

MANAGEMENT BOARD'S REPORT

on activities of PGE Capital Group
for the 6-month period

ended June 30, 2023



Leading in the green transition

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Key financial data	Unit	H1 2023	H1 2022	% change
Sales revenues	PLN m	49 560	32 625	52%
EBIT	PLN m	3 549	4 254	-17%
EBITDA	PLN m	5 872	6 392	-8%
EBITDA margin	%	12%	20%	
Recurring EBITDA	PLN m	6 205	4 212	47%
Recurring EBITDA margin	%	13%	13%	
Net profit	PLN m	2 171	3 305	-34%
Capital expenditures	PLN m	3 953	1 844	114%
Net cash from operating activities	PLN m	339	5 015 ¹	-93%
Net cash from investing activities	PLN m	-5 491	-2 720	102%
Net cash from financial activities	PLN m	3 633	1 928	88%

Key financial data		June 30, 2023	December 31, 2022	% change
Working capital	PLN m	-2 548	-1 269	101%
Net debt	PLN m	7 627²	-2 656	-
Net debt /LTM reported EBITDA ³	x	0.94	-0.31	
Net debt /LTM recurring EBITDA ³	x	0.84	-0.37	

One offs affecting EBITDA		H1 2023	H1 2022	% change
Change of reclamation provision	PLN m	-331	2 160	-
Change of actuarial provision	PLN m	-52	-19	174%
LTC compensations	PLN m	-31	2	-
Correction of estimated contribution to Price Difference Payment Fund for year 2022	PLN m	81	0	-
Provision for prosumers	PLN m	0	37	-
Total	PLN m	-333	2 180	-

¹ The restatement of comparative data is described in Note 4 to the consolidated financial statements.

² Estimated economic financial net debt (taking into account future payments for CO2 emission rights) amounts to PLN 19 250 million.

³ LTM EBITDA - Last Twelve Months EBITDA.

1. PGE Capital Group

1.1. Characteristics of activities

Capital Group of PGE Polska Grupa Energetyczna S.A. ("PGE Capital Group", the "Capital Group", "PGE Group", the "Group") is the largest vertically integrated producer of electricity and heat in Poland. With a mix of own fuel sources, generation assets and distribution network, PGE Group provides a safe and reliable supply of electricity to households, businesses and institutions. Moreover, PGE Group is the largest heat producer in the country.

The parent company of PGE Capital Group is PGE Polska Grupa Energetyczna S.A. (also "PGE S.A.", "PGE", the "Company"). PGE Group organizes its activities in eight operating segments:



CONVENTIONAL GENERATION

Core business of the segment includes extraction of lignite, production of electricity and heat from conventional sources.



DISTRICT HEATING

The core business of the segment includes production of electricity and heat in cogeneration sources as well as transmission and distribution of heat.



RENEWABLES

The core business of the segment includes electricity generation from renewable sources and in pumped-storage power plants.



DISTRIBUTION

The core business of the segment includes supply of electricity to final off-takers through the grid and HV, MV and LV infrastructure.



RAILWAY ENERGY SERVICES

The segment's main activities are the distribution and sale of electricity to railway operators and customers functioning within the railway system, the sale of fuels, as well as the maintenance and modernisation of overhead contact line network, together with other auxiliary services.



SUPPLY

The core business of the segment includes wholesale trading of electricity on domestic and international market, sale of electricity to final off-takers, trading of CO2 allowances and energy certificates and fuels and provision of services of the Corporate Centre to companies from the PGE Group.



CIRCULAR ECONOMY

The activities of the segment include the provision of comprehensive services in the field of management of combustion by-products ("UPS"), provision of services in auxiliary areas for electricity and heat producers and the supply of materials based on UPS.



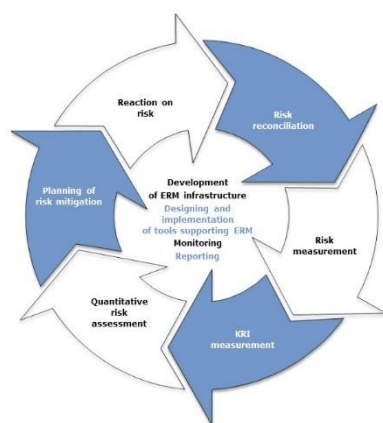
OTHER OPERATIONS

Other operations include provision of services, through the subsidiaries, to PGE Group, which include organisation of capital raising in form of Eurobonds (PGE Sweden), provision of IT, payroll and HR services, transportation and investing in start-ups.

Additionally, within the segment there are companies responsible for construction of CCGT units in Gryfino (PGE Gryfino 2050 sp. z o.o.), new low-emission unit in Rybnik (Rybnik 2050 sp. z o.o.) and other project companies of the Group.

The composition of the Capital Group is presented in note 1.3 to the consolidated financial statements.

2. Risks in the PGE Group's operations



PGE S.A., as the Corporate Centre managing the Capital Group, creates and implements integrated risk management architecture at PGE Group. In particular, it shapes PGE Group's risk management policies, standards and practices, designs and develops internal IT tools to support these processes, specifies global risk appetite and adequate limits as well as monitors their levels. PGE Capital Group companies, as well as other entities from the electrical and power sector, are exposed to a number of risks and threats resulting from the specific operating activities and operating in specific market and regulatory environment.

In PGE Group risk management process is pursued based on the GRC (Governance - Risk - Compliance) model i.e. the concept of 3 lines of defence (Business - Risk - Audit). It allows adaptation and integration of each of the operational areas at all levels of management. Having established a top-level Risk Committee, which reports directly to the Management Board, supervision over the effectiveness of risk management in the Group is ensured. Function definition within corporate risk management allows an independent assessment of particular risks, their impact on PGE Group and limiting and controlling major risks using dedicated instruments. Formation of a separate compliance function within the Group guarantees that PGE Group's activities are in line with legal conditions and ensures observance of the adopted internal standards.

The PGE Capital Group has consequently developed a comprehensive risk management system. The Group measures and assesses risks in the key companies of the Group. Mechanism allowing identification of areas exposed to risk and risk level measurement methods are constantly verified and developed. Thanks to that, the significant risks concerning various areas of operations are identified and kept within the assumed limits by reducing negative effects of such risks and by taking preventive or corrective measures, in accordance with the presented cycle.

All identified and assessed risks relating to the Group's current activities are recorded in the risk register (risk books) maintained by the Risk and Insurance Department in PGE S.A. Risk books reflect changes in the value of particular risk parameters along with information on implemented mitigating activities (reducing the probability of occurrence and minimising negative consequences of a risk) and its operational efficiency. The effectiveness of the mitigating actions implemented is denoted by the following three categories:

- effective,
- to be improved,
- to be changed.

Among the most significant risks for PGE Group (presented in Chapter 2.1) approx. 88% are mitigating actions from the effective category and approx. 12% from the category to be improved, while there were no mitigating actions from the category to be changed.













The table in Chapter 2.1 presents the most significant risks identified in the PGE Capital Group together with their assessment in 2023 EOY perspective. A risk level indicates a risk's potential financial impact on the













Group's results, and a risk prospect (trend) indicates the probable direction of risk development. Potential events determining risk assessments in the previous report are now partially described in other sections of this report as period events.

The current scenario (2023 EOY perspective) includes the potential carve-out of PGE Group's coal assets (Conventional Generation segment).

2.1. Current outlook

The main risks and threats of PGE S.A. and the PGE Group are presented below along with their assessment and outlook for year 2023.

Risk level					Mitigating actions and main tools used for the management of the risk
Risk outlook in the next period					
		low	medium	high	
Low level	Risk does not pose a threat and may be tolerated				
Medium level	Risk which needs preparation of the proper reaction based on analysis of costs and benefits				
High level	Intolerable risk, which needs immediate and active reaction, leading simultaneously to limitation of possible consequences and of probability of occurrence thereof				
Market and product risks Related to prices and volumes of offered products and services	Gross margin on electricity from the production assets of the PGE Capital Group and on trading in related products – its amount is exposed to risks arising from the uncertainty as to the future levels and volatility of market prices (electricity prices and the prices of key energy products - CO ₂ , fuels, including in particular hard coal, gas and the prices of certificates) and regulatory issues concerning electricity, EUA and fuel price levels			Most important actions: <ul style="list-style-type: none"> Optimization of generation assets - definition of production scenarios for updated market parameters of electricity, CO₂ and fuels. Defining and implementing a margin hedging strategy by hedging revenues brought in by the generation assets of the PGE Capital Group (electricity sales) and costs (EUA and fuel purchases), monitoring limits relating to the level of hedged margin expected at a given point in time. Establishing position hedging levels with consideration given to the results of analysing pricing risk in respect of electricity and related products, VaR-based. Target hedging levels are specified taking into consideration the Group's financial standing, in particular its strategic objectives. Monitoring risk exposure for individual areas in relation to the set limits and hedging strategies defined by the Risk Committee or the Management Board of PGE S.A. through operational reports prepared by the Department of Risk and Insurance. Research, monitoring and analysing the electricity markets and sector trends and the regulatory environment with regard to changes in the electricity sector and related products in order to optimally use generation and selling capacities. Acquiring new customers - diversification of channels to reach final off-takers and diversification of target groups by maintaining an extensive product portfolio and adapting offering to market demand (including the development of the offer for products such as PPAs - Power Purchase Agreements). Current clients retention - a diversified portfolio of customer loyalty schemes and special offers dedicated to former clients who moved over to the competitors. 	
	Electricity and heat production – related to production planning and the negative impact of factors determining production capacities				
	Electricity sales volumes - this risk being derived from the uncertainty surrounding the margin levels of the generation assets held and the risk of deterioration in the economic efficiency of the coal assets due to regulatory policies relating to the energy sector, macroeconomic indicators affecting the demand for electricity and energy goods, including inter alia the level of				

	<p>economic prosperity, the direction of the energy market development (e.g. changes in the energy mix), war in Ukraine and undertaken countermeasures.</p>			<ul style="list-style-type: none"> ▪ Care for a high level of customer service by developing employees' competences and building relations with business and retail clients. ▪ Use of tools to supporting customer relations processes allows the Group better sales planning and organisation of sales. ▪ Ensuring the expected level of operational readiness of the individual capacity market units. ▪ Close cooperation with the ERO throughout the tariff year, adapting the strategy for securing tariff sales to the expected approach of the ERO with regard to determining tariff prices for electricity. ▪ Close cooperation with the Settlement Administrator and the ERO President on settlements related to the Extraordinary Measures Act aimed at limiting electricity prices and providing support for certain consumers in 2023 (Act on Extraordinary Measures in 2023).
	<p>Tariffs (regulated prices) – resulting from the requirement to approve rates for distribution services and electricity and heat prices for particular groups of entities, as well as from delays in compensation payments by the Settlement Administrator</p>			
	<p>The Capacity Market – consequence of threats related to non-compliance with the capacity obligations of Capacity Market Units</p>			
<p>Property risks Related to development and maintenance of the assets</p>	<p>Failures and damage to property – connected with the operation and degradation over time of energy equipment and facilities and protection of energy equipment and facilities against destructive factors (including fire, effects of weather phenomena, intentional damage)</p>			<p>Most important actions:</p> <ul style="list-style-type: none"> ▪ Diversification of the current structure of the production sources, introducing a technology reducing the negative impact of atmospheric factors. ▪ Active pursuing of a strategy for building up and modernization of the production capacities. ▪ Performing maintenance repairs in line with the highest sector standards. ▪ Insurance of the most important production assets in the event of breakdown and property damage. Assets are insured based on an analysis of insurance costs, capabilities of insurance markets for specified risks or for particular types of assets, costs related to asset replacement and potential lost revenue. ▪ The systematic improvement of reliability of the power supply to the end users through modernization of the distribution grid. ▪ Continuous monitoring of environmental laws and regulations regarding environmental protection, and the energy policy.
	<p>Tangible investments – related to the strategic development directions of the PGE Capital Group and limited possibilities of obtaining financing for these projects</p>			
	<p>Asset management and maintenance investment - related to risks arising from the maintenance of production assets in good condition</p>			
<p>Operational risks Related to pursuing of ongoing economic processes</p>	<p>Fuel management – connected with uncertainty regarding the costs, quality, timeliness and volumes of fuel supply (mainly coal) and production</p>			<p>Most important actions:</p> <ul style="list-style-type: none"> ▪ Optimisation of equipment lifecycles and the availability of key assets. ▪ Timely inspections, repairs and modernisation of the existing assets.

¹ The decline in the risk trend is due to the fall in fuel prices.

	raw material as well as the effectiveness of inventory management processes			
	Cybersecurity – the risk of deliberate disruption of the proper functioning of the information processing and exchange space created by IT systems operating at the PGE Capital Group			<ul style="list-style-type: none"> ▪ Optimisation of costs inter alia through monitoring of fuel prices and reserves and securing supply through long-term contracts with suppliers and through price fixing formulas. ▪ Monitoring ICT networks due to increased activity of criminal groups in connection with the war in Ukraine. ▪ Monitoring of legal changes and changes in technical standards in the field of by-products. ▪ Investments in improving the efficiency of the combustion process. ▪ Constant monitoring of service availability.
	Oversight of insurance policies – risks arising from the failure to tailor insurance policies to the needs or the Company's failure to comply with the terms of insurance policies which may result in lack of receiving a claim in whole or in part			<ul style="list-style-type: none"> ▪ Creating Business Continuity Plans for critical systems, developing and testing emergency procedures. ▪ Continuous contact and cooperation with the Risk and Insurance Department and the Company's organisational units with regard to identified new risks or gaps in current insurance policies. ▪ Commencement of the internal broker's operational activity - PGE Asekuracja S.A.
	Reputation – risk associated with the negative perception of the entity's image by its customers, counterparties, investors, Shareholders as well as the general public			<ul style="list-style-type: none"> ▪ Centralisation of the claims handling process. ▪ Ongoing monitoring of changes in legal regulations. ▪ Training in regulations preventing money laundering and terrorist financing. ▪ Conducting a responsible media policy regarding the Turów Mine dispute.
	Procurement – related to the ineffectiveness and incorrectness of the purchasing process			<ul style="list-style-type: none"> ▪ Requirement to read Best Procurement Practices and the Code of Conduct for Business Partners of PGE Group companies.
	Human Resources – pertaining to difficulties in provision of personnel with the relevant experience, competences and ability to perform specific tasks			<ul style="list-style-type: none"> ▪ The proper approval path and internal regulations concerning the purchasing process. ▪ Control of the work environment. ▪ Training of employees in the field of occupational health and safety.
	Social dialogue – related to the failure to reach an agreement between the PGE Group's management and the social partners, which could lead to strikes / collective disputes			<ul style="list-style-type: none"> ▪ Informing about threats, restrictions and rules related to the COVID-19 (dedicated tab on the Intranet). ▪ PGE Group's active participation in internship programmes and cooperation with educational institutions in order to secure a pipeline of qualified personnel. ▪ Assessment and training of personnel in order to make optimal use of it within the Group's structures. ▪ Conducting an intensive and effective dialogue in order to avoid escalation of potential disputes with the social partners and to work out









² The level and trend of the risk was conditioned by the situation related to the planned carve-out of coal assets to National Energy Security Agency (NABE).

³ The increase in trend of the risk is related to the ongoing proceedings regarding the environmental permit for the Turów Mine.

⁴ The high risk trend is related to the need to verify contractors in supply chains (sanctions lists).

				the most favourable solutions with regard to employment and employment costs within PGE Capital Group connected therewith.
Regulatory and legal risks Related to compliance with external and internal legal provisions	Environmental protection – resulting from industry regulations specifying which "environmental" requirements energy installations should meet and what are the principles for using the natural environment, including uncertainty about their final form and level of limits and ESG reporting	■■■	↔	Most important actions: <ul style="list-style-type: none"> ▪ Monitoring of the changes being introduced or proposed provides that our operations in key operational segments are carried in compliance with the law and that PGE Capital Group has solutions which take into account potential changes in the legal environment. ▪ Social dialogue. ▪ Exercising operational supervision of planned and ongoing investment and modernisation measures with respect to their compliance with environmental requirements. ▪ Improvement of activities aimed at protecting and improving the state of the environment by implementing technological and organisational solutions ensuring efficient and effective management in this area. ▪ Monitoring national regulations concerning the Act on Extraordinary Measures in 2023. ▪ Reduction in the emission intensity of PGE Group's generating assets, development of low- and zero-carbon energy generation sources. ▪ Adaptation of internal regulations and practices to make sure that the activities are in compliance with the power sector regulations and binding law. ▪ Monitoring and analysing PGE Group's legal environment at an international level, together with risk assessment. ▪ Assessing the impact on PGE Group of proposed regulatory changes at an international level. ▪ Issuing opinions and influencing changes with regard to the legal environment at an international level in a strategic dimension. ▪ Managing cooperation and contacts with stakeholders as regards international regulations, including through the activities of PGE S.A.'s office in Brussels. ▪ Performing legal actions allowing for the maintaining of the environmental decision granting the Turów Mine a licence for lignite mining until 2044. ▪ Managing the PGE Capital Group's membership and cooperation within the industry organisation called the Polish Electricity Committee. ▪ Preparing for the fulfilment of new reporting obligations resulting from the new European Union legislation (CSRD/ESRS Directive, taxonomy, CSDD). ▪ Monitoring internal regulations implementing EU environmental directives into the national legal system.
	The Solidarity Shield – the risk related to the need to make contributions to the PDP Fund and submitting reports on its implementation	■■■	↔	
	Employee safety – associated with failures to provide safe working conditions	■■□	↔	
	Climate – commitments on the EU and national level and under strategic objectives arising from the EU's climate and energy policy and reporting on ESG issues	■■■	↔	
	Concessions – resulting from the statutory requirement to hold concessions with regard to conducted operations	■■□	↗ ⁵	
	Reporting and Taxes – related to changes in tax regulations and their interpretation as well as their practical, correct implementation	■■■	↔	

⁵ The increase in the risk trend is related to the ongoing environmental permit proceedings for the Turów mine.

				<ul style="list-style-type: none"> Participating in ESG ratings and foreign investor surveys. Effective raising of external financing and state aid for the development of planned low- and zero-carbon investments by PGE Group.
Financial risks Related to finance management	Credit risk – connected with the counterparty default, partial and/or late payment of receivables or a different type of breach of contractual conditions (for example failure to deliver/collect goods or failure to pay for any associated damages or contractual penalties)			Most important actions: <ul style="list-style-type: none"> Prior to executing a transaction, a counterparty assessment is carried out and forms a base for applying internal rating and credit limits, that are regularly monitored and updated. Exposures that exceed established limits are hedged in accordance with the rules of the credit risk management procedure. The level of utilisation of limits is monitored on a regular basis, payment of receivables is monitored on an ongoing basis and early recovery procedures are in place. Applying a central financing model, which assumes – as a rule – that external capital is raised by PGE S.A. PGE Group subsidiaries use a variety of intra-group financing sources. Liquidity risk is monitored using periodic planning for operating, investing and financing activities. As regards currency risk and interest rate risk, PGE Group has implemented internal management procedures. PGE Group companies execute derivative transactions involving interest rate- and/or currency-based instruments (IRS, CCIRS, FX Forward) only in order to hedge identified risk exposures. Regulations in force do not allow, with regard to derivative transactions based on interest rates and currencies, to enter into speculative transactions, i.e. transactions which would be aimed at generating additional gains resulting from changes in the level of interest rates and changes in exchange rates, while exposing the Group to the risk of incurring a potential loss on this account.
	Liquidity risk – connected with the possibility of losing the ability to meet current liabilities and obtaining financing sources for business operations		 ⁶	
	Interest rate risk – resulting from the negative impact of changes in market interest rates on PGE Group's cash flows			
	Foreign exchange risk – resulting from negative impact of exchange rate movements on PGE Group's cash flows denominated in currencies other than domestic currency			

⁶ Uncertainty about the future of legislation.

2.2. Long-term outlook

Challenges and threats are assessed, that will arise for the PGE Group in the next decade. Each of the long-term risks is assessed in terms of its impact on the achievement of business goals, the company's image and business continuity. The presented result is the dominant (value most often appearing in the results) of these three aspects.

[DEVELOPMENT DIRECTIONS](#) - the risk of losing the PGE Group's leading position on the energy market.

[ACCESS TO FINANCING](#) - risk associated with failure by PGE Group to raise capital for planned investments.

[COMPETITION](#) - risk resulting from structural changes in the energy sector (inter alia creation of NABE), affecting the competitive environment of PGE Group.

[GEOPOLITICS](#) - risk stemming from changes in geopolitical factors and trends (e.g. EU politics, diverging interests of particular countries, war in Ukraine), causing limited access to raw material supply for PGE Group.

[CLIMATE CHANGE \(METEOROLOGY\)](#) - risk deriving from physical hazards related to the occurrence of extreme weather events and an increase in their frequency, as a result of which the PGE Group's assets may be damaged, as well as climate changes affecting the demand for electricity and heat.

[ENERGY GENERATION SOURCES](#) - risk associated with failure to develop generation resources from new energy sources (after NABE carve-out) at the expected volume.

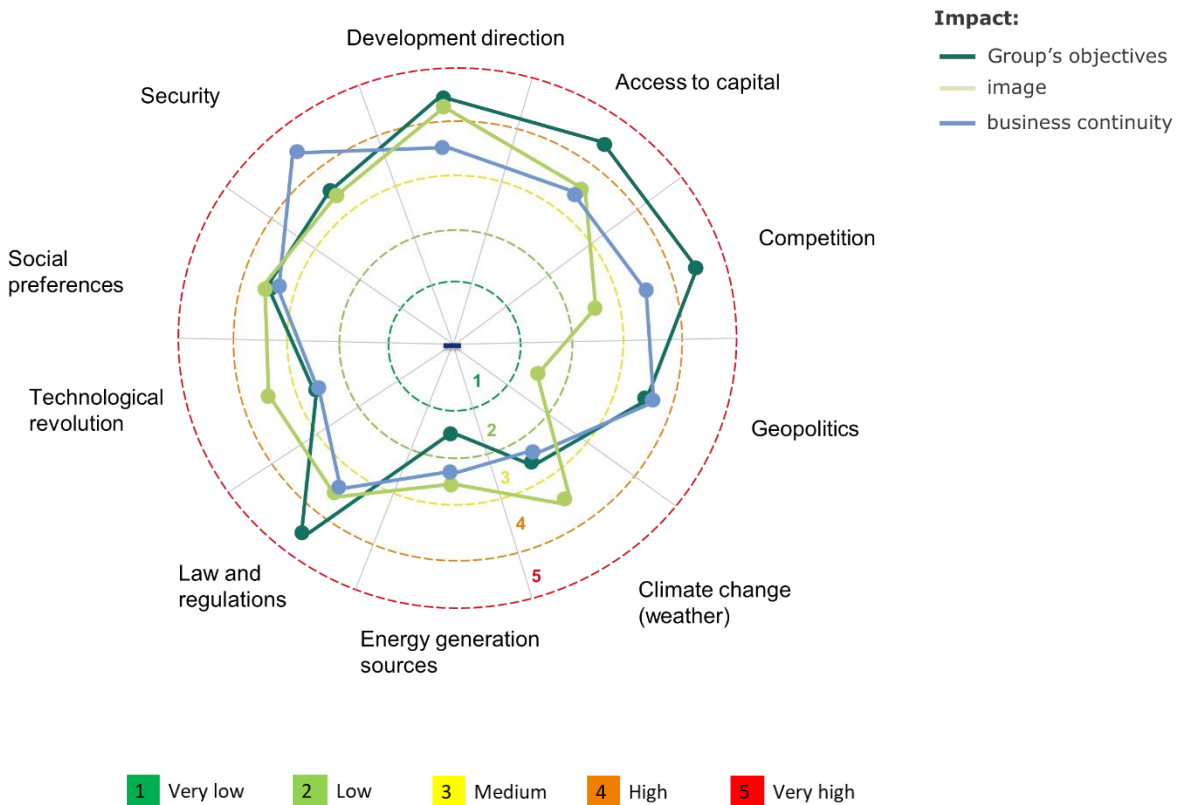
[LAW AND REGULATIONS](#) - risk associated with changes in the legal system and regulatory uncertainty, including: limitation of maximum margins, change of support systems, regulatory burdens resulting from environmental requirements.

[TECHNOLOGICAL REVOLUTION](#) - risk arising from technological development, which has a considerable impact on the direction of changes related to the energy market.

[SOCIAL PREFERENCES](#) - risks resulting from an expected further evolution of social preferences towards care for the environment, sustainability and social responsibility (from the perspective of mass customer expectations, assessment of employer attractiveness and public opinion).

[SECURITY](#) - risk associated with a negative impact of the geopolitical situation on both physical security and cybersecurity to PGE Group's business, including intentional disruption of the correct functioning of information processing and exchange space created by IT systems in place at PGE Group (interference in any element of PGE Group's infrastructure resulting in disruption of work of ICT (Information and Communication Technologies) and OT (Operational Technology) infrastructure).

Diagram: Map of long-term risks



Source: own work

The location on the map based on the assessment of significance level shows the impact of a given risk for the PGE Capital Group in three different aspects:

- the achievement of business goals,
- the company's image,
- business continuity.

The map of long-term risks was prepared based on the elements dominating in the responses, according to the subjective perception of these risks in the assessments of the top management of the PGE Capital Group (Management Board Members and Division Directors) during the strategic workshop held on March 2, 2023.

2.3. Climate risks

The PGE Capital Group is aware of the impact of its operations on the climate, as well as the threats resulting from climate change for the Group's operations. This interdependence generates both risks and opportunities for development. Therefore, the expectations of stakeholders in terms of reporting the impact of activities on the environment are understandable, recognising climate risk management as a key element of strategic management, with a direct impact on financial aspects.

Therefore, the PGE Capital Group focuses not only on risks, but also on opportunities to ensure resilience to threats and increase the Group's sustainable revenues. PGE Capital Group undertook a number of actions aimed at achieving climate neutrality in 2050, which were indicated in the PGE Group's Strategy until 2030, and continues to work on the implementation of the PGE Group's ESG Strategy, focusing on 4 areas:

- competitiveness in the financial market,
- leading in the green transition,

- corporate culture supporting sustainable development,
- active communication on sustainable development with all stakeholders.

The Group also carries out activities aimed at meeting regulatory requirements, both domestic and European. This applies to e.g. EU environmental taxonomy⁷, preparations for fulfilment of the requirements arising from the Corporate Sustainability Reporting Directive (CSRD) and expectations of financial institutions, investors and customers.

Issues related to climate risk are subject to the rigors and guidelines resulting from the corporate risk management process. The body responsible for overseeing the corporate risk management process in the PGE Group, including climate risk, is the Risk Committee. The establishment of a Risk Committee at the highest management level, reporting directly to the Management Board, ensures supervision over the effectiveness of risk management in the Group. Such a location of the risk function allows for an independent assessment of individual risks and their impact on the PGE Group as well as mitigation and control of significant risks using dedicated instruments.

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

Climate issues are assessed centrally at PGE S.A. taking into account all types of activities of the entities included in the Capital Group. This means that the result of the assessment is provided at the PGE Capital Group level.

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

In 2022 PGE Group once again participated in the Carbon Disclosure Project - CDP (<https://www.cdp.net/en>), an international study on corporate environmental impact. The Group responded to enquiries from global investors about the impact of its operations on climate and water resources and identified both risks and opportunities related thereto.

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

- **physical risk**, related to the physical effects of climate change i.e. real threats in the form of extreme weather events, drought, flooding;
- **risks associated with the transition** (so called transition risks) to a low-carbon and climate-resilient economy, which relate to meeting regulatory requirements, implementing new technologies or impact on the reputation of a business.

The changing climate and efforts to combat climate change, i.e. to mitigate and adapt to its effects, provide at the same time new opportunities and chances to develop business. This is why PGE Group focuses not only on risks but also on opportunities so as to ensure resilience to risks and to increase sustainable earnings. The climate-related opportunities in the PGE Group concern above all:

- effective resource management, e.g. in the form of work on solutions in the field of waste management and recovery of valuable products from wind turbine blades,

⁷ The PGE Capital Group is obliged to make disclosure to what extent its operations can be considered environmentally sustainable in accordance with Regulation 2020/852 of June 18, 2020 on establishing a framework to facilitate sustainable investments, amending Regulation 2019/2088 and with the Delegated Regulations on establishing a framework to facilitate sustainable investments.

- new sources of electricity through investments in offshore and onshore wind farms and photovoltaic farms, construction of electricity storage,
- new products - such as expansion of the product portfolio with PRO EKO initiatives - products that fit into low-emission heating systems, development of products / offers promoting low-emission activities, following changes in consumer preferences or development of offshore wind farms insurance solutions,
- increased resistance to climate change - e.g. in the form of building competences in the offshore wind energy industry as part of cooperation with PGE S.A. with high schools and universities in Poland, establishing scientific and research cooperation between PGE S.A. and institutes from the offshore wind energy or underground cabling industries.

PGE Group defines climate risk across following areas:

- difficulties in raising support funds and investment incentives - related to the growing impact of climate requirements relevant to the granting of aid funds and investment incentives in domestic regulations,
- requirements related to international regulations – related to EU legislation as regards energy and climate policy, in particular the Fit for 55 package,
- CO2 emissions – related to the rising costs of emission allowances, which could adversely affect the profitability of generating assets or bring these assets to a halt,
- operations – related to extreme weather events or changes in climate conditions, which could negatively influence PGE Group's assets and operating activities,
- investments – concerning a failure by PGE Group to fulfil investment commitments aimed at the green transition, at the EU and domestic level and for own strategic purposes.

Each of these areas of climate risk is assessed on a short, medium and long horizon. The adopted timeframes are aligned with external analyses.

ASSESSMENT OF THE IMPACT OF PHYSICAL CLIMATE RISKS ON THE OPERATIONS OF THE PGE GROUP

Global warming, changing precipitation patterns, rising sea levels and extreme weather events are increasingly challenging the resilience of power systems, increasing the likelihood of disruption. Climate change directly affects every segment of the power system:

- production potential and efficiency,
- demand for heating and cooling,
- resilience of transmission and distribution networks,
- demand patterns.

Being aware of the threats arising from climate change, as part of the first stage of the climate risk management process in 2022, the PGE Group carried out an assessment of significant physical (material) climate risks that may have a negative impact on its operations, supporting adaptation to climate change and increasing resistance to climate threats. Climatic factors in the form of mainly temperature, precipitation and wind and their negative impact on the Group's key activities were assessed.

The assessment of the risk related to climatic physical threats in PGE Capital Group in 2022 was carried out in the current and long-term perspective using scientific models describing possible climate scenarios i.e.:

- RCP 4.5 - an optimistic scenario, which assumes the introduction of new technologies in order to achieve a higher reduction of greenhouse gas emissions than at present, assuming that the increase in the average global temperature will be approx. 2.5°C at the end of the 21st century compared to the pre-industrial era,
- RCP 8.5 - pessimistic scenario, which assumes that the current growth rate of greenhouse gas emissions will be maintained, in the "business as usual" formula, assuming that the average temperature of the earth will increase by 4.5°C at the end of the 21st century compared to the pre-industrial era.

The assessment carried out showed a low or medium impact of risks related to physical climatic hazards on the key activities of the Capital Group in 2022. In accordance with the adopted criterion, risks whose assessment showed a high impact were tested. An important role in the impact assessment process is played by e.g. implementation of adaptive measures developed in the PGE Capital Group, increasing the stability of power systems by applying solutions more resistant to weather conditions, e.g. a cabling program (replacement of overhead transmission networks with cables placed in the ground), preventive management of key infrastructure elements affecting business continuity, insurance in the event of events related to weather phenomena or precise analyzes of areas for new investments.

IMPACT OF TRANSITIONAL CLIMATE RISKS ON OPERATIONS

Transformational climate risks in the PGE Capital Group relate primarily to areas affecting the change towards achieving climate neutrality planned by 2050, i.e., among others: requirements and regulations of existing products and services (policy and law), replacement of existing products and services their low-emission counterparts (technology area) and stakeholder concerns/negative opinions (reputation area).

Examples of risks from the above areas by category:

POLITICS AND LAW

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

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

ARISING REGULATIONS

The arising regulations are important from the point of view of implementing the Strategy and supporting the effective transition to low- and zero-emission technologies. The PGE Capital Group strives to fully use the available financing options for green investments. Emerging regulatory changes, such as support for EU infrastructure to stimulate sustainable investment, the inclusion of non-financing, penalties for climate-negative transactions, may raise significant risks. These changes will affect the credit risk and may affect the financial flows generated by assets belonging to the PGE Capital Group and thus affect their income value.

The risk of rising costs of greenhouse gas emission allowances, including the reduction of the limit of free emission allowances for the heating sector, reduces the ability to finance low- and zero-emission investments.

The PGE Capital Group systematically takes steps to reduce greenhouse gas emissions. Decarbonisation of generation assets will intensify along with the implementation of the Strategy of the PGE Capital Group. As a result, the Group's contribution to avoiding CO₂ emissions by 2030 will amount to 120 million tonnes. At the same time, pro-environmental investments are the core of the PGE Capital Group's investment activities. In addition, the Group invests in the modernisation of assets and development investments, including the optimisation of combustion processes and the introduction of solutions aimed at improving production efficiency, higher efficiency of fuel and raw material consumption, and reducing the energy intensity of production processes and internal needs.

