CONSOLIDATED FINANCIAL STATEMENTS

PGE Polska Grupa Energetyczna S.A.
for 2021

ended December 31, 2021
in accordance with IFRS (in PLNm)

Leading in the green transition

PGE GROUP'S SELECTED CONSOLIDATED FINANCIAL DATA

	Period ended December 31		Period ended December 31	
	2021	2020	2021	2020
	PLN million		EUR million	
Revenue from sales	**52,730**	**45,766**	**11,519**	**10,229**
Operating profit	5,123	1,408	1,119	315
Gross profit	4,871	314	1,064	70
Net profit for the reporting period	**3,945**	**148**	**862**	**33**
Net profit attributable to shareholders of the parent company	3,972	110	868	25
Comprehensive income	4,904	273	1,071	61
Net cash from operating activities	7,456	10,256	1,629	2,292
Net cash from investing activities	(4,367)	(6,037)	(954)	(1,349)
Net cash from financing activities	(528)	(1,357)	(115)	(303)
Net change in cash and equivalents	2,561	2,862	559	640
Net profit per share attributable to shareholders of the parent company (in PLN/EUR per share)	**2.12**	**0.06**	**0.46**	**0.01**
Diluted net profit per share attributable to shareholders of the parent company (in PLN/EUR per share)	**2.12**	**0.06**	**0.46**	**0.01**
Weighted average number of ordinary shares used to calculate profit per share	1,869,760,829	1,869,760,829	1,869,760,829	1,869,760,829

	As at		As at	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
	PLN million		EUR million	
Non-current assets	66,239	66,498	14,402	14,410
Current assets	22,714	15,089	4,938	3,270
Assets classified as held for sale	13	7	3	2
Total assets	**88,966**	**81,594**	**19,343**	**17,681**
Equity	48,291	43,501	10,499	9,426
Equity attributable to shareholders of the parent company	47,494	42,518	10,326	9,213
Share capital	**19,165**	**19,165**	**4,167**	**4,153**
Non-current liabilities	18,878	23,075	4,104	5,000
Current liabilities	21,797	15,018	4,740	3,254
Number of shares at the end of the reporting period	1,869,760,829	1,869,760,829	1,869,760,829	1,869,760,829
Book value per share (in PLN/EUR per share)	**25.40**	**22.74**	**5.52**	**4.93**
Diluted book value per share (in PLN/EUR per share)	**25.40**	**22.74**	**5.52**	**4.93**

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 4,5994 and for December 31, 2020 - EURPLN 4,6148.*
- *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, 2021 to December 31, 2021 - EURPLN 4,5775; for the period from January 1, 2020 to December 31, 2020 - EURPLN 4,472.*

Table of contents

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Note	Year ended December 31, 2021	Year ended December 31, 2020
STATEMENT OF PROFIT OR LOSS			
REVENUE FROM SALES	*7,1*	**52,730**	**45,766**
Cost of goods sold	*7,2*	(49,121)	(41,611)
GROSS PROFIT/(LOSS) ON SALES		**3,609**	**4,155**
Distribution and selling expenses	*7,2*	(1,515)	(1,492)
General and administrative expenses	*7,2*	(1,028)	(1,189)
Net other operating income/(costs)	*7,3*	4,057	(66)
OPERATING PROFIT / (LOSS)		**5,123**	**1,408**
Net finance costs, including:	*7,4*	(250)	(542)
Interest income calculated using the effective interest rate method		*35*	*32*
Share of profit/(loss) of entities accounted for using the equity method	*7,5*	(2)	(552)
GROSS PROFIT/(LOSS)		**4,871**	**314**
Income tax	*8,1*	(926)	(166)
NET PROFIT/(LOSS) FOR THE REPORTING PERIOD		**3,945**	**148**
OTHER COMPREHENSIVE INCOME			
Items that may be reclassified to profit or loss in the future:			
Valuation of debt financial instruments	*20,3*	12	(4)
Valuation of hedging instruments	*20,3*	757	387
Foreign exchange differences from translation of foreign entities	*20,4*	-	6
Deferred tax	*8,1*	(146)	(73)
Items that may not be reclassified to profit or loss in the future:			
Actuarial gains and losses from valuation of provisions for employee benefits	*22*	404	(235)
Deferred tax	*8,1*	(77)	46
Share of other comprehensive income of equity-accounted entities	*7,5*	9	(2)
OTHER COMPREHENSIVE INCOME FOR THE REPORTING PERIOD, NET		**959**	**125**
TOTAL COMPREHENSIVE INCOME		**4,904**	**273**
NET PROFIT/(LOSS) ATTRIBUTABLE TO:			
shareholders of the parent		3,972	110
non-controlling interests		(27)	38
COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
shareholders of the parent		4,929	235
non-controlling interests		(25)	38
EARNINGS AND DILUTED EARNINGS PER SHARE ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT (IN PLN)	*20,7*	**2.12**	**0.06**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Note	As at December 31, 2021	As at December 31, 2020
NON-CURRENT ASSETS			
Property, plant and equipment	9	60,817	61,741
Investment property	10	39	41
Intangible assets	11	682	646
Right-of-use assets	12	1,257	1,309
Financial receivables	25,1,1	204	191
Derivatives and other assets measured at fair value through profit or loss	25,1,2	364	132
Shares and other equity instruments		117	57
Shares accounted for using the equity method	13	156	152
Other non-current assets	17,1	873	839
CO_2 emission allowances for captive use	16	797	39
Deferred income tax assets	14,1	933	1,351
		66,239	**66,498**
CURRENT ASSETS			
Inventories	15	2,189	3,123
CO_2 emission allowances for captive use	16	4,106	1,735
Income tax receivables		144	8
Derivatives and other assets measured at fair value through profit or loss	25,1,2	575	423
Trade and other financial receivables	25,1,1	7,727	4,812
Other current assets	17,2	1,240	799
Cash and cash equivalents	18	6,733	4,189
		22,714	**15,089**
ASSETS CLASSIFIED AS HELD FOR SALE		**13**	**7**
TOTAL ASSETS		**88,966**	**81,594**
EQUITY			
Share capital	20,1	19,165	19,165
Reserve capital	20,2	20,154	18,410
Hedging reserve	20,3	609	(13)
Foreign exchange differences from translation	20,4	2	5
Retained earnings	20,5	7,564	4,951
EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT		**47,494**	**42,518**
Equity attributable to non-controlling interests	20,6	797	983
TOTAL EQUITY		**48,291**	**43,501**
NON-CURRENT LIABILITIES			
Non-current provisions	21	8,559	11,207
Loans, borrowings, bonds and lease	25,1,3	8,666	10,025
Derivatives	25,1,2	1	385
Deferred income tax liabilities	14,2	402	345
Deferred income and government grants	23,1	600	600
Other financial liabilities	25,1,4	517	448
Other non-financial liabilities	24	133	65
		18,878	**23,075**
CURRENT LIABILITIES			
Current provisions	21	12,600	7,311
Loans, borrowings, bonds and leases	25,1,3	2,160	1,384
Derivatives	25,1,2	82	63
Trade and other financial liabilities	25,1,4	4,601	3,504
Income tax liabilities		20	476
Deferred income and government grants	23,2	76	77
Other non-financial liabilities	24	2,258	2,203
		21,797	**15,018**
TOTAL LIABILITIES		**40,675**	**38,093**
TOTAL EQUITY AND LIABILITIES		**88,966**	**81,594**

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*	*20,3*	*20,4*			*20,6*	
JANUARY 1, 2020	**19,165**	**19,669**	**(323)**	**(1)**	**3,779**	**42,289**	**848**	**43,137**
Net profit/(loss) for the reporting period	-	-	-	-	110	110	38	148
Other comprehensive income	-	-	310	6	(191)	125	-	125
COMPREHENSIVE INCOME	**-**	**-**	**310**	**6**	**(81)**	**235**	**38**	**273**
Accounting for results from prior years	-	(1,259)	-	-	1,259	-	-	-
Dividend	-	-	-	-	-	-	(3)	(3)
Capital increase by minority shareholders	-	-	-	-	-	-	114	114
Settlement of purchase of additional shares in subsidiaries	-	-	-	-	(6)	(6)	(14)	(20)
DECEMBER 31, 2020	**19,165**	**18,410**	**(13)**	**5**	**4,951**	**42,518**	**983**	**43,501**
Net profit/(loss) 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**
Accounting for results from prior years	-	1,744	-	-	(1,744)	-	-	-
Dividend	-	-	-	-	-	-	(2)	(2)
Settlement of purchase of additional shares in subsidiaries	-	-	-	-	(1)	(1)	(4)	(5)
Share of change in equity of jointly-controlled entities	-	-	-	-	72	72	-	72
Changes in PGE Group	-	-	-	(2)	(18)	(20)	(155)	(175)
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, 2021	Year ended December 31, 2020
CASH FLOWS FROM OPERATING ACTIVITIES			
Gross profit / (loss)		**4,871**	**314**
Income tax paid		(1,273)	(359)
Adjustments for:			
Share of (profit)/loss of equity-accounted entities		2	552
Depreciation, amortisation, disposal and impairment losses		4,412	4,558
Interest and dividend, net		312	293
(Profit) / loss on investing activities	*27,1*	(363)	244
Change in receivables	*27,1*	(2,958)	(1)
Change in inventories	*27,1*	866	1,370
Change in CO_2 emission allowances for captive use		(3,129)	(569)
Change in liabilities, excluding loans and borrowings	*27,1*	1,418	764
Change in other non-financial assets, prepayments	*27,1*	(482)	(253)
Change in provisions	*27,1*	3,813	3,347
Other		(33)	(4)
NET CASH FROM OPERATING ACTIVITIES		**7,456**	**10,256**
CASH FLOWS FROM INVESTING ACTIVITIES			
Sale of property, plant and equipment and intangible assets		59	48
Purchase of property, plant and equipment and intangible assets	*27,2*	(4,682)	(5,930)
Recognition of deposits with maturity over 3 months	*27,2*	(312)	(494)
Termination of deposits with maturity over 3 months	*27,2*	303	481
Purchase of financial assets		(60)	(51)
Inclusion of companies in consolidation	*27,2*	-	(122)
Sale of subsidiary		368	-
Sale of other financial assets		63	-
Loss of control	*27,2*	(118)	-
Other		12	31
NET CASH FROM INVESTING ACTIVITIES		**(4,367)**	**(6,037)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Increase in stake in Group companies		-	(17)
Proceeds from share issue for non-controlling interests	*27,3*	419	56
Proceeds from loans, borrowings	*27,3*	601	4,451
Repayment of loans, borrowings, leases	*27,3*	(1,233)	(5,507)
Dividends paid		(2)	(2)
Interest paid	*27,3*	(358)	(373)
Other		45	35
NET CASH FROM FINANCING ACTIVITIES		**(528)**	**(1,357)**
NET CHANGE IN CASH AND CASH EQUIVALENTS		**2,561**	**2,862**
Net exchange differences		*(17)*	*14*
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF PERIOD	*18*	**4,173**	**1,311**
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD	*18*	**6,734**	**4,173**

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. The Company's registered office is located at ul. Mysia 2, 00-496 Warsaw (Poland).

As at January 1, 2021 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,
- Paweł Strączyński – Vice-President of the Management Board,
- Paweł Śliwa – Vice-President of the Management Board,
- Ryszard Wasiłek – Vice-President of the Management Board.

On March 31, 2021 Mr. Paweł Strączyński resigned as Vice-President of the Management Board, effective March 31, 2021. On June 8, 2021, PGE's Supervisory Board adopted a resolution to appoint Mr. Lechosław Rojewski to the Management Board from June 9, 2021.

At December 31, 2021 and on the date on which these 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,
- 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.

Ownership structure

The parent's ownership structure was as follows:

	As at December 31, 2021	As at December 31, 2020
State Treasury	57.39%	57.39%
Other shareholders	42.61%	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.

1.2 Information on PGE Group

PGE Group consists of the parent, PGE Polska Grupa Energetyczna S.A., along with 77 consolidated subsidiaries. Also subject to consolidation are 2 entities constituting joint operations, 3 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, 2021 to December 31, 2021 and include comparative data for the period from January 1, 2020 to December 31, 2020.

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. PGE Obrót S.A. reported negative equity as at December 31, 2021, largely due to negative changes on the retail electricity market. PGE Obrót S.A. has access to financing through PGE S.A., in connection with which this company's going concern assumption is justified.

ENESTA sp. z o.o. reported a loss in 2021 and showed negative equity as of December 31, 2021. In these financial statements, PGE Group recognised appropriate provisions related to restructuring and possible claims against ENESTA S.A.

Aside from the circumstances indicated above, 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, 2021	Stake held by Group entities as at December 31, 2020
	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%
	PGE Trading GmbH (in liquidation) Berlin	PGE S.A.	-	100.00%
3.	PGE Obrót S.A. Rzeszów	PGE S.A.	100.00%	100.00%
4.	ENESTA sp. z o.o. Stalowa Wola	PGE Obrót S.A.	87.33%	87.33%
	PGE Centrum sp. z o.o. Warsaw	PGE S.A.	-	100.00%
5.	PGE Paliwa sp. z o.o. Kraków	PGE EC S.A.	100.00%	100.00%
	SEGMENT: CONVENTIONAL GENERATION			
6.	PGE GiEK S.A. Bełchatów	PGE S.A.	100.00%	100.00%
7.	ELBIS sp. z o.o. Rogowiec	PGE S.A.	100.00%	100.00%
8.	MegaSerwis sp. z o.o. Bogatynia	PGE S.A.	100.00%	100.00%
9.	ELMEN sp. z o.o. Rogowiec	PGE S.A.	100.00%	100.00%
10.	ELTUR-SERWIS sp. z o.o. Bogatynia"	PGE S.A.	100.00%	100.00%
11.	BETRANS sp. z o.o. Bełchatów	PGE S.A.	100.00%	100.00%
12.	BESTGUM POLSKA sp. z o.o. Rogowiec	PGE S.A.	100.00%	100.00%
13.	RAMB sp. z o.o.	PGE S.A.	100.00%	100.00%

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2021	Stake held by Group entities as at December 31, 2020
	Piaski			
14.	„Energoserwis – Kleszczów" sp. z o.o. Rogowiec	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%
17.	PGE Gaz Toruń sp. z o.o. Warsaw	PGE EC S.A.	100.00%	100.00%
18.	Zespół Elektrociepłowni Wrocławskich KOGENERACJA S.A. Wrocław	PGE EC S.A.	58.07%	58.07%
19.	Elektrociepłownia Zielona Góra S.A. Zielona Góra	KOGENERACJA S.A.	98.40%	98.40%
20.	MEGAZEC sp. z o.o. Bydgoszcz	PGE S.A.	100.00%	100.00%
21.	Przedsiębiorstwo Energetyki Cieplnej sp. z o.o. Zgierz	PGE EC S.A.	100.00%	100.00%
	SEGMENT: CIRCULAR ECONOMY			
22.	PGE Ekoserwis S.A. Wrocław	PGE S.A.	100.00%	95.08%
23.	EPORE S.A. Bogatynia	PGE GiEK S.A.	100.00%	100.00%
24.	ZOWER sp. z o.o. Rybnik	PGE Ekoserwis S.A.	100.00%	-
		PGE EC S.A.	-	100.00%
	SEGMENT: RENEWABLES			
25.	PGE Energia Odnawialna S.A. Warsaw	PGE S.A.	100.00%	100.00%
26.	Elektrownia Wiatrowa Baltica-1 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
27.	Elektrownia Wiatrowa Baltica-4 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
28.	Elektrownia Wiatrowa Baltica-5 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
29.	Elektrownia Wiatrowa Baltica-6 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
30.	Elektrownia Wiatrowa Baltica-9 sp. z o.o. Warsaw	PGE S.A.	100.00%	-
31.	Elektrownia Wiatrowa Baltica-10 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
32.	Elektrownia Wiatrowa Baltica-11 sp. z o.o. Warsaw	PGE S.A.	100.00%	-
33.	Elektrownia Wiatrowa Baltica-12 sp. z o.o. Warsaw	PGE S.A.	100.00%	-
34.	PGE Baltica 1 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
35.	PGE Baltica 2 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
36.	PGE Baltica 3 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
37.	PGE Baltica 4 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
38.	PGE Baltica 5 sp. z o.o. Warsaw	PGE Baltica 3 sp. z o.o.	100.00%	-
		PGE S.A.	-	100.00%
39.	PGE Baltica 6 sp. z o.o. Warsaw	PGE Baltica 2 sp. z o.o.	100.00%	-
		PGE S.A.	-	100.00%
40.	PGE Baltica sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
41.	PGE Klaster sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
42.	PGE Soleo 1 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
43.	PGE Soleo 2 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
44.	PGE Soleo 3 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
45.	PGE Soleo 4 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
46.	PGE Soleo 5 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2021	Stake held by Group entities as at December 31, 2020
47.	PGE Soleo 6 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
48.	PGE Soleo 7 sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
	ECO-POWER sp. z o.o. Warsaw	PGE EO S.A.	-	100.00%
	SEGMENT: DISTRIBUTION			
49.	PGE Dystrybucja S.A. Lublin	PGE S.A.	100.00%	100.00%
	SEGMENT: OTHER ACTIVITY			
	PGE EJ 1 sp. z o.o. Warsaw	PGE S.A.	-	70.00%
50.	PGE Systemy S.A. Warsaw	PGE S.A.	100.00%	100.00%
51.	PGE Sweden AB (publ) Stockholm	PGE S.A.	100.00%	100.00%
52.	PGE Synergia sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
53.	„Elbest” sp. z o.o. Bełchatów	PGE S.A.	100.00%	100.00%
54.	Elbest Security sp. z o.o. Bełchatów	PGE S.A.	100.00%	100.00%
55.	PGE Inwest 2 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
56.	PGE Ventures sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
57.	PGE Gryfino 2050 sp. z o.o. (formerly PGE Inwest 8 sp. z o.o.) Warsaw	PGE S.A.	100.00%	100.00%
58.	PGE Inwest 9 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
59.	PGE Inwest 10 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
60.	PGE Inwest 11 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
61.	PGE Inwest 12 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
62.	PGE Inwest 13 S.A. Warsaw	PGE S.A.	100.00%	100.00%
63.	PGE Inwest 14 sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
64.	PGE Nowa Energia sp. z o.o. Warsaw	PGE S.A.	100.00%	100.00%
65.	Towarzystwo Funduszy Inwestycyjnych Energia S.A. Warsaw	PGE S.A.	100.00%	100.00%
66.	Rybnik 2050 sp. z o.o. Warsaw	PGE S.A.	100.00%	-
67.	PGE Inwest 20 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
68.	PGE Inwest 21 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
69.	PGE Inwest 22 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
70.	PGE Inwest 23 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
71.	PGE Inwest 24 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
72.	PGE Inwest 25 sp. z o.o. w organizacji Warsaw	PGE S.A.	100.00%	-
73.	BIO-ENERGIA sp. z o.o. Warsaw	PGE EO S.A.	100.00%	100.00%
74.	Przedsiębiorstwo Transportowo-Usługowe „ETRA” sp. z o.o. Białystok	PGE Dystrybucja S.A.	100.00%	100.00%
75.	Energetyczne Systemy Pomiarowe sp. z o.o. Białystok	PGE Dystrybucja S.A.	100.00%	100.00%
76.	Przedsiębiorstwo Usługowo-Handlowe TOREC sp. z o.o. Toruń	PGE Toruń S.A.	51.05%	51.05%
77.	4Mobility S.A. Warsaw	PGE Nowa Energia sp. z o.o.	51.47%	51.47%
78.	PIMERGE S.A. Wrocław	PGE Ventures sp. z o.o.	89.87%	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 period ended December 31, 2021:

- Rybnik 2050 sp. z o.o. w organizacji was formed on February 1, 2021. The company was registered at the National Court Register on May 31, 2021.
- On March 1, 2021, an Extraordinary General Meeting of PGE Trading GmbH adopted a resolution to dissolve PGE Trading GmbH and appoint a liquidator to carry out liquidation. Due to the loss of control related to the liquidation, as of April 1, 2021 PGE Trading GmbH is no longer a part of PGE Group and is not subject to consolidation.
- An agreement to sell all shares in PGE EJ1 sp. z o.o. to the State Treasury was signed on March 26, 2021. The ownership of the shares was transferred on March 31, 2021. In connection with this sale, PGE Group recorded a gross loss of PLN 19 million in its consolidated financial statements.
- On March 31, 2021 an Extraordinary General Meeting of PGE EO S.A. (acquiring company) and Extraordinary General Meeting of ECO - POWER sp. z o.o. (acquired company) adopted resolutions to merge the companies by transferring the entire assets of the acquired company to the acquiring company without issuing new shares by the acquiring company in exchange for shares in the acquired company. The merger was registered at the National Court Register on April 30, 2021. The merger had no impact on these consolidated financial statements.
- On April 15, 2021 the Extraordinary General Meetings of PGE GiEK S.A. and PGE EC S.A. adopted resolutions to divide PGE GiEK S.A. (divided company) through a carve-out pursuant to art. 529 § 1 point 4 of the Polish Commercial Companies Code, by transferring certain assets from the divided company to PGE Energia Ciepła S.A. (acquiring company), i.e. branch Zespół Elektrowni Dolna Odra, including CHP Szczecin, CHP Pomorzany and the district heating network in Gryfino, constituting organised parts of enterprise, functionally related to the generation of electricity as well as electricity and heat in cogeneration and the distribution of heat. The transfer of these organised parts of enterprise to the acquiring company was carried out by lowering the divided company's share capital and increasing the acquiring company's share capital. The share capital increase was registered at the National Court Register on July 1, 2021. The transaction had no impact on these financial statements.
- On July 12, 2021, PGE S.A. purchased 11,525 shares of PGE Ekoserwis S.A. in a mandatory squeeze out procedure pursuant to art. 418 of the Polish Commercial Companies Code. As a result of this transaction, PGE S.A. currently holds a 100% interest in PGE Ekoserwis S.A. The price paid for the shares was PLN 5 million.
- On July 15, 2021 the Extraordinary General Meetings of PGE GiEK S.A. and PGE Inwest 8 sp. z o.o. adopted resolutions to divide PGE GiEK S.A. (divided company) through a carve-out pursuant to art. 529 § 1 point 4 of the Polish Commercial Companies Code by transferring certain assets from the divided company to PGE Inwest 8 sp. z o.o., i.e. PGE GiEK S.A. - branch Zespół Elektrowni Dolna Odra, including the construction of gas units constituting an organised part of enterprise, functionally related to the construction of new gas units and in the future generation of electric energy. The transfer of these organised parts of enterprise to the acquiring company was carried out by lowering the divided company's share capital and increasing the acquiring company's share capital. The share capital increase was registered at the National Court Register on October 1, 2021. This transaction had no impact on the consolidated financial statements.
- A merger of PGE Obrót S.A. (acquiring company) with PGE Centrum sp. z o.o. (acquired company) was registered at the National Court Register on January 3, 2022. This merger had no impact on the consolidated financial statements.
- On October 4, 2021, PGE S.A. formed 6 limited liability companies, named PGE Inwest 20 to 25 w organizacji. The share capital of each of these companies amounts to PLN 25,000. PGE Inwest 20 to 22 and PGE Inwest 25 were entered in the register of companies maintained by the National Court Register in March 2022. PGE Inwest 23 sp. z o.o. and PGE Inwest 24 sp. z o.o. were not yet registered at the National Court Register as of the date on which these consolidated financial statements were prepared.
- On October 4, 2021, PGE S.A. formed 4 limited liability companies, named Elektrownia Wiatrowa Baltica 9 to 12. The share capital of Elektrownia Wiatrowa Baltica 9 sp. z o.o. is PLN 981,000 and the share capital of the remaining companies is PLN 25,000 each. The companies were entered in the register of companies maintained by the National Court Register in December 2021 and February 2022.
- On November 18, 2021 PGE S.A. as the vendor and ENEA S.A. as the buyer signed a conditional agreement for the sale of a 33.8% stake held by PGE S.A. in EWB4, EWB5 and EWB6. The entry into force of the conditional share purchase agreement and the transfer of ownership of the shares to ENEA is subject to fulfilment of conditions precedent.
- On November 18, 2021 PGE S.A. as the vendor and Tauron Polska Energia S.A. as the buyer signed a conditional agreement for the sale of a 44.96% stake in PGE Baltica 4. The entry into force of the

conditional share purchase agreement and the transfer of ownership of the shares to Tauron is subject to fulfilment of conditions precedent.
- On December 15, 2021 PGE S.A. and Polski Holding Hotelowy sp. z o.o. signed a conditional agreement to sell 100% of shares in Elbest sp. z o.o. The sale was finalised on March 4, 2022. In these financial statements, assets attributable to Elbest before consolidation adjustments amounted to PLN 91 million, and liabilities amounted to PLN 22 million. The sale price was PLN 88 million.
- On December 21, 2021 the Extraordinary General Meeting of PGE Soleo 1 sp. z o.o. adopted a resolution to increase the company's share capital by PLN 4,1 million through the issue 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 this transaction, PGE EO S.A. and the Municipality of Kleszczów will each hold a 50% stake in share capital, and PGE Soleo 1 sp. z o.o. will no longer be a PGE Group subsidiary. At the date on which these financial statements were approved for publication, the share capital increase was not yet registered at the National Court Register.

Events after the reporting period

- 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 January 3, 2022. This merger had no impact on the consolidated financial statements.
- On January 14, 2022 the Extraordinary General Meeting of 4Mobility S.A. adopted a resolution to increase share capital by PLN 130,000 by way of a share issue. All of the new shares were offered in a private placement exclusively to EFF B.V., based in Maastricht - an existing shareholder of 4Mobility S.A. As a result of the share capital increase, PGE Nowa Energia sp. z o.o.'s stake will decrease from 51.47% to 37.93%, which means that 4Mobility S.A. will become a PGE Group associate. At the date on which these financial statements were approved for publication, the share capital increase was not yet registered at the National Court Register.
- 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 in the Wielkopolskie and Lubuskie voivodships, with a total capacity of 26 MW, for the total price of PLN 18,7 million.
- On February 15, 2022, the Management Board of PGE EO S.A. adopted a resolution to adopt and agree on the Merger Plan of PGE EO S.A. as the acquiring company and Bio-Energia sp. z o.o. as the acquired company. This merger will have no impact on PGE Group's financial statements in the future.

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, 2021	Stake held by Group entities as at December 31, 2020
	SEGMENT: RENEWABLES			
1.	Elektrownia Wiatrowa Baltica-2 sp. z o.o. Warsaw	PGE Baltica 6 sp. z o.o.	50.00%	100.00%
2.	Elektrownia Wiatrowa Baltica-3 sp. z o.o. Warsaw	PGE Baltica 5 sp. z o.o.	50.00%	100.00%

In May 2021, Ørsted acquired shares 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 generally 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.

The following table presents the way in which the loss of control over EWB2 and EWB3 was accounted for:

	EWB2	EWB3	Total
Fair value of contractual joint operation attributable to PGE Group (50%)	233	297	530
Net carrying amount of assets prior to loss of control	90	116	206
GAIN ON LOSS OF CONTROL	**143**	**181**	**324**
Fair value of contractual joint operation attributable to PGE Group (50%)	233	297	530
Net assets at the date joint control began	197	252	449
GOODWILL	**36**	**45**	**81**

1,3,3 Associates and jointly controlled entities subject to consolidation using the equity method

	Entity	Entity holding stake	Stake held by Group entities as at December 31, 2021	Stake held by Group entities as at December 31, 2020
1.	Polska Grupa Górnicza S.A. Katowice	PGE GiEK S.A.	15.32%	15.32%
2.	Polimex Mostostal S.A. Warsaw	PGE S.A.	16.40%	16.48%
	ElectroMobility Poland S.A. Warsaw	PGE S.A.	4.33%	25.00%
3.	PEC Bogatynia Bogatynia	PGE GiEK S.A.	34.93%	
		PGE EC S.A.		34.93%
4.	Energopomiar sp. z o.o. Gliwice	PGE Group companies	49.79%	49.79%

On August 19, 2021 an Extraordinary General Meeting of ElectroMobility Poland S.A. adopted a resolution to decrease the company's share capital from PLN 70 million to PLN 52 million, by reducing the nominal value of all shares. Moreover, the Extraordinary General Meeting adopted a resolution to increase the company's share capital from PLN 52 million to PLN 302 million by issuing new shares, which were then taken up by the State Treasury in exchange for a cash contribution. As a result of the State Treasury becoming a shareholder of ElectroMobility Poland S.A., PGE S.A.'s stake in this company's share capital declined from 25% to 4.33%. These changes were registered at the National Court Register on September 30, 2021. As of September 30, 2021, PGE Group no longer recognised ElectroMobility Poland S.A. using the equity method.

On August 26 - September 1, 2021, in exchange transactions on the Warsaw Stock Exchange, PGE S.A. sold 187,500 shares of Polimex Mostostal S.A. As a result of the transaction, PGE S.A.'s stake in capital declined from 16.48% to 16.40%. The share sale was related to the planned acquisition of 187,500 shares of Polimex Mostostal S.A. as part of one of the tranches of call options for Polimex Mostostal S.A. shares, which PGE S.A. had purchased from Towarzystwo Finansowe Silesia sp. z o.o. on January 20, 2017.

On February 24, 2022 PGE S.A. exercise call options and purchased from Towarzystwo Finansowe Silesia sp. z o.o. 187,500 shares (call option 2) and 125,000 shares (call option 3) of Polimex Mostostal S.A. As a result of these transactions, its stake in share capital increased from 16.40% to 16.45%.

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, 2021	December 31, 2020
USD	4.0600	3.7584
EUR	4.5994	4.6148

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, 2021:

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 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 resulting from IFRS annual improvement cycle 2018-2020	Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41 mainly concern the resolution of inconsistencies and clarification of terminology.	January 1, 2022
Amendments to IFRS 3	Amendments to References to the Conceptual Framework	January 1, 2022
Amendments to IAS 16	Proceeds from property, plant and equipment before intended use	January 1, 2022
Amendments to IAS 37	Onerous Contracts — Cost of Fulfilling a Contract	January 1, 2022
Amendments to IFRS 16	Covid-19-Related Rent Concessions	April 1, 2021
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023
Amendments to IFRS 17 Insurance Contracts	First-time Adoption of IFRS 17 and IFRS 9 - Comparative Data	January 1, 2023

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.

3. Impairment tests on property, plant and equipment, intangible 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 analytical centres' support. In previous reporting periods, PGE Group recognised substantial impairment allowances of property, plant and equipment of Conventional Generation segment and the Renewables segment. A significant part of an impairment loss that had been recognised in the Renewables segment was also reversed in previous reporting periods.

In this first half of 2021, the Group analysed impairment indications and identified factors that could result in changes to the asset values in the Conventional Generation and Renewables segments. The tests showed no need to recognise an impairment loss for the Conventional Generation segment and the necessity to reverse the impairment loss for the Renewables segment. An analysis of the indications for conducting impairment tests in the District Heating segment did not show the need to conduct these tests.

In the fourth quarter of 2021 the Group again analysed indications in order to identify factors that could result in a change in the value of assets. No such factors were identified in the Conventional Generation and Renewables segments. In the District Heating segment, impairment tests were carried out in connection with the adoption of the 2050 Decarbonisation Plan, which aims 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 tests showed no need to recognise an impairment loss for the District Heating segment.

The analysis of indications and impairment tests were prepared before Russia's attack on Ukraine and the associated potential consequences for the macroeconomic environment and for PGE Group. The impact of the Russia-Ukraine war on PGE Group is described in note 33.6.2 to these financial statements.

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 year of the forecast.

Electricity price forecasts assume a decline between 2023 and 2024 relative to 2022 prices, followed by an average annual increase of approx. 6% in 2025-2029.

CO_2 price projections assume an average annual decline in 2023-2025 of about 4.6% relative to 2022 and an average annual increase between 2026 and 2029 of approx. 12.7%. A slight decrease is expected in 2030, in comparison with 2029, followed by stable growth at approx. 4% annually until 2040.

Coal price forecasts assume an average annual increase over the period 2023-2030 of approx. 2.5% relative to 2022.

The forecasts for natural gas prices expect an increase in price in 2023 relative to 2022, followed by an average annual growth of approx. 4.4% in subsequent years.

The price forecasts for certificates of origin for energy expect an average annual decrease of approx. 12.5% in 2023-2031 relative to 2022, which is related to the decreasing obligation to redeem these certificates.

The forecast for revenue from the capacity market for 2022-2026 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 2027, 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 a completed auction and forecasts from an external expert. For one-year contracts with delivery from July 1, 2025 and for multiannual contracts executed as part of the auction for 2025 and subsequent, the 550g CO_2/kWh (EPS 550) emission criterion is in place, which in practice rules out all coal units from Capacity Market auctions.

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

On February 2, 2021 the Council of Ministers approved "Poland's Energy Policy 2040." The Policy constitutes a vision for Poland in the area of energy transition, indicating, inter alia, the expected structure of electricity generating units. According to the Policy, the share of low- and zero-emission units will grow, while the share of coal-based units will decline.

Climate considerations

The pace of the energy transition and trends expected in Poland's Energy Policy 2040 recently considerably accelerated and strengthened. 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 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. In effect, the current level of prices for CO_2 emission allowances significantly diverges from that assumed in the Policy. Another important element that vastly diverges from the Policy's assumptions is the dynamic increase in PV capacities as a result of numerous grant programs, a discount system for prosumers and renewable energy auctions. In effect, the level of installed capacities expected for 2030 has already been achieved.

For the purposes of impairment tests on tangible assets, PGE Group uses assumptions developed by an independent analytical centre, which take into account the current regulatory and market situation. 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 Analysis of indications for the Conventional Generation segment

In previous reporting periods, PGE Group recognised substantial impairment losses on property, plant and equipment in the Conventional Generation segment. The key assumptions used in the impairment tests carried out as at June 30, 2021 are described in PGE Group's interim consolidated financial statements for the 6-month period ended June 30, 2021.

In the fourth quarter of 2021, the Group performed an analysis of indications in order to determine whether these assets are impaired or the earlier impairment losses may be reversed.

The most important factors analysed include:

- analysis of the 2021 financial plan implementation,
- analysis of the current market situation,
- confirmation that the long-term forecasts are up-to-date,
- confirmation that the investment plan is up-to-date,
- analysis of assumptions regarding the capacity market.

An analysis of assumptions for the Conventional Generation segment showed that the financial plan was implemented beyond the assumed values, which is mainly related to an increase in electricity prices and margins obtained on sales of electricity on the derivative and SPOT markets. The increase in electricity prices in the fourth quarter of 2021 was largely due to higher energy prices in neighbouring countries resulting from high gas and coal prices in Europe and globally. This translated into additional export demand on the Polish market, which in itself raised price levels and also contributed to lower hard coal inventories, which further raised the valuation of marginal unit energy sales offers on hard coal. According to the Group, these increases will not be permanent and therefore they do not constitute grounds for impairment tests. In addition, no significant changes are expected in the levels of planned capital expenditures or in the level of revenue from the capacity market. The price and volume assumptions are also consistent with those used in the asset impairment tests performed as of June 30, 2021.

Accordingly, the Group came to the conclusion that there are no grounds for impairment testing of generation assets at the balance sheet date of December 31, 2021.

Climate considerations

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 the PGE Group. The macroeconomic assumptions adopted for the rationale analysis 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, and in the long term are consistent with the assumptions adopted for the impairment tests performed as at June 30, 2021.

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

In previous reporting periods, PGE Group recognised substantial impairment losses on non-current assets in the District Heating segment. In the fourth quarter, the Group analysed grounds for impairment and identified factors that could result in major changes in asset values and the necessity to carry out impairment tests.

Climate considerations

The 2050 Decarbonisation Plan for the District Heating segment was approved in October 2021, which aims 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.

Other conditions

Impairment tests on non-current assets were conducted as of December 31, 2021, 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 and combined heat and power plants for which a value on the local market should be determined there are no observable fair values. Given the above, the recoverable value of the analysed assets was estimated on the basis of discounted net cash flow method which relied on financial projections prepared for the period from 2022 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.

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 CGUs 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 2022 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 2022-2030 for system district heating and high-efficiency cogeneration. The allocation of free-of-charge allowances for heat from 2022 to 2030 is addressed by Directive (EU) 2018/410 of March 14, 2018 amending

Directive 2003/87/EC to enhance cost-effective emission and low-carbon investments, and Decision (EU) 2015/1814. Another regulation clarifying the allocation of free emission allowances is the Commission Delegated Regulation (EU) of December 9, 2018 on laying down transitional rules for harmonised free allocation of emission allowances across the Union pursuant to art. 10a of Directive 2003/87/EC of the European Parliament and of the Council (the so-called FAR - Free Allocation Rules) (went into effect on February 28, 2019 - Polish version of February 27, 2019). The directive is reflected in the amended law of July 4, 2019, amending the law on the greenhouse gas emission trading scheme and certain other laws. Under art. 10a of the Directive, 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;

- assumption for combined heat and power 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
- 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 6.56%.

As at December 31, 2021, the value of tested property, plant and equipment in the District Heating segment was PLN 4,905 million, and goodwill amounted to PLN 189 million. As a result of an asset impairment test, the Group estimated the useful value of the assets being tested at PLN 18,585 million, in connection with which it 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, 2021.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in electricity prices throughout the forecast period	1%	218	-
	-1%	-	218

A decline in electricity price by 1% would have caused a PLN 0.2 billion decrease in useful value.

Parameter	Change	Impact on useful value in PLNm	
		Increase	Decrease
Change in WACC	+0.5 pp	-	2,719
	-0.5 pp	3,509	0

An increase in WACC by 0.5 percentage points would have caused a PLN 2.7 billion decrease in the useful value of assets.

3.3 Analysis of indications for the Renewables segment

In previous reporting periods, PGE Group recognised substantial impairment losses on property, plant and equipment in the Renewables segment. Impairment tests carried out at the end of the first half of 2021 showed the need to reverse the entire impairment loss. The key assumptions used in the impairment tests carried out as at June 30, 2021 are described in PGE Group's interim consolidated financial statements for the 6-month period ended June 30, 2021.

At the end of the reporting period, the Group performed an analysis of indications in order to determine whether these assets are impaired.

The following cash generating units are identified and analysed in the Renewables segment:

- considered as separate CGU belonging to PGE EO S.A.
- total pumped-storage power plants,
- total other hydropower plants
- individual wind farms owned by PGE EO S.A.
- individual wind farms owned by PGE Klaster sp. z o.o.

Analysis of indications for CGU PGE EO S.A.

The analysis included the following key factors:

- analysis of the 2021 financial plan implementation,
- confirmation that the investment plan is up-to-date,
- analysis of prices for energy and certificates of origin,
- analysis of assumptions regarding the capacity market.
- analysis of estimated margins on the production and sale of electricity in future periods in light of the price forecasts for energy,

The analysis of the premises in the area CGU PGE EO S.A. showed that the generating units of the Wind area carry out the financial plan above the assumed values, which is related, inter alia, to higher prices of electricity and energy and certificates of origin with a simultaneous lower production volume, caused by worse weather conditions than the assumed windiness. The higher result in Hydro was driven by factors such as higher electricity and energy and certificates of origin prices and higher electricity production due to favourable hydrological conditions. In the case of pumped-storage assets, the higher result is mainly due to higher electricity prices, resulting in significantly higher sales revenues. Lower projected revenues from the Capacity Market compared to the tests performed as of June 30, 2021 do not pose a risk that the useful value of the assets will decline below book value due to the fact that the tests performed as of June 30, 2021 showed a significant surplus. No major changes in the levels of planned capital expenditures are expected. The electricity price and volume assumptions are also consistent with those used in the asset impairment tests performed as of June 30, 2021.

Accordingly, the Group came to the conclusion that there are no grounds for impairment testing of generation assets at the balance sheet date of December 31, 2021.

Analysis of indications for CGU PGE Klaster Sp. z o.o.

The most important factors analysed include:

- analysis of the 2021 financial plan implementation,
- confirmation that the investment plan is up-to-date,
- analysis of energy prices.

The premise analysis for CGU PGE Klaster Sp. z o.o. indicated that the company is executing its financial plan above the approved values, mainly as a result of higher electricity prices despite a slightly lower production volume. No major changes in the levels of planned capital expenditures are expected. The electricity price assumptions are also consistent with those used in the asset impairment tests performed as of June 30, 2021.

Accordingly, the Group came to the conclusion that there are no grounds for impairment testing of generating assets at the reporting date of December 31, 2021.

3.4 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 19 billion and represented approx. 31% 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 PGE Group have been prepared on the basis of the financial statements of the parent company and the 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.

Measurement 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. Measurement 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 measurement.

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, 2021

The accounting principles (policy) applied in preparing these financial statements are consistent with those applied in preparing the financial statements for 2020. The following amendments to IFRSs are applied in these financial statements in line with their effective dates. 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 to IFRS 4 - Extension of the Temporary Exemption from Applying IFRS 9;
- Amendments to IFRS 9, IAS 39 and IFRS 7 - Interest Rate Benchmark Reform - Phase II.

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.

EXPLANATORY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

EXPLANATORY NOTES TO OPERATING SEGMENTS

6. Information on operating segments

ACCOUNTING RULES

Operating segments

An operating segment is a component of the Group:

- that engages in business activities from which it may earn revenues and incur expenses,
- 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.

Due to the types of production processes as well as the current system of regulation within PGE Group, the following segments are distinguished:

- Conventional Generation,
- District Heating,
- Renewables,
- Supply,
- Distribution,
- Circular Economy,
- Other activities, which includes the activities of subsidiaries other than listed above, but not material enough to create separate segments.

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.

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 2025-2044.

On April 28, 2021, the Minister of Climate and Environment, having taken into consideration the application of PGE GiEK S.A., changed the previously granted concession for the extraction of minerals from the "Turów" deposit by extending it until 2044, whereby the extraction of minerals will be carried out in accordance with a decision of the Regional Director for Environmental Protection in Wrocław of January 21, 2020, establishing the environmental conditions for the undertaking consisting of continued exploitation of the "Turów" lignite deposit, carried out in the municipality of Bogatynia.

Complaints and requests for reconsideration were filed with respect to the license renewal decisions.

Nevertheless, based on legal opinions, according to PGE Group, there is no major risk that the concession will not be extended until 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 2021, PGE Group’s concessions costs amounted to approx. PLN 16 million (PLN 17 million in 2020), exploitation charges and mining usufruct charges amount to PLN 135 million in 2021 and PLN 113 million in 2020.

PGE Group presents information on operating segments in the current and comparative reporting period in accordance with IFRS 8 *Operating Segments*. PGE Group’s segment reporting is based on the following business 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 includes sales and purchases of electricity and gas on the wholesale market, trading in emissions certificates and energy origin rights, sales and purchases of fuel, as well as sales of electricity and rendering 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.

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.

Starting in 2021, PGE Group reports a new operating segment - Circular Economy - the assets and results of which were recognised and analysed within the following segments: Conventional Generation, District Heating and Other Operations. The data for the comparative period was not restated. The new presentation layout is intended to improve transparency and strengthen supervision over the implementation of the District Heating Strategy, which is one of the key areas of the Group's development.

Seasonality of business segments

Key factors affecting the demand for electricity and heating are: weather conditions – air temperature, wind force, rainfall; socio-economic factors – number of energy consumers, prices of energy sources, GDP growth; and technological factors – technological progress, manufacturing technologies. 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 in 2021

	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
STATEMENT OF PROFIT OR LOSS									
Sales to external customers	18,730	4,019	1,050	22,260	6,415	137	110	9	52,730
Inter-segment sales	9,992	2,220	622	15,963	77	174	322	(29,370)	-
TOTAL SEGMENT REVENUE	**28,722**	**6,239**	**1,672**	**38,223**	**6,492**	**311**	**432**	**(29,361)**	**52,730**
Cost of goods sold	(29,914)	(5,690)	(912)	(35,496)	(4,738)	(227)	(383)	28,239	(49,121)
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 FOR THE REPORTING PERIOD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,945**
ASSETS AND LIABILITIES									
Segment assets excluding trade receivables	37,058	8,680	4,238	1,575	19,589	71	1,848	(1,059)	72,000
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	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88,966**
Segment liabilities excluding trade liabilities	18,776	2,742	578	5,705	1,935	50	274	(2,324)	27,736
Trade liabilities	5,648	1,821	133	10,888	402	51	30	(17,365)	1,608
Unallocated liabilities	-	-	-	-	-	-	-	-	11,331
TOTAL LIABILITIES	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40,675**
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

** Including goodwill*
*** Non-monetary expenses 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.*

Information on operating segments in 2020

	Conventional Generation	District Heating	Renewables	Supply	Distribution	Other activity	Adjustments	Total
STATEMENT OF PROFIT OR LOSS								
Sales to external customers	18,777	3,010	754	18,380	6,308	88	(1,551)	45,766
Inter-segment sales	6,474	1,889	337	10,637	88	413	(19,838)	-
TOTAL SEGMENT REVENUE	**25,251**	**4,899**	**1,091**	**29,017**	**6,396**	**501**	**(21,389)**	**45,766**
Cost of goods sold	(24,638)	(4,217)	(614)	(27,109)	(5,033)	(455)	20,455	(41,611)
EBIT	**(647)**	**304**	**405**	**577**	**1,093**	**(138)**	**(186)**	**1,408**
Depreciation, amortisation, disposal and impairment losses recognised in profit or loss	2,372	643	192	35	1,213	156	(53)	4,558
EBITDA	**1,725**	**947**	**597**	**612**	**2,306**	**18**	**(239)**	**5,966**
GROSS PROFIT	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**314**
Income tax	-	-	-	-	-	-	-	(166)
NET PROFIT FOR THE REPORTING PERIOD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**148**
ASSETS AND LIABILITIES								
Segment assets excluding trade receivables	36,404	8,143	4,326	1,890	19,439	817	(747)	70,272
Trade receivables	623	730	180	3,891	892	75	(2,789)	3,602
Shares accounted for using the equity method	-	-	-	-	-	-	-	152
Unallocated assets	-	-	-	-	-	-	-	7,568
TOTAL ASSETS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81,594**
Segment liabilities, except for trade liabilities	16,652	2,179	532	3,585	2,186	121	(1,197)	24,058
Trade liabilities	986	490	48	2,343	302	47	(2,859)	1,357
Unallocated liabilities	-	-	-	-	-	-	-	12,678
TOTAL LIABILITIES	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**38,093**
OTHER INFORMATION ON BUSINESS SEGMENT								
Capital expenditures	2,370	656	709	15	1,646	164	(127)	5,433
Increases in right-of-use assets	2	15	6	1	34	6	(2)	62
TOTAL INVESTMENT EXPENDITURES	**2,372**	**671**	**715**	**16**	**1,680**	**170**	**(129)**	**5,495**
Acquisition of property, plant and equipment, intangible assets and investment properties as part of acquisition of new companies	-	-	251	-	-	2	2	255
Impairment losses on financial and non-financial assets	860	55	(141)	9	31	56	(89)	781
Other non-monetary expenses*	6,309	907	30	254	775	36	326	8,637

* Including goodwill
*** Non-monetary expenses 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 revenues for 2021 and 2020 is as follows:

	Year ended December 31, 2021	Year ended December 31, 2020
REVENUES FROM OPERATING ACTIVITIES		
Domestic market	47,456	42,859
EU countries	5,233	2,907
Other countries	41	-
TOTAL REVENUE FROM SALE	**52,730**	**45,766**

Geographic distribution of assets for the year ended December 31, 2021 and December 31, 2020 is as follows:

	As at December 31, 2021	As at December 31, 2020
OTHER INFORMATION ON AREA		
Domestic market	76,173	73,854
EU countries	36	20
TOTAL SEGMENT ASSETS	**76,209**	**73,874**
Domestic market	12,528	7,449
EU countries	73	119
TOTAL UNALLOCATED ASSETS	**12,601**	**7,568**
Domestic market	156	152
SHARES ACCOUNTED FOR UNDER THE EQUITY METHOD, TOTAL	**156**	**152**
TOTAL ASSETS	**88,966**	**81,594**

EXPLANATORY NOTES TO THE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

7. Revenue and costs

7.1 Revenue from sales

ACCOUNTING RULES

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 entity recognises revenue from a contract with a customer 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 includes some 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 recognized cumulative 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 RULES

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

Contracts for the sale of electricity concluded on the wholesale market are notified to the Transmission System Operator (TSO) in the form of the quantity of electricity declared each hour which the company, as supplier, is required 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 the TGE power exchange are conducted with clearinghouse IRGiT, which is the guarantor for settlements of transactions executed on TGE, 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

Revenue is measured at currently applicable tariff rates, subject to approval by the President of the Energy Regulatory Office. The tariff rates relate to the heat capacity ordered, thermal energy sold and the heat carrier. 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 based on documented sales, plus any re-assessment of sales of electricity distribution services not invoiced in the period, less any re-assessment of such sales from the previous 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.

Regulatory account

Revenue from electricity distribution services for 2021 was not reduced by the regulatory account balance, which in 2021 amounted to PLN 253 million.

The calculation of the regulatory account balance was made in accordance with the principles set out in the Regulation of the Minister of Climate and Environment of November 13, 2020 amending the Regulation on the detailed principles for shaping and calculating tariffs and settlements in trade of electricity. The regulatory account balance represents the difference between the sum of the planned revenue assumed in the tariff for 2021, which is the basis for calculating the distribution charge rates, and the sum of revenue actually received in 2021, which does not depend on the Group and is primarily the result of deviations in the charge carriers such as, for example, the volume of electricity deliveries or the level of contracted capacity, on the basis of which the charge rates are calculated.

The regulatory account balance for 2021 will be taken into account by the President of the Energy Regulatory Office when calculating the tariff and will affect the level of regulated revenue in 2023 (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 supplies, for the purposes of proper accounting the Group adjusts sales revenue (invoiced sales) by the amount of energy delivered 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

The capacity market was introduced in Poland on the basis of the Capacity Market Act adopted by the Polish parliament on December 8, 2017. Pursuant to the Act, Capacity Suppliers 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. In accordance with art. 90 sec. 3 of the Act, the first delivery period was 2021. As a result of the Main Auction for 2021, held on November 15, 2018, PGE Group contracted more than 11.5 GW of capacity obligations and receives revenue from PSE S.A. from January 2021 onwards.

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, 2021	Year ended December 31, 2020
within 1 year	55	55
from 1 year to 2 years	48	49
from 2 year to 3 years	46	46
from 3 year to 4 years	45	44
from 4 year to 5 years	43	43
over 5 years	639	700

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.

	Conventional Generation	District Heating	Renewables	Supply	Distribution	Circular Economy	Other activity	Adjustments	Total
Revenue from contracts with customers	28,709	6,265	1,667	38,220	6,437	311	427	(29,337)	**52,699**
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	**28,722**	**6,239**	**1,672**	**38,223**	**6,492**	**311**	**432**	**(29,361)**	**52,730**

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.

Lease payments recognised as income in 2021 amounted to PLN 84 million (PLN 278 million in 2020). 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	28,668	6,213	1,646	37,393	7,729	130	65	(27,880)	**53,964**
Taxes and fees collected on behalf of third parties	*(10)*	*(4)*	-	*(145)*	*(1,344)*	-	-	-	***(1,503)***
Revenue from sale of goods and products, including:	**28,658**	**6,209**	**1,646**	**37,248**	**6,385**	**130**	**65**	**(27,880)**	**52,461**
Sale of electricity	18,765	2,680	1,137	13,633	4	-	-	(5,433)	**30,786**
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	**28,709**	**6,265**	**1,667**	**38,220**	**6,437**	**311**	**427**	**(29,337)**	**52,699**

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	21,335	5,544	1,455	14,176	6,159	-	-	(5,715)	**42,954**
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	**28,709**	**6,265**	**1,667**	**38,220**	**6,437**	**311**	**427**	**(29,337)**	**52,699**

Revenue from sales in 2020, 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	Other activity	Adjustments	Total
Revenue from contracts with customers	25,236	4,829	890	28,943	6,343	500	(21,371)	**45,370**
Receivables from recognised compensation based on Act on electricity prices	-	-	-	68	-	-	-	**68**
Revenue from support for high-efficiency cogeneration	-	19	-	-	-	-	-	**19**
Revenues from LTC compensations	-	31	-	-	-	-	-	**31**
Operating lease income	15	20	201	6	53	1	(18)	**278**
TOTAL REVENUE FROM SALES	**25,251**	**4,899**	**1,091**	**29,017**	**6,396**	**501**	**(21,389)**	**45,766**

The total amount of revenue from sales includes PLN 47 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	Conventional Generation	District Heating	Renewables	Supply	Distribution	Other activity	Adjustments	Total
Revenue from sale of goods and products, without excluding taxes and fees	25,167	4,738	890	28,175	6,362	75	(20,036)	**45,371**
Taxes and fees collected on behalf of third parties	*(4)*	*(2)*	-	*(125)*	*(74)*	-	-	***(205)***
Revenue from sale of goods and products, including:	**25,163**	**4,736**	**890**	**28,050**	**6,288**	**75**	**(20,036)**	**45,166**
Sale of electricity	21,430	2,418	599	15,742	3	-	(8,317)	**31,875**
Sale of distribution services	14	12	-	48	6,066	-	(84)	**6,056**
Sale of heat	165	2,033	-	10	**-**	-	(1)	**2,207**
Sale of energy origin rights	52	11	238	-	-	-	24	**325**
Regulatory system services	482	-	48	-	-	-	(1)	**529**
Sale of natural gas	-	-	-	289	-	-	(145)	**144**
Sale of other fuel	-	-	-	688	-	-	(363)	**325**
Sale of CO_2 emission allowances	2,897	202	-	11,271	-	-	(11,145)	**3,225**
Other sale of goods and materials	123	60	5	2	219	75	(4)	**480**
Revenue from sale of services	**73**	**93**	**-**	**893**	**55**	**425**	**(1,335)**	**204**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**25,236**	**4,829**	**890**	**28,943**	**6,343**	**500**	**(21,371)**	**45,370**

Deadline for delivery of goods or services	Conventional Generation	District Heating	Renewables	Supply	Distribution	Other activity	Adjustments	Total
Revenue from sale of goods or services provided to the customer over time	22,091	4,463	647	16,089	6,069	-	(8,548)	**40,811**
Revenue from sale of goods or services provided to the customer at a point in time	3,145	366	243	12,854	274	500	(12,823)	**4,559**
TOTAL REVENUE FROM CONTRACTS WITH CUSTOMERS	**25,236**	**4,829**	**890**	**28,943**	**6,343**	**500**	**(21,371)**	**45,370**

7.2 Costs by nature and function

ACCOUNTING RULES

Cost of goods sold

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 measurement of financial instruments related to coal measured at fair value and changes in the measurement of coal inventories measured at fair value.

Production costs that can be directly attributed to revenues recognised by the entity are recognised in profit or loss for the reporting period in which the revenues were recognised.

Production costs that are only indirectly attributable to revenue or other economic benefits generated by the entities affect profit or loss of the entities to the extent that they relate to the reporting period, ensuring that they are commensurate with revenue or other economic benefits

	Year ended December 31, 2021	Year ended December 31, 2020
COSTS BY NATURE		
Depreciation, amortisation and impairment losses	4,419	4,581
Materials and energy	5,976	5,181
External services	2,499	2,597
Taxes and fees	13,988	8,454
Employee benefits expenses	5,098	5,450
Other costs by nature	365	312
TOTAL COST BY NATURE	**32,345**	**26,575**
Change in product inventories	4	-
Cost of products and services for internal purposes	(578)	(818)
Distribution and selling expenses	(1,515)	(1,492)
General and administrative expenses	(1,028)	(1,189)
Cost of goods and materials sold	19,893	18,535
COST OF GOODS SOLD	**49,121**	**41,611**

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, 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 goods sold	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**

Year ended	Depreciation, amortisation, disposal					Impairment		
December 31, 2020	Property, plant and equipment	Intangible assets	Right-of-use assets	Investment property	TOTAL	Property, plant and equipment	Right-of-use assets	TOTAL
Cost of goods sold	3,622	75	51	3	**3,751**	651	1	**652**
Distribution and selling expenses	12	3	1	-	**16**	-	-	**-**
General and administrative expenses	37	87	11	-	**135**	4	-	**4**
RECOGNISED IN PROFIT OR LOSS	**3,671**	**165**	**63**	**3**	**3,902**	**655**	**1**	**656**
Change in product inventories	(3)	-	-	-	**(3)**	-	-	**-**
Cost of products and services for internal purposes	25	-	1	-	**26**	-	-	**-**
TOTAL	**3,693**	**165**	**64**	**3**	**3,925**	**655**	**1**	**656**
Other operating income	-	-	-	-	**-**	2	-	**2**
Other operating expenses	-	-	-	-	**-**	(3)	-	**(3)**

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

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

7.2.2 Materials and energy

	Year ended December 31, 2021	Year ended December 31, 2020
Cost of production fuel	4,831	4,144
Use of repair and operation materials	457	489
Use of energy	333	252
Other	355	296
TOTAL MATERIALS AND ENERGY	**5,976**	**5,181**

7.2.3 External services

	Year ended December 31, 2021	Year ended December 31, 2020
Transmission services	1,272	1,438
External services - repairs and exploitation	479	510
Logistics services	151	143
IT services	101	110
Telecommunication services	20	21
Rent and lease	20	18
Consulting services	45	39
Other	411	318
TOTAL EXTERNAL SERVICES	**2,499**	**2,597**

7.2.4 Taxes and fees

	Year ended December 31, 2021	Year ended December 31, 2020
Fees for CO_2 emissions	11,553	6,200
Environmental fees	1,304	1,148
Real estate tax	960	932
Other	171	174
TOTAL TAXES AND FEES	**13,988**	**8,454**

7.2.5 Employee benefits expenses and employment structure

	Year ended December 31, 2021	Year ended December 31, 2020
Payroll	3,850	3,938
Social security expenses	733	754
Retirement and pension expenses	62	58
Jubilee awards, coal benefits	123	123
Other post-employment benefits	50	47
Change in provisions for employee benefits	(277)	(85)
Cost of Voluntary Leave Program	(10)	28
Other employee benefits	567	587
TOTAL EMPLOYEE BENEFITS EXPENSES, INCLUDING:	**5,098**	**5,450**
Included in costs of goods sold	3,965	4,122
Included in distribution and selling costs	298	312
Included in general and administrative expenses	677	759
Cost of products and services for internal purposes	158	257

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, 2021	As at December 31, 2020
Conventional Generation	18,609	20,610
District Heating	3,705	4,014
Renewables	630	595
Supply	2,459	2,347
Distribution	9,636	10,038
Circular Economy	944	-
Other consolidated companies	2,018	2,537
TOTAL EMPLOYMENT	**38,001**	**40,141**

7.3 Other operating income and costs

ACCOUNTING RULES

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, 2021	Year ended December 31, 2020
NET OTHER OPERATING INCOME/(COSTS)		
Measurement and exercise of derivatives, including:	2,896	170
- CO_2	*2,894*	*155*
- Coal	*2*	*15*
Effect of change in rehabilitation provision	1,463	(306)
(Creation)/reversal of other provisions	(352)	(21)
(Creation)/reversal of impairment losses on receivables	(83)	(105)
Penalties, fines and compensations received	69	149
Gain on sale of property, plant and equipment / intangible assets	41	31
Grants received	32	34
Surpluses / asset disclosures	24	9
Donations granted	(18)	(19)
Property, plant and equipment/intangible assets and other infrastructure received free-of-charge	17	15
Liquidation of property, plant and equipment/intangible assets	(14)	(8)
Damage / failure removal	(9)	(7)
Other	(9)	(8)
TOTAL NET OTHER OPERATING INCOME/(COSTS)	**4,057**	**(66)**

In order to optimise financial flows, the Group decided to changed its hedging strategy for CO_2 emission allowances and the rolling of certain contracts concerning these allowances. As a result of this strategy, purchase contracts with delivery in December 2021, with a total volume of 19.6 million, were closed and replaced by contracts with delivery in the first quarter of 2022. The conclusion of opposite contracts caused the existing purchase contracts, with a total volume of 19,6 million, not to be used for the Group's redemption purposes. In connection with the above, these contracts - and the opposite contracts - were measured at fair value in accordance with IFRS 9 *Financial Instruments*. As a result of these operations, the Group generated PLN 2,778 million in revenue resulting from the difference between the sale price for contracts with delivery in December 2021 and the historic purchase price for these contracts. At the same time, the provision for the cost of CO_2 emissions for 2021 was updated, i.e. the purchase price of allowances resulting from the new contracts was taken into account. This action had a neutral impact on the financial results for 2021.

7.4 Finance income and finance costs

ACCOUNTING RULES

Finance income and finance 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, 2021	Year ended December 31, 2020
NET FINANCE INCOME/(COSTS) FROM FINANCIAL INSTRUMENTS		
Dividends	3	2
Interest, including	(307)	(269)
Interest income calculated using the effective interest rate method	*35*	32
Revaluation of financial assets	(33)	12
Reversal/(recognition) of impairment	(7)	1
Exchange differences	(4)	(33)
Loss on disposal of investment	(6)	(13)
Settlement of loss of control	324	-
TOTAL NET FINANCE COSTS) FROM FINANCIAL INSTRUMENTS	**(30)**	**(300)**
NET OTHER FINANCE INCOME/(COSTS)		
Interest cost on non-financial items	(219)	(229)
Interest on statutory receivables	2	(1)
Reversal of provisions	(1)	(1)
Other	(2)	(11)
TOTAL NET OTHER FINANCE INCOME/(COSTS)	**(220)**	**(242)**
TOTAL NET FINANCE INCOME/(COSTS)	**(250)**	**(542)**

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. The transaction is described in greater detail in notes 1.3 and 33.3 to these financial statements.

Interest costs mainly relate to outstanding bonds, credit facilities, loans, settled IRS transactions and leases. The interest cost on lease liabilities reached PLN 40 million in the current report (PLN 42 million in 2020). The interest cost on non-financial items concerns land rehabilitation provisions and employee benefit provisions.

7.5 Share of profit of equity-accounted entities

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**	**-**	**-**

2020	Polska Grupa Górnicza	Polimex Mostostal	ElectroMobility Poland	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**15.32%**	**16.48%**	**25.00%**	**34.93%**	**49.79%**
Revenue	7,476	1,498	-	15	76
Result on continuing operations	(1,838)	105	(4)	(1)	1
Share of profit of equity-accounted entities	**(282)**	**17**	**(1)**	**-**	**-**
Elimination of unrealised gains and losses	7	-	-	-	-
Impairment	(286)	-	-	(7)	-
SHARE OF PROFIT OF EQUITY-ACCOUNTED ENTITIES	**(561)**	**17**	**(1)**	**(7)**	**-**
Other comprehensive income	(11)	-	-	-	-
SHARE OF OTHER COMPREHENSIVE INCOME OF EQUITY-ACCOUNTED ENTITIES	(2)	-	-	-	-

The Group makes a consolidation adjustment related to margin on sale of coal between PGG and the Group and an adjustment of margin on Polimex Mostostal's contracts for the Group.

8. Income tax

ACCOUNTING RULES

Income tax

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

Recognised in profit or loss is the actual tax charge for the reporting period, as determined by 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, 2021 and December 31, 2020 are as follows:

	Year ended December 31, 2021	Year ended December 31, 2020
INCOME TAX RECOGNISED IN STATEMENT OF PROFIT OR LOSS		
Current income tax	650	810
Adjustments concerning current income tax from prior years	27	-
Deferred income tax	250	(649)
Adjustments of deferred income tax	(1)	5
INCOME TAX EXPENSE RECOGNISED IN STATEMENT OF PROFIT OR LOSS	**926**	**166**
INCOME TAX EXPENSE RECOGNISED IN OTHER COMPREHENSIVE INCOME		
From actuarial gains and losses from valuation of provisions for employee benefits	77	(46)
From measurement of hedging instruments	146	73
(Tax benefit) / tax burden recognised in other comprehensive income (equity)	**223**	**27**

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, 2021	Year ended December 31, 2020
PROFIT/(LOSS) BEFORE TAX	**4,871**	**314**
Income tax according to Polish statutory tax rate of 19%	926	60
ITEMS ADJUSTING INCOME TAX		
Adjustments concerning current income tax from prior years	27	-
Adjustments of deferred income tax	(1)	5
Result on settlement of loss of control	(62)	-
Costs not recognised as tax-deductible costs	50	139
Tax loss	9	-
Recognition of non-tax provisions and impairment losses	51	15
Reversal of non-tax provisions and impairment losses	(53)	-
Non-taxable income	5	(27)
Other adjustments	(26)	(26)
TAX AT EFFECTIVE TAX RATE **Income tax (expense) as presented in the consolidated financial statements**	**926**	**166**
EFFECTIVE TAX RATE	**19%**	**53%**

Adjustments related to settlement of current income tax of previous years concern mainly final settlement of the tax 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.

EXPLANATORY NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

9. Property, plant and equipment

ACCOUNTING RULES

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.

After initial recognition, an item of property, plant and equipment is measured at 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 such indication exists, or if an annual impairment test is required

the Group estimates the recoverable amount of the asset or cash-generating unit to which the asset belongs.

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

ACCOUNTING RULES

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 finance lease or an operating lease. Leases are classified as finance 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.

Useful lives adopted for groups of property, plant and equipment

Group	Average remaining depreciation period in years	Most frequently applied total depreciation periods in years
Buildings and structures	17	20 – 60
Machinery and equipment	14	4 – 40
Vehicles	6	4 – 14
Other property, plant and equipment	14	5 – 10

	As at December 31, 2021	As at December 31, 2020
Land	199	227
Buildings and construction	25,769	24,613
Technical equipment	28,883	26,264
Vehicles	351	376
Other property, plant and equipment	2,316	3,350
Property, plant and equipment in progress	3,299	6,911
NET VALUE OF PROPERTY, PLANT AND EQUIPMENT	**60,817**	**61,741**

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, 2021	**260**	**45,266**	**59,290**	**927**	**9,843**	**7,271**	**122,857**
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	-	(6)	(16)	(8)	(2)	(3)	(35)
AS AT DECEMBER 31, 2021	**234**	**47,667**	**64,049**	**940**	**9,104**	**3,478**	**125,472**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2021	**33**	**20,653**	**33,026**	**551**	**6,493**	**360**	**61,116**
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)	(29)	(29)	(6)	(1)	(7)	(73)
AS AT DECEMBER 31, 2021	**35**	**21,898**	**35,166**	**589**	**6,788**	**179**	**64,655**
NET VALUE AT DECEMBER 31, 2021	**199**	**25,769**	**28,883**	**351**	**2,316**	**3,299**	**60,817**

	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, 2020	**256**	**43,633**	**56,468**	**879**	**8,805**	**6,965**	**117,006**
Capital expenditures	-	-	3	1	-	5,353	5,357
Settlement of property, plant and equipment under construction	5	1,838	2,845	78	171	(4,937)	-
Liquidation, disposal	(1)	(163)	(366)	(21)	(9)	(87)	(647)
Purchase of new subsidiaries	-	57	182	-		2	241
Effect of change in rehabilitation provision	-	14	21	-	877	-	912
Transfers between groups	-	(118)	118	-	-	-	-
Other	-	5	19	(10)	(1)	(25)	(12)
AS AT DECEMBER 31, 2020	**260**	**45,266**	**59,290**	**927**	**9,843**	**7,271**	**122,857**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2020	**30**	**19,318**	**30,616**	**509**	**5,973**	**870**	**57,316**
Depreciation and net value of liquidation presented in costs by nature	3	1,438	1,946	66	232	8	3,693
Impairment	-	21	687	-	298	(352)	654
Liquidation, disposal	-	(159)	(361)	(19)	(9)	-	(548)
Transfers between groups	-	43	140	-	-	(183)	-
Other	-	(8)	(2)	(5)	(1)	17	1
AS AT DECEMBER 31, 2020	**33**	**20,653**	**33,026**	**551**	**6,493**	**360**	**61,116**
NET VALUE AT DECEMBER 31, 2020	**227**	**24,613**	**26,264**	**376**	**3,350**	**6,911**	**61,741**

Significant additions and disposals of property, plant and equipment

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 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 for the year ended December 31, 2021 was 22% (36% 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. At the same time, the Group recognised depreciation of capitalised stripping costs of PLN 147 million. 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 827 million (including PLN 730 million of the provision for rehabilitation of post-mining properties). In the comparative period, the net value of the capitalised rehabilitation provision was PLN 1,750 million (including PLN 1,609 million of the provision for rehabilitation of post-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 economic useful lives of property, plant and equipment was conducted in 2021 and resulted in a increase in depreciation costs for 2021 by approx. PLN 7 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, 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**	**0**	**49**
NET VALUE AT DECEMBER 31, 2021	**23**	**31**	**1**	**1**	**56**

	Land	Buildings and structures	Technical equipment	Other property, plant and equipment	Total
GROSS CARRYING AMOUNT					
AS AT JANUARY 1, 2020	**28**	**527**	**531**	**2**	**1,088**
Capital expenditures	-	1	-	-	1
Settlement of property, plant and equipment under construction	-	4	4	(8)	-
Liquidation, disposal	-	(1)	(1)	-	(2)
Other	(1)	(5)	(1)	9	2
AS AT DECEMBER 31, 2020	**27**	**526**	**533**	**3**	**1,089**
DEPRECIATION AND IMPAIRMENT LOSSES					
AS AT JANUARY 1, 2020	**4**	**313**	**403**	**-**	**720**
Depreciation and net value of liquidation presented in costs by nature	-	28	29	-	57
Liquidation, disposal	-	(1)	(1)	-	(2)
Other	(2)	-	(1)	1	(2)
AS AT DECEMBER 31, 2020	**2**	**340**	**430**	**1**	**773**
NET VALUE AT DECEMBER 31, 2020	**25**	**186**	**103**	**2**	**316**

The amounts presented in the comparative period were mainly related to a contract for the provision of regulatory system services by the Group's pumped storage power plants.
An agreement concluded with Polskie Sieci Elektroenergetyczne S.A., which had been recognised as an operating lease, was terminated. The effects of contract termination are presented in the line Other.

10. Investment property

ACCOUNTING RULES

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.

In the present period, the Group recognised capital expenditure on investment properties of PLN 1 million, while depreciation costs amounted to PLN 2 million.

11. Intangible assets and goodwill

ACCOUNTING RULES

Intangible assets

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

- economic rights acquired by the Company and recognised in non-current assets, with an economic useful life exceeding one year, intended to be used by the Company,
- 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 capitalized 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.

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 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.

The adopted useful lives for 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 – 10
Cost of finished development works	4	3 – 15
Other	9	3 – 25

	As at December 31, 2021	As at December 31, 2020
Cost of finished development works	2	3
Goodwill	285	204
Software	165	166
Other licences and patents	3	10
Other intangible assets	155	162
Intangible assets not commissioned for use	72	101
NET VALUE OF INTANGIBLE ASSETS	**682**	**646**

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, 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**

	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, 2020	**21**	**205**	**796**	**150**	**235**	**153**	**1,560**
Capital expenditures	1	-	-	-	-	75	**76**
Intangible assets not commissioned for use	-	-	50	4	12	(66)	**-**
Transfers between groups	-	-	41	(39)	(2)	-	**-**
Liquidation, sale	(4)	-	(69)	(1)	-	(61)	**(135)**
Purchase of new subsidiaries	-	2	-	-	-	-	**2**
Other	-	(3)	(13)	-	5	7	**(4)**
AS AT DECEMBER 31, 2020	**18**	**204**	**805**	**114**	**250**	**108**	**1,499**
DEPRECIATION AND IMPAIRMENT LOSSES							
AS AT JANUARY 1, 2020	**18**	**-**	**601**	**118**	**78**	**10**	**825**
Amortisation, liquidation and impairment	1	-	85	6	12	61	**165**
Transfers between groups	-	-	21	(20)	(1)	-	**-**
Liquidation, disposal	(4)	-	(69)	(1)	-	(61)	**(135)**
Other	-	-	1	1	(1)	(3)	**(2)**
AS AT DECEMBER 31, 2020	**15**	**-**	**639**	**104**	**88**	**7**	**853**
NET VALUE AT DECEMBER 31, 2020	**3**	**204**	**166**	**10**	**162**	**101**	**646**

Intangible assets not commissioned for use

The presented amounts of intangible assets not commissioned for use as at December 31, 2021 are related mainly to IT implementation programs at the Group.

Goodwill

At reporting period, December 31, 2021, goodwill was allocated to the following segments:

- District Heating - PLN 192 million,
- Renewables - PLN 85 million,
- Other activity - PLN 8 million.

Amortisation periods for intangible assets

The economic useful lives of intangible assets were verified in 2021 and resulted in an increase in amortisation costs for 2021 by approx. PLN 2 million.

12. Right-of-use assets

ACCOUNTING RULES

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 RULES

- 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 measures 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	2-70
Perpetual usufruct of land	52	12-90
Easement agreements	26	20-50
Buildings and construction	5	2-60
Other	3	1-28

	As at December 31, 2021	As at December 31, 2020
Land lease and tenancy agreements	206	227
Perpetual usufruct of land	907	933
Easement agreements	24	21
Buildings and construction	89	97
Other	31	31
NET VALUE OF RIGHT-OF-USE ASSETS	**1,257**	**1,309**

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, 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	8	18	4	2	6	38
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**

	Land lease and tenancy	Perpetual usufruct of land	Easements	Buildings and structures	Other	Total
GROSS CARRYING AMOUNT						
AS AT JANUARY 1, 2020	238	929	64	119	50	1,400
Liquidation, disposal	-	(4)	(44)	(3)	(3)	(54)
Changes, revaluation of liability, modification of contracts	14	20	1	10	1	46
Contracts signed in the current period	5	38	4	7	8	62
Other	13	(1)	-	1	(3)	10
AS AT DECEMBER 31, 2020	**270**	**982**	**25**	**134**	**53**	**1,464**
DEPRECIATION AND IMPAIRMENT LOSSES						
AS AT JANUARY 1, 2020	26	32	5	20	14	97
Depreciation, amortisation	17	18	2	18	9	64
Impairment	-	-	-	-	1	1
Liquidation, disposal	-	(1)	(3)	(1)	(2)	(7)
AS AT DECEMBER 31, 2020	**43**	**49**	**4**	**37**	**22**	**155**
NET VALUE AT DECEMBER 31, 2020	**227**	**933**	**21**	**97**	**31**	**1,309**

13. Shares accounted for using the equity method

	As at December 31, 2021	As at December 31, 2020
Polska Grupa Górnicza S.A., Katowice	-	-
Polimex - Mostostal S.A., Warsaw	144	127
ElectroMobility Poland S.A., Warsaw,	-	14
PEC Bogatynia Sp. z o.o., Bogatynia	-	-
Energopomiar Sp. z o.o., Gliwice	12	11
EQUITY-ACCOUNTED INTERESTS	**156**	**152**

	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**

	Polska Grupa Górnicza	Polimex Mostostal	ElectroMobility Poland	PEC Bogatynia	Energopomiar
SHARE IN VOTES	**15.32%**	**16.48%**	**25.00%**	**34.93%**	**49.79%**
AT DECEMBER 31, 2020					
Current assets	1,770	1,390	18	4	33
Non-current assets	9,423	674	39	21	18
Current liabilities	6,626	1,175	3	2	18
Non-current liabilities	2,704	214	-	-	10
NET ASSETS	**1,863**	**675**	**54**	**23**	**23**
Share in net assets	**285**	**111**	**14**	**7**	**11**
Goodwill	1	16	-	-	-
Impairment	(286)	-	-	(7)	-
EQUITY-ACCOUNTED INTERESTS	-	**127**	**14**	-	**11**

14. Deferred tax in statement of financial position

ACCOUNTING RULES

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, 2021	As at December 31, 2020
Difference between tax value and carrying amount of property, plant and equipment	2,585	2,776
Rehabilitation provision	859	1,242
Provisions for employee benefits	626	723
Provision for purchase of CO_2 emission allowances	2,157	1,206
Difference between tax value and carrying amount of liabilities	335	316
Difference between carrying amount and tax value of right-of-use assets	152	171
Tax losses	55	111
Other provisions	111	157
Difference between tax value and carrying amount of financial assets	545	395
LTC compensations	85	79
Difference between tax value and carrying amount of inventories	14	11
Energy infrastructure acquired free of charge and connection payments received	26	28
Other	3	4
DEFERRED TAX ASSETS	**7,553**	**7,219**

Change in deferred income tax - assets

	Year ended December 31, 2021	Year ended December 31, 2020
AS AT JANUARY 1	**7,219**	**6,947**
Change in correspondence to financial result	414	906
Change in correspondence to other comprehensive income	(78)	45
Recognition of deferred income tax in connection with the de-merger of subsidiaries	(4)	-
Entity's exit from PGE Group	(4)	-
Other changes	6	(679)
AS AT DECEMBER 31	**7,553**	**7,219**

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, 2021	As at December 31, 2020
Difference between tax value and carrying amount of property, plant and equipment	4,938	5,000
CO_2 emission allowances	792	199
Difference between tax value and present carrying amount of financial assets	1,012	713
Difference between carrying amount and tax value of lease liabilities	190	181
Receivables from recognised compensation - Act on electricity prices	-	16
Difference between tax value and carrying amount of energy origin units	15	31
Difference between tax value and present carrying amount of financial liabilities	11	8
Other	64	65
DEFERRED TAX LIABILITIES	**7,022**	**6,213**

Change in deferred income tax - liabilities

	Year ended December 31, 2021	Year ended December 31, 2020
AS AT JANUARY 1	**6,213**	**6,549**
Change in correspondence to financial result	663	262
Change in correspondence to other comprehensive income	145	72
Purchase of new subsidiaries	-	8
Business combinations	(3)	-
Other changes	4	(678)
AS AT DECEMBER 31	**7,022**	**6,213**

Changes in correspondence with other comprehensive income relate to the change in deferred tax on the measurement 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. The deductible temporary differences associated with investments in subsidiaries and associates would amount to PLN 2,491 million and the deferred tax asset would amount to PLN 473 million.

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

	Year ended December 31, 2021	Year ended December 31, 2020
Deferred tax assets	933	1,351
Income tax liabilities	(402)	(345)

15. Inventories

ACCOUNTING RULES

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.

CO_2 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.

	At December 31, 2021			At December 31, 2020		
	Initial value	Impairment	Net carrying amount	Initial value	Impairment	Net carrying amount
Hard coal	499	-	499	963	-	963
Repair and maintenance materials	683	(29)	654	701	(25)	676
Mazut	50	-	50	29	-	29
Other materials	86	(13)	73	86	(16)	70
TOTAL MATERIALS	**1,318**	**(42)**	**1,276**	**1,779**	**(41)**	**1,738**
Green energy origin rights	884	(60)	824	1,269	(129)	1,140
Other energy origin rights	3	-	3	4	(1)	3
ENERGY ORIGIN RIGHTS	**887**	**(60)**	**827**	**1,273**	**(130)**	**1,143**
CO_2 emission allowances	1	-	1	1	-	1
Hard coal	12	5	17	144	-	144
Other goods	11	(2)	9	19	6	25
TOTAL GOODS	**24**	**3**	**27**	**164**	**6**	**170**
OTHER INVENTORIES	**61**	**(2)**	**59**	**72**	**-**	**72**
TOTAL INVENTORIES	**2,290**	**(101)**	**2,189**	**3,288**	**(165)**	**3,123**

	Year ended December 31, 2021	Year ended December 31, 2020
REVALUATION ADJUSTMENTS OF INVENTORIES AS AT JANUARY 1	**(165)**	**(207)**
Recognition of an impairment loss	(18)	(32)
Reversal of impairment loss	81	64
Use of impairment loss	5	2
Fair value measurement	(2)	20
Other changes	(2)	(12)
REVALUATION ADJUSTMENTS OF INVENTORIES AS AT DECEMBER 31	**(101)**	**(165)**

16. CO_2 emission allowances for captive use

ACCOUNTING RULES

CO_2 emission allowances for captive use

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.

Pursuant to the provisions of the Regulation of the Council of Ministers of 8 April 2014 on the list of electricity generating installations covered by the greenhouse gas emission allowance trading scheme, installations belonging to PGE Group are not entitled to the allocation of free emission allowances from 2020. Only EUAs for CO_2 emissions related to the production of heat (1 million EUAs) will be allocated.

EUA	At December 31, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Quantity (Mg million)	**2**	**41**	**1**	**20**
Value (PLN million)	**797**	**4,106**	**39**	**1,735**

EUA	Quantity (Mg million)	Value (PLN million)
AT JANUARY 1, 2020	**21**	**1,205**
Purchase/sale	48	3,983
Granted free of charge	13	-
Redemption	(61)	(3,414)
AT DECEMBER 31, 2020	**21**	**1,774**
Purchase/sale	80	9,447
Granted free of charge	1	-
Redemption	(59)	(6,318)
AT DECEMBER 31, 2021	**43**	**4,903**

17. Other current and non-current assets

ACCOUNTING RULES

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, 2021	As at December 31, 2020
Advances for property, plant and equipment	749	711
Cost to acquire customers	106	105
Other non-current assets	18	23
TOTAL OTHER ASSETS	**873**	**839**

Advances for property, plant and equipment are mainly related to the construction of two gas and steam units by PGE Gryfino 2050 sp. z o.o. The cost to acquire customers concern co-financing by PGE Energia Ciepła S.A. of investments in the development of district heating networks and agent commissions at PGE Obrót S.A.

17.2 Other current assets

	As at December 31, 2021	As at December 31, 2020
PREPAYMENTS		
Cost to acquire customers	56	50
Long-term contracts	38	43
Property and tort insurance	14	14
Logistics costs related to coal purchases	4	17
IT services	15	16
Social Fund	7	10
Other prepayments	18	20
OTHER CURRENT ASSETS		
VAT receivables	537	519
Excise tax receivables	17	17
Advances for deliveries	507	11
Other current assets	27	82
TOTAL OTHER ASSETS	**1,240**	**799**

The amount of VAT receivables is related mainly to an estimate of electricity sales, unread on metering equipment as of the reporting date. The amount of excise tax receivables regards the exemption from excise tax of electricity generated from renewable energy sources on the basis of a document confirming the redemption of the certificate of origin.

The amount of advance is mainly related to future coal supplies for the purposes of the Conventional Generation segment.

ACCOUNTING RULES

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, 2021 and December 31, 2020

	Year ended December 31, 2021	Year ended December 31, 2020
AS AT JANUARY 1	**155**	**148**
Costs of bringing a contract to conclusion - capitalised	61	53
Amortisation and impairment	(54)	(46)
AS AT DECEMBER 31	**162**	**155**
Current	56	50
Non-current	106	105

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 RULES

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, 2021	As at December 31, 2020
Cash on hand and cash at bank	5,059	1,415
Overnight deposits	5	309
Short-term deposits	1,124	1,423
Cash in VAT accounts	545	1,042
TOTAL	**6,733**	**4,189**
Exchange differences on cash in foreign currencies	1	(16)
Cash and cash equivalents presented in the statement of cash flows	**6,734**	**4,173**
Undrawn borrowing facilities as at December 31	6,002	6,556
including overdraft facilities	*1,830*	*1,811*

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 212 million (PLN 93 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 RULES

Social 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, 2021	As at December 31, 2020
Loans granted to employees	70	76
Cash and cash equivalents	54	55
Other assets	2	-
Fund liabilities	(119)	(120)
BALANCE AFTER COMPENSATION	**7**	**11**
Contributions to the Social Fund in the period	**187**	**198**

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

20. Equity

ACCOUNTING RULES

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. Equity management takes places at 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, 2021	Year ended December 31, 2020 *restated data**
Net debt / EBITDA	0.44x	1.22x
Net debt / equity	0.09x	0.17x

** In order to standardise the reporting of net debt (adjustment to the method of calculating covenants contained in loan agreements), starting from the results for the first half of 2021, there has been a change in presentation, which also results in a change in the comparative period, i.e. only funds in client accounts of PGE Dom Maklerski S.A. constituting collateral for settlements with clearinghouse IRGiT are included in restricted funds.*

20.1 Share capital

	As at December 31, 2021	As at December 31, 2020
1,470,576,500 Series A ordinary Shares with a nominal value of PLN 10.25 each	15,073	15,073
259,513,500 Series B ordinary Shares with a nominal value of PLN 10.25 each	2,660	2,660
73,228,888 Series C ordinary Shares with a nominal value of PLN 10.25 each	751	751
66,441,941 Series D ordinary Shares with a nominal value of PLN 10.25 each	681	681
Total share capital	**19,165**	**19,165**

All of the Company's shares are paid up.
The Company plans to initiate a recapitalisation of the Company in connection with its planned investment projects, as described in note 33.6 of this report.

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.

Based on this act the Minister of Energy has the right to object to any resolution adopted or legal activity undertaken by the Management Board involving assets that would endanger the functioning, operational continuity 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

Reserve 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 13,766 million as at December 31, 2021 and to PLN 12,022 million as at December 31, 2020.

20.3 Hedging reserve

	Year ended December 31, 2021	Year ended December 31, 2020
AS AT JANUARY 1	**(13)**	**(323)**
Change in hedging reserve:	**768**	**383**
Measurement of hedging instruments, including:	**756**	**387**
Recognition of the effective part of change in fair value of hedging instruments in the part considered as effective hedge	*762*	*420*
Accrued interest on derivatives transferred from hedging reserve and recognised in interest expense	*(8)*	*17*
Currency revaluation of CCIRS transaction transferred from hedging reserve and recognised in the result on foreign exchange differences	*2*	*(51)*
Ineffective portion of changes in fair value of hedging derivatives recognised in profit or loss	*-*	*1*
Measurement of other financial assets	**12**	**(4)**
Deferred tax	**(146)**	**(73)**
HEDGING RESERVE AFTER DEFERRED TAX	**609**	**(13)**

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

20.4 Foreign exchange differences from translation

Foreign exchange differences from translation of subsidiaries comprise the effect of translation into PLN of the financial statements of foreign companies belonging to the Group, i.e. PGE Trading GmbH and PGE Sweden AB (publ) as part of 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, 2021	As at December 31, 2020
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	5,827	3,209
Profit/loss recognised by the parent company in retained earnings through other comprehensive income	3	(2)
Retained earnings from prior years, subject to distribution	-	-
Net profit/(loss) of the parent company	1,734	1,744
TOTAL RETAINED EARNINGS PRESENTED IN THE STATEMENT OF FINANCIAL POSITION	**7,564**	**4,951**

For information regarding limitations to payment of dividends from reserve capital please refer to 20,2 of these financial statements. As at December 31, 2021 there were no other restrictions on dividend payments.

20.6 Equity attributable to non-controlling interests

As at December 31, 2021, 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, 2021	As at December 31, 2020
AS AT JANUARY 1	**983**	**848**
Share of net profit of subsidiaries	(27)	38
Share of actuarial profit and losses	2	-
Dividends declared by subsidiaries	(2)	(3)
Sale of subsidiaries	(155)	-
Share capital increase and share purchase	-	114
Acquisition of non-controlling interests by the Group	(4)	(14)
AS AT DECEMBER 31	**797**	**983**

Of the total equity attributable to non-controlling interests, 85% 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, 2021*	
Current assets	662
Non-current assets	1,692
Current liabilities	564
Non-current liabilities	212
Equity	1,578
Revenue	931
Result on continuing operations	12
Approved dividends	-

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

20.7 Earnings per share

ACCOUNTING RULES

Earnings per share

Earnings 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 earnings 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 earnings per share.

	Year ended December 31, 2021	Year ended December 31, 2020
NET PROFIT/(LOSS) ATTRIBUTABLE TO:	**3,945**	**148**
equity holders of the parent company	3,972	110
non-controlling interests	(27)	38
NET PROFIT / (LOSS) ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE COMPANY USED TO CALCULATE EARNINGS PER SHARE	**3,972**	**110**
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	1,869,760,829	1,869,760,829
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES USED TO CALCULATE EARNINGS / (LOSS) PER SHARE	**1,869,760,829**	**1,869,760,829**
EARNINGS AND DILUTED EARNINGS PER SHARE ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT (IN PLN)	**2.12**	**0.06**

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 RULES

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 finance 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.

ACCOUNTING RULES

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 capitalised 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.

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 finance 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 CO_2 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

ACCOUNTING RULES

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 property rights is measured at the reliably estimated amount of the fulfilment of the future obligation to redeem the property 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, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Employee benefits	2,381	276	3,007	276
Rehabilitation provision	6,071	4	8,110	1
Provision for shortage of CO_2 emission allowances	-	11,553	-	6,318
Provision for energy origin units held for redemption	-	276	-	589
Provision for non-contractual use of property	6	5	58	5
Other provisions	101	486	32	122
TOTAL PROVISIONS	**8,559**	**12,600**	**11,207**	**7,311**

Changes in provisions

	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
Sale of Group companies	(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

	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, 2020	**3,066**	**6,649**	**3,532**	**572**	**72**	**127**	**14,018**
Actuarial gains and losses	40	-	-	-	-	-	40
Current employment costs	121	-	-	-	-	-	121
Past employment costs	(10)	-	-	-	-	-	(10)
Interest costs	61	168	-	-	-	-	229
Adjustment of discount rate and other assumptions	231	1,173	-	-	-	-	1,404
Benefits paid / Provisions used	(228)	(1)	(3,411)	(947)	-	(32)	(4,619)
Provisions reversed	-	-	(121)	(2)	(16)	(15)	(154)
Provisions recognised - costs	-	55	6,318	966	7	80	7,426
Provisions recognised - expenditures	-	43	-	-	-	-	43
Acquisition of companies within the Group	-	14	-	-	-	-	14
Other changes	2	10	-	-	-	(6)	6
DECEMBER 31, 2020	**3,283**	**8,111**	**6,318**	**589**	**63**	**154**	**18,518**
Change recognised in operating expenses	(147)	(55)	(6,197)	(964)	-	(35)	(7,398)
Change recognised in other operating income/ (expenses)	-	(306)	-	-	9	(28)	(325)
Change recognised in other financial income/ (expenses)	(61)	(168)	-	-	-	(2)	(231)
Change recognised in assets	-	(912)	-	-	-	-	(912)
Change recognised in other comprehensive income	(235)	-	-	-	-	-	(235)

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 5,571 million as of December 31, 2021 (PLN 7,463 million at December 31, 2020).

In 2021, the Group updated some of the assumptions used in the valuation of the mine workings rehabilitation provisions. Changes to the valuation assumptions were made at both mines in connection with the revaluation of the cost of decommissioning the workings at the end of mining.

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 – 3.6% (compared to 1.3% as at December 31, 2020);
- for expenses expected to be incurred 16-25 years from the balance sheet date – 4.08%, PGE's extrapolation in accordance with the adopted method (compared to 1.6% as at December 31, 2020);
- for expenses expected to be incurred more than 25 years from the balance sheet date – 4.17%, PGE's extrapolation in accordance with the adopted method (compared to 1.9% as at December 31, 2020).

The update of the discount rate resulted in a decrease in the provision by PLN 4,460 million, while the change of other assumptions resulted in an increase in the provision by PLN 2,298 million. Ongoing production and the reversal of the discount resulted in an increase in the provision of PLN 270 million. As a result, the provision for rehabilitation of mine workings decreased by PLN 1,892 million in the current reporting period. This change was recognised as follows:

- PLN 749 million - in correspondence with assets (as a decrease in the value of property, plant and equipment),
- PLN 1,143 - 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	5,571	1,706	(1,270)

Provision for rehabilitation of ash landfills

PGE Group's generating assets create provisions for the rehabilitation of ash landfills. As at December 31, 2021, this provision amounted to PLN 248 million (PLN 318 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 26 million as of December 31, 2021 (PLN 71 million at December 31, 2020).

Liquidation of property, plant and equipment

As at the reporting date, the provision amounted to PLN 230 million (PLN 259 million as at the end of the comparative period) and refers to 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, 2021, this provision amounted to PLN 11,553 million (PLN 6,318 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, 2021 amounted to PLN 276 million (PLN 589 million in the comparative period) and was created mainly by PGE Obrót S.A.

21.4 Provision for claims concerning non-contractual use of property

PGE Group companies recognise a provision for claims related to the non-contractual use of property. This issue mainly concerns PGE Dystrybucja, which owns distribution grid assets. The provision recognised at the reporting date amounts to PLN 11 million - this is a provision for cases under legal proceedings. In the comparative period, the provision amounted to PLN 73 million (including PLN 32 million for cases pending in court).

21.5 Other provisions

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. In turn, the Act on Renewable Energy Sources of February 20, 2015 introduced a billing system for prosumers and energy cooperatives that generates losses for the obliged seller (i.e. PGE Obrót S.A.) the higher the percentage of electricity fed into the grid the prosumer or energy cooperative can compensate with its own consumption.

Therefore, the prosumer does not incur any variable costs of distribution services for energy drawn from the grid. On the other hand, the supply company, which is only an intermediary in the sale of distribution services, has to pay the full fee for the electricity consumed by the prosumer to the Distribution Network Operator. Supply companies, although they are not in the business of distribution services, are burdened with the costs related thereto due to the fact that they are a party to the comprehensive contract with the consumer.

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 these statements. The provision has been recognised for losses projected for 2022, i.e. the period of reliably predictable energy price developments.

Provision for potential claims from counterparties

In the second half of 2021, ENESTA sp. z o.o. terminated unfavourable contracts for the supply of electricity and natural gas. As a result, a provision for potential claims from counterparties in the amount of PLN 279 million was created.

In addition, 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 dispute with Worley Parsons, in case of defeat PGE S.A. may be required to cover the costs of 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.

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, 2021	As at December 31, 2020
Expected inflation rate (%)	4.45% in 2022. 3.35% in 2023. 2.5% in 2024 and in subsequent years	2.58 in 2021. 2.5 in 2022 and in subsequent years
Discount rate (%)	3.6	1.3
Expected salary growth rate (%)	1.36 – 2.80	0.0 – 3.03
Employee turnover (%)	0.2 – 9.8	0.0 – 15.0
Expected medical care costs growth rate (%)	-22.34* in 2022; 2.5% in subsequent years	2.5 - 2.58
Expected Social Fund (ZFŚS) allowance growth rate (%)	4.5 – 7.27	0.0 - 4.0

**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 3.6% was used to discount future benefit payments at the reporting date (December 31, 2020: 1.3%), i.e. at the level of the yield on long-term securities issued by the State Treasury and listed on the Polish capital market.

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

	At December 31, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Retirement, pension and post-mortem benefits	462	101	557	105
Coal subsidy	100	9	132	9
Energy tariff	743	38	951	32
Social Fund	356	18	501	17
Medical benefits	54	4	71	4
Total post-employment benefits	**1,715**	**170**	**2,212**	**167**
Jubilee awards	666	106	795	109
TOTAL ACTUARIAL PROVISIONS	**2,381**	**276**	**3,007**	**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, 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)
Sale of Group companies	(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 finance income/(costs)	(8)	(2)	(12)	(7)	(1)	(12)	(42)
Change recognised in other comprehensive income	68	25	175	121	15	-	404

	Retirement, pension and post-mortem benefits	Coal subsidy	Energy tariff	Social Fund	Medical benefits	Jubilee awards	Total
AS AT JANUARY 1, 2020	**660**	**148**	**832**	**442**	**67**	**917**	**3,066**
Actuarial gains and losses	(8)	(6)	33	22	3	(4)	40
Discount rate adjustment	33	8	97	48	5	40	231
Current employment costs	30	1	26	13	2	49	121
Past employment costs	(9)	-	6	(5)	(1)	(1)	(10)
Interest costs	13	3	17	9	1	18	61
Benefits paid / Provisions used	(58)	(8)	(27)	(17)	(3)	(115)	(228)
Other changes	1	(5)	(1)	6	1	-	2
AS AT DECEMBER 31, 2020	**662**	**141**	**983**	**518**	**75**	**904**	**3,283**
Change recognised in operating expenses	(21)	(1)	(32)	(8)	(1)	(84)	(147)
Change recognised in finance income/(costs)	(13)	(3)	(17)	(9)	(1)	(18)	(61)
Change recognised in other comprehensive income	(25)	(2)	(130)	(70)	(8)	-	(235)

Sensitivity analysis of the value of actuarial provisions as at December 31, 2021, 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	40	(34)	(35)	40
Coal subsidy	109	9	(7)	(8)	10
Energy tariff	781	104	(85)	(87)	106
Social Fund	374	45	(39)	(40)	46
Medical benefits	58	5	(5)	(5)	5
Jubilee awards	772	49	(43)	(44)	49
TOTAL	**2,657**	**252**	**(213)**	**(219)**	**256**

23. Deferred income and governments grants

ACCOUNTING RULES

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, 2021	As at December 31, 2020
GOVERNMENT GRANTS		
Grants received from NFOŚiGW (environmental funds)	282	275
Redemption of loans from environmental funds	28	30
Other government grants	114	124
DEFERRED INCOME		
Subsidies received and connection fees	56	35
Donations and property, plant and equipment granted free of charge	65	80
Other deferred income	55	56
NON-CURRENT GOVERNMENT GRANTS AND DEFERRED INCOME, TOTAL	**600**	**600**

23.2 Current deferred income and governments grants

	As at December 31, 2021	As at December 31, 2020
GOVERNMENT GRANTS		
Grants received from NFOŚiGW (environmental funds)	17	17
Redemption of loans from environmental funds	3	3
Other government grants	12	12
DEFERRED INCOME		
Subsidies received and connection fees	3	2
Donations and property, plant and equipment granted free of charge	38	38
Other deferred income	3	5
CURRENT GOVERNMENT GRANTS AND DEFERRED INCOME, TOTAL	**76**	**77**

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, 2021	As at December 31, 2020
OTHER NON-CURRENT LIABILITIES		
Liabilities related to a contract	132	64
Estimated liabilities due to Voluntary Leave Programs	1	1
TOTAL OTHER NON-CURRENT LIABILITIES	**133**	**65**

24.2 Other current non-financial liabilities

	As at December 31, 2021	As at December 31, 2020
OTHER CURRENT LIABILITIES		
VAT liabilities	564	540
Excise tax liabilities	27	33
Environmental fees	240	202
Payroll liabilities	257	284
Bonuses for employees	277	272
Unused annual holiday leave	96	113
Liabilities due to Voluntary Leave Programs	1	1
Bonuses for the Management Board	17	20
Estimated liabilities concerning other employee benefits	5	5
Personal income tax	99	95
Liabilities from social insurances	255	269
Liabilities related to a contract	344	296
Liabilities related to dividends	4	7
Other	72	66
TOTAL OTHER CURRENT LIABILITIES	**2,258**	**2,203**

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 2021, the Group recognised revenue of PLN 147 million (PLN 165 million in 2020), which was included in the balance of contract liabilities at the beginning of the period.

EXPLANATORY NOTES TO FINANCIAL INSTRUMENTS

25. Financial Instruments

ACCOUNTING RULES

Financial instruments

Classification and measurement

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 RULES

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.

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.

	At December 31, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Trade receivables	-	4,209	-	3,602
Deposits and loans	194	-	185	6
Loans granted		77		
Bonds	-	-	-	40
Receivables from recognised compensation - Act on electricity prices	-	-	-	85
Deposits, security and collateral	5	3,348	2	788
Damages and penalties	-	17	-	102
Other financial receivables	5	76	4	189
FINANCIAL RECEIVABLES	**204**	**7,727**	**191**	**4,812**

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 22% of the consolidated balance of trade receivables, while receivables from the corporate clients of PGE Obrót S.A. represent about 47% 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 28.3 of these consolidated financial statements.

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

ACCOUNTING RULES

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, 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

	At December 31, 2020			
	Recognised in profit or loss	Recognised in other comprehensive income	Assets	Liabilities
DERIVATIVES AT FAIR VALUE THROUGH PROFIT OR LOSS				
Currency forwards	(117)	-	3	4
Commodity forwards	231	-	11	4
Commodity SWAP	-	-	11	13
Contracts for purchase/sale of coal	(89)	-	17	18
IRS transactions	-	-	-	-
Options	11	-	16	-
HEDGING DERIVATIVES				
CCIRS hedges	37	(7)	64	-
IRS hedges	(73)	(261)	-	385
Currency forward - USD	-	(1)	-	1
Currency forward - EUR	-	656	381	23
Other assets carried at fair value through profit or loss				
Investment fund participation units	(4)	-	52	-
TOTAL	**(4)**	**387**	**555**	**448**
current			423	63
non-current			132	385

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.

A rollover of commodity forwards was recognised in the current period. Details of this event are presented in note 7.3 of these financial statements.

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 2022.

IRS transactions

PGE S.A. executed IRS transactions to hedge interest rates on credit facilities with a total nominal value of PLN 7,030 million. Before beginning to repay the principal on certain credit facilities, the current nominal amount of credit-hedging IRS transactions is PLN 4,654 million. To recognise these IRS transactions, the Company 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

As of the reporting date, the Company holds participation units in three sub-funds of Towarzystwo Funduszy Inwestycyjnych Energia S.A., whose value as of the reporting date amounts to PLN 30 million.

25.1.3 Loans, borrowings, bonds and leases

	At December 31, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Loans and borrowings	5,757	2,099	7,105	1,318
Bonds issued	2,033	13	2,035	10
Leases	876	48	885	56
TOTAL CREDIT, LOANS, BONDS AND LEASES	**8,666**	**2,160**	**10,025**	**1,384**

Currency position and interest rates

As at December 31, 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**	

As at December 31, 2020

Currency	Reference rate	Value in currency	Value in PLN	Final repayment deadline
PLN	Variable	7,294	7,294	credit, loans - September 2021 - June 2035 bonds – May 2026 – May 2029
	Fixed	3,103	3,103	credit, loans - March 2023 - August 2038 leases - April 2021 - March 2101
TOTAL PLN		**10,397**	**10,397**	
EUR	Variable	47	219	Credit and loans - June 2024
	Fixed	140	644	bonds - VIII 2029
TOTAL EUR		**187**	**863**	
USD	Variable	40	149	Credit and loans - September 2021
TOTAL USD		**40**	**149**	
TOTAL CREDIT, LOANS, BONDS AND LEASES			**11,409**	

The following table illustrates changes in credit, loans and bonds in the years ended December 31, 2021 and 2020:

	Year ended December 31, 2021	Year ended December 31, 2020 *restated data*
AS AT JANUARY 1	**10,468**	**11,377**
CHANGE IN OVERDRAFT FACILITIES	**-**	**(572)**
CHANGE IN CREDIT, LOANS, BONDS	**(566)**	**(337)**
Drawn credit, loans, leases / issued bonds	601	4,387
Repayment of credit and loans / buy-back of bonds	(1,221)	(4,829)
Accrued interest	170	236
Paid interest	(123)	(252)
Purchase of new subsidiaries	-	104
Conversion of loan to equity	-	(57)
Exchange differences	9	71
Other changes	(2)	3
AS AT DECEMBER 31	**9,902**	**10,468**

Loans and borrowings

Lender	Security instrumen	Maturity	Limit in currency	Currency	Interest rate	Liability at 31-12-2021	Liability at 31-03-2020
Bank consortium	IRS	2023-09-30	3,630	PLN	Variable	2,909	3,636
European Investment Bank	-	2034-08-25	1,500	PLN	Fixed	1,505	1,505
Bank Gospodarstwa Krajowego	IRS	2027-12-31	1,000	PLN	Variable	751	876
European Bank for Reconstruction and Development	IRS	2028-06-07	500	PLN	Variable	439	501
Bank Gospodarstwa Krajowego	IRS	2028-12-31	500	PLN	Variable	438	500
European Investment Bank	-	2034-08-25	490	PLN	Fixed	493	493
Nordic Investment Banl	-	2024-06-20	150	EUR	Variable	129	219
Bank Pekao S.A.	-	2021-09-21	40	USD	Variable	135	149
Millennium	-	2021-06-16	7	PLN	Fixed	-	1
Bank Gospodarstwa Krajowego	-	2023-05-31	1,000	PLN	Variable	-	-
Revolving credit facility (bank syndicate)	-	2023-12-16	4,100	PLN	Variable	-	-
Bank Pekao S.A.	-	2024-12-22	500	PLN	Variable	-	-
PKO BP S.A.	-	2022-04-29	300	PLN	Variable	-	-
European Investment Bank	-	2038-10-16	273	PLN	Fixed	274	-
NFOŚiGW	-	June 2022 - December 2028	215	PLN	Fixed	116	157
NFOŚiGW	-	June 2024 - June 2035	630	PLN	Variable	491	279
Voivodship Fund for Environmental Protectic and Water Management (WFOŚiGW)	-	September 202 - December 2029	34	PLN	Fixed	25	6
Voivodship Fund for Environmental Protectic and Water Management (WFOŚiGW)	-	March 2026 - September 202	187	PLN	Variable	151	101
TOTAL BANK CREDIT						**7,856**	**8,423**

As at December 31, 2021, the value of the available overdrafts at significant PGE Group companies was PLN 1,800 million. The repayment dates for the available overdraft facilities of PGE Group's key companies are in 2022-2024.

In 2021 and after the reporting period no failures to make payment or other breaches of credit agreement terms were recorded.

Bonds issued

Issuer	Security instrument	Program maturity date	Program limit in currency	Currency	Interest rate	Tranche issue date	Tranche buy-back date	Liability at 31-12-2021	Liability at 31-03-2020
PGE SA	IRS	indefinite	5,000	PLN	Variable	2019-05-21	2029-05-21	1,003	1,001
						2019-05-21	2026-05-21	401	400
PGE Sweden AB (publ)	CCIRS	indefinite	2,000	EUR	Fixed	2014-08-01	2029-08-01	642	644
TOTAL OUTSTANDING BONDS								**2,046**	**2,045**

Lease liabilities

ACCOUNTING RULES

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 (printers, 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 RULES

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, 2021		At December 31, 2020	
	Non-current	Current	Non-current	Current
Trade liabilities	-	1,608	-	1,357
Purchase of property, plant and equipment and intangible assets	7	909	6	1,050
Security deposits received	30	106	30	96
Liabilities related to LTC	430	17	395	22
Insurance	-	-	-	8
Settlements related to transactions on exchange	-	1,663	-	856
Other	50	298	17	115
TRADE AND OTHER FINANCIAL LIABILITIES	**517**	**4,601**	**448**	**3,504**

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, 2021 amounted to EUR 140 million and their estimated fair value amounted to EUR 155 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 2,272 million and its fair value is PLN 2,182 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 valuation models for financial instruments based on publicly available exchange rates, interest rates, discount curves in particular currencies (applicable also for commodities which prices are denominated in these currencies) derived 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. 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.

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, 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**	**-**	**-**

	Assets at December 31, 2020		Liabilities at December 31, 2020	
FAIR VALUE HIERARCHY	**Level 1**	**Level 2**	**Level 1**	**Level 2**
CO_2 emission allowances in trading activities	1	-	-	-
Hard coal in trading activities	144	-	-	-
INVENTORIES	**145**	**-**	**-**	**-**
Currency forwards		3	-	4
Commodity forwards		11	-	4
Commodity SWAP		11	-	13
Contracts for purchase/sale of coal		17	-	18
Options		16	-	-
DERIVATIVES AT FAIR VALUE THROUGH PROFIT OR LOSS	**-**	**58**		**39**
CCIRS hedges	-	64	-	-
IRS hedges	-	-	-	385
Currency forward - USD	-	-	-	1
Currency forward - EUR	-	381	-	23
HEDGING DERIVATIVES	**-**	**445**	**-**	**409**
Investment fund participation units	-	52	-	-
OTHER ASSETS / LIABILITIES MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS	**-**	**52**	**-**	**-**

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, 2021		At December 31, 2020		Maturity at December 31, 2021
	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	110	144	64	144	July 2029
Options	16	5	16	6	November 2026
Investment fund participation units	30	27	52	48	n/a
Currency forward purchase EUR	485	3,980	382	2,766	December 2024
Currency forward sale EUR		14		31	
Commodity forward sale PLN	47	132	11	871	December 2023
Commodity forward purchase PLN		180		882	December 2023
IRS - interest rate PLN	203	438	-	-	June 2028
		750		-	December 2027
		438		-	December 2028
		2,904		-	September 2023
		1,000		-	May 2029
		400		-	May 2026
Currency forward purchase USD	3	8	-	-	December 2022
Currency forward purchase USD	1	10	2	12	April 2022
Currency forward purchase USD	3	8	-	-	December 2022
Commodity SWAP purchase USD	22	5	11	4	January 2022
Commodity SWAP sale USD		17			June 2022
Contracts for purchase - USD	19	6	17	56	September 2022
Contracts for sale - USD		13		9	June 2022
Financial assets	**939**	**-**	**555**	**-**	
Currency forward purchase EUR	34	831	24	88	December 2024
Currency forward sale EUR		65		208	December 2024
IRS – interest rate - PLN	-	-	385	500 875 500 3,630 1,000 400	June 2028 December 2027 December 2028 September 2023 May 2029 May 2026
Commodity forward PLN	1	19 18	4	258 254	December 2023
Commodity SWAP purchase USD	31	25	13	3	June 2022
Commodity SWAP sale USD		11		1	June 2022
Currency forward - USD	3	53	2	32 -	September 2022
Currency forward - USD	-	-	1	4	April 2021
Currency forward - USD	3	8	1	23	December 2022
Contracts for purchase - USD	11	21	18	-	April 2022
Contracts for sale - USD		6		8	June 2022
Financial liabilities	**83**		**448**		

25.4 Statement of comprehensive income

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

Year ended December 31, 2021	Cash and cash equivalents	Other financial assets	Shares and other equity instruments	Financial instruments at fair value	Financial hedging instruments	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)**

Year ended December 31, 2020	Cash and cash equivalents	Other financial assets	Shares and other equity instruments	Financial instruments at fair value	Financial hedging instruments	Other financial liabilities	TOTAL
Dividends	-	-	2	-	-	-	2
Interest income / (costs)	3	25	-	-	(82)	(215)	(269)
Impairment	-	-	(8)	20	-	-	12
Reversal/(recognition) of impairment	-	(2)	3	-	-	-	1
Exchange differences	(9)	227	-	-	-	(251)	(33)
Gain / (loss) on sale of investment	-	-	(13)	-	-	-	(13)
TOTAL PROFIT/ (LOSS)	**(6)**	**250**	**(16)**	**20**	**(82)**	**(466)**	**(300)**

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, 2021	As at December 31, 2020
Property, plant and equipment	911	900
Inventories	-	-
Trade receivables	119	206
TOTAL ASSETS AS COLLATERAL FOR REPAYMENT OF LIABILITIES	**1,030**	**1,106**

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, 2021 and as at December 31, 2020 is a capped mortgage on an 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. Santander Bank Polska and Bank Polska Kasa Opieki S.A PEKAO SA hold customer funds. Cash reported as restricted cash under these two headings amounted to PLN 212 million as at December 31, 2021 (PLN 93 million in the comparative period).

In addition, financial receivables include funds for the Mine Liquidation Fund in the amount of PLN 194 million (PLN 185 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;
- 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
- property 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 property rights to electricity origin certificates	• PGE Group has a net short position resulting from the obligation to redeem property rights related to the sale of electricity to end users.	• Price of transactions to buy/sell property 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 related to changes in demand for electricity in the National Power System.	• Macroeconomic situation, especially in energy-intensive industries; • Technological changes, especially in energy efficiency and development of distributed energy; • Climate changes; • Regulations, including preferences for specific sectors of the energy industry; • Degree of integration with foreign power systems.
Short-term volume risk	• Risks relating to changes in the planned volume of electricity sales as a result of changes in customers' demand for electricity.	• 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; • 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, 2021		Year ended December 31, 2020	
	Tonnage – external purchase (in thousand tonnes)	Purchase costs (PLN million)	Tonnage – external purchase (in thousand tonnes)	Purchase costs (PLN million)
Hard coal	9,983	2,932	9,796	2,993
CO_2 emission allowances for captive use	116,206	14,024	78,769	6,629
Natural gas [m^3 000s]	1,173,366	980	1,305,773	774
Biomass	719	150	584	140
Fuel oil	66	160	49	74
TOTAL	**-**	**18,246**	**-**	**10,610**

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 1.2 billion as at December 31, 2021 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 2.9 billion as at December 31, 2021 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.

The COVID-19 pandemic did not noticeably affect PGE Group's interest rate risk. Long-term liabilities based on variable interest rates were 100% hedged by IRS and CIRS contracts.

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

		Type of interest	As at December 31, 2021	As at December 31, 2020
Derivatives - assets exposed to interest rate risk	PLN	Fixed	47	11
		Variable	219	16

	Other currencies	Fixed	-	-
		Variable	643	476
Deposits, cash, debt securities, leases	PLN	Fixed	6,044	3,708
		Variable	-	-
	Other currencies	Fixed	964	739
		Variable	-	-
Derivatives – liabilities, exposed to interest rate risk	PLN	Fixed	(1)	(4)
		Variable	-	(385)
	Other currencies	Fixed	-	-
		Variable	(82)	(59)
Loans, borrowings, bonds and lease	PLN	Fixed	(3,329)	(3,103)
		Variable	(6,583)	(7,294)
	Other currencies	Fixed	(650)	(644)
		Variable	(264)	(368)
Net exposure	PLN	Fixed	2,761	612
		Variable	(6,364)	(7,663)
	Other currencies	Fixed	314	95
		Variable	297	49

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;
- fees denominated in or indexed to foreign currency relevant to purchase of transmission capacities;
- sales and purchases of CO_2 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 currency risk measure is based on the 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 currency risk management strategy adopted based on minimising and hedging risk exposures, the cost of servicing liabilities in foreign currencies in the medium and long term did not change significantly as a result of the hedging measures that were taken prior to the outbreak of the COVID-19 pandemic.

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, 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 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, 2020			
		EUR		USD	
		currency	PLN	currency	PLN
Trade and other financial receivables:	5,003	156	720	1	4
Cash and cash equivalents	4,189	158	729	1	4
Derivatives, including:	555	2,924	13,493	90	356
Carried at fair value through profit or loss	*58*	-	-	*90*	*356*
Hedging instruments	*445*	*2,924*	*13,493*	-	-
Other assets at fair value through profit or loss	*52*	-	-	-	-
FINANCIAL ASSETS	**9,747**	**3,238**	**14,942**	**92**	**364**
Loans, borrowings, bonds and leases	11,409	187	863	40	149
Trade and other financial liabilities measured at amortised cost	3,952	196	902	10	37
Derivatives, including:	448	120	554	70	262
Carried at fair value through profit or loss	*40*	-	-	*66*	*247*
Hedging instruments	*408*	*120*	*554*	*4*	*15*
FINANCIAL LIABILITIES	**15,809**	**503**	**2,319**	**120**	**448**

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 liquidity risk management at PGE Group is to ensure and maintain the companies' ability to meet their existing and future financial liabilities, taking into account the cost to obtain liquidity.

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.

Periodical planning and monitoring of liquidity at PGE Group allows for securing funds to cover a potential liquidity gap, both through allocation of funds between PGE Group companies (cash pooling mechanism) and using external financing, including overdraft facilities.

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 various financing sources, such as overdrafts, term loans and investment loans, issue of domestic bonds 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

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 CO2 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**

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

AT DECEMBER 31, 2020	Carrying amount	Total payments	Under 3 months	From 3 to 12 months	From 1 year to 5 years	Over 5 years
Loans and borrowings	8,423	9,049	187	1,241	5,274	2,347
Bonds issued	2,045	2,381	-	41	166	2,174
Trade and other financial payables	3,096	3,096	2,508	142	441	5
Settlements with exchanges, largely related to the purchase of CO2 emission allowances (*)	856	856	856	-	-	-
Lease liabilities	941	2,322	18	55	239	2,010
Derivatives	448	450	42	147	242	19
TOTAL	**15,809**	**18,154**	**3,611**	**1,626**	**6,362**	**6,555**

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 property rights to electricity certificates of origin and CO_2 emission allowances, transactions for purchase and sale of fuels, etc. This concerns, among other things, the possibility and lack of payment by counterparties and customers of PGE Group or the fulfilment of their delivery obligations towards a company of PGE Group 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.

There are significant concentrations of credit risk within PGE Group related to trade receivables. The three most significant customers accounted for approx. 12% 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, 2021	Year ended December 31, 2020
Trade and other financial receivables	7,931	5,003
Cash and cash equivalents	6,733	4,189
Derivatives - assets	939	555
MAXIMUM EXPOSURE TO CREDIT RISK	**15,603**	**9,747**

26.3.1 Trade receivables. Other loans and financial receivables

ACCOUNTING RULES

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 losses on receivables are recognised as other operating costs or finance 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, 2020		December 31, 2020	
	Amount of impairment	% of impairment	Amount of impairment	% of impairment
Receivables before due date	462	0.0 – 0.14/ 100	479	0.0 – 0.17/ 100
Past due <30 days	5	0.0 – 2.5/ 100	37	0.0 – 2.9/ 100
Past due 30-90 days	7	0.0 – 10.2/ 100	28	0.0 – 87.48/ 100
Past due 90-180 days	20	100.0	18	100.0
Past due 180-360 days	46	100.0	30	100.0
Past due >360 days	385	100.0	296	100.0
TOTAL FINANCIAL ASSETS	**925**		**888**	

The impairment loss applies to receivables subject to matrix and individual impairment loss (100%). The Group has no significant items of receivables, past due for more than 90 days, which were not subject to a 100% write-down at the reporting date, except for the disputed receivable with Enea S.A. described in detail in note 28.3 to these financial statements.

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

Rating level	December 31, 2021		December 31, 2020	
	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 2021, 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.

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. Moreover, the Group has updated the models used to estimate 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 has been changed - from December 31, 2020, losses are calculated based on quotations of Credit Default Swap (CDS) instruments, while for the second group of counterparties, the percentage ratios in the different intervals of the provision matrix have been updated to a level corresponding to the current collectability of receivables. As a result of these two changes, the level of provisions for expected credit losses as at December 31, 2021 is PLN 12 million higher than if the provisions had been made under the previous rules.

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

	December 31, 2021		December 31, 2020	
	Receivables balance	% share	Receivables balance	% share
Poland	4,178	99%	3,600	100%
Germany	31	1%	2	<1%
TOTAL	**4,209**	**100%**	**3,602**	**100%**

Ageing of receivables and impairment

Certain financial assets were covered by impairment losses as of December 31, 2021. The change in allowances accounts for these classes of financial instruments is presented in the table below:

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**

Impairment of trade receivables concerns the Supply segment. The total amount of trade receivables impairment at these companies as at December 31, 2021, was PLN 147 million (PLN 156 million in 2020).

There are no significant receivables in the Group that would be substantially past due and not covered by an impairment allowance, except for disputed claims from ENEA S.A. described in detail in note 28.3 to these financial statements.

2020	Trade receivables	Other financial receivables	Bonds	Total financial assets
Impairment as of January 1	**(192)**	**(239)**	**(386)**	**(817)**
Use of impairment losses	16	9	-	25
Reversal of impairment losses	65	21	-	86
Recognition of impairment losses	(104)	(87)	-	(191)
Other changes	13	(4)	-	9
Impairment as of December 31	**(202)**	**(300)**	**(386)**	**(888)**
Value prior to impairment	**3,804**	**1,701**	**386**	**5,891**
Net value (carrying amount)	**3,602**	**1,401**	**-**	**5,003**

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

	December 31, 2021			December 31, 2020		
	Gross	Impairment	Net carrying amount	Gross	Impairment	Net carrying amount
Receivables before due date	**8,058**	(462)	**7,596**	**4,981**	**(479)**	**4,502**
Past due <30 days	184	(5)	179	276	(37)	239
Past due 30-90 days	46	(7)	39	80	(28)	52
Past due 90-180 days	22	(20)	2	29	(18)	11
Past due 180-360 days	52	(46)	6	44	(30)	14
Past due >360 days	494	(385)	109	481	(296)	185
Receivables past due, total	**798**	(463)	**335**	**910**	**(409)**	**501**
Total financial assets	**8,856**	(925)	**7,931**	**5,891**	(888)	**5,003**

As at December 31, 2021, more than 51% of overdue trade receivables and other loans and receivables that were not covered by impairment losses concerned sale of energy to end-users.

26.3.2 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 three major banks in which PGE Group has allocated the most significant cash balances as at December 31, 2021, accounted for approximately 82% (82% in the comparative period).

26.3.3 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 established 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.

26.3.4 Guarantees and sureties issued

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

26.4 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, 2021 and December 31, 2020 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, 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)**

CLASS OF FINANCIAL INSTRUMENTS	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR CURRENCY RISK AS AT DECEMBER 31, 2020				
		Value exposed to risk	EUR/PLN impact on financial result / equity		USD/PLN impact on financial result / equity	
			+10%	-10%	+10%	-10%
Trade and other financial receivables	5,003	724	72	(72)	-	-
Cash and cash equivalents	4,189	733	73	(73)	-	-
Derivatives measured at fair value	58	356	-	-	32	(32)
Hedging derivatives	445	872	66	(66)	-	-
Interest bearing loans and borrowings	(8,423)	368	(22)	22	(15)	15
Bonds issued	(2,045)	644	(64)	64	-	-
Trade and other financial payables	(3,952)	939	(86)	86	(4)	4
Derivatives measured at fair value	(40)	161	-	-	(16)	16
Impact on financial result			**39**	**(39)**	**(3)**	**3**
Hedging instruments	36	12,838	1,228	(1,228)	(11)	11
Impact on revaluation reserve			**1,228**	**(1,228)**	**(11)**	**11**

Sensitivity analysis for interest rate risk

The Group identifies exposure to interest rate risk related to WIBOR, EURIBOR. 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, 2021				
		Value exposed to risk	WIBOR		EURIBOR	
			impact on financial result / equity		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**

FINANCIAL ASSETS AND LIABILITIES	Value in the financial statements in PLN	SENSITIVITY ANALYSIS FOR INTEREST RATE RISK AS AT DECEMBER 31, 2020				
		Value exposed to risk	WIBOR		EURIBOR	
			impact on financial result / equity		impact on financial result / equity	
			+50bp	-50bp	+25bp	-25bp
Derivatives measured at fair value through profit or loss - assets	48	47	-	-	-	-
Interest bearing loans and borrowings	(8,423)	6,261	(29)	29	(1)	1
Bonds issued	(2,045)	1,401	(7)	7		
Derivatives	(40)	35	-	-	-	-
Impact on financial result			**(36)**	**36**	**(1)**	**1**
Hedging instruments	36	36	178	(147)	(17)	17
IMPACT ON REVALUATION RESERVE			**178**	**(147)**	**(17)**	**17**

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, 2021			AS AT DECEMBER 31, 2020		
	Cost to purchase commodities	Impact on financial result		Cost to purchase commodities	Impact on financial result	
		+10%	-10%		+10%	-10%
Hard coal	2,932	293	(293)	2,993	299	(299)
CO_2 emission allowances for captive use	14,024	1,402	(1,402)	6,629	663	(663)
Natural gas [000s m3]	980	98	(98)	774	77	(77)
Biomass	150	15	(15)	140	14	(14)
Fuel oil	160	16	(16)	74	7	(7)
TOTAL	**18,246**	**1,824**	**(1,824)**	**10,610**	**1,060**	**(1,060)**

26.5 Hedge accounting

ACCOUNTING RULES

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, 2021
VALUE OF HEDGED ITEM AS OF JANUARY 1	**644**
Accrued interest	19
Paid interest	(19)
Exchange differences	(2)
VALUE OF HEDGED ITEM AS OF DECEMBER 31	**642**

Information on hedging instruments - maturity structure as at December 31, 2021. 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	29	(230)
IRS	PLN	(28)	(167)	(31)
Currency forwards	EUR	124	346	-

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 RULES

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, 2021	Year ended December 31, 2020
Matching cost measurement of derivatives	(9)	235
(Profit) / loss on sale of property, plant and equipment	(50)	(32)
(Profit) / loss on disposal of financial non-current assets	19	11
(Profit) / loss on loss of control	(324)	-
Other	1	30
(PROFIT) / LOSS ON INVESTING ACTIVITIES, TOTAL	**(363)**	**244**

Change in receivables

	Year ended December 31, 2021	Year ended December 31, 2020
Change in trade receivables and other financial receivables	(2,927)	(8)
Adjustment for sale of subsidiary	(40)	-
Adjustment for deposits	3	10
Other	6	(3)
TOTAL CHANGE IN RECEIVABLES	**(2,958)**	**(1)**

Change in inventories

	Year ended December 31, 2021	Year ended December 31, 2020
Change in inventories	934	1,386
Adjustment for transfer of investment materials to property, plant and equipment	(68)	(18)
Other	-	2
TOTAL CHANGE IN INVENTORIES	**866**	**1,370**

Change in liabilities, excluding loans and borrowings

	Year ended December 31, 2021	Year ended December 31, 2020
Change in trade and other financial payables	1,166	(160)
Change in other non-financial liabilities	123	345
Adjustment for change in investment liabilities	145	580
Adjustment for sale of subsidiary	(12)	-
Other	(4)	(1)
TOTAL CHANGE IN LIABILITIES	**1,418**	**764**

Change in other non-financial assets, prepayments

	Year ended December 31, 2021	Year ended December 31, 2020
Change in other assets	(475)	(357)
Change in deferred income	1	(19)
Change in advances for construction in progress	54	161
Adjustment for sale of subsidiary	(16)	-
Change in balance concerning financing/investing activities	(45)	(35)
Other	(1)	(3)
TOTAL CHANGES IN OTHER NON-FINANCIAL ASSETS, PREPAYMENTS	**(482)**	**(253)**

Change in provisions

	Year ended December 31, 2021	Year ended December 31, 2020
Change in provisions	2,641	4,500
Change in actuarial provisions recognised in other comprehensive income	404	(235)
Change in rehabilitation provision recognised in assets	821	(912)
Change in investing activities	(39)	-
Other	(14)	(6)
TOTAL CHANGE IN PROVISIONS	**3,813**	**3,347**

27.2 Cash flows from investing activities

Purchase of property, plant and equipment and intangible assets

In 2021, the largest expenditure on the acquisition of property, plant and equipment and intangible assets was incurred by the following segments:

- Conventional Generation - PLN 2,004 million, including:
  - Branch Zespół Elektrowni Dolna Odra – construction of units 9 and 10 - approx. PLN 325 million (from October 1, 2021 this project is being implemented by PGE Gryfino 2050 sp. z o.o.), adaptation of units 5-8 to BAT conclusions - approx. PLN 78 million, medium-level overhaul at units 5,6,8 - approx. PLN 25 million,
  - Branch Elektrownia Turów – construction of new power unit - approx. PLN 448 million, adaptation of units 1-3 to BAT conclusions - approx. PLN 92 million, medium-level overhaul at unit 6 - approx. PLN 26 million,
  - Branch Elektrownia Opole - modernisation of units 1-4 - approx. PLN 235 million, including PLN 107 million to adapt the units to BAT conclusions,
  - Branch Elektrownia Bełchatów - adaptation of units 3-12,14 to BAT conclusions - approx. PLN 191 million, medium-level overhauls at units 5,6,11,12 - approx. 43 million,
  - Branch KWB Bełchatów and Branch KWB Turów – expenditures on replacement of primary machinery and construction of conveyors - approx. PLN 100 million,
  - Branch Elektrownia Rybnik – adaptation to BAT conclusions and medium-level overhaul at unit 6 - approx. PLN 38 million,
- Distribution PLN 1,457 million - mainly new customer connections and the modernisation and expansion of grids, substations and power lines.

In 2020, the Conventional Generation segment incurred expenses of PLN 2,903 million and the Distribution segment PLN 1,925 million.

Sale of subsidiary

The amount of PLN 368 million relates to the impact of the sale of subsidiary PGE EJ1 sp. z o.o.

Consolidation of companies

Shares in ECO-POWER sp. z o.o. were acquired in the previous reporting period. Expenditure on the acquisition of this company amounted to PLN 150 million and cash acquired amounted to PLN 28 million.

Loss of control

The total amount of PLN 118 million relates to cash of PGE EJ1 sp. z o.o., which was sold in the current year (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.

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.

27.3 Cash flows from financing activities

Proceeds from share issue for non-controlling interests

The proceeds of PLN 419 million relate to half of the payments made by Ørsted to subscribe to and increase the capital in joint operations, i.e. EWB2 and EWB3

Proceeds from loans, borrowings

In the current reporting period PGE S.A. used available credits in total amount of PLN 273 million (PLN 4,100 million in 2020). In addition, companies in the Conventional Generation segment received loans and borrowings from environmental funds worth approximately PLN 316 million (PLN 249 million in 2020).

Repayment of loans, credit facilities, bonds and leases

In the current reporting period PGE S.A. repaid loans with a total value of PLN 976 million (PLN 5,161 million in 2020). PGE GiEK's branch Elektrownia Bełchatów repaid a loan of PLN 90 million in the current period (PLN 96 million in the previous period).

In addition to the above, the item mainly includes repayment of loans and borrowings from environmental funds by the Conventional Generation segment with a total value of approximately PLN 22 million and by the District Heating segment with a total value of approximately PLN 45 million.

Payments of principal amounted to PLN 53 million in the current period and PLN 42 million in the previous period.

Interest paid

In the present reporting period, the item mainly includes 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.

In 2020, the item mainly shows interest on loans and borrowings of approximately PLN 200 million, on bonds of PLN 60 million, on financial instruments (CCIRS and IRS) of PLN 66 million, on leasing liabilities of PLN 37 million.

OTHER EXPLANATORY NOTES

28. Contingent liabilities and receivables. Legal claims

ACCOUNTING RULES

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, 2021	As at December 31, 2020
Contingent return of grants from environmental funds	476	461
Legal claims	104	186
Liabilities related to bank guarantees securing exchange transactions	262	75
Contractual fines and penalties	-	70
Usufruct of land	67	67
Other contingent liabilities	5	37
Total contingent liabilities	**914**	**896**

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 shares of PGE EJ1 sp. z o.o. to the State Treasury and pursuant to the Agreement regulating the liability of the current Shareholders for the costs of a dispute with Worley Parsons, if PGE SA loses the dispute it may be required to cover the costs of the dispute in the amount of up to PLN 98 million. The probability of losing the dispute was estimated in order to determine the fair value of the payment received. In effect, PLN 59 million was recognised under contingent liabilities and PLN 39 million in non-current 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.

The increase in liabilities on account of sureties towards clearinghouse IRGiT is connected with a significant increase in prices of futures contracts concluded on TGE. The increase in electricity prices directly affects the increase in the amount of the required security deposit lodged with the in non-monetary form, this deposit is secured by a surety under which bank guarantees are accepted by 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.

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 take delivery of the minimum quantities of fuel specified in the contracts may result in the payment of appropriate charges (in the case of gaseous fuel, quantities not taken back by individual CHPs but paid for may be taken back 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 Rybnik Power Plant the coal stock was rebuilt and exceeded the minimum level indicated in the legislation, while at Opole Power Plant the required coal stock was not rebuilt by this deadline.

The failure to meet the minimum levels of hard coal stocks and the problems in rebuilding these stocks at the Opole Power Plant were driven by a number of factors beyond the Group's control, including primarily:

- unforeseen restrictions in coal supply in the months of September 2021-January 2022, the main cause of which were problems occurring on the part of rail carriers as well as the lack of sufficient supply of coal from the largest domestic suppliers,
- blockade of railway tracks for several days in connection with a protest action at PGG S.A.,
- 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,
- limitations on the availability of coal from domestic producers as well as restriction of coal supply to system power plants due to priority given to fuel supply to CHP plants,
- restrictions on coal transport to the above-mentioned generating units caused by repair and modernisation works and damage to railway lines in the Upper Silesia region.

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.

28.3 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. No final opinion was issued by the court experts prior to the approval of these financial statements. In connection with the expert team's opinion being admitted as evidence, the hearing was postponed to an ex-officio date. The next hearing has been scheduled for April 8, 2022.

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. A justification for the Supreme Court ruling was received by PGE S.A. and PGE GiEK S.A. on June 24, 2021. The Appeals Court hearing date was September 30, 2021. During the hearing, the Court required the defendants to present a position on the statute of limitations, and the claimant to name witnesses questioned about the start of the statute of limitations time limit. The hearing was postponed, without setting another date.

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 2016, PGE GiEK S.A., PGE EO S.A. and PGE Energia Natury PEW sp. z o.o. (acquired by PGE EO S.A.) received statements from Enea S.A. regarding the termination of long-term contracts for the sale of renewable energy origin rights, the so-called "green certificates." Justifying the termination, Enea S.A. claimed that the companies significantly breached the provisions of these contracts, i.e. failed to re-negotiate contractual provisions in accordance with the adaptive clause, as requested by Enea S.A. in July 2015 in connection with an alleged change in legal regulations having impact on performance of these contracts.

According to PGE Group, the notices terminating the contracts sent by Enea S.A. were submitted in breach of contractual obligations. The companies took appropriate steps to enforce their rights. With

Enea S.A. refusing to perform these long-term contracts to purchase property rights resulting from certificates of origin received by PGE Group companies in connection with the production of renewable energy, PGE GiEK S.A. and PGE Energia Natury PEW sp. z o.o. demanded from Enea S.A. the payment of contractual penalties, while PGE EO S.A. demanded payment of compensation for damages. In October 2020, at the request of the parties, the court proceedings were suspended in connection with the intention to hold mediation sessions as an alternative dispute resolution. 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.

According to PGE Group, the notices terminating the contracts sent by Enea S.A. were submitted in breach of contractual obligations. As at December 31, 2021, the Group recognised receivables of PLN 68 million, of which PLN 164 million recognised in income in prior reporting periods. In the present period, a partial write-down of receivables in the amount of PLN 103 million was made, accompanied by a partial release of an impairment loss on property rights inventories of PLN 70 million due to their sale. According to PGE Group companies, based, inter alia, on available legal opinions, a favourable settlement of the above disputes with respect to the recovery of the above receivables is more likely than an unfavourable settlement.

In addition, PGE GiEK S.A., PGE Energia Natury, PEW sp. z o.o. (acquired by PGE EO S.A.) and PGE EO S.A. filed lawsuits against Enea S.A. for the payment of receivables totalling PLN 47 million concerning invoices issued to Enea S.A. for the sale of property rights based on these contracts. Enea S.A. refused to pay these receivables, claiming that they were offset by receivables from the Group's companies related to compensation for alleged damages arising as a result of the companies' failure to re-negotiate the contracts. According to Group companies, such offsets are groundless because Enea S.A.'s receivables concerning the payment of compensation never arose and there are no grounds for acknowledging Enea S.A.'s claim that the companies breached contractual provisions. In October 2020, at the request of the parties, the court proceedings were suspended in connection with the intention to hold mediation sessions as an alternative dispute resolution. 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.

As a result of the division of PGE GiEK S.A., from July 1, 2021 PGE GiEK S.A. was replaced by PGE EC S.A. as party to the dispute with Enea S.A.

29. Future investment commitments

As at December 31, 2021, PGE Group committed to incur capital expenditures on property, plant and equipment of approximately PLN 6,852 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, 2021	As at December 31, 2020
Conventional Generation	256	5,790
Distribution	1,058	1,346
District Heating	1,549	190
Renewables	414	185
Supply	1	3
Circular Economy	4	-
Other activity	3,570	175
TOTAL FUTURE INVESTMENT COMMITMENTS	**6,852**	**7,689**

The most significant future investment commitments concern:

- Other activity - construction of two CCGT units and service agreement for two gas turbines - approximately PLN 3,429 million (as described in note 1.3, on October 1, 2021 this commitment, together with the entire organised part of enterprise, was transferred to PGE Inwest 8 sp. z o.o. as part of the division of PGE GIEK S.A.),
- District Heating - construction of gas-and-steam CHP Nowa EC Czechnica in Siechnice - approx. PLN 1,141 million,
- Distribution – investment commitments mainly related to grid assets with the total value of approximately PLN 1,058 million,

The increase in future investment commitments in the Renewables segment results from the start of a joint offshore project, as described in note 33.3.

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.

Basic tax rates were as follows in 2021: 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 for a tax group named PGK PGE 2015, represented by PGE S.A., was signed on September 18, 2014, for a period of 25 years. An annex to the tax group agreement was signed on July 28, 2021, which reduced the agreement validity period from 25 to 7 years. PGK PGE 2015 no longer exists as of December 31, 2021.

As the law stood until the end of 2021, companies forming the tax group had to meet a number of requirements, including the following: an appropriate level of capital, the parent company's share in the capital of companies forming the tax group at a minimum of 75%, no capital links between subsidiaries, no tax arrears, achieving a revenue share of at least 2% (calculated for the entire tax group) and entering into transactions with entities outside the tax group only on market terms. A breach of these requirements could mean the dissolution of the tax group and the loss of its taxpayer status. When the tax group is dissolved, each of its member companies becomes an individual payer of corporate income tax.

VAT split payment mechanism

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 31 December 2021, the cash balance in VAT accounts was PLN 545 million.

Reporting of tax arrangements (MDR)

In 2019, new regulations introduced mandatory reporting of tax arrangements (Mandatory Disclosure Rules - MDR). A tax arrangement should be understood as any activity of which the main or one of the main benefits 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 hearing was held on December 2, 2020, after which the Court of Appeals in Warsaw rejected PGE GiEK S.A.'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 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.

Tax settlements and other activity areas are conditioned by regulations (customs or currency controls) and can be subject to controls of respective authorities that are authorised to issue fines and penalties, and all additional tax liabilities resulting from such audits must be paid with high interest. This means that tax risk in Poland is higher than in countries with more stable tax systems.

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.

30.1 Contingent receivables

As at the reporting date, PGE Group held PLN 72 million in contingent receivables related to a potential refund of excess excise duty. The Group is waiting for a ruling by the Supreme Administrative Court on what excise duty rate should be applied in settling the excise duty relief related to the redemption of property rights created in renewable energy sources prior to January 1, 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.

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, 2021	Year ended December 31, 2020
Sales to associates and jointly controlled entities	162	310
Purchases from associates and jointly controlled entities	2,092	2,126

	As at December 31, 2021	As at December 31, 2020
Trade receivables from associates and jointly controlled entities	51	93
Trade liabilities to associates and jointly controlled entities	178	243

The value of turnover and the balance of settlements results from transactions with Polska Grupa Górnicza 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, 2021	Year ended December 31, 2020
Sales to related parties	4,674	2,368
Purchases from related parties	7,650	5,109

	As at December 31, 2021	As at December 31, 2020
Trade receivables from related parties	458	254
Trade liabilities to related parties	895	582

The largest transactions with companies where the State Treasury holds a stake concern Polskie Sieci Elektroenergetyczne S.A., PKO Bank Polski S.A., Polskie Górnictwo Naftowe i Gazownictwo S.A., Jastrzębska Spółka Węglowa S.A., ENERGA-OPERATOR S.A., PKP Cargo S.A., Zakłady Azotowe PUŁAWY S.A., PKN Orlen S.A., Grupa LOTOS S.A., TAURON Dystrybucja 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.

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, 2021	Year ended December 31, 2020
Short-term employee benefits (salaries and salary related costs)	34,387	34,709
Post-employment benefits	1,374	3,289
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**35,761**	**37,998**
Remuneration of key management personnel of entities of non-core operations	24,898	24,787
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**60,659**	**62,785**

PLN 000s	Year ended December 31, 2021	Year ended December 31, 2020
Management Board of the parent company	5,869	7,201
including post-employment benefits	*(935)*	*49*
Supervisory Board of the parent company	818	761
Management Boards – subsidiaries	25,545	26,332
Supervisory Boards – subsidiaries	3,529	3,704
TOTAL	**35,761**	**37,998**
Remuneration of key management personnel of entities of non-core operations	24,898	24,787
TOTAL REMUNERATION OF KEY MANAGEMENT PERSONNEL	**60,659**	**62,785**

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. Entity authorised to audit financial statements

The entity authorised to audit the separate financial statements of PGE Polska Grupa Energetyczna S.A. for 2021 and 2020 and the consolidated financial statements of PGE Group for 2021 and 2020 is Deloitte Audyt spółka z ograniczoną odpowiedzialnością sp. k. (Deloitte) pursuant to an agreement executed on April 26, 2019. The selection of the aforementioned audit firm for the years 2019-2021 was made by the Supervisory Board of PGE S.A. Deloitte is also the entity authorised to audit the annual financial statements of selected PGE Group companies.

The Group also used Deloitte's services in 2021 and 2020 in the following scope:

- 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 audit financial and material reports on the implementation of tasks included in the National Investment Plan in connection with free allocation of CO_2,
- to issue a report including an assessment of compliance with the requirements for the safekeeping of client assets,
- issue a statement on the risk management system adopted.

The amount of remuneration for the entities, including Deloitte, authorised to audit financial statements in relation to PGE Polska Grupa Energetyczna S.A. and PGE Group subsidiaries is presented in the table below.

PLN 000s	Year ended December 31, 2021	Year ended December 31, 2020
Audit firm fee for:		
Audit of annual financial statements	3,469	3,438
Review of semi-annual financial statements	220	220
Other assurance services	685	592
TOTAL	**4,374**	**4,250**

33. Significant events during and after the reporting period

33.1 Impact of COVID-19 on PGE Group's business

PGE is identifying risk factors related to the COVID-19 pandemic that affect the Group's results on an on-going basis. The pandemic's impact on financial results remained limited in 2021. Further potential events and their scale are difficult to estimate. The occurrence and extent of further waves of the disease, the possibility of introducing restrictions and their impact on economic activity in Poland will be of importance. At the same time, preparing precise estimate is difficult due to a variety of other factors having an impact on the electricity market, including demand for electricity.

The pandemic outbreak caused an economic slowdown in 2020 due to the freezing of economies, with GDP down -2.5% in Poland and -6.4% in the eurozone respectively. There was a strong rebound in GDP and industrial production in 2021, as successive waves of epidemics did not have much of an impact on restrictions on economic activity. In Poland, GDP grew by 5.7% in real terms and in the eurozone by 5.2%.

Nonetheless, the re-introduction of restrictions could result in reduced economic activity, which would give rise to a temporarily lower domestic consumption of electricity, which in turn would reduce revenue and margins on the generation, distribution and sale of energy in the Conventional Energy, Distribution, Supply and District Heating segments. PGE Group to a large extent contracts the sale of electricity produced for subsequent years in advance, therefore it protects itself in this respect against potential effects of a recurrence of an epidemic or economic recession.

If the pandemic intensifies, the Supply segment is at risk of falling demand for electricity, which could translate into lower sales to end customers and a higher cost of electricity balancing. Also in the Distribution segment, a lower volume of supplies to end customers could also directly lead to lower revenue.

As at December 31, 2021, the impact due to the anticipated increase in payment congestion, especially on receivables from small and medium-sized enterprises, was not material. As described in note 26.3.1 to the consolidated financial statements, PGE Group recognised additional impairment losses of PLN 12 million. Depending on the further development of the pandemic and economic situation, liquidity risk and the risk of higher impairment of overdue receivables at PGE Group still exist and are being monitored on an on-going basis. PGE Group currently does not expect this risk to become material and has not identified liquidity risk.

PGE Group owns facilities of strategic importance from the viewpoint of uninterrupted generation and supply of electricity and heat in Poland. The COVID-19 pandemic has changed the way work is organised, especially with regard to PGE Group's generating assets. In many instances, this gives rise to additional costs, including for example the purchase of protective equipment for employees. Since the start of the pandemic, the Group has work rules in place that are aimed at reducing the risk of infection for employees as much as possible. As one of the largest employers in Poland, with a workforce of approx. 40 000 employees, PGE Group is undertaking a number of activities related to the organisation of work aimed at ensuring continuity of operations, protection of employees' health and life, including the implementation of remote and rotating work, building awareness of, in particular, the basic principles of COVID-19 protection, prevention and quarantine. Having implemented appropriate remedial measures at an early stage of the pandemic, PGE Group has been producing and supplying electricity and heat with no interruptions.

PGE Group additionally conducts communication and motivational activities aimed at employees to build awareness of the positive effects of vaccination - both individual and social. In addition, there is internal communication related to the course of the pandemic and encouragement to minimise the risk of infection - that is, keeping a distance, washing hands frequently or using office spaces safely. PGE has appointed a crisis team, which collects information from all Group companies, monitors the situation at the companies and undertakes appropriate activities.

Production units also have operational plans, drafted and approved on an on-going basis, in the event of elevated absences - as they are of strategic importance from the viewpoint of maintaining the continuity of production and supply of electricity and heat, they also remain in continuous contact with local services responsible for monitoring the situation in the country across all PGE Group sites. In the retail customer area, PGE Group has been primarily focusing on expanding its remote service channels.

33.2 Preliminary proposal to purchase stake in Fortum's assets

On October 27, 2020, an investor consortium that included PGE submitted a preliminary, non-binding proposal to purchase from Fortum Holding B.V. its district heating and cooling business in Estonia, Lithuania, Latvia and Poland. Consortium members included: PGE, Polskie Górnictwo Naftowe i Gazownictwo S.A., PFR Inwestycje FIZ, whose investment portfolio is managed in part by Polski Fundusz Rozwoju S.A., and IFM Investors Pty Ltd.

On November 16, 2021, a consortium consisting of: PGE and Polskie Górnictwo Naftowe i Gazownictwo S.A. (Partners) submitted a modified preliminary non-binding offer to purchase shares belonging to Fortum Holding B.V.

The modified proposal entails the acquisition of Fortum Holding B.V.'s district heating business in Poland only. At the same time, the Partners withdrew from the intended acquisition of Fortum's assets in Estonia, Lithuania, Latvia and from participating in the investor consortium with PFR Inwestycje FIZ and IFM Investors Pty Ltd.

On December 21, 2021, PGE received a statement from Polskie Górnictwo Naftowe i Gazownictwo S.A. on its withdrawal from participating in the transaction to acquire assets from Fortum Group in Poland and from cooperation with PGE for the purpose of the transaction process.

Irrespective of the consortium member's decision, PGE has expressed interest in acquiring Fortum Group's assets in Poland, in particular the district heating network in Wrocław. However, in March 2022, PGE learned that Fortum had completed its review of strategic options for selected business segments, including but not limited to district heating assets in Poland, and decided to continue their development within Fortum Group. Therefore, this process is no longer being pursued.

33.3 Investment agreement with Ørsted for offshore wind farm projects

On February 10, 2021 PGE Group entities and Ørsted signed an agreement to form a 50%/50% joint venture to develop two offshore wind farm projects. These are PGE's on-going projects Baltica 2 through SPV EWB2 (with a planned capacity of approx. 1,5 GW) and Baltica 3 through SPV EWB3 (with a planned capacity of approx. 1 GW).

PGE Baltica 6 sp. z o.o., PGE Baltica 5 sp. z o.o. (PGE's subsidiaries) ("Existing Shareholders"), Orsted Baltica 2 Holding sp. z o.o., Orsted Baltica 3 Holding sp. z o.o., (subsidiaries of Ørsted Wind Power A/S ("OWPAS"), hereinafter jointly referred to as "Investors"), Elektrownia Wiatrowa Baltica – 2 sp. z o.o. and Elektrownia Wiatrowa Baltica – 3 sp. z o.o. signed an investment agreement concerning the development by the Investors of projects Baltica 2 and Baltica 3.

The investment agreement establishes the legal framework for the formation of a joint venture between PGE and OWPAS for the development, construction and operation of offshore wind projects Baltica 2 and Baltica 3.

Under the investment agreement, the Investors undertake to acquire newly-issued shares in EWB2 and EWB3 constituting 50% of share capital and granting the Investors 50% of votes at each of the companies.

On March 10, 2021 the President of the Polish Office of Competition and Consumer Protection approved the concentration.

On May 6, 2021, after the fulfilment of the conditions precedent, relevant PGE Group entities and Ørsted completed the transaction in which Ørsted entities acquired shares representing a 50% stake in EWB2 and EWB3. Once the share capital increase was registered, Ørsted and PGE (acting through subsidiaries) became 50/50 partners in this joint operation.

The total price for the 50% stake in EWB2 and EWB3 constitutes the equivalent of approx. PLN 686 million. The increased price includes in particular contributions made by PGE to the companies after the investment agreement was signed.

Once the relevant assumptions are met, Ørsted entities will be required to make additional contributions to EWB2 and EWB3, which can amount to a total of PLN 1,024 million.

In closing the transactions, Ørsted and PGE entities signed a number of documents, separately for Baltica 2 and Baltica 3, including in particular:

- shareholder agreements, regulating the companies' corporate governance, operational rules for integrated project teams, commitments by the parties regarding financing and the provision of other services to the companies, restrictions on the disposal of shares in the companies constituting the joint operation as well as the consequences of contractual breaches and change of control;
- agreements concerning the provision of development services for the companies constituting the joint operation by relevant subsidiaries from both sides;
- agreements regarding access to resources, based on which both of the parties will delegate personnel to the companies;
- shareholder loan agreements, pursuant to which the shareholders will provide debt financing (aside from equity financing) to the companies,
- corporate guarantees issued by PGE and Ørsted Wind Power A/S, pursuant to which both of the parties guarantee due performance of liabilities at the development stage of the projects by their respective subsidiaries.

33.4 Czechia's complaint against Poland regarding prolongation of mining concession for KWB Turów

On September 30, 2020 the Czech Republic sent a letter to the European Commission pursuant to art. 259 of the Treaty on the Functioning of the EU, initiating a procedure against Poland for alleged violations of EU law in connection with the extension of the term of KWB concession for lignite mining for 6 years for KWB Turów.

On December 17, 2020, the European Commission issued a reasoned opinion, in which it shared some of the objections of the Czech side, while pointing out that the extension of the operation of KWB Turów did not violate the provisions of the Water Framework Directive. The European Commission also stressed that some of the remaining allegations from the Czech side turned out to be wrong.

On February 26, 2021 the Czech government lodged a complaint against Poland with the Court of Justice of the EU. A summary of the complaint and key arguments were published in the EU Official Journal on April 19, 2021. The parties in this proceeding are member states, which precludes the participation of natural and legal persons even if the case directly concerns their activities.

On May 21, 2021, the Vice-President of the Court of Justice issued an order for an interim measure as follows: "The Republic of Poland will cease immediately and until a ruling in case C-121/21 lignite mining at the Turów mine (Poland)." An interim measure does not decide the merits of the case.

On June 9, 2021, the European Commission joined the main proceedings as an intervener supporting some of the claims of the Czech side. In the interim measure procedure, the Czech Republic additionally demanded a fine for each day of non-compliance with the decision to immediately cease lignite mining. At the same time, the Republic of Poland applied for annulment of the decision on interim measures due to a change in circumstances within the meaning of art. 163 of the Rules of the Court of Justice. In accordance with the decision of September 20, 2021, the Vice-President of the Court of Justice dismissed the request to revoke the interim measure and ordered Poland to pay the European Commission a fine in the amount of EUR 500 000 per day, starting from the date of delivery to Poland of the decision until that Member State complies with the decision of May 21, 2021. According to the Company, it is not possible to transfer the above-mentioned penalties onto PGE Group companies.

A hearing at the EU Court of Justice was held on November 9, 2021. On February 3 2022, the Advocate General issued an opinion on the complaint and found part of the Czech party's allegations to legitimate. On February 3, 2022, the Prime Ministers of the Polish and Czech governments initialled a bilateral agreement setting out the conditions for the withdrawal of the Czech complaint from the Court of Justice of the European Union. On February 4, 2022, the Czech Republic informed the Court that, pursuant to art. 147(1) of the Rules of Procedure, it waves all of its claims in consequence of an agreement reached with the Republic of Poland on the settlement of the dispute. In view of the above, on February 4, 2022 the President of the Court of Justice issued an order removing the case from the register.

On February 7, 2022, an Agreement was concluded between PGE GiEK S.A., PGE S.A. and the State Treasury defining principles of cooperation in connection with the execution of the Agreement concluded on February 3, 2022 between the Government of the Czech Republic and the Government of the Republic of Poland on cooperation in respect of effects on the territory of the Czech Republic of mining operations at KWB Turów.

Pursuant the above-mentioned Agreement, PGE GiEK S.A. has undertaken to construct an earth embankment, monitor noise, monitor air quality, drill 4 boreholes to monitor water aquifer levels, complete the construction of an anti-filtration screen, carry out land displacement measurements and replace lighting at KWB Turów.

Furthermore, PGE GiEK S.A. has committed to contribute EUR 10 million to the Liberec Region of the Czech Republic through the PGE Foundation. The donation was made in February 2022.

33.5 Planned disposal of coal assets to National Energy Security Agency (NABE)

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. The assets may be carved out from the energy groups by:

- purchase of shares of each of the companies directly by the State Treasury and their consolidation within NABE - if this option is selected, consolidation within NABE will take place through their contribution to the capital increase at PGE GiEK,
- or through conditional purchase of shares of these companies by PGE GiEK, on the condition that PGE GiEK S.A. shares are purchased by the State Treasury.

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 will be subject to 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.

According to the framework schedule, the start of the due diligence process has been scheduled for Q3/Q4 2022, and the valuation of the carved-out assets for Q4 2022. The sale of these assets to NABE is planned for the fourth quarter of 2022.

The method of valuation and settlement of debt and other asset-related liabilities has not yet been determined. In connection with this, it is currently not possible to determine the impact of this carve out on the future financial statements of PGE S.A. and PGE Group.

33.6 Events after the reporting period

33.6.1 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 resolution provides for a proposal to the Company's Extraordinary General Meeting to adopt 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 Company's Management Board intends to raise more than PLN 3 billion from investors as part of the capital increase process. The proceeds from the share issue are intended to support PGE S.A.'s investments across three areas:

- development of renewable energy sources,
- decarbonisation via development of low-carbon sources;
- development of distribution.

The Extraordinary General Meeting will be held on April 6, 2022.

33.6.2 Impact of war in Ukraine on PGE Group's activities

PGE is the largest energy company in Poland. PGE's units meet approx. 43% 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 energy generation and supply and the protection of critical and IT infrastructure. Its tasks also include undertaking actions minimising the risk of a crisis situation, preparing the Company in the event of a crisis situation and planning, organising and coordinating works ensuring 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 both urgently updating and reviewing internal regulations and business continuity plans.

Cybersecurity is also particularly important in the current geopolitical situation. 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. A significant change in the company'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 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 in PGE Group affected by the war in Ukraine:

- fuel availability and prices,
- supply chain,
- cybersecurity,
- geopolitics,
- macro-economy (including exchange rates and interest rates),
- prices of CO_2 emission allowances
- foreign regulatory environment,
- counterparties.

PGE's key operating risks related to the war in Ukraine:

- reduced availability of hard coal on the Polish market due to the planned embargo on supplies of this raw material from Russia,
- increase in hard coal 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:

- CHP Gorzów and CHP 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 System.
- CHP Toruń, CHP Zawidawie, CHP Lublin-Wrotków and CHP Rzeszów are supplied with high-methane gas (so-called gas E). Gas E drawn from the National Gas System is secured in the form of adequate storage, and in Poland this is at a relatively safer level than in Western Europe.

PGE Group has no influence on the directions of supply and management of fuel transmission therefore the risk of possible disruptions lies with PGNiG and the Transmission System Operator (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 generation:

- In the case of gaseous fuel, due to the lack of stock-holding possibilities, reduced availability translates into an immediate disruption in electricity and heat production. However, if there are reserve coal-fuelled water boilers at a given CHP plant, heat production is possible until stocks are exhausted (concerns locations Branch Lublin-Wrotków, Branch Rzeszów, in the case of Branch Gorzów Wielkopolski the production reserve is the coal-fuelled OP-140 steam boiler). At the CHP 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. The generating units have reserves of hard coal to enable uninterrupted production of electricity and heat.

The electricity supply for PGE Dystrybucja and PGE Obrót 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 war in Ukraine has contributed to dynamic volatility in the commodity, CO_2 and financial (e.g. currency) markets, affecting margin levels and capital raising possibilities (interest rates). At this point, it is difficult to estimate the scale of the impact of these factors on PGE Group. The markets are under exceptional pressure and, depending on how the situation develops, how long the war lasts, the direction it takes, an equilibrium will be sought. However, at this time it is difficult to discuss any scenario, and this is what will determine attempts to value the risks described. Nonetheless, PGE mitigates risks by continuing its policy of hedging electricity generation costs together with energy sales on the wholesale market, which is reflected both in hedging CO_2 emission allowances and foreign currencies for transaction purposes. At the date on which these financial statements are approved, the Company has adequate liquidity to carry on its business without material disruption.

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 measurement of financial instruments may change.

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 future financial statements. No adjustments were made in these financial statements.

34. Approval of financial statements

These consolidated financial statements were approved for publication by the Management Board on March 21, 2022.

Warsaw, March 21, 2022

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	**Paweł Cioch**	*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*
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.
EUA	European Union Allowances
EWB2, 3 …….	Elektrownia Wiatrowa Baltica–2 sp. z o.o., Elektrownia Wiatrowa Baltica–3 sp. z o.o.
MLF	Mine Liquidation Fund
GIR	Exchange Clearinghouse
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.
NPS	National Power System
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
Investment property	Investment property
TSO	Transmission System Operator
BCP	Business Continuity Plan
Right-of-use assets	Right-of-use assets
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 GiEK S.A.
PGE PGK	Tax group
PGG S.A.	Polska Grupa Górnicza S.A.
PGNiG	Polskie Górnictwo Naftowe i Gazownictwo S.A.
Perpetual usufruct of land	Right of perpetual usufruct of land
Property, plant and equipment	Property, plant and equipment
Financial statements, consolidated financial statements	PGE Group's consolidated financial statements
TGE	Towarowa Giełda Energii
URE	Urząd Regulacji Energetyki (Energy Regulatory Office)
WACC	Weighted Average Cost of Capital
Voivodship Fund for Environmental Protection and Water Management (WFOŚiGW)	Voivodship Fund for Environmental Protection and Water Management
Intangible assets	Intangible assets
Organised part of enterprise	Organised part of enterprise
Social Fund	Social Fund