered to the customer.

Upon contract execution, the Group analyses the goods or services covered by the contract with the client and identifies as a performance obligation all commitments to provide the customer with:

- goods or services (or packages of goods or services) that are distinguishable; or
- groups of separate goods or services that are essentially the same and in the transfer to the client is the same.

The Group recognises revenue when the performance obligation concerning the goods and services is met (or is in the process of being met). The transfer of the asset occurs when the client obtains control over the asset, i.e. gains the ability to directly manage the asset and obtain largely all other benefits from it.

The Group transfers control over goods or services over time and thus satisfies the performance obligation and recognises revenue over time if one of the following conditions is met:

- the customer receives and derives benefits from the Group's consideration as the Group provides the consideration;
- as a result of the Group's consideration a new or improved asset is created (e.g. production in progress) and control over this asset - as it is created or improved - is exercised by the customer; or
- as a result of the Group's consideration no new asset is created for alternative use by the Group and the Group has an enforceable title to pay for the consideration provided thus far.

For each performance obligation over time, the Group recognises revenue over time, measuring the degree of performance of this obligation. The purpose of the measurement is to determine the progress in meeting the entity's obligation to transfer control of the goods or services promised to the customer (i.e. the extent to which the performance obligation is met).

When a performance obligation is met (or is in the process of being met), the Group recognises as revenue an amount equal to the transaction price that was allocated to that performance obligation. The transaction price takes into account part or all of the amount of estimated variable consideration only to the extent that it is highly probable that a significant portion of the amount of previously recognised accumulated revenue will not be reversed when uncertainty about the amount of variable consideration ceases. Revenue is recognised after deducting value added tax (VAT), excise duty and other sales taxes as well as discounts.

ACCOUNTING POLICIES

To determine the transaction price, the entity considers the terms of the contract and its usual commercial practices. The transaction price is the amount of consideration that the Group expects to receive in exchange for transferring the promised goods or services to the customer, excluding amounts collected on behalf of third parties.

Revenue from wholesale of electricity

Agreements for the sale of electricity concluded on the wholesale market shall be notified to the Transmission System Operator (TSO) in the form of the quantity of electricity declared each hour that the Group, as supplier, is obliged to deliver or cause to be delivered and the customer to receive. The settlement price as well as volumes of electricity in particular hours result from previously signed over-the-counter (OTC) contracts or in case of sales on TGE markets from electronically recorded transactions. Revenue from the sale of electricity is recognised on the delivery date.

The actual delivery of electricity is carried out through the Balancing Market, where the TSO ensures the reliability of data in terms of the delivered amount of energy, and quantitative deviations from the previously submitted operational schedules (the so-called Energy Sale Contracts) are settled using prices resulting from the Balancing Market mechanism. Balancing market settlements are carried out with the TSO in 10-day cycles, while wholesale settlements on POLPX are conducted with clearinghouse IRGiT, which is the guarantor for settlements of transactions executed on POLPX, and they are performed daily, in accordance with the IRGiT settlement rules. In the case of OTC contracts, settlements are carried out in accordance with the provisions of these contracts, i.e. in 10-day or monthly cycles.

Revenue from sale of heat in the District Heating segment

Revenues are priced according to currently applicable heat prices and tariff rates, subject to approval by URE President. Heat prices relate to the heat capacity ordered, the heat energy sold and the heat carrier in terms of heat generation, while the variable and fixed charge rates relate to heat distribution and transmission. Revenue invoiced for the sale of heat is the product of the tariff rates described above and the sales volumes.

The sales of heat in quantitative terms are derived from readings of measurement and billing systems. Readings are taken on designated working days in each calendar month, including a date close to the end of the month. Accordingly, for financial reporting purposes, re-estimates of sales volumes are made for the period between the last reading date of the month and the end of that month.

Revenue from the sale of heat is recognised when the heat is delivered in accordance with the readings obtained, including re-assessment.

Revenues from sale of electricity distribution services in the Distribution segment

Revenue from the sale of electricity distribution services is derived from sales documented by invoices, adjusted by the re-estimation made of uninvoiced sales of electricity distribution services during the period. The re-assessment of sales is made at least at the end of each quarter.

Revenue from the distribution service is recognised at the time the service is performed, based on readings of measurement and billing systems, taking into account the re-estimation of consumption.

Sales revenue does not include the value of fees collected on behalf of third parties for which the Group acts as payer, i.e. the transitional charge, the RES charge, the co-generation charge and the capacity fee.

Regulatory account

The balance of the regulatory account is determined in accordance with the rules set out in the Decree of the Minister of Climate and Environment of November 13, 2020 amending the Ordinance on detailed rules for the formation and calculation of tariffs and settlements in electricity trading.

The balance of the regulatory account is the difference between the sum of the projected revenue assumed in the tariff for a given year, which is the basis for calculating the DSO's own charge rates, and the sum of the revenue actually generated in a given year, which does not depend on the Group and is primarily the result of deviations in the charge carriers, such as e.g. the volume of electricity deliveries or the level of contracted power, on the basis of which the charge rates are calculated.

The balance of the regulatory account for year n is taken into account by the URE President when calculating the tariff and influences the regulated revenue in year n+2 (possibly also in subsequent years).

Revenues from sale of electricity and gas fuel in the Supply segment

The Group generates revenue from the sale of electricity and natural gas to final customers and on the wholesale market. Revenue from the sale of electricity is recognised on the basis of the month of sale indicated on the invoices.
Due to the continuous nature of energy supply, for the purposes of correct accounting, the Group adjusts sales revenue (invoiced sales) by the amount of energy supplied but not invoiced in the period. A re-assessment of electricity sales is made at the end of each month.

The re-assessment calculation is made separately for each energy consumption point and separately for individual price components and types of tariff charges. The estimation of the electricity volume is calculated on the basis of the average daily energy consumption for the point of consumption in question, determined on the following basis:

- data from energy sales invoiced in the last billing period,
- forecast daily energy consumption.

The re-assessment of electricity volume for a newly acquired energy consumption point (with no history of electricity consumption in the billing system) is determined on the basis of the volume declared by the customer.

In the case of electricity points billed using forecast-based invoices, the re-assessment makes the sales realistic by recalculating the charges for the forecasted amount of energy according to the current rates applicable in the forecast period.

Receivables from re-assessed sales as at December 31, 2021 are presented in note 25.1.1 to these financial statements.

Revenue from the Capacity Market

Pursuant to the Act, Capacity Providers may offer the Operator (PSE S.A.) a capacity obligation for a specified delivery period in capacity auctions. The capacity obligation is the obligation of the Capacity Supplier to remain available during the supply period to supply specified electrical capacity to the system by a capacity market unit and to supply specified electrical capacity to the system during periods of emergency. As a result of the Main Auction for 2022, held on November 15, 2018, PGE Group contracted more than 12 GW of capacity obligations.

Operating lease income

Operating lease income is recognised in profit or loss on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished.

The undiscounted lease payments to be received annually in future periods are presented in the table below.

Maturity date	Year ended December 31, 2022	Year ended December 31, 2021
within 1 year	59	55
from 1 year to 2 years	52	48
from 2 year to 3 years	51	46
from 3 year to 4 years	48	45
from 4 year to 5 years	45	43
over 5 years	697	639

Revenue from sales in 2022, by category

The following table presents a reconciliation between revenue disclosed by category and information on revenue that the Group discloses for each reporting period.

	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from contracts with customers	36,449	7,435	3,395	45,887	6,746	353	316	(28,139)	**72,442**
Receivables from recognised compensation based on Act on electricity and gas fuel prices	-	-	-	543	-	-	-	-	**543**
Revenue from recognized compensation in accordance with the Law on Preferential Purchase of Solid Fuel for Households	-	-	-	131	-	-	-	-	**131**
Revenue from support for high-efficiency cogeneration	-	231	-	-	-	-	-	-	**231**
Revenues from LTC compensations	-	2	-	-	-	-	-	-	**2**
Operating lease income	11	22	6	5	57	1	1	(17)	**86**
TOTAL REVENUE FROM SALES	**36,460**	**7,690**	**3,401**	**46,566**	**6,803**	**354**	**317**	**(28,156)**	**73,435**

The total amount of revenue from sales includes PLN 66 million due to sales transactions for which the value was not finally determined at the end of the reporting period. PGE Group makes revenue estimates, the most significant of which relate to:

- compensation revenue estimates in the Supply segment,
- Re-estimation of revenues] from the sale of electricity, gaseous fuel, distribution services in the Supply and Distribution segments,
- Re-estimation of revenues] from the sale of electricity, gaseous fuel, distribution services in the District Heating segment,

Lease payments recognised as income in 2022 amounted to PLN 86 million (PLN 84 million in 2021). The Group did not earn operating lease income relating to variable lease payments that do not depend on an index or rate.

The following table presents revenue from contracts with customers by category to reflect the manner in which economic factors influence the type, amount, payment deadline and uncertainty of revenue and cash flows.

Type of goods or services	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from sale of goods and products, without excluding taxes and fees	36,362	7,387	3,364	44,487	8,207	162	20	(26,178)	**73,811**
Taxes and fees collected on behalf of third parties	*(8)*	*(5)*	-	*(73)*	*(1,515)*	-	-	-	***(1,601)***
Revenue from sale of goods and products, including:	**36,354**	**7,382**	**3,364**	**44,414**	**6,692**	**162**	**20**	**(26,178)**	**72,210**
Sale of electricity	33,434	3,969	2,849	22,520	15	-	-	(8,870)	**53,917**
Capacity market	2,142	211	276	29	-	-	-	-	**2,658**
Sale of distribution services	13	15	-	46	6,374	-	-	(77)	**6,371**
Sale of heat	89	2,901	-	13	-	-	-	(14)	**2,989**
Sale of energy origin rights	1	75	246	-	-	-	-	13	**335**
Regulatory system services	220	91	16	-	-	-	-	-	**327**
Sale of natural gas	-	-	-	1,041	-	-	-	(465)	**576**
Sale of other fuel	-	-	-	8,568	-	-	-	(4,357)	**4,211**
Sale of CO_2 emission allowances	263	67	-	12,200	-	-	-	(12,221)	**309**
Other sale of goods and materials	192	53	(23)	(3)	303	162	20	(187)	**517**
Revenue from sale of services	**95**	**53**	**31**	**1,473**	**54**	**191**	**296**	**(1,961)**	**232**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**36,449**	**7,435**	**3,395**	**45,887**	**6,746**	**353**	**316**	**(28,139)**	**72,442**

Deadline for delivery of goods or services	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from sale of goods or services provided to the customer over time	35,898	7,187	3,141	23,649	6,389	-	-	(9,426)	**66,838**
Revenue from sale of goods or services provided to the customer at a point in time	551	248	254	22,238	357	353	316	(18,713)	**5,604**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**36,449**	**7,435**	**3,395**	**45,887**	**6,746**	**353**	**316**	**(28,139)**	**72,442**

Revenue from sales in 2021, by category

The following table presents a reconciliation between revenue disclosed by category and information on revenue that the Group discloses for each reporting period.

restated data	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from contracts with customers	28,751	6,265	1,667	38,220	6,437	311	427	(29,337)	**52,741**
Receivables from recognised compensation based on Act on electricity prices	-	-	-	(2)	-	-	-	-	**(2)**
Revenue from support for high-efficiency cogeneration	-	7	-	-	-	-	-	-	**7**
Revenues from LTC compensations	-	(58)	-	-	-	-	-	-	**(58)**
Operating lease income	13	25	5	5	55	-	5	(24)	**84**
TOTAL REVENUE FROM SALES	**28,764**	**6,239**	**1,672**	**38,223**	**6,492**	**311**	**432**	**(29,361)**	**52,772**

The total amount of revenue from sales includes PLN - 40 million due to sales transactions for which the value was not finally determined at the end of the reporting period. PGE Group makes estimates of revenue, of which the most significant one concerns estimation of revenue from sale of electricity, gas fuel, distribution services in segments Supply and Distribution as well as estimation of revenue from support of high-efficiency co-generation in the District Heating segment.

The following table presents revenue from contracts with customers by category to reflect the manner in which economic factors influence the type, amount, payment deadline and uncertainty of revenue and cash flows.

Type of goods or services *restated data*	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from sale of goods and products, without excluding taxes and fees	28,710	6,213	1,646	37,393	7,729	130	65	(27,880)	**54,006**
Taxes and fees collected on behalf of third parties	*(10)*	*(4)*	-	*(145)*	*(1,344)*	-	-	-	***(1,503)***
Revenue from sale of goods and products, including:	**28,700**	**6,209**	**1,646**	**37,248**	**6,385**	**130**	**65**	**(27,880)**	**52,503**
Sale of electricity	18,807	2,680	1,137	13,633	4	-	-	(5,433)	**30,828**
Capacity market	2,162	281	305	32	-	-	-	-	**2,780**
Sale of distribution services	19	12	-	49	6,155	-	-	(76)	**6,159**
Sale of heat	157	2,555	-	13	**-**	-	-	(7)	**2,718**
Sale of energy origin rights	35	143	224	-	-	-	-	(56)	**346**
Regulatory system services	232	16	13	-	-	-	-	-	**261**
Sale of natural gas	-	-	-	449	-	-	-	(199)	**250**
Sale of other fuel	-	-	-	564	-	-	-	(315)	**249**
Sale of CO_2 emission allowances	7,175	511	-	22,506	-	-	-	(21,702)	**8,490**
Other sale of goods and materials	113	11	(33)	2	226	130	65	(92)	**422**
Revenue from sale of services	**51**	**56**	**21**	**972**	**52**	**181**	**362**	**(1,457)**	**238**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**28,751**	**6,265**	**1,667**	**38,220**	**6,437**	**311**	**427**	**(29,337)**	**52,741**

Deadline for delivery of goods or services *restated data*	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from sale of goods or services provided to the customer over time	21,377	5,544	1,455	14,176	6,159	-	-	(5,715)	**42,996**
Revenue from sale of goods or services provided to the customer at a point in time	7,374	721	212	24,044	278	311	427	(23,622)	**9,745**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**28,751**	**6,265**	**1,667**	**38,220**	**6,437**	**311**	**427**	**(29,337)**	**52,741**

7.2 Costs by nature and function

ACCOUNTING POLICIES

<u>Cost of sales</u>

Cost of goods sold includes:

- production costs incurred in the reporting period adjusted for related changes in inventories (finished goods, semi-finished products and production in progress) and costs related to production of goods for own use,
- value of electricity, goods and materials sold at cost,
- changes in the fair value of financial instruments related to coal measured at fair value, as well as changes in the valuation of coal stocks measured at fair value.

Production costs directly attributable to the revenue generated by the entities affect the Group's financial result for the reporting period in which the revenue occurred.

Production costs that are only indirectly attributable to revenue or other economic benefits generated by the Group affect the Group's profit or loss for the part of the reporting period, ensuring that they are commensurate with revenue or other economic benefits

	Year ended December 31, 2022	Year ended December 31, 2021 *restated data*
COSTS BY NATURE		
Depreciation, amortisation and impairment losses	4,371	4,419
Materials and energy	11,348	5,993
External services	2,787	2,499
Taxes and fees	23,278	13,988
Employee benefits expenses	6,092	5,098
Other costs by nature	436	365
TOTAL COST BY NATURE	**48,312**	**32,362**
Change in product inventories	(7)	4
Cost of products and services for internal purposes	(689)	(563)
Distribution and selling expenses	(2,012)	(1,515)
General and administrative expenses	(1,382)	(1,028)
Cost of goods and materials sold	23,472	19,903
COST OF SALES	**67,694**	**49,163**

7.2.1 Depreciation, amortisation, disposal and impairment losses

The following presents depreciation, amortisation, liquidation and impairment of property, plant and equipment, intangible assets, right-of-use assets and investment properties in the statement of comprehensive income.

Year ended	Depreciation, amortisation, disposal					Impairment		
December 31, 2022	**Property, plant and equipment**	**Intangible assets**	**Right-of-use assets**	**Investment property**	**TOTAL**	**Property, plant and equipment**	**Intangible assets**	**TOTAL**
Cost of sales	4,089	45	50	2	**4,186**	87	10	**97**
Distribution and selling expenses	8	2	4	-	**14**	-	-	**-**
General and administrative expenses	41	7	10	-	**58**	2	1	**3**
RECOGNISED IN PROFIT OR LOSS	**4,138**	**54**	**64**	**2**	**4,258**	**89**	**11**	**100**
Change in product inventories	(2)	-	-	-	**(2)**	-	-	**-**
Cost of products and services for internal purposes	14	1	-	-	**15**	-	-	**-**
TOTAL	**4,150**	**55**	**64**	**2**	**4,271**	**89**	**11**	**100**
Other operating expenses	-	-	-	-	**-**	4	-	**4**

Year ended	Depreciation, amortisation, disposal					Impairment			
December 31, 2021	**Property, plant and equipment**	**Intangible assets**	**Right-of-use assets**	**Investment property**	**TOTAL**	**Property, plant and equipment**	**Intangible assets**	**Right-of-use assets**	**TOTAL**
Cost of sales	4,003	59	47	2	**4,111**	185	28	1	**214**
Distribution and selling expenses	10	2	2	-	**14**	1	-	-	**1**
General and administrative expenses	44	18	10	-	**72**	-	-	-	**-**
RECOGNISED IN PROFIT OR LOSS	**4,057**	**79**	**59**	**2**	**4,197**	**186**	**28**	**1**	**215**
Change in product inventories	1	-	-	-	**1**	-	-	-	-
Cost of products and services for internal purposes	6	-	-	-	**6**	-	-	-	**-**
TOTAL	**4,064**	**79**	**59**	**2**	**4,204**	**186**	**28**	**1**	**215**
Other operating expenses	-	-	-	-	-	1	-	-	**1**

Impairment losses recognised in the reporting period concern investment expenditures at units for which impairment had been recognised in previous periods.

In the item 'Depreciation/amortisation and liquidation' the Group recognised in the current period PLN 44 million net as liquidation of property, plant and equipment and intangible assets (PLN 33 million in the comparative period).

7.2.2 Materials and energy

	Year ended December 31, 2022	Year ended December 31, 2021 *restated data*
Cost of production fuel	9,377	4,831
Use of energy	964	333
Use of repair and operation materials	518	457
Other	489	372
TOTAL MATERIALS AND ENERGY	**11,348**	**5,993**

7.2.3 External services

	Year ended December 31, 2022	Year ended December 31, 2021
Transmission services	1,241	1,272
External services - repairs and exploitation	508	479
Logistics services	363	151
IT services	137	101
Consulting services	59	45
Telecommunication services	20	20
Rent and lease	18	20
Other	441	411
TOTAL EXTERNAL SERVICES	**2,787**	**2,499**

7.2.4 Taxes and fees

	Year ended December 31, 2022	Year ended December 31, 2021
Fees for CO_2 emissions	20,325	11,553
Environmental fees	1,411	1,304
Real estate tax	1,009	960
Contribution to the Price Difference Payment Fund	351	-
Other	182	171
TOTAL TAXES AND FEES	**23,278**	**13,988**

7.2.5 Employee benefits expenses and employment structure

	Year ended December 31, 2022	Year ended December 31, 2021
Payroll	4,224	3,850
Social security expenses	809	733
Retirement and pension expenses	53	62
Jubilee awards, coal benefits	124	123
Other post-employment benefits	54	50
Change in provisions for employee benefits	150	(277)
Cost of Voluntary Leave Programme	-	(10)
Other employee benefits	678	567
TOTAL EMPLOYEE BENEFITS EXPENSES, INCLUDING:	**6,092**	**5,098**
Included in costs of goods sold	4,456	3,965
Included in distribution and selling costs	364	298
Recognised in general and administrative expenses	957	677
Cost of products and services for internal purposes	315	158

In the item Other costs of employee benefits the Group recognises the costs of employee pension schemes, contributions to Social Fund, cost of healthcare and training.

Employment at PGE Group (FTE) was as follows:

	As at December 31, 2022	As at December 31, 2021 *restated data*
Conventional Generation	19,574	19,585
District Heating	3,628	3,705
Renewables	713	630
Supply	2,702	2,459
Distribution	9,703	9,636
Circular Economy	970	944
Other consolidated companies	723	1,042
TOTAL EMPLOYMENT	**38,013**	**38,001**

7.3 Other operating income and costs

ACCOUNTING POLICIES

Other operating income and costs

Other operating income and costs are recognised in the financial statements in accordance with the prudence principle and commensurability principle.

	Year ended December 31, 2022	Year ended December 31, 2021
NET OTHER OPERATING INCOME/(COSTS)		
Effect of change in rehabilitation provision	1,721	1,463
Penalties, fines and compensations received	599	69
(Creation)/reversal of impairment losses on receivables	(548)	(83)
Reversal/(recognition) of other provisions	162	(352)
Donations granted	(75)	(18)
Surpluses, asset disclosures/accounting for inventory shortfalls	75	24
Grants received	32	32
Property, plant and equipment/intangible assets and other infrastructure received free-of-charge	21	17
Gain/(loss) on sale of property, plant and equipment / intangible assets	18	41
Valuation and exercise of derivatives, including:	(22)	2.896
- CO_2	*33*	*2.894*
- Coal	*(55)*	*2*
Other	(31)	(32)
TOTAL NET OTHER OPERATING INCOME/(COSTS)	**1,952**	**4,057**

The increase in Fines, damages is due to the calculation by subsidiary PGE GiEK S.A. of a contractual penalty in the amount of PLN 562 million to the consortium of Mitsubishi Power Europe Gmbh, TECNICAS REUNIDAS S.A and BUDIMEX S.A for failure to meet the availability rate of the Turów Power Plant unit in the first year of the guarantee period. The contractual penalty is covered by an impairment loss of the same amount. In July 2022, PGE GiEK S.A. submitted a demand for payment to the consortium, to which it received a negative response. In October 2022, the consortium requested mediation, to which it received a response that the possibility of mediation would only be possible once the block had been brought into compliance with the provisions of the Contract.

The release of other provisions relates to provisions for litigation with ENESTA's counterparties, as described in note 1.2 of these financial statements.

The issue of the measurement of a land rehabilitation provision is described in note 21.1 to these financial statements.

The item Donations granted mainly includes a donation given by PGE Group to the Liberec Region in the Czech Republic, amounting to EUR 10 million.

7.4 Financial income and costs

ACCOUNTING POLICIES

Financial income and costs

Interest income and costs are recognised successively over the respective period using the effective interest method in relation to the net amount of the financial instrument at the reporting date, in line with the materiality principle.

Dividends are recognised when the shareholders' right to receive payments is established.

	Year ended December 31, 2022	Year ended December 31, 2021
NET FINANCIAL INCOME/(COSTS) FROM FINANCIAL INSTRUMENTS		
Dividends	4	3
Interest, including	147	(307)
Interest income calculated using the effective interest rate method	*458*	*35*
Revaluation of financial assets	(4)	(33)
Reversal/(recognition) of impairment	(9)	(7)
Exchange differences	(26)	(4)
Profit/(loss) on disposal of investment	37	(6)
Settlement of loss of control	(1)	324
TOTAL NET FINANCIAL INCOME /(COSTS) FROM FINANCIAL INSTRUMENTS	**148**	**(30)**
NET OTHER FINANCIAL INCOME/(COSTS)		
Interest cost on non-financial items	(338)	(219)
Interest on statutory receivables	(3)	2
Reversal of provisions	(2)	(1)
Other	6	(2)
TOTAL NET OTHER FINANCIAL INCOME/(COSTS)	**(337)**	**(220)**
TOTAL NET FINANCIAL INCOME/(COSTS)	**(189)**	**(250)**

The Group reports interest income mainly on cash held in bank accounts and deposits Interest costs mainly relate to outstanding bonds, credit facilities, loans, settled IRS transactions and leases. The interest cost on lease liabilities reached PLN 41 million in the current report (PLN 40 million in 2020). The interest cost on non-financial items concerns land rehabilitation provisions and employee benefit provisions.

Result on the loss of control is related to Ørsted's acquisition of a 50% stake in the increased share capital of EWB 2 and EWB 3.

7.5 Share of profit of equity-accounted entities

2022	Polska Grupa Górnicza	Polimex Mostostal	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**15.32%**	**16,26%**	**34.93%**	**49.79%**
Revenue	8,287	3,766	19	65
Result on continuing operations	1.664	143	-	1
Share of profit of equity-accounted entities	**255**	**23**	**-**	**-**
Elimination of unrealised gains and losses	(6)	(17)	-	-
Impairment	(255)	-	-	-
SHARE OF PROFIT OF EQUITY-ACCOUNTED ENTITIES	**(6)**	**6**	**-**	**-**
Other comprehensive income	76	9	-	-
SHARE OF OTHER COMPREHENSIVE INCOME OF EQUITY-ACCOUNTED ENTITIES	12	1	-	-
Impairment	(12)	-	-	-
Share of other comprehensive income of equity-accounted entities	**-**	**1**	**-**	**-**

2021	Polska Grupa Górnicza	Polimex Mostostal	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**15.32%**	**16.40%**	**34.93%**	**49.79%**
Revenue	8,087	2,221	13	72
Result on continuing operations	(824)	101	-	2
Share of profit of equity-accounted entities	**(126)**	**16**	**-**	**1**
Elimination of unrealised gains and losses	(9)	(5)	-	-
Impairment	121	-	-	-
SHARE OF PROFIT OF EQUITY-ACCOUNTED ENTITIES	**(14)**	**11**	**-**	**1**
Other comprehensive income	48	7	-	-
SHARE OF OTHER COMPREHENSIVE INCOME OF EQUITY-ACCOUNTED ENTITIES	**8**	**1**	**-**	**-**

On October 25, 2022, the agreement on the sale of shares in Polska Grupa Górnicza S.A. was executed. Pursuant to the agreement, PGE GiEK S.A. sold all its PGG shares to the State Treasury. Accordingly, PGG data has been presented for the period up to September 30, 2022.

The Group makes a consolidation adjustment relating to the margin on coal sales between Polska Grupa Górnicza and the Group (until the sale of shares in that company) and also an adjustment to the margin on contracts performed by Polimex - Mostostal for the Group.

8. Income tax

ACCOUNTING POLICIES

Income tax

Income tax recognised in profit or loss comprises current income tax and deferred income tax.

The statement of profit and loss recognises the actual tax charge for the reporting period, as determined by the Group entities in accordance with the applicable provisions of the Corporate Income Tax Act, and the change in deferred tax assets and liabilities not accounted for in equity.

8.1 Tax in the statement of comprehensive income

Main elements of income tax charges for the years ended December 31, 2022 and December 31, 2021 are as follows:

	Year ended December 31, 2022	Year ended December 31, 2021
INCOME TAX RECOGNISED IN STATEMENT OF PROFIT OR LOSS		
Current income tax	2,177	650
Adjustments concerning current income tax from prior years	7	27
Deferred income tax	(1,452)	250
Adjustments of deferred income tax	(12)	(1)
INCOME TAX EXPENSE RECOGNISED IN STATEMENT OF PROFIT OR LOSS	**720**	**926**
INCOME TAX EXPENSE RECOGNISED IN OTHER COMPREHENSIVE INCOME		
From actuarial gains and losses from valuation of provisions for employee benefits	33	77
From valuation of hedging instruments	(150)	146
(Tax benefit) / tax burden recognised in other comprehensive income (equity)	**(117)**	**223**

8.2 Effective tax rate

A reconciliation of the calculation of income tax on profit before tax at the statutory tax rate and income tax calculated according to the effective tax rate of the Group is as follows:

	Year ended December 31, 2022	Year ended December 31, 2021
PROFIT/(LOSS) BEFORE TAX	**4,110**	**4,871**
Income tax according to Polish statutory tax rate of 19%	781	926
ITEMS ADJUSTING INCOME TAX		
Adjustments concerning current income tax from prior years	7	27
Adjustments of deferred income tax	(12)	(1)
Result on settlement of loss of control	-	(62)
Costs not recognised as tax-deductible costs	60	50
Tax loss	25	9
Recognition of non-tax provisions and impairment losses	151	51
Reversal of non-tax provisions and impairment losses	(183)	(53)
Non-taxable income	(126)	5
Other adjustments	17	(26)
TAX AT EFFECTIVE TAX RATE **Income tax (expense) as presented in the consolidated financial statements**	**720**	**926**
EFFECTIVE TAX RATE	**18%**	**19%**

As described in note 7.3, in the present period subsidiary PGE GiEK S.A. imposed a PLN 562 million contractual penalty. The contractual penalty is covered by an impairment loss of the same amount. No deferred tax was recognised on the revenue or on the created impairment loss (PLN 107 million).

In the comparative period, the adjustments relating to the settlement of current income tax of previous years relate to the final tax settlement of the group for the previous year. The differences arise from sales of electricity for the previous year invoiced in the current year, previously recognised based on estimates.

In the comparative period, the result on loss of control is related to Ørsted's acquisition of 50% of the increased share capital in EWB2 and EWB3 as further described in note 1.3.2.

EXPLANATORY NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

9. Property, plant and equipment

ACCOUNTING POLICIES

Property, plant and equipment

Property, plant and equipment are assets:

- held for use in the production or supply of goods or services, for rental to other entities based on a rental agreement, or for administrative purposes and
- expected to be used for more than one year.

Property, plant and equipment is measured at net carrying amount, i.e. initial value (or deemed cost for items of property, plant and equipment used before the transition to IFRS) less any accumulated depreciation and any impairment losses. Initial value comprises purchase price including all costs directly attributable to the purchase and bringing the asset into use. The cost comprises estimate of the costs of dismantling and removing the property, plant and equipment and restoring the site on which these assets located, the obligation for which an entity incurs either when the assets are acquired or as a consequence of having them used for purposes other than to produce inventories. As at the date of acquiring or manufacturing an item of property, plant and equipment, the Group identifies and distinguishes all components being a part of a respective asset that are material relative to the acquisition price, cost of manufacture or deemed cost, and depreciates them separately. The Group also recognises the costs of major overhauls, periodic inspections that meet the definition of component as components of property, plant and equipment.

The depreciable amount is the cost of an asset less its residual value. Depreciation commences when the asset is available for use. Depreciation is based on a depreciation plan reflecting the future useful life of the asset. The depreciation method used reflects the pattern in which the asset's future economic benefits are expected to be consumed by the entity. Major inspection and overhauls recognised as a component of property, plant and equipment are depreciated starting from the next month after finishing the inspection/overhaul until the beginning of the next major inspection/overhaul.

Depreciation methods, depreciation rates and residual values of property, plant and equipment are verified at least each financial year. Changes identified during verification are accounted for as a change in an accounting estimate, and possible adjustments to depreciation amounts are recognised in the year in which the verification took place and in subsequent periods.

Investments relating to property, plant and equipment under construction or in assembly are recognised at cost of acquisition or cost of manufacturing less impairment losses. Property, plant and equipment under construction is not depreciated until the construction is completed and the items are available for use.

Borrowing costs

Borrowing costs are interest and other costs that the Group incurs in connection with the borrowing of funds. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognised as an expense. Exchange differences arising from foreign currency borrowings are capitalised by the Group to the extent that they are regarded as an adjustment to interest costs.

Impairment of non-financial assets

The Group assesses at each reporting date whether there is any indication that a component of non-financial assets may be impaired. If any such indication exists, or if there is a need to perform an annual impairment testing, the Group estimates the recoverable amount of the asset or cash-generating unit.

The recoverable amount or an asset or cash generating unit is defined as the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If the carrying amount is higher than the recoverable amount, an impairment loss is recorded. When estimating the value in use of an asset, future cash flows are discounted to the present value using a discount rate before tax, which represents the current market estimate of time value of money and risk relevant to the asset. Impairment losses on assets

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used in continuing operations are recognised in those expense categories that correspond to the function of the asset that is impaired.

Stripping costs

When the conditions of IFRIC Interpretation 20 are met, mines also recognise as a component of property, plant and equipment the so-called stripping asset, i.e. the stripping costs incurred at the production stage. The value of the stripping activity asset at the production stage is determined on the basis of a model taking into account, inter alia, the estimated value of the overall ratio of the amount of overburden to coal and the actual annual overburden to coal ratio. This ratio is calculated as the ratio of the remaining quantity of overburden to be removed to the remaining coal resources to be extracted from the date of application of the interpretation of IFRIC 20 until the end of coal extraction from a given deposit component. This ratio is determined based on the best knowledge of the mine's technical services at the end of each financial year and may change if new information is obtained as mining progresses regarding the size of the deposit in operation and the manner in which it is deposited.

The overburden stripping asset is systematically depreciated using the natural method based on the amount of coal extracted from the deposit component.

Measurement of the stripping activity asset at the production stage

The value of the overburden stripping asset at the production stage is determined on the basis of a model taking into account, among other things, the estimated value of the overall overburden to coal ratio.

Costs of post-mining rehabilitation of open-pit mines

Open-pit mines operating in the Group capitalise in the value of the corresponding component of tangible assets estimated costs of rehabilitation of post-mining properties in the proportion of the volume of the excavation resulting from stripping of overburden at the reporting date to the planned volume of excavation resulting from stripping of overburden at the end of exploitation period.

Capitalised costs of rehabilitation are systematically depreciated using the natural method of depreciation based on the amount of lignite extracted from a particular field.

Property, plant and equipment under operating leases

The Group classifies each of its leases as either a financial lease or an operating lease. Leases are classified as financial leases if substantially all the risks and rewards of ownership of the underlying asset are transferred to the lessee. All other leases are treated as operating leases.

Assets under operating leases are presented in the statement of financial position according to the nature of the assets.

An entity, as lessor, divides each class of property, plant and equipment into assets subject to operating leases and assets not subject to operating leases.

The following useful lives are adopted for particular groups of property, plant and equipment:

Group	Average remaining depreciation period in years	Most frequently applied depreciation periods in years
Buildings and structures	17	20 – 60
Machinery and equipment	13	2 – 40
Vehicles	5	4 – 15
Other property, plant and equipment	7	3 – 10

	As at December 31, 2022	As at December 31, 2021 *restated data*
Land	200	199
Buildings and construction	26,506	26,060
Technical equipment	29,138	28,902
Vehicles	333	351
Other property, plant and equipment	1,541	2,314
Property, plant and equipment in progress	6,670	3,299
NET VALUE OF PROPERTY, PLANT AND EQUIPMENT	**64,388**	**61,125**

Changes in property, plant and equipment by type

	Land	Buildings and structures	Technical equipment	Vehicles	Other property, plant and equipment	Property, plant and equipment in progress	Total
GROSS CARRYING AMOUNT							
AS AT JANUARY 1, 2022	**234**	**48,018**	**64,066**	**940**	**9,104**	**3,478**	**125,840**
Capital expenditures	-	-	1	1	-	6,911	6,913
Settlement of property, plant and equipment under construction	8	1,576	1,916	48	25	(3,573)	-
Liquidation, disposal	(3)	(306)	(381)	(20)	(9)	-	(719)
Changes in Group composition	(4)	195	693	(5)	(8)	38	909
Effect of change in rehabilitation provision	1	18	16	-	(579)	-	(544)
Donations and transfers for free	-	126	6	-	-	-	132
Other	(1)	(3)	(14)	-	-	(3)	(21)
AS AT DECEMBER 31, 2022	**235**	**49,624**	**66,303**	**964**	**8,533**	**6,851**	**132,510**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2022	**35**	**21,958**	**35,164**	**589**	**6,790**	**179**	**64,715**
Depreciation and net value of liquidation presented in costs by nature	2	1,567	2,294	63	221	3	4,150
Impairment	-	(12)	99	-	1	5	93
Liquidation, disposal	-	(301)	(372)	(16)	(8)	-	(697)
Sale of subsidiaries	(2)	(87)	(16)	(2)	(10)	-	(117)
Other	-	(7)	(4)	(3)	(2)	(6)	(22)
AS AT DECEMBER 31, 2022	**35**	**23,118**	**37,165**	**631**	**6,992**	**181**	**68,122**
NET VALUE AT DECEMBER 31, 2022	**200**	**26,506**	**29,138**	**333**	**1,541**	**6,670**	**64,388**

restated data	Land	Buildings and structures	Technical equipment	Vehicles	Other property, plant and equipment	Property, plant and equipment in progress	Total
GROSS CARRYING AMOUNT							
AS AT JANUARY 1, 2021	**260**	**45,547**	**59,302**	**927**	**9,843**	**7,271**	**123,150**
Capital expenditures	-	-	5	2	-	4,573	4,580
Settlement of property, plant and equipment under construction	5	2,705	5,124	40	23	(7,897)	-
Liquidation, disposal	(1)	(168)	(411)	(21)	(9)	(2)	(612)
Sale of subsidiaries	(29)	(6)	(3)	-	(2)	(412)	(452)
Effect of change in rehabilitation provision	(1)	(31)	(35)	-	(749)	-	(816)
Transfers between groups	-	(93)	95	-	-	(2)	-
Loss of control over jointly controlled entities	-	-	-	-	-	(50)	(50)
Other	-	64	(11)	(8)	(2)	(3)	40
AS AT DECEMBER 31, 2021	**234**	**48,018**	**64,066**	**940**	**9,104**	**3,478**	**125,840**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2021	**33**	**20,700**	**33,024**	**551**	**6,493**	**360**	**61,161**
Depreciation and net value of liquidation presented in costs by nature	3	1,504	2,179	63	302	13	4,064
Impairment	-	(25)	358	-	4	(150)	187
Liquidation, disposal	-	(159)	(407)	(19)	(9)	-	(594)
Sale of subsidiaries	-	(5)	(2)	-	(1)	(37)	(45)
Transfers between groups	-	(41)	41	-	-	-	-
Other	(1)	(16)	(29)	(6)	1	(7)	(58)
AS AT DECEMBER 31, 2021	**35**	**21,958**	**35,164**	**589**	**6,790**	**179**	**64,715**
NET VALUE AT DECEMBER 31, 2021	**199**	**26,060**	**28,902**	**351**	**2,314**	**3,299**	**61,125**

Significant additions and disposals of property, plant and equipment

The largest expenditures were incurred in the Distribution segment (PLN 2,576 million), Other Activity segment (PLN 2,202 million), District Heating segment (PLN 1,140 million). The main items of expenditure were the connection of new customers to the distribution network (PLN 1,097 million) and the Cable Program (PLN 503 million). Expenditure in the Other Activity segment was primarily incurred on the construction of gas and steam units at PGE Gryfino 2050 (PLN 2,110 million). In the District Heating segment, the largest expenditure was incurred on the construction of the new CHP plant EC Czechnica (PLN 393 million).

The largest expenditures were incurred in the Conventional Generation segment (PLN 1,759 million) and the Distribution segment (PLN 1,358 million). The key expenditures included: construction of unit 7 at Elektrownia Turów (PLN 587 million). Expenditures on connecting new customers to the distribution grid incurred by the Distribution segment reached PLN 626 million.

In the current period, the Group purchased shares in companies that own wind farms. The purchase is described in note 1.4 of these consolidated financial statements. As a result of this transaction, the net value of property, plant and equipment and right-of-use assets increased by PLN 1,134 million.

In the current period, the Group sold its stake in PGE EJ1 sp. z o.o. As a result of this transaction, the net value of property, plant and equipment, intangible assets and right-of-use assets decreased by PLN 415 million.

Borrowing costs

During the year ended December 31, 2021 PGE Group recognised in the value of property, plant and equipment borrowings costs of approx. PLN 40 million (PLN 87 million in the comparative period). The average capitalisation rate of borrowing costs in the year ended December 31, 2022 was 18% (22% in the comparative period).

Capitalisation of stripping costs

In the current period, in accordance with the requirements of IFRIC 20, no stripping costs in the production phase were capitalised. In the current reporting period, amortisation of capitalised expenses of PLN 154 million (147 million in the comparative period) was charged to expenses. Capitalised stripping costs are presented as "other property, plant and equipment".

Capitalisation of changes in valuation of rehabilitation provision

PGE Group recognises in property, plant and equipment changes in value of the rehabilitation provision assigned to stripping of overburden, provision for rehabilitation of post-construction grounds of wind farms and provision for liquidation of property, plant and equipment. As at December 31, 2031 the net value of the capitalised rehabilitation provision (after depreciation and impairment) was PLN 239 million (including PLN 113 million of the provision for rehabilitation of post-mining properties). In comparative period the net value of capitalised land rehabilitation provision amounted to PLN 827 million (including PLN 730 million of the provision for rehabilitation of post-exploitation mining properties).

Depreciation period for property, plant and equipment

Depreciation rates are calculated on the basis of the estimated economic useful life of an item of property, plant and equipment and its residual value. Capitalised costs of major inspections and overhauls are depreciated throughout the period until the beginning of the next major inspection or overhaul.

Estimated economic useful lives of assets are subject to verification at least once a year. The applicable depreciation periods are presented in notes 9, 11 and 12.

The review of the economic useful lives of property, plant and equipment carried out in 2022 resulted in a reduction in depreciation and amortisation expense 2022 in the total amount of approximately PLN 58 million.

Property, plant and equipment under operating leases

The following table presents changes in property, plant and equipment under operating leases, divided by class of underlying asset.

	Land	Buildings and structures	Technical equipment	Other property, plant and equipment	Total
GROSS CARRYING AMOUNT					
AS AT JANUARY 1, 2022	**26**	**70**	**8**	**1**	**105**
Sale	-	(2)	-	-	(2)
Other	(1)	4	-	-	3
AS AT DECEMBER 31, 2022	**25**	**72**	**8**	**1**	**106**
DEPRECIATION AND IMPAIRMENT LOSSES					
AS AT JANUARY 1, 2022	**3**	**39**	**7**	**-**	**49**
Depreciation and net value of liquidation presented in costs by nature	-	2	-	-	2
Sale	-	(2)	-	-	(2)
Other	(1)	-	-	1	-
AS AT DECEMBER 31, 2022	**2**	**39**	**7**	**1**	**49**
NET VALUE AT DECEMBER 31, 2022	**23**	**33**	**1**	**-**	**57**

	Land	Buildings and structures	Technical equipment	Other property, plant and equipment	Total
GROSS CARRYING AMOUNT					
AS AT JANUARY 1, 2021	**27**	**526**	**533**	**3**	**1,089**
Other*	(1)	(456)	(525)	(2)	(984)
AS AT DECEMBER 31, 2021	**26**	**70**	**8**	**1**	**105**
DEPRECIATION AND IMPAIRMENT LOSSES					
AS AT JANUARY 1, 2021	**2**	**340**	**430**	**1**	**773**
Depreciation and net value of liquidation presented in costs by nature	-	2	-	-	2
Other*	1	(303)	(423)	(1)	(726)
AS AT DECEMBER 31, 2021	**3**	**39**	**7**	**-**	**49**
NET VALUE AT DECEMBER 31, 2021	**23**	**31**	**1**	**1**	**56**

** The line Other mainly presents the effects of the termination of the regulatory system services agreement between the Group's pumped storage power plants and Polskie Sieci Elektroenergetyczne S.A.*

10. Investment property

ACCOUNTING POLICIES

Investment property

Investment property is measured on initial recognition at purchase price or cost to manufacture, including transaction costs. If an investment property has been purchased, the purchase price consists of the purchase price plus any costs directly related to the purchase transaction, such as legal fees and real estate transfer tax.

Investment property in the PGE Group companies comprises mainly buildings located in the entity's locations, leased fully or partially to third parties. Fair value of investment property is not significantly different than valuation determined under the historical cost convention in light of the materiality related to the consolidated financial statements.

The Group did not incur any expenditure on investment properties in the current period. Depreciation costs amounted to PLN 2 million.

11. Intangible assets

ACCOUNTING POLICIES

Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance, such as:

- acquired, classified as non-current assets, property rights capable of economic exploitation, with an expected economic life of more than one year, intended to be used for the purposes of the Group,
- development costs,
- goodwill excluding internally generated goodwill,
- easements for power lines acquired and received free-of-charge,
- intangible assets not commissioned for use.

The initial recognition of intangible assets acquired in a separate transaction will be at the purchase price or cost to manufacture (in the case of development work).

Subsequent to initial recognition, an intangible asset is carried at purchase price or cost to manufacture less accumulated amortisation and accumulated impairment losses. The cost of an internally generated intangible asset, excluding development costs, are not capitalised and are recorded in profit or loss for the period when the related cost was incurred.

The Group assesses whether the useful life of an intangible asset is finite or indefinite and, if finite, estimates its useful life based on production volumes or other measure used to determine useful life. The useful life of an intangible asset is assessed as indefinite if, based on an analysis of relevant factors, there is no foreseeable period over which the asset will generate cash flows for the Group.

The amortisable amount of an intangible asset with a definite useful life will be amortised on a systematic basis over its useful life. Amortisation begins on the first day of the month following the month in which the asset is ready for use.

The amortisation period and the amortisation method are reviewed at least at each balance sheet date. Any changes resulting from the revision are recognised as a change in estimate.

Intangible assets, both intangible assets with indefinite useful lives and intangible assets not yet in use, are periodically (at least annually) tested for impairment.

Other intangible assets are reviewed for impairment only when there is an indication that they may be impaired. If there is an indication that an impairment loss may have occurred and the carrying amount exceeds the estimated recoverable amount, then the carrying amount of those assets or the cash-generating units to which those assets belong is reduced to the recoverable amount. The Group recognises impairment losses on intangible assets in the income statement under costs by nature and by function in accordance with the amortisation reference. This includes impairment losses on intangible assets not put into use and those arising from impairment of the entire CGU.

The adopted useful lives for the various groups of intangible assets are as follows:

Group	Average remaining amortisation period in years	Applied total amortisation periods in years
Acquired patents and licences	3	3 - 11
Cost of finished development works	3	3 – 15
Other	10	3 – 70

	As at December 31, 2022	As at December 31, 2021
Cost of finished development works	1	2
Goodwill	276	285
Software	179	165
Other licences and patents	5	3
Other intangible assets	151	155
Intangible assets not commissioned for use	114	72
NET VALUE OF INTANGIBLE ASSETS	**726**	**682**

Change in intangible assets by type group

	Cost of finished development works	Goodwill	Software	Other licences and patents	Other intangible assets	Intangible assets not commissioned for use	Total
GROSS CARRYING AMOUNT							
AS AT JANUARY 1, 2022	**18**	**285**	**842**	**107**	**260**	**106**	**1,618**
Capital expenditures	-	-	-	-	-	123	**123**
Intangible assets not commissioned for use	-	-	64	3	11	(78)	**-**
Transfers between groups	-	-	(5)	5	-	-	**-**
Liquidation, sale	-	-	(30)	(1)	-	-	**(31)**
Changes in Group composition	(3)	(9)	(2)	1	(1)	1	**(13)**
Other	1	-	(3)	-	4	(3)	**(1)**
AS AT DECEMBER 31, 2022	**16**	**276**	**866**	**115**	**274**	**149**	**1,696**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2022	**16**	**-**	**677**	**104**	**105**	**34**	**936**
Depreciation, amortisation, liquidation	1	-	42	2	10	-	**55**
Impairment	-	-	-	3	8	-	**11**
Transfers between groups	-	-	(3)	3	-	-	**-**
Liquidation, disposal	-	-	(29)	(1)	-	-	**(30)**
Changes in Group composition	(2)	-	(2)	-	(1)	1	**(4)**
Other	-	-	2	(1)	1	-	**2**
AS AT DECEMBER 31, 2022	**15**	**-**	**687**	**110**	**123**	**35**	**970**
NET VALUE AT DECEMBER 31, 2022	**1**	**276**	**179**	**5**	**151**	**114**	**726**

	Cost of finished development works	Goodwill	Software	Other licences and patents	Other intangible assets	Intangible assets not commissioned for use	Total
AS AT JANUARY 1, 2021	**18**	**204**	**805**	**114**	**250**	**108**	**1,499**
Capital expenditures	-	-	1	-	-	67	**68**
Intangible assets not commissioned for use	-	-	62	1	7	(70)	**-**
Transfers between groups	-	-	1	(3)	-	2	**-**
Liquidation, sale	-	-	(21)	(4)	(1)	-	**(26)**
Changes in Group composition	-	81	(1)	(1)	-	-	**79**
Other	-	-	(5)	-	4	(1)	**(2)**
AS AT DECEMBER 31, 2021	**18**	**285**	**842**	**107**	**260**	**106**	**1,618**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2021	**15**	**-**	**639**	**104**	**88**	**7**	**853**
Depreciation, amortisation, liquidation	1	-	54	6	18	-	**79**
Impairment	-	-	-	1	(1)	28	**28**
Transfers between groups	-	-	3	(3)	-	-	**-**
Liquidation, disposal	-	-	(18)	(2)	(1)	-	**(21)**
Changes in Group composition	-	-	(1)	(2)	-	-	**(3)**
Other	-	-	-	-	1	(1)	**-**
AS AT DECEMBER 31, 2021	**16**	**-**	**677**	**104**	**105**	**34**	**936**
NET VALUE AT DECEMBER 31, 2021	**2**	**285**	**165**	**3**	**155**	**72**	**682**

Intangible assets not commissioned for use

The presented amounts of intangible assets not commissioned for use as at December 31, 2022 are related mainly to IT implementation programs at the Group.

Goodwill

At the reporting date ended 31 December 2022, goodwill was allocated to the following segments:

- District Heating - PLN 192 million,
- Renewables - PLN 84 million,

Amortisation periods for intangible assets

The review of the economic useful lives of intangible assets carried out in 2022 resulted in a reduction in amortisation expense 2022 of approximately PLN 4 million.

12. Right-of-use assets

ACCOUNTING POLICIES

As defined in IFRS 16, an arrangement is or contains a lease if it transfers the right to control the use of an identified asset for a specified period in exchange for consideration.

The scope of application of IFRS 16 excludes leases relating to the exploration for or exploitation of lignite deposits, including in particular agreements to establish mining usufruct and perpetual usufruct of land, lease agreements and similar land lease agreements relating to mine workings, forefields and spoil tips. In accordance with the Group's interpretation, lignite mining contracts are excluded from the scope of IFRS 16.

The Group defines the lease term as an irrevocable period over which the lessee has the right to use the underlying asset, along with:

- the periods for which the lease may be renewed if it can be assumed with reasonable certainty that the lessee will exercise that right; and
- the periods for which the lease may be terminated if it can be assumed with reasonable certainty that the lessee will not exercise that right.

In determining the lease term and estimating the length of the irrevocable lease term, the Group applies the contract definition and determines the enforceability period of the contract. A lease ceases to be enforceable when both the lessee and the lessor have the right to terminate the lease without the consent of the other party, resulting at most in a minor penalty. The notion of penalty includes all kinds of "disadvantages" of an economic nature, creating barriers to exit from the contract.

If only the lessee has a right to terminate the lease, that right is regarded as a termination option of the lessee that the entity takes into account in determining the lease term. If only the lessor has the right to terminate the lease, the irrevocable lease term covers the period covered by the option to terminate the lease.

The lease term begins on the inception date (when the underlying asset is made available for use by the lessee) and includes any rent-free periods granted to the lessee by the lessor.

At the inception of the lease, the Group takes into account all relevant facts and circumstances that create an economic incentive for the lessee to exercise or not to exercise the option to renew the lease, the option to purchase the underlying asset or the option to terminate the lease.

The lease rate is an interest rate that causes the present value of the lease payments and the non-guaranteed residual value to equal the sum of the fair value of the underlying asset and any initial direct costs incurred by the lessor.

The lessee's marginal interest rate is the interest rate the lessee would have to pay to borrow, for a similar term and with similar security, the funds necessary to purchase an asset of similar value to the right-of-use asset in a similar economic environment.

The lessee recognises the right-of-use asset on the inception date.

As a lessee, the Group applies a recognition, measurement and presentation exemption to:

- short-term leases, i.e. leases of which the lease term is not longer than 12 months and which do not contain a call option;
- leases in respect of which the underlying asset is of low value and which are not subleased. The Group considers the value of the underlying asset to be low (the value of a new asset regardless of the age of the leased asset) if it does not exceed PLN 18 thousand.

As a lessee, the Group applies a recognition, measurement and presentation exemption to:

- short-term leases, i.e. leases of which the lease term is not longer than 12 months and which do not contain a call option;

ACCOUNTING POLICIES

- leases in respect of which the underlying asset is of low value and which are not subleased. The Group considers the value of the underlying asset to be low (the value of a new asset regardless of the age of the leased asset) if it does not exceed PLN 18 thousand.

The exemption for short-term leases is selected by class of the underlying asset to which the right of use relates. The Group benefits from this exemption for all contracts entered into. Where the underlying asset is of low value, it selects the exemption on a lease-by-lease basis.

At the inception date, the lessee measures the right-of-use asset at cost. The cost of a right-of-use asset should include:

- the amount of the initial measurement of the lease liability,
- any lease payments paid on or before the inception date, less any lease incentives received,
- any initial direct costs incurred by the lessee, and
- an estimate of the costs to be incurred by the lessee to dismantle and remove the underlying asset, renovate the site on which it is located or renovate the underlying asset to the condition required by the terms of the lease, unless those costs are incurred to produce inventories. The lessee assumes the obligation to pay these costs at the inception date or as a result of using the underlying asset for a given period.

Subsequent to the inception date, the lessee measure the right-of-use asset using the cost model. The lessee measures the right-of-use asset at cost:

- less accumulated depreciation (amortisation) and accumulated impairment losses. Depreciation is charged over the life of the lease, from the moment the asset is put in service. No depreciation is charged on the right-of-use classified as non-current assets held for sale.
- adjusted for the revaluation of the liability (e.g. as a result of changes in lease payments).

The following useful lives are adopted for particular groups of right-of-use assets:

Group	Average remaining amortisation period in years	Applied total depreciation periods in years
Land lease and tenancy agreements	13	1-70
Perpetual usufruct of land	51	3-90
Easement agreements	26	17-50
Buildings and construction	6	1-60
Other	4	1-28

	As at December 31, 2022	As at December 31, 2021
Land lease and tenancy agreements	273	206
Perpetual usufruct of land	883	907
Easement agreements	29	24
Buildings and construction	97	89
Other	29	31
NET VALUE OF RIGHT-OF-USE ASSETS	**1,311**	**1,257**

Changes in right-of-use assets by type group

	Land lease and tenancy	Perpetual usufruct of land	Easements	Buildings and structures	Other	Total
GROSS CARRYING AMOUNT						
AS AT JANUARY 1, 2022	254	974	29	149	33	1.439
Liquidation, disposal	(1)	(5)	-	(23)	(3)	(32)
Changes, revaluation of liability, modification of contracts	19	(4)	-	11	2	28
Contracts signed in the current period, of which:	52	4	3	14	8	81
Increase in right-of-use assets (amounts paid)	*-*	*1*	*3*	*8*	*5*	*17*
Increase in right-of-use assets (discounts received)	*52*	*3*	*-*	*6*	*3*	*64*
Other	20	(3)	3	3	(10)	13
AS AT DECEMBER 31, 2022	**344**	**966**	**35**	**154**	**30**	**1,529**
DEPRECIATION AND IMPAIRMENT LOSSES						
AS AT JANUARY 1, 2022	48	67	5	60	2	182
Depreciation, amortisation	22	17	1	17	7	64
Liquidation, disposal	-	(1)	-	(19)	(3)	(23)
Other	1	-	-	(1)	(5)	(5)
AS AT DECEMBER 31, 2022	**71**	**83**	**6**	**57**	**1**	**218**
NET VALUE AT DECEMBER 31, 2022	**273**	**883**	**29**	**97**	**29**	**1,311**

	Land lease and tenancy	Perpetual usufruct of land	Easements	Buildings and structures	Other	Total
GROSS CARRYING AMOUNT						
AS AT JANUARY 1, 2021	270	982	25	134	53	1,464
Liquidation, disposal	(4)	(8)	-	(13)	(8)	(33)
Changes, revaluation of liability, modification of contracts	12	(20)	-	6	1	(1)
Contracts signed in the current period, of which:	8	18	4	2	6	38
Increase in right-of-use assets (amounts paid)	*-*	*9*	*4*	*-*	*1*	*14*
Increase in right-of-use assets (discounts received)	*8*	*9*	*-*	*2*	*5*	*24*
Other	(32)	2	-	20	(19)	(29)
AS AT DECEMBER 31, 2021	**254**	**974**	**29**	**149**	**33**	**1,439**
DEPRECIATION AND IMPAIRMENT LOSSES						
AS AT JANUARY 1, 2021	43	49	4	37	22	155
Depreciation, amortisation	15	17	1	16	10	59
Impairment	-	-	-	-	1	1
Liquidation, disposal	(1)	-	-	(8)	(6)	(15)
Other	(9)	1	-	15	(25)	(18)
AS AT DECEMBER 31, 2021	**48**	**67**	**5**	**60**	**2**	**182**
NET VALUE AT DECEMBER 31, 2021	**206**	**907**	**24**	**89**	**31**	**1,257**

13. Shares accounted for using the equity method

	As at December 31, 2022	As at December 31, 2021
Polska Grupa Górnicza S.A., Katowice	-	-
Polimex - Mostostal S.A., Warsaw	169	144
ElectroMobility Poland S.A., Warsaw,	-	-
PEC Bogatynia S.A., Bogatynia	-	-
Energopomiar Sp. z o.o., Gliwice	11	12
EQUITY-ACCOUNTED INTERESTS	**180**	**156**

	Polimex Mostostal	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**16,26%**	**34.93%**	**49.79%**
At December 31, 2022			
Current assets	2,149	5	25
Non-current assets	676	20	22
Current liabilities	1,621	4	23
Non-current liabilities	262	-	3
NET ASSETS	**942**	**21**	**21**
Share in net assets	**153**	**7**	**11**
Goodwill	16	-	-
Impairment	-	(7)	-
EQUITY-ACCOUNTED INTERESTS	**169**	**-**	**11**

	Polska Grupa Górnicza	Polimex Mostostal	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**15.32%**	**16.40%**	**34.93%**	**49.79%**
AT DECEMBER 31, 2021				
Current assets	1,749	1,544	4	32
Non-current assets	8,722	673	20	19
Current liabilities	7,766	1,156	2	25
Non-current liabilities	3,034	276	-	3
NET ASSETS	**(329)**	**785**	**22**	**23**
Share in net assets	**-**	**128**	**8**	**12**
Goodwill	-	16	-	-
Impairment	-	-	(8)	-
EQUITY-ACCOUNTED INTERESTS	**-**	**144**	**-**	**12**

14. Deferred tax in statement of financial position

ACCOUNTING POLICIES

Deferred income tax

In connection with temporary differences between the reported value of assets and liabilities in the books and their tax value and tax loss deductible in the future, the Group establishes deferred tax liabilities and assets.

A deferred tax liability is recognised for all taxable temporary differences.

Deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilised.

The Group separately recognises deferred tax assets for deductible temporary differences on lease liabilities recognised in connection with the enactment of IFRS 16 and deferred tax liabilities for taxable temporary differences to right-of-use assets.

The current carrying amount of deferred tax assets and liabilities is reviewed at each reporting date. Deferred tax assets and deferred tax liabilities are classified as long-term. The Group offsets deferred tax assets and liabilities at the level of the tax group and at the level of individual PGE Group companies.

14.1 Deferred income tax assets

	As at December 31, 2022	As at December 31, 2021
Difference between tax value and carrying amount of property, plant and equipment	2,214	2,585
Rehabilitation provision	637	859
Provisions for employee benefits	608	626
Provision for purchase of CO_2 emission allowances	3,852	2,157
Difference between tax value and carrying amount of liabilities	712	335
Difference between carrying amount and tax value of right-of-use assets	187	152
Tax losses	145	55
Other provisions	243	111
Difference between tax value and carrying amount of financial assets	367	545
LTC compensations	85	85
Difference between tax value and carrying amount of inventories	103	14
Energy infrastructure acquired free of charge and connection payments received	96	26
Other	19	3
DEFERRED TAX ASSETS	**9,268**	**7,553**

Change in deferred income tax - assets

	Year ended December 31, 2022	Year ended December 31, 2021 *restated data*
AS AT JANUARY 1	**7,553**	**7,219**
Change in correspondence to financial result	1,647	414
Change in correspondence to other comprehensive income	(31)	(78)
Changes in correspondence to retained earnings	2	-
Changes in Group composition	106	(4)
Other changes	(9)	2
AS AT DECEMBER 31	**9,268**	**7,553**

Changes in correspondence with other comprehensive income relate to the change in deferred tax on the portion of the employee benefit liability relating to post-employment benefits. Other changes in each item have been recognised in the financial result.

14.2 Deferred tax liabilities

	As at December 31, 2022	As at December 31, 2021
Difference between tax value and carrying amount of property, plant and equipment	4,807	4,938
CO_2 emission allowances	795	792
Difference between tax value and present carrying amount of financial assets	951	1,012
Difference between carrying amount and tax value of lease liabilities	235	190
Receivables from recognised compensation - Act on electricity prices	103	-
Receivables for recognised compensation under the Law on Preferential Purchase of Solid Fuel	25	-
Difference between tax value and carrying amount of energy origin units	20	15
Difference between tax value and present carrying amount of financial liabilities	30	11
Other	121	64
DEFERRED TAX LIABILITIES	**7,087**	**7,022**

Change in deferred income tax - liabilities

	Year ended December 31, 2022	Year ended December 31, 2021 *restated data*
AS AT JANUARY 1	**7,022**	**6,213**
Change in correspondence to financial result	183	663
Change in correspondence to other comprehensive income	(148)	145
Changes in Group composition	28	-
Other changes	2	1
AS AT DECEMBER 31	**7,087**	**7,022**

Changes in correspondence with other comprehensive income relate to the change in deferred tax on the valuation of hedging instruments. Other changes in each item have been recognised in the financial result.

The Group does not recognise a deferred tax liability for taxable temporary differences associated with investments in subsidiaries and associates because it is not probable that the differences will reverse in the foreseeable future. Deductible temporary differences related to investments in subsidiaries and associates would amount to PLN 1,785 million and deferred tax assets would amount to PLN 339 million. The Group also does not recognise a provision for deferred tax on the difference between the tax and book value of shares in PGE GiEK S.A. (potential deferred tax amount of PLN 273 million) due to the uncertainty of the value of income taxes to be realised on the sale of this company. As presented in note 33.2 of these financial statements, significant parameters related to the sale of PGE GiEK S.A. are not yet determined.

Group's deferred tax after offsetting assets and liabilities at companies and within tax group

	Year ended December 31, 2022	Year ended December 31, 2021
Deferred tax assets	3,183	933
Income tax liabilities	(1,002)	(402)

15. Inventories

ACCOUNTING POLICIES

Inventories

Inventories are assets held for sale in the ordinary course of business, in the process of production for sale, or in the form of materials or raw materials consumed in the production process or in the rendering of services.

Inventories comprise:

- materials
- products
- work in progress
- energy origin rights – purchased rights of origin for energy produced from renewable energy sources, rights of origin for energy relating to energy generated in cogeneration and rights to energy efficiency certificates,
- goods (especially CO_2 emission allowances intended for re-sale).

Inventories (except for CO_2 allowances acquired to generate profits) are valued at the lower of purchase price / cost to manufacture and net realisable value.

CO2 emission allowances acquired in order to realise profits from fluctuations in market prices are measured at fair value less costs of disposal.

Cost of usage of inventories is determined as follows:

- materials and goods (except for CO_2 emission allowances) – using the FIFO method;
- CO_2 emission allowances - using specific identification,
- Energy origin rights - using the specific identification method.

As at reporting date, the cost of inventories cannot be higher than net realisable value. Impairment losses on inventories are recognised in operating expenses. When the realisable value of a specific item of inventory is recovered fully or partially, its carrying amount is adjusted by decreasing revaluation adjustment.

Companies in which backlog and redundant stocks constitute a significant item may, on the basis of specific instructions, apply more detailed rules for calculating and writing down their value. Write-downs of backlog and redundant inventory may be recognised in other operating activities

	At December 31, 2022			At December 31, 2021		
	Initial value	Impairment	Net carrying amount	Initial value	Impairment	Net carrying amount
Hard coal	1,958	-	1,958	499	-	499
Repair and maintenance materials	776	(30)	746	683	(29)	654
Heavy oil	64	-	64	50	-	50
Other materials	156	(13)	143	86	(13)	73
TOTAL MATERIALS	**2,954**	**(43)**	**2,911**	**1,318**	**(42)**	**1,276**
Green energy origin rights	466	(38)	428	884	(60)	824
Other energy origin rights	4	(1)	3	3	-	3
ENERGY ORIGIN RIGHTS	**470**	**(39)**	**431**	**887**	**(60)**	**827**
CO_2 emission allowances	1	-	1	1	-	1
Hard coal	1,723	(226)	1,497	12	5	17
Other commodities	8	(1)	7	11	(2)	9
TOTAL GOODS	**1,732**	**(227)**	**1,505**	**24**	**3**	**27**
OTHER INVENTORIES	**71**	**-**	**71**	**61**	**(2)**	**59**
TOTAL INVENTORIES	**5,227**	**(309)**	**4,918**	**2,290**	**(101)**	**2,189**

	Year ended December 31, 2022	Year ended December 31, 2021
REVALUATION ADJUSTMENTS OF INVENTORIES AS AT JANUARY 1	**(101)**	**(165)**
Recognition of an impairment loss	(81)	(18)
Reversal of impairment loss	66	81
Use of impairment loss	3	5
Valuation to fair value	(196)	(2)
Changes in Group composition	(5)	-
Other changes	5	(2)
REVALUATION ADJUSTMENTS OF INVENTORIES AS AT DECEMBER 31	**(309)**	**(101)**

16. CO_2 emission allowances for captive use

ACCOUNTING POLICIES

CO_2 emission allowances for captive use

PGE Group emits carbon dioxide into the atmosphere as part of its operations. The demand for carbon allowances is covered in part by allowances received free of charge and the remainder must be obtained by PGE Group on the market. In order to cover the demand of PGE Group's generating units, external transactions for the purchase of greenhouse gas emission allowances are concluded. Carbon dioxide emission allowances intended for captive use by generating units are recognised under a separate line in the statement of financial position. EUAs received free of charge are presented in the statement of financial position at nominal value, i.e. at zero. Purchased EUAs are recognised at purchase price. Outgoing CO_2 allowances purchased for own use are valued using the specific identification method.

As PGE Group enters into transactions for the purchase of CO_2 allowances at the time of contracted sales, each purchase is allocated to the relevant basket associated with the sales contracted for the year. The value of allowances allocated to the basket relating to a reporting period is reflected in the value of the CO_2 provision for that period.

{Forward transactions related to hedging the purchase of CO_2 allowances for surrender purposes benefit from the own-use exemption and are not recognised in the statement of financial position.

EUA	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Quantity (Mg million)	**0**	**20**	**2**	**41**
Value (PLN million)	**114**	**4,754**	**797**	**4,106**

EUA	Quantity (Mg million)	Value (PLN million)
AT JANUARY 1, 2021	**21**	**1,774**
Purchase/sale	80	9,447
Granted free of charge	1	-
Redemption	(59)	(6,318)
AT DECEMBER 31, 2021	**43**	**4,903**
Purchase/sale	47	11,525
Granted free of charge	1	-
Redemption	(71)	(11,560)
At December 31, 2022	**20**	**4,868**

17. Other current and non-current assets

ACCOUNTING POLICIES

Other assets, including prepayments

The Group recognises an asset as a prepayment under the following conditions:

- result from past events - expenditure incurred for the operational purpose of the units,
- it can be reliably measured,
- it refers to future reporting periods.

Prepayments are set at incurred, reliably determined expenses that relate to future periods and are associated with the receipt of future economic benefits.

Other assets include in particular state receivables, advances for deliveries (including advances for property, plant and equipment in progress) and services and dividend receivables.

17.1 Other non-current assets

	As at December 31, 2022	As at December 31, 2021
Advances for property, plant and equipment	615	749
Cost to acquire customers	102	106
Other non-current assets	133	18
TOTAL OTHER ASSETS	**850**	**873**

The calculations for property, plant and equipment under construction mainly relate to the modernisation of the Porąbka-Żar pumped storage plant by PGE Energia Odnawialna S.A., the construction of two gas and steam units by PGE Gryfino 2050 sp. z o.o. and investments made in the district heating segment. Customer acquisition costs relate to the co-financing by PGE Energia Ciepła S.A. of investments in the development of district heating networks and agency commissions at PGE Obrót S.A. Other non-current assets mainly include advance payments for CO_2 deliveries.

17.2 Other current assets

	As at December 31, 2022	As at December 31, 2021
PREPAYMENTS		
Cost to acquire customers	60	56
Logistics costs related to coal purchases	55	4
Long-term contracts	35	38
IT services	19	15
Property and tort insurance	17	14
Social Fund	5	7
Other prepayments	30	18
OTHER CURRENT ASSETS		
VAT receivables	1,570	537
Advances for deliveries	404	507
Excise tax receivables	12	17
Other current assets	12	27
TOTAL OTHER ASSETS	**2,219**	**1,240**

The increase in input VAT receivables is mainly due to the introduction of the anti-inflation shield (a reduction in the VAT rate on electricity, system heat, gas, among others) and an increase in coal purchases. The amount of the delivery advance is linked to future coal deliveries.

ACCOUNTING POLICIES

Cost to acquire customers

Pre-contractual costs incurred in connection with the performance of the contract are included in other assets and recognised as prepaid expenses if it is probable that these costs will be covered in the future by revenue received from the customer.

The Group recognised the following costs to be settled over time as at December 31, 2022 and December 31, 2021

	Year ended December 31, 2022	Year ended December 31, 2021
AS AT JANUARY 1	**162**	**155**
Costs of bringing a contract to conclusion - capitalised	56	61
Amortisation and impairment	(56)	(54)
AS AT DECEMBER 31	**162**	**162**
Current	60	56
Non-current	102	106

The costs of bringing a contract to conclusion primarily include agency commissions for acquiring or retaining a customer.

The asset is depreciated on a systematic basis, taking into account the period over which the goods or services to which it relates are transferred to the customer.

18. Cash and cash equivalents

ACCOUNTING POLICIES

Cash and cash equivalents

Cash comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Short-term deposits have different maturities, typically from one day up to one month, depending on the Group's needs for cash.

The balance of cash and cash equivalents comprise the following positions:

	As at December 31, 2022	As at December 31, 2021
Cash on hand and cash at bank	1,429	5,059
Overnight deposits	801	5
Short-term deposits	6,147	1,124
Proceeds from share issue	2,716	-
Cash in VAT accounts	794	545
TOTAL	**11,887**	**6,733**
Undrawn borrowing facilities as at December 31	11,783	6,002
including overdraft facilities	*3,817*	*1,830*

A detailed description of credit agreements is presented in note 25.1.3 of these financial statements.

The value of cash includes restricted cash amounting to PLN 295 million (PLN 212 million in the comparative period) in customer accounts at PGE Dom Maklerski S.A., which constitute collateral for settlements with clearinghouse IRGiT.

19. Social Fund assets and liabilities

ACCOUNTING POLICIES

Company Social Benefits Fund and Other Special Funds

The Social Fund Act of March 4, 1994 states that a Social Fund is created by employers employing over 20 employees (calculated using full time equivalents). The Group's entities create such a fund and make periodic contributions to it. The objective of the fund is to subsidize the social activity for employees of the Group, loans granted to its employees and other social expenses. Contributions to the Social Fund are recognised as an expense in the period in which they are incurred.

The assets and liabilities of the Social Fund are netted off in the financial statements.

	As at December 31, 2022	As at December 31, 2021
Loans granted to employees	75	70
Cash and cash equivalents	48	54
Other assets	2	2
Fund liabilities	(120)	(119)
BALANCE AFTER COMPENSATION	**5**	**7**
Contributions to the Social Fund in the period	**283**	**187**

In addition, as described in note 22, the Group creates provision for the post-employment benefits from the Social Fund.

20. Equity

ACCOUNTING POLICIES

Equity

Equity is stated at nominal value, classified by nature, in accordance with legal regulations and the Company's Articles of Association.

Share capital, reserve capital and other capital reserves in the consolidated financial statements are the ones of the parent company. Hedging reserve, foreign exchange differences from translation on foreign entities and retained earnings include both the amounts deriving from the financial statements of the parent company and the relevant portion of the subsidiaries' equity, established in accordance with the consolidation principles. Declared, but not contributed, share capital contributions are recognised as outstanding share capital contributions as negative value.

In the consolidated statement of financial position equity is divided into:

- Equity attributable to equity holders of the parent company,
- Equity attributable to non-controlling interests

The objective of equity management is to ensure a secure and effective financing structure that takes into account operational risk, investment expenditures and the interests of shareholders and debt investors. Capital management takes places at PGE Group level.

In line with common practices, the Group monitors its net debt to EBITDA ratio at the Group level. Net debt is understood as short- and long-term financial debt (interest-bearing loans and borrowings, bonds and other debt securities issued, as well as lease liabilities), less cash and cash equivalents, and short-term deposits. Restricted cash is not included in calculating net debt.

The Group's aim is to maintain its investment grade credit ratings. In connection with the ongoing investment program, leverage is planned to increase in the coming years. The net debt to EBITDA ratio is a central element of the Group's financial forecasts and plans.

	Year ended December 31, 2022	Year ended December 31, 2021
Net debt / EBITDA	-0.31x	0.44x
Net debt / equity	-0.05x	0.09x

20.1 Share capital

	As at December 31, 2022
1,470,576,500 Series A ordinary Shares with a nominal value of PLN 8.55 each	12,574
259,513,500 Series B ordinary Shares with a nominal value of PLN 8.55 each	2,219
73,228,888 Series C ordinary Shares with a nominal value of PLN 8.55 each	626
66,441,941 Series D ordinary Shares with a nominal value of PLN 8.55 each	568
373,952,165 Series E ordinary Shares with a nominal value of PLN 8.55 each	3,197
Total share capital	**19,184**

	As at December 31, 2021
1,470,576,500 Series A ordinary Shares with a nominal value of PLN 10.25 each	15,073
259,513,500 Series B ordinary Shares with a nominal value of PLN 10.25 each	2,660
73,228,888 Series C ordinary Shares with a nominal value of PLN 10.25 each	751
66,441,941 Series D ordinary Shares with a nominal value of PLN 10.25 each	681
Total share capital	**19,165**

All of the Company's shares are paid up.

On April 6, 2022, the Company's Extraordinary General Meeting adopted a resolution on lowering the share capital by reducing the nominal value of shares with a simultaneous increase in the share capital by way of issuing E series shares in a private subscription, depriving the existing shareholders of the pre-emptive right to all E series shares entirely, applying for admission and introduction of E series shares or rights to E series shares to trading on a regulated market managed by the Warsaw Stock

Exchange, dematerialisation of E series shares or rights to E series shares and amendment to the Company's Articles of Association.

The share capital was reduced by lowering the nominal value of each Company share from PLN 10.25 to PLN 8.55. The share capital was reduced by PLN 3,178,593,409.30, with this amount being transferred to supplementary capital. Next, the share capital was increased by PLN 3,197,291,010.75 through the issue of 373,952,165 series E shares with a nominal value of PLN 8.55.

The changes in PGE S.A.'s share capital were registered with the National Court Register on May 18, 2022.

The Company's recapitalisation is also discussed in note 33.3 to these financial statements.

Shareholder rights - State Treasury rights concerning the Company's activities

The Company is a part of PGE Group, where the State Treasury holds special rights as long as it remains a shareholder.

The State Treasury's special right applicable to PGE Group entities derive from the Act of March 18, 2010 on the special rights of the Minister of Energy and their exercise at certain companies and groups operating in the electricity, oil and gas sectors (Polish Journal of Laws of 2020, item 2173). defines specific powers vested in the minister responsible for state assets in capital companies or groups operating in the electricity, oil and gas fuels sectors, whose property is disclosed in the uniform list of facilities, installations, equipment and services constituting critical infrastructure.

On the basis of the provisions in question, the minister responsible for state assets may object to a resolution adopted by the Management Board or any other legal action carried out by the Management Board, the object of which is the disposal of an asset that would pose a threat to the functioning, continuity of operation and integrity of critical infrastructure. The objection can also be applied to any resolution pertaining to:

- dissolution of the Company,
- changes in use or retirement of an asset being a component of critical infrastructure,
- change in the scope of the Company's activities,
- sale or lease of enterprise or its organised part or establishment of legal restrictions,
- approval of operational and financial plan, investment plan or long-term strategic plan,
- transfer of the Company's registered office abroad,

if the performance of such a resolution would cause an actual threat to the functioning, operational continuity and integrity of critical infrastructure. The objection of the minister responsible for state assets will be expressed - after consulting the minister responsible for energy - in the form of an administrative decision.

20.2 Reserve capital

Supplementary capital results from statutory allocation of profits generated in previous reporting periods, from surplus of profit distribution in excess of the value of statutory allocations, as well as from merger of PGE S.A. with its subsidiaries.

According to regulations of the Commercial Code, joint stock companies are obliged to create reserve capital to cover potential losses. At least 8% of the profit for the reporting year recognised in the Company's separate financial statements until this capital reached at least one-third of share capital. The part of supplementary capital which amounts to one third of share capital can only be used to cover losses recognised in the separate financial statements and cannot be distributed for other purposes. The General Meeting decides on the use of supplementary and reserve capital.

Reserve capital subject to distribution to shareholders amounted to PLN 18,654 million as at December 31, 2022 and to PLN 13,766 million as at December 31, 2021.

20.3 Hedging reserve

	Year ended December 31, 2022	Year ended December 31, 2021
AS AT JANUARY 1	**609**	**(13)**
Change in hedging reserve:	**(791)**	**768**
Valuation of hedging instruments, including:	**(788)**	**756**
Recognition of the effective part of change in fair value of hedging instruments in the part considered as effective hedge	*(728)*	*762*
Accrued interest on derivative transferred from valuation reserve and included in interest expense	*(45)*	*(8)*
Currency revaluation of CCIRS transactions transferred from capital and recognised in foreign exchange result	*(13)*	*2*
Ineffective portion of changes in fair value of hedging derivatives recognised in profit or loss	*(2)*	*-*
Valuation of other financial assets	**(3)**	**12**
Deferred tax	**150**	**(146)**
AS AT DECEMBER 31	**(32)**	**609**

The hedging reserve mainly includes the valuation of cash flow hedges.

20.4 Foreign exchange differences from translation

Exchange differences from translation of subsidiaries include the effect of translating the financial statements of foreign Group companies, i.e. PGE Trading GmbH (until the date of control over this company, i.e. 31 March 2021) and PGE Sweden AB (publ) into PLN within consolidation procedures.

20.5 Retained earnings and limitations on payment of dividend

Retained earnings which are not subject to distribution are amounts that cannot be paid in the form of dividends.

	As at December 31, 2022	As at December 31, 2021
Amounts included in retained earnings not subject to distribution by the parent company		
Retained earnings of subsidiaries, attributable to equity holders of the parent company, including consolidation adjustments	6,232	5,827
Profit/loss recognised by the parent company in retained earnings through other comprehensive income	4	3
Net profit/(loss) of the parent company	3,097	1,734
TOTAL RETAINED EARNINGS PRESENTED IN THE STATEMENT OF FINANCIAL POSITION	**9,333**	**7,564**

For information regarding limitations to payment of dividends from reserve capital please refer to 20.2 of these financial statements. As at December 31, 2022 there were no other restrictions on dividend payments.

20.6 Equity attributable to non-controlling interests

As at December 31, 2022, equity attributable to non-controlling interests related mainly to the non-controlling interests in ZEW Kogeneracja S.A. and EC Zielona Góra S.A.

The table below presents changes in non-controlling interests in the reporting periods.

	As at December 31, 2022	As at December 31, 2021
AS AT JANUARY 1	**797**	**983**
Share of net profit of subsidiaries	62	(27)
Share of actuarial profit and losses	(1)	2
Dividends declared by subsidiaries	(3)	(2)
Sale of subsidiaries	(10)	(155)
Acquisition of non-controlling interests by the Group	-	(4)
AS AT DECEMBER 31	**845**	**797**

Of the total equity attributable to non-controlling interests, 79% is the equity of Kogeneracja S.A. Summarised information on this subsidiary is presented below.

	ZEW Kogeneracja S.A.
SHARE IN VOTES	**58.07%**
At December 31, 2022*	
Current assets	589
Non-current assets	1,969
Current liabilities	804
Non-current liabilities	195
Equity	1,559
Revenue	1,132
Result on continuing operations	(14)
Approved dividends	5

**Data differs from statutory data due to consolidation procedures*

20.7 Profit/loss per share

ACCOUNTING POLICIES

Net profit/(loss) per share

Net profit/(loss) per share for each period is calculated by dividing profit or loss attributable to equity holders of the parent company by the weighted average number of shares outstanding during the reporting period.

The Company calculates diluted net profit/(loss) per share by dividing the net profit or loss attributable to ordinary equity holders of the Company (after deduction of interest on redeemable convertible preference shares) by the weighted average number of shares outstanding during the period (adjusted by the number of dilutive options or dilutive redeemable convertible preference shares).

During the current and comparative reporting period there was no dilutive effect on profit/(loss) per share.

	Year ended December 31, 2022	Year ended December 31, 2021
NET PROFIT ATTRIBUTABLE TO	**3,390**	**3,945**
equity holders of the parent company	3,328	3,972
non-controlling interests	62	(27)
NET PROFIT ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE COMPANY USED TO CALCULATE EARNINGS PER SHARE	**3,328**	**3,972**
Number of ordinary shares at the beginning of the reporting period	1,869,760,829	1,869,760,829
Number of ordinary shares at the end of the reporting period	2,243,712,994	1,869,760,829
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES USED TO CALCULATE EARNINGS / (LOSS) PER SHARE	**2,129,990,555**	**1,869,760,829**
EARNINGS AND DILUTED EARNINGS PER SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT COMPANY (IN PLN)	**1.56**	**2.12**

20.8 Dividends paid and recommended for payment

The Company did not pay a dividend in the current or comparative reporting period.

21. Provisions

ACCOUNTING POLICIES

Provisions

The Group recognises provisions when there is present obligation (legal or constructive) that arises from past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

When the effect of the time value of money is significant, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation. The discount rate is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The discount rate does not reflect risks for which future cash flow estimates have been adjusted.

Reversals of discounts are charged to financial costs.

Post-employment and jubilee awards provision

Depending on the unit, the Group's employees are entitled to the following post-employment benefits:

- retirement and pension benefits – paid once when the employee retires or becomes a pensioner,
- post-mortem severance,
- cash equivalent related to energy tariff for employees of power industry,
- coal allowance given in nature or paid as a cash equivalent,
- benefits from the Social Fund,
- medical benefits.

The Group's employees are also entitled to receive jubilee awards that are paid after an employee has worked for a specified period of time. The amount of awards paid depends on the period of service and the average remuneration of the employee.

The Group recognises a provision for future obligations relevant to past service costs and jubilee awards for the purpose of assigning costs to the periods in which they are incurred. The provision raised is recognised as an operating expense in the amount corresponding with accrued future employees' benefits. The present value of these liabilities is measured by an independent actuary.

Actuarial gains and losses arising from the change of actuarial assumptions (including change in discount rate) and ex post actuarial adjustments are recognised in other comprehensive income for post-employment benefits and in operating expenses of the current period for jubilee awards.

Rehabilitation provision

The mining companies which belong to the Group raise provisions for costs of rehabilitation of post-mining properties. The value of the provision is based on the estimated cost of rehabilitation and development works related to final excavations. This cost is divided into the part attributable to stripping cost and the part attributable to mined lignite. The provision is created:

- for the part attributable to mined lignite: in the proportion of the extracted lignite as at the reporting date to the total planned volume of extraction over the period of the lignite deposit exploitation,
- for the part attributable to the stripping cost: in the proportion of the volume of the excavation resulting from stripping of overburden as at the reporting date to the planned excavation volume resulting from stripping of overburden at the end of exploitation period.

The provision is updated in case of change of estimated time or amounts of expenses necessary to conduct the rehabilitation process, or in case of change of discount rate. Estimation of rehabilitation provision requires making technical, geological, environmental, legal and tax assumptions, as well as schedule, scope and the level of rehabilitation costs. Changes in assumptions mentioned above impact the value of rehabilitation provision and capitalized rehabilitation costs recognized in property, plant and equipment, as well as statement of comprehensive income.

In the case of the rehabilitation of ash landfills (post-production waste from electricity generation), the cost of creating the provision is recognised in operating costs in proportion to the degree to which the landfill is filled.

A provision for reclamation of land following the construction of wind farms is created at the time of commissioning of the farm in the amount of the present value of the estimated costs of dismantling and removing the remains of equipment, structures and buildings and bringing the land to a condition as similar as possible to its condition prior to the construction of the farm.

ACCOUNTING POLICIES

Estimates concerning expected costs of rehabilitation are subject to revaluation at least once in a 5-year-period. However, once a year the amount of provision is verified according to actual assumptions in terms of inflation rate, discount rate and the volume of lignite extraction or the extent of storage filling, respectively.

The increase in the provision for the year is recognised as operating costs or recognised in the initial value of tangible assets as appropriate. The unwinding of the discount is recognised in financial costs. Changes in the valuation of provisions resulting from the change of assumptions (e.g. macroeconomic factors, way of conducting the rehabilitation, date, etc.), are recognised in the following way:

- for the provisions recognised as the part of the cost of property, plant and equipment: they are added to or deducted from the costs of the asset to which they relate, however the amount deducted from the cost of the asset should not exceed its carrying amount;
- as other operating expenses or other operating income - in other cases.

Provision for deficit of CO2 emission allowances

The reserve for CO_2 liabilities is recorded by PGE Group entities in relation to the shortfall of CO_2 emission allowances granted free of charge. The provision is made for the most appropriate estimate of the expenditure required to settle the present obligation at the reporting date. The estimate of the expenditure necessary to meet the obligation to surrender CO_2 allowances shall be based on a detailed identification method taking into account the allocation of both free and purchased allowances to a given year.

Provisions are recognised in the statement of comprehensive income as operating expenses (as costs of goods sold in cost by function and taxes and charges in cost by nature).

Provisions for energy origin rights held for redemption

The provision is created based on the requirement of the percentage share of the renewable energy and the energy generated in cogeneration units in the total sales of electricity to end users and the volume of sales to final customers. To the extent of owned energy origin rights held for redemption the provision is recognised at the value of those rights. The provision for the amount not covered by energy origin rights is measured at the reliably estimated amount of the fulfilment of the future obligation to redeem the energy origin rights. The estimation takes into account, inter alia, the level of the substitution charge and the market price. The cost of the provision made is recognised in selling costs.

The carrying amount of provisions is as follows:

	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Employee benefits	2,188	298	2,381	276
Rehabilitation provision	4,139	3	6,071	4
Provision for shortage of CO_2 emission allowances	-	20,318	-	11,553
Provision for energy origin units held for redemption	-	271	-	276
Other provisions	36	333	107	491
TOTAL PROVISIONS	**6,363**	**21,223**	**8,559**	**12,600**

Changes in provisions

	Employee benefits	Rehabilitation provision	Provision for cost of CO_2 emissions	Provisions for energy origin rights held for redemption	Other	Total
JANUARY 1, 2022	**2,657**	**6,075**	**11,553**	**276**	**598**	**21,159**
Actuarial gains and losses	605	-	-	-	-	605
Current employment costs	80	-	-	-	-	80
Past employment costs	(1)	-	-	-	-	(1)
Interest costs	95	243	-	-	-	338
Adjustment of discount rate and other assumptions	(711)	(2,285)	-	-	-	(2,996)
Benefits paid / Provisions used	(234)	(1)	(11,559)	(1,140)	(55)	(12,989)
Provisions reversed	-	-	(1)	(17)	(387)	(405)
Provisions recognised - costs	-	53	20,325	1,152	237	21,767
Provisions recognised - expenditures	-	24	-	-	-	24
Changes in Group composition	(3)	25	-	-	-	22
Other changes	(2)	8	-	-	(24)	(18)
DECEMBER 31, 2022	**2,486**	**4,142**	**20,318**	**271**	**369**	**27,586**
Change recognised in operating expenses	(152)	(53)	(20,324)	(1,135)	(8)	(21,672)
Change recognised in other operating income/ (expenses)	-	1,721	-	-	161	1,882
Change recognised in other financial income/ (expenses)	(95)	(243)	-	-	(3)	(341)
Change recognised in assets	-	532	-	-	-	532
Change recognised in other comprehensive income	179	-	-	-	-	179

	Employee benefits	Rehabilitation provision	Provision for cost of CO_2 emissions	Provisions for energy origin rights held for redemption	Provision for non-contractual use of property	Other	Total
JANUARY 1, 2021	**3,283**	**8,111**	**6,318**	**589**	**63**	**154**	**18,518**
Actuarial gains and losses	209	-	-	-	-	-	209
Current employment costs	86	-	-	-	-	-	86
Past employment costs	(51)	-	-	-	-	-	(51)
Interest costs	42	177	-	-	-	-	219
Adjustment of discount rate and other assumptions	(678)	(2,323)	-	-	-	-	(3,001)
Benefits paid / Provisions used	(233)	(1)	(6,318)	(1,284)	(1)	(45)	(7,882)
Provisions reversed	-	(3)	(2)	(1)	(56)	(34)	(96)
Provisions recognised - costs	-	74	11,555	972	5	500	13,106
Provisions recognised - expenditures	-	40	-	-	-	-	40
Changes in Group composition	(1)	-	-	-	-	(2)	(3)
Other changes	-	-	-	-	-	14	14
DECEMBER 31, 2021	**2,657**	**6,075**	**11,553**	**276**	**11**	**587**	**21,159**
Change recognised in operating expenses	30	(72)	(11,553)	(971)	-	(22)	(12,588)
Change recognised in other operating income/ (expenses)	-	1,463	-	-	51	(403)	1,111
Change recognised in other financial income/ (expenses)	(42)	(177)	-	-	-	(41)	(260)
Change recognised in assets	-	821	-	-	-	-	821
Change recognised in other comprehensive income	404	-	-	-	-	-	404

21.1 Rehabilitation provision

Provision for rehabilitation of post-mining properties

The Group's open-pit mines will be rehabilitated after coal extraction is completed. According to current plans, costs will be incurred between 2032 and 2066 for the Bełchatów Lignite Mine Branch and between 2045 and 2085 for the Turów Lignite Mine Branch.

The Group recognises provisions for the costs of rehabilitating pits. The amount of the provision presented in the financial statements also includes the value of the Mine Liquidation Fund created in accordance with the Geological and Mining Act. The provision amounted to PLN 3,606 million as of December 31, 2022 (PLN 5,571 million at December 31, 2021).

In addition, the Group has adjusted the level of discount rates used to estimate the present value of future pit rehabilitation expenditures at the two open-pit lignite mines; they are as follows:

- for expenses expected to be incurred within 15 years from the balance sheet date - 7.0% (compared to 3.6% as at December 31, 2021);
- for expenses expected to be incurred 16-25 years from the balance sheet date - 7.03%, PGE's extrapolation in accordance with the adopted method (compared to 4.08% as at December 31, 2021);
- for expenses expected to be incurred more than 25 years from the balance sheet date - 7.08%, PGE's extrapolation in accordance with the adopted method (compared to 4.17% as at December 31, 2021).

In addition, the Group has revised its inflation forecasts.

Update of the above assumptions resulted in a decrease in the provision of PLN 2,262 million. Ongoing production and the reversal of the discount resulted in an increase in the provision of PLN 297 million. As a result, the provision for rehabilitation of mine workings decreased by PLN 1,965 million in the current reporting period. This change was recognised as follows:

- PLN 569 million - in correspondence with assets (as a decrease in the value of property, plant and equipment),
- PLN 1,396 - in correspondence with current financial result.

Estimated influence of changes in discount rate on the value of rehabilitation provision:

	Carrying amount	Discount rate	
		-1 p.p.	+1 p.p.
Provision for rehabilitation of post-mining properties	3,606	952	(734)

Provision for rehabilitation of ash landfills

PGE Group's generating assets create provisions for the rehabilitation of ash landfills. As at December 31, 2022, this provision amounted to PLN 205 million (PLN 248 million at the end of the comparative period).

Provisions for wind farm decommissioning and restoration

Wind farm owners create provisions for decommissioning and restoration. The provision amounted to PLN 22 million as of December 31, 2022 (PLN 26 million at December 31, 2021).

Liquidation of property, plant and equipment

As at the reporting date, the provision amounted to PLN 309 million (PLN 230 million as at the end of the comparative period) and concerned certain assets in the Conventional Generation and Renewables segments.

21.2 Provision for cost of CO_2 emissions

As described in note 16 to these financial statements, the Group no longer receives free emission allowances for electricity generation from 2020. The Group is only eligible to receive free allowances for heating generation. As at December 31, 2022, this provision amounted to PLN 20,318 million (PLN 11,553 million at the end of the comparative period).

21.3 Provision for energy origin rights held for redemption

PGE Group companies create a provision for energy origin rights concerning sales generated in the reporting period or previous periods, in the part yet to be redeemed as of the reporting date. The provision as at December 31, 2022 amounted to PLN 271 million (PLN 276 million in the comparative period) and was created mainly by PGE Obrót S.A.

21.4 Other provisions

Provision for potential claims from counterparties

The value of other provisions consists mainly of provisions created by ENESTA sp. z o.o. w restrukturyzacji (PLN 93 million) - a detailed description of the movement on provisions is described in note 1.3 of these consolidated financial statements.

In addition, the value of other provisions consists of provisions set up by PGE Paliwa Sp. z o.o. - 49 million relates to onerous contracts, 41 million relates to penalty provisions.

In 2021 the Group created a provision in the amount of PLN 39 million in connection with the sale of shares in PGE EJ1 sp. z o.o. to the State Treasury. Pursuant to the Agreement regulating the liability of the existing Partners for the costs of the dispute with Worley Parsons, in case of defeat PGE S.A. may be required to cover the costs of the dispute in the amount of up to PLN 98 million. The amount of PLN 59 million is disclosed in contingent liabilities, in note 28.1.

Provision for settlements with prosumers

In 2021, there was a significant increase in prosumer installations, mainly as a result of the "My Electricity" support program. According to the Energy Market Agency, installed PV capacity in Poland grew by 94% to 7.67 GW in 2021 vs. 3.96 GW at the end of 2020. The act on renewable energy sources of February 20, 2015 introduced a settlement system for prosumers and energy cooperatives that generates losses for the obligated vendor (i.e. PGE Obrót S.A.); the higher the percentage of electricity introduced to the grid that is compensated by the prosumer's or energy cooperative's own use, the higher these losses are.

Therefore, the prosumer does not incur any variable costs of distribution services for energy drawn from the grid. Companies in the Supply segment, which are merely intermediaries in the sale of distribution services, have to pay the full fee for electricity drawn by the prosumer to the Distribution

System Operator. Companies in the Supply segment, despite the fact that they do not provide distribution services, have to bear the costs related to these services because they are a party to a framework contract with the customer.

The rights to use the current billing system are valid for the prosumer for 15 years. Current prosumers and new prosumers who apply for connection to the electricity grid by March 31, 2022 will be able to settle under the current rules. New regulations abolishing the discount system will come into force from April 1, 2022. As of that date, a net-billing system based on the purchase and sale of energy will be in force, involving the settlement of energy by value. From July 1, 2022, the prosumer will sell energy at an average monthly price. The surplus generated will be collected in the course of the year, but with all charges according to the seller's tariff, so it will also pay distribution charges (hitherto charged to energy sellers). If, after one year, it obtains an overpayment, it will not pay out more than 20% of the value of the energy injected into the grid in the month to which the overpayment relates.

The necessity to respect the prosumer's right to use the settlement system based on net-metering in accordance with the currently binding regulations of the Renewable Energy Sources Act for a period of 15 years generates further losses for PGE Obrót S.A. Therefore, a provision of PLN 74 million for agreements creating liabilities within the meaning of IAS 37 was recognised in the financial statements for 2021. The provision has been recognised for losses projected for 2022, i.e. the period of reliably predictable energy price developments.

The provision was fully reversed during 2022. The actual realised loss on the distribution service alone under comprehensive agreements with prosumers in 2022 was PLN 259 million. However, given the high power purchase prices in the context of the take-up of 20% or 30% of the energy injected into the grid by the prosumer and taking into account the result on electricity trading under these contracts, the projected result for 2023 on the billing of prosumers from Gx tariff groups as a whole should remain positive. Accordingly, the Group has not recognised provisions for onerous contracts in these financial statements.

22. Employee benefits

The amount of actuarial provisions for post-employment benefits recognised in the financial statements results from the valuation prepared by an independent actuary.

Key actuarial assumptions related to the calculation of provisions as at the reporting date are as follows:

	As at December 31, 2022	As at December 31, 2021
Expected inflation rate (%)	13.70 in 2023 5.05 in 2024 3.00 in 2025, 2.50 in 2026 and subsequent years	4.45% in 2022, 3.35% in 2023, 2.5% in 2024 and in subsequent years
Discount rate (%)	7.0	3.6
Expected salary growth rate (%)	3.8 – 5.0	1.36 – 2.80
Employee turnover (%)	0.0 – 8.2	0.2 – 9.8
Expected medical care costs growth rate (%)	0.0 – 14.5	-22.34* in 2022; 2.5% in subsequent years
Expected Social Fund allowance growth rate (%)	0.0 – 10	4.5 – 7.27

**The change is mainly due to a change in medical provider.*

- The probability of employees leaving was based on the Group's historical staff turnover data.
- Mortality and survival probability have been adopted from the Life Expectancy Tables published by Central Statistical Office of Poland, assuming that the population of the Group's employees corresponds, in respect of mortality, to the average in Poland.
- A statutory mode of retirement for employees was adopted according to the detailed rules contained in the Act amending the Act on pensions from the Social Insurance Fund and certain other acts of November 16, 2016.
- A discount rate of 7.0% (December 31, 2021: 3.6%), i.e. at the level of the yield on long-term securities issued by the State Treasury and quoted on the Polish capital market, was used to discount future benefit payments at the reporting date.

Current book value of provisions for post-employment benefits and jubilee awards

	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Retirement, pension and post-mortem benefits	460	103	462	101
Coal subsidy	72	9	100	9
Energy tariff	678	47	743	38
Social Fund	254	19	356	18
Medical benefits	43	4	54	4
Total post-employment benefits	**1,507**	**182**	**1,715**	**170**
Jubilee awards	681	116	666	106
TOTAL ACTUARIAL PROVISIONS	**2,188**	**298**	**2,381**	**276**

Change in provisions for employee benefits

	Retirement, pension and post-mortem benefits	Coal subsidy	Energy tariff	Social Fund	Medical benefits	Jubilee awards	Total
AS AT JANUARY 1, 2022	**563**	**109**	**781**	**374**	**58**	**772**	**2,657**
Actuarial gains and losses	137	(4)	225	11	4	232	605
Discount rate adjustment	(123)	(20)	(287)	(109)	(13)	(159)	(711)
Current employment costs	22	1	11	4	1	41	80
Past employment costs	(1)	-	-	-	-	-	(1)
Interest costs	20	4	28	13	2	28	95
Benefits paid / Provisions used	(54)	(9)	(33)	(19)	(3)	(116)	(234)
Changes in Group composition	(1)	-	-	(1)	-	(1)	(3)
Other changes	-	-	-	-	(2)	-	(2)
AS AT DECEMBER 31, 2022	**563**	**81**	**725**	**273**	**47**	**797**	**2,486**
Change recognised in operating expenses	(21)	(1)	(11)	(4)	(1)	(114)	(152)
Change recognised in financial income/(costs)	(20)	(4)	(28)	(13)	(2)	(28)	(95)
Change recognised in other comprehensive income	(14)	24	62	98	9	-	179

	Retirement, pension and post-mortem benefits	Coal subsidy	Energy tariff	Social Fund	Medical benefits	Jubilee awards	Total
AS AT JANUARY 1, 2021	**662**	**141**	**983**	**518**	**75**	**904**	**3,283**
Actuarial gains and losses	31	(4)	115	14	(1)	54	209
Discount rate adjustment	(99)	(21)	(290)	(135)	(14)	(119)	(678)
Current employment costs	23	1	16	6	1	39	86
Past employment costs	(3)	-	(25)	(19)	-	(4)	(51)
Interest costs	8	2	12	7	1	12	42
Benefits paid / Provisions used	(60)	(9)	(30)	(17)	(3)	(114)	(233)
Changes in Group composition	(1)	-	-	-	-	-	(1)
Other changes	2	(1)	-	-	(1)	-	-
AS AT DECEMBER 31, 2021	**563**	**109**	**781**	**374**	**58**	**772**	**2,657**
Change recognised in operating expenses	(20)	(1)	9	13	(1)	30	30
Change recognised in financial income/(costs)	(8)	(2)	(12)	(7)	(1)	(12)	(42)
Change recognised in other comprehensive income	68	25	175	121	15	-	404

Sensitivity analysis of the value of actuarial provisions as at December 31, 2022, for changes in key assumptions:

	Carrying amount	Discount rate		Expected average growth rate of the basis of calculation	
		-1 p.p.	+1 p.p.	-1 p.p.	+1 p.p.
Retirement, pension and post-mortem benefits	563	31	(30)	(31)	31
Coal subsidy	81	5	(5)	(5)	6
Energy tariff	725	69	(58)	(61)	72
Social Fund	273	26	(22)	(22)	25
Medical benefits	47	4	(3)	(3)	4
Jubilee awards	797	42	(39)	(39)	42
TOTAL	**2,486**	**177**	**(157)**	**(161)**	**180**

23. Deferred income and governments grants

ACCOUNTING POLICIES

Deferred income and governments grants

Deferred income is recognised under the principle of prudence and accrual basis of accounting. Deferred income comprises:

- funds obtained to finance acquisition or production of property, plant and equipment and intangible assets. This is accounted for by gradually increasing other operating income by an amount corresponding to the depreciation of these assets in the part financed by the said cash. This relates in particular to loans and credit facilities, whether partially or wholly remitted, and to grants for the purchase of tangible assets and to contributions to development work or the purchase of intangible assets,
- property, plant and equipment and intangible assets acquired free of charge. Write-offs of this income are made to other operating income, in parallel with depreciation on property, plant and equipment.

Government grants are recognised if there is a reasonable assurance that the grant will be received and all the related conditions will be met. Government grants related to assets are amortized to other operating income proportionally to the depreciation charges on these assets.

23.1 Non-current deferred income and government grants

	As at December 31, 2022	As at December 31, 2021 *restated data*
GOVERNMENT GRANTS		
Grants received from NFOŚiGW (environmental funds)	296	282
Redemption of loans from environmental funds	25	28
Other government grants	124	114
DEFERRED INCOME		
Subsidies received and connection fees	56	56
Donations and property, plant and equipment granted free of charge	455	346
Other deferred income	55	55
NON-CURRENT GOVERNMENT GRANTS AND DEFERRED INCOME, TOTAL	**1,011**	**881**

23.2 Current deferred income and governments grants

	As at December 31, 2022	As at December 31, 2021 *restated data*
GOVERNMENT GRANTS		
Grants received from NFOŚiGW (environmental funds)	16	17
Redemption of loans from environmental funds	3	3
Other government grants	11	12
DEFERRED INCOME		
Subsidies received and connection fees	3	3
Donations and property, plant and equipment granted free of charge	57	65
Other deferred income	7	3
CURRENT GOVERNMENT GRANTS AND DEFERRED INCOME, TOTAL	**97**	**103**

24. Other non-financial liabilities

The main components of non-financial liabilities as at the respective reporting dates are as follows:

24.1 Other non-current non-financial liabilities

	As at December 31, 2022	As at December 31, 2021
OTHER NON-CURRENT LIABILITIES		
Liabilities related to a contract	139	132
Other	2	1
TOTAL OTHER NON-CURRENT LIABILITIES	**141**	**133**

24.2 Other current non-financial liabilities

	As at December 31, 2022	As at December 31, 2021
OTHER CURRENT LIABILITIES		
VAT liabilities	840	564
Excise tax liabilities	12	27
Liabilities related to a contract	446	344
Liabilities concerning contributions to price difference payment fund	351	-
Environmental fees	266	240
Payroll liabilities	299	257
Bonuses for employees	297	277
Unused holidays and other employee benefits	313	101
Bonuses for the Management Board	19	17
Personal income tax	95	99
Liabilities from social insurances	291	255
Other	76	77
TOTAL OTHER CURRENT LIABILITIES	**3,305**	**2,258**

Environmental fees relate mainly to charges for the use of water and gas emission in conventional power plants as well as exploitation charges paid by coal mines. The "Other" position comprises mainly payments to the Employment Pension Program, the Social Fund and the State Fund for Rehabilitation of Persons with Disabilities.

Liabilities related to a contract

Contract liabilities mainly include advances for deliveries and prepayments by customers for connections to the distribution grid and electricity consumption forecasts for future periods. In 2022, the Group recognised revenue of PLN 167 million (PLN 147 million in 2021), which was included in the balance of contract liabilities at the beginning of the period.

EXPLANATORY NOTES TO FINANCIAL INSTRUMENTS

25. Financial Instruments

ACCOUNTING POLICIES

Financial instruments

Classification and valuation

Financial assets are subject to classification in the following categories of financial instruments:

- measured at amortised cost;
- measured at fair value through other comprehensive income ("FVTOCI");
- measured at fair value through profit or loss ("FVTPL").

The classification of financial assets is based on the business model and characteristics of cash flows.

A debt financial asset is measured at amortised cost if both of the following conditions are met:

- the objective of the entity's business model is to hold the financial asset to collect the contractual cash flows;
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI test).

A debt financial asset is measured at fair value through other comprehensive income if both of the following conditions are met:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets;
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI test).

All other debt instruments must be measured at fair value through profit or loss (FVTPL).

All equity investments are to be measured at fair value. If an equity investment is not held for trading, the Group can make an irrevocable election at initial recognition to measure it at FVTOCI. For equity instruments held for trading, changes in fair value are recognised in profit or loss.

All standard transactions to purchase or sell financial assets are recognised at the transaction date, i.e. at the date on which the entity committed to purchase the asset. Standard transactions to purchase or sell financial assets are purchase or sale transactions in which the asset delivery deadline is explicitly stated by law or customs in a given market.

An impairment model is based on expected credit losses and its scope covers the following:

- Financial assets measured at amortised cost;
- debt financial assets measured at fair value through other comprehensive income;
- Loan commitments when there is a present obligation to extend credit;
- financial guarantee contracts to which IFRS 9 is applied;
- Lease receivables within the scope of IFRS 16;
- Contract assets within the scope of IFRS 15.

The Group classified financial liabilities in one of the following categories:

- measured at amortised cost,
- measured at fair value through profit or loss.

25.1 Description of significant items within particular classes of financial instruments

25.1.1 Trade and other financial receivables

ACCOUNTING POLICIES

Financial receivables

Financial receivables, including trade receivables, are measured at fair value at inception and subsequently at amortised cost using the effective interest rate including allowance for expected credit losses.

The Group uses simplified methods for the valuation of receivables measured at amortised cost if this does not distort the information contained in the statement of financial position, in particular if the period until repayment of the receivables is not long.

For financial receivables, the Group measures the allowance for expected credit losses at an amount equal to the expected credit losses over the life of the instrument.

The Group measures financial assets at amortised cost in accordance with its business model. This model assumes that a financial asset is held to produce contractual cash flows.

	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Trade receivables	-	6,517	-	4,209
Deposits and loans	214	-	194	-
Loans granted	-	-	-	77
Receivables from recognised compensation	-	671	-	-
Support system for high-efficiency cogeneration	-	41	-	-
Deposits, security and collateral	7	1,579	5	3,348
Damages and penalties	-	192	-	17
Other financial receivables	2	83	5	76
FINANCIAL RECEIVABLES	**223**	**9,083**	**204**	**7,727**

Deposits, deposits and collateral mainly relate to security and transaction deposits and the guarantee fund in electricity and EUA trading.

Trade receivables

The main component of trade receivables are receivables recognised by the company PGE Obrót S.A. Receivables from households account for about 17% of the consolidated balance of trade receivables, while receivables from the corporate clients of PGE Obrót S.A. represent about 40% of the consolidated balance of trade receivables. Additional information relating to trade receivables is presented in note 26.3.1 of these financial statements.

In trade receivables, the Group also presents receivables from the re-assessment of electricity sales.

Other financial receivables

The value of other financial receivables consists mainly of the guarantee fund, compensation for damages and disputed receivables described in note 28.4 of these consolidated financial statements.

25.1.2 Derivatives and other instruments measured at fair value through profit or loss

ACCOUNTING POLICIES

Financial derivatives and hedging instruments

The derivatives used by the Group to hedge its exposure to interest rate and exchange rate risks are mainly forward exchange contracts, futures and interest rate swap contracts IRS and CCIRS transactions hedging the exchange rate and interest rate. Such derivatives are measured at fair value. Derivatives are recorded as assets when their value is positive and as liabilities when their value is negative.

Gains and losses from changes in the fair value of derivatives that do not qualify for hedge accounting and the ineffective portion of hedging relationships in cash flow hedge accounting are charged directly to the financial result for the financial year.

The fair value of forward foreign exchange contracts is determined by reference to the exchange rate at which the contract is entered into and current forward rates calculated based on market data. The fair value of interest rate swap contracts is calculated based on yield curves.

	At December 31, 2022			
	Recognised in profit or loss	Recognised in other comprehensive income	Assets	Liabilities
DERIVATIVES AT FAIR VALUE THROUGH PROFIT OR LOSS				
Currency forwards	(199)	-	3	111
Commodity forwards	157	-	5	1
Commodity SWAP	(65)	-	95	71
Contracts for purchase/sale of coal	(8)	-	650	650
Derivatives embedded in sales contracts	9	-	-	397
Options	2	-	18	-
HEDGING DERIVATIVES				
CCIRS hedges	(11)	(19)	104	-
IRS hedges	119	212	459	-
Currency forward - USD	-	(14)	-	13
Currency forward - EUR	-	(967)	173	691
OTHER assets carried at fair value through profit or loss				
Investment fund participation units	2	-	28	-
TOTAL	**6**	**(788)**	**1,535**	**1,934**
current	-	-	927	1,629
non-current	-	-	608	305

	At December 31, 2021			
	Recognised in profit or loss	Recognised in other comprehensive income	Assets	Liabilities
DERIVATIVES AT FAIR VALUE THROUGH PROFIT OR LOSS				
Currency forwards	(102)	-	4	6
Commodity forwards	3,018	-	47	1
Commodity SWAP	(126)	-	22	31
Contracts for purchase/sale of coal	9	-	19	11
IRS transactions	-	-	-	-
Options	-	-	16	-
HEDGING DERIVATIVES				
CCIRS hedges	(44)	82	110	-
IRS hedges	(119)	579	203	-
Currency forward - USD	-	3	3	-
Currency forward - EUR	-	93	485	34
Other assets carried at fair value through profit or loss				
Investment fund participation units	1	-	30	-
TOTAL	**2,637**	**757**	**939**	**83**
current	-	-	575	82
non-current	-	-	364	1

Commodity and currency forwards

Commodity and currency forward transactions mainly relate to trade in CO_2 emission allowances and coal sales. The Group applies hedge accounting to recognise forward foreign exchange transactions.

Options

PGE S.A. acquired from Towarzystwo Finansowe Silesia Sp. z o.o. a call option to purchase shares of Polimex-Mostostal S.A. The option was valued using the Black-Scholes method.

Coal swaps

In the current period, PGE Paliwa sp. z o.o. in order to secure commodity risk related to the price of imported coal executed a number of transactions to hedge this risk using commodity swaps for coal. The number and value of these transactions is correlated to the quantity and value of imported coal. Changes in fair value are recognised in profit or loss.

Purchase and sale contracts with physical delivery of coal

PGE Paliwa Sp. z o.o. values all contracts for the sale and purchase of coal with physical delivery in the trader-broker model at fair value. As at the reporting date, the Company held contracts that would be performed in 2023.

Derivatives embedded in sales contracts

As described in note 1.4 of these consolidated financial statements, PGE Group purchased wind assets.

As part of the acquired wind farms, PGE Group also received derivatives embedded in sales contracts. The structure of these instruments relates to the necessity to deliver the contracted capacity every day throughout the contract term.

IRS transactions

The Company entered into IRS transactions to hedge interest rates on loans taken out and bonds issued with a total nominal value of PLN 7,030 million (PLN 5,630 million for loans and PLN 1,400 million for bonds). Due to the commencement of principal repayments on certain loans, the current nominal amount of loan-hedging IRS transactions is PLN 2,827 million. To recognise these IRS transactions, the Group uses hedge accounting. The impact of hedge accounting on the revaluation reserve is disclosed in note 20.3 of these consolidated financial statements.

CCIRS hedges

{In connection with loans received with PGE Sweden AB (publ), PGE S.A. entered into CCIRS transactions, hedging the exchange rate of principal and interest repayments. In these transactions, banks-counterparties pay PGE S.A. interest based on a fixed rate in EUR and PGE S.A. pays interest based on a fixed rate in PLN. In the consolidated financial statements, a relevant part of the CCIRS transaction is treated as a hedge of bonds issued by PGE Sweden AB (publ).

To recognise these CCIRS transactions, the Group uses hedge accounting. The impact of hedge accounting on equity is presented in note 20.3 to these financial statements.

Investment fund participation units

At the reporting date, the Group held participation units in three sub-funds managed by TFI Energia S.A.

25.1.3 Loans, borrowings, bonds and leases

	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Loans and borrowings	3,808	2,062	5,757	2,099
Bonds issued	2,046	21	2,033	13
Leases	945	54	876	48
TOTAL CREDIT, LOANS, BONDS AND LEASES	**6,799**	**2,137**	**8,666**	**2,160**

Currency position and interest rates

As at December 31, 2022

Currency	Reference rate	Value in currency	Value in PLN	Final repayment deadline
PLN	Variable	4,959	4,959	credit, loans – IX 2023 - III 2036; bonds – May 2026 – May 2029
	Fixed	3,282	3,282	credit, loans - IX 2026 - X 2038 leases - I 2023 – XI 2120
TOTAL PLN		**8,241**	**8,241**	
EUR	Variable	-	-	-
	Fixed	140	655	bonds - VIII 2029
TOTAL EUR		**140**	**655**	
USD	Variable	9	40	credit, loans - X 2023
TOTAL USD		**9**	**40**	
TOTAL CREDIT, LOANS, BONDS AND LEASES			**8,936**	

As at 31 December 2021

Currency	Reference rate	Value in currency	Value in PLN	Final repayment deadline
PLN	Variable	6,587	6,587	credit, loans – April 2022 - June 2035; bonds – May 2026 – May 2029
	Fixed	3,333	3,333	credit, loans - June 2022 - October 2038 leases - January 2022 – November 2120
TOTAL PLN		**9,920**	**9,920**	
EUR	Variable	28	129	Credit and loans - June 2024
	Fixed	140	642	bonds - VIII 2029
TOTAL EUR		**168**	**771**	
USD	Variable	33	135	Credit and loans - September 2022
TOTAL USD		**33**	**135**	
TOTAL CREDIT, LOANS, BONDS AND LEASES			**10,826**	

The Group is continuously monitoring works related to the IBOR reform, which may have an impact on financial instruments based on a variable interest rate. At December 31, 2022 the value of credit facilities, loans and bonds exposed to interest rate risk was PLN 4,999 million (PLN 4,959 million is based on WIBOR and PLN 40 million is based on LIBOR). To hedge the interest rate in respect of incurred financial liabilities, PGE S.A. uses IRS instruments and hedging accounting. As at December, 2022, PLN 4,274 million of the above loans, borrowings and bonds is covered by hedging instruments.

The following table illustrates changes in credit, loans and bonds in the years ended December 31, 2022 and 2021:

	Year ended December 31, 2022	Year ended December 31, 2021
AS AT JANUARY 1	**9,902**	**10,468**
CHANGE IN OVERDRAFT FACILITIES	**-**	**-**
CHANGE IN CREDIT, LOANS, BONDS	**(1,965)**	**(566)**
Drawn credit, loans, leases / issued bonds	2,293	601
Repayment of credit and loans / buy-back of bonds	(4,305)	(1,221)
Accrued interest	399	170
Paid interest	(362)	(123)
Exchange differences	13	9
Other changes	(3)	(2)
AS AT DECEMBER 31	**7,937**	**9,902**

Loans and borrowings

Lender	Security instrume	Maturity	Limit in currency	Currency	Interest rate	Liability at 31-12-2022	Liability at 31-12-2021
Bank consortium	IRS	2023-09-30	3,630	PLN	Variable	1,481	2,909
European Investment Bank	-	2034-08-25	1,500	PLN	Fixed	1,442	1,505
Bank Gospodarstwa Krajowego	IRS	2027-12-31	1,000	PLN	Variable	627	751
European Investment Bank	-	2034-08-25	490	PLN	Fixed	472	493
European Bank for Reconstruction and Development	IRS	2028-06-06	500	PLN	Variable	378	439
Bank Gospodarstwa Krajowego	IRS	2028-12-31	500	PLN	Variable	376	438
European Investment Bank	-	2038-10-16	273	PLN	Fixed	274	274
Bank Pekao S.A.	-	2021-09-21	40	USD	Variable	40	135
Nordic Investment Bank	-	2024-06-20	150	EUR	Variable	-	129
European Investment Bank	-	2042-12-09	2,000	PLN	Fixed	-	-
Bank Gospodarstwa Krajowego	-	2023-06-30	2,000	PLN	Variable	-	-
Bank Gospodarstwa Krajowego	-	2023-12-31	1,600	PLN	Variable	-	-
PKO BP S.A.	-	2023-10-31	2,000	PLN	Variable	-	-
Bank Pekao S.A.	-	2024-07-03	500	PLN	Variable	-	-
Bank Pekao S.A.	-	2023-10-31	100	USD	Variable	-	-
Bank Gospodarstwa Krajowego	-	2024-06-12	2,500	PLN	Variable	-	-
PKO BP S.A.	-	2023-10-31	300	PLN	Variable	-	-
National Fund for Environmental Protection and water Management (NFOŚiGW)	-	XII 2028	214	PLN	Fixed	90	116
National Fund for Environmental Protection and water Management (NFOŚiGW)	-	VI 2024 – VI 2037	1,693	PLN	Variable	515	491
Voivodship Fund for Environmental Protection and Water Management (WFOŚiGW)	-	IX 2026	9	PLN	Fixed	5	25
Voivodship Fund for Environmental Protection and Water Management (WFOŚiGW)	-	III 2026 – XII 2029	213	PLN	Variable	170	151
TOTAL BANK CREDIT						**5,870**	**7,856**

As at December 31, 2022, the value of the available overdrafts at significant PGE Group companies was PLN 3,817 million. The repayment dates for the available overdraft facilities of PGE Group's key companies are in 2023-2024. The amount of overdraft limits remaining available was reduced by PLN 59 million (USD 13.5 million), i.e. by the amount of a letter of credit granted as security for the repayment of trade liabilities.

In 2022 and after the reporting period no failures to make payment or other breaches of credit agreement terms were recorded.

Bonds issued

Issuer	Security instrument	Date maturity date	Program limit in currency	Currency	Interest rate	Tranche issue date	Tranche buy-back date	Liability at 31-12-2022	Liability at 31-12-2021
PGE SA	IRS	indefinite	5,000	PLN	Variable	2019-05-21	2029-05-21	1,009	1,003
						2019-05-21	2026-05-21	403	401
PGE Sweden AB (publ)	CCIRS	indefinite	2,000	EUR	Fixed	2014-08-01	2029-08-01	655	642
TOTAL OUTSTANDING BONDS								**2,067**	**2,046**

Lease liabilities

ACCOUNTING POLICIES

Lease liabilities

The lessee recognises the lease liability at the inception date.

At the inception date, the lessee measures the lease liability at the present value of the lease payments outstanding at that date. Lease payments are discounted using the interest rate implicit in the lease if that rate is readily determinable. Otherwise, the lessee applies the lessee's marginal interest rate.

At the inception date, lease payments included in the measurement of the lease liability include the following payments for the right to use the underlying asset during the lease term, which remain payable at that date:

- fixed lease payments (including substantially fixed lease payments) less any lease incentives payable;
- variable lease payments that depend on an index or a rate, measured initially using that index or rate according to their value at the inception date,
- amounts expected to be paid by the lessee under the guaranteed residual value,
- the strike price of the call option if it can be assumed with reasonable certainty that the lessee will exercise the option, and
- financial penalties for terminating a lease if the lease terms provide that the lessee may exercise the option to terminate the lease.

The lessee measures, after the commencement date, the lease liability by:

- increase in carrying amount to reflect interest on the lease liability, which at each date during the lease term is an amount that earns a fixed periodic rate of interest on the outstanding balance of the lease liability,
- a reduction in the carrying amount to take account of lease payments made, and
- revise the measurement of the carrying amount to reflect any reassessment or modification of the lease or to reflect updated substantially fixed lease payments.

PGE Group is a party to a number of lease, tenancy, easement and rental agreements. The subjects of the agreements are land, technical infrastructure areas, office and commercial space, equipment, installations, technical premises, as well as IT infrastructure. Contracts are concluded for a fixed or indefinite period with a specified notice period. The Group also holds the right to use land in perpetual usufruct. The Group estimates the lease term on a case-by-case basis, taking into account relevant facts and circumstances that may affect the extension or reduction of the term of the contracts.

Some contracts have variable fees based on the inflation rate as announced by Statistics Poland for the previous year. The valorisation element accounts for their variable nature - these payments are taken into account in the valuation of the lease liability as they are based on an index. In certain cases, the annual rent is increased by other charges of a variable nature, other than variable charges depending on a rate or index. These are, for example, payments for property tax or building tax. These charges are not included in the measurement of lease liabilities. In land lease contracts for the construction and operation of wind farms, in addition to the lease rent, there are compensation payments for the exclusion of the property from agricultural cultivation for the construction period. These charges are not included in the calculation of the lease liability as no rights to use the assets are transferred to the lessee nor are any services provided to the lessee as a result of incurring these charges. Similarly, charges relating to compensation for losses for entering the site to carry out operation, maintenance and other works related to the operation of the wind power park are also treated.

Decisions on the perpetual usufruct of land are usually granted for a fixed period of 99 years. The fee for perpetual usufruct of land is set as a percentage of the land value. The amount of the annual fee for perpetual usufruct of land is subject to update no more frequently than once every 3 years, if the value of the property changes, thus it will be a variable fee depending on the index or the rate, which is taken into account in the valuation of the lease liability.

The Group leases small office equipment (printing equipment, photocopiers, computers, etc.), which it treats as leases of low-value assets. The Group has elected to apply the exemption and not to recognise rights of use and lease liabilities in respect of these contracts in the statement of financial position.

The Group also applied a practical exemption for short-term leases. This primarily applies to decisions on occupation of road or railway lanes if the decision is issued for a period of less than 12 months.

The Group also benefits from an expedient for short-term leases in the case of property leases with an indefinite term with a notice period of less than 12 months, where the leased space has not been subject to special adjustments, there are no significant exit barriers (e.g. early termination penalties) and both parties have the practical ability to lease such space on the market.

25.1.4 Trade and other financial liabilities

ACCOUNTING POLICIES

Liabilities

Liabilities are the Company's present obligations, arising from past events, settlement of which will cause an outflow of resources embodying economic benefits from the Company.

The Group divides liabilities into the following categories:

- financial liabilities at fair value through profit or loss,
- other financial liabilities measured at subsequent reporting dates at amortized cost,
- non-financial liabilities.

When the effect of the time value of money is significant, liabilities are presented at discounted value.

	At December 31, 2022		At December 31, 2021	
	Non-current	Current	Non-current	Current
Trade liabilities	-	3,104	-	1,608
Purchase of property, plant and equipment and intangible assets	1	1,078	7	909
Security deposits received	31	169	30	106
Liabilities related to LTC	375	55	430	17
Compensation	-	357		
Insurance	-	4	-	-
Settlements related to transactions on exchange	-	1,423	-	1,663
Other	71	517	50	298
TRADE AND OTHER FINANCIAL LIABILITIES	**478**	**6,707**	**517**	**4,601**

The item 'Other' includes PGE Dom Maklerski S.A.'s liabilities towards clients on account of funds deposited.

25.2 Fair value of financial instruments

Financial assets and liabilities measured at amortised cost represent a reasonable approximation of their fair values, except for bonds issued by PGE Sweden AB (publ) and a loan from the European Investment Bank.

Bonds issued by PGE Sweden AB (publ) are based on a fixed interest rate. Their amortised cost presented in these financial statements as at December 31, 2022 amounted to EUR 140 million and their estimated fair value amounted to EUR 125 million. The indicators used in the valuation belong to Level 1 of fair value hierarchy.

In the case of the loan with the European Investment Bank, which is based on a fixed interest rate, its value at amortised cost shown in the financial statements at the reporting date is PLN 2,188 million and its fair value is PLN 1,871 million. The indicators used in the valuation belong to Level 2 of fair value hierarchy.

Financial instruments not quoted on active markets, for which fair value cannot be estimated reliably

The key positions in this category of financial instruments are shares in entities not listed on active markets. PGE Group is not able to reliably determine the fair value of shares of companies not listed on active markets and therefore they are presented at cost, adjusted for impairment if necessary.

25.3 Fair value hierarchy

Derivatives

The Group measures derivatives at fair value using financial instrument pricing models, using exchange rates, interest rates, discount curves in individual currencies (also applicable to commodities priced in these currencies) publicly available in information platforms from active markets. The fair value of derivatives is determined based on discounted future cash flows from transactions, calculated based on the difference between the forward rate and transaction price. The valuation of an IRS transaction is the difference between the discounted interest flows of a fixed-rate stream and a floating-rate stream. The valuation of a CIRS transaction is the difference of the discounted flows paid and received in two different currencies. Forward exchange rates are not modelled as a separate risk factor, but are derived from the spot rate and appropriate forward interest rate for foreign currencies in relation to PLN.

Future developments in interest rates, exchange rates or EUA price levels other than those projected by the Company will have an impact on future financial statements.

In the category of financial assets and liabilities measured at fair value through profit or loss, the Group recognises financial instruments related to trading in CO_2 emission allowances - currency and commodity forwards, in addition to contracts for the purchase and sale of coal, commodity SWAPs (Level 2).

In addition, the Group presents a derivative hedging instrument for exchange rate and interest rate hedging CCIRS and IRS hedging transactions swapping a floating rate in PLN for a fixed rate in PLN (Level 2).

	Assets at December 31, 2022		Liabilities at December 31, 2022	
FAIR VALUE HIERARCHY	**Level 1**	**Level 2**	**Level 1**	**Level 2**
CO_2 emission allowances in trading activities	1	-	-	-
Hard coal in trading activities	1,497	-	-	-
INVENTORIES	**1,498**	**-**	**-**	**-**
Currency forwards	-	3	-	111
Commodity forwards	-	5	-	1
Commodity SWAP	-	95	-	71
Contracts for purchase/sale of coal	-	650	-	650
Derivatives embedded in sales contracts		-		397
Options	-	18	-	-
Derivatives measured at fair value through profit or loss	**-**	**771**	**-**	**1,230**
CCIRS hedges	-	104	-	-
IRS hedges	-	459	-	-
Currency forward - USD	-	-	-	13
Currency forward - EUR	-	173	-	691
HEDGING DERIVATIVES	**-**	**736**	**-**	**704**
Investment fund participation units	-	28	-	-
OTHER ASSETS / LIABILITIES MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS	**-**	**28**	**-**	**-**

	Assets at December 31, 2021		Liabilities at December 31, 2021	
FAIR VALUE HIERARCHY	**Level 1**	**Level 2**	**Level 1**	**Level 2**
CO_2 emission allowances in trading activities	1	-	-	-
Hard coal in trading activities	17	-	-	-
INVENTORIES	**18**	**-**	**-**	**-**
Currency forwards	-	4	-	6
Commodity forwards	-	47	-	1
Commodity SWAP	-	22	-	31
Contracts for purchase/sale of coal	-	19	-	11
Options	-	16	-	-
Derivatives measured at fair value through profit or loss	**-**	**108**	**-**	**49**
CCIRS hedges	-	110	-	-
IRS hedges	-	203	-	-
Currency forward - USD	-	3	-	-
Currency forward - EUR	-	485	-	34
HEDGING DERIVATIVES	**-**	**801**	**-**	**34**
Investment fund participation units	-	30	-	-
OTHER ASSETS / LIABILITIES MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS	**-**	**30**	**-**	**-**

Derivative instruments are presented in note 25.1.2 to these financial statements. During the current and comparative reporting periods, there were no transfers of financial instruments between the first and second level of the fair value hierarchy.

Presented below are the terms of the derivative instruments and other receivables carried at fair value through profit or loss.

	At December 31, 2022		At December 31, 2021		Maturity as at December 31, 2022
	Value in financial statements in PLN	Instrument's nominal value in original currency	Value in financial statements in PLN	Instrument's nominal value in original currency	
CCIRS – EUR to PLN	104	144	110	144	July 2029
Options	18	4	16	5	November 2026
Investment fund participation units	28	23	30	27	n/a
Currency forward purchase EUR	173	1,961	485	3,980	December 2024
Currency forward sale EUR		91		14	December 2024
Commodity forward sale PLN	5	40	47	132	December 2023
Commodity forward purchase PLN		35		180	December 2023
IRS - interest rate PLN	459	375	203	438	June 2028
		625		750	December 2027
		375		438	December 2028
		1,452		2,904	September 2023
		1,000		1,000	May 2029
		400		400	May 2026
Currency forward sale USD	-	-	3	8	-
Currency forward purchase USD	3	48	1	10	February 2023
		5			April 2023
Currency forward purchase USD	-	-	3	8	December 2022
Commodity SWAP purchase USD	95	4	22	5	January 2023
Commodity SWAP sale USD		114		17	March 2023
Contracts for purchase - USD	650	10	19	6	April 2023
Contracts for sale - USD		201		13	December 2023
Financial assets	**1,535**	**-**	**939**	**-**	
Currency forward purchase EUR	691	3,899	34	831	December 2024
Currency forward sale EUR		28		65	December 2024
Commodity forward PLN	1	28	1	19	December 2023
		29		18	
Commodity SWAP purchase USD	71	82	31	25	March 2023
Commodity SWAP sale USD		6		11	March 2023
Currency forward - USD	72	170	3	53	December 2023
		3		-	
Currency forward - USD	13	105	-	-	January 2023
Currency forward purchase USD	39	297	3	8	November 2023
Contracts for purchase - USD	650	816	11	21	December 2023
Contracts for sale - USD		-		6	-
Derivatives embedded in sales contracts	45	53			December 2025
Derivatives embedded in sales contracts	352	344			December 2030
Financial liabilities	**1,934**		**83**		

25.4 Statement of comprehensive income

Impact of various categories of financial instruments on financial income and costs

Year ended December 31, 2022	Cash and cash equivalents	Other financial assets	Shares and other equity instruments	Financial instruments measured at fair value	Hedging derivatives	Other financial liabilities	TOTAL
Dividends	-	-	4	-	-	-	4
Interest income / (costs)	343	109	-	-	108	(413)	147
Impairment	-	-	(7)	3	-	-	(4)
Reversal/(recognition) of impairment	-	(5)	(4)	-	-	-	(9)
Exchange differences	4	26	-	-	-	(56)	(26)
Gain / (loss) on sale of investment	-	-	37	-	-	-	37
Settlement of loss of control	-	-	(1)	-	-	-	(1)
TOTAL PROFIT/ (LOSS)	**347**	**130**	**29**	**3**	**108**	**(469)**	**148**

Year ended December 31, 2021	Cash and cash equivalents	Other financial assets	Shares and other equity instruments	Financial instruments measured at fair value	Hedging derivatives	Other financial liabilities	TOTAL
Dividends	-	-	3	-	-	-	3
Interest income / (costs)	1	16	-	-	(129)	(195)	(307)
Impairment	-	-	-	(2)	(31)	-	(33)
Reversal/(recognition) of impairment	-	(7)	-	-	-	-	(7)
Exchange differences	1	(18)	-	-	-	13	(4)
Gain / (loss) on sale of investment	-	-	(6)	-	-	-	(6)
Settlement of loss of control	-	-	324	-	-	-	324
TOTAL PROFIT/ (LOSS)	**2**	**(9)**	**321**	**(2)**	**(160)**	**(182)**	**(30)**

25.5 Collateral for repayment of receivables and liabilities

The Group uses many financial instruments and combinations thereof as collaterals for repayment of loans. The most frequently used are agreements for the transfer of receivables, promissory notes and enforcement declarations. Additionally, the Group uses powers of attorney to bank accounts and assignments of receivables.

As at the reporting date, the following assets were used as collateral for repayment of liabilities or contingent liabilities:

	As at December 31, 2022	As at December 31, 2021
Property, plant and equipment	958	911
Inventories	-	-
Trade receivables	94	119
TOTAL ASSETS AS COLLATERAL FOR REPAYMENT OF LIABILITIES	**1,052**	**1,030**

Property, plant and equipment presented in the table above are collaterals for repayment of drawn investment credits. The most significant item as at December 31, 2022 and as at December 31, 2021 is a capped mortgage on a 858 MW unit in PGE Górnictwo i Energetyka Konwencjonalna S.A.'s branch Elektrownia Bełchatów.

Pursuant to the regulations of clearinghouse IRGiT, PGE Group companies are required to maintain a certain balance of cash in accounts kept in PKO BP. Customer funds are stored at PKO BP, Santander Bank Polska and Bank Polska Kasa Opieki S.A. Cash reported as restricted cash under these two headings amounted to PLN 295 million as at December 31, 2022 (PLN 212 million in the comparative period).

In addition, financial receivables include funds for the Mine Liquidation Fund in the amount of PLN 214 million (PLN 194 million in the comparative period).

26. Objectives and principles of financial risk management

The primary objective of financial risk management at PGE Group is to support the process of creating value for the Group's shareholders and the implementation of the Group's business strategy by reducing and controlling financial risk to a level acceptable to the Group's management.

Responsibility for managing PGE Group's financial risk lies with the Management Board of PGE S.A. The Management Board specifies risk appetite, understood as an acceptable level of deterioration of PGE Group's financial results, taking into consideration its current and planned economic and financial situation. The Management Board also decided on the allocation of risk appetite to specific business areas.

The organisation of the financial risk management function at PGE Group is based on the principle of organisational independence of the unit responsible for measurement and control of risk at PGE Group (Risk and Insurance Department at PGE Polska Grupa Energetyczna S.A.) from business units which own risks. Risk reports are submitted directly to the Risk Committee, the Audit Committee of the Supervisory Board of PGE S.A. and the Management Board of PGE S.A.

PGE Group has a Risk Committee that exercises oversight of the financial and corporate risk management process at PGE Group. The Risk Committee monitors PGE Group's exposure levels, sets limits for significant financial risks, accepts methodologies in financial risk resulting from trade and finance activities, permits expansions of activities in new business areas and makes key decisions regarding risk management.

Financial risk is managed at Group level, in an integrated manner. This process is implemented or supervised by PGE Group's Corporate Centre, which is a centre of competences in this area. Risk exposures of individual business areas are considered in a comprehensive manner, taking into account the existing dependencies between exposures, the possibility of using natural hedging effects and their combined impact on the risk profile and financial position of the entire PGE Group.

The financial risk management model includes:

- collection and consolidation of data on exposure to particular categories of financial risk,
- calculation of financial risk metrics, including Value-at-Risk (VaR) and Profit-at-Risk (PaR) for specific risk factors and overall for all risk factors;
- management of the PGE Group's consolidated exposure in relation to capital at risk and risk limits established based on it (including the identification and implementation of hedging strategies).

In key areas of financial risk, PGE Group has implemented internal regulations for managing these risks.

PGE Group is exposed to a variety of financial risks:

- market risk (commodity risk, interest rate risk, currency risk);
- liquidity risk;
- credit risk.

PGE Group's exposure to specific financial risks depends on the scope of activities in commodity and financial markets.

26.1 Market risk

Market risk covers commodity risk, interest rate risk, currency risk.

The main objective of market risk management at PGE Group is to protect the financial result and maintain the level of risk resulting from commercial and financial activities at an acceptable level and to support the implementation of the business strategy and maximisation of the Group's value for shareholders.

PGE Group's procedures for managing specific market risk categories in trade and finance activities specify the following:

- objective, scope and rules for managing risk;
- scope of responsibility for managing risk;
- management and operational processes within risk management in trading on electricity markets and related product markets and as regards financing activities;
- ways of identifying sources of exposure to risk;
- permitted instruments for hedging exposure to risk;
- methods for measuring and monitoring exposures to risk;

The market risk management rules applicable at PGE Group also specify the method of determining the market risk appetite, limiting market risk exposures and the mechanisms for securing exposures when limits are exceeded.

26.1.1 Commodity risk

Commodity risk is related to the possibility of a deterioration in the financial result in the trading area due to changes in commodity prices.

PGE Group companies' exposure to commodity risk relates to the following commodity markets:

- electricity
- CO_2 emission allowances
- rights to electricity origin certificates;
- hard coal;
- natural gas;
- biomass and other fuels.

PGE Group owns lignite mines that deliver production fuel to two power plants operating within the PGE Group. Due to this fact, the Group's exposure to price risk in this area is not significant.

Selected key types of commodity risk (including currency) that PGE Group is exposed to (without taking account of the risk hedging strategies applied):

Risk associated with	Description	Example of exposure source
Risk of changes in electricity prices	• PGE Group has a natural long position due to its generation assets and a lack of possibility to place its production on the market at a pre-determined price.	• The level of margin generated as a result of changes in electricity prices and electricity generation costs; • Price of electricity sale contracts to retail clients, • Price of transactions to buy/sell energy on the wholesale market,
Risk of changes in the prices of rights to electricity origin certificates;	• PGE Group has a net short position resulting from the obligation to redeem rights related to the sale of electricity to end users.	• Price of transactions to buy/sell rights on the wholesale market,
Risk of changes in the prices of CO_2 emission allowances	• Risk related to changes in the prices of CO_2 emission allowances in EUR and risk of changes in EURPLN exchange rate; • PGE Group has a short position given its electricity generation at units participating in the EU-ETS scheme.	• Use of generation sources not as planned due to their varying emission levels; • Price of transactions to buy/sell CO_2 emission allowances on the wholesale market.
Risk of changes in prices of fuel for electricity generation (including hard coal, natural gas, biomass, heating oil)	• Risk of commodity price changes, including commodities denominated in foreign currency (or indexed to foreign currency) and foreign currency risk; • PGE Group has a short position due to its need to purchase fuel on the market.	• Price of transactions to buy/sell fuel on the wholesale market.
Long-term volume risk	• Risk relating to changes in demand for electricity in the National Power System and the long-term risk of PGE Group's generating units being replaced in meeting this demand by generating units with lower generation costs (in particular renewable energy sources).	• Macroeconomic situation, especially in energy-intensive industries; • Technological changes, especially in energy efficiency and development of distributed energy (renewable energy sources); • Climate changes; • ESG regulations, including preferences for specific sectors of the energy industry; • Degree of integration with foreign power systems.

Risk associated with	Description	Example of exposure source
Short-term volume risk	• Risk relating to changes in the planned volume of electricity sales as a result of changes in customers' demand for electricity or short- and medium-term substitution of PGE Group generating units by generating units with lower generation costs (in particular renewable energy sources) in meeting this demand.	• Trends among retail clients concerning changes in energy providers; • Regulations, including those pertaining to the opportunity to change energy providers; • Short-, mid-term weather changes; • Short-term changes in the availability of supply from renewable energy sources • Risk associated to the model for planning demand for energy and quality of source data used in planning.

PGE Group has a strategy for hedging key exposures in trading electricity and related commodities adequately to the level of risk appetite over a mid-term horizon. The level of hedging for an open position is set taking into account risk appetite, results of monitoring the risk of electricity and related product prices, liquidity of specific markets as well as the financial situation of the Group and the Group's strategic objectives.

PGE Group's exposure to commodity price risk (as regards raw materials) specifies the volume of external purchases of each raw material, as presented in the table below:

COMMODITY	Year ended December 31, 2022		Year ended December 31, 2021	
	Tonnage – external purchase (in thousand tonnes)	Purchase costs (PLN million)	Tonnage – external purchase (in thousand tonnes)	Purchase costs (PLN million)
Hard coal	11,348	8,085	9,983	2,932
CO_2 emission allowances for captive use	48,343	11,765	116,206	14,024
Natural gas [m^3 000s]	832,945	1,570	1,173,366	980
Biomass	491	196	719	150
Fuel oil	72	272	66	160
TOTAL	**-**	**21,888**	**-**	**18,246**

26.1.2 Interest rate risk

Interest rate risk is related to the possibility that financial results deteriorate as a result of changes in interest rates.

PGE Group's exposure to interest rate risk arises mainly from the fact that Group companies finance their operating and investing activities by obtaining funding based on variable interest rates, mainly in the form of loans, borrowings and bonds issued in domestic and foreign currencies and from investments in financial assets bearing variable interest rates.

PGE Group controls interest rate risk through a system of limits relating to the maximum potential loss due to changes in interest rates in related to consolidated exposure to interest rate risk by PGE Group companies. The measure of interest rate risk is based on the size-at-risk methodology, understood as the product of the size of the net interest rate position and the value of a potential change in market interest rates.

Moreover, PGE Group determines the hedging strategy for the Group's consolidated interest rate risk exposure through hedge ratios subject to the approval of PGE S.A.'s Risk Committee and Management Board. The hedging strategy and level of interest rate risk are subject to monitoring and are regularly reported to the Risk Committee.

PGE Group companies execute derivative transactions concerning instruments that are based on interest rates only in order to hedge identified risk exposures. Regulations applicable at PGE Group do not allow, with respect to interest rate derivative transactions, to conclude speculative transactions, i.e. transactions aimed at generating additional profits resulting from changes in the level of interest rates, at the same time exposing the Group to the risk of possible loss on this account.

Bonds issued in the amount of PLN 1.4 billion under the PLN 5 billion Bond Issuance Program are floating rate bonds in PLN. Payments on these bonds are secured by IRS contracts.

Bonds issued under the medium term Eurobonds Issue Program, are interest bearing bonds at a fixed rate in EUR. Payments on these bonds are hedged by CCIRS hedging instruments.

Long-term credit facilities in the total amount of PLN 1 billion as at December 31, 2022 under the Credit Agreements entered into on December 17, 2014 and December 4, 2015 with Bank Gospodarstwa Krajowego, respectively, and a syndicated loan (term tranche) in the amount of PLN 1.45 billion as at December 31, 2022 under the Loan Agreement dated September 7, 2015, are floating interest rate instruments in PLN. Payments under these credit facilities are secured using Interest Rate Swaps.

Interest rate hikes as a consequence of the fight against inflation did not noticeably affect the interest rate risk on long-term variable-rate debt, as these were 100% hedged with IRS and CCIRS contracts.

PGE Group's exposure to interest rate risk and concentration of this risk by currency:

		Type of interest	As at December 31, 2022	As at December 31, 2021
Derivatives - assets exposed to interest rate risk	PLN	Fixed	5	47
		Variable	477	219
	Other currencies	Fixed	-	-
		Variable	1,025	643
Deposits, cash, debt securities, leases	PLN	Fixed	10,180	6,044
		Variable	-	-
	Other currencies	Fixed	1,926	964
		Variable	-	-
Derivatives – liabilities, exposed to interest rate risk	PLN	Fixed	(1)	(1)
		Variable	(397)	-
	Other currencies	Fixed	-	-
		Variable	(1,536)	(82)
Loans, borrowings, bonds and lease	PLN	Fixed	(3,276)	(3,329)
		Variable	(4,959)	(6,583)
	Other currencies	Fixed	(661)	(650)
		Variable	(40)	(264)
Net exposure	PLN	Fixed	6,908	2,761
		Variable	(4,879)	(6,364)
	Other currencies	Fixed	1,265	314
		Variable	(551)	297

Interest rates on variable interest rate financial instruments are updated in periods shorter than one year. Interest on fixed-rate financial instruments is fixed throughout the period to maturity of those instruments.

26.1.3 Currency risk

Currency risk is related to the possibility of changes in the financial result due to changes in exchange rates.

The main sources of PGE Group's exposure to currency risk are presented below:

- capital expenditures denominated in or indexed to foreign currencies;
- loans and borrowings denominated in foreign currencies;
- sales and purchases of electricity denominated in foreign currencies (if applicable);
- fees denominated in or indexed to foreign currency relevant to purchase of transmission capacities (if applicable);
- sales and purchases of CO2 emission allowances and gas as well as purchases of hard coal denominated in or indexed to foreign currencies;
- expenses related to current use of production goods denominated in or indexed to foreign currencies;
- financial assets with deposit characteristics denominated in foreign currencies.
- other operating flows denominated in or indexed to foreign currencies.

PGE Group controls currency risk through a system of limits relating to the maximum potential loss due to changes in exchange rates in related to consolidated exposure to currency risk by PGE Group companies. The measure of foreign exchange risk is based on a size-at-risk methodology understood as the product of the absolute size of the net foreign exchange position and the value of a potential change in the exchange rate.

Moreover, PGE Group sets out hedging strategies for the Group's currency risk using hedging ratios subject to approval by the Company's Risk Committee and Management Board. The hedging strategy and level of currency risk are subject to monitoring and are regularly reported to the Risk Committee.

PGE Group companies enter into derivative transactions in currency-based instruments only to hedge identified risk exposures.

The regulations in place at PGE Group do not allow, with respect to currency derivative transactions, to enter into speculative transactions, i.e. transactions aimed at generating additional profits resulting from changes in exchange rates, while exposing the Group to the risk of possible loss from such transactions.

In view of the applied currency risk management strategy based on minimising and hedging currency risk exposures, the cost of servicing liabilities in foreign currencies, in the medium and long term, under conditions of escalating risks related to Russia's aggression in Ukraine, did not change materially, as a result of hedging activities implemented in accordance with previously adopted hedging strategies.

The Group's exposure to currency risk broken down into classes of financial instruments:

	Total value in the financial statements in PLN	CURRENCY POSITION AT DECEMBER 31, 2022					
		EUR		DKK		USD	
		currency	PLN	currency	PLN	currency	PLN
Trade and other financial receivables:	9,306	284	1,329	-	-	-	-
Cash and cash equivalents	11,887	397	1,864	90	57	1	5
Derivatives, including:	1,535	2,015	9,450	-	-	344	1,514
Carried at fair value through profit or loss	*771*	-	-	-	-	*344*	*1,514*
Hedging instruments	*736*	*2,015*	*9,450*	-	-	-	-
Other assets at fair value through profit or loss	*28*	-	-	-	-	-	-
FINANCIAL ASSETS	**22,728**	**2,696**	**12,643**	**90**	**57**	**345**	**1,519**
Loans, borrowings, bonds and leases	8,936	141	661	-	-	9	40
Trade and other financial liabilities measured at amortised cost	7,185	381	1,784	-	-	117	514
Derivatives, including:	1,934	3,871	18,155	-	-	1,164	5,124
Carried at fair value through profit or loss	*1,230*	-	-			*1,164*	*5,124*
Hedging instruments	*704*	*3,871*	*18,155*	-	-	-	-
FINANCIAL LIABILITIES	**18,055**	**4,393**	**20,600**	**-**	**-**	**1,290**	**5,678**

The book value of derivatives constitutes their fair value measurement. The value of exposure to currency risk for forwards constitutes their nominal value in currency. The currency risk exposure value for CCIRS derivatives is the value in the currency of the discounted cash flows of the currency leg.

	Total value in the financial statements in PLN	CURRENCY POSITION AT DECEMBER 31, 2021					
		EUR		DKK		USD	
		currency	PLN	currency	PLN	currency	PLN
Trade and other financial receivables:	7,931	374	1,718			-	-
Cash and cash equivalents	6,733	186	856	174	108	-	-
Derivatives, including:	939	4,144	19,060	-	-	45	182
Carried at fair value through profit or loss	*108*	-	-	-	-	*37*	*150*
Hedging instruments	*801*	*4,144*	*19,060*	-	-	*8*	*32*
Other assets at fair value through profit or loss	*30*	-	-	-	-	-	-
FINANCIAL ASSETS	**15,603**	**4,704**	**21,634**	**174**	**108**	**45**	**182**
Loans, borrowings, bonds and leases	10,826	170	779	-	-	33	135
Trade and other financial liabilities measured at amortised cost	5,118	417	1,918	16	10	8	33
Derivatives, including:	83	766	3,523	-	-	90	365
Carried at fair value through profit or loss	*49*	-	-			*90*	*365*
Hedging instruments	*34*	*766*	*3,523*	-	-	-	-
FINANCIAL LIABILITIES	**16,027**	**1,353**	**6,220**	**16**	**10**	**131**	**533**

The book value of derivatives constitutes their fair value measurement. The value of exposure to currency risk for forwards constitutes their nominal value in currency. The value of exposure to risk currency for CCIRS constitutes a value in the currency of discounted cash flows in the currency leg.

26.2 Liquidity risk

Liquidity risk concerns a situation in which an entity is unable to meet its liabilities (current or non-current) when they become due.

The main objective of PGE Group's liquidity management is to ensure and maintain the companies' ability to meet both current and future financial obligations, taking into account the cost and ability to obtain them.

Liquidity risk management at PGE Group involves planning and monitoring short- and long-term cash flows from operating, investing and financing activities and taking action intended to secure funds for the activities of PGE Group, while limiting the cost of these actions.

Periodic planning and monitoring of PGE Group's liquidity enables the Group to secure funds to cover any liquidity gap, both by allocating funds between PGE Group companies (cash pooling) and using external financing, including overdrafts and working capital loans.

Liquidity risk management in the long term allows PGE Group to define its borrowing capacity and supports decisions regarding the financing of long-term investments.

PGE Group has a central financing model in which, as a rule, agreements relating to external financing are executed by PGE S.A. PGE Group subsidiaries use various sources of intra-group financing such as loans, bonds, bank account consolidation agreements and real cash pooling agreements.

PGE Group uses a variety of financing sources, such as overdrafts, working capital loans, term investment loans, domestic bond issues and Eurobonds.

As part of its liquidity assessment, the Group monitors the performance of the net debt/EBITDA ratio at a level that guarantees the maintenance of investment grade credit ratings and, consequently, the ability to finance the Group's investment program. The ratio is calculated on the basis of PGE Group's consolidated financial statements. The debt ratio is presented in note 20 of these financial statements.

The following table presents maturities of the Group's financial liabilities at reporting dates by maturity based on contractual undiscounted payments

In the case of derivatives - commodities, the table shows net flows - payments have been net of receipts from the execution of contracts.

AT DECEMBER 31, 2022	Carrying amount	Total payments	Under 3 months	From 3 to 12 months	From 1 year to 5 years	Over 5 years
Loans and borrowings	5,870	6,926	823	1,504	2,625	1,974
Bonds issued	2,067	2,897	-	145	926	1,826
Trade and other financial payables	5,762	5,847	4,759	525	420	143
Settlements with exchanges, largely related to the purchase of CO_2 emission allowances (*)	1,423	1,423	1,423	-	-	-
Lease liabilities	999	2,293	18	54	293	1,928
Derivatives	1,184	3,986	1,774	1,731	341	140
TOTAL	**17,305**	**23,372**	**8,797**	**3,959**	**4,605**	**6,011**

(*)Settlements relate to margins, the value of which depends on the current price of CO_2 allowances.

AT DECEMBER 31, 2021	Carrying amount	Total payments	Under 3 months	From 3 to 12 months	From 1 year to 5 years	Over 5 years
Loans and borrowings	7,856	8,591	902	1,339	3,986	2,364
Bonds issued	2,046	2,499	-	66	657	1,776
Trade and other financial payables	3,902	3,902	2,831	124	907	40
Settlements with exchanges, largely related to the purchase of CO_2 emission allowances (*)	1,663	1,663	1,663	-	-	-
Lease liabilities	924	2,374	19	55	244	2,056
Derivatives	83	155	117	9	29	-
TOTAL	**16,474**	**19,184**	**5,532**	**1,593**	**5,823**	**6,236**

26.3 Credit risk

Credit risk is related to a potential credit event that may take the form of a counterparty's insolvency, only partial repayment of receivables, a material delay in repayment of receivables or other deviation from contractual terms (including, in particular, failure to deliver and receive agreed goods in accordance with the contract and possible non-payment of damages and contractual penalties).

PGE Group companies are exposed to credit risk arising in the following areas:

- core business of the companies - sources of credit risk include, inter alia, transactions for purchase and sale of electricity and heat, transactions for purchase and sale of rights to electricity certificates of origin and CO_2 emission allowances, transactions for purchase and sale of fuels, etc. This includes the possibility that counterparties and customers of PGE Group may fail to make payments when due or to fulfil their delivery obligations to a PGE Group company if the fair value of the transaction is positive from the Group's point of view;
- investment activities of entities – the credit risk results from transactions resulting from investment projects which depend on the financial situation of the Group’s suppliers;
- investing free cash of entities – the credit risk results from investing free cash of the PGE Group entities in securities bearing credit risk, i.e. financial instruments other than those issued by the State Treasury.

To monitor credit risk in operating activities, the most commercially significant PGE Group companies use the internal rating approach using rating models implemented with the assistance of an external provider.

There are significant concentrations of credit risk within PGE Group related to trade receivables. The three most significant customers accounted for approx. 14% of the trade receivables balance.

Maximum credit risk exposure resulting from PGE Group’s financial assets is equal to the carrying value of these items.

	Year ended December 31, 2022	Year ended December 31, 2021
Trade and other financial receivables	9,306	7,931
Cash and cash equivalents	11,887	6,733
Derivatives - assets	1,573	939
MAXIMUM EXPOSURE TO CREDIT RISK	**22,766**	**15,603**

26.3.1

26.3.2 Trade receivables. Other loans and financial receivables

ACCOUNTING POLICIES

Financial receivables

Financial receivables, including trade receivables, are measured at fair value at inception and subsequently at amortised cost using the effective interest rate including allowance for expected credit losses.

The Group uses simplified methods for the measurement of receivables measured at amortised cost if this does not distort the information contained in the statement of financial position, in particular if the period until repayment of the receivables is not long.

The Group does not monitor changes in the level of credit risk over the life of the instrument. The expected credit loss is estimated to the maturity of the instrument.

The Companies apply the following policies for estimating and recognising impairment losses on financial receivables:

- for receivables from significant customers that are subject to credit risk assessment procedures, the Companies estimate the expected credit losses based on a model to assess this risk based on the ratings assigned to each counterparty; the ratings are assigned a probability of failure that is adjusted for the impact of macroeconomic factors;
- for receivables from bulk customers or those not covered by the credit risk assessment process, the Companies estimate expected credit losses based on an analysis of the probability of incurring credit losses in each age bracket;
- in justified cases the Companies may estimate the value of the impairment loss individually.

Impairment allowances on receivables are recognised as other operating costs or financial costs. Non-current receivables are measured at present (discounted) value.

Ratios used to estimate expected losses calculated according to the following provision matrix:

	December 31, 2022		December 31, 2021	
	Amount of impairment	% of impairment	Amount of impairment	% of impairment
Receivables before due date	463	0.0 – 79.39/ 100	462	0.0 – 0.14/ 100
Past due <30 days	8	0.0 – 79.39/ 100	5	0.0 – 2.5/ 100
Past due 30-90 days	18	0.0 – 59.47/ 100	7	0.0 – 10.2/ 100
Past due 90-180 days	28	100.0	20	100.0
Past due 180-360 days	651	100.0	46	100.0
Past due >360 days	275	100.0	385	100.0
TOTAL FINANCIAL ASSETS	**1.443**		**925**	

The impairment loss applies to receivables subject to matrix and individual impairment loss (100%). The Group does not have any significant items of receivables, past due more than 90 days, that were not subject to a 100% write-down at the reporting date.

Indicators used to estimate expected loss values calculated according to the model for key customers:

Rating level	December 31, 2022		December 31, 2021	
	Amount of impairment	% of impairment	Amount of impairment	% of impairment
Highest Highest AAA to AA- according to S&P and Fitch, and Aaa to Aa3 according to Moody's	-	-	-	--
Medium high A+ to A- according to S&P and Fitch, and A1 to A3 according to Moody's	-	-	-	--
Medium BBB+ to BBB- according to S&P and Fitch, and Baa1 to Baa3 according to Moody's	<1	100.0	<1	100.0
TOTAL FINANCIAL ASSETS	**<1**		**<1**	

Trade receivables typically have a 14-21-day payment deadline. In 2022, PGE Group waited an average of 28 days for repayment of receivables. Trade receivables relate mainly to receivables for energy sold and distribution services. According to PGE Group's management, there are no additional risks of non-repayment of receivables above the level determined by the impairment loss.

PGE Group mitigates and controls credit risk related to commercial transactions in accordance with harmonised credit risk management rules implemented at all key PGE Group companies. For commercial transactions that, due to their high value, may generate significant losses as a result of counterparty default, a counterparty assessment taking into account financial analysis, counterparty credit history and other factors is carried out before entering into the transaction. Based on the assessment, an internal rating is recognised or PGE Group uses a rating determined by an independent reputable agency. A limit for the contractor is set based on the rating. Entering into contracts that would increase exposure above the limit, requires in principle the collateral in line with PGE Group's rules pertaining to credit risk management. The level of used limit is regularly monitored and reported and if it is substantially exceeded, units responsible for counterparty risk are required to undertake measures to eliminate them. PGE Group regularly monitors payments of receivables and uses system of early debt recovery, taking into consideration deadlines arising from the energy law and high level of repayment of receivables with short term of expire. It also works with business intelligence agencies and debt collection companies.

Credit risk relating to trade receivables by geographical region is presented in the table below:

	December 31, 2022		December 31, 2021	
	Receivables balance	% share	Receivables balance	% share
Poland	6,515	100%	4,178	99%
Germany	2	0%	31	1%
TOTAL	**6,517**	**100%**	**4,209**	**100%**

Ageing of receivables and impairment

Certain financial assets were covered by impairment losses as of December 31, 2022. The change in allowances accounts for these classes of financial instruments is presented in the table below:

2022	Trade receivables	Other financial receivables	Bonds	Total financial assets
Impairment as of January 1	**(150)**	**(389)**	**(386)**	**(925)**
Use of impairment losses	15	6	-	21
Reversal of impairment losses	94	169	-	263
Recognition of impairment losses	(206)	(600)	-	(806)
Other changes	4	-	-	2
Impairment as of December 31	**(243)**	**(814)**	**(386)**	**(1,443)**
Value prior to impairment	**6,760**	**3,380**	**386**	**10,526**
Net value (carrying amount)	**6,517**	**2,566**	**-**	**9,083**

Impairment of trade receivables concerns the Supply segment. The total amount of trade receivables impairment at these companies as at December 31, 2022 was PLN 235 million (PLN 147 million in 2021).

The Group does not have any significant items of receivables that were significantly past due as at the reporting date but not subject to an impairment loss.

2021	Trade receivables	Other financial receivables	Bonds	Total financial assets
Impairment as of January 1	**(202)**	**(300)**	**(386)**	**(888)**
Use of impairment losses	37	8	-	45
Reversal of impairment losses	70	32	-	102
Recognition of impairment losses	(59)	(133)	-	(192)
Other changes	4	4	-	8
Impairment as of December 31	**(150)**	**(389)**	**(386)**	**(925)**
Value prior to impairment	**4,359**	**4,111**	**386**	**8,856**
Net value (carrying amount)	**4,209**	**3,722**	**-**	**7,931**

Analysis of ageing structure of trade receivables and other loans and receivables taking into account impairment allowances is presented below:

	December 31, 2022			December 31, 2021		
	Gross	Impairment	Net carrying amount	Gross	Impairment	Net carrying amount
Receivables before due date	**9,466**	**(463)**	9,003	**8,058**	**(462)**	**7,596**
Past due <30 days	229	(8)	221	184	(5)	179
Past due 30-90 days	92	(18)	74	46	(7)	39
Past due 90-180 days	28	(28)	-	22	(20)	2
Past due 180-360 days	651	(651)	-	52	(46)	6
Past due >360 days	283	(275)	8	494	(385)	109
Receivables past due, total	**1,283**	**(980)**	**303**	**798**	**(463)**	**335**
Total financial assets	**10,749**	**(1,443)**	**9,306**	**8,856**	**(925)**	**7,931**

As at December 31, 2021, more than 72% of overdue trade receivables and other loans and receivables that were not covered by impairment losses concerned sale of energy to end-users.

26.3.3 Deposits, cash and cash equivalents

The Group manages credit risk related to cash and cash equivalents by diversification of banks in which surpluses of cash are allocated. All entities with which PGE Group concludes deposit transactions with operate in the financial sector. These are exclusively banks incorporated in Poland or operating in Poland in the form of branches of foreign banks, with a rating of at least investment grade, with an adequate solvency ratio and equity, and with a strong and stable market position. The share of the three major banks in which PGE Group has allocated the most significant cash balances as at December 31, 2022, accounted for approximately 72% (82% in the comparative period).

26.3.4 Derivatives

All entities with which PGE Group concludes derivative transactions with operate in the financial sector. These are banks and entities regulated by financial supervisory institutions, with investment grade ratings, and with sufficient equity capital and a strong and stable market position. As at the reporting date, PGE Group was party to derivative transactions as described in detail in note 25.1.2 to these consolidated financial statements.

26.3.5 Guarantees and sureties issued

Guarantees and sureties issued by PGE Group companies are presented in note 28 to these financial statements.

26.4 Climate risk

PGE Group is aware of the impact of its activities on the climate, as well as the threats posed by climate change to the Group's operations. It is well known that our business activities both influence and depend on the climate, this interdependence generates both risks and opportunities for growth. We therefore understand the expectations of stakeholders in terms of reporting on the environmental impact of the business, recognising climate risk management as a key element of strategic management, with a direct impact on financial aspects.

PGE Group is therefore focusing not only on risks but also on opportunities to ensure resilience to risks and to increase sustainable Group revenues. PGE Group has taken a number of actions in 2022 aimed at achieving climate neutrality in 2050, already indicated in PGE Group's Strategy to 2030, and continues to work on the implementation of PGE Group's ESG Strategy, focusing on 4 areas: competitiveness in the financial market, a leader in green transformation, a corporate culture that supports sustainable development and active communication on sustainable development with all stakeholders. The Group is also implementing measures to meet regulatory requirements, both national and European. This includes, among other things, the EU Taxonomy, preparation to the Corporate Sustainability Reporting Directive (CSRD), as well as the expectations of financial institutions, investors and customers.

Climate risk issues are subject to the rigours and guidelines arising from the corporate risk management process. The body responsible for overseeing PGE Group's enterprise risk management process, including climate risk, is the Risk Committee, as in the case of financial risks. Having a Risk Committee at the top executive level that reports directly to the Management Board ensures supervision over the effectiveness of risk management processes across the entire Group. This positioning of the risk function allows for an independent assessment of individual risks, their impact on PGE Group and the mitigation and control of significant risks through dedicated instruments.

The assessment of climate and environmental risks is carried out on the basis of the General Procedure for Enterprise Risk Management. At PGE Group, climate risk is analysed both in the context of the impact of climate change on business as well as the impact of business on climate change. Identification and analysis of climate risk as well as continuous improvement of pro-environmental solutions and control tools allow effective management and minimisation of the impact on climate, while ensuring financial results for PGE Group. The solutions developed by PGE Group are aimed at its development and sustainable transition in line with climate-related requirements and with care for all stakeholders.

Climate issues are assessed centrally in PGE S.A., taking into account all activities of the Group and its constituent entities. This means that the result of the assessment is given collectively, at the Group level.

The approach to climate risks is inspired by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), however, the method concerning inventory and risk assessment adopted is an internal PGE concept.

In 2022, PGE Group once again took part in an international study on the company's environmental impact, i.e. Carbon Disclosure Project - CDP (https://www.cdp.net/en). The Group responded to global investor queries on the climate and water resource impacts of its operations and identified both the risks and opportunities involved.

There is an interdependence between the risks and opportunities for businesses related to the climate. Any business is affected by two types of climate risk:

- physical risks, related to the physical effects of climate change, i.e. real threats in the form of extreme weather events, drought, flooding;
- transition risks (also known as transformation risks) towards a low-carbon and climate-resilient economy; these relate to meeting regulatory requirements, implementing new technologies or the impact on a company's reputation.

The changing climate and climate change mitigation and adaptation efforts simultaneously provide new opportunities and chances for business development. This is why PGE Group focuses not only on risks but also on opportunities so as to ensure resilience to risks and to increase sustainable earnings. Climate-related opportunities at PGE Group primarily concern:

- resource efficiency, e.g. by working on waste management solutions and recovering valuable products from wind turbine blades,
- new energy sources, e.g. through investment in offshore and onshore wind farms, as well as PV farms, the construction of emission-free hybrid electricity storage,
- new products, e.g. expanding the product portfolio with PRO EKO initiatives - products that align with low-carbon heating systems, developing products/offerings that promote low-carbon activities, following changes in consumer preferences or developing insurance solutions for Offshore Wind Farms,
- increased resilience to climate change in the form of, among other things, competence building in the offshore wind power industry as part of PGE S.A.'s cooperation with secondary schools and universities in Poland, the establishment of scientific and research cooperation between PGE S.A. and institutions from the offshore wind power industry in Poland, or underground cabling.

PGE Group defines climate risk in five areas:

- securing aid funds and investment incentives in national regulations - related to increasing the impact of climate requirements relevant to the allocation of aid funds and investment incentives in national regulations,
- international regulations - related to EU legislation on energy and climate policy, in particular as part of the current Fit for 55 package,
- CO_2 emissions - related to the rising costs of emission allowances, which may adversely affect the profitability of generating units or lead to discontinuation of production in these units,
- operations - related to extreme weather events or changes in climate conditions that may adversely affect the assets and operating activities of PGE Group,
- investments - concerning PGE Group's failure to meet its investment commitments, aimed at green transition, at EU, national and own strategic objectives.

Each climate risk area is assessed in the short term, medium term and long term. The adopted time horizons are due to analogies with ongoing external research.

Assessing the impact of physical climate risks on operations

Global warming, changing precipitation patterns, rising sea levels and extreme weather events are increasingly posing serious challenges to the resilience of electricity systems, increasing the likelihood of disruption. Climate change directly affects every segment of the electricity system: both generation potential and capacity, heating and cooling demand, the resilience of transmission and distribution networks and demand patterns.

PGE Group, being aware of the risks posed by climate change, as part of the first phase of the climate risk management process, conducted an assessment in 2022 of the relevant climatic physical (material) risks - which could have a negative impact on its operations, supporting adaptation to climate change and enhancing resilience to climate risks. Climatic factors in the form of mainly temperature, precipitation and wind and their negative impact on key activities in the Group were assessed.

An assessment of the risks associated with climatic physical hazards in the PGE Group in 2022 was carried out in the current and long-term perspective using scientific models describing possible climate scenarios, i.e:

- RCP 4.5- the optimistic scenario, which assumes the introduction of new technologies to achieve a higher reduction in greenhouse gas emissions than is currently the case, assuming an increase in global average temperature of approx. 2.5° at the end of the 21st century relative to the pre-industrial era and
- RCP 8.5- a pessimistic scenario that assumes a continuation of the current rate of increase in greenhouse gas emissions, on a business-as-usual basis, assuming that, by the end of the 21st century, the Earth's average temperature will have risen by 4.5° relative to the pre-industrial era.

The assessment carried out showed a low to medium impact of risks related to climatic physical hazards on key activities in the Group in 2022. According to the criterion adopted, risks whose assessment showed a high impact were tested. An important role in the impact assessment process is played by, among others, the implementation of adaptation measures developed in PGE Group to increase the resilience of the power systems to climate change in the form of the use of more weather-proof solutions in the form of a cabling programme (replacement of overhead transmission networks with cables placed in the ground), preventive management of key infrastructure elements affecting the continuity of operations, insurance against events related to weather phenomena or precise analyses of land for new investments.

Impact of transition climate risks on operations

The PGE Group's transitional climate risks mainly relate to areas affecting the transformation towards achieving the planned climate neutrality by 2050, i.e., among others: requirements and regulation of existing products and services (area: policy and law), replacement of existing products and services with their low-carbon counterparts (area: technology) and stakeholder concerns/negative feedback (area: reputation). Examples of risks from the above areas are listed below, by category:

Politics and law

Climate regulations have a direct impact on energy companies. PGE Group companies, like other entities in the energy sector, are exposed to risks and threats resulting from the nature of their operations and functioning in a specific market and regulatory and legal environment. PGE Group operates in an environment characterised by a significant impact of domestic and foreign regulations. The risk of current regulations is particularly relevant in the context of raising capital, grants and support from aid funds.

PGE Group undertakes a number of activities related to monitoring available sources of support, the reliable preparation of application documentation and the use of expert know-how. PGE Group has extensive experience in obtaining preferential support and has the knowledge and staff to successfully implement this process.

Emerging regulations

The emerging regulations are important to implement the strategy and to support an effective transition to low-carbon technologies. PGE Group aims to make full use of available financing options for green investments. Emerging regulatory changes, such as support for EU infrastructure to stimulate sustainable investment, addressing the lack of financing, penalties for climate-negative transactions, may give rise to significant risks. These changes will have an impact on credit risk and may affect the cash flows generated by PGE Group assets and thus affect their income value.

The risk of rising costs of greenhouse gas emission allowances, including a reduction in the cap on free emission allowances for district heating, has the effect of reducing the ability to finance low- and zero-carbon investments.

PGE Group is systematically taking measures to reduce greenhouse gas emissions. Decarbonisation of generation assets will intensify with the implementation of the new PGE Group strategy. As a result, PGE's contribution to avoiding CO2 emissions by 2030 is expected to be 120 million tonnes. At the same time, pro-environmental investments form the core of PGE Group's investment activities. In addition, the Group invests in asset modernisation and development investments, including optimising combustion processes and introducing solutions to improve generation efficiency, higher fuel and raw material consumption efficiency and reducing the energy intensity of generation processes and internal needs.

Technology

A permanent reduction in emissions intensity is to be achieved in the PGE Group by changing generation technologies, investing in new technologies, expanding the renewable portfolio, developing the circular economy and enabling customers to participate in the energy transition. Technology risk also includes the selection of optimal and efficient new technologies, the exploitation of potential by PGE Group. By 2030, the share of low- and zero-carbon sources in the Group's generation portfolio is expected to reach 85% and renewables will account for 50% of the energy generated. PGE Group aims to achieve climate neutrality by 2050.

Reputation

Reputation risk for PGE Group is very significant as the energy sector plays an important role in supporting an effective transition to a low-carbon and ultimately zero-carbon economy. As a transition leader, PGE Group is focused on reducing its environmental impact. A sustainable reduction in emissions intensity is to be achieved by changing generation technologies, expanding the renewable portfolio and enabling customers to participate in the energy transition by offering them attractive products. Failure to pay due attention to the low-carbon economy and ESG issues can cause problems with access to capital.

In order to mitigate risk at PGE Group, a team for the calculation of the carbon footprint of the PGE Group was established, a joint initiative was created within the Polish Association of Combined Heat and Power Plants to develop a sectoral guide for the uniform recognition of the carbon footprint of power plants, combined heat and power plants, including heat transmission and distribution, and electricity distribution activities, and the staffing of organisational units involved in processes related to reporting, decarbonisation and risk assessment was increased.

26.5 Market (financial) risk - sensitivity analysis

PGE Group is mainly exposed to the EURPLN exchange rate risk and to the risk of changes in reference interest rates of PLN, EUR. It also has positions in US dollars, which are smaller in scale and therefore the risk associated with them for the Group is low. For the purpose of sensitivity analysis of changes in market risk factors, PGE Group uses the scenario analysis method, i.e. expert scenarios reflecting subjective assessment with respect to future development of market risk factors.

The scenario analysis presented in this point is intended to analyse the influence of changes in market risk factors on consolidated financial results. With regard to interest rate risk and currency risk, only those positions that meet the definition of financial instruments are covered.

In sensitivity analysis related to interest rate risk, PGE Group applies parallel shift of interest rate curve related to a potential possible change of referential interest rates during the following year.

In case of sensitivity analysis of interest rates' fluctuations, the effect of risk factors' changes could be recorded in the consolidated statement of comprehensive income as income or expenses or as revaluation of financial instruments measured at fair value.

The sensitivity analysis related to all types of market risks PGE Group is exposed to as at the reporting date, indicating the potential influence of changes of individual risk factors by class of financial assets and liabilities on profit before tax is presented below.

The value of exposure to currency risk for derivatives (forward instruments) is their nominal value together with interest accrued to the reporting date, translated into PLN at the closing rate as at December 31, 2022 and December 31, 2021 respectively, without taking into account the discount. The book value of these derivatives is the fair value measurement.

Sensitivity analysis for currency risk

The table below shows the sensitivity of financial instruments to reasonably possible changes in exchange rates, with all other risk factors held constant.

CLASS OF FINANCIAL INSTRUMENTS	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR CURRENCY RISK AS AT DECEMBER 31, 2022						
		Value exposed to risk	EUR/PLN		DKK/PLN		USD/PLN	
			impact on financial result / equity		impact on financial result / equity		impact on financial result / equity	
			+10%	-10%	+10%	-10%	+10%	-10%
Trade and other financial receivables	9,306	1,329	133	(133)	-	-	-	-
Cash and cash equivalents	11,887	1,926	186	(186)	6	(6)	1	(1)
Derivatives measured at fair value	771	1,514	-	-	-	-	151	(151)
Hedging derivatives	736	680	67	(67)	-	-	-	-
Interest bearing loans and borrowings	(5,870)	(40)	-	-	-	-	(4)	4
Bonds issued	(2,067)	(655)	(66)	66	-	-	-	-
Lease liabilities	(999)	(6)	(1)	1	-	-	-	-
Trade and other financial payables	(7,185)	(2,298)	(178)	178	-	-	(51)	51
Derivatives measured at fair value	(1,230)	(4,662)	-	-	-	-	(319)	319
Impact on financial result			**141**	**(141)**	**6**	**(6)**	**(222)**	**222**
Hedging instruments	32	(9,167)	2,694	(2,694)	-	-	46	(46)
Impact on revaluation reserve			**2,694**	**(2,694)**	**-**	**-**	**46**	**(46)**

CLASS OF FINANCIAL INSTRUMENTS	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR CURRENCY RISK AS AT DECEMBER 31, 2021						
		Value exposed to risk	EUR/PLN impact on financial result / equity		DKK/PLN impact on financial result / equity		USD/PLN impact on financial result / equity	
			+10%	-10%	+10%	-10%	+10%	-10%
Trade and other financial receivables	7,931	1,718	172	(172)	-	-	-	-
Cash and cash equivalents	6,733	964	86	(86)	11	(11)	-	-
Derivatives measured at fair value	108	150	-	-	-	-	15	(15)
Hedging derivatives	801	819	66	(66)	-	-	-	-
Interest bearing loans and borrowings	(7,856)	(264)	(13)	13	-	-	(14)	14
Bonds issued	(2,046)	(642)	(64)	64	-	-	-	-
Lease liabilities	(924)	(8)	(1)	1	-	-	-	-
Trade and other financial payables	(5,118)	(1,961)	(192)	192	(1)	1	(3)	3
Derivatives measured at fair value	(49)	(365)	-	-	-	-	7	(7)
Impact on financial result			**54**	**(54)**	**10**	**(10)**	**5**	**(5)**
Hedging instruments	767	15,569	2,192	(2,192)	-	-	3	(3)
Impact on revaluation reserve			**2,192**	**(2,192)**	**-**	**-**	**3**	**(3)**

Sensitivity analysis for interest rate risk

The Group identifies exposure to interest rate risk related to WIBOR, EURIBOR and LIBOR. The table below presents the sensitivity of financial instruments to reasonably possible changes in interest rates, under assumption of stability of other risk factors.

FINANCIAL ASSETS AND LIABILITIES	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR INTEREST RATE RISK AS AT DECEMBER 31, 2022						
		Value exposed to risk	WIBOR impact on financial result / equity		EURIBOR impact on financial result / equity		LIBOR impact on financial result / equity	
			+50%	-50%	+25%	-25%	+25%	-25%
Derivatives measured at fair value through profit or loss - assets	771	766	-	-	-	-	2	(2)
Interest bearing loans and borrowings	(5,870)	(3,587)	(18)	18	-	-	-	-
Bonds issued	(2,067)	(1,412)	(7)	7	-	-	-	-
Derivatives - equity and liabilities	(1,230)	(1,229)	(2)	2	-	-	(2)	2
Impact on financial result			**(27)**	**27**	**-**	**-**	**-**	**-**
Hedging instruments	32	32	58	(58)	(12)	12	-	-
Impact on revaluation reserve			**58**	**(58)**	**(12)**	**12**	**-**	**-**

FINANCIAL ASSETS AND LIABILITIES	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR INTEREST RATE RISK AS AT DECEMBER 31, 2021				
		Value exposed to risk	WIBOR impact on financial result / equity		EURIBOR impact on financial result / equity	
			+50bp	-50bp	+25bp	-25bp
Derivatives measured at fair value through profit or loss - assets	108	61	-	-	-	-
Interest bearing loans and borrowings	(7,856)	(5,443)	(26)	26	-	-
Bonds issued	(2,045)	(1,404)	(7)	7		
Derivatives	(49)	(48)	-	-	-	-
Impact on financial result			**(33)**	**33**	**-**	**-**
Hedging instruments	767	313	87	(95)	(14)	15
IMPACT ON REVALUATION RESERVE			**87**	**(95)**	**(14)**	**15**

Sensitivity analysis for commodity price risk

The Group identifies exposure to the risk of changes in commodity prices, including raw materials for electricity generation.

The table below presents the sensitivity analysis to changes of the purchase cost of selected commodities by 10%:

COMMODITY	AS AT DECEMBER 31, 2022			AS AT DECEMBER 31, 2021		
	Cost to purchase commodities	Impact on financial result		Cost to purchase commodities	Impact on financial result	
		+10%	-10%		+10%	-10%
Hard coal	8,085	809	(809)	2,932	293	(293)
CO_2 emission allowances for captive use	11,765	1,177	(1,177)	14,024	1,402	(1,402)
Natural gas [m3 000s]	1,570	157	(157)	980	98	(98)
Biomass	196	20	(20)	150	15	(15)
Fuel oil	272	27	(27)	160	16	(16)
TOTAL	**21,888**	**2,190**	**(2,190)**	**18,246**	**1,824**	**(1,824)**

26.6 Hedge accounting

ACCOUNTING POLICIES

Hedge accounting

Changes in the fair value measurement of derivative financial instruments designated as CCIRS and IRS cash flow hedges are taken to the revaluation reserve for the portion that represents an effective hedge, while the ineffective portion of the hedge is taken to the income statement.

{Amounts of cumulative remeasurement to fair value of a hedging instrument previously recognised in the revaluation reserve will be transferred to the statement of profit and loss in the period or periods during which the hedged item affects the statement of profit and loss. Alternatively, if the hedge of a planned transaction results in the recognition of non-financial assets or non-financial liabilities, the Group excludes the amount from equity and includes it in the initial cost or other carrying amount of a non-financial asset or liability.

In connection with loans received from PGE Sweden AB (publ), PGE S.A. concluded CCIRS transactions, hedging the exchange rate. In these transactions, banks - counterparties pay PGE S.A. interest based on a fixed rate in EUR and PGE S.A. pays interest based on a fixed rate in PLN. In the consolidated financial statements, a relevant part of the CCIRS transaction is treated as a hedge of bonds issued by PGE Sweden AB (publ).

PGE S.A. hedges the risk of changes in cash flows resulting from foreign exchange rates in connection with forward contracts for the purchase of carbon emission allowances, the price of which is expressed in EUR.

PGE S.A. also applies hedge accounting to IRS transactions, hedging the interest rate in connection with its financial commitments under credit agreements such as the Credit Agreement with a bank syndicate concluded on September 7, 2015 and Credit Agreement with Bank Gospodarstwa Krajowego concluded on December 17, 2014 and under the market bonds issued on May 9, 2019. In these transactions, banks - counterparties pay PGE S.A. interest based on a fixed rate in EUR and PGE S.A. pays interest based on a fixed rate in PLN.

To recognise the above transactions, PGE Group applies hedge accounting.

The source of ineffectiveness for the application of hedge accounting is exclusively the CCIRS transaction, which hedges the price of bonds issued by PGE Sweden AB.

	Year ended December 31, 2022
VALUE OF HEDGED ITEM AS OF JANUARY 1	**642**
Accrued interest	19
Paid interest	(19)
Exchange differences	13
VALUE OF HEDGED ITEM AS OF DECEMBER 31	**655**

Information on hedging instruments - maturity structure as at December 31, 2022. Payments received by the Group are shown with a 'minus' sign and payments made by the Group are shown with a 'plus' sign.

Derivative instrument	Currency	Within 1 year	From 1 year to 5 years	Over 5 years
CCIRS	EUR	9	27	(266)
IRS	PLN	(194)	(277)	(56)
Currency forwards	EUR	(529)	(20)	-
Currency forwards	USD	(14)	-	-

The Group estimates that the impact of the ineffective part of the hedge, resulting from the EUR exchange rate and the change in WIBOR and recognised in the income statement, will not have a material impact on future financial statements of PGE Group.

The impact of hedge accounting on the revaluation reserve is presented in note 20.3 to these financial statements.

EXPLANATORY NOTES TO THE STATEMENT OF CASH FLOWS

27. Statement of cash flows

ACCOUNTING POLICIES

Statement of cash flows

The statement of cash flows is prepared using the indirect method.

27.1 Cash flows from operating activities

(Gain) / loss on investing activities

	Year ended December 31, 2022	Year ended December 31, 2021
Valuation of derivatives based on accrual basis	71	(9)
(Profit) / loss on sale of property, plant and equipment	(21)	(50)
(Profit) / loss on disposal of financial non-current assets	(47)	19
(Profit) / loss on loss of control	-	(324)
Other	15	1
(PROFIT) / LOSS ON INVESTING ACTIVITIES, TOTAL	**18**	**(363)**

Change in receivables

	Year ended December 31, 2022	Year ended December 31, 2021
Change in trade receivables and other financial receivables	(1,375)	(2,927)
Adjustment for purchase/sale of subsidiary	4	(40)
Adjustment for deposits	20	3
Other	(22)	6
TOTAL CHANGE IN RECEIVABLES	**(1,373)**	**(2,958)**

Change in inventories

	Year ended December 31, 2022	Year ended December 31, 2021
Change in inventories	(2,729)	934
Adjustment for transfer of investment materials to property, plant and equipment	(23)	(68)
Adjustment for purchase/sale of subsidiary	25	-
TOTAL CHANGE IN INVENTORIES	**(2,727)**	**866**

Change in liabilities, excluding loans and borrowings

	Year ended December 31, 2022	Year ended December 31, 2021
Change in trade and other financial payables	2,067	1,166
Change in other non-financial liabilities	1,055	123
Adjustment for change in investment liabilities	(163)	145
Adjustment for purchase/sale of subsidiary	(8)	(12)
Other	54	(4)
TOTAL CHANGE IN LIABILITIES	**3,005**	**1,418**

Change in other non-financial assets, prepayments

	Year ended December 31, 2022	Year ended December 31, 2021 _restated data_
Change in other assets	(956)	(475)
Change in deferred income	124	62
Change in advances for construction in progress	(134)	54
Adjustment for purchase/sale of subsidiary	(7)	(16)
Change in balance concerning financing/investing activities	(187)	(45)
Other	30	(62)
TOTAL CHANGES IN OTHER NON-FINANCIAL ASSETS, PREPAYMENTS	**(1,130)**	**(482)**

Change in provisions

	Year ended December 31, 2022	Year ended December 31, 2021
Change in provisions	6,427	2,641
Change in actuarial provisions recognised in other comprehensive income	178	404
Change in rehabilitation provision recognised in assets	542	821
Change in investing activities	-	(39)
Adjustment for purchase/sale of subsidiary	(25)	-
Other	25	(14)
TOTAL CHANGE IN PROVISIONS	**7,147**	**3,813**

27.2 Cash flows from investing activities

Purchase of property, plant and equipment and intangible assets

In 2022, the largest expenditure on the acquisition of property, plant and equipment and intangible assets was incurred by the following segments:

- Distribution PLN 2,372 million
- Other activity PLN 1,839 million.
- District Heating PLN 1,114 million,
- Conventional Generation PLN 704 million,
- Renewables PLN 603 million,

Recognition and release of deposits with maturity over 3 months

Companies in the Conventional Generation segment are required to have Mine Liquidation Fund funds collected and invested in accordance with the requirements of the Mining and Geological Law.

Purchase of fully consolidated entity, after offsetting acquired cash

In the current reporting period, PGE EO S.A. purchased:

- 100% interest in Collfield Investments sp. z o.o. holding 100% interest in three special purpose vehicles (Future Energy sp. z o.o., Radzyn Clean Energy Poland sp. z o.o., Elwiatr Pruszyński sp. z o.o.) operating three wind farms with a total capacity of 84.2 MW. Expenditure on the acquisition of this company amounted to PLN 939 million and cash acquired amounted to PLN 183 million.
- 100% stake in Mithra companies owning 35 photovoltaic projects with a total capacity of 85 MW. Expenditure on the acquisition of these companies amounted to PLN 41m and cash acquired amounted to PLN 200 thousand.

Sale of subsidiary

In the current reporting period, the amount of 111 million relates to the proceeds from the sale of companies: Elbest sp. z o.o., TFI Energia S.A., Przedsiębiorstwo Usługowo-Handlowe TOREC sp. z o.o.

In the comparative period, the amount of PLN 368 million relates to proceeds from the sale of PGE EJ1 sp. z o.o.

Loss of control

In the comparative period, the total amount of PLN 118 million relates to cash of the sold PGE EJ1 sp. z o.o. (PLN 53 million) and the deconsolidated PGE Trading GmbH (PLN 13 million) as well as funds provided to EWB2 and EWB3 in a period of time when PGE lost control over them.

27.3 Cash flows from financing activities

Proceeds from issue of shares

The proceeds from the share issue of approximately PLN 3,197 million are intended to support PGE Group's investments in the development of renewable energy sources, decarbonisation through the development of low-carbon sources and the development of the distribution segment.

The funds raised from the share issue can only be used for investments in the three areas described above. The way in which the issue proceeds are spent will be subject to detailed reporting and audit.

Proceeds from share issue for non-controlling interests

Proceeds of 33 million in the current period and 419 million in the comparative period relate to half of the payments made by Ørsted for the subscription and capital increase in the contractual joint operations, i.e. EWB2 and EWB3.

Proceeds from loans, borrowings

In the current reporting period, PGE S.A. utilised available loans totalling PLN 2,200 million (PLN 273 million in 2021). In addition, companies in the Conventional Generation and District Heating segments received loans and borrowings from environmental funds worth approximately PLN 93 million (PLN 316 million in 2021).

Repayment of loans, credit facilities, bonds and leases

In the current reporting period, PGE S.A. repaid loans with a total value of PLN 3,985 million (PLN 976 million in 2021). PGE GiEK Branch Elektrownia Bełchatów repaid a loan of PLN 156 million in the current period (PLN 90 million in the previous period).

In addition to the above, the item mainly includes the repayment of overdrafts of PLN 94 million at PGE Paliwa.

Payments of the principal part of the lease obligation amounted to PLN 47 million in the current period and PLN 53 million in the previous period.

Interest paid

In the current reporting period, the item mainly includes interest on loans and borrowings of approximately PLN 270 million, on bonds of PLN 99 million, on financial instruments (CCIRS and IRS) of (-) PLN 65 million, and on leasing liabilities of PLN 41 million.

In 2021, the item mainly shows interest on loans and borrowings of approximately PLN 139 million, on bonds of PLN 41 million, on financial instruments (CCIRS and IRS) of PLN 137 million, and on lease liabilities of PLN 41 million.

OTHER EXPLANATORY NOTES

28. Contingent liabilities and receivables. Legal claims

ACCOUNTING POLICIES

Contingent liabilities

In applying IAS 37 to the recognition and measurement of provisions and contingent liabilities, an assessment is made of the probability of the occurrence of potential liabilities. If an adverse event is probable, a provision is recognised for the appropriate amount. If an adverse event is possible but not probable, a contingent liability is disclosed.

28.1 Contingent liabilities

	As at December 31, 2022	As at December 31, 2021
Contingent return of grants from environmental funds	616	476
Legal claims	86	104
Liabilities related to bank guarantees securing exchange transactions	601	262
Usufruct of land	61	67
Other contingent liabilities	31	5
Total contingent liabilities	**1,395**	**914**

Contingent return of grants from environmental funds

The liabilities represent the value of possible future returns of funds received by PGE Group companies from environmental funds for selected investments. The funds will be reimbursed, if investments for which they were granted, will not bring the expected environmental effect.

Legal claims

Dispute with WorleyParsons

In connection with the sale of the shares of PGE EJ1 sp. z o.o. to the State Treasury, which took place in 2021, and in accordance with the Agreement regulating the liability of the existing Shareholders for the costs of the dispute with Worley Parsons, PGE SA may be obliged to cover the costs of the dispute in the maximum amount of PLN 98 million if it loses the dispute. Therefore, for the purpose of determining the fair value of the payment received, an estimate of the probability of losing the dispute was made. As a result, an amount of PLN 59 million was recognised in contingent liabilities and an amount of PLN 39 million in short-term provisions. The amount of the provision adjusted the result on the sale of shares as presented in these financial statements.

Bank guarantee and surety liabilities

These liabilities represent bank guarantees provided as security for exchange transactions resulting from membership in the clearinghouse IRGiT.

Usufruct of land

Contingent liabilities pertaining to the usufruct of land are related to an update of annual fees for the usufruct of land. PGE GiEK S.A.'s branches have appealed the decisions in Local Appeals Courts. The value of the contingent liability was measured as the difference between the discounted sum of the updated perpetual usufruct fees for the entire period for which perpetual usufruct was established and the perpetual usufruct liability recognised in the books on the basis of the previous fees.

Other contingent liabilities

In August 2022, a 'Cost Reimbursement Agreement' was signed between EWB1, EWB2 and EWB3 and the company constructing the installation port. The contract provides the works contractor with reimbursement of the costs incurred in the construction of the installation port in the event that the companies do not continue with the investment in question. The value of the contingent liability is estimated at EUR 6.5 million and, on a company-by-company basis, the reimbursement payment will be made on a 33.33% basis to each company. Accordingly, the potential value of the commitment from PGE Group was estimated at PLN 20 million.

28.2 Other significant issues related to contingent liabilities

Non-contractual use of property

As described in note 21.4 of these financial statements the PGE Group recognises provision for disputes under court proceedings, concerning non-contractual use of properties for distribution activities. In addition, PGE Group is a party to disputes at an earlier stage of proceedings, and it cannot be ruled out that the volume and value of similar disputes will increase in the future.

Contractual liabilities related to purchase of fuels

In accordance with fuel purchase agreements (mainly coal and gas), PGE Group is required to collect a minimum volume of fuel and to not exceed the maximum gas uptake levels in specific periods. Failure to collect the minimum volumes of fuel or to exceed the maximum volumes specified in the contracts may result in the payment of the corresponding charges (in the case of one of the gas fuel purchase contracts, volumes not collected but paid for may be collected during the following three contractual years).

According to PGE Group, the terms of fuel delivery to its generating assets as described above do not diverge from the terms of delivery to other power stations in Poland.

Commitments to maintain fuel stocks

According to the applicable legislation, an energy enterprise producing electricity or heat is required to maintain fuel stocks in an amount sufficient to ensure continuity of supply of electricity or heat to consumers. In October 2021, the minimum hard coal stockpile was breached at all PGE GiEK S.A. generating units operating on hard coal (Opole Power Plant, Dolna Odra Power Plant, Rybnik Power Plant). By the end of 2021, hard coal stock levels were below the minimum volumes set for the month. The President of the Energy Regulatory Office positively considered the Branches' applications submitted in November 2021 and issued three separate administrative decisions extending the deadline for rebuilding hard coal stocks in the aforementioned Branches until February 28, 2022.

By the end of February 2022 at the Dolna Odra Power Plant and the Rybnik Power Plant, the coal stock had been rebuilt and exceeded the minimum level indicated in the regulations, while at the Opole Power Plant the required coal stock was not rebuilt until April 2022. Periods of reduction in hard coal stocks below the regulatory level also occurred in the following months of 2022 at all the generating units mentioned above. In particular, the maintenance of the minimum required level of hard coal stocks was significantly impacted by the change in regulations that came into force on 28 November 2022, which caused the required minimum levels of hard coal stocks at PGE GiEK S.A. to almost double. As a result, breaches of the minimum hard coal stock levels appeared in all the above-mentioned Branches at the end of November 2022. In December 2022, all of the above branches applied to extend the deadline for rebuilding coal stocks to March 31, 2023. The URE President granted the application of Elektrownia Opole Branch and issued an administrative decision extending the deadline for the restoration of hard coal stocks at this Branch until March 31, 2023, while the other Branches had not received a response to their applications by the date of these financial statements. In February 2023, the regulatory required level of hard coal stocks was rebuilt in all of the above branches.

The situation of failing to meet minimum levels of hard coal stocks and the problems of rebuilding these stocks were significantly influenced by a number of factors beyond the Group's control, most notably:

- unforeseen coal supply constraints, the main reasons for which were problems on the part of the rail carriers and the lack of a sufficient supply of coal from the country's largest suppliers,
- lack of full performance of contractual obligations by some hard coal suppliers,
- an accumulating backlog of rail yard shipments and, on the mines' side, untimely coal loading,
- no consent from the TSO for all requested reductions in electricity production,
- high (higher than planned) demand on the TSO's part for electricity from PGE GiEK S.A.'s generating units,
- restrictions on the transport of coal to the aforementioned generating units due to repair and modernisation works on railway lines.

Pursuant to art. 56 sec. 1 point 2) of the Energy Law, a fine will be imposed on anyone who fails to comply with the obligation to maintain the fuel stocks, (...), or does not replenish them in time, (...). It should be noted that the mere fact of violating a prohibition or order provided for in the Energy Law results in the imposition of a penalty by the President of the Energy Regulatory Office. As the Opole Power Plant failed to rebuild the required coal reserves by February 28, 2022, the risk of the President of the Energy Regulatory Office imposing a penalty on PGE GiEK S.A. is high. Pursuant to art. 56 sec. 3 of the Energy Law, the penalty may not be lower than PLN 10 thousand and higher than 15% of the penalised enterprise's revenue generated in the previous tax year, and if the cash penalty is related to a concession activity, then the penalty may not be lower than PLN 10 thousand or higher than 15% of the penalised enterprise's revenue generated from the concession activity in the previous tax year.

Taking into account the above mentioned reasons, independent from the Group, for not complying and not building the required minimum coal stocks within the designated timeframe, as well as the fact that PGE GiEK S.A. did not have any previous penalties on this account, which should be a premise for appropriate mitigation of the penalty, the Group estimates that the value of the potential penalty calculated should not be significant for the Group, therefore no provisions on this account were recognised in these financial statements.

Proceeds from increase of the Company's share capital

As described in note 33.3 of this report, the disbursement of funds obtained from the capital increase contrary to the provisions of the investment agreement may result in fines or even in the need to return the funds received.

28.3 Contingent receivables

At the reporting date, the Group has contingent receivables of PLN 120 million (PLN 72 million in the comparative period) for the potential refund of the excise tax overpayment. The Group is awaiting a ruling from the Supreme Administrative Court on what excise duty rate should be applied to account for the excise duty relief on the redemption of Energy Origin Rights generated from renewable energy sources before 1 January 2019.

According to PGE Group, this relief should be settled using the rate applicable at the time the electricity generated from renewable sources is sold to the end customer, i.e. 20 PLN/MWh. This was confirmed in a ruling by the Voivodship Administrative Court in Rzeszów of October 8, 2019.

The tax authority issued a cassation appeal against this ruling by the Voivodship Administrative Court on November 20, 2019.

28.4 Other court cases and disputes

Compensation for conversion of shares

On November 12, 2014, Socrates Investment S.A. (purchaser of receivables from former shareholders of PGE Górnictwo i Energetyka S.A.) filed a lawsuit seeking damages in the total amount of over PLN 493 million (plus interest) for the loss suffered in connection with the incorrect (in its opinion) determination of the share exchange parity in the process of the merger of PGE Górnictwo i Energetyka S.A. with PGE S.A. The company filed a response to the lawsuit. On November 15, 2017 the Company received a procedural document from the claimant - change of demand sought, increasing the amount sought in court to PLN 636 million. A hearing to appoint a court expert was held on November 20, 2018. A first-instance court proceeding is currently under-way. In a ruling dated April 19, 2019 the court appointed experts to draft an opinion on this matter. On April 8, 2022, a further hearing was held on the need and possibility of a supplementary opinion by an additional expert. To date, a final expert opinion has not been produced.

Furthermore, a similar claim was raised by Pozwy sp. z o.o., an entity that purchased claims from former PGE Elektrownia Opole S.A. shareholders. Pozwy sp. z o.o. filed a claim at the District Court in Warsaw against PGE Górnictwo i Energetyka Konwencjonalna S.A., PGE S.A. and PwC Polska sp. z o.o. ("Defendants"), demanded from the Defendants, in solidum, or jointly damages for Pozwy sp. z o.o. totalling over PLN 260 million with interest for allegedly incorrect (in its opinion) determination of the exchange ratio for PGE Elektrownia Opole S.A. shares for PGE Górnictwo i Energetyka Konwencjonalna S.A. shares in a merger of these companies. This lawsuit was delivered to PGE S.A. on March 9, 2017, and the deadline for responding to it was set by the court as July 9, 2017. The following companies: PGE S.A. and PGE GiEK S.A. submitted a response to the claim on July 8, 2017. On September 28, 2018, the District Court in Warsaw ruled in the first instance - the lawsuit by Pozwy sp. z o.o. against PGE S.A., PGE GiEK S.A. and PWC Polska sp. z o.o. was dismissed. On April 8, 2019 PGE S.A. received a copy of an appeal lodged by the claimant on December 7, 2018. A response from PGE S.A. and PGE GiEK S.A. to the appeal was drafted on April 23, 2019. A hearing was held on December 21, 2020. The Appeals Court ruled to repeal the District Court's ruling in its entirety and referred the case to the District Court for re-examination. On January 22, 2021 PGE S.A. and PGE GiEK S.A. appealed the ruling to the Supreme Court, requesting that the appealed ruling be repealed entirely and the case referred to the Appeals Court for re-examination. At a closed-door hearing on April 27, 2021 the Supreme Court reversed the judgement. The case was returned to be re-examined by the Appeals Court. The case is currently pending before the Court of Appeal in Warsaw, with witnesses being heard at subsequent hearings set by the Court.

PGE Group companies do not accept the claims being raised by Socrates Investment S.A., Pozwy sp. z o.o. According to PGE S.A., these claims are groundless and the entire consolidation process was conducted fairly and correctly. The value of the shares, which were subject to the process of consolidation (merger), was established by an independent company PwC Polska sp. z o.o. Additionally, merger plans of the companies mentioned above, including the exchange ratios were examined for accuracy and reliability by an expert appointed by the registration court; no irregularities were found. Then, the court registered the mergers of the aforementioned companies.

PGE Group did not create a provision for this claim.

Termination by Enea S.A. of long-term energy origin rights sale contracts

In connection with the termination by Enea S.A. in 2016 of long-term agreements for the sale of energy origin rights arising from certificates of origin of energy from renewable sources, PGE Group companies are in dispute with Enea S.A.

As a result of the willingness between the parties to hold settlement talks in an alternative dispute resolution, the court proceedings were suspended in 2020. In 2021, the parties to the disputes submitted them for conciliation by the General Prosecutor's Office of the Republic of Poland. In February 2022, the conciliation was concluded and the parties took steps to resume the litigation. In the course of 2022, the parties resumed conciliation and, at the concerted request of the parties, suspended the proceedings before the Courts.

On 20 December 2022, an agreement was signed for the amicable settlement of all pending disputes.

According to the content of the agreement concluded with PGE EO, its significant provision was the commitment of the parties to conclude a transaction for the sale to Enea S.A. of rights resulting from certificates of origin of electricity for a total price of approximately PLN 25 million. The sale took place on December 28, 2022.

According to the above agreements, PGE Group companies will receive approximately PLN 287 million by the end of April 2023. The impact of the concluded agreements increased the PGE Group's pre-tax financial result for 2022, taking into account the energy origin rights sale transaction described above, by approx. PLN 163 million.

29. Future investment commitments

As at December 31, 2022, PGE Group committed to incur capital expenditures on property, plant and equipment of approximately PLN 9,426 million. These amounts relate mainly to construction of new power units, modernisation of Group's assets and purchase of machinery and equipment.

	As at December 31, 2022	As at December 31, 2021
Distribution	2,824	1,058
Renewables	2,092	414
Other activity	2,067	3,570
District Heating	1,928	1,549
Conventional Generation	512	256
Supply	3	1
Circular Economy	-	4
TOTAL FUTURE INVESTMENT COMMITMENTS	**9,426**	**6,852**

The most significant future investment commitments concern:

- Distribution – investment commitments mainly related to grid assets amounting to approx. PLN 2,824 million,
- Renewables - modernisation of the upper reservoir of ESP Porąbka Żar - amounting to approximately PLN 909 million; performance of environmental studies together with preparation of the Environmental Impact Report and obtaining the Environmental Conditions Decision for the project involving the construction of the Baltica 1 wind farm in the Baltic Sea together with offshore and onshore connection infrastructure - amounting to approximately PLN 411 million; design and construction of new photovoltaic installations in over 40 different locations - amounting to approximately PLN 487 million;

- Other Activity - construction of two gas-and-steam units (PGE Gryfino 2050 sp. z o.o.) and contract for service for two gas turbines - approx. PLN 1,909 million,
- District Heating - construction of a gas-steam cogeneration power plant New EC Czechnica in Siechnice amounting to approx. PLN 747 million; construction of a gas-fuelled cogeneration source based on gas engines and a reserve and peak heat source in Bydgoszcz - amounting to approx. PLN 317 million; construction of Line II of the Thermal Processing Installation with Energy Recovery in Rzeszów - amounting to approx. PLN 324 million;

30. Tax settlements

Tax obligations and rights are specified in the Constitution of the Republic of Poland, tax regulations and ratified international agreements. According to the tax code, tax is defined as public, unpaid, obligatory and non-returnable cash liability toward the State Treasury, provincial or other regional authorities resulting from the tax regulation. Taking into account the subject criterion, the current taxes in Poland can be divided into five groups: income tax, turnover tax, asset tax, activity tax and other fees not classified elsewhere.

From the point of view of business entities, the most important is the taxation of incomes (corporate income tax), taxation of turnover (value added tax, excise tax) followed by taxation of assets (real estate tax and vehicle tax). Other payments classified as quasi – taxes must also be mentioned Among these there are social security charges.

The basic tax rates were as follows: corporate income tax rate – 19%, for smaller enterprises a 9% rate is possible; basic value added tax rate – 23%, reduced: 8%, 5%, 0%, furthermore some goods and products are subject to a VAT tax exemption.

The tax system in Poland is characterised by significant volatility and complexity of tax regulations, steep potential penalties for tax offences or crimes. Tax settlements and other activity areas subject to regulations (customs or currency controls) may be the subject of inspections by relevant authorities authorised to issue fines and penalties with interest. These inspections may cover tax settlements for a five-year period after the end of calendar year in which the tax was due.

Tax group

An agreement of September 18, 2014 on a tax group entitled "Tax Capital Group PGK PGE 2015" was in effect in previous years. Pursuant to an annex of July 28, 2021, the term of the agreement was reduced from 25 years to 7 years. "Tax Capital Group PGK PGE 2015" no longer exists as of December 31, 2021. From January 1, 2022, all companies included in the tax group agreement have become independent CIT taxpayers again.

VAT split payment mechanism, requirement to make payments to accounts registered with tax offices

The Group intends to effectively use the funds received from counterparties in VAT accounts to pay its liabilities that contain VAT. The level of funds in these VAT accounts on any given day depends mainly on how many of PGE Group's counterparties decide to use this mechanism and the relation between the payment deadlines for receivables and liabilities. As at December 31, 2021, the cash balance in VAT accounts was PLN 794 million.

Reporting of tax arrangements (MDR)

In 2019, new regulations introduced mandatory reporting of tax arrangements (Mandatory Disclosure Rules - MDR). In principle, a tax arrangement should be understood as any activity of which the main or one of the main benefits is is the obtaining of a tax advantage. In addition, events with so-called special or other distinctive hallmarks, as defined in the legislation, have been identified as a tax scheme. Three types of entities are subject to the reporting obligation: promoter, supporter and beneficiary. MDR regulations are complex and imprecise in numerous areas, which gives rise to interpretation doubts as to their practical application.

Excise tax

In connection with an incorrect implementation of EU regulations in the Polish legal system, PGE GiEK S.A. in 2009 initiated proceedings regarding reimbursement of improperly paid excise tax for the period January 2006 - February 2009. The irregularity consisted of taxing electricity at the first stage of sale, i.e. by producers, whereas sales to end users should have been taxed.

Examining the company's complaints with regard to the restitution claims against decisions issued by tax authorities refusing to confirm overpayment of excise tax, administrative courts ruled that the company did not bear the economic burden of the improperly calculated excise tax (which in the context of the resolution by the Supreme Administrative Court of June 22, 2011, file no. I GPS 1/11, precludes the return of overpaid amounts). According to the Supreme Administrative Court, the claims that the company sought, especially using economic analyses, are of an offsetting nature and therefore may be sought only in civil courts. Given the above, PGE GiEK S.A. decided to withdraw from the proceedings as regards restitution claims. Activities concerning the excess excise tax are currently being conducted in civil courts. On January 10, 2020 the District Court in Warsaw issued a ruling in a case brought by PGE GiEK S.A. against the State Treasury - Minister of Finance. The court dismissed the case. On February 3, 2020 the company filed an appeal with the Court of Appeals in Warsaw against the first-instance ruling. The session was held on December 2, 2020, after which the Court of Appeals in Warsaw rejected PGE GiEK's appeal in a ruling dated December 17, 2020. On April 23, 2021, PGE GiEK S.A. submitted a cassation complaint to the Supreme Court. On May 20, 2021 PGE GiEK received a response from the general prosecutor's office regarding the company's cassation complaint.

Given the significant uncertainty over the final ruling in this issue, the Group does not recognise in its financial statements any effects related to potential compensation in civil courts in connection with the improperly paid excise tax.

Real estate tax

Real estate tax constitutes a considerable burden for certain PGE Group companies. Regulations on the real estate tax are unclear in some areas and give rise to a range of interpretation doubts. Tax authorities such as municipality head, city mayor or president, often issue inconsistent tax interpretations in substantively similar cases. This means that PGE Group companies were and can be parties in proceedings relating to real estate tax. If the Group concludes that an adjustment of settlements is probable as a result of such a proceeding, it creates an appropriate provision.

Uncertainty concerning tax settlements

Regulations concerning tax on goods and services, corporate income tax and burdens related to social insurance are subject to frequent changes. These frequent changes result in a lack of reference points, inconsistent interpretations and few precedents that can be applied. The existing regulations also contain uncertainties that result in differing opinions as to legal interpretation of tax regulations both between state organs and between state organs and companies.

Taxation and other areas of activity (for example, customs and foreign exchange) may be audited by the authorities, which have the power to impose heavy fines and penalties, and any additional tax liabilities arising from an audit must be paid with high interest. These conditions make tax risk in Poland higher than in countries with a more stable tax system.

In consequence, the amounts presented and disclosed in financial statements may change in the future as a result of a final decision by a tax control organ.

The Tax Ordinance Act contains provisions from the General Anti-Abuse Clause (GAAR). GAAR is intended to prevent the formation and use of artificial legal structures created in order to avoid paying tax in Poland. GAAR defines tax avoidance as an activity performed primarily to obtain a tax benefit contrary under the circumstances to the subject and aim of the tax law. According to GAAR, such an activity does not result in a tax benefit if it is artificial. All proceedings regarding unjustified division of operations, involving intermediaries despite a lack of economic justification, mutually offsetting elements or other similar activities may be treated as a condition for the existence of artificial activities subject to GAAR. These new regulations will require a much greater judgement in assessing the tax effects of transactions.

The GAAR clause is to be applied in relation to transactions executed after its entry into force and to transactions that were executed prior to its entry into force but in the case of which tax benefits were or continue to be obtained after GAAR went into force. The implementation of these regulations will make it possible for Polish tax inspection authorities to question legal arrangements and agreements made by taxpayers such as group restructuring and reorganisation.

The Group recognises and measures current and deferred income tax assets and liabilities using IAS 12 Income tax based on profit (tax loss), tax base, unsettled tax losses, unused tax exemptions and tax rates, taking into account assessment of uncertainties related to tax settlements. If there is uncertainty over where or not and in what scope the tax authority will accept tax accounting for transactions, the Group recognises these settlements taking into account an uncertainty assessment.

31. Information on related parties

PGE Group's transactions with related entities are concluded based on market prices for provided goods, products and services or are based on the cost of manufacturing.

31.1 Associates and jointly controlled entities

The total value of transactions with such entities is presented in the table below.

	Year ended December 31, 2022	Year ended December 31, 2021
Sales to associates and jointly controlled entities	22	162
Purchases from associates and jointly controlled entities	1,316	2,092

	As at December 31, 2022	As at December 31, 2021
Trade receivables from associates and jointly controlled entities	6	51
Trade liabilities to associates and jointly controlled entities	17	178

The turnover and settlement balances result from transactions with Polska Grupa Górnicza S.A., PEC w Bogatyni S.A. and Polimex-Mostostal S.A.

31.2 State Treasury-controlled companies

The State Treasury is the dominant shareholder of PGE Polska Grupa Energetyczna S.A. and as a result in accordance with IAS 24 Related Party Disclosures, State Treasury companies are treated as related entities. PGE Group entities identify in detail transactions with approximately 40 of the biggest State Treasury subsidiaries.

The total value of transactions with such entities is presented in the table below:

	Year ended December 31, 2022	Year ended December 31, 2021
Sales to related parties	8,410	4,674
Purchases from related parties	10,324	7,650

	As at December 31, 2022	As at December 31, 2021*
Trade receivables from related parties	1,260	616
Trade liabilities to related parties	1,089	895

*restated data**

The largest transactions with companies where the State Treasury holds a stake concern Polskie Sieci Elektroenergetyczne S.A., PKN Orlen S.A., PKO Bank Polski S.A., Jastrzębska Spółka Węglowa S.A., Enea Wytwarzanie S.A., WĘGLOKOKS S.A., ENERGA - Operator S.A., Polska Grupa Górnicza sp. z o.o., PKP Cargo S.A., ENERGA Elektrownie Ostrołęka S.A., Zakłady Azotowe PUŁAWY S.A.

Moreover, PGE Group executes material transactions on the energy market via power exchange Towarowa Giełda Energii S.A. Due to the fact that this entity only manages exchange trading, purchases and sales transacted through this entity are not treated as transactions with related parties.

The values presented above do not include significant transactions with the Zarządca Rozliczeń S.A., including write-offs to the Price Difference Payment Fund and the settled, paid compensation to eligible entities for the introduction of the maximum price, as defined by the Act of October 27, 2022 on emergency measures to limit the level of electricity prices and support for certain consumers in 2023. This information is described in Note 33.5 Regulatory developments in the electricity market.

31.3 Management Board and Supervisory Board remuneration

The key management includes the Management Boards and Supervisory Boards of the parent company and significant Group entities.

PLN 000s	Year ended December 31, 2022	Year ended December 31, 2021
Short-term employee benefits (salaries and salary related costs)	37,433	34,387
Post-employment benefits	1,938	1,374
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**39,371**	**35,761**
Remuneration of key management personnel of entities of non-core operations	23,616	24,898
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**62,987**	**60,659**

PLN 000s	Year ended December 31, 2022	Year ended December 31, 2021
Management Board of the parent company	9,193	5,869
including post-employment benefits	*555*	*(935)*
Supervisory Board of the parent company	767	818
Management Boards – subsidiaries	25,647	25,545
Supervisory Boards – subsidiaries	3,764	3,529
TOTAL	**39,371**	**35,761**
Remuneration of key management personnel of entities of non-core operations	23,616	24,898
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**62,987**	**60,659**

PGE Group companies (direct and indirect subsidiaries) apply a rule whereby management board members are employed on the basis of management services contracts. In note 7.2 costs by nature and by function, this remuneration is presented under other costs by nature.

32. Audit company

The entity authorised to audit the separate financial statements of PGE S.A. for the year 2022 and the consolidated financial statements of PGE Group, as well as to provide a review of the semi-annual separate and consolidated financial statements for the year 2022 is PKF Consult sp. z o.o. sp.k. (PKF) under an agreement concluded on January 21, 2022.

The selection of the aforementioned audit firm for the years 2022-2024 was made by the Supervisory Board of PGE S.A. PKF is also the entity authorised to audit the annual financial statements of selected PGE Group companies. With regard to the comparative period, the entity authorised to audit the separate financial statements of PGE S.A. for the year 2021 and the consolidated financial statements of PGE Group, as well as providing the service of reviewing the semi-annual separate and consolidated financial statements for the year 2021 was Deloitte Audyt sp. z o.o. sp.k. (Deloitte) pursuant to an agreement executed on April 26, 2019.

The Group also used the services of both PKF and Deloitte:

- to verify annual, half-yearly packages for consolidation purposes,
- to confirm the conditions for maintaining the indicators set out in the financing agreements,
- to audit the annual financial statements of self-balancing branches,
- to audit reports on the regulatory value of assets and smart metering systems,
- to issue a report including an assessment of compliance with the requirements for the safekeeping of client assets,

The amounts of remuneration of the entities, including PKF in the current year and Deloitte in the comparative period, authorised to audit financial statements in respect of PGE Polska Grupa Energetyczna S.A. and Group subsidiaries are presented in the table below.

PLN 000s	Year ended December 31, 2022	Year ended December 31, 2021
Audit firm fee for:		
Audit of annual financial statements	2,682	3,469
Review of semi-annual financial statements	241	220
Other assurance services	699	685
TOTAL	**3,622**	**4,374**

33. Significant events during and after the reporting period

33.1 Impact of war in Ukraine on PGE Group's activities

PGE is the largest energy group in Poland. The Group's units meet approx. 40% of the country's electricity demand and serve over 5.5 million customers, while PGE's distribution area covers over 40% of Poland's territory, including areas on the border with Ukraine and Belarus. The Group's activities are therefore of exceptional importance for the country's energy security. It is crucial for PGE Group to secure the continuity of operation of power plants and CHPs and distribution infrastructure so as to ensure uninterrupted supplies of electricity and heat to residents, institutions and businesses.

In connection with the situation in Ukraine, a Crisis Team has been established at the central level of PGE Group to continuously monitor threats and identify potential risks. The Crisis Team's work includes monitoring the security of electricity and heat generation and supply and the protection of critical and IT infrastructure. The Team's tasks also include taking actions to minimise the risk of a crisis situation, preparing the companies in the Group in the event of a crisis situation and planning, organising and coordinating work to ensure the continuity of the Company's and PGE Group's operations.

Crisis teams have also been formed at the Group's key companies, operating 24 hours a day, carrying out continuous monitoring and identifying potential risks in order to minimise risk to electricity and heat supplies.

All key PGE Group companies have adopted guidelines for developing business continuity plans. On this basis, companies develop and then implement their own business continuity plans that take into account the specifics of the company. A key assumption of business continuity plans is the development of a catalogue of risks for critical processes, on the basis of which emergency scenarios (instructions, procedures) are developed and adopted. The emergency scenarios are periodically tested and continuously updated. In the current situation, companies have been tasked with urgently updating and reviewing internal regulations and business continuity plans.

In the current geopolitical situation, the importance of cyber security has increased drastically. PGE Group has implemented special procedures for monitoring ICT networks due to increased activity of criminal groups aiming to attack ICT (Information and Communication Technologies) and OT (Operational Technology) systems. With the CHARLIE-CRP state of alert in force, the emergency plans have been reviewed. This significant change in the Group's operating context triggered the launch of a threat analysis and risk estimation for cybersecurity incidents. There is also an increased focus on protecting the supply chain against cyberattacks.

The reality of cyber threats is confirmed by attacks carried out against PGE Group's ICT infrastructure and users of information systems. Targeted attacks aimed at phishing or attempting to install malware have been particularly visible recently. DDoS (Distributed Denial of Service) attacks have also been identified, the aim of which is to seize all available and free resources in order to prevent the entire service from functioning. Identified incidents of attacks have been documented, information has been communicated to the relevant State authorities.

The counter measures taken (monitoring, incident handling and system recovery) allow attacks to be successfully repelled. These actions, combined with adequate management, lead to the build-up of resilience in cyberspace. At the same time, development and improvement of safety management appropriate to the risks identified is being implemented.

The physical security of the Group's facilities has been strengthened. In order to protect key energy infrastructure, the Group cooperates with all services responsible for security in Poland, with a particular focus on the Internal Security Agency (ABW). In addition, PGE Dystrybucja is continuously supported by the Territorial Defence Forces (TDF).

Key areas at PGE Group affected by the war in Ukraine:

- fuel availability and prices,
- disruption of the component supply chain,
- rising inflation and interest rates and a weakening of the national currency,
- prices of CO_2 emission allowances
- improving energy efficiency,
- greater pressure on the energy transition through the development of RES,
- import of hard coal,
- cybersecurity,
- geopolitics,
- counterparties (sanctions lists).

PGE Group's key operating risks related to the war in Ukraine:

- reduced availability of hard coal on the Polish market due to the embargo on supplies of this raw material from Russia,
- increase in hard coal and gas prices on the international market,
- logistical disruptions due to the high utilisation of rolling stock and changes to current travel routes,
- reduced availability of biomass on the Polish market due to the suspension of feedstock imports from Belarus,
- logistical disruptions in road transport related to fuel prices and the availability of service providers' employees.

Risks related to gas supplies:

- EC Gorzów and EC Zielona Góra are supplied with field gas (so-called Ln nitrogenous gas). Due to the use of dedicated transmission infrastructure between the mine and the CHP plant, these generating assets are neutral to supply disruptions to Poland's National Gas Transmission System.
- EC Toruń, EC Zawidawie, EC Czechnica, EC Lublin Wrotków, EC Rzeszów, EC Zgierz, EC Bydgoszcz i EC Kielce receive high-methane gas (so-called E gas). Gas E taken from the National Transmission System is secured in the form of adequate storage and in Poland this is at a relatively high level.

PGE Group has no influence on the directions of supply and management of the transmission of gaseous fuel, therefore the risk of possible disruptions lies with PKN Orlen S.A. (formerly PGNiG S.A.) and the Transmission System Operator OGP Gaz - System S.A.(Gaz-System). PGE has established communication channels with PGNiG and Gaz-System in commercial and operational management in cooperation with the respective PGE Group location. In accordance with national gas supply constraint management programs, securing supplies for electricity and heat generation is favoured over other customers.

Impact of fuel availability constraints on electricity and heat generation:

- In the case of gas fuel, due to the lack of stock-holding capacities, a reduced availability translates into an immediate disruption in electricity and heat production. However, if there are back-up coal-fuelled water boilers at a CHP plant, it is possible to produce heat until these stocks are exhausted (this pertains to CHP Lublin Wrotków and CHP Rzeszów). In the case of CHP Gorzów, an OP-140 coal-fired steam boiler constitutes a back-up. At the EC Zielona Góra location, the reserve for heat production is constituted by oil boilers.
- The main suppliers of hard coal for electricity and heat production are Polish mining companies and coal importers. The CHPs have reserves of hard coal to enable uninterrupted production of electricity and heat. Due to the significant load and problems in the hard coal market, centrally-dispatched generating units have problems maintaining the minimum required stocks, resulting in the need to reduce production in order to maintain continuous operation of the units.

The electricity supply for PGE Dystrybucja S.A. and PGE Obrót S.A. is secured on a commercial basis. The physical supply of energy is conditioned by the current situation of balancing and operation of the National Power System. Disruptions in electricity generation will affect the energy supply depending on the location on the grid in the NPS. So far, PGE Group has not identified any risk associated with electricity or heat supply to residents, institutions and businesses.

Impact of war on commodity and financial markets:

The energy crisis has spread across Poland, Europe and the world. The war in Ukraine is having a major impact on the heat and electricity market in Poland. It has a major impact on the prices and availability of energy raw materials, which has translated into higher energy and CO2 emission allowance prices and the prices of goods and services, thereby affecting the levels of margins generated and capital raising opportunities. The disruption or complete shutdown of many production sites in Ukraine has disrupted the supply chain of components for key investments, or significantly increased their prices. The war in Ukraine has also highlighted the huge role of renewable energy sources (RES), the development of which is a response to the cut-off of energy supplies from Russia and high energy prices. Renewable sources are not burdened by fuel and CO_2 costs. High energy prices are forcing improvements in energy and operational efficiency. There is also pressure mounting to accelerate the energy transition in line with the European Union's climate policy, using the phase-out of fossil fuels to modernise the Polish economy. As the leader of Poland's national energy transition, PGE Group is integrating the need to achieve climate neutrality into its long-term business strategy. At the same time, PGE Group is making an important contribution to maintaining the country's energy security by ensuring the import of hard coal from directions such as South America for the needs of both electricity producers and households. A change in the behavioural patterns of energy market customers is also inevitable, leading to efficient energy consumption. This is intended to avoid problems with heat and electricity shortages during the winter. PGE Group mitigates these risks by continuing its policy of hedging electricity generation costs along with energy sales on the wholesale market, which is reflected both in hedging CO_2 emission allowances and foreign currencies for transaction purposes.

In order to protect against major increases in electricity prices for some consumers, regulations have been put in place resulting in an obligation to apply price caps in the supply of electricity to eligible consumers. The regulations provide for compensation for trading companies that sell electricity at capped prices. The way compensation is calculated generates the risk of not fully covering the costs associated with electricity supply and limits the margins earned on electricity sales.

Also, in line with the current decision to impose war sanctions on Russia and Belarus, PGE Group has introduced contractor compliance verification in its supply chains.

As a consequence, the aforementioned risks may have a material impact on individual areas of PGE Group's operations and future financial performance. In particular, the recoverable amount of selected asset items, the level of expected credit losses and the valuation of financial instruments may change.

The introduction by the European Union of an embargo on oil supplies from Russia will not be without an impact on the wider energy market, not least because of potential fuel price increases.

In view of the dynamic course of the war on the territory of Ukraine and its macroeconomic and market consequences, PGE Group will monitor its development on an ongoing basis and any events that occur will be reflected accordingly in the Group's future financial statements.

33.2 Planned disposal of coal assets to National Energy Security Agency

On March 1, 2022, the Council of Ministers adopted a resolution on the adoption of the document "Energy sector transition in Poland." Carve out of coal-based generation assets from companies with a State Treasury shareholding." According to the document, the carve out process will follow the formula of purchase by the State Treasury from PGE S.A., ENEA S.A., TAURON Polska Energia S.A. and ENERGA S.A. of all assets connected to generation of energy in power plants fuelled by hard coal and lignite, including the accompanying service companies. Due to the inseparability of lignite-fuelled energy complexes, lignite mines will also be among the assets acquired. Assets related to hard coal mining will not become a part of the entity operating coal-based energy generation units. The district heating assets in connection with their planned upgrades to low- and zero-carbon sources will not be the subject of this transaction. It is planned that the spin-off of assets from the energy groups will take place through the acquisition of shares in individual companies directly by the State Treasury and their subsequent consolidation within NABE through the contribution of shares in individual companies to the capital increase of PGE GiEK.

NABE will operate in the form of a holding company centred around PGE GiEK S.A., with the companies acquired from ENEA, Tauron and Energa being subsidiaries included in its capital.

NABE will be a fully self-sufficient entity, i.e. it will be able to provide on its own or - in the interim period - on the basis of agreements concluded with external entities, including the companies from which the assets are spun off, all internal and external functions necessary for uninterrupted operation, i.e. HR, IT, purchasing, trading.

All transactions required under the selected structure, if any, relating to the carve out of assets will be carried out on the basis of a market valuation by an independent entity and following independent due diligence. The individual valuations will take into account the financial liabilities that the generating companies, carved out as part of the transaction, have to their parent companies and/or financial liabilities to financing institutions.

Given the debt of the generation companies to their parent companies, accounting for the transactions is the subject of detailed arrangements between the State Treasury and the current owners and their lenders.

According to the document, after the carve out of coal-based generating assets, the energy companies will focus on developing their activities on the basis of their assets in the area of distribution, heating, trading and generation of energy in low- and zero-emission sources.

NABE's role will be to provide the necessary capacity balance in the power system. NABE will focus on maintenance and modernisation investments necessary to maintain the efficiency of the coal units in operation, including those aimed at reducing the carbon intensity of these units.

On July 23, 2021, PGE S.A., ENEA S.A., TAURON Polska Energia S.A. and ENERGA S.A. executed an agreement with the State Treasury regarding cooperation on the carve out of coal-based energy generation assets and their integration into NABE.

At the date of these financial statements, work is underway to finalise the due diligence process, the valuation of the spin-off companies and the determination of other key parameters for a future sale transaction. Especially, the valuation and settlement rules for the debt and other liabilities associated with the ring-fenced assets have not yet been determined. No corporate's decision concerning sale of coal assets have been made. As a result, it is currently not possible to reliably estimate the impact of the spin-off on PGE Group's future financial statements, including the level of expected future credit losses.

As at reporting date in PGE CG's opinion, the conditions of IFRS 5 regarding the activities held for sale in area of assets and liabilities as well as income and costs for the described coal assets are not met.

33.3 Planned capital injection for PGE S.A. by way of share issue

On January 18, 2022, the Management Board of PGE S.A. adopted a resolution to initiate a capital injection process for the Company in connection with planned investment projects in the area of renewable energy, decarbonisation and distribution.

The proceeds from the share issue, approx. PLN 3.2 billion, are intended to support PGE Group's investments across three areas:

- development of renewable energy sources,
- decarbonisation via development of low-carbon sources,
- development of the distribution segment.

On April 5, 2022, an investment agreement was concluded between PGE S.A. and the State Treasury concerning the acquisition by the State Treasury of shares issued as a result of the share capital increase. Under the terms of the agreement, the proceeds from the share issue may only be used for investment in the three areas described above. The way in which the issue proceeds are spent will be subject to detailed reporting and audit. Spending in contravention of the provisions of the investment agreement may result in fines or even the necessity to repay the funds. Which in turn may result in the share capital having to be reduced by the amount to be repaid.

33.4 PGE Paliwa sp. z o.o.'s implementation of decisions relating to the purchase and sale of coal

On 13 July and 8 August 2022, PGE Paliwa sp. z o.o. received decisions from the Prime Minister instructing the company to purchase at least 3 million tonnes of thermal coal with parameters close to the quality parameters used by households and to import it into the country by the end of April 2023. The company is in the process of implementing the decision.

The implementation of the decision will result in a temporary increase in PGE Group's cash requirements and a potential temporary increase in debt in connection with the settlement of coal purchase and resale transactions. In the current conditions, the company does not expect the implemented actions to have a material impact on PGE Group’s consolidated financial result.

PGE Paliwa sp. z o.o. is designated in the Regulation of the Minister of State Assets of November 2, 2022 on the list of entities authorised to conduct sales of solid fuel to municipalities, as one of the six marketing entities authorised to conduct sales of solid fuel to municipalities for preferential purchase. In accordance with the provisions of the Act of October 27, 2022 on preferential purchase of solid fuel for households, the selling price of solid fuel may not be higher than PLN 1,500 gross. At the same time, the selling company is entitled to compensation equal to the product of the quantity of solid fuel and the difference between the justified average unit cost of solid fuel over that period and the average net selling price of solid fuel over that period, plus value added tax.

PGE Paliwa has estimated and recognised an estimate of revenue from compensation for deliveries made in 2022 of PLN 131 million. The request for compensation for this period in accordance with the Law of October 27, 2022 on preferential purchase of solid fuel for households should be submitted by the Company by February 25, 2023. The company submitted the application on February 23, 2023. Applications for subsequent periods will be submitted for the period of a calendar month, within 60 days of the last day of the month to which the application relates.

The company is in the process of implementing these sales.

33.5 Regulatory changes on the electricity market

Due to the crisis in the energy market, the government has decided to introduce legal regulations that temporarily introduce exceptional measures for electricity prices and electricity tariffs in 2023. The Act of October 7, 2022 on special measures for the protection of electricity consumers in 2023 due to the situation on the electricity market (hereinafter the "Household Act") entered into force on October 18, 2022, and the Act of October 27, 2022 on emergency measures to limit the level of electricity prices and support certain consumers in 2023 (hereinafter the "Emergency Measures Act") entered into force on November 4, 2022.

According to the Household Act, an energy company carrying out commercial activities in the field of electricity trading is required to apply to household customers prices equal to those contained in the tariff in force on January 1, 2022 for individual tariff groups up to specified consumption limits. Once the consumption limits dedicated to household customers have been exceeded, a maximum price of 693 PLN/MWh (price excluding VAT and excise duty) will be used for billing household customers in accordance with the Emergency Measures Act in 2023. This means that electricity prices have been fixed by law and, therefore, in 2023, tariffs approved by the URE President will not directly affect electricity prices for households.

In addition, in accordance with the Emergency Measures Act 2023, the maximum electricity price for other eligible customers has been set at 785 PLN/MWh (price excluding VAT and excise duty). This price will, in principle, apply from 1 December 2022 to 31 December 2023. The indicated limit of the maximum price for eligible customers also applies to electricity sales contracts concluded or amended after February 23, 2022 and in cases where the maximum price will also apply to settlements for the period from the date of conclusion or amendment of these contracts until November 30, 2022. Energy companies have been required to successively make refunds resulting from the application of capped prices by the end of 2023.

Electricity trading companies, in accordance with the implemented regulations, shall be entitled to compensation for applying the same electricity prices in their settlements with household customers as on January 1, 2022. The compensation is the product of the electricity consumed at the point of consumption, up to the maximum consumption limits entitling customers to apply the 2022 prices to them, and the difference between the electricity price resulting from the electricity tariff approved by the URE President for 2023 and the electricity prices approved in the 2022 tariff. In turn, for the application of the maximum price of 693 PLN/MWh to household customers, trading companies will be entitled to compensation in the amount of the product of the volume of electricity consumed in a given month and the difference between the reference price and the maximum price, for each energy point. The reference price will be the electricity price resulting from the electricity tariff approved by the President of the Energy Regulatory Office for 2023. Compensation will also be due for the use of capped prices in settlements with other eligible parties. In this case, as a rule, the reference price for compensation payments will be calculated on the basis of the price of electricity in exchange contracts and the price of electricity purchased for sale to an eligible customer, plus the cost of redemption of certificates of origin and a margin.

Nonetheless the mechanisms introduced in the Household Act and the 2023 Emergency Measures Act should in principle compensate trading companies for the price reduction.

The financial position of the PGE Group from December 1, 2022 to December 31, 2023 is also affected by the provisions of the Emergency Measures Act in 2023, which introduced the obligation for electricity generators and power companies performing electricity trading activities to make monthly contributions to the account of the Price Difference Payment Fund ("Fund"). Contributions to the Fund are the product of the volume of electricity sold and the positive difference between the volume-weighted average market price of electricity sold and the volume-weighted average price cap of electricity sold, as regulated in the Decree of the Council of Ministers of November 8, 2022 on the manner of calculating the price cap.

A different way of calculating the price cap has been specified for individual generation sources:

- for lignite- and hard coal-fired generating units, the price cap takes into account, among other things, the unit cost of fuel consumed, the cost of CO_2 emission allowances, the efficiency of the generating units, the margin and a certain level of investment and fixed cost allowance of PLN 50/MWh.
- for units producing energy from renewable sources, the price cap is set in reference to a reference price, as referred to in art. 77 sec. 3 point 1 of the Act on Renewable Energy Sources, with the stipulation that for hydropower plants the price cap will be 40% of this preferential price.

For electricity trading companies:

- for energy sold to final consumers, the price limit is the product of the volume-weighted average price of electricity purchased on the day in question and a margin set as 1.035 or 1.03 (plus the unit cost of redemption of certificates of origin)
- for energy sold to customers other than final consumers, the price limit shall be constituted by multiplying the volume-weighted average price of energy purchased on the day in question by the margin defined as 1.015 or 1.01.

From January 1, 2023 onwards, trading companies will calculate the amount of the contribution to the Fund for the calendar month to which the settlement relates, taking into account the volume of electricity sales, the market price and the price cap for periods of 3 decades of that month, i.e. from the 1st to the 10th, from the 11th to the 20th and from the 21st to the last day of the month. Until December 31, 2022, the Fund contributions were calculated separately for each day of the month.

The above regulations had the following impact on the values reported in these financial statements for PGE Group companies:

- Fund contribution for December 2022 amounted to PLN 351 million (reduction of financial result).
- The reduction in revenue for 2022 under the Emergency Appropriations Act in 2023 amounted to PLN 808 million.
- The estimate of compensation due for 2022 was PLN 543 million.

The above figures for the reduction in revenue and compensation payable are estimates determined to the best knowledge available to PGE Group at the date of these financial statements.

33.6 Preliminary agreement to purchase 100% of shares in PKPE Holding sp. z o.o.

On December 28, 2022, PGE S.A. and Edison Holdings S.à.r.l. signed a Preliminary Share Purchase Agreement concerning PKPE Holding Sp. z o.o., pursuant to which the parties agreed to enter into a Final Agreement for the sale of 100% of shares in PKPE Holding sp. z o.o. In execution of the Preliminary Agreement, PGE S.A. will directly acquire 100% of the shares in PKPE Holding sp. z o.o. and indirectly 100% of the shares in PKP Energetyka S.A. as well as shares in other subsidiaries held by PKPE Holding sp. z o.o.

PKPE Holding Sp. z o.o. is a holding company controlling a number of entities the activities of which are focused around PKP Energetyka S.A. PKPE Group is a distributor and seller of electricity to the catenary, and additionally provides catenary maintenance services as well as supplying energy to customers outside the catenary on a TPA basis. PKPE Group also sells electricity to non-traction customers on a TPA basis.

The price to be paid by PGE has been set at approximately PLN 1,913.5 million based on an enterprise value determined as at March 31, 2022 of approx. PLN 5,944.5 million and will be settled based on a locked - box mechanism. The price will be subject to possible adjustments, especially by the amount of the outflow of funds from PKPE Group to the Edison Holdings S.à.r.l. group.

The transaction is expected to close on April 3, 2023. Payment for the shares will take place on the closing date of the transaction.

In certain cases involving, among other things, differences between the value of certain actual and projected financial data, the parties may withdraw from the Preliminary Agreement.

The transaction closing will be carried out provided that, in particular, the following conditions are met:

- approval of the Office of Competition and Consumer Protection is obtained,
- the court dispute concerning the privatisation of PKP Energetyka is ended,
- approval from the Minister of State Assets is obtained,
- approvals from the financing entities are obtained.

If the circumstances set out in the Preliminary Agreement arise, the parties may withdraw from the transaction.

The acquisition of PKPE Holding sp. z o.o. is in line with PGE Group's strategy. As a result of the transaction, PGE Group will gain access to the traction distribution network throughout the country.

33.7 Significant events after the reporting period

On March 7, 2023, PGE S.A. entered into a preliminary agreement with ZE PAK S.A. regarding the establishment of a joint special purpose vehicle. In order to cooperate directly on the project to build a nuclear power plant based on Korean APR1400 technology, PGE S.A. and ZE PAK S.A. intend to jointly establish a special purpose vehicle in the form of a joint stock company based in Konin, which will then purchase or acquire shares in a company tasked with implementing the nuclear power plant project with the potential participation of a technology partner.

The agreement summarises the basic terms of cooperation between the Parties in respect of a joint venture to participate in the development of an investment for the construction of a nuclear power plant, including the definition of the corporate governance and operations of the SPV and restrictions on the disposal of shares in the SPV. PGE S.A. and ZE PAK S.A. will hold an equal number of shares in the SPV and the corporate rules will be based on the principle of joint control.

The creation of the special purpose vehicle is subject to the approval of the President of the Office of Competition and Consumer Protection for the concentration. PGE S.A. and ZE PAK S.A. intend to notify the intention of concentration without delay.

At the same time, it is planned that the SPV, as part of the next phase of cooperation, will prepare:

- a feasibility study,
- land surveys,
- Environmental Impact Assessment for the planned construction of a Nuclear Power Plant.

34. Approval of the financial statements

These consolidated financial statements were approved for publication by the Management Board on March 20, 2023.

Warsaw, March 20, 2023

Signatures of members of the Management Board of PGE Polska Grupa Energetyczna S.A.

President of the Management Board	**Wojciech Dąbrowski**	*signed with a qualified electronic signature*
Vice-President of the Management Board	**Wanda Buk**	*signed with a qualified electronic signature*
Vice-President of the Management Board	**Lechosław Rojewski**	*signed with a qualified electronic signature*
Vice-President of the Management Board	**Paweł Śliwa**	*signed with a qualified electronic signature*
Vice-President of the Management Board	**Ryszard Wasiłek**	*signed with a qualified electronic signature*
Vice-President of the Management Board	**Rafał Włodarski**	*signed with a qualified electronic signature*
Signature of person responsible for drafting these financial statements	Michał Skiba Director, Reporting and Tax Department	*signed with a qualified electronic signature*

35. Glossary of terms and abbreviations

Presented below is a set of the most frequently used terms and abbreviations in these consolidated financial statements.

Abbreviation	Full term
CCIRS	Cross Currency Interest Rate Swap
CGU	Cash Generating Unit
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EPS 550	Carbon dioxide emission criterion per unit of electricity produced, introduced as part of the so-called "Winter Package", conditioning the participation of generating units in the capacity market - this limit is 550 gCO2/kWh.
ENESTA	ENESTA sp. z o.o w restrukturyzacji
EUA	European Union Allowances
EWB2, EWB3	Elektrownia Wiatrowa Baltica–2 sp. z o.o., Elektrownia Wiatrowa Baltica–3 sp. z o.o.
MLF	Mine Liquidation Fund
Fund	Price Difference Payment Fund
PGE Group, Group	PGE Polska Grupa Energetyczna S.A. Group
IRGiT	Izba Rozliczeniowa Giełd Towarowych S.A.
IRS	Interest Rate Swap
LTC	Long-term capacity and electricity sale contracts
IFRIC	Interpretations by the IFRS Interpretations Committee
KOGENERACJA S.A.	Zespół Elektrociepłowni Wrocławskich KOGENARACJA S.A.
IFRS	International Financial Reporting Standards
IFRS EU	International Financial Reporting Standards approved by the European Union
NABE	Narodowa Agencja Bezpieczeństwa Energetycznego S.A.
NFOŚiGW	National Fund for Environmental Protection and Water Management
TSO	Transmission System Operator
BCP	Business Continuity Plan
PGE S.A., Company, Parent	PGE Polska Grupa Energetyczna S.A.
PGE EC S.A.	PGE Energia Cieplna S.A.
PGE EO S.A.	PGE Energia Odnawialna S.A.
PGE GiEK S.A.	PGE Górnictwo i Energetyka Konwencjonalna S.A.
PGNiG	Polskie Górnictwo Naftowe i Gazownictwo S.A.
Financial statements, consolidated financial statements	PGE Group's consolidated financial statements
TGE	Towarowa Giełda Energii
URE	Urząd Regulacji Energetyki (Energy Regulatory Office)
Law for households	Act of 7 October 2022 on special solutions for the protection of electricity consumers in 2023 in connection with the situation on the electricity market (Dz.U.2023.269 t.j. of 2023.02.09)
Emergency measures act 2023	Act of 27 October 2022 on emergency measures to reduce the level of electricity prices and support for certain consumers in 2023 (Journal of Laws 2022.2243 of 2022.11.03)
WACC	Weighted Average Cost of Capital
WFOŚiGW	Voivodship Fund for Environmental Protection and Water Management
Social Fund	Social Fund