TECHNOLOGY

A permanent reduction in emission intensity is to be achieved in the PGE Capital Group by changing the generation technology, investing in new technologies, expanding the portfolio of renewable energy sources, developing the circular economy and enabling customers to participate in the energy transformation. Technological risk also includes the selection of optimal and effective new technologies, the use of the potential by the PGE Capital Group. By 2030, the share of low- and zero-emission sources in the Group's production portfolio is to reach 85%, and renewable energy sources will constitute 50% of the energy produced. PGE Capital Group strives to achieve climate neutrality by 2050.

REPUTATION

Reputation risk in the case of the PGE Group is very important, because the energy sector plays an important role in supporting the effective transition to a low-carbon economy, and ultimately a zero-carbon one. As a transformation leader, the PGE Group focuses on reducing its impact on the natural environment. A permanent reduction in emission intensity is to be achieved by changing the generation technology, expanding the portfolio of renewable energy sources and enabling customers to participate in the energy transformation by offering them attractive products. Lack of due attention to the low-carbon economy and ESG issues can cause problems with access to capital.

In order to reduce the risk, a Team for calculating the PGE Group's carbon footprint was established in the PGE Capital Group, a joint initiative was established within the Polish Society of Industrial CHP plants to develop a sector guide for a uniform approach to the carbon footprint of power plants, CHP plants, including heat transmission and distribution, and for activities in the field of electricity distribution, staffing of organisational units involved in processes related to reporting, decarbonisation and risk assessment was increased.

3. Electricity market and regulatory and business environment

3.1. Macroeconomic environment

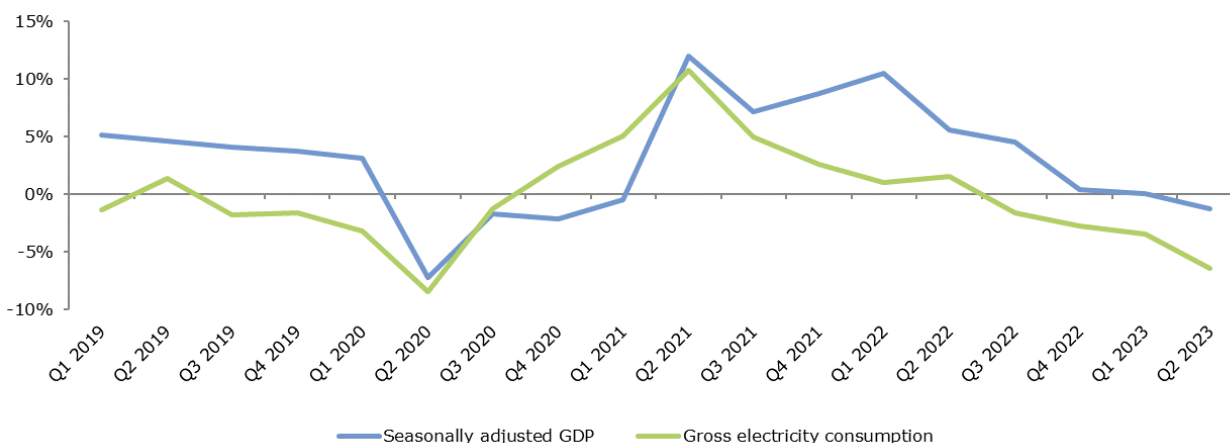
PGE Group's main operating area is Poland, and the domestic macroeconomic backdrop has a substantial impact on Group's results. At the same time, the condition of Poland's economy remains largely tied to the situation across the European Union and in global markets. The Group's financial results are affected by both the situation in specific segments of the economy and the financial markets, which determine the terms of PGE Group's debt financing.

In Poland there is a dependence between change in electricity demand and change in the rate of economic growth. Considering PGE Group's position on the Polish power generation market, as well as its substantial share in the electricity sales and distribution market, changes in electricity and heat demand may have a significant impact on the Group's results.

According to preliminary data published by the Central Statistical Office, non-seasonally adjusted GDP fell by 0.6% y/y in the second quarter of 2023. This is associated with a deterioration in economic activity, weaker consumption and lower industrial output sold. There was a deep decline in seasonally adjusted GDP growth in the second quarter of 2023 (by 1.4% y/y). Also, quarterly GDP dynamics showed a decline of 2.2% in real terms relative to the first quarter of 2023, the largest decline after the COVID-19 pandemic and the second consecutive quarter with negative GDP dynamics. This means that the Polish economy has entered a technical recession. Despite the worse performance in the second quarter of 2023, GDP is forecast to slowly rebound and return to positive growth in the second half of 2023, mainly due to rising consumption.

In the first half of 2023, gross electricity consumption decreased by 5% y/y. Lower demand for electricity in Poland in the first half of 2023 compared to the first half of 2022 is due to lower economic activity in this period y/y.

Chart: Seasonally adjusted GDP change vs. change in domestic gross electricity consumption.

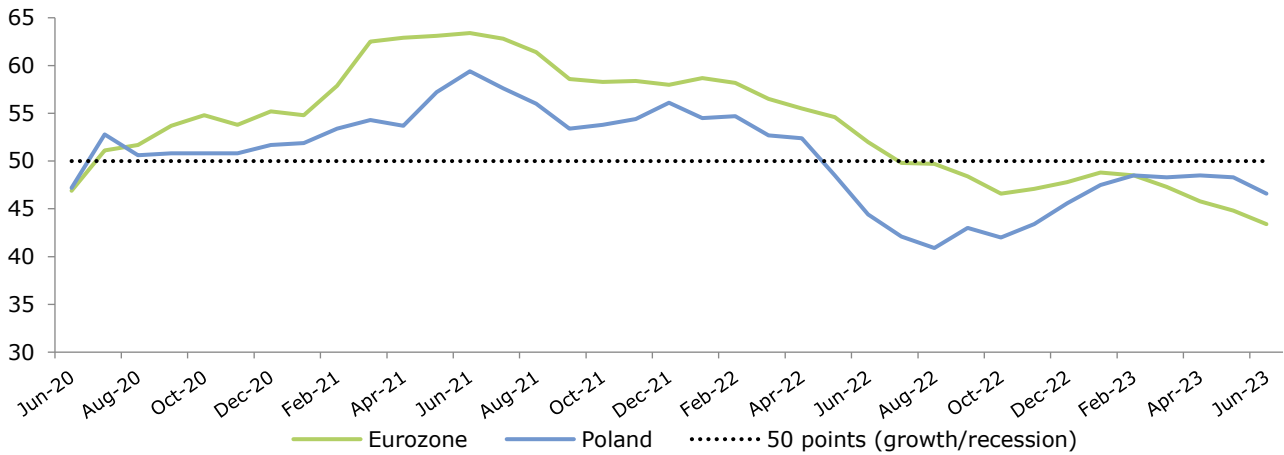


Source: Central Statistical Office of Poland, Polskie Sieci Elektroenergetyczne S.A. (PSE S.A.)

In June 2023, the condition of the Polish manufacturing sector deteriorated. The Purchasing Managers Index (PMI) stood at 45.1 points, which was a drop of almost 2 points compared to May 2023 (47.0 points). It was also the lowest reading after November 2022 (43.3 points) and the fourteenth consecutive month when the PMI reading was below the 50-point level. In the first half of 2023, the PMI averaged 47.2 points, down 4 points on a year-on-year basis. The decline in the index was caused by a deterioration in purchasing activity and a lack of orders for Polish industrial products (mainly from German enterprises). The weakening of foreign demand was due to the strengthening of the Polish currency. This contributed to weaker production and reduced inventories as manufacturers were emptying warehouses instead of manufacturing new products. In June 2023, as in the previous months, factory employment levels continued to fall. On the positive side, declining demand was alleviating inflationary pressures and influencing a further decline in the prices of means

of manufacture and finished goods. For the second consecutive month, the Polish PMI was higher than the Eurozone PMI which amounted to 43.4 points in June 2023. Eurozone PMI averaged 46.4 points in the first half of 2023, compared to an average of 55.9 points in the same period last year (a decrease of 9.5 points).

Chart: Manufacturing PMI in Poland and Eurozone (in points).



Source: Markit Economics

In June 2023, sold industrial production was 1.4% lower year-on-year, but it increased by 1.2% compared to May 2023. In the first half of 2023, dynamics were on average 1.7% lower than in the same period last year. Year-on-year declines were recorded in the manufacture of energy-related goods by 10.9%, durable consumer goods by 9.9%, supply goods by 5.8% and non-durable consumer goods by mere 0.3%. In contrast, the manufacture of capital goods increased by 11.0%. The dynamics of sold production in the whole industrial sector fell by 2.6% year-on-year in June 2023. According to preliminary data from the Central Statistical Office, in June 2023, compared to the same period last year, a decrease in sold industrial production was recorded in 22 industry divisions, including coal and lignite mining (by 31.6%), chemicals and chemical products (by 20.4%), metals (by 12.9%) and electricity, gas, steam and hot water generation and supply (by 6.6%).

3.2. Market environment

SITUATION IN THE NATIONAL POWER SYSTEM (NPS)

Table: Domestic electricity consumption (TWh).

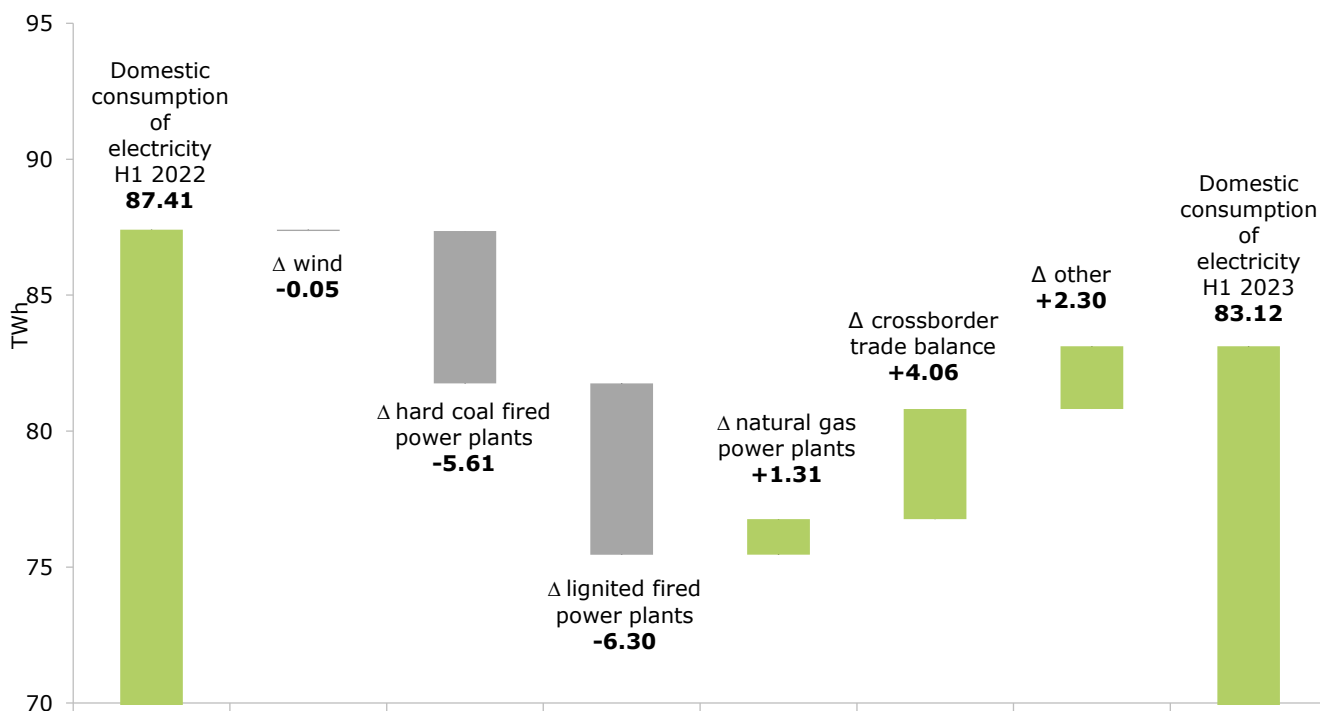
Consumption volume	H1 2023	H1 2022	% change
Domestic electricity consumption, including:	83.12	87.41	-5%
Wind farms	10.40	10.45	0%
Industrial thermal hard-coal fired power plants	37.57	43.18	-13%
Industrial thermal lignite fired power plants	17.37	23.67	-27%
Industrial gas-fired power plants	6.93	5.62	23%
International exchange balance	2.35	-1.71	-
Other (hydro power plants, other RES)	8.50	6.20	37%

Source: PSE S.A. data.

First half of 2023

In the first half of 2023, domestic electricity consumption decreased by 4.3 TWh compared to the base period, mainly due to slower pace of economic growth and higher self-consumption by prosumers. Electricity production from wind remained at a similar level compared to the same period previous year. In the first half of 2023, Poland was in balance an energy importer, which was a change compared to the first half of the previous year (+4.1 TWh). A decrease in production was recorded in hard coal-fired power plants (-5.6 TWh) and in lignite-fired power plants (-6.3 TWh) due to lower domestic electricity consumption. In addition, the fall in natural gas prices resulted in an increase in production based on this type of fuel (+1.3 TWh). There was also an increase in generation from other electricity sources, most notably photovoltaic plants, due to an increase in installed capacity.

Chart: Energy balance in the NPS (TWh).



Source: own work based on data from PSE S.A.

ELECTRICITY PRICES – DOMESTIC MARKET

DAY-AHEAD MARKET (RDN, SPOT MARKET)¹

Market/measure	Unit	H1 2023	H1 2022 ²	% change
RDN – average price	PLN/MWh	594	665	-11%
RDN – trading volume	TWh	27.20	16.20	68%

¹ Data from TGE, include weighted average monthly BASE prices.

² Counting methodology adapted to the currently applicable.

ANALYSIS – SELECTED PRICE FACTORS AFFECTING RDN QUOTATIONS

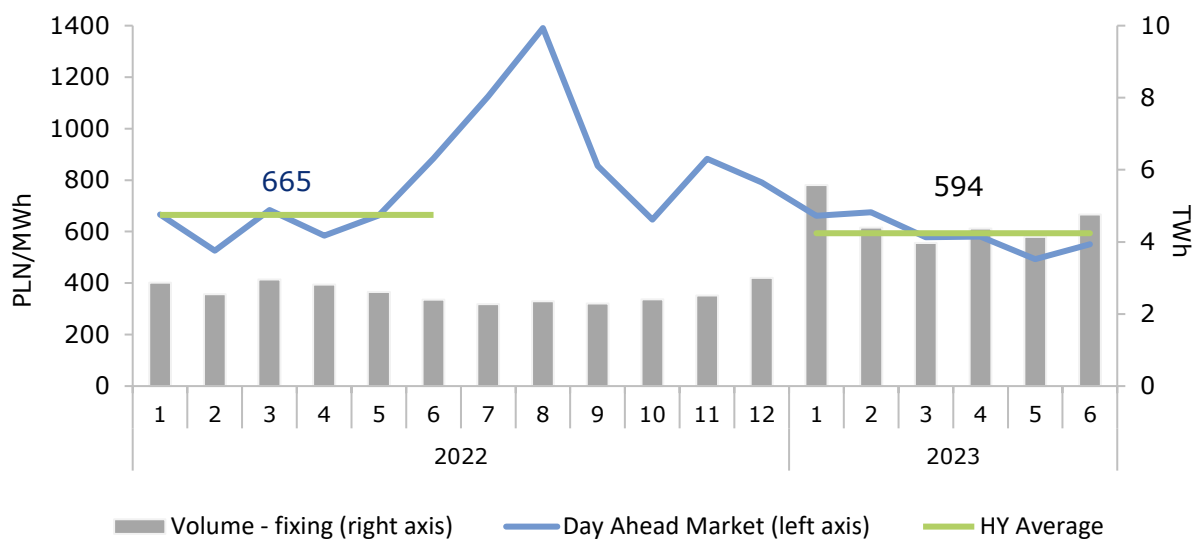
Factor	Unit	H1 2023	H1 2022	% change
CO ₂ emission rights ¹	EUR/t	89.36	82.80	8%
Polish Steam Coal Market Index PSCMI-1	PLN/GJ	33.02	14.26	132%
Wind generation NPS	TWh	10.40	10.45	0%
Ratio: wind generation/ NPS consumption	%	13%	12%	
Ratio: international trading/ NPS consumption	%	3%	-	

¹ Source: own work based on ICE quotations.

In the first half of 2023, the average electricity price on the day-ahead market was PLN 594/MWh and was lower by 11% than average price (PLN 665/MWh) in the analogical period of the previous year. Lower demand for electricity contributed to the price drop.

Average level of PSCMI-1 in the first half of 2023 was PLN 33.02/GJ, i.e. 132% higher y/y.

Chart: Average monthly prices on the day-ahead market in 2022–2023 (TGE).¹



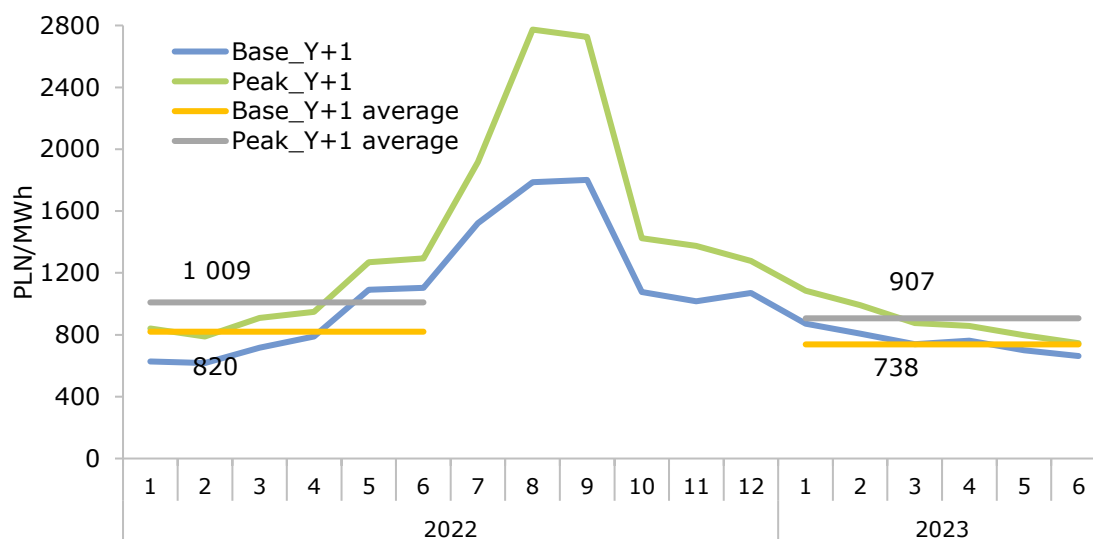
¹ Data from TGE, include weighted average monthly BASE prices.

FORWARD MARKET

Market/measure	Unit	H1 2023	H1 2022	% change
BASE Y+1 – average price	PLN/MWh	738	820	-10%
BASE Y+1 – trading volume	TWh	11.42	34.26	-67%
PEAK5 Y+1 – average price	PLN/MWh	907	1 009	-10%
PEAK5 Y+1 – trading volume	TWh	1.69	3.40	-50%

Energy prices on the forward market in the first half of 2023 fell by around -10% for both BASE and PEAK5 contracts. The decrease was due to the high base of the previous year, when increases were influenced by the market situation related to the limited supply of hard coal and natural gas due to the ongoing conflict in Ukraine.

Chart: Average monthly prices on the forward market in 2022–2023 (TGE).¹

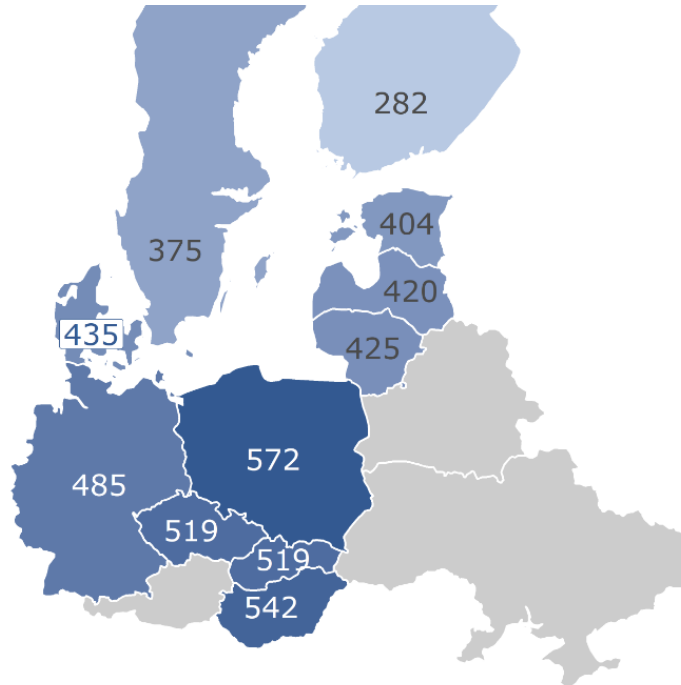


¹ Monthly average index level for forward contracts for the next year (Y+1), baseload and peak, weighted by the trading volume.

ELECTRICITY PRICES - INTERNATIONAL MARKET

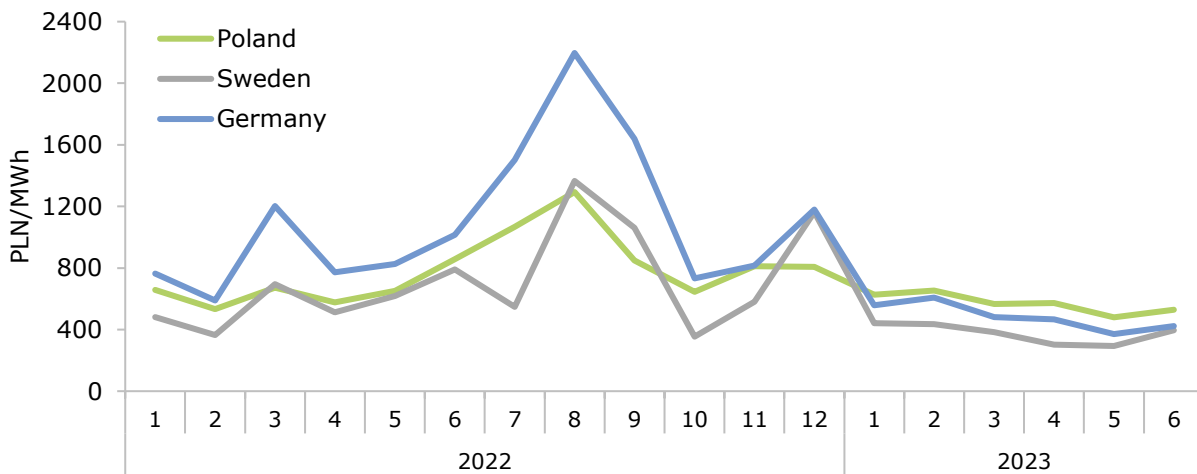
WHOLESALE MARKET (COMPARISON OF SPOT MARKETS)

Chart: Comparison of average electricity prices on Polish market and on European markets in the first half of 2023 (prices in PLN/MWh, average exchange rate EUR/PLN 4.63).



Source: TGE - RDN price level calculated on the basis of hourly quotations (fixing), EEX, Nordpool

Chart: Evolution of spot market prices.

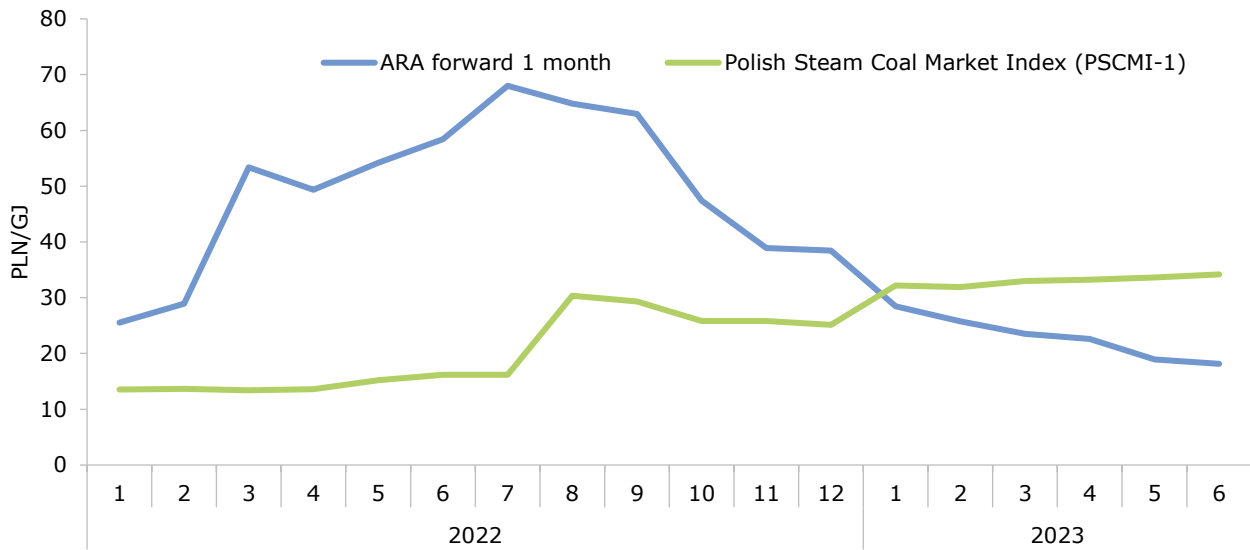


Source: TGE, EEX, Nordpool

There was a year-on-year fall in prices in neighbouring markets in the first half of 2023. The largest y/y declines were recorded in Hungary (PLN -478/MWh), and the smallest in Sweden (PLN -202/MWh). The differentiation of energy prices results from a different level of share of renewable energy sources in the technological mix and from the situation on the markets for related products. The price spread between Poland and its neighbouring countries is also due to differences in realised coal prices and also to prices of natural

gas at home and abroad. The price of hard coal in ARA ports fell by 49% y/y in the first half of 2023, while the domestic pulverised coal price index, PSCMI-1, increased by 132% over the same period.

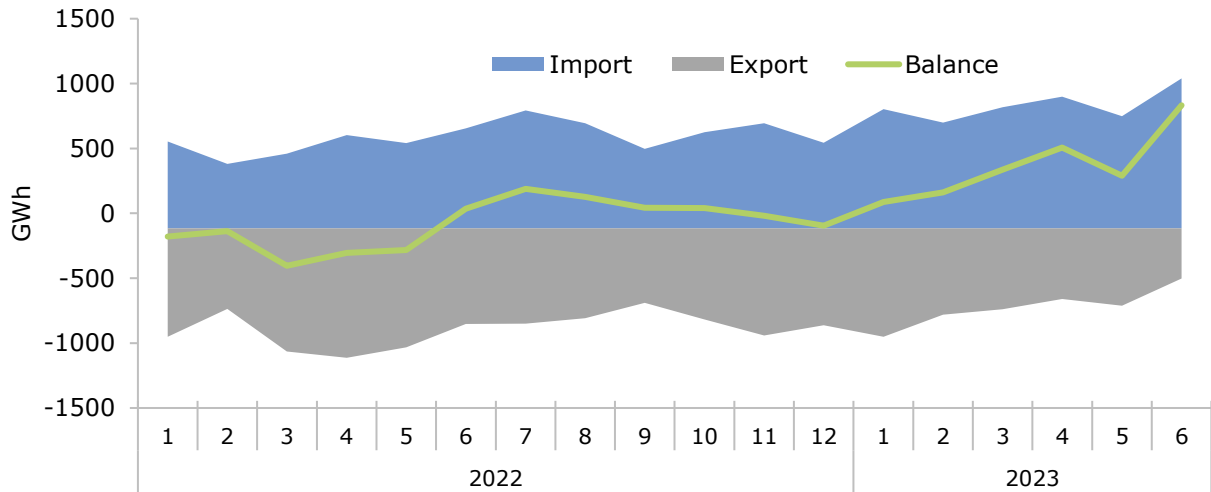
Chart: Hard coal indices ARA vs PSCMI-1⁸.



Source: ARP, Bloomberg (API21MON OECM Index), own work.

INTERNATIONAL TRADING

Chart: Monthly imports, exports and cross-border exchange balance in 2022 - 2023.

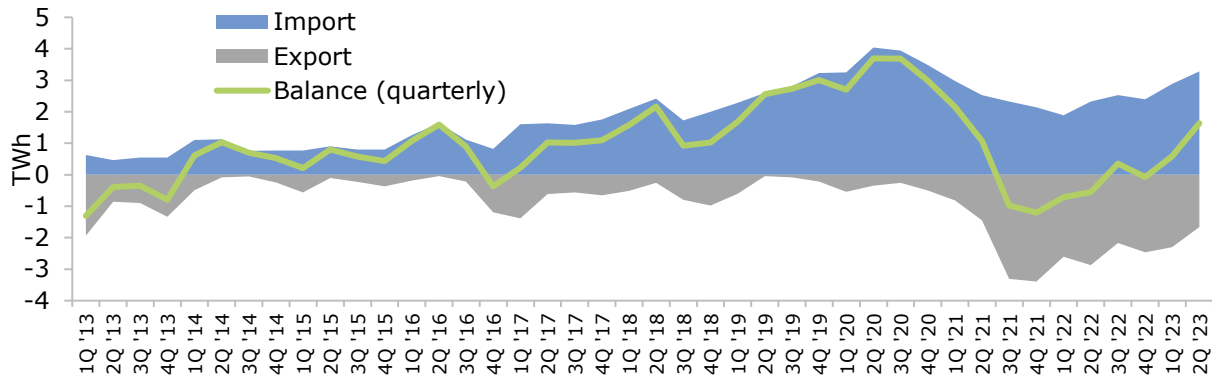


Source: own work based on data from PSE S.A.

Global decline in fuel prices (which translate into a decrease in the costs of electricity production from natural gas and hard coal) translated into a decrease in energy prices in neighbouring countries, which in turn increased electricity import to Poland from neighbouring countries.

⁸ The comparison is illustrative only. Methodologies of counting the ARA and PSCMI1 indexes are different. Among other things, the ARA index includes insurance and delivery costs. The PSCMI 1 is an ex-mine index without insurance and delivery costs. Standards for calculating the caloric values are also different (ARA – 25.12 GJ/t vs. PSCMI1 caloric value - range 20-24 GJ/t). The aim is to compare the trend and not the absolute level. For illustration purposes ARA index is recalculated from USD/t to PLN/GJ.

Chart: Quarterly trading volumes – import, export and international trading balance in years 2013 - 2023.



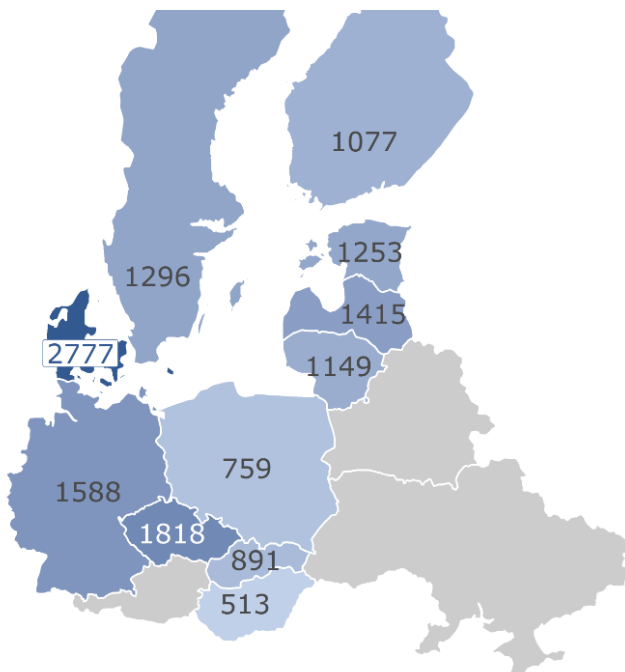
Source: own work based on data from PSE S.A.

In the first half of 2023, Poland was a net importer of electricity, with a trade balance of +2.3 TWh (imports 6.2 TWh, exports 3.9 TWh), up y/y by 4.1 TWh. Imports from Sweden (2.2 TWh), Germany (1.6 TWh) and Lithuania (1.0 TWh) had the greatest impact on the trade balance. At the same time, we exported the most electricity to Slovakia (1.6 TWh) and Germany (1.2 TWh).

RETAIL MARKET

The diversity of electricity prices for retail customers in the European Union depends mainly on the level of the wholesale prices of electricity, fiscal system (taxes and fees), regulatory mechanism and support schemes in particular countries. In Poland in the second half of 2022⁹ an additional burden (over sale price and cost of electricity distribution) for individual customers accounted for 38% of the electricity price. The Danes paid the most for electricity, for whom additional charges also accounted for 38% of the final price.

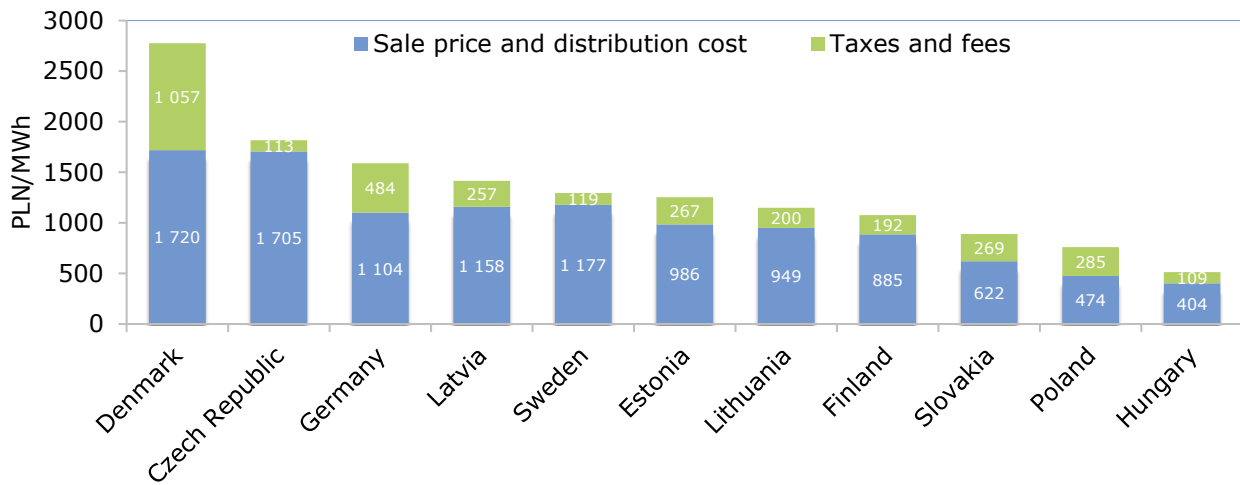
Chart: Comparison of average prices for individual customers in selected EU countries in the second half of 2022 (prices in PLN/MWh, average exchange rate EUR/PLN 4.73).



Source: own work based on Eurostat data.

⁹ Eurostat data on retail market are published in semi-annual intervals, currently, there is no data for the first half of 2023.

Chart: The share of additional charges in electricity prices for the individual customers in selected EU countries in the second half of 2022 (prices in PLN/MWh, average exchange rate EUR/PLN 4.73).

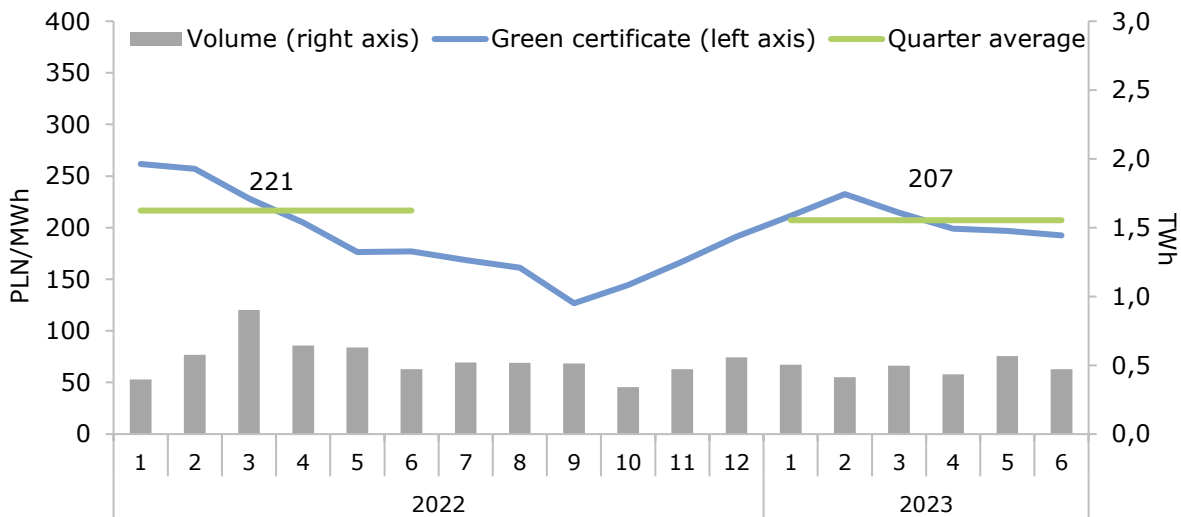


Source: own work based on Eurostat data.

PRICES OF CERTIFICATES

In the first half of 2023 the average price of green certificates (index TGEoza) reached PLN 207/MWh and was lower by 6% compared to the analogical period of the previous year. An obligation to redeem green certificates changed as compared to 2022 (18.5%) and stands at 12% for 2023.

Chart: Average quarterly prices of green certificates (TGEoza).



Source: Own work based on TGE quotations.

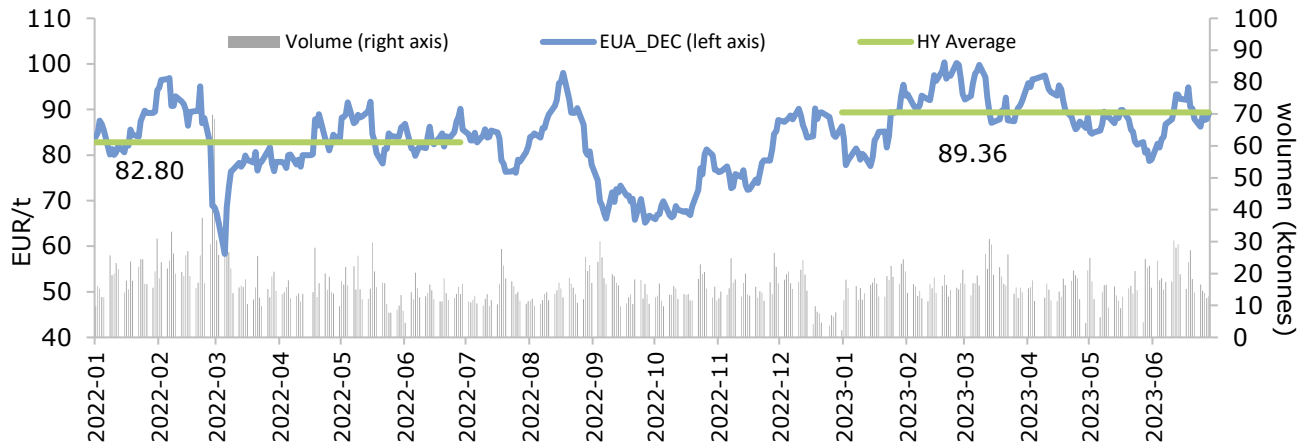
PRICES OF CO₂ EMISSION RIGHTS

EUA (European Union Allowances) prices are one of the key factors determining wholesale energy prices and PGE Group's financial results. Installations emitting CO₂ in the process of electricity or heat production bear the expenses for purchasing EUA allowances to cover the deficit (i.e. the difference between CO₂ emissions at PGE Group's generating units and the free-of-charge allowances received under derogation in accordance with the National Investment Plan). Wherein, last allocations granted free of charge were planned for realisation of

investment tasks for 2019. It means that the free allocations for electricity generation, in accordance with the currently used method, ended when 2019 allowances were received.

In the first half of 2023 the weighted average price of EUA DEC 23 was EUR 89.36/t and was higher (by approx. 8%) than the average price of EUR 82.80/t for the EUA DEC 22 instrument in the similar period of the previous year.

Chart: Prices of CO₂ emission rights.



Source: own work based on ICE exchange quotations

3.3. CO₂ emission rights granted free of charge

In accordance with Commission Implementing Regulation (EU) 2019/1842 of October 31, 2019 laying down rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards further arrangements for adjustment of the allocation of free CO₂ emission allowances due to changes in activity levels, the competent authority may suspend the issuance of free emission allowances to an installation until it is determined that there is no need to adjust the allocation to that installation or the Commission has adopted a decision concerning adjustments to the allocation to that installation.

In national legislation, the Act on the Greenhouse Gas Emission Trading Scheme introduced an additional condition for the issuance of emission allowances to installations. According to the general rules, allowances are issued by February 28 each year, however, in the case of installations, the issue of emission allowances takes place after the submission of an activity level report and the publication of information in the Public Information Bulletin on the website of the office serving the Minister of Climate and Environment. According to the European Commission Regulation, activity level reports are submitted by March 31 each year, thus on April 12, 2023 emission allowances were issued to the accounts of the operators of installations in the Union Registry in accordance with the publication in the Public Information Bulletin of the Ministry of Climate and Environment on April 7, 2023. Further adjustment will be corrected over the course of 2023 to reflect increases and decreases in production volumes resulting from verified activity level reports submitted for individual installations.

Table: Emission of CO₂ compared to the allocation of CO₂ emission allowances for 2023 (in tonnes).

Product	CO ₂ emissions in H1 2023	Allocation of CO ₂ emission rights for 2023 ¹
Electricity	25 485 907	-
Heat	2 702 268	641 296
Total	28 188 175	641 296






¹ Allowances for heat production.





3.4. Regulatory environment






PGE Group operates in an environment with a significant impact of domestic and foreign regulations. Presented below is a summary of the most significant decisions, which could have an impact on PGE Group's operations in the coming years.

Legal regulations regarding the current rules for determining the prices of electricity and heat and the compensations due in this respect are described in chapter 5.1 of this report in the section Regulatory changes on the electricity market.




DOMESTIC REGULATORY ENVIRONMENT

Segments	Regulation	Regulation objectives	Latest conclusions and next stages	Impact on PGE Group
	The bill on the amendment to the Energy Law and the Renewable Energy Sources Act.	The act includes, in particular, proposals for provisions implementing into the Polish legal system Directive (EU) 2019/944 of the European Parliament and of the Council of June 5, 2019 on common rules for the internal market in electricity and amending Directive 2012/27/EU. In particular, the project provides implementation of civic institutions of energy communities, facilitation in the field of aggregation, contracts with dynamic electricity prices and other flexibility and demand response services, direct line changes.	The Sejm passed the law on July 28, 2023 . On August 14, 2023 the President signed the law. The law entered into force on September 7, 2023 .	The proposed solutions will have an impact on all of PGE Group's operating segments, especially the Supply and Distribution segments. The draft introduces or applies numerous EU laws addressing the electricity market.
 	The act on amendment of the act on renewable energy sources and certain other acts.	The act introduces amendments to several acts, including: Energy Law, Environmental Protection Law, in connection with heating going green, and other changes related to the necessity to implement directive RED II (regarding the promotion of the use of energy from renewable sources). Moreover, the act introduces new support systems for biomethane, to modernise RES installations and for existing RES installations to cover operating expenses. The act also changes the definition of hybrid RES installations.	The Sejm passed the law on August 17, 2023 . On August 28, 2023 the President signed the law. The law enters into force on October 1, 2023 .	The act is of significance for the Renewables segment, especially due to the possibility of using new support systems and for the District Heating segment in terms of increasing the use of heat generated from RES.
	Amendment of the act on investment in wind farms.	Modification of rule 10h - mitigation by allowing municipalities to define in local spatial development plans, after consultation with local communities, a distance less than the statutory distance for wind farms from residential buildings, but not less than 500 m.	On February 8, 2023 , the draft was passed by the Sejm. On February 14, 2023 , the President signed the act. The act entered into force on April 23, 2023 .	The act is of significance to the development of the Renewables segment.
	Draft Act amending the Act on the greenhouse gas emission allowance trading scheme and the Act - Environmental Protection Law.	The aim of the act is to establish national legislation governing the establishment and operation of the Energy Transition Fund. The Energy Transition Fund is to be used to finance investments in the energy and industrial sectors excluding solid fossil fuels, i.e. coal.	PGE S.A. submitted comments on the published draft law. Analysis of the submitted comments is in progress. The draft is being	The draft will be relevant for the PGE Group, excluding coal assets. Funds from the Energy Transition Fund will be available to finance investments in the areas: RES, grids, storage, etc.

Segments	Regulation	Regulation objectives	Latest conclusions and next stages	Impact on PGE Group
	Regulation of the Minister of Climate and Environment on the method of conducting settlements and balancing of the gas transmission system in periods of mandatory reserves of natural gas and during the period of restrictions in the off-take of natural gas.	<p>The regulation is intended to set out how settlements are to be carried out for released compulsory natural gas reserves and how the price for gaseous fuels used for these settlements is to be calculated, as well as how balancing of the gas transmission system is to be carried out and how imbalances are to be settled during the release of stocks.</p> <p>The regulation sets out formulas for the calculation of:</p> <ul style="list-style-type: none"> ▪ fees for collected mandatory reserves, ▪ fees for the release of mandatory reserves to the relevant entity ordering transmission services, ▪ fees for balancing activities, taking into account an entity ordering transmission services whose imbalance is negative and positive respectively, ▪ fee related to the financial neutrality of balancing during the period of mandatory reserve release. 	considered by the Council of Ministers. The regulation came into force on June 2, 2023 .	The regulation is of importance from the point of view of trading in gaseous fuels (establishment of a system of settlements between PSE S.A. and transmission services principals).
	Act amending the Act on the Management of Agricultural Property of the Treasury and certain other acts.	The act introduces regulations according under which agricultural properties belonging to the Agricultural Property Stock of the Treasury, which include at least 70% of uncultivated land/land of class IV will be able to be leased for the purpose of obtaining electricity from RES.	The Sejm passed the law on August 18, 2023 . On August 28, 2023 the President signed the law.	The act will make it possible to acquire new land, in particular wasteland included in the Agricultural Property Stock of the State Treasury, for RES investments.
	Act amending the Act on Spatial Planning and Development and certain other acts.	The act introduces the principle that photovoltaic (PV) investments above 1 MW will only be allowed on the basis of a Local Spatial Development Plan. In other case, it will not be possible to realise the investment in question on the basis of a decision on development conditions. The draft also provides for the possibility of applying a simplified procedure for the enactment or amendment to the Local Spatial Development Plan, including in the case of PV investments, but this does not apply to investments with significant impact on the environment.	The act came into force on September 24, 2023 .	The act may slow down PV investments due to necessity to embed such investment in the Local Spatial Development Plan. The average time required to enact the Local Spatial Development Plan is around 3 years.
	The law under consideration pertains to modifications to the Act on the preparation and implementation of strategic investments in transmission networks and certain other Acts.	<p>The law introduces new, essential transmission projects and broadens the scope of the distribution project legislation to include voltage equal to or greater than 110 kV, which is crucial for transmitting electric energy from the transmission network to distribution networks.</p> <p>This will make it possible for investors to streamline the process of obtaining public-law permits, as well as introduce a simplified approach to acquiring land for these investments. For the purpose of easing the administrative load on the bodies of local</p>	The act came into force on September 3, 2023 .	This regulation directly affects the Distribution sector. The implementation of regulations will simplify and accelerate investment activities ith respect to distribution networks having voltage equal to or exceeding 110 kV and, to a lesser extent, networks at lower voltages

Segments	Regulation	Regulation objectives	Latest conclusions and next stages	Impact on PGE Group
		government and government administration, the recommendation is to restrict the list of distribution investments to those that are of utmost importance.		than 110 kV (mainly medium voltage networks)
	Act on the preparation and execution of investments in the realm of hydroelectric pumped-storage power plants.	The legislation is designed to streamline the investment process for pumped-storage hydroelectric power plants.	The act came into force on June 30, 2023 .	The act will make investments in the Renewables segment more efficient and speedy by building new pumped-storage plants and refurbishing existing ones.
	The Act regulating amendments to the Act on special measures in the field of certain heat sources due to the fuel market situation and other acts.	The act modifies the initial legislation on unique solutions for specific heat sources due to the current fuel market situation and other laws. A new heat price freezing mechanism is coming into effect for end-users, lasting until the end of 2023. The distributors (heat providers) are responsible for making settlements related to the reduction of heat prices.	The act came into force on February 8, 2023 .	The act seeks to resolve the billing structure for heat distributors who use fixed pricing.
	Draft regulation on confirming compliance with the permitted emission levels, while acknowledging the uncertainty of measurements.	The draft regulation specifies: <ul style="list-style-type: none"> ▪ the method of evaluating adherence to the allowable emission level; ▪ the highest possible uncertainty values for a single measuring result. ▪ strategy for accounting for measurement uncertainty when establishing allowable emission levels; ▪ the method of accounting for excess emissions. 	On June 13, 2023 , the draft was referred for renewed public consultation due to the broad scope of the changes.	The project bears an impact on the reporting of substances emissions into the air and their settlement with authorities.
	The regulation amending the regulation on detailed rules for the formation and calculation of tariffs and settlements for heat supply.	The amendment to the regulation is aimed at balancing the interests of heat consumers and power utilities engaged in heat generation and distribution. The proposed regulation will contribute to making the prices and charge rates in heat tariffs more realistic. Repealing § 11 (4) and (8) and § 45b will make it impossible to take an index-based approach to shaping heat tariffs, which in the current situation allows for overstatement of projected revenue in applications for heat tariff approvals, thus resulting in calculation of prices and charge rates at too high a level.	Public consultation ran until July 17, 2023 .	The draft regulation affects the revenue of power utilities generating heat and offering transmission and distribution services, tariffed under the cost method.
	The draft Oder River Revitalisation Act.	The aim of the draft Act is to ensure adequate water resources and improve water quality in the Oder River. The draft Act provides for the introduction of separate charging mechanisms for activities relating to heat pumps and aquifer heat batteries, particularly bearing in mind the pro-environmental nature of such activities. The solutions in question are intended to support the conduct of particular activities.	On August 17, 2023 , the Sejm passed the Act. On August 28, 2023 , the President signed the Act.	By introducing preferences for heat pumps, the Act contributes to the use of this technology in the Heat Generation segment.

INTERNATIONAL REGULATORY ENVIRONMENT

Segments	Regulation	Regulation objectives	Latest conclusions and next stages	Impact on PGE Group
	<p>Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the EU (ETS Directive).</p> <p>Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve (MSR Decision).</p>	<p>Combating climate change.</p> <p>Development of investment incentives through a CO₂ price signal to develop low-emission sources.</p>	<p>On April 18, 2023, the agreement reached between the European Commission, the European Parliament and the Council (trilogues) was adopted by the EP, and on April 25, 2023 by the Council.</p> <p>On May 16, 2023, Directive (EU) 2023/959 was published in the Official Journal of the EU and entered into force on the twentieth day after its publication.</p> <p>The deadline for the transposition of the ETS Directive has been set as December 31, 2023, with a few derogations possible until June 30, 2024.</p> <p>The EC is currently implementing the reform of the ETS system; in the fourth quarter of 2023 it is to publish, among others: implementing regulation regarding the climate neutrality plan for installations covered by the ETS and implementing regulation regarding the principles of operation of the Modernization Fund.</p>	<p>Increased competitiveness of renewable sources compared to generation assets using high-emission fuels.</p> <p>Increase in operating costs for conventional generation of electricity and heat.</p> <p>Option to obtain investment support from the Modernisation Fund and Innovation Fund and partial free allocation of allowances to district heating.</p>
	<p>Directive 2018/2001 on the promotion of the use of energy from renewable sources (Renewable Energy Sources Directive).</p>	<p>To adapt legislation related to increased share of renewables in reference to EU's new higher GHG reduction target by 2030.</p>	<p>On March 30, 2023, in the trilogues, a preliminary agreement was reached between the EC, the EP and the Council, assuming a new, binding EU-level target for the share of energy from renewable sources in gross final energy consumption at the level of 42.5% with additional indicative national targets, the implementation of which will enable the achievement of a total target of 45% in 2030.</p> <p>The EP adopted the agreed text of the directive in a vote during its plenary session on September 12, 2023.</p> <p>The agreement reached still needs to be formally adopted by the Council. The directive is to be transposed within 18 months of its entry into force.</p>	<p>Improvement in the competitiveness of low-emission sources of energy in comparison with high-emission sources.</p> <p>Larger share of renewable sources in the Polish energy mix by 2030, including a faster path of decarbonisation of District Heating segment. Possibility of wider use of power-to-heat solutions (e.g. heat pumps or electrode boilers) in the District Heating segment.</p>
	<p>Directive 2012/27/EU on energy efficiency (EED Directive).</p>	<p>To adapt legislation related to energy efficiency improvements in reference to EU's new higher GHG emission reduction target by 2030.</p>	<p>As part of trilogues ended on March 10, 2023 a new binding EU-level target was set to reduce final energy consumption by 11.7% by 2030 in relation to the projections contained in the Reference Scenario 2020.</p> <p>The agreement reached was formally adopted by the EP and the Council on July 11, 2023 and July 25, 2023 respectively.</p>	<p>Improvement in the competitiveness of low-emission sources of energy.</p> <p>The gradual displacement of coal-fired cogeneration from heat generation systems due to the introduction of new definitions of efficient heating/cooling and high-efficiency cogeneration systems.</p>

The directive is to be transposed within two years of its entry into force.

Need for more extensive development of renewable sources and waste heat in district heating systems.

A higher factor for annual final energy savings, resulting in an increase in burdens on the energy efficiency certificate system.



Directive 2010/31/EU on the energy performance of buildings (EPBD).

Alignment of legislation related to improving the energy performance of buildings in the EU with respect to the 2050 climate neutrality target and the new higher 2030 EU GHG reduction target.

In accordance with the EP's position of **March 14, 2023**, from 2026 new public utility buildings, and from 2028 new residential buildings will have to meet the zero-emission criteria and, as a rule, be powered only with energy from RES. At the same time, the EP proposes minimum requirements for improving the efficiency of existing buildings, targets for solar energy and provisions to accelerate the development of charging points.

Adoption of positions by the Council (**October 25, 2022**) and the EP allowed the start of trilogues, the first of which took place on June 6, 2023. The date for transposition of the Directive into national law is not specified.

Greater competitiveness of renewable energy sources as a heat source in buildings .

Reduction in the heat demand of buildings due to improved energy performance .

Faster pace of displacement of fossil fuels in the heating sectors, including district heating.



Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control – IED).

Introduction of new requirements determining emission levels in the integrated permit, the rules for obtaining derogations from BAT requirements and giving new competences to the EC. Public participation in appeal proceedings will be increased.

On **March 16, 2023**, the Council adopted a general approach, in which, among others, introduced less restrictive determination of emission levels in integrated permits compared to the EC proposal and the possibility of applying for derogations for installation operators in emergency situations, as well as relaxation of provisions penalizing infringements of the provisions of the directive proposed by the European Commission. The EP adopted its position at its plenary session held on **July 11, 2023**, taking into account, among other things, a less restrictive definition of emission levels in integrated permits compared to the EC proposal and the possibility for operators of installations to apply for derogations in extraordinary situations. The provision on the reversed burden of proof was retained (in a modified form).

The adoption of the positions by the Council and the EP allows for the commencement of trilogues.

Depending on the final result of the arrangements in the trilogues, the entry into force of the proposed solutions may result in additional capital expenditures being incurred additional costs related to the operation of installations falling under the scope of the IED.

It is planned to increase the role of the public in monitoring the fulfillment of obligations under the IED Directive by installation operators.

The regulations concerning the financial perspective 2021-2027



Directive of the European Parliament and of the Council on corporate sustainability due diligence (CSDD).

To establish a framework that encourages companies to contribute to the pursuit of respect for human rights and environmental legislation in their operations and through their value chains.

On **April 25, 2023**, the EP Committee on Legal Affairs adopted its position on the project. The EP adopted the above position on **June 1, 2023**. The main issues raised in this position include the following :

- extending the subjective scope of the Directive by including financial institutions;
- maintaining the value chain without limiting it solely to the supply chain;
- enabling parent companies to fulfil their obligations under the Directive for their subsidiaries;
- the obligation for Member States to take into account, when granting public support, concessions and public contracts to companies, the compliance or non-compliance of companies with the provisions of the Directive;

Increasing reporting obligations for PGE Group's value chain in terms of environmental impact and respect for human rights.

Incorporating the due diligence policy on sustainability in the activities of the PGE Group.

- increasing the scope of climate transformation plans that companies are required to prepare and implement.

On **June 8, 2023**, trilogues among the EP, the Council and the EC were initiated. They will continue **in the third and fourth quarter of 2023**.

Regulations introducing changes on the electricity market in the EU



Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) 2019/943 and (EU) 2019/942 as well as Directives (EU) 2018/2001 and (EU) 2019/944 to improve the Union's electricity market design.

Guaranteeing the protection of consumers against excessive changes in electricity prices, providing access to clean and secure energy, and enhancing the market's ability to withstand variations in natural gas prices. Encouraging the adoption of PPA contracts¹⁰; empowering end consumers in the market, simplifying the implementation of CfD agreements¹¹.

On March 14, 2023, the EC presented a legislative proposal. The European Commission's recommendations centre on initiatives that serve to spread the use of PPA agreements for RES, CfD for new RES ventures, and nuclear power. The EC recommends measures to back the advancement of flexibility services such as demand management and energy storage, strengthen consumer protection, broaden prosumers' authorities, and establish new mechanisms for an energy emergency. In order to reduce the risk of bankruptcy, the EC suggested that energy sellers be required to implement appropriate transaction security strategies by imposing a risk management obligation.

On July 19, 2023, the ITRE committee adopted amendments to the EC's draft. They concerned, among other things, the further strengthening of rights, obligation for regulators to conduct stress tests for energy sellers. Amendments were also made to the articles concerning CfDs and allowing equivalent mechanisms to be used on the same basis, as well as indicating new areas where revenue from CfD could be spent (e.g. for investments in the energy transition, development of distribution networks and RES).

The ITRE committee also decided that the position adopted should constitute the EP's mandate in negotiations with the Council.

The impact of the reform on PGE CG will depend on further legislative work in the EP and the Council.

Among other things, the extent to which the final wording of the provisions on state aid (contracts for difference and analogous solutions) will be adapted to the specifics of investments in the area of nuclear energy and who will be the beneficiaries of funds from contracts for difference will be of significant importance for PGE CG.

Potentially significant regulatory changes may apply to companies from the Supply segment (mandatory securing and potential changes to tariffs and offers) and Distribution segment (new tariff formation method and incentives for using flexibility services). Increased empowerment of consumers vis-à-vis electricity trading companies. The potential impact of the reform on the electricity market will also depend on the final decisions concerning capacity mechanisms.

¹⁰ PPA - Power Purchase Agreement; a long-term contract involving the direct purchase of electricity by the end-user from RES generators.

¹¹ CfD - Contract for difference; a contract for difference, defining a support model in which the supporting party and the supported party agree on a certain reference price. In the event that market energy prices are below the reference price, the supported party receives the positive difference; however, if energy prices exceed the reference price, the supporting party is entitled to that difference.



The EU draft regulation seeks to improve protection against manipulation in the wholesale energy market by amending regulations (EU) 1227/2011 and 2019/942.

Increase market transparency and monitoring capacity and ensure more effective investigation and enforcement of cross-border breaches in the EU so that consumers and market participants have confidence in the integrity of energy markets, prices reflect a fair and competitive supply-demand relationship and no profits can be made from market abuse.

On **March 14, 2023**, the EC presented a legislative proposal (revision of the REMIT regulation).

On **June 19, 2023**, the Council reached a general agreement that, in respect of the EC's proposal, among other things:







- clarified certain definitions proposed by the EC (e.g. the definitions of inside information, market participant, organised trading platform);
- clarified that market participants resident or established in a third country should appoint a representative in the Member State where they operate, as well as register with the national regulatory authority of that Member State;
- some of ACER's competences concerning the conduct of investigations for infringements of the Regulation were limited.

On **September 7, 2023**, the ITRE committee adopted the position on the revision, which also constitutes the EP's mandate for trilogues, which should end **in the fourth quarter of 2023**.

The impact of the reform on PGE CG depends on further legislative work in the EP and the Council.

4. Activities of PGE Capital Group

4.1. Basic operational data for PGE Capital Group

	 Conventional Generation	 District Heating	 Renewables	 Distribution	 Railway Energy Services	 Supply
Key assets of the segment	5 conventional power plants 2 lignite mines	16 CHP plants	20 wind farms ¹ 24 photovoltaic power plants 29 run-of-river hydro power plants 4 pumped-storage power plants, including 2 with natural flow	299 219 kms of distribution lines	18 564 kms of distribution lines	-
Installed capacity electricity/heat	12 852 MWe/844 MWt	2 608 MWe/6 952 MWt	2 428 MWe ¹ /-	-	-	-
Electricity volumes	Net electricity generation 21.43 TWh	Net electricity generation 4.84 TWh	Net electricity generation 1.74 TWh	Electricity distribution volume 17.82 TWh ²	Electricity distribution volume 1.00 TWh; Sales to final off-takers 0.72 TWh	Sales to final off-takers 16.70 TWh ³
Heat volumes	Heat production (net) 1.76 PJ	Heat production (net) 27.38 PJ	-	-	-	-
Market position	PGE Group is the leader of lignite mining in Poland (95%) PGE Group is also a national leader in electricity and district heat generation	-	PGE Group is the largest electricity producer from RES with market share of approx. 7% (excluding co-combustion of biomass and bio-gas)	Second domestic electricity distributor with regard to number of customers	Leader of energy services for railway infrastructure and the largest distributor and seller of electricity to the traction grid	Leader in wholesale and retail trading in Poland

¹ Without Zalesie wind farm (company Longwing Polska sp. z o.o.) acquired on September 20, 2023 by PGE Energia Odnawialna S.A.

² Data for PGE Dystrybucja S.A.

³ Data for PGE Obrót S.A.

BALANCE OF ENERGY OF PGE CAPITAL GROUP

Table: Sales, purchase, production and consumption of electricity in the PGE Capital Group (TWh).

Sales volume	H1 2023	H1 2022	% change
A. Sales of electricity outside the PGE Capital Group:	39.34	50.22	-22%
▪ Sales to end-users ¹	17.48	17.46	0%
▪ Sales on the wholesale and balancing market	21.86	32.76	-33%
B. Purchases of electricity from outside of PGE Group (wholesale and balancing market)	13.39	19.52	-31%
C. Net production of electricity in units of PGE Capital Group	28.02	32.32	-13%
D. Own consumption DSO, lignite mines, pumped-storage power plants (D=C+B-A)	2.07	1.62	28%

¹ Sale mainly by PGE Obrót S.A. and Energy Railway Services

The total volume of purchased and generated electricity is higher than the volume of electricity sold. The difference presented in point D results from the necessity to cover grid losses in the distribution business (DSO), consumption of energy at lignite mines and consumption of energy at pumped-storage power plants.

Lower energy sales on the wholesale market, including the balancing market, result from lower demand for electricity, a higher share of electricity imports and a higher share of RES production. The lower purchase on the wholesale market is mainly the result of lower sales to end customers in the corporate client segment, who tend to diversify energy sources, mainly with greater use of RES.

Table: Net production of electricity (TWh).

Production volume	H1 2023	H1 2022	% change
NET ELECTRICITY PRODUCTION IN TWh, including:	28.02	32.32	-13%
Lignite-fired power plants	14.82	19.87	-25%
Coal-fired power plants	6.61	6.66	-1%
Coal-fired CHP plants	2.27	2.41	-6%
Gas-fired CHP plants	2.31	1.61	43%
Biomass-fired CHP plants	0.26	0.18	44%
Communal waste-fired CHP plants	0.01	0.02	-50%
Pumped-storage power plants	0.57	0.43	33%
Hydroelectric plants	0.28	0.26	8%
Wind power plants	0.89	0.88	1%
including RES generation	1.44	1.34	7%

The level of electricity production in the first half of 2023 was 13% lower compared to the first half of 2022.

The lower level of electricity production is mainly the effect of lower demand for electricity in the Polish power system and higher net energy imports.

Lower generation at lignite-fired power plants (decline by 5.1 TWh) is due to lower use by PSE S.A. Reserve downtime of units in Bełchatów power plant and Turów power plant were longer by: 5 480 h in Bełchatów power plant and 2 263 h in Turów power plant. At the same time average load factor of unit at Bełchatów power plant was lower by 44 MW and at Turów power plant by 12 MW. In addition, units at Bełchatów power plant were in

overhaul longer by 2 207 h, mainly as a result of the overhaul of unit no. 7, lasting from January to the beginning of May 2023, and overhaul of unit no. 8 which has started at the beginning of May 2023.

Production in hard coal-fired power plants was at a similar level as in the first half of 2022. Lower production took place at the Rybnik Power Plant and the Dolna Odra Power Plant (a total decrease of 0.4 TWh) as a result of longer standby time in the reserve of these power plants by 4 346 hours and at the same time shorter standby time for renovations by 3 126 hours. The above was compensated by higher production at the Opole Power Plant (an increase of 0.4 TWh), which is caused by a higher average load factor by 27 MW.

A slight drop in production was recorded in coal-fired CHP plants.

Higher generation from gas-fired CHP plants (increase by 0.7 TWh) is the result of a low base in the first half of 2022, when a failure occurred at the Lublin Wrotków CHP plant.

Higher production in biomass CHP plants (mainly in Szczecin CHP plant) due to the optimisation of production between CHP Szczecin and CHP Pomorzany in terms of cost minimisation, resulting from the new model of heat and electricity generation in the above-mentioned locations.

Higher production in pumped storage power plants results from the nature of the operation of the generating units, which were used to a greater extent by PSE S.A. in the first half of 2023.

Higher production in hydro power plants is due to better hydrological conditions in the first half of 2023.

Production in wind farms remained at the level of the first half of 2022.

HEAT PRODUCTION

Table: Net production of heat (PJ).

Heat production volume	H1 2023	H1 2022	% change
Net production of heat in PJ, including	29.14	30.57	-5%
Lignite-fired power plants	1.40	1.46	-4%
Coal-fired power plants	0.36	0.37	-3%
Coal-fired CHP plants	20.84	22.85	-9%
Gas-fired CHP plants	5.41	4.47	21%
Biomass-fired CHP plants	0.86	1.11	-23%
CHP plants fuelled by municipal waste	0.07	0.15	-53%
Other CHP plants	0.20	0.16	25%

External temperatures contributed more than any other factor to lower net generation of heat in 2023 (y/y). The average temperatures in 2023 were by 0.5°C higher y/y, which translated into decreased production of heat.

HEAT SALES

In the first half of 2023 the heat sales volume in PGE Capital Group totalled 28.4 PJ and was lower by 1.3 PJ y/y. The above result was caused mainly by lower demand for heat due to the higher average outside temperatures than in the first half of 2022.

4.2. PGE Group's key financial results

The best way to measure the profitability of energy companies is EBITDA (recurring). This is a result before depreciation, amortization, income tax and financial activities, including interest from drawn debt. EBITDA makes it possible to compare the results of companies regardless of the value of their assets, level of debt and existing income tax rates. Additionally, recurring EBITDA is adjusted for one-offs.

PGE Group's consolidated EBITDA is composed of the financial results of each of its operating segments. The following segments have the largest share in the Group's recurring EBITDA for the first half of 2023: Distribution (37%), Conventional Generation (22%), District Heating (20%), Renewables (11%), Railway Energy Services (4%). Other segments have an insignificant share in recurring EBITDA.

Chart: Recurring EBITDA of PGE Capital Group (PLN million)

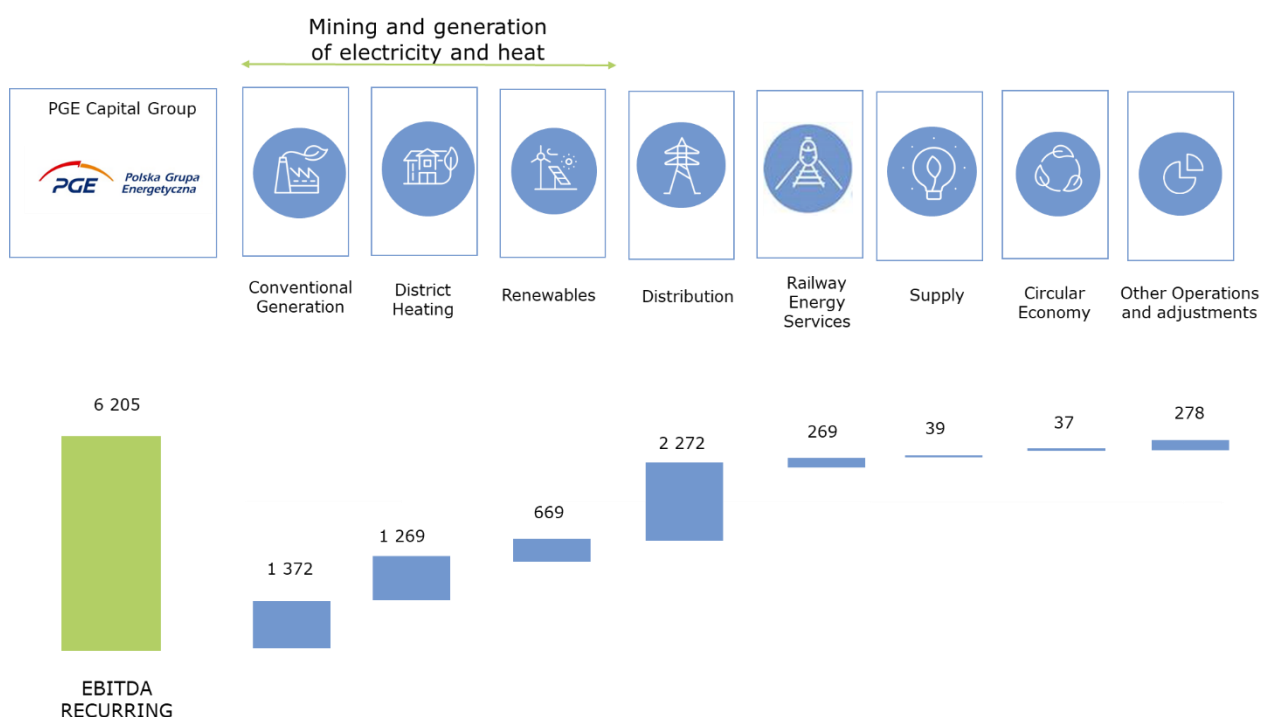


Chart: Reported EBITDA of PGE Capital Group (PLN million)

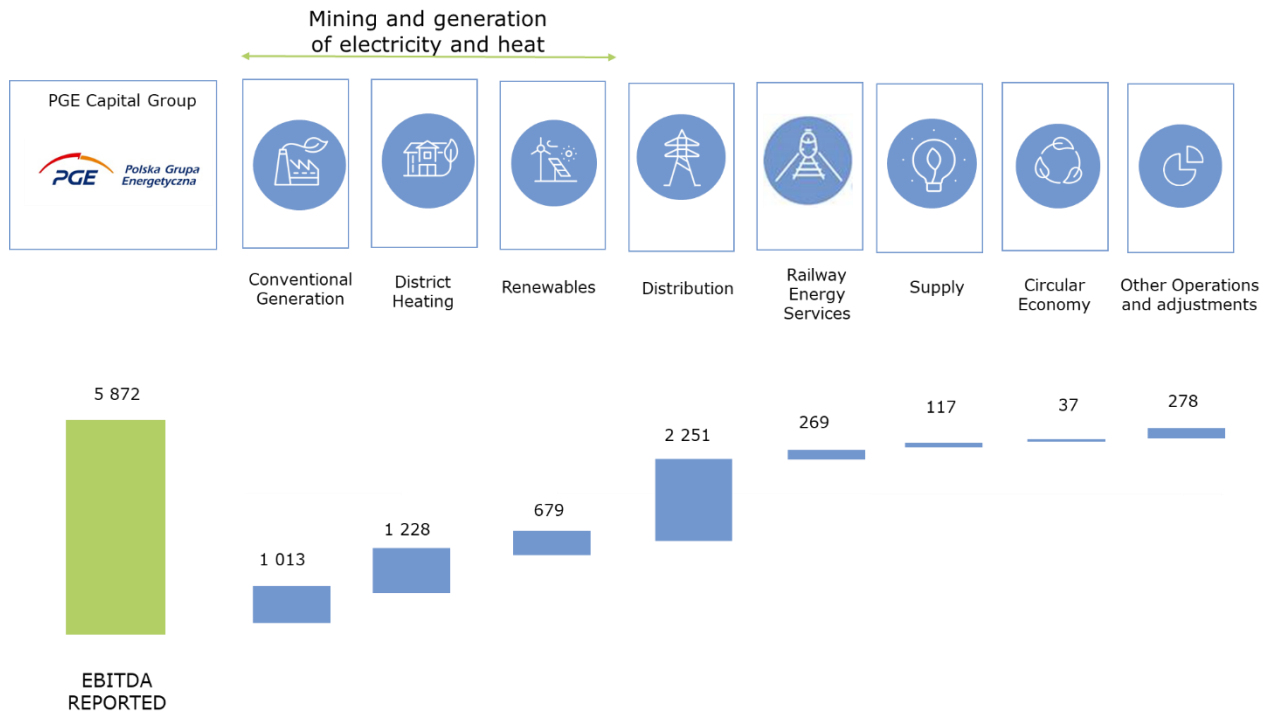
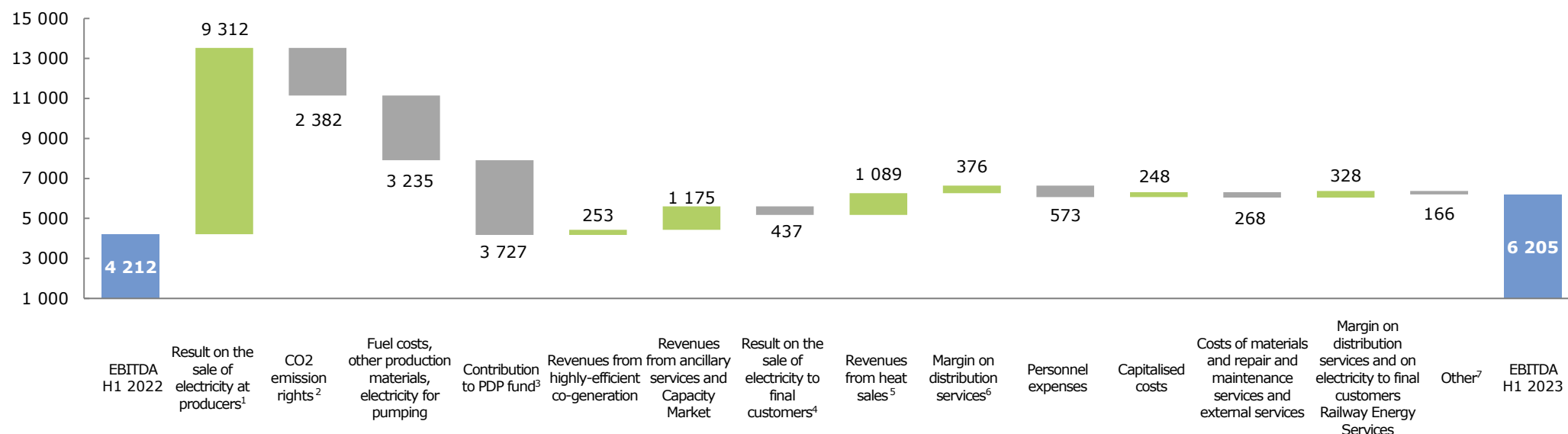


Chart: Key factors affecting EBITDA in PGE Capital Group (in PLN million).



Change	9 312	-2 382	-3 235	-3 727	253	1 175	-437	1 089	376	-573	248	-268	328	-166	
Reported EBITDA H1 2022	6 392														
One-offs H1 2022	2 180														
Recurring EBITDA H1 2022	4 212	14 813	9 582	3 594	0	155	1 396	897	1 494	2 372	2 846	252	667	0	478
Recurring EBITDA H1 2023		24 125	11 964	6 829	3 727	408	2 571	460	2 583	2 748	3 419	500	935	328	644
One-offs H1 2023															
Reported EBITDA H1 2023															6 205
															-333
															5 872

¹ Revenue from the sale of electricity reduced by the purchase cost of electricity.

² Adjusted for result on resale of CO₂ emission rights, that was caused due to reductions by PSE S.A. and trading activities, and result on forward contracts.

³ Contribution to the PDP Fund without impact of correction of estimated contribution for 2022 (one-off).

⁴ Including compensation, margin adjustment on certificates at PGE Group; without additional estimation of the cost of the balancing difference.

⁵ Including compensations.

⁶ Including revenues from distribution services, compensations, transmission services (PSE), balance of transferred fees and costs of electricity purchased to cover balancing difference; without additional estimation of the cost of the balancing difference.

⁷ Other without provision for prosumers, reclamation provision and LTC compensations (one-offs).

Chart: Structure of assets and equity and liabilities (in PLN million).

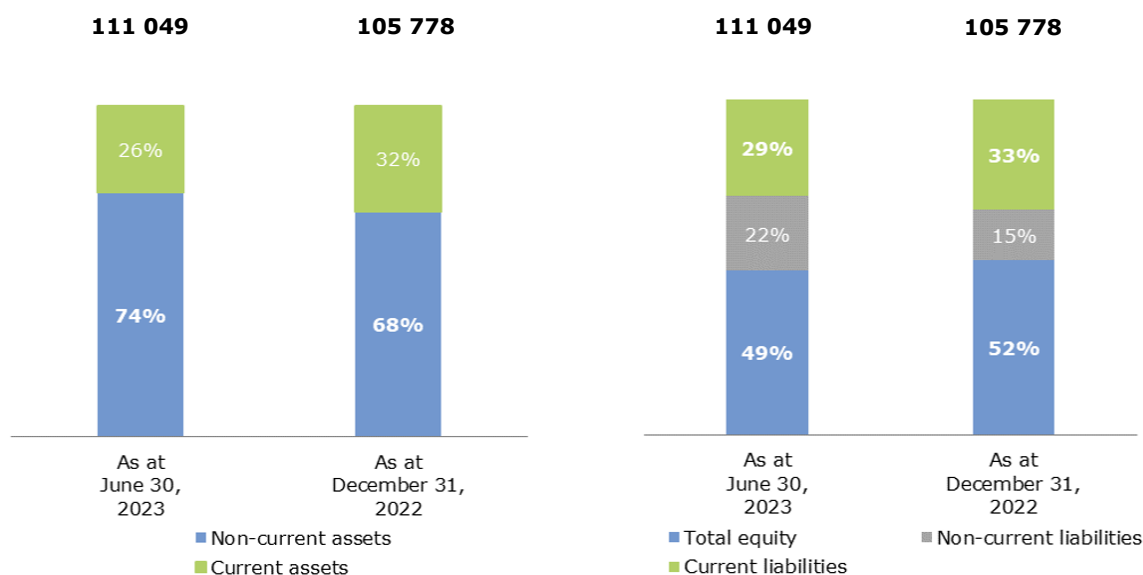
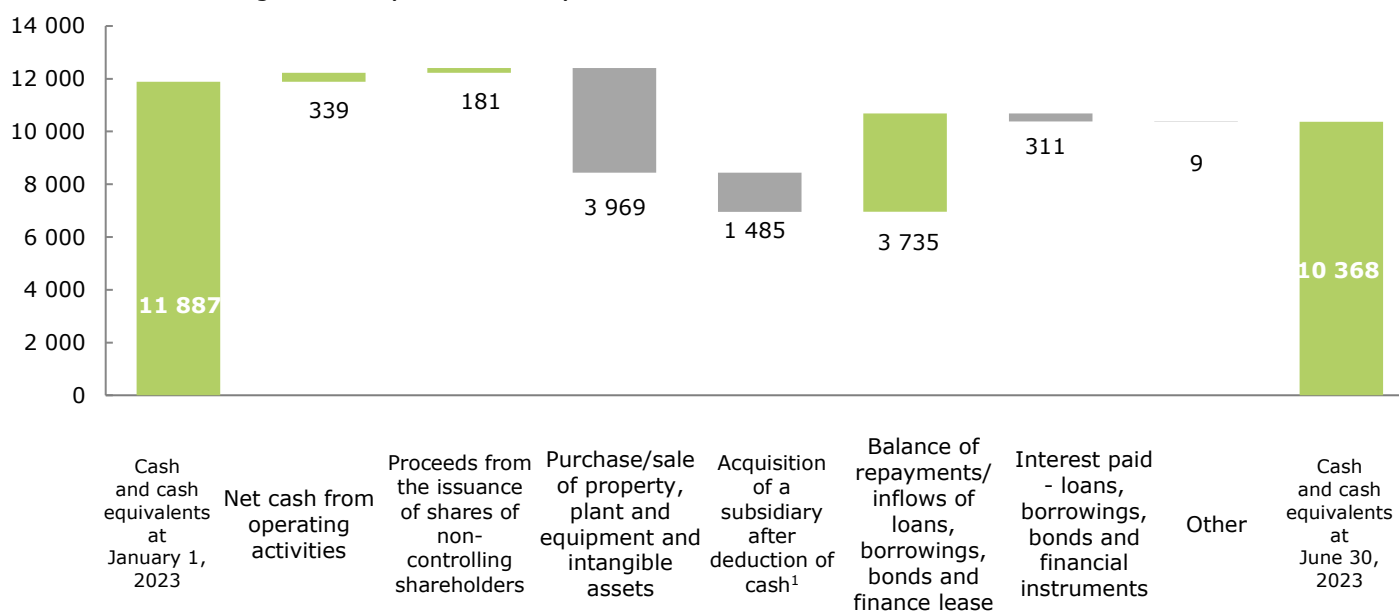


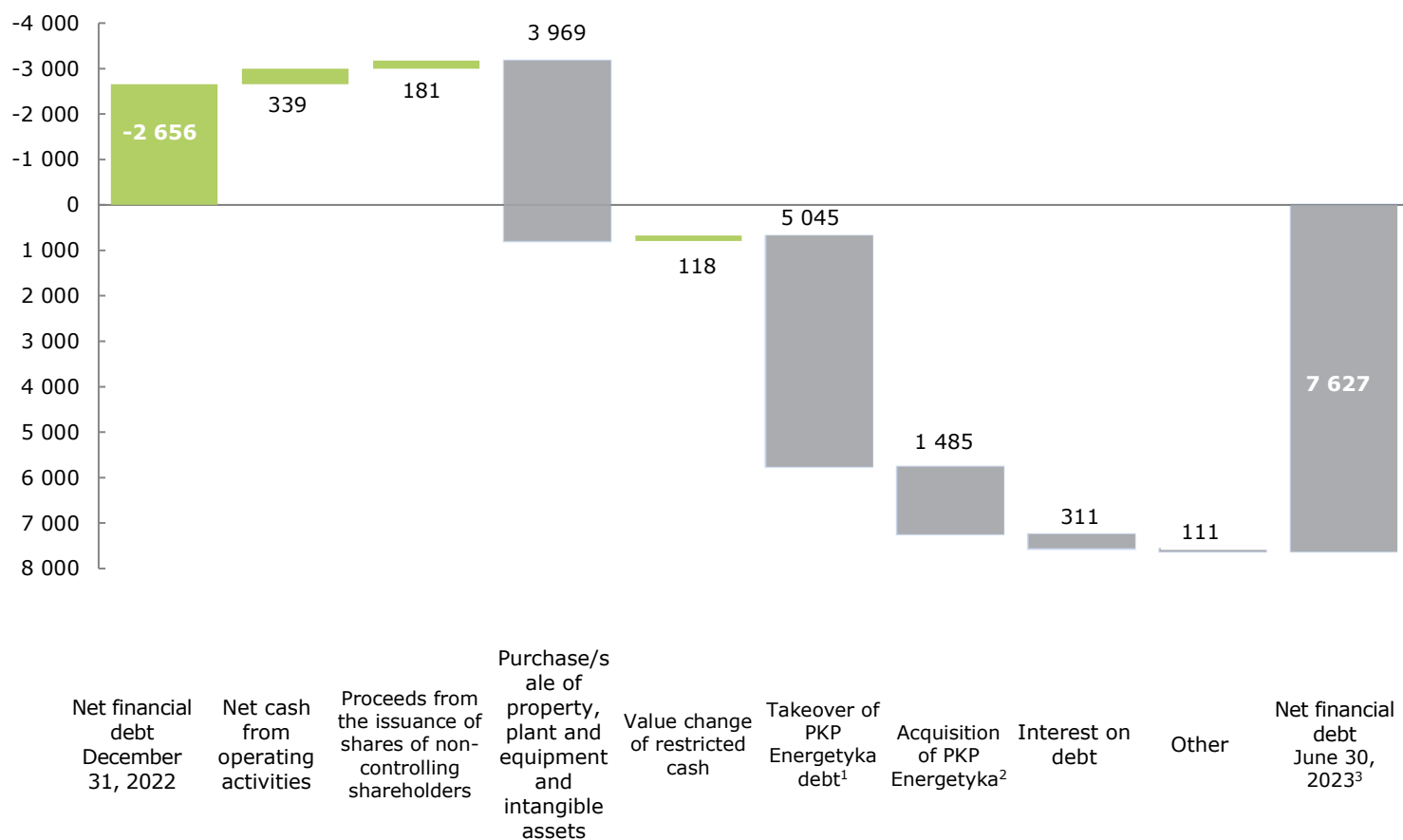
Chart: Net change in cash (in PLN million).



Impact on level of cash	339	181	-3 969	-1 485	3 735	-311	-9	
Cash and cash equivalents	11 887							10 368

¹ Acquisition of PKP Energetyka S.A.

Chart: Net financial debt (in PLN million).



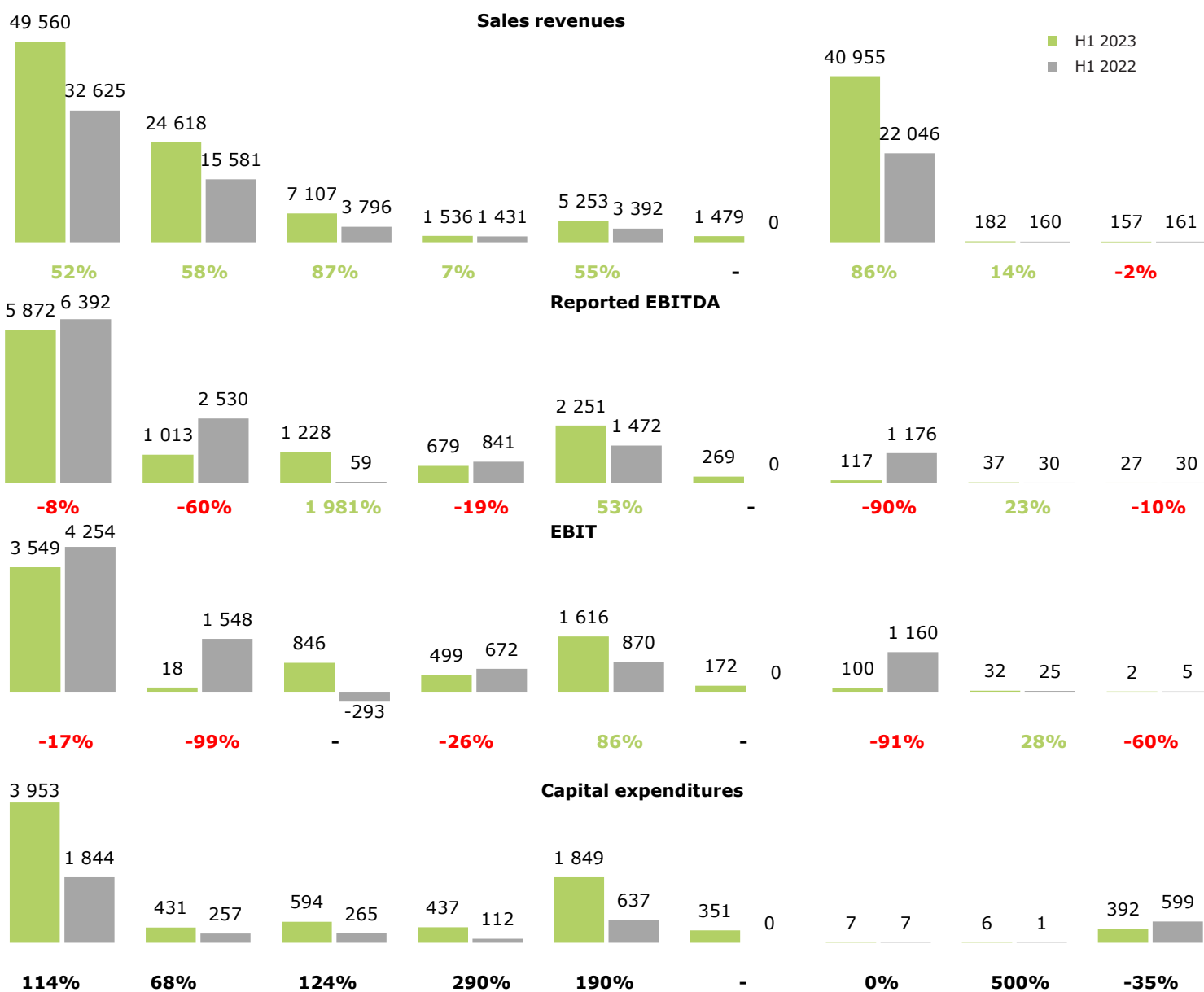
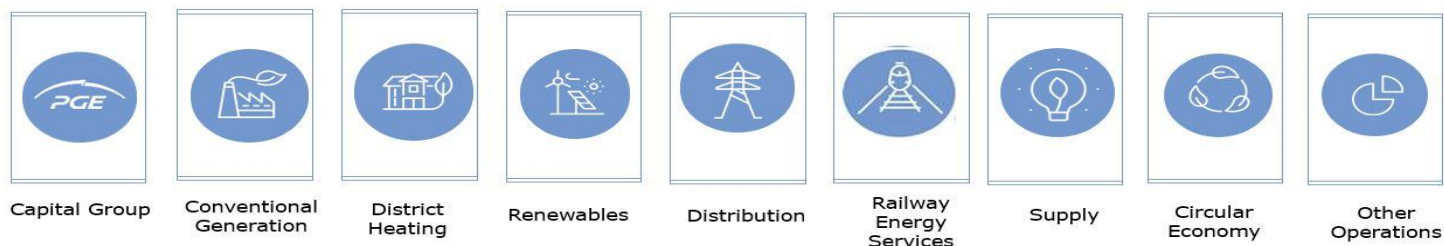
	Net financial debt December 31, 2022	Net cash from operating activities	Proceeds from the issuance of shares of non-controlling shareholders	Purchase/sale of property, plant and equipment and intangible assets	Value change of restricted cash	Takeover of PKP Energetyka debt ¹	Acquisition of PKP Energetyka ²	Interest on debt	Other	Net financial debt June 30, 2023 ³
Impact on level of net debt		-339	-181	3 969	-118	5 045	1 485	311	111	
Financial net debt	-2 656									7 627

¹ Estimated debt level as at the date of the company acquisition transaction.

² After adjusting for the seized cash.

³ Estimated level of net economic debt (taking into account forward payment for CO₂ emission rights) amounts to PLN 19 250 million.

KEY RESULTS IN BUSINESS SEGMENTS (IN PLN MILLION)

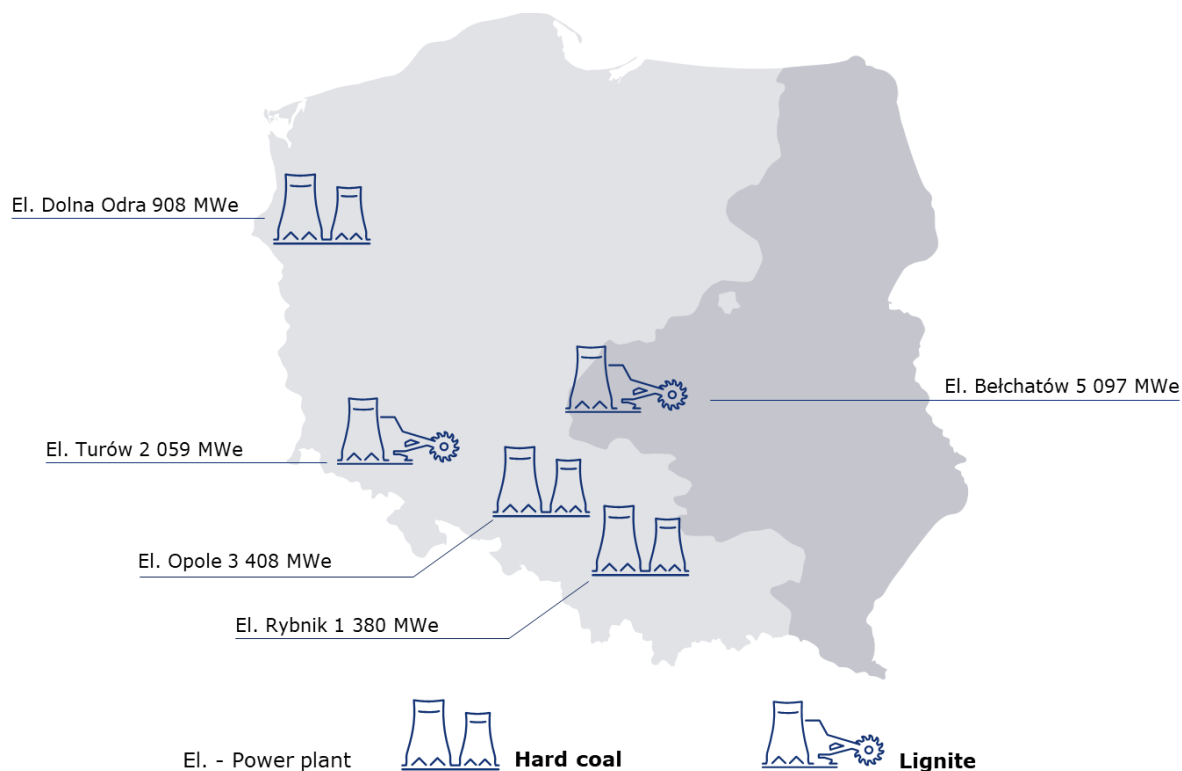


ASSETS

Conventional Generation segment consists of: 2 lignite mines and 5 conventional power plants.

Conventional Generation is the leader of lignite mining (its share in the extraction market of this raw material accounting for 95%¹² of domestic extraction), it is also the largest generator of electricity as it generates approx. 30%¹³ of domestic gross electricity production. The generation is based on lignite extracted from mines owned by the company as well as hard coal.

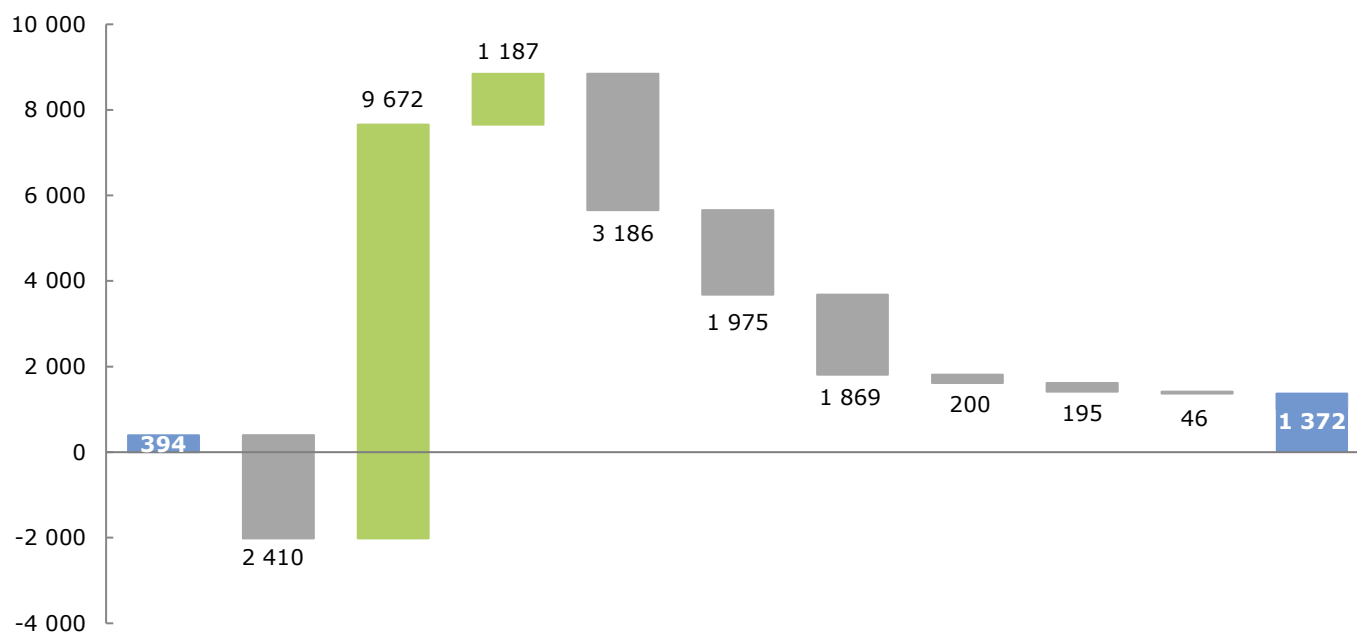
Diagram: Main assets of the Conventional Generation segment with their installed capacity.



¹² Own calculations based on data from Central Statistical Office of Poland.

¹³ Own calculations based on data from PSE S.A.

Chart: Key changes of recurring EBITDA in Conventional Generation (in PLN million) – managerial perspective.



	EBITDA H1 2022	Electricity production - volume ¹	Electricity production - price ¹	Ancillary services and Capacity Market	PDP Fund	Costs of fuel	Costs of CO ₂ ²	Costs of ZHZW ³	Personnel costs ⁴	Other ⁵	EBITDA H1 2023
Change		-2 410	9 672	1 187	-3 186	-1 975	-1 869	-200	-195	-46	
EBITDA reported H1 2022	2 530										
One-offs H1 2022	2 136										
EBITDA recurring H1 2022	394	12 287	1 122	0	1 479	8 536	512	1 490	998		
EBITDA recurring H1 2023		19 549	2 309	3 186	3 454	10 405	712	1 685	1 044		1 372
One-offs H1 2023											-359
EBITDA reported H1 2023											1 013

¹ Managerial perspective.

² Costs reduced by resale of CO₂ emission rights, that was caused due to reductions by PSE S.A. and trading activities.

³ ZHZW - Agreement for Commercial Management of Generation Capacities.

⁴ Personnel costs without taking into account the impact of changes in actuarial provisions (one-off).

⁵ Item Other without taking into account the impact of a change in the reclamation provision (one-off).

Table: Data on one-offs in Conventional Generation (PLN million).

One-off	H1 2023	H1 2022	% change
Change of reclamation provision	-334	2 150	-
Change of actuarial provision	-25	-14	79%
Total	-359	2 136	-

Key factors affecting the EBITDA result of Conventional Generation segment on y/y basis included:

- **Increase in revenues from the sale of electricity**, which results from: higher average selling price of electricity by PLN 463/MWh y/y, which translated into an increase in revenues by approx. PLN 9 672 million; lower sales volume by 5.1 TWh, which resulted in a decrease in revenues by approx. PLN 2 410 million.
- **Higher revenues from ancillary services**, resulting mainly from larger settlements with the TSO due to the reallocation of electricity production between PGE GIEK branches within the Balancing Market and **higher result obtained from the Capacity Market**, as a result of the higher price of the capacity obligation and higher share of the capacity of PGE GIEK S.A. in the total capacity of the PGE Capital Group.
- **Contribution to the PDP fund**, which did not exist in the comparable period.
- **Higher fuel consumption costs**, mainly hard coal, due to the much higher fuel price. Main changes on different types of fuel are presented in the chart below.
- **Higher CO₂ costs** as a result of higher average cost of CO₂ by PLN 151.7/t y/y. Main changes are shown in the chart below.
- **Higher ZHZW costs** results from higher average price of electricity.
- **Higher personnel expenses** mainly in connection with the implementation of agreements concluded with the social party.

Chart: Costs of production fuels consumption in Conventional Generation (in PLN million).

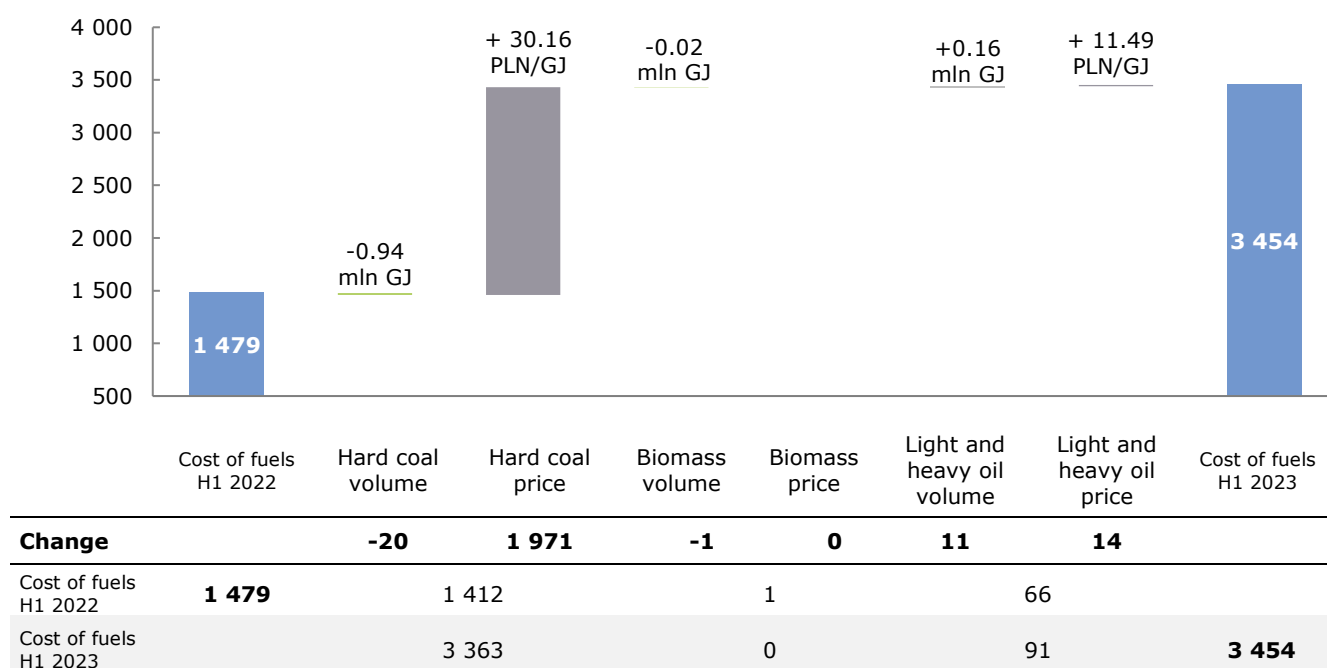
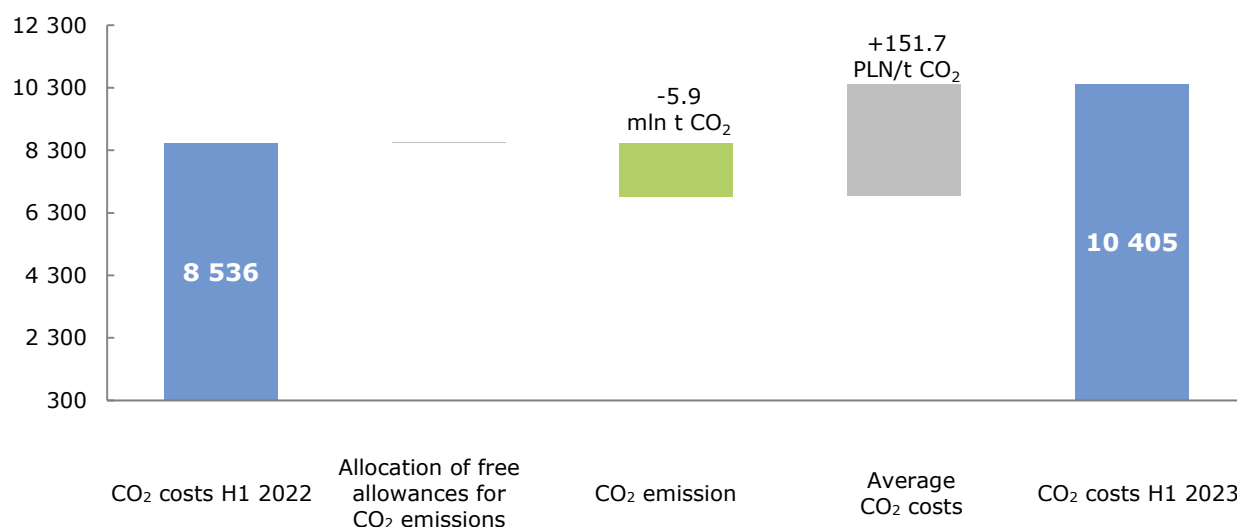


Table: Data on use of production fuels consumption in Conventional Generation.

Fuel type	H1 2023		H1 2022	
	Volume (tons ths)	Cost (PLN million)	Volume (tons ths)	Cost (PLN million)
Hard coal	2 931	3 363	3 064	1 412
Biomass	0	0	2	1
Fuel oil – light and heavy	29	91	25	66
Total		3 454		1 479

Chart: CO₂ costs in Conventional Generation segment (in PLN million).



Change	0	-1 708	3 577
CO ₂ costs H1 2022	8 536		
CO ₂ costs H1 2023			10 405

Table: Data on CO₂ costs in Conventional Generation.

Data on CO ₂	H1 2023	H1 2022	% change
Allocation of free allowances for CO ₂ emissions (tons)	31 379	31 583	-1%
CO ₂ emission (tons)	23 609 209	29 508 039	-20%
Average CO ₂ costs (PLN/t CO ₂) ¹	441.3	289.6	52%

¹ Managerial perspective.

CAPITAL EXPENDITURES

Table: Capital expenditures incurred in Conventional Generation segment

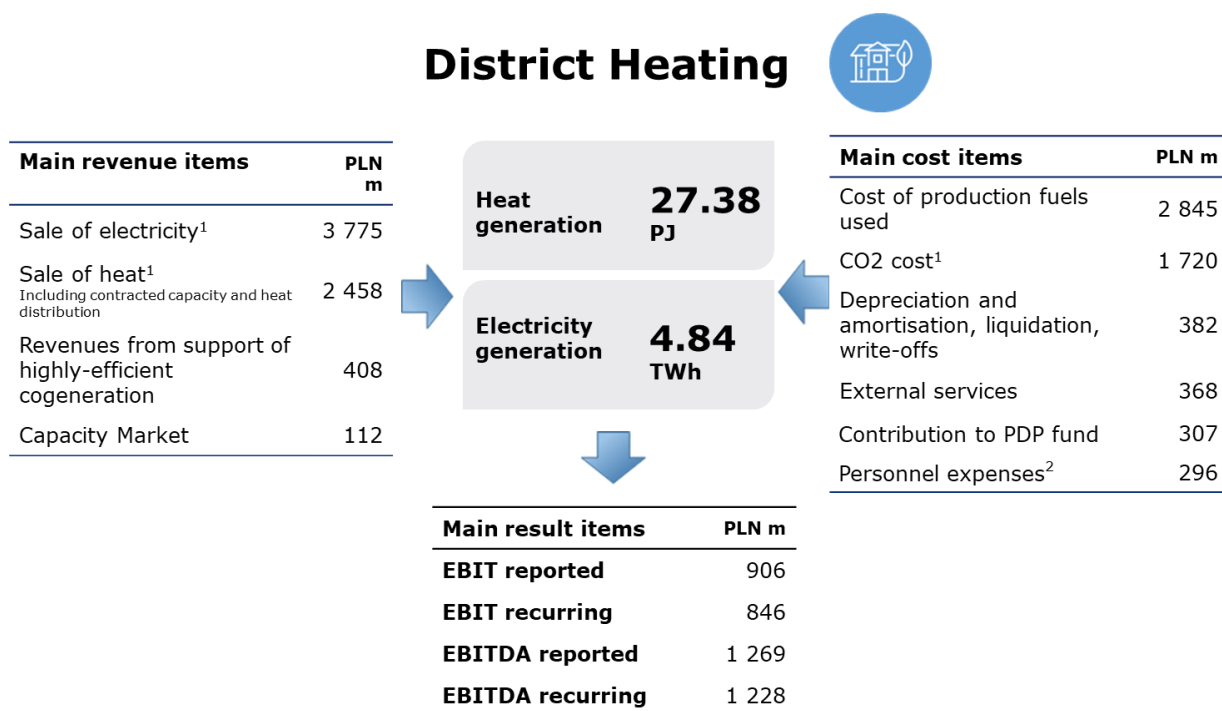
PLN million	H1 2023	H1 2022	% change
Investments in generating capacities, including:	394	237	66%
▪ Development	6	0	-
▪ Modernisation and replacement	388	237	64%
Other	37	20	85%
Total	431	257	68%

KEY EVENTS IN CONVENTIONAL GENERATION

- INTEC Sp. z o.o. handed over the construction site to the Contractor, i.e. INTEC SP. z o.o. on January 5, 2023 for the commencement of works titled "**Construction of a steam generator at the Rybnik Power Plant.**"
- The Environmental Decision for the construction of the **Starting Station in the Dolna Odra Power Plant**, which was issued on January 20, 2023, became legally effective on February 3, 2023.
- The second stage pilot installation of reverse osmosis at the Industrial Wastewater Treatment Plant in the Turów Power Plant has been completed and tested successfully on February 28, 2023.
- On March 15, 2023 the attainment of the required technical parameters by the **flue gas desulfurization installations at the Bełchatów Power Plant's** was confirmed.
- The construction and acceptance of the chimney foundation, boiler room building foundation, switching station building, and transformer building for the "**Rybnik Power Plant Steam Generator Construction**" project were completed between March 7 and March 21, 2023.
- The delivery of steam generators and their installation on the boiler room foundation took place on March 23, 2023 as part of the "**Rybnik Power Plant Steam Generator Construction**" project.
- On June 2, 2023, the commissioning of the system returning treated waste water to the cooling water system in the **Industrial Waste Water Treatment Plant at the Turów Power Plant** was carried out.
- On June 15, 2023, a request for mediation with the participation of a mediator was filed with the Polish General Prosecutor's Office in order to attempt an amicable settlement of disputes arising from the contract for the **construction of a power generation unit in the Turów Power Plant.**

DISTRICT HEATING

Core business of the District Heating segment includes production of electricity and heat from cogeneration sources as well as distribution of heat.



¹ managerial perspective

² after adjusting for one-offs

As in the case of Conventional Generation, this segment's significant revenues are **revenues from electricity sales**, however, they are usually directly related to generation of heat which in turn depends on demand that is highly seasonal and depends on external temperatures. This is why, in contrast to industrial power plants in Conventional Generation, as a rule, CHP plants do not have any considerable impact on the development of prices for electricity on the wholesale market.

Revenues from the sale and distribution of heat are regulated revenues. Energy companies independently set tariffs and present them to the President of the Energy Regulatory Office (the "ERO President") for approval. Heat production at PGE Group takes place in cogeneration units, which tariffs for heat are calculated using a simplified approach (compared to tariffs based on a full cost structure), based on reference prices, conditioned on average sales prices for heat generated in units with specific fuel other than cogeneration units. They are published each year by the ERO President. Tariffs for heat production for cogeneration units in a given tariff year thus reflect changes in the costs of heat-generation units (not co-generation units) in the previous calendar year. The cost approach is applied in the case of tariffs for heat distribution, which allows to cover justified costs (mainly the costs of heat losses and property tax) and a return on invested capital, in line with guidelines from the ERO President. Distribution tariffs for heat are in place at branches in Gorzów and Zgierz, as well as by Zespół Elektrociepłowni Wrocławskich KOGENERACJA S.A. (KOGENERACJA S.A.), PGE Toruń and Zielona Góra CHP.

Generation of heat and electricity is directly related to key variable costs of the segment, i.e. **the cost of production fuel used** (in particular, hard coal and gas) and **the cost of fees for CO₂ emissions** and **contribution to PDP fund**.

Electricity production in high-efficiency cogeneration is additionally remunerated. CHP plants receive support at a level covering increased operating costs related to production. The support mechanism in the form of certificates is in place also for biomass-fired generating assets. This type of production is additionally remunerated by awarding origin certificates, i.e. green certificates, the sale of which generates additional revenue. Within the segment such revenues is obtained at Szczecin CHP plant and biomass unit in Kielce CHP.

Revenue from the Capacity Market, a mechanism introduced to prevent electricity shortages in the National Power System, constitutes a significant item in the segment's revenue. CHP plants receive fees for performing the capacity obligation (a Capacity Market entity being on standby to supply electricity to the system and the obligation to supply specified capacity to the system when the system is under threat).

Weather conditions substantially affect the segment's results. Temperatures directly shape the level of heat demand. Simultaneously, the level of heat production determines the level of electricity production in co-generation, which is an additional source of revenues that decisively affects the CHP plant's profitability.

Under the provisions of the Emergency Measures Act, from December 2022, electricity generating entities are required to make a **contribution to the Price Difference Payment Fund**.

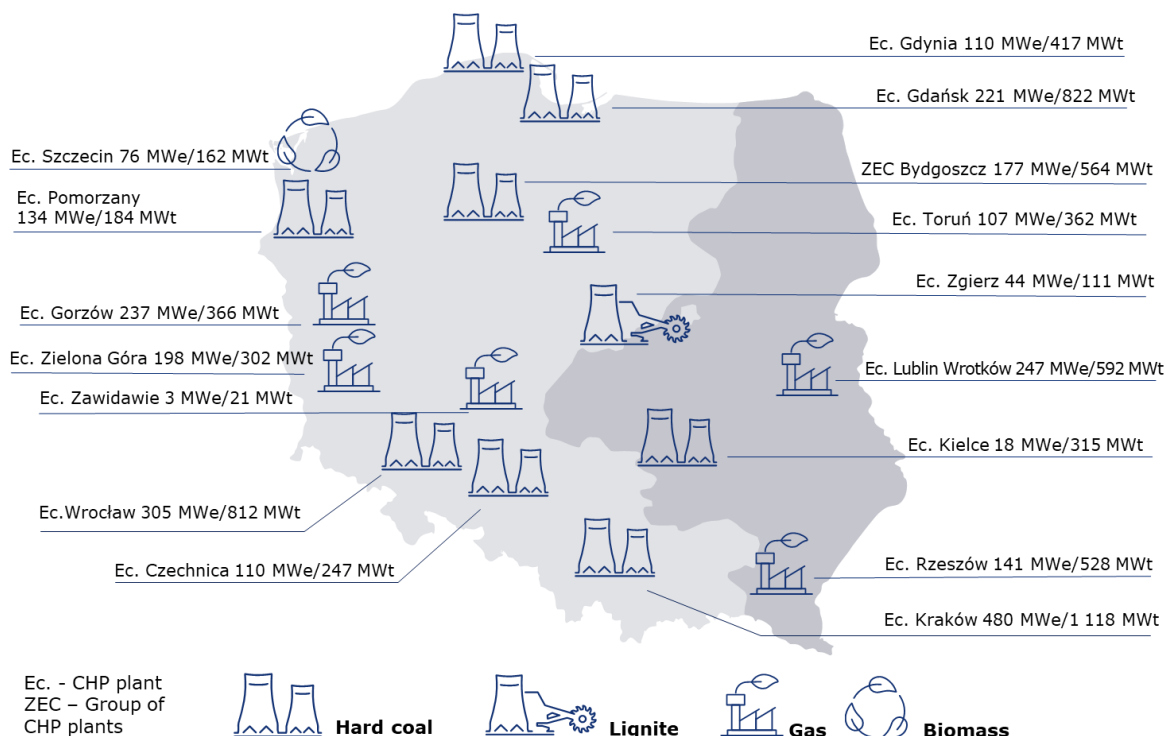
ASSETS

The following companies are included in the segment: PGE EC S.A., KOGENERACJA S.A., EC Zielona Góra S.A., PGE Toruń S.A., MEGAZEC sp. z o.o., EC Szczecin, EC Pomorzany and the district heating network in Gryfino.

Currently, the segment includes 16 combined heat and power plants.

District Heating is the largest heat producer in Poland. Generation is based mainly on hard coal and natural gas.

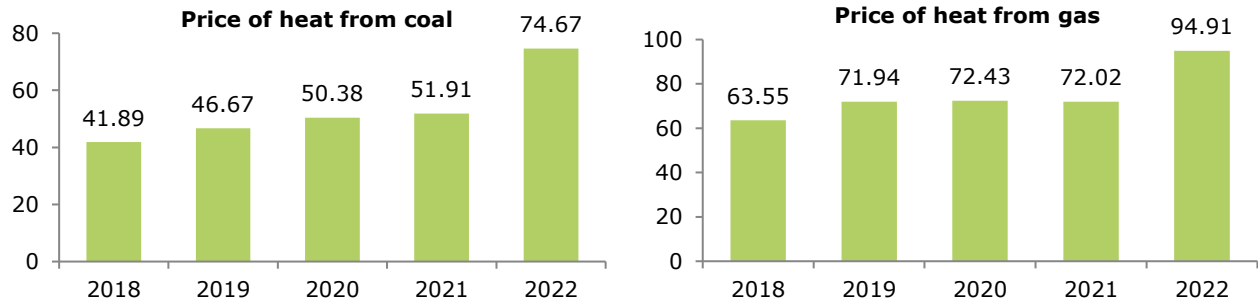
Diagram: Main assets of the District Heating segment and their installed capacity.



TARIFFS IN DISTRICT HEATING

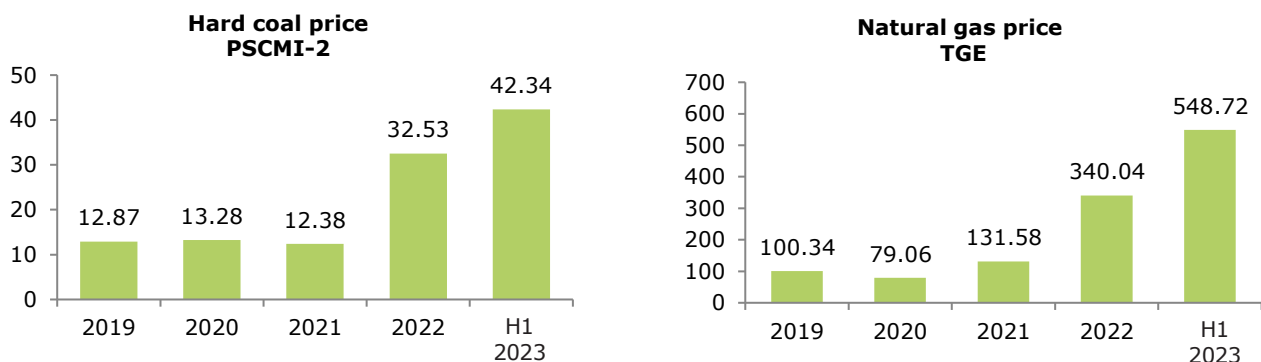
Due to the fact that the income on heat sales for CHP plant are tarified as part of the so-called simplified method, they are characterised by a relative delay in the transfer of costs (annual or two-year). They are based on the year-to-year dynamics of average costs (including fuels used) incurred by entities that are not co-generation entities for the year preceding the time of tariff setting.

Charts: Changes in the reference price of heat for hard coal and natural gas (PLN/GJ).



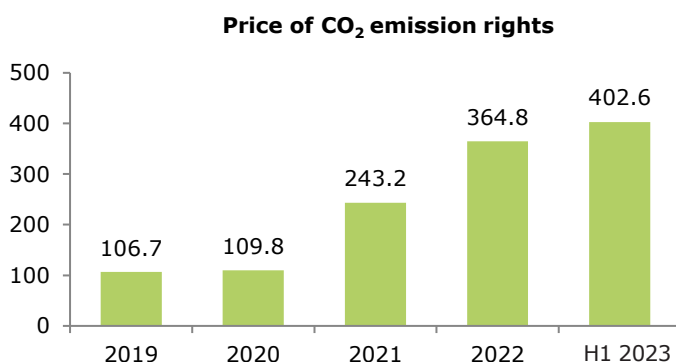
Source: ERO.

Changes in costs of fuels – hard coal (PLN/GJ) – PSCMI-2¹⁴ and gas (PLN/MWh) - TGE.



Source: ARP, TGE.

Chart: Changes in price of CO₂ emission rights¹⁵ (PLN/t).



Source: ICE.

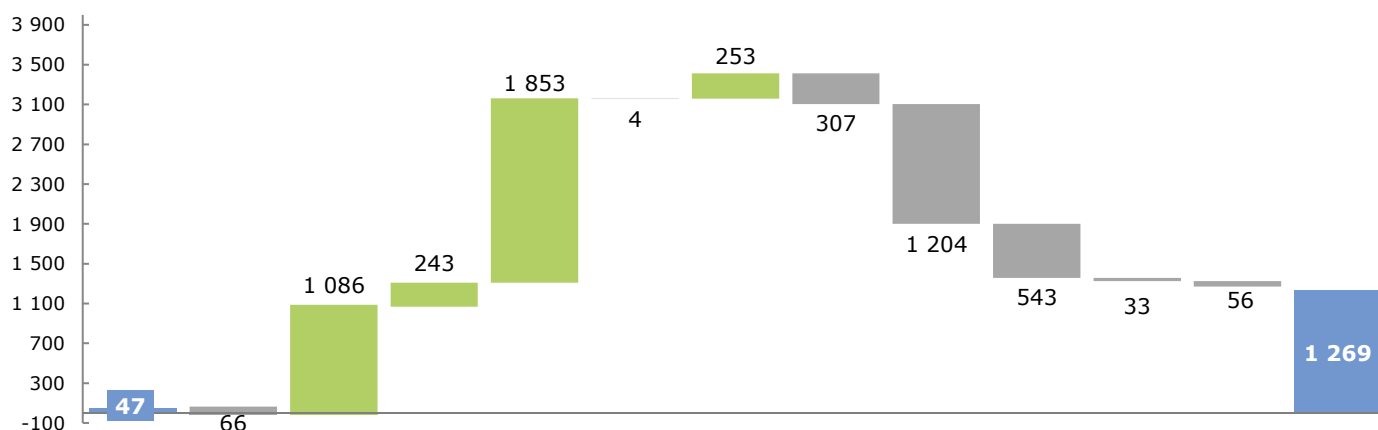
¹⁴ PSCMI-2 Polish Steam Coal Market Index 2 - the average prices for pulverised coals sold on the domestic heating market.

¹⁵ Arithmetic average of the daily and monthly records in a given period (spot price).

Reflecting previous cost increases, the reference price of heat produced from hard coal increased by 44% in 2022. It is a base to the increase in heat prices for co-generation entities establishing the tariff during 2023. In 2023 the average market price of coal increased by 30%, while the average price of CO₂ emission rights increased by 10% in comparison to 2022.

Tariffs for the production of heat from gas in 2023 are set based on an change in the reference price, whereas in 2023 gas prices are already significantly higher than in previous periods. Prices of gas in TGE forward contracts stood at approx. PLN 549/MWh (i.e. increase by 61%).

Chart: Key changes of EBITDA in District Heating (in PLN million) – managerial perspective.



	EBITDA H1 2022	Heat production - volume	Heat production - price ¹	Electricity production - volume	Electricity production - price ¹	Capacity Market	Revenues from support of highly-efficient cogeneration	PDP Fund	Cost of fuel	Costs of CO ₂	Personnel expenses ²	Other ³	EBITDA H1 2023
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Change	-66	1 086	243	1 853	-4	253	-307	-1 204	-543	-33	-56		
EBITDA reported H1 2022	59												
One-offs H1 2022	12												
EBITDA recurring H1 2022	47	1 438		1 679	116	155	0	1 641	1 177	263	260		
EBITDA recurring H1 2023		2 458		3 775	112	408	307	2 845	1 720	296	316	1 269	
One-offs H1 2023												-41	
EBITDA reported H1 2023													1 228

¹ Value adjusted for costs of certificates redemption.

² Personnel costs without taking into account the impact of a change in the actuarial provision (one-off)

³ Item Other without taking into account the impact of changes in the reclamation provision and LTC compensations (one-off).

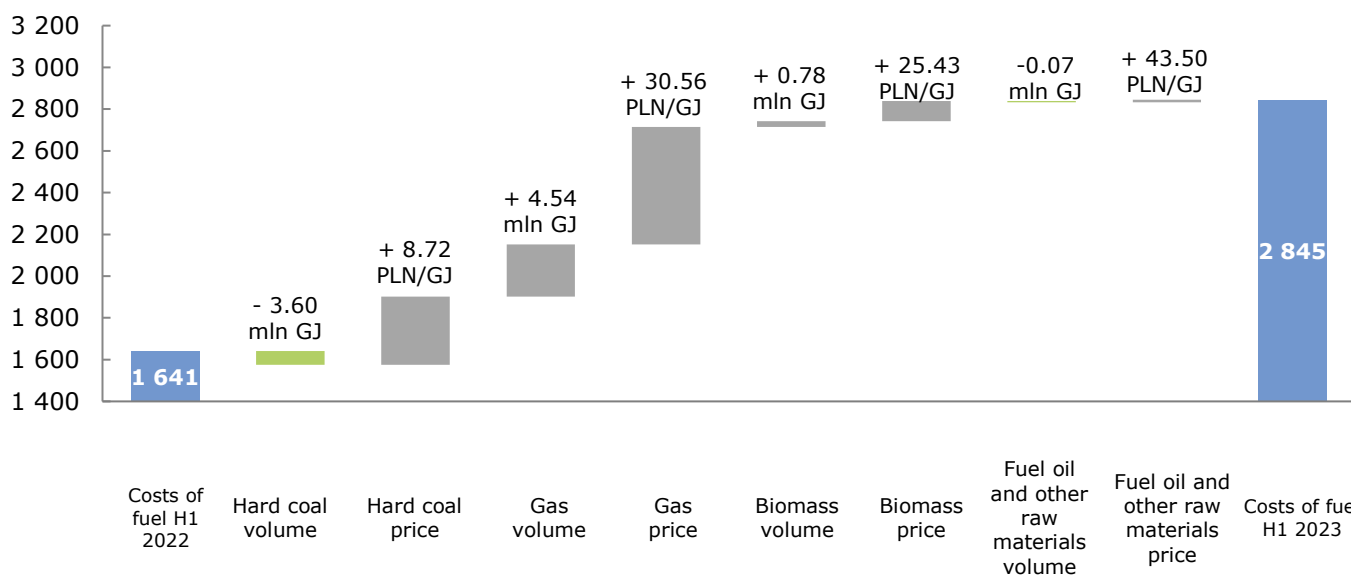
Table: Data on one-offs in District Heating (PLN million).

One-offs	H1 2023	H1 2022	% change
Change in reclamation provision	-8	10	-
Change in actuarial provision	-2	-	-
LTC compensations	-31	2	-
Total	-41	12	-

Key factors affecting the EBITDA result of District Heating segment on y/y basis included:

- **Lower volume of net heat production** in the first half of 2023 y/y is a result of higher outside temperatures compared to analogical period of 2022. The average temperatures were by 0.5° C higher, what translated into decreased heat production (by 1.4 PJ).
- **Increase of heat sale price** is a result of increased tariffs for heat for the CHP plants in the second half of 2022 following the publication by the ERO of new reference prices for heat production in units not being co-generation units and the amendment of the tariff regulation.
- **Increase in revenues from the sale of electricity**, which results from: higher average selling price of electricity by PLN 383/MWh y/y, which translated into an increase in revenues by approx. PLN 1 853 million and higher sales volume by 0.6 TWh, which resulted in an increase in revenues by approx. PLN 243 million.
- **Lower revenues from Capacity Market**, due to the lower volume of dispatch capacity.
- **Higher revenues due to support for high-efficiency cogeneration** due to the granting of a higher individual cogeneration bonus for gas-fired units.
- **Contribution to the PDP fund**, which did not exist in the comparable period.
- **Higher fuel consumption costs** which are caused by higher gas prices and higher price of hard coal use. The details are shown in the chart below.
- **Higher CO₂ costs** are mainly a result of higher price of allowances. The details are shown in the chart below.
- **Higher level of personnel costs** is mainly the result of an increase in salaries due to wage agreements and an increase in the minimum wage.
- **Value change of the item Other** mainly due to higher ZHZW costs, due to the higher average selling price of electricity.

Chart: Consumption costs of production fuels in District Heating (in PLN million).

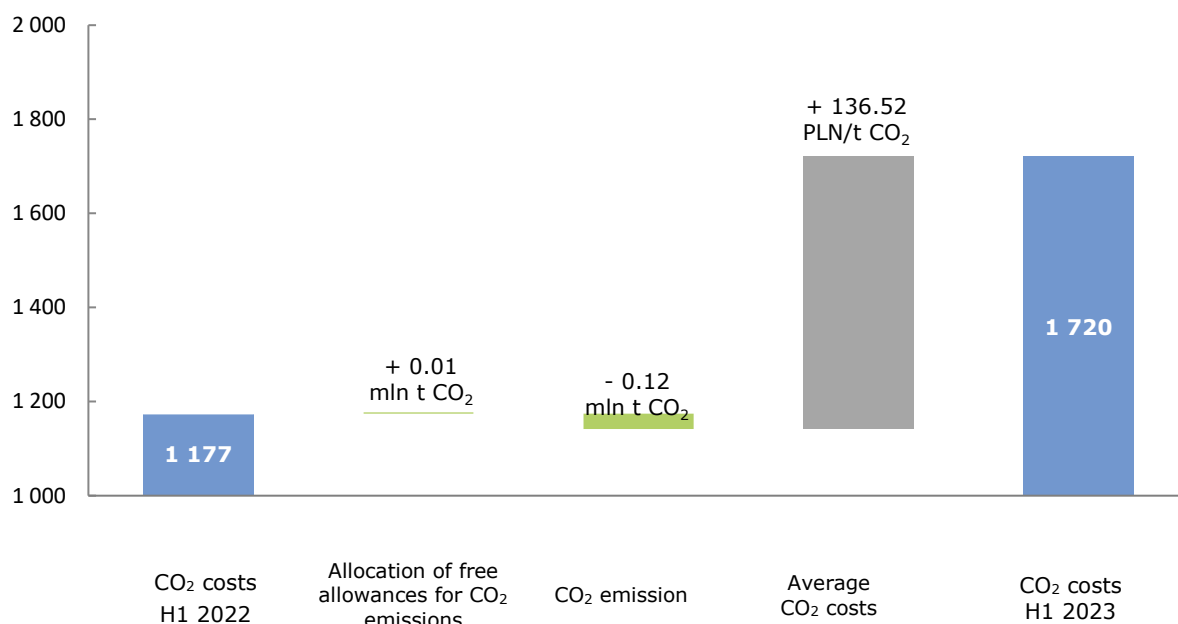


Change	Hard coal volume	Hard coal price	Gas volume	Gas price	Biomass volume	Biomass price	Fuel oil and other raw materials volume	Fuel oil and other raw materials price	Costs of fuel H1 2023
	-65	326	250	563	27	97	-6	12	
Costs of fuel H1 2022	1 641	733		765		105		38	
Costs of fuel H1 2023		994		1 578		229		44	2 845

Table: Data on use of production fuels consumption in District Heating.

Fuel type	H1 2023		H1 2022	
	Volume (tons ths)	Cost (PLN million)	Volume (tons ths)	Cost (PLN million)
Hard coal	1 691	994	1 850	733
Gas (cubic metres ths)	612 357	1 578	483 858	765
Biomass	428	229	355	105
Fuel oil and other raw materials	-	44	-	38
Total		2 845		1 641

Chart: CO₂ costs in District Heating (PLN million).



Change	-3	-33	579
CO ₂ costs H1 2022	1 177		
CO ₂ costs H1 2023	1 720		

Table: Data on CO₂ costs in District Heating.

Data regarding CO ₂	H1 2023	H1 2022	% change
Allocation of free allowances for CO ₂ emissions (tons)	335 742	324 739	3%
CO ₂ emission (tons)	4 578 966	4 700 110	-3%
Average CO ₂ costs (PLN/t CO ₂) ¹	405.45	268.93	51%

¹ Managerial perspective.

CAPITAL EXPENDITURES

Table: Capital expenditures incurred in District Heating segment.

PLN million	H1 2023	H1 2022	% change
Investments in generating capacities, including:	570	239	138%
▪ Development	482	151	219%
▪ Modernisation and replacement	88	88	0%
Other	24	26	-8%
Total	594	265	124%

KEY EVENTS IN DISTRICT HEATING

- The turnkey construction of the **New Czechnica CHP plant, i.e. CCGT unit** with a total gross capacity of 179 MWe and 163 MWt, heat accumulator and four water boilers with total capacity of 152 MWt, is in progress. In the second quarter of 2023, the installation of a system for the evacuation of heat from the Peak Boiler Room and the Stand-by Boiler Room to the district heating network was completed. Works related to the installation of cable routes and pipelines at the CCGT unit are underway. The commissioning of the unit is planned for the second quarter of 2024.
- The works on peak-reserve boiler construction projects were continued at the CHP plants in Gorzów Wielkopolski, Lublin and Rzeszów. Stationary boilers have been mounted on foundations in Gorzów, Rzeszów and Lublin since previous year. Construction and installation works were being continued in the second half of 2023. The commissioning of boiler rooms at all locations is planned for the second half of 2023.
- At Rzeszów CHP plant the construction of the second line with a capacity of 80 000 tons of waste / year of the **Waste-to-Energy Incinerator** is in progress. the second quarter of 2023, works were being performed on the loading channel and the auxiliary production buildings.
- An investment program is being implemented in **EC Bydgoszcz I** (EC I) and **EC Bydgoszcz II** (EC II):
 - EC I: construction of four gas boilers is in progress (total capacity 38 MWt). In June 2023, a test run of the installation was carried out and completed. On July 17, 2023, the District Building Control Inspector in Bydgoszcz issued an operation permit for the installation.
 - EC II: the contract is being pursued for construction of a cogeneration source based on five gas engines with a total capacity of 52.6 MWe/ 50.8 MWt and a reserve-peak heat source. In May 2023, the construction site was handed over to the contractor. Currently, earthworks are being carried out to prepare the ground for the first stage of the foundations, the supply of utilities to the construction facilities, and the relocation of the fire protection and power installations. A commissioning procedure is planned for the first quarter of 2025.
- At the **Zgierz CHP** plant, the installation of three cogeneration units, a peak-reserve boiler and a RES installation including solar panels was completed. The chimney and fan coolers were also installed. Works on the installation of a gas system inside the building and an external wiring system are underway. A commissioning procedure is planned for the third quarter of 2023.
- On April 28, 2023, a new **gas boiler house** with a capacity of 5x32 MWt was commissioned at **Kielce CHP plant**. Construction of a cogeneration system based on a 7.32 MWe and 12.42 MWt gas turbine with a recovery boiler was continued. The commissioning of the cogeneration unit is planned for the fourth quarter of 2023.

KEY PROJECT IN 2023

Aim of the project	Budget ¹	Expenditures incurred ¹	Capital expenditures in 2023 ¹	Fuel/ Net efficiency	Contractor	Investment completion date
Construction of New Czechnica CHP Plant	PLN 1.2 bn	approx. PLN 687 million	PLN 258 million	Natural gas/ 85% in cogeneration	Syndicate of: Polimex Mostostal S.A. (Leader) / Polimex Energetyka sp. z o.o.	Q2 2024

¹ Expenditures incurred do not include financing costs and expenses in the form of advances paid to the General Contractor for the Project and to the other contractors.

RENEWABLES

This segment is involved in the generation of electricity from renewable sources and in pumped storage power plants.

Renewables



Main revenue items	PLN m				Main cost items	PLN m
Sale of electricity	1 224	<p>Electricity generation 1.74 TWh</p>			Use of energy incl. energy to pump water at pumped-storage plants	407 401
Sale of certificates	167				Taxes and fees incl. Contribution to PDP fund Real estate tax	228 187 36
Capacity Market	126				Depreciation and amortisation	180
Ancillary services	9				External services	101
					Personnel expenses ¹	89
Main result items		PLN m				
EBIT reported		489				
EBIT recurring		499				
EBITDA reported		669				
EBITDA recurring		679				

The Renewables segment is based mainly on **revenues from the sale of electricity**, however contrary to production at industrial plants within the Conventional Generation segment, this revenue is subject to a larger degree to changes in weather conditions and prices on the spot market due to the renewables sales model in place. Electricity output volume translates into property rights (green certificates) and revenue from the sale of energy origin certificates obtained by the segment's assets, excluding hydropower plants over 5 MWe.

Revenue from the Capacity Market, a mechanism introduced to prevent electricity shortages in the National Power System, constitutes a significant item in the segment's revenue, starting from 2021. Selected power plants in the Renewables segment receive fees for performing the capacity obligation (a Capacity Market Entity being on standby to supply electricity to the system and the obligation to supply specified capacity to the system when the system is under threat). Capacity Market revenue compensated for revenue from ancillary services. The readiness intervention reserve service was discontinued.

On the cost side, the most important items include: **use of energy to pump water at pumped-storage plants, depreciation of segment assets** and **third-party services**, mainly the repair services. Property tax and employee wages also constitute a significant cost item in this segment. Under the provisions of the Emergency Measures Act, from December 2022, electricity generating entities are required to make a contribution to the **Price Difference Payment Fund**.

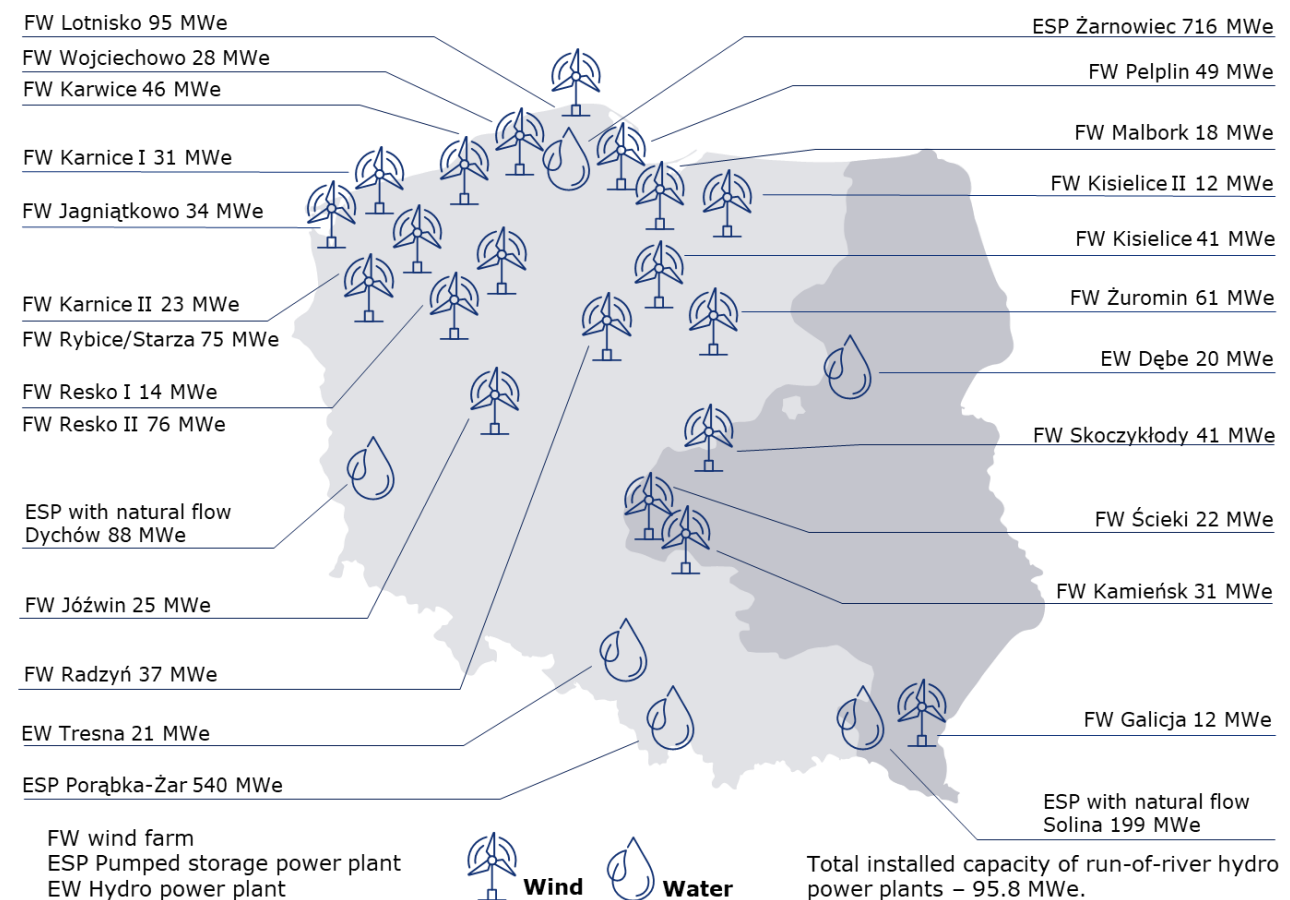
ASSETS

The PGE Capital Group's operations in renewable energy are managed by the PGE Energia Odnawialna S.A. Due to the profile of operations, the segment also includes companies from the Offshore area, which are responsible for all activities related to offshore wind energy.

Assets in the segment include:

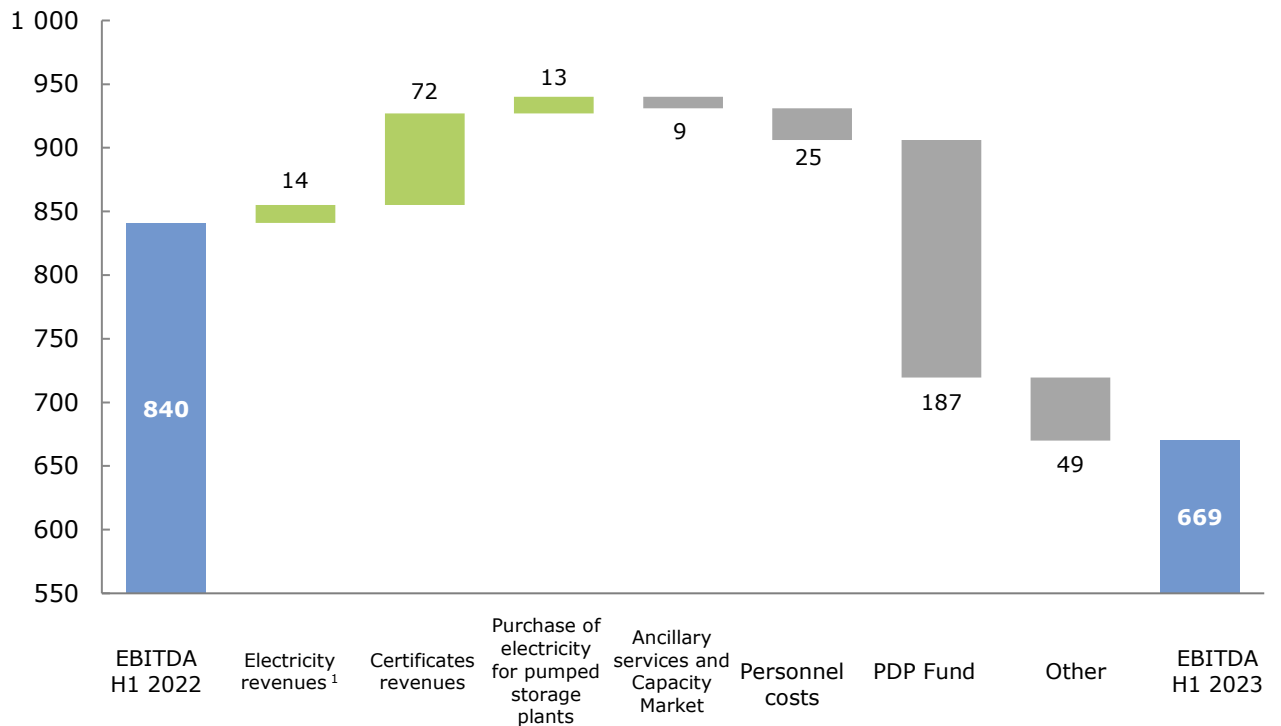
- 20 wind farms¹⁶,
- 24 photovoltaic power plants,
- 29 run-of-river hydro power plants,
- 4 pumped-storage power plants, including 2 with natural flow.

Diagram: Main assets of the Renewables segment and their installed capacity.



¹⁶ Without Zalesie wind farm (company Longwing Polska sp. z o.o.) acquired on September 20, 2023 by PGE Energia Odnawialna S.A.

Chart: Key changes of EBITDA in Renewables (in PLN million) – managerial perspective.



Change	14	72	13	-9	-25	-187	-49	
EBITDA reported H1 2022	841							
One-offs H1 2022	1							
EBITDA recurring H1 2022	840	1 210	95	414	144	64	0	131
EBITDA recurring H1 2023		1 224	167	401	135	89	187	180
One-offs H1 2023								10
EBITDA reported H1 2023								679

¹ electricity revenues include revenues from main generation technologies (wind, water, PV, pumped storage).

Table: Data on one-offs in Renewables (PLN million).

One-off	H1 2023	H1 2022	% change
Actuarial provision	-1	1	-
Change of reclamation provision	11	0	-
Total	10	1	900%

Key factors affecting the y/y results of Renewables included:

- **Increase in revenues from electricity sales** results from: higher sales volume by 458 GWh, what caused revenues increase of approx. PLN 316 million, lower average electricity sale price by PLN 136/MWh y/y, what translated into decrease of revenues by PLN 302 million.

- **Increased revenues from sales of certificates** resulting mainly from: higher average electricity sale price by PLN 88/MWh y/y, as a result revenues increased by PLN 70 million; higher sales volume by 17 GWh, what translated into increase of revenues by PLN 2 million.
- **The decrease in electricity purchase costs** for pumping in pumped storage power plants results from: lower average electricity purchase price by PLN 59/MWh y/y, which translated into a decrease in costs by PLN 51 million; higher purchase volume by 73 GWh, contributing to an increase in costs by PLN 38 million.
- **Lower revenues from ancillary services and the Capacity Market** result mainly from lower revenues from the Capacity Market due to lower utilization of production units due to renovations carried out.
- **The increase in personnel costs** is mainly a result of higher employment due to the development of the Offshore Energy and Renewable Energy areas.
- **Contribution to PDP Fund**, which did not exist in the comparable period.
- **Value change in item Other** results mainly from higher operating costs, caused by the development of the Offshore Energy and Renewable Energy areas.

CAPITAL EXPENDITURES

Table: Capital expenditures incurred in Renewables segment.

PLN million	H1 2023	H1 2022	% change
Investments in generating capacities, including:	432	106	308%
▪ Development	354	89	298%
▪ Modernisation and replacement	78	17	359%
Other	5	6	-17%
Total	437	112	290%

KEY EVENTS IN RENEWABLES

- Offshore wind farms construction program:

As part of offshore wind farms investments, 8 applications for a new location permit for an offshore wind farms in the Baltic Sea was submitted to the Ministry of Infrastructure. 5 proceedings were resolved in favour of the PGE Group and 3 in favour of PKN Orlen. In addition, the PGE Group obtained 3 location permits in 2012, based on which it is preparing investments in the Baltic Sea with a total capacity of approx. 3.5 GW (including 2.5 GW in JV with Ørsted). The launch of both stages of the project carried out jointly with Ørsted, i.e. Baltica 2 with a capacity of up to 1.5 GW and Baltica 3 with a capacity of up to 1.0 GW, is planned by 2030, while the Baltica 1 project after 2030.

On April 20, 2023 Elektrownia Wiatrowa Baltica–2 sp. z o.o. and Siemens Gamesa Renewable Energy Sp. z o.o. concluded following agreements:

- Turbine Supply Agreement, which includes 107 wind turbines of 14 MW each with a total capacity of 1 498 MW;
- Service Warranty Agreement for 5 years from the commissioning of all turbines;
- Spare Parts and Tools Agreement.

Elektrownia Wiatrowa Baltica–2 sp. z o.o. also concluded contracts for the supply of key components of offshore wind farms: foundations, marine internal and export cables, marine transformer stations.

Furthermore, in August 2023, the European Investment Bank (EIB) issued a preliminary credit decision for the PGE Group's offshore wind farm investment project. The total financing package amounts to EUR 1.4 billion. This is a significant step towards securing the optimal financing structure to build the PGE Group's first offshore wind farms in the Baltic Sea.

The strategic goal of the PGE Group in the offshore energy area is to build at least 6.5 GW of capacity by 2040.

- PGE Group PV Development Program:
 - In the second quarter of 2023, projects with a total capacity of approximately 220 MW were being pursued, including four large PV farms Gutki with a capacity of 12 MW, Huszlew with a capacity of 13 MW, Augustynka with a capacity of 25 MW and Jeziórko with a capacity of 100 MW (including the first part of the project with a capacity of 50MW).
 - The development of further photovoltaic farm projects, including the acquisition of land rights and obtaining the required administrative decisions aimed at obtaining construction permits, also continued. In 2023, it is planned to obtain building permits for projects with a total capacity of approx. 220 MW.
- Modernisation of technological equipment at the Dębe hydro power plant

To date, the modernisation of two of the four hydro-sets of the Dębe Hydroelectric Power Plant has been completed, and the third is undergoing modernisation works.

- Comprehensive modernisation program of Porąbka-Żar **pumped**-storage power plant

The scope of the works includes the modernisation of the technological part, the upper reservoir and the structures along the waterway. The cleaning of the upper reservoir consisting in the removal of sediment and silt has been completed. Model studies of the designed facilities are being carried out. Works are underway to develop basic and detailed designs for the particular design disciplines. The main modernisation works at the facility are scheduled to start in 2024.

VOLUME, CUSTOMERS AND OPERATING DATA

PGE Dystrybucja S.A. operates in the area of 129 829 sq. km and delivers electricity to approximately 5.7 million customers.

Diagram: Area of PGE distribution grid.



■ PGE's distribution network area

Table: Volume of distributed energy (TWh)

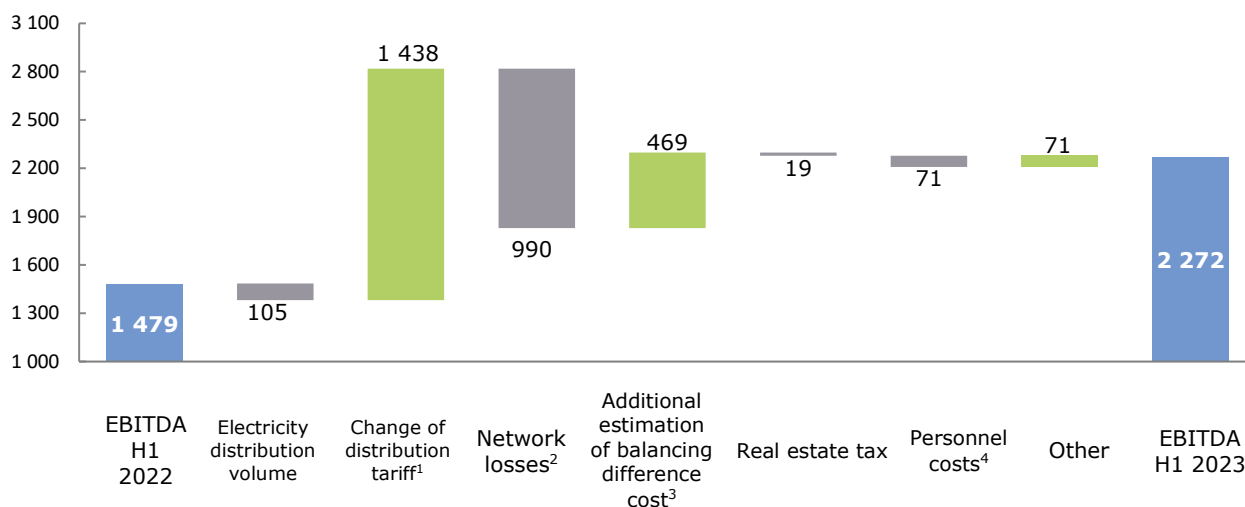
Tariff	H1 2023	H1 2022	% change
A tariff group	2.45	2.69	-9%
B tariff group	6.90	7.40	-7%
C+R tariff groups	3.16	3.39	-7%
G tariff group	5.31	5.14	3%
Total	17.82	18.62	-4%

Table: Number of customers according to power take-off points.

Tariff	H1 2023	H1 2022	% change
A tariff group	140	123	14%
B tariff group	13 718	13 235	4%
C+R tariff groups	475 967	486 763	-2%
G tariff group	5 202 166	5 121 741	2%
Total	5 691 991	5 621 862	1%

KEY FACTORS FOR THE RESULTS OF THE SEGMENT

Chart: Key changes of EBITDA in Distribution (in PLN million) – managerial perspective.



Change	EBITDA H1 2022	Electricity distribution volume	Change of distribution tariff ¹	Network losses ²	Additional estimation of balancing difference cost ³	Real estate tax	Personnel costs ⁴	Other	EBITDA H1 2023
EBITDA reported H1 2022	1 472								
One-offs H1 2022	-7								
EBITDA recurring H1 2022	1 479	2 460	255	35	234	690	163		
EBITDA recurring H1 2023		3 793	1 245	504	253	761	234		2 272
One-offs H1 2023									-21
EBITDA reported H1 2023									2 251

¹ Excluding cost of transmission services from PSE S.A. and taking into account revenues from compensations.

² Adjusted for revenues from the Balancing market.

³ Position that affects the Supply segment negatively, neutral for PGE Capital Group.

⁴ Personnel costs without taking into account the impact of changes in actuarial provision (one-off)

Table: Data on one-offs in Distribution (PLN million).

One-off	H1 2023	H1 2022	% change
Actuarial provision	-21	-7	200%
Total	-21	-7	200%

Key factors affecting results of Distribution segment y/y included:

- **A decrease in the volume of distributed** electricity by 0.80 TWh, resulting mainly from lower demand for electricity from high- and medium-voltage consumers. Additionally, there was a decrease in the number of energy consumption points in the tariff of small and medium-sized businesses and farms (by 10.8 ths).
- **Increase in rates in tariff for 2023** by an average of PLN 44.6/MWh compared to the tariff for the previous year, as a result of the increase in the cost of the balance difference. In addition, the item includes revenues from compensation related to the law limiting electricity price increases in 2023.
- **Higher costs of electricity purchases** to cover network losses mainly as a result of significant increase in electricity prices.
- **Positive impact of the additional estimation of the cost of the balancing difference** as a result of changes in electricity prices. The additional valuation has a neutral impact on the results of the PGE Capital Group.

- **Increase of costs of tax on real estate** results from higher tax rates and an increase in the value of the buildings as a result of the investment and expansion of the power grid.
- **Increase in personnel costs** due to increasing employment costs resulting from increased inflation pressure.
- **Value change in item Other**, resulting mainly from higher revenues from the sale of other distribution services in the field of reactive energy and capacity excess, as a result of the increase in rates in the 2023 Tariff. Additionally, a higher level of capitalised costs, partially compensated by an increase in the costs of electricity consumption, mainly for own and technological needs.

CAPITAL EXPENDITURES

Table: Capital expenditures incurred in Distribution segment.

PLN million	H1 2023	H1 2022	% change
Investments in generating capacities, including:	1 848	633	192%
▪ Development	798	363	120%
▪ Modernisation and replacement	1 050	270	289%
Other	1	4	-75%
Total	1 849	637	190%

KEY EVENTS IN DISTRIBUTION

- **Connecting new customers:** the Customer Connection Program to the distribution network was implemented, under which in the first half of 2023 expenditures were incurred in the amount of PLN 747 million.
- **Program LTE450:** The objective of the Programme is the construction of a modern Special Communications Network in the LTE450 technology for the provision of services such as critical communication, control of energy infrastructure and remote reading for PGE Dystrybucja S.A. In the first half of 2023, tendering procedures for individual components of the system continued, of which two key procedures for the purchase and implementation of components of the CORE LTE450 core network and the purchase and implementation of components of the RAN LTE450 radio network were finalised and the most favourable offers were approved. As a result, executive contracts were signed and preparatory works for the implementation phase began. In parallel, as part of the dedicated projects included in the Programme, works were carried out in the remaining areas necessary for the launch of the service.
- **Cabling program:** in the first half of 2023 PGE continued to implement its cabling program for medium-voltage (MV) grids up to the level of 30% of MV networks owned by PGE Dystrybucja S.A., incurring expenditures in amount of PLN 380 million.

2 730 kms of MV cable lines were completed from the start of the Program in 2019.

442 kms of MV cable lines were installed in the first half of 2023.

- **Installation program for remote reading meters:** This project is mandatory and results from the requirements imposed on Distribution System Operators (DSO) by the legislator in the amended Energy Law. In the first half of 2023, actions were taken to:
 - purchase of remote reading meters for end customers for years 2023 – 2024 (On May 29, 2023, the contract for part I was concluded (50%)),
 - purchase of meters and remote reading modems that will be installed in MV/LV stations in 2023 – 2025 (On June 26, 2023, a contract for balancing meters was concluded),

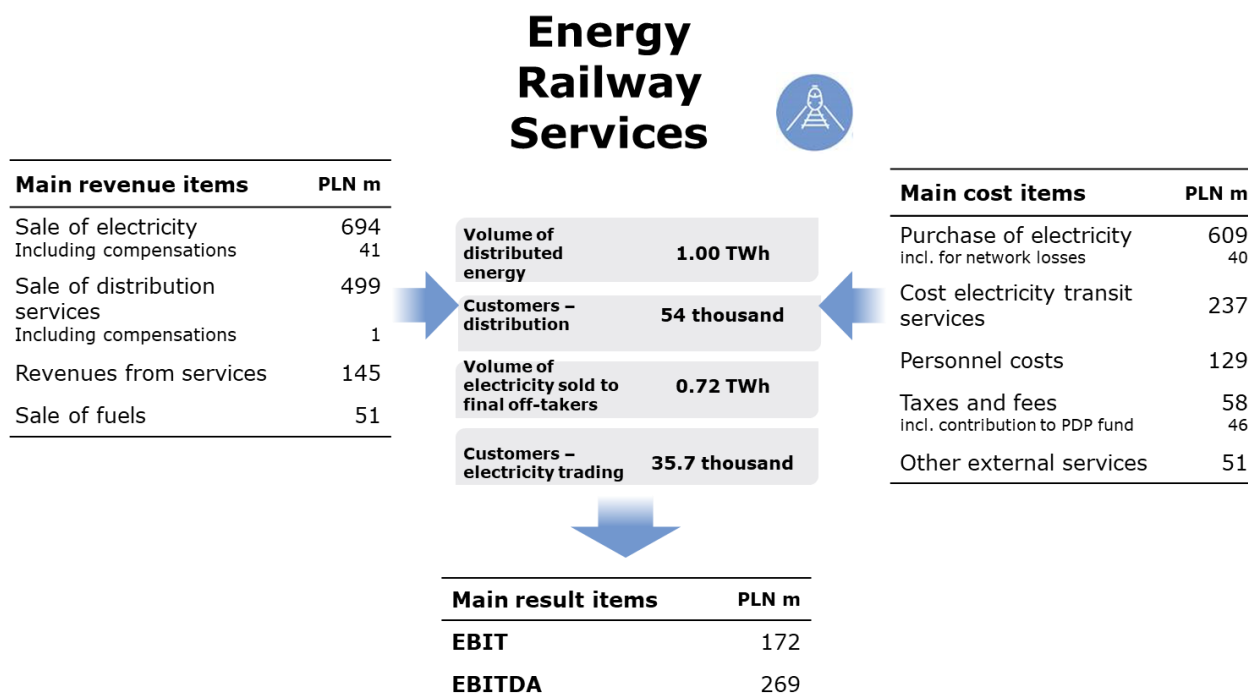
-
- purchase of the service of installing meters at end users, (On May 24, 2023, further tender procedures were announced),
 - purchase of services of modernisation and installation of meters in MV/LV substations.

According to the provisions of the law, the DSO should until December 31, 2028 install remote reading meters connected to a remote reading system at power take-off points, representing at least 80% of the total number of end-customer energy consumption points. EP Directive 2019/994 specifies that at least 80% of final customers must be equipped with smart meters. PGE Dystrybucja S.A. has decided to meter 100% of customers by 2030.

- **Implementation of central systems CRM and Billing (NCB Program):** The aim of the NCB Program is the implementation of a comprehensive, central IT solution to support key business processes at PGE Group being performed by PGE Obrót S.A. and PGE Dystrybucja, consisting of two billing systems – separate for each of the companies – and a CRM system for PGE Obrót S.A. The program is implemented by PGE Systemy S.A. which signed a contract with the contractor selected in the tender last year. The new solution will replace the existing billing and CRM systems for customer service at PGE Group. At the turn of 2022 and 2023 the investment task moved from the analysis phase to the pilot implementation phase. In the first half of 2023, in accordance with the contractual schedule, the implementation works of the pilot phase were carried out. They will result in the launch of a new system and the migration of data from selected local systems currently in operation. In parallel, as part of dedicated projects included in the Programme, works are being carried out to ensure the necessary integration of the new solution with other components of the IT environment in the PGE Capital Group.

RAILWAY ENERGY SERVICES

The segment's main activities are the distribution and sale of electricity to railway operators and customers functioning within the railway system, the sale of fuels, as well as the maintenance and modernisation of overhead contact line network, together with other auxiliary services.



One of the primary sources of revenue in the Railway Energy Services segment is the **sale of electricity**. This revenue is derived from the supply of energy to railway operators and entities connected to the segment's distribution network. Rail operators are additionally the recipients of fuel sales services.

Another important source of revenue is the distribution of electricity. Similarly to the Distribution segment, this revenue is subject to applicable regulations and based on a tariff approved by the ERO. In principle, this tariff ensures a transfer of reasonable costs and a return on the capital invested in the distribution network. The activities of the Railway Energy Services segment as a distribution network operator are limited to the areas along railway lines throughout the country.

The most significant cost items of the segment include **the purchase of the distribution service, as well as the purchase of electricity and fuels**.

The scope of the Railway Energy Services segment's activities comprises works related to the maintenance of the overhead contact line network and the performance of local modernisation works on this network. The segment also provides power engineering services outside the ranges of the overhead contact line network, such as equipment maintenance, as well as the construction and maintenance of railway traffic control systems. In this type of activity, the most significant costs are **personnel costs**.

Furthermore, under the provisions of the Act on Extraordinary Measures in 2023, a **system of compensating** trading companies for the application of maximum prices and discounts was introduced in December 2022. At the same time, electricity trading companies were required to make **contributions to the PDP Fund**.

The data reported for the Railway Energy Services segment for the first half of 2023 relate to the period from the date of acquisition, i.e. from April 2023.

VOLUMES, CUSTOMERS AND OPERATING DATA

The main part of the segment's assets consists of electricity distribution assets held by PGE Energetyka Kolejowa SA. Among other elements, these assets include 517 overhead contact line network substations supplying power to railway lines throughout the country. The total length of the company's network lines is 18 600 kilometres. The network serves approximately 54 000 customers.

Table: Volume of electricity sold to final off-takers and number of customers by power take-off points in the first half of 2023.

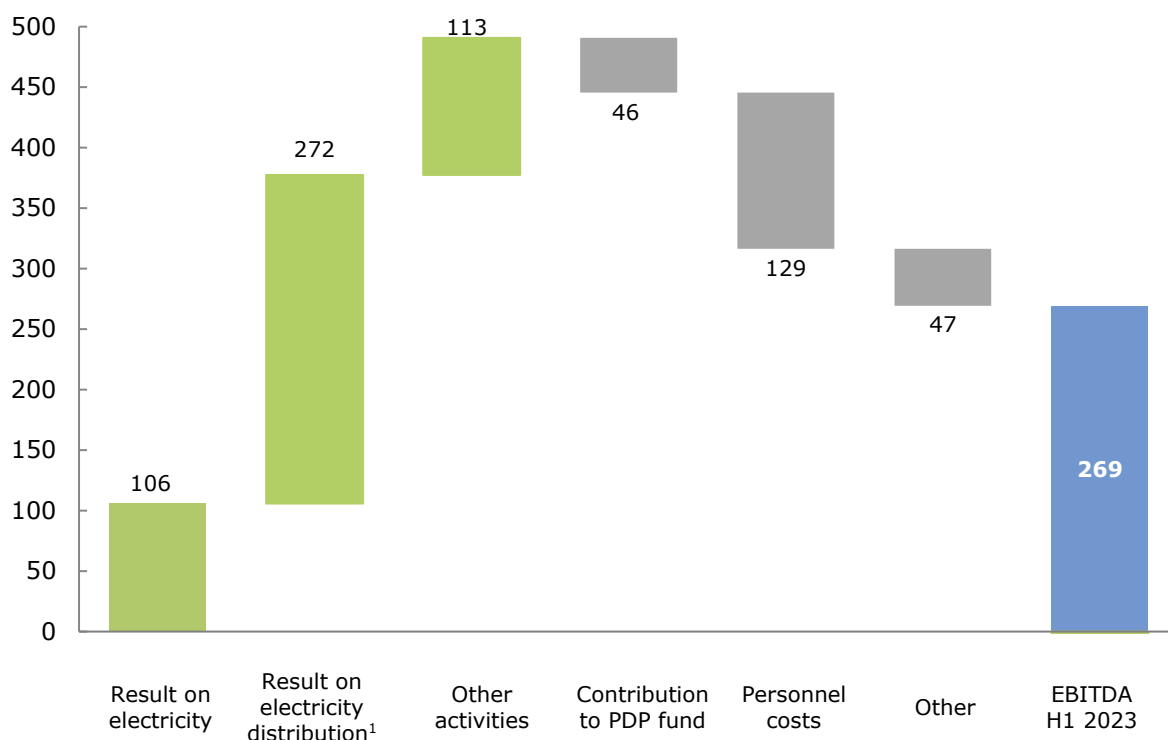
Tariff	Volume (TWh)	Number of customers
	H1 2023	H1 2023
A tariff group	0.00	0
B tariff group	0.68	310
C+R tariff groups	0.03	8 071
G tariff group	0.01	27 309
Total	0.72	35 690

Table: Volume of electricity distributed and number of customers by power take-off points in the first half of 2023

Tariff	Volume (TWh)	Number of customers
	H1 2023	H1 2023
A tariff group	0.00	0
B tariff group	0.87	629
C+R tariff groups	0.12	25 825
G tariff group	0.01	27 561
Total	1.00	54 015

KEY FACTORS FOR THE RESULTS OF THE SEGMENT

Chart: Key changes of EBITDA in Railway Energy Services (in PLN million) – managerial perspective.



EBITDA development factors	106	272	113	-46	-129	-47	269
EBITDA H1 2022							
EBITDA H1 2023	106	272	113	46	129	47	

¹ Excluding the costs of transmission services from PSE S.A., including compensation revenues, connection revenues, resumption of supplies and adjusted for the cost of the balancing difference.

Key factors affecting results of Railway Energy Services segment y/y included:

- **Result on electricity sale**, resulting from the sale of electricity to end users in number of approx. 36 thousand (77% of which are customers from the G tariff group) with the total volume of electricity sales at 0.72 TWh (94% of them are customers from tariff group B).
- **Result on distribution**, which is the result of energy distribution to 54 thousand customers (51% of which are customers from the G tariff group) with the total volume of electricity distribution at 1.0 TWh (86% of them are customers from tariff group B).
- **Result on other activities** at the level of PLN 113 million regarding activities in the field of traction services, electricity and fuel sales.
- **Contribution to the PDP Fund in the amount of PLN 46 million** in accordance with the adopted legal regulations (for the period from takeover to the end of the reporting period).
- **Personnel cost** at PLN 129 million with average employment level of 4 012 FTEs.
- **Item Other**, which mainly includes other operating costs.

CAPITAL EXPENDITURES

Table: Capital expenditures in Railway Energy Services segment

PLN million	H1 2023 ¹
Investment in generation capacities, including:	351
▪ Development	323
▪ Modernisation and replacement	28
Total	351

¹ Capital expenditures for the period April - June 2023

KEY EVENTS IN THE SEGMENT

- **MUZa Program:** the Railway Energy Services segment continued the implementation of the **Power Supply Systems Modernisation** programme. The programme is being implemented on the basis of the "Agreement on the principles of establishing a connection to the distribution network" entered into with PKP Polskie Linie Kolejowe S.A. (PKP PLK). Its objectives are the following:
 - enabling an increase in the capacity of railway lines (increase in train traffic),
 - introducing locomotives with higher power (of the order of 6 MW) allowing for an increase in speed up to 200 km/h,
 - electrifying railway lines,
 - reducing the distribution network and equipment failure rate as well as improving the quality parameters of electricity,
 - meeting the power supply requirements according to the standards set out in the Technical Specifications for Interoperability (TSI) of the "Energy" subsystem – obtaining authorisation from the President of the Railway Transport Office (RTO).

On the part of the Railway Energy Services segment, the programme consists in the modernisation and construction of overhead contact line network substations in accordance with the agreements for network connections entered into with PKP PR. In the second quarter of 2023, the performance of seven agreements for network connections was completed on schedule and the expenditure incurred in this period amounted to PLN 287 million. Since the start of the programme in 2012, 296 connection agreements were signed, of which 240 were completed.

- **Connection of new electricity consumers:** the Railway Energy Services segment continued the implementation of the programme for connecting new customers to the distribution network, under which expenditure of PLN 16 million was incurred in the second quarter of 2023.
- **ZUBI project:** the Railway Energy Services segment continued the project aimed at installing remote reading balancing meters (Balancing Systems Installation – BSI). The implementation of the project is mandatory under the requirements imposed on DSOs by the Legislator in the Energy Law of May 20, 2021. In the second quarter of 2023, the segment was focused on pursuing the following objectives:
 - purchasing remote reading meters for MV/nN substations for the years 2023-2025,
 - purchasing balancing cabinets equipped with modem-routers for the years 2023-2025,
 - purchasing current transformers for the year 2023,
 - purchasing modernisation and installation services for balancing cabinets at MV/nN substations for the years 2023-2025,
 - installing 245 balancing cabinets.

These tasks are aimed at fulfilling the statutory obligation, i.e. the installation of 100% of remote reading meters in medium- and low-voltage substations by December 31, 2025. An expenditure of PLN 4 million was incurred in the second quarter of 2023.

VOLUME, CUSTOMERS AND OPERATING DATA

Table: Volume of electricity sales to final off-takers (TWh)¹.

Tariffs	H1 2023	H1 2022	% change
A tariff group	3.14	3.61	-13%
B tariff group	5.67	6.04	-6%
C+R tariff groups	3.09	2.89	7%
G tariff group	4.80	4.90	-2%
Total	16.70	17.44	-4%

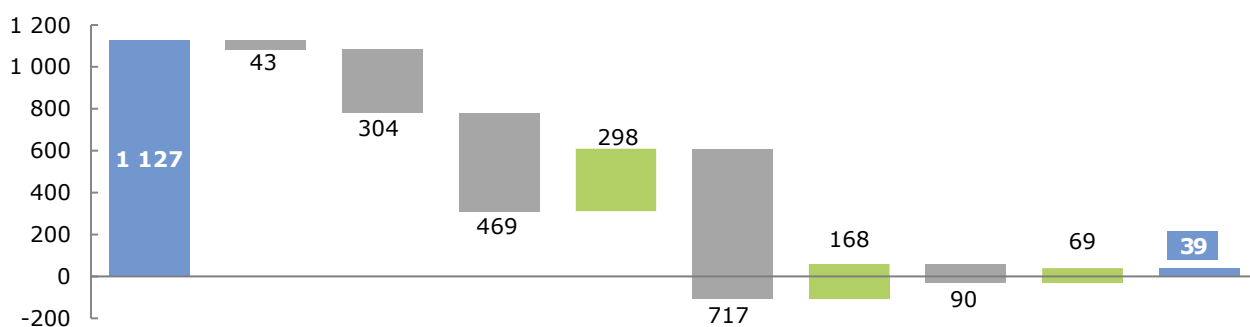
¹ Data for PGE Obrót S.A.

Table: Number of customers according to power take-off points¹.

Tariffs	H1 2023	H1 2022	% change
A tariff group	162	150	8%
B tariff group	11 237	11 017	2%
C+R tariff groups	420 885	406 622	4%
G tariff group	5 201 566	5 054 547	3%
Total	5 633 850	5 472 336	3%

¹ Data for PGE Obrót S.A.

Chart: Key changes of EBITDA in Supply (in PLN million) – managerial perspective.



	EBITDA H1 2022	Result on electricity volume	Result on electricity margin	Estimation of the cost of the balancing difference ¹	Revenues from services provided to other segments of the PGE Group ²	Result on sale of gas and other fuels	Result on sale of CO ₂	Personnel costs ³	Other ⁴	EBITDA H1 2023
Change		-43	-304	-469	298	-717	168	-90	69	
EBITDA reported H1 2022	1 176									
One-offs H1 2022	49									
EBITDA recurring H1 2022	1 127	840		35	661	243	72	206	448	
EBITDA recurring H1 2023		493		504	959	-474	240	296	379	39
One-offs H1 2023										78
EBITDA reported H1 2023										117

¹ Position with a positive impact on the Distribution segment, neutral for the PGE Capital Group.

² This item does not include the margin on CO₂ transactions with PGE Group companies.

³ Personnel costs without taking into account the impact of change in actuarial provision.

⁴ Item without taking into account the impact of reversing the provision for prosumers and correction of the estimate of the contribution to the PDP Fund for 2022 at PGE Obrót S.A. (one-offs).

Table: Data on one-offs in Supply (PLN million).

One-offs	H1 2023	H1 2022	% change
Correction of estimated contribution to Price Difference Payment Fund for 2022 at PGE Obrót	81	-	-
Actuarial provision	-3	1	-
Release of provision for prosumers ¹	-	48	-
Total	78	49	59%

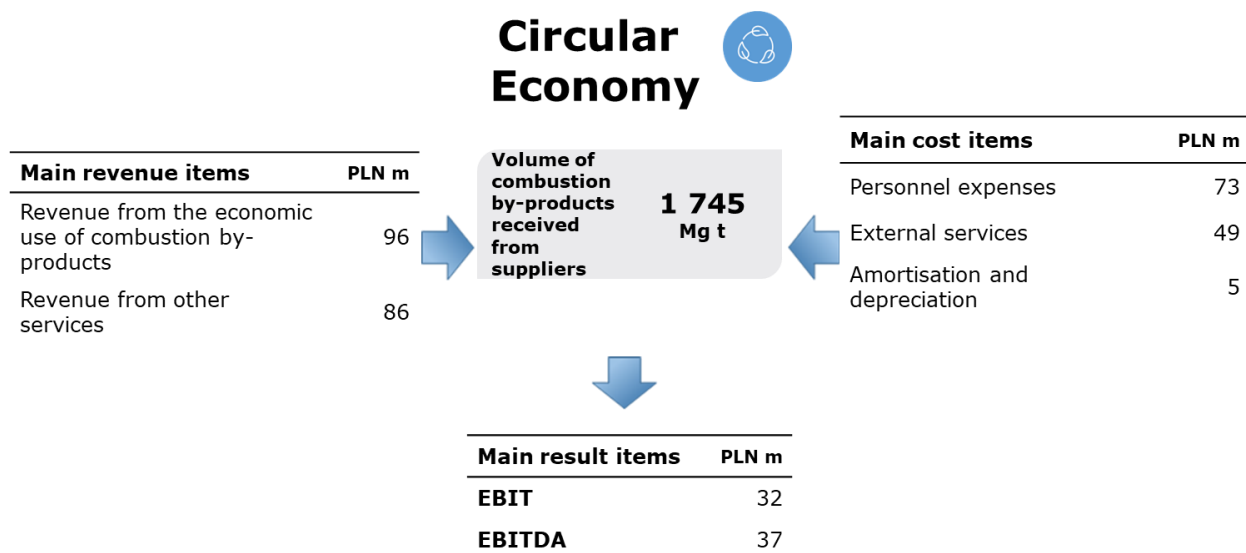
¹In connection with the amendment of the Act on Renewable Energy Sources of October 29, 2021, introducing changes in settlements with prosumers and specifying the period of support for existing prosumers, it was considered that the conditions for creating provisions for onerous contracts within the meaning of IAS 37 were met. The provision was created for contracts for 2022. In 2022, provision was fully released for the projected loss on the sale of electricity to prosumers.

Key factors affecting EBITDA of Supply segment y/y included:

- **The lower result on sale of electricity** is mainly the result of a lower margin on sales on market and tariff products.
- **Negative impact of additional valuation of balancing difference** as a result of changes in electricity prices. The additional valuation has a neutral impact on the results of the PGE Capital Group.
- **Increase of revenues from services performed within the Group** resulting from the increase in revenues under the ZHZW agreement, which is a consequence of the higher value of trade in electricity under management.
- **Lower result on sale of gas and other fuels** is an effect of effect of recognizing an impairment on coarse coal stock and adjustment in PGE Paliwa sp. z o.o. result for 2022.
- **Higher result on sale of CO₂** mainly as a result of mainly as a result of higher interim valuation of CO₂ futures contracts and a higher margin on CO₂ trading transactions with PGE Group companies.
- **Higher personnel expenses** as a consequence of organisational changes and the ongoing process of changing remuneration.
- **Value change on item Other** mainly as a result of the low base of the previous year in connection with the recognition of write-offs on trade receivables, as a result of the creation of provisions for future doubtful receivables in retail sales companies and as a result of higher costs of settlements with prosumers.

CIRCULAR ECONOMY

The activities of the segment include the provision of comprehensive services in the field of management of combustion by-products ("UPS"), provision of services in auxiliary areas for electricity and heat producers and the supply of materials based on UPS.

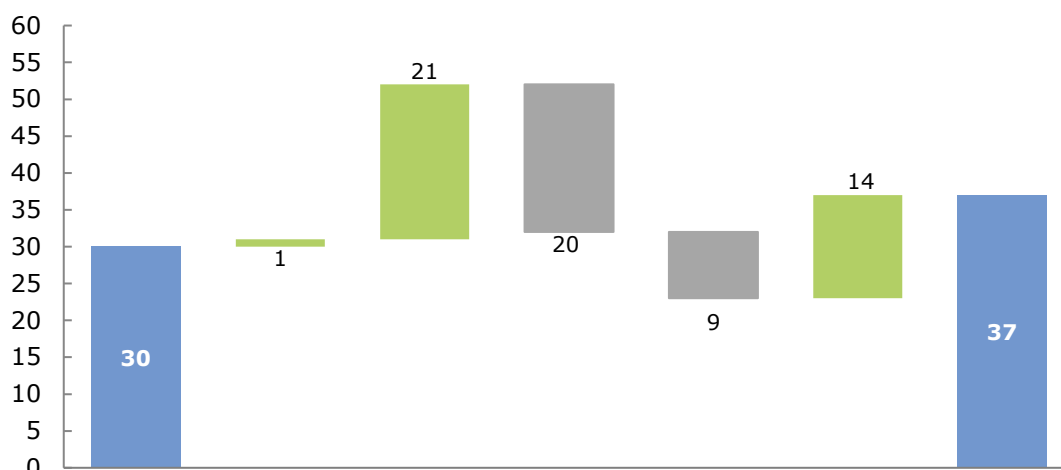


From the beginning of 2021, PGE Group reports a new operating segment – Circular Economy, which includes the following companies: PGE Ekoserwis S.A., EPORE S.A., ZOWER sp. z o.o. The management of combustion by-products at PGE Group turns waste into high-value substances that are used in other branches of economy (cement industry, construction, road-building, mining) and thus reduces the volume of ultimate waste generated.

The main revenue source in the Circular Economy segment is **revenue from the economic use of combustion by-products**, which includes revenue from the sale of products manufactured on the basis of combustion by-products in internal production processes and the sale of services related to the management of combustion by-products. The level of revenue depends on multiple factors, including commercial potential for selling combustion by-products, in processed and unprocessed form, seasonality of industries purchasing combustion by-products, seasonality of suppliers of combustion by-products (power plants, combined heat-and-power plants), volumes collected, efficiency of production infrastructure, capabilities for storing combustion by-products as materials inventories intended for production, as well as market conditions.

Revenue from other services includes revenue from the sale of continuous and ad hoc services provided to electricity and heat producers, including the operation of ash handling systems and equipment, operation of technological lines, operation of mill facilities and operation of fuel and combustion by-product storage sites.

Chart: Key factors affecting EBITDA in Circular Economy segment (in PLN million) – managerial perspective.



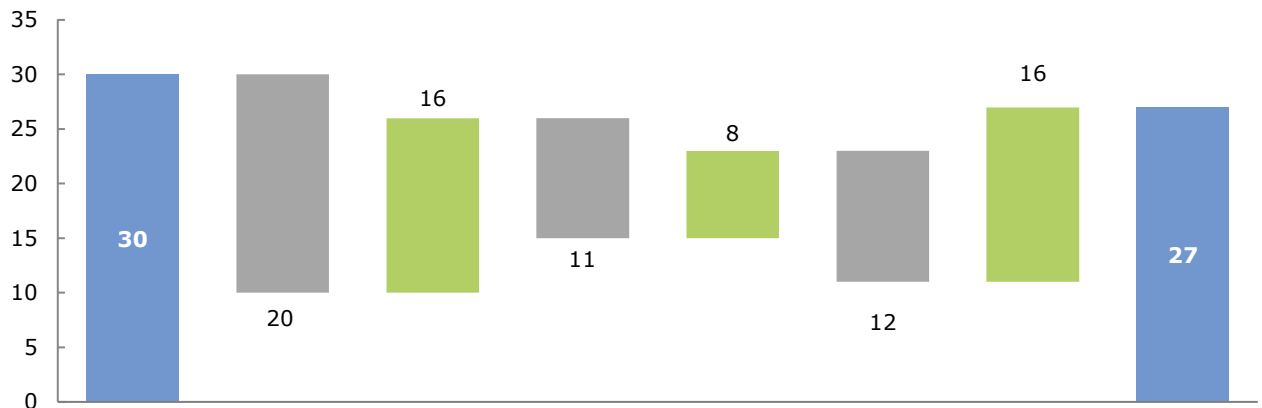
	EBITDA H1 2022	Revenues from sale of combustion by-products	Revenues from sale of services	Personnel costs	External services	Other	EBITDA H1 2023
Change		1	21	-20	-9	14	
EBITDA H1 2022	30	95	65	53	40	37	
EBITDA H1 2023		96	86	73	49	23	37

Key factors affecting EBITDA of Circular Economy segment included:

- **Lower revenues from sale of combustion by-products**, caused by the realisation of a lower selling price.
- **Higher revenues from the sale of services**, which is the result of a wider scope of work carried out and higher service labour costs.
- **Higher level of personnel costs** is mainly the result of the ongoing process of changing wages.
- **Higher external services costs**, resulting mainly from higher combustion by-products management costs.
- **Value change of item Other**, due to the higher stock of the coal mixture.

KEY FACTORS FOR THE RESULTS OF THE SEGMENT

Chart: Key factors affecting EBITDA in Other operations segment (in PLN million) – managerial perspective.



	EBITDA H1 2022	Costs of IT services	Revenues from sale of services	Costs of consulting services	Capitalised costs	Personnel costs	Other	EBITDA H1 2023
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Change		-20	16	-11	8	-12	16	
EBITDA H1 2022	30	30	140	4	19	79	16	
EBITDA H1 2023		50	156	15	27	91	0	27

Key factors affecting EBITDA of Other Operations segment included:

- **Higher costs of IT services** resulting from the purchase of external services in order for PGE Systemy S.A. to provide a wider range of services to PGE Group and deliver new investment programs, especially LTE450.
- **Higher revenues from the sale of services** due to a wider range of services provided by PGE Systemy S.A. and Elbis sp. z o. o. for companies in the PGE Group.
- **Higher costs of advisory services** due to the wider scope of projects implemented by Elbis sp. z o.o.
- **Higher capitalised costs** as a result of higher cost allocation to assets in the first half of 2023 due to projects carried out by PGE Systemy S.A.
- **Higher personnel costs** due to the increase in the minimum wage and inflation pressure.
- **Change of value on item 'Other'** mainly as a result of postponed settlements of project costs.

CAPITAL EXPENDITURES

Table: Capital expenditures incurred in Other operations segment

PLN million	H1 2023	H1 2022	% change
Total	392	599	-35%

KEY EVENTS IN OTHER OPERATIONS

- In the first half of 2023, work continued on the project to build a **CCGT unit** with a gross capacity of 882 MW in Rybnik (**Rybnik 2050 sp. z o.o.**). Currently, the project is at the stage of obtaining permits and preparing documentation that will enable construction works to begin. In April 2023, the decision on environmental conditions was granted its final status. The General Contractor also started work on the preparation of a basic design and a construction design that constitute a basis for obtaining a construction permit decision.
- Work continued on the construction of two **new gas-and-steam units** of 671 MWe each (**PGE Gryfino 2050 sp. z o.o.**) in the first half of 2023. The key elements of the engine room of unit 9 and unit 10 were placed on foundations, assembly works on the engine room were being continued. The installation of a recovery boiler and a gas station including a gas service line was completed. The cabling process and the preparatory works for the commissioning procedure were commenced. The material advancement of the project at the end of the second quarter of 2023 was approx. 95 %. The planned commissioning date of the units is April 2024.
- At company **PGE Inwest 14 sp. z o.o.** Work is in progress on a Battery Electricity Storage System (BESS) project at ESP Żarnowiec, which will be one of the largest energy storage facilities of its kind in Europe. The project has obtained a decision on environmental conditions and conditions for connection to the 400 kV transmission grid. Another milestone for the project was the first concession promise for electricity storage in Poland. Combining the existing 716 MW Żarnowiec pumped-storage plant with BESS will result in an innovative hybrid installation with a total power rating of at least 921 MW and a capacity of over 4.6 GWh. The capacity of the entire installation corresponds to the capacity of the largest conventional units in Poland, which has a significant impact on increasing the level of flexibility of the NPS, taking into account the constantly increasing share of RES and the progressing phase out of coal-fired units. The BESS will be able to provide a full range of ancillary services. Further activities in 2023 will be related to the preparation of a public procurement procedure for the construction of BESS and the power evacuation system. In addition, BESS will perform the function of technical and commercial balancing for unstable RES, i.e. onshore and offshore wind farms owned by PGE Group.

KEY PROJECTS IN OTHER OPERATIONS

Aim of the project	Budget	Expenditures incurred ¹	Capital expenditures in 2023 ¹	Fuel/ Net efficiency	Contractor	Investment completion date
Construction of two CCGT units at PGE Gryfino 2050 sp. z o.o.	PLN 4.3 bn	PLN 3.02 bn	PLN 225.5 m	Natural gas/ 63%	Syndicate of companies: General Electric (consortium leader) and Polimex Mostostal	April 2024
Construction of gas-steam unit at Rybnik 2050 sp. z o.o.	PLN 4.0 bn	PLN 10.1 m	PLN 7.3 m	Natural gas/ 61%	Syndicate of companies: Polimex Mostostal S.A. (consortium leader), Siemens Energy sp. z o.o., Siemens Energy Global GmbH & Co. KG	December 2026

¹ Expenditures incurred do not include expenses in the form of advances paid to the General Contractor for the Investment and to the other contractors.

5. Other elements of the report

5.1. Significant events of the reporting period and subsequent events

IMPACT OF WAR IN UKRAINE ON PGE GROUP'S ACTIVITIES

In connection with the situation in Ukraine, a Crisis Team has been established at the central level of PGE Group to continuously monitor threats and identify potential risks. The Crisis Team's work includes monitoring the security of electricity and heat generation and supply and the protection of critical and IT infrastructure. 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.

Cybersecurity has grown significantly in importance in the current geopolitical situation. PGE Group has implemented special procedures for monitoring Information and communication technologies (ICT) networks due to increased activity of criminal groups aiming to attack ICT and Operational Technology (OT) systems. Incidents are regularly identified: phishing, attempts to install malware and DDoS attacks (Distributed Denial of Service).

The physical security of the Group's facilities also has been strengthened.

KEY AREAS IN PGE GROUP AFFECTED BY THE WAR IN UKRAINE

- level of generated margin,
- fuel availability and prices,
- prices of CO2 emission allowances,
- disruption of the component supply chain or a significant increase in their prices,
- rising inflation and interest rates and a weakening of the national currency,
- capital raising opportunities,
- improving energy efficiency,
- greater pressure on the energy transition through RES development,
- import of hard coal,
- cybersecurity and physical security,
- geopolitics,
- new regulations,
- counterparties (sanctions lists).

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,
- instability of hard coal and gas prices on the international market.

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 Transmission System.

- EC Toruń, EC Zawidawie, EC Czechnica, EC Lublin Wrotków, EC Rzeszów, EC Zgierz, EC Bydgoszcz, EC Kielce are supplied with high-methane gas (so-called gas E). Gas E taken from the National Gas Transmission System is secured in the form of adequate storage and in Poland this is at a relatively high level.

PGE Group has no influence over the directions of supply and management of fuel transmission therefore the risk of possible disruptions lies with PKN Orlen S.A. (previously PGNiG S.A.) and the Transmission System Operator (Gaz-System S.A.). PGE has established communication channels with PKN Orlen and Gaz-System S.A. 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 gas fuel, due to the lack of stock-holding capacities, a reduced availability translates into an immediate disruption in electricity and heat production. However, if there are back-up coal-fuelled water boilers at a CHP plant, it is possible to produce heat until these stocks are exhausted (this pertains to CHP Lublin Wrotków and CHP Rzeszów). In the case of CHP Gorzów, an OP-140 coal-fired steam boiler constitutes a back-up. At CHP Zielona Góra, oil boilers serve as back-up for heat production.
- The main suppliers of hard coal for electricity and heat production are Polish mining companies and coal importing companies. Currently, CHP plants and Centrally Dispatched Generating Units (JWCD) 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 balancing and operation of the NPS. 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.

THE RISK OF IMPACT OF THE WAR ON FUTURE FINANCIAL RESULTS

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 the Group's future financial statements.

INFORMATION CONCERNING PROCEEDINGS IN FRONT OF COURT, BODY APPROPRIATE FOR ARBITRATION PROCEEDINGS OR IN FRONT OF PUBLIC ADMINISTRATION AUTHORITIES

Significant proceedings pending in front of courts, competent arbitration authority or public administration authority are described in note 24.4 to the consolidated financial statements.

The above-mentioned note discusses, among others: the issue of compensation regarding the conversion of shares and termination by ENEA S.A. of agreements for sale of certificates

INFORMATION CONCERNING THE GUARANTEES FOR LOANS GRANTED BY THE COMPANY OR A SUBSIDIARY

As at June 30, 2023 PGE S.A. and subsidiaries did not grant guarantees to other entities or to a subsidiary, where a value of guarantees constitutes at least 10% of the Company's equity.

INFORMATION ON ISSUE, REDEMPTION AND REPAYMENT OF DEBT SECURITIES AND OTHER SECURITIES

Information on issue, redemption and repayment of debt securities and other securities is described in p. 5.2 of the foregoing report and in note 1.3 to the consolidated financial statements.

TRANSACTIONS WITH RELATED ENTITIES

Information about transactions with related entities is presented in note 26 to the consolidated financial statements.

PROJECT OF SETTING UP THE NATIONAL ENERGY SECURITY AGENCY (NABE)

On March 1, 2022, the Council of Ministers adopted a resolution on accepting the document: "Transformation of the electricity sector in Poland. Separation of generation coal assets from companies with State Treasury shareholding". According to the document, the asset spin-off process will be pursued through acquisition by the State Treasury from PGE S.A., ENEA S.A., TAURON Polska Energia S.A. and ENERGA S.A. all assets related to the generation of energy in hard coal-fired and lignite-fired power plants, including service companies providing services to them. Due to the inseparability of lignite-fired energy complexes, lignite mines will also be among the acquired assets. Assets related to hard coal mining will not be transferred to the entity dealing with generation of electricity in coal units. CHP plants will not be subject to this transaction, as they are planned to be modernised towards low and zero-emission sources. It is planned that the carve-out of assets from the energy groups will take place through the purchase of shares of individual companies directly by the State Treasury and their subsequent consolidation within NABE - if this option is selected, consolidation within NABE will take place through their contribution to a capital increase in PGE GiEK S.A.

NABE will operate as a holding company, concentrated around PGE GiEK S.A., and the companies being acquired from ENEA, TAURON and ENERGA as subsidiaries in its group.

NABE will be a fully self-sufficient entity, capable of procuring all internal and external functions, i.e. HR, IT, procurement, trading, to ensure seamless operations either independently or – in the transition period – based on contracts signed with external entities, including companies from which the assets are being carved out.

According to the document, after the separation of coal-fired generation assets, 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 power balance in the energy system. NABE will focus on maintenance and modernisation investments necessary to maintain the efficiency of the coal-fired units in operation, including those aimed at reducing the carbon intensity of the units in operation.

On July 23, 2021, PGE S.A., ENEA, TAURON and ENERGA concluded an agreement with the State Treasury regarding cooperation in the process of separating coal energy assets and their integration into NABE.

CONDITIONS OF THE TRANSACTION

On July 14, 2023 PGE received from the State Treasury, represented by the Minister of State Assets, proposal of a non-binding document summarising terms and conditions for acquisition by the State Treasury of all shares held in PGE GiEK S.A. On August 10, 2023 PGE and the Minister of the State Assets, signed a document summarising terms and conditions for acquisition by the State Treasury of all shares held by PGE in PGE GiEK S.A. in order to set up NABE (the "Term Sheet").

Term Sheet particularly includes key economical and legal terms for the realization of the transaction, including key provisions of the preliminary sale agreement and the promised sale agreement as well as proposed mechanism of settling the intragroup debt of PGE GiEK towards the Company. In accordance with the document the sale price of shares of PGE GiEK (Equity Value) amounts to PLN 849 million on the basis of the Enterprise Value settled as at September 30, 2022 (settlement according to locked-box mechanism) and adjusted for the net debt. The Term Sheet assumes that the debt of PGE GiEK towards PGE in amount of PLN 5.4 billion will be subject to repayment throughout 8-year period from the conclusion of the transaction and the repayment of 70% of the debt will be secured by the guarantee of the State Treasury. The eventual debt existing at the date of the acquisition of shares of PGE GiEK by the State Treasury (if it occurs) will be repaid by NABE using the funds from the loan granted to NABE by banks within the transaction immediately after the transaction closing.

Other intragroup settlements, particularly settlements regarding CO2 emission rights, are being pursued on ongoing basis and will not have impact on the sale price.

The provisions of the Term Sheet are binding only on: prohibition of employment and advertising, confidentiality and duration, costs of the transaction and applicable law and dispute resolution.

In other respects, the Term Sheet is non-binding.

Conclusion of the sale transaction of PGE GiEK S.A. to the State Treasury depends on the fulfillment of number of conditions precedent, the most crucial of which are:

- reaching an agreement in terms of content of the transaction documentation, including future financing of NABE and obtaining initial credit decisions from banks for financing of NABE,
- positive consideration by the Prime Minister of the request for acquisition of shares by the State Treasury from the Reprivatisation Fund,
- obtaining all internal approvals and permits required for concluding or executing the transaction,
- concluding agreements (or relevant appendices) ensuring the operation of the companies forming NABE after the closing of the transaction.

RECOGNITION OF ASSETS RELATED TO PGE GiEK S.A. IN THE FINANCIAL STATEMENTS

In the opinion of the PGE Capital Group, as at the reporting date, the conditions of IFRS 5 concerning operations held for sale regarding assets and liabilities as well as revenue and expenses for the described coal-fired units are not met. In particular, as at the reporting date:

- the terms of the planned transaction were not known;
- the assets of PGE GiEK S.A. are not available for immediate sale in their present condition, taking into account only normal and customary conditions for the sale of such assets.

Consequently, as at June 30, 2023, assets related to PGE GiEK S.A. are not reclassified to discontinued operations. PGE S.A. also did not make adjustments bringing the value of assets related to PGE GiEK S.A. to the values required by IFRS 5. The values of assets, liabilities, revenue, costs and results of the Conventional Generation segment, showing the data for PGE GiEK S.A. and its subsidiaries, are presented in note 6.1 to these financial statements.

The book value of PGE GiEK S.A. shares in the separate financial statements is PLN 11 723 million as at June 30, 2023. In turn, the book value of consolidated net assets of PGE GiEK S.A. and its subsidiaries as at June 30, 2023 is PLN 10 692 million. If the conditions under IFRS 5 are met in the future, the difference between the indicated values and the future transaction price will be recognised in the financial statements of future periods, adjusting the financial result accordingly.

Assuming the value of the transaction indicated in the Term Sheet and the values of the assets as at June 30, 2023, PGE S.A.'s separate gross profit would be reduced by PLN 10 874 million and the PGE Capital Group's consolidated gross profit would be reduced by PLN 9 843 million.

As at the date of the approval of the consolidated financial statements, neither the Management Board nor the Supervisory Board of the Company has made a decision to sell shares in PGE GiEK S.A.

In order to conclude financing agreements and establish NABE, it is necessary for the Parliament to adopt an act on the principles of granting guarantees by the State Treasury for the obligations of the NABE. On September 7, 2023, the act was rejected by the Senate in its entirety and submitted to the Sejm on September 8, 2023.

As of the date of publication this report, the law has not been adopted and the next session of the Parliament has not been scheduled before the parliamentary elections on October 15, 2023. Therefore, in the Company's opinion, it is more than less likely that sale transaction of the PGE GiEK S.A. will not be completed within the timeframe and on the terms and conditions included in the Term Sheet.

BENEFITS OF COAL ASSET SALES

The discontinuation of Conventional Generation's operations based on coal combustion results from the strategy of the PGE Capital Group, published on 19 October 2020, which assumes climate neutrality by 2050. The spin-off coal assets will bring measurable benefits for the Group, among others, in the following areas:

- greater and more favorable access to sources of debt and equity financing, lower financing costs;
- greater and more favorable access to the insurance market;
- lower cash requirements for hedging CO₂ emission costs and stocks of production raw materials;
- release of credit limits in financing institutions as a result of reducing the demand for EUA allowances;
- increasing the possibility of using financial resources for investments in distribution networks and green technologies, with a higher rate of return;
- reducing the risk of exposure to the price of CO₂ emission allowances.

All the above actions, in the opinion of the Management Board, will increase the attractiveness of the Company for shareholders.

Current reports of PGE S.A.:

[Receipt of the proposal of the terms and conditions for the acquisition of 100% of shares in PGE GiEK](#)

[Obtaining corporate approvals](#)

[Summary of the Term Sheet](#)

PROVISION FOR CLAIMS FROM CONTRACTORS OF ENESTA SP. Z O.O.

In 2021 ENESTA sp. z o.o. (currently ENESTA sp. z o.o. in restructurisation) terminated unfavourable contracts for the supply of electricity and natural gas. In 2022, some contractors brought their claims to court. After unsuccessful attempts to reach an agreement with its counterparties, ENESTA sp. z o.o. applied for restructuring proceedings. On June 21, 2022, restructuring proceedings were opened. At the end of 2022 and in February 2023, judgments unfavourable to the company were passed in pending proceedings. The judgments established the existence and validity of contracts for the sale of electricity and natural gas. Due to the need to continue the implementation of unfavourable sales contracts, a provision was created at the end of 2022 for onerous contracts in the amount of PLN 37 million. In addition, provisions were created for potential court disputes in connection with the reserve sale carried out in 2022 by the supplier of last resort in the amount of PLN 56 million. In the first half of 2023 provision for onerous contracts was partly released and currently amounts to PLN 22 million. Sales revenues are invoiced in accordance with final court judgments.

As at June 30, 2023, the value of assets and equity and liabilities of the company amounts to PLN 140 million and the value of equity to PLN (-)217 million.

RECOMMENDATION NOT TO PAY DIVIDEND FOR 2022

On March 21, 2023 the Management Board of PGE S.A. decided on the recommendation not to pay dividend for 2022 to the PGE's shareholders. Decision was taken in accordance with the dividend policy and is a result of analysis of Company's indebtedness, expected capital expenditures and planned acquisitions (in line with the PGE Group's Strategy until 2030 with 2050 perspective, including acquisition of 100% shares in PKP Energetyka Holding Sp. z o.o.), in the context of prolonged market volatility and uncertainty.

Current report of PGE S.A.:

[Recommendation not to pay dividend](#)

IMPLEMENTATION BY PGE PALIWA SP. Z O.O. OF THE DECISION OF THE PRESIDENT OF THE COUNCIL OF MINISTERS CONCERNING THE PURCHASE OF COAL FOR HOUSEHOLDS

In mid-2022 PGE Paliwa sp. z o.o. received a decision from the Prime Minister instructing the purchase of at least 3 million tonnes of thermal coal with parameters similar to the quality parameters used by households and its import into the country by the end of April 2023.

PGE Paliwa sp. z o.o. was named in the Regulation of the Minister of State Assets of November 2, 2022, on the list of entities authorised to conduct sales of solid fuel to municipalities, as one of six market-entry entities authorised to conduct sales of solid fuel to municipalities for sale under preferential purchase. According to the provisions of the Act of October 27, 2022, on preferential purchase of solid fuel for households, the sale price of solid fuel couldn't be higher than PLN 1 500 gross. At the same time, the market-entry entity was entitled to compensation in the amount of the product of the quantity of solid fuel and the difference between the justified average unit purchase cost of solid fuel in that period and the average net selling price in that period, plus value added tax.

The implementation of the above mentioned decision resulted in a temporary increase in PGE Group's cash requirements and a potential temporary increase in debt in connection with the settlement of coal purchase and resale transactions. As at the date of this report, no financing agreement was concluded for the implementation of the Prime Minister's decision. In connection with a significant decrease in market prices of coal in the first half of 2023 and taking into account the prudence principle, a write-down of the value of coal inventories purchased by the Group and not sold by June 30, 2023 was recognised in the financial results of the PGE Capital Group to the estimated coal prices obtainable on the market. As at June 30, 2023, the amount of the inventory write-down was PLN 634 million. An amount of PLN 563 million was recognised in the current period's results. The Group expects the signing of an agreement and full reimbursement of the costs related to the implementation of the decision, which will result in the recognizing revenue in future financial statements.

The Group recognised PLN 115 million in the current period results as revenue from compensation for coal deliveries made from January to April 2023. On the other hand, PLN 131 million was recognised in the 2022 results for deliveries made in 2022. The applications for compensation for the respective periods were submitted in accordance with the deadlines set out in the Law of October 27, 2022 on the preferential purchase of solid fuel for households. By the date of this report, PGE Paliwa sp. z o.o. had received all requested compensation. PGE Paliwa sp. z o.o. had carried out sales under the aforementioned Act until April 30, 2023.

REGULATORY CHANGES ON THE ELECTRICITY MARKET

Due to the electricity market crisis, the legislator decided to introduce regulations that temporarily introduce exceptional solutions for electricity prices and tariffication in 2023. On October 18, 2022, the Act of October 7, 2022, on special measures to protect electricity consumers in 2023 in connection with the situation on the electricity market (Act for Households) entered into force and on November 4, 2022, the Act of October 27, 2022 on Emergency Measures in 2023 entered into force (Act on Emergency Measures). On September 4, 2023, the Act of August 16, 2023 amending the Act on special solutions for the protection of electricity consumers in 2023 in connection with the situation on the electricity market and certain other acts was published, which entered into force on September 19, 2023. The Act of August 17, 2023 on the principles of granting guarantees for NABE liabilities by the State Treasury, which amends the provisions of the Act for households, is also being processed at the parliamentary stage. On September 7, 2023, the Senate adopted a resolution rejecting the Act and it was submitted to the Sejm.

Pursuant to the Act for households, in 2023 an electricity trading company is required to apply to the aforementioned households customers prices equal to those contained in the tariff in force on January 1, 2022 for individual tariff groups up to certain consumption limits. On the other hand, once the Act of August 16, 2023 amending the Act for Households enters into force, the consumption limits for each category of customer will be increased by an additional 1MWh. Once the consumption limits for household consumers are exceeded, a maximum price of 693 PLN/MWh (price excluding VAT and excise duty) is used for billing off-takers in households in accordance with the Emergency Measures Act in 2023. This means that electricity prices have

been fixed by law and therefore in 2023 the tariffs approved by the President of the Energy Regulatory Office will not have a direct impact on electricity prices for households.

Additionally, in accordance with the Emergency Measures Act in 2023, the maximum electricity price for other eligible customers is set at 785 PLN/MWh (price excluding VAT and excise duty). After the Act of August 16, 2023 amending the Act for households and certain other acts enters into force, the maximum price will be, similarly to that for households, 693 PLN/MWh. This price, in principle, applies from December 1, 2022, however, the changed amount will apply from October 1, 2023 to December 31, 2023. The maximum price limit for eligible customers also applies to electricity sales agreements concluded or amended after February 23, 2022, in which case the maximum price also applied to settlements for the period from the date of conclusion or amendment of these agreements until November 30, 2022. Electricity companies are required to make systematic refunds resulting from the application of the maximum prices until the end of 2023.

Electricity trading companies, in accordance with the implemented regulations, is entitled to compensation for applying electricity prices in their settlements with household customers at the same level as on January 1, 2022. The compensation is the product of the electricity consumed at the point of consumption, up to the maximum consumption limits entitling customers to apply to them the prices from 2022 and the difference between the price of electricity resulting from the electricity tariff approved by the President of the Energy Regulatory Office for 2023 and the electricity prices approved in the tariff for 2022. In turn, for applying the maximum price of PLN 693/MWh in settlements with household customers, trading companies are entitled to compensation in the amount of the product of the volume of electricity consumed in a given month and the difference between the reference price and the maximum price, for each energy point. The reference price is the price of electricity resulting from the electricity tariff approved by the President of URE for 2023. Compensation is also due for the use of maximum prices in settlements with other eligible entities. In this case, in principle, the reference price for compensation payments is calculated on the basis of electricity prices in exchange contracts and the prices of electricity purchased for sale to eligible customer, plus the cost of redemption of energy certificates of origin and a margin.

The mechanisms introduced in the Act for Households and the Emergency Measures in 2023 Act should as a rule compensate trading companies for the price reduction.

From December 1, 2022 PGE Group's financial position is also affected by the provisions of the Emergency Measures in 2023 Act, which provide for the requirement to make monthly contributions to the account of the Price Difference Payment Fund (PDP Fund) by electricity producers and power companies that are engaged in the business of electricity trading. The contribution to the PDP Fund is the product of the volume of electricity sales and the positive volume-weighted average difference of the market price of electricity sold and the volume-weighted average of the price cap of electricity sold, as regulated in the Regulation of the Council of Ministers of November 8, 2022 on the method of calculating the price cap.

A different way of calculating the price cap has been defined for individual generation sources:

- for units generating energy from lignite and hard coal, the price limit takes into account, among other things, the unit cost of fuel consumed, the cost of CO₂ emission allowances, the efficiency of the generating units, a margin and a certain level of investment allowance and for coverage of fixed costs of 50 PLN/MWh.
- for units generating energy from RES, the price limit is determined with reference to the reference price referred to in art. 77 sec. 3 p. 1 of the Renewable Energy Sources Act, whereby for hydroelectric power plants the price limit will be 40% of this reference price.

For electricity trading companies, on the other hand:

- for energy sold to final consumers, the price limit is the product of the volume-weighted average price of electricity purchased on a given day and a margin defined as 1.035 or 1.03 (plus the unit cost of redemption of certificates of origin),
- for energy sold to customers other than final consumers, the price limit is the product of the volume-weighted average price of energy purchased on a given day and the margin defined as 1.015 or 1.01.

From January 1, 2023 onwards, trading companies will calculate the amount of the contribution to the Fund for the calendar month to which the settlement relates, taking into account the volume of electricity sales, the

market price and the price cap for periods of 3 decades of that month, i.e. from the 1st to the 10th, from the 11th to the 20th and from the 21st to the last day of the month. Until December 31, 2022, the Fund contributions were calculated separately for each day of the month.

The above regulations had the following impact on the values presented in the consolidated financial statements of the PGE Capital Group:

- PDP Fund contribution for the first half of 2023 (including correction for 2022) amounted to PLN 3 646 million (decreasing financial result).
- revenues from compensation for the first half of 2023 amounted to PLN 3 760 million.

The above figures for reduction in revenue and compensation payable are estimates determined to the best knowledge available to PGE Group at the date of this report.

On September 1, 2023, an amendment to the Act on Extraordinary Measures in 2023 came into force. It determines the rules for paying contributions to the PDP Fund introduced by the Act amending the Energy Law and certain other acts of July 28, 2023.

The amendment concerns, among other things, the extension of the catalogue of revenue items that constitute the basis for calculating the contribution to the PDP Fund. As a result, the amount of contributions transferred by the PGE Capital Group will increase.

In addition, according to the introduced regulations, the system of contributions to the PDP Fund will not be closed before December 31, 2023. Contributions to the Fund will also have to be transferred in 2024 in the case of sales made in the last weeks of 2023.

At the same time, on September 11, 2023, the regulation of the Ministry of Climate and Environment of September 9, 2023 was published, amending the regulation on the method of shaping and calculating tariffs and the method of settlement in electricity trading and entered into force on September 18, 2023. This regulation reduces electricity bills for household consumers by over PLN 120 on average in 2023, provided that one of the conditions mentioned is met.

As at the date of publication of this report, the impact of the above regulation on the results of the PGE Group is difficult to precisely estimate, as it will depend on the number of recipients meeting the conditions of the regulation.

MARGIN DEPOSITS

In connection with their forward transactions on the power exchange TGE, for which the underlying commodity is electricity and natural gas, PGE Group companies are required to put up margin deposits, which constitutes the basic element of the clearing guarantee system for forward markets. The margins are lodged by entities opening positions in futures contracts and their task is to secure the risk related to cleared futures and forward transactions.

Collateral margins are composed of the initial margin and the variation margin.

The clearinghouse Izba Rozliczeniowa Giełd Towarowych S.A. (IRGiT) determines the required value of the collateral margin as a sum of the initial margin and the variation margin.

The variation margin is responsible for the on-going alignment of the portfolio value with market values, can take positive (surplus) as well as negative values (margin requirement) and is subject to daily updates. The clearinghouse accepts both monetary and non-monetary collateral - bank guarantees, CO₂, property rights, sureties and declaration of submission to enforcement in the form of a notarial deed in accordance with Art. 777 of the Civil Code.

In addition, for PGE Group Companies, the IRGiT applies mutual netting of initial and variation margins within the Netting Group, which has the effect of reducing the value of required security deposits.

In the first half of 2023 compared to 2022 the amount of collateral deposits significantly decreased as a consequence of the stabilisation of energy prices and the abolition of the 100% exchange trading obligation from December 6, 2022.

From September 1, 2022, the IRGIT introduced updates to the order and amount of recognition of non-monetary collateral to cover the required security deposits. The updated IRGIT rules set the maximum amount of security to be provided in the form of a declaration of submission to execution in the form of a notarial deed pursuant to art. 777 of the Civil Code up to 90% of the value of the required security deposits. The remaining 10% of the value of the required security deposits may be covered by up to 90% with bank guarantees and/or property rights and CO₂ recognised by IRGIT, with at least 10% covered by cash.

The PGE Group has the ability to make forward transactions on ICE Endex of the Intercontinental Exchange Inc. (ICE) and on the European Energy Exchange AG, for which the underlying instrument are CO₂ emission allowances. Margin deposits are required to secure open positions in futures contracts. The margins consist of the Initial Margin and Variation Margin, whose function is to cover the difference between the transaction price of a concluded contract and its market valuation based on the settlement price on a daily basis. For a long position, a fall in the current day's clearing prices compared to the previous day's clearing prices means the necessity to make Variation Margin deposits, while an increase in prices compared to the previous day means that you will receive a Variation Margin.

The PGE Group makes settlements related to CO₂ trading on an ongoing basis.

[IMPAIRMENT TESTS FOR PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE ASSETS, RIGHTS TO USE ASSETS AND GOODWILL](#)

Property, plant and equipment constitute the most important part of the PGE Capital Group's assets. In view of its changing macroeconomic environment, the PGE Capital Group periodically reviews circumstances indicating a loss of the recoverable value of its assets. In its evaluation of the market situation, the PGE Capital Group uses both its own analytical tools and support provided by independent consulting entities. In previous reporting periods, the PGE Capital Group made significant impairment write-downs on property, plant and equipment in the Conventional Generation, District Heating and Renewables segments. The impairment write-down relating to the Renewables segment was also wholly reversed.

In the current reporting period, the Group analysed the circumstances and identified factors that could have significantly contributed to a change in the value of fixed assets held.

Results of the tests are described in Note 3 to the consolidated financial statements.

[NUCLEAR POWER PLANT CONSTRUCTION PROJECT](#)

On October 31, 2022 PGE S.A. signed with Korea Hydro & Nuclear Power Co. Ltd. and ZE PAK S.A. a letter of intent, the aim of which is to start cooperation as part of the strategic Polish-Korean project to build a nuclear power plant in Pałnów. The parties have decided to start the cooperation in order to develop plan for the nuclear power plant based on the Korean technology APR1400, particularly to perform analysis of data regarding geotechnical, seismic and environmental conditions, develop an estimated budget for the preparatory work, construction phase and production phase along with the proposed Project financing model as well as to create an expected Project implementation schedule along with the definition of dates for key milestones.

Pałnów area is indicated in the Energy Policy of Poland until 2040 and in the Polish Nuclear Power Programme as one of four possible locations of nuclear power plant in Poland.

On March 7, 2023 PGE signed with ZE PAK S.A. an initial agreement on setting-up a joint special purpose vehicle (the "SPV") for the nuclear power plant construction project. On April 13, 2023 PGE S.A. and ZE PAK S.A. established a special purpose vehicle PGE PAK Energia Jądrowa S.A. based in Konin that will acquire or subscribe for shares in a company with a task to pursue project of nuclear power plant construction with a potential share of technological partner.

The agreement includes a summary of main terms of parties' cooperation in terms of joint venture intended to participate in implementation of nuclear power plant investment, including determination of corporate governance rules and operations of the SPV and limitations in selling shares of the SPV. PGE S.A. and ZEPAK S.A. will possess equal number of shares in the SPV and corporate rules will be based on the rule of joint control.

At the same time, it is planned that the special purpose vehicle will implement it as part of the next stage of cooperation:

- feasibility study,
- location and environmental studies.

On August 16, 2023, PGE PAK Energia Jądrowa S.A. filed an application with the Ministry of the Economy for the issuance of a fundamental decision for the construction of a nuclear power plant in the Konin region. Obtaining a fundamental decision is necessary to obtain further decisions in the investment process, such as a decision on environmental conditions, a building permit, a construction permit.

The application includes key elements of the proposed power plant: a location, planned total installed capacity – two reactors with a total capacity of 2 800 MW, technology, a planned ownership structure and a description of the planned financing of the investment project.

Current reports of PGE S.A.:

[Signing of a letter of intent regarding a cooperation regarding the development of a nuclear power plant](#)

[Initial agreement on setting up of SPV](#)

[ACQUISITION OF 100% OF THE SHARES IN PKPE HOLDING](#)

The closing of the transaction of the direct acquisition by PGE S.A. of 100% of the shares in PKPE Holding sp. z o.o., and consequently an indirect acquisition of 100% of the shares in PKP Energetyka S.A. and shares in other subsidiaries owned by the company, took place on April 3, 2023. PKPE Holding Sp. z o.o. is a holding company controlling a number of entities the activities of which are concentrated around PKP Energetyka S.A.. The PKP Energetyka Group is distributor and seller of electricity to the traction grid, and additionally provides traction grid maintenance.

The price to be paid at the closing for 100% shares in the company was determined to be PLN 1 913 million on the basis of the enterprise value as at March 31, 2022, and was settled using a locked-box mechanism assumed in the preliminary shares purchase agreement of December 28, 2022 and then was subject to corrections in accordance with the locked-box mechanism.

The final price paid by PGE S.A. to the seller on April 3, 2023 amounted to PLN 1 873 million.

Currently, the companies operate within the structure of the PGE Group in the newly created Railway Energy Services segment.

The acquisition of PKPE Holding Sp. z o.o. was in line with PGE Group's strategy. As a result of the transaction, PGE Group gained access to the distribution grid throughout the whole country.

Current reports of PGE S.A.:

[Signing of the agreement on acquisition of PKP Energetyka S.A.](#)

[SIGNING OF A LOAN AGREEMENT WITH EUROPEAN INVESTMENT BANK](#)

On February 3, 2023 PGE signed a loan agreement with European Investment Bank ("EIB"). The value of the loan agreement amounts to PLN 1.4 billion, the loan will be intended for implementation of the projects in the distribution segment, including MV lines cabling program, connection of new off-takers and generating units as well as installation of smart meters. Investments are planned to be implemented until 2025.

Loan availability period is 24 months from the agreement signing date and the maturity date will be maximum 18 years from the drawing date of the last installment under the agreement. The interest rate will be determined before the payment of the each installment. The agreement does not provide for tangible collaterals. After signing the above mentioned agreement, total nominal value of the financing from EIB amounts to PLN 5.7 billion.

Current report of PGE S.A.:

[Signing of a loan agreement with EIB](#)

SIGNING OF THE AGREEMENT FOR CONSTRUCTION OF THE POWER UNIT IN RYBNIK

On February 9, 2023 Rybnik 2050 sp. z o.o., a subsidiary of PGE, signed an agreement with consortium of: Polimex Mostostal S.A. (consortium leader), Siemens Energy Sp. z o.o. (consortium member), Siemens Energy Global GmbH & Co. KG (consortium member). The subject matter of the agreement is the performance of construction and assembly works and other works by the consortium, in order to build a gas and steam unit in Rybnik with a gross capacity of 882 MWe.

The value of the agreement amounts to PLN 3.0 billion net. In connection with the agreement, a service agreement was also signed with regard to gas turbine for the period of at least 12 years starting from the commissioning date of the unit. The value of the service agreement amounts to PLN 0.8 billion net. Total value of all signed agreements amounts to PLN 3.8 billion net.

Current report of PGE S.A.:

[Signing of the agreement for construction of the power unit in Rybnik](#)

SIGNING OF THE SYNDICATED LOAN

On March 1, 2023 the revolving loan agreement was signed by PGE S.A. with a syndicate consisting of the following banks: Powszechna Kasa Oszczędności Bank Polski S.A., Bank Polska Kasa Opieki S.A., Bank of China (Europe) S.A., Industrial and Commercial Bank of China (Europe) S.A., Alior Bank S.A. and Santander Bank Polska S.A. The subject matter of the agreement includes granting by the banks of the revolving loan of up to PLN 2 330 million. The loan may be utilised for:

- finance the day-to-day operations of PGE S.A. and the Group in particular in line with the long term Group strategy aiming at reduction of emissions and increase of production of electricity from renewable sources;
- finance investment and capital expenditure in connection with the operations of PGE S.A. and the PGE group, other than investments in new carbon assets;
- refinancing of the financial liabilities of PGE and PGE Group.

The final repayment date falls on February 26, 2027. Interest rate of the loan will be calculated on the floating rate based on the relevant WIBOR rate (reference rate) plus margin. The margin may be periodically adjusted depending on the ESG rating assigned to PGE by a specialised agency. According to the provisions of the agreement, PGE undertakes to keep the consolidated net debt to consolidated EBITDA at a level not higher than 4:1 in the case PGE holds investment grade credit rating or at a level not higher than 3.5:1 in the case PGE does not held investment grade credit rating.

The loan is not secured on any of the assets of PGE or of the PGE Group.

Current report of PGE S.A.:

[Signing of the syndicated loan](#)

ENVIRONMENTAL DECISION ON THE TURÓW LIGNITE MINE

On May 31, 2023, the Provincial Administrative Court in Warsaw suspended – pending an analysis of the relevant complaint – the enforceability of the environmental decision on lignite mining for the Turów Mine. The environmental decision sets out the conditions for the implementation of the project: "Continuation of the exploitation of the Turów lignite deposit, carried out in the commune of Bogatynia". The complaint against the

environmental decision was filed by, among others, the Frank Bold Foundation, Greenpeace and the EKO-UNIA Ecological Association.

On June 12, 2023, PGE GiEK S.A. filed a complaint with the Supreme Administrative Court in Warsaw against the decision concerning the Turów Mine and issued by the Provincial Administrative Court on May 31, 2023. This was the company's response to the Provincial Administrative Court's suspension of the enforceability of the environmental decision issued by the General Directorate of Environmental Protection in September 2022.

On July 18, 2023, the Supreme Administrative Court overturned the decision of the Provincial Administrative Court of May 31, 2023 to suspend the enforceability of the environmental decision concerning the Turów Mine. The complaints filed by the General Directorate of Environmental Protection, PGE GiEK S.A. and the National Public Prosecutor's Office were taken into consideration.

On August 31, 2023, the Provincial Administrative Court suspended the proceedings on the environmental decision issued by the General Directorate of Environmental Protection and concerning the Turów Mine until the formal conclusion of the proceedings relating to the application of PGE GiEK S.A. for amending the environmental decision.

[CHANGE OF COMMISSIONING DATE OF CCGT UNITS IN PGE GRYFINO 2050](#)

On July 20, 2023 PGE Gryfino 2050 sp. z o.o. signed an annex to the agreement for construction of two new power units at PGE Gryfino realized by the syndicate of General Electric Global Services GmbH, General Electric International Inc. and Polimex Mostostal S.A.

According to the provisions of the annex the commissioning date of CCGT units is postponed from December 11, 2023 to a date not later than April 30, 2024.

Prolongation of the completion date of the contract is caused by the occurrence of force majeure events. the change of completion date of the contract does not cause a change of the syndicate's remuneration.

Current report of PGE S.A.:

[Change of commissioning date of CCGT units in PGE Gryfino 2050](#)

[OBTAINING THE DECISIONS ON THE PERMIT TO ERECT AND USE ARTIFICIAL ISLANDS](#)

On August 9, 2023 the Company received the decisions of the Minister of Infrastructure on granting of permits to erect and use artificial islands, structures and devices in Polish maritime area (exclusive economic zone) for projects involving construction of offshore wind farms.

Current report of PGE S.A.:

[Obtaining the decisions on the permit to erect and use artificial islands](#)

[ACQUISITION OF ZALESIE WIND FARM \(COMPANY LONGWING POLSKA SP. Z O.O.\)](#)

On September 20, 2023, PGE Energia Odnawialna S.A. purchased 100% of shares in Longwing Polska sp. z o.o., which owns the Zalesie wind farm with a capacity of 24.9 MW, located in the Warmian-Masurian Voivodeship. The new investment can provide electricity for almost 38 000 households.

5.2. Significant changes in organisation of the Capital Group

Changes which occurred in the PGE Capital Group's structure in the period from January 1, 2023 until the publication date of this report, are presented in note 1.3 to consolidated financial statements and described below.

ESTABLISHMENT OF COMPANIES

Segment	Entity	Date of establishment/ registration in the National Court Register (NCR)	Comment
Other operations	PGE PAK Energia Jądrowa S.A.	April 13, 2023/ May 22, 2023	On April 13, 2023 PGE S.A. and ZE PAK S.A. (ZE PAK) established a capital company with its registered office in Konin in the form of a joint-stock company with the following name: PGE PAK Energia Jądrowa S.A. PGE S.A. and ZE PAK each hold 50% of shares in the share capital of the established company. The share capital of this company is PLN 10 000 000.

ACQUISITION OR DISPOSAL OF SHARES BY THE COMPANIES

Segment	Shares of the company	Date of transaction/ registration in the NCR	Comment
District Heating	EC Zielona Góra S.A. – compulsory buyout of shares of EC Zielona Góra from the minority shareholders by KOGENERACJA S.A. as a shareholder of EC Zielona Góra	March 1, 2021/ On April 25, 2023 the ownership title was transferred.	On March 1, 2021 the Extraordinary General Meeting of EC Zielona Góra adopted a resolution on compulsory buyout of 8 849 shares hold by the minority shareholders, representing a total of 1.6% of the share capital of EC Zielona Góra. On April 25, 2023, the above-mentioned 8,849 shares were transferred to KOGENERACJA., by making an appropriate entry in the register of shareholders of EC Zielona Góra. In connection with the above, as of April 25, 2023, KOGENERACJA S.A. became the only shareholder holding 100% of the shares of EC Zielona Góra.
Circular Economy	EPORE S.A. (EPORE) – sale by PGE GiEK S.A. of all possessed shares in EPORE to PGE Ekoserwis S.A. (share sale agreement)	December 23, 2022/ On January 10, 2023 a change was made in the register of shareholders.	On December 23, 2022 PGE GiEK S.A. as a seller and PGE Ekoserwis S.A. as a buyer signed share sale agreement concerning all possessed shares in EPORE, i.e. 63 963 shares, with a total nominal value of PLN 31 981 500, representing 100% in the share capital.
-	ElectroMobility Poland S.A. (ElectroMobility Poland) - share capital increase of	December 28, 2022/ January 16, 2023	On December 28, 2022 the Extraordinary General Meeting of ElectroMobility Poland adopted a resolution on increasing the share capital of the company, by private placement of 50 748 series C shares with a nominal value of PLN 4 926.29 each. The Extraordinary General Meeting of the

Segment	Shares of the company	Date of transaction/ registration in the NCR	Comment
	ElectroMobility Poland and acquisition of all new shares by the State Treasury		company decided to offer all new shares to be acquired by the State Treasury in exchange for a cash contribution. As a result of acquisition by the State Treasury of new shares, share of PGE S.A. in the share capital of this company decreased from 4.33% to 2.30%.
Railway Energy Services	PKPE Holding sp. z o.o. with seat in Warsaw (PKPE Holding) – acquisition by PGE S.A. from Edison Holdings S.à r.l. of all shares in PKPE Holding, owning inter alia 100% shares in PKP Energetyka.	December 28, 2022 On April 3, 2023 the ownership title was transferred.	On December 28, 2022 PGE S.A. as a buyer and Edison Holdings S.à r.l. as a seller signed preliminary agreement regarding the acquisition of the shares in PKPE Holding (currently: PGE Energetyka Kolejowa Holding sp. z o.o.). As a result PGE S.A. and Edison Holdings S.à r.l. committed to conclude a promised agreement for the sale of 100% of the shares in PKPE Holding. On April 3, 2023, after meeting certain conditions precedent, PGE S.A. acquired directly 100% of shares in PKPE Holding and indirectly 100% of shares in PKP Energetyka S.A. (currently PGE Energetyka Kolejowa S.A.) and shares in other subsidiaries held by PKPE Holding.
-	Energopomiar sp. z o.o. (Energopomiar) – sale by PGE S.A. and PGE Energia Ciepła S.A. of all possessed shares in Energopomiar to PGE GiEK S.A.	On January 4, 2023 the ownership title was transferred.	On January 4, 2023 PGE S.A. and PGE Energia Ciepła S.A. as sellers and PGE GiEK S.A. as a buyer signed share sale agreement regarding all shares in Energopomiar, i.e. 1 share each in this company, with a nominal value of PLN 1 007 774.28 in case of the share owned by PGE S.A. and with a nominal value of PLN 418 288.40 in case of the share owned by PGE Energia Ciepła S.A., jointly representing 26.48% in the share capital. As a result of the concluded share sale agreement, PGE S.A. and PGE Energia Ciepła S.A. ceased to be partners of Energopomiar, and PGE GiEK currently holds shares constituting in total 49.79% share in Energopomiar.
-	4Mobility S.A. – sale by PGE Nowa Energia sp. z o.o. in liquidation of all possessed shares in 4Mobility S.A. to CetusMobility sp. z o.o.	June 15, 2023 On June 22, 2023 the ownership title was transferred.	On June 15, 2023 PGE Nowa Energia sp. z o.o. in liquidation as a seller and CetusMobility sp. z o.o. as a buyer signed signed share sale agreement concerning all possessed shares in 4Mobility S.A., i.e. 1 875 000 shares of this company, with a total nominal value of PLN 187 500, representing 37.93% in the share capital. As a result of the signed agreement PGE Nowa Energia sp. z o.o. in liquidation ceased to be a shareholder of 4Mobility.
Other Operations	Siechnice Nowa Energia sp. z o.o. - acquisition by KOGENERACJA S.A. from Siechnice Commune 50% of shares in the share capital.	On August 29, 2023 the ownership title was transferred.	On August 29, 2023 KOGENERACJA S.A. as a buyer and Siechnice Commune as a seller signed agreement for sale of shares of Siechnice Nowa Energia sp. z o.o., i.e. 50 shares with a total nominal value of PLN 2 500, representing 50% in the share capital of the company. As a result of the above sales transaction, KOGENERACJA S.A. and the Siechnice Commune currently hold 50% of the shares in the share capital of Siechnice Nowa Energia.
Renewables	Longwing Polska sp. z o.o. - acquisition by PGE Energia Odnawialna S.A. from SOLAR ENERGY RESSOURCES S.À R.L. and SER WINDPARK ZALESIE GMBH 100% of shares in the share capital.	On September 20, 2023 the ownership title was transferred to PGE Energia Odnawialna S.A.	On September 20, 2023 PGE Energia Odnawialna S.A. as a buyer and SOLAR ENERGY RESSOURCES S.À R.L. and SER WINDPARK ZALESIE GMBH as sellers, signed agreement for sale of 100% shares in the share capital of Longwing Polska sp. z o.o., i.e. shares with a total nominal value of PLN 50 000.

MERGERS

Segment	Acquiring company/acquired company	Date of transaction/ registration in the National Court Register	Comment
Renewables	PGE Energia Odnawialna S.A. /Mithra B sp. z o.o. with seat in Warsaw	June 7, 2023/ June 30, 2023 (merger date)	On June 7, 2023 the Extraordinary General Meetings of PGE Energia Odnawialna S.A. and Mithra B sp. z o.o. adopted resolutions on the merger through acquisition, through transferring of all assets of the acquired company to the acquiring company without issue of new shares in exchange for the shares in the share capital of the acquired company and dissolution of the acquired company without its liquidation. PGE Energia Odnawialna S.A. was the sole shareholder of the acquired company.
Renewables	PGE Energia Odnawialna S.A. / PGE Soleo 3 sp. z o.o. and PGE Klaster sp. z o.o. with seats in Warsaw	June 7, 2023/ June 30, 2023 (merger date)	On June 7, 2023 the Extraordinary General Meetings of PGE Energia Odnawialna S.A. and PGE Soleo 3 sp. z o.o. and PGE Klaster sp. z o.o. adopted resolutions on the merger through acquisition, through transferring of all assets of the acquired companies to the acquiring company without issue of new shares in exchange for the shares in the share capital of the acquired companies and dissolution of the acquired companies without their liquidation. PGE Energia Odnawialna S.A. was the sole shareholder of the acquired companies.

LIQUIDATION OF COMPANIES

Segment	Company in liquidation	Date of transaction/ registration in the National Court Register	Comment
Supply	PGE Trading GmbH in liquidation with seat in Berlin ("PGE Trading")	March 1, 2021 As of June 30, 2023, PGE Trading has not been removed from the commercial register	On March 1, 2021 the Extraordinary Assembly of Partners of PGE Trading, in which PGE holds 100% of the share capital, adopted resolution on dissolution of PGE Trading and appointment of a liquidator to carry out liquidation activities of PGE Trading.
Other Operations	PGE Nowa Energia sp. z o.o. in liquidation	March 31, 2022 As of June 30, 2023, the company has not been removed from the register of entrepreneurs of the National Court Register	On March 31, 2022 the Extraordinary Assembly of Partners of PGE Nowa Energia sp. z o.o. in liquidation, in which PGE holds 100% of the share capital, adopted resolution on dissolution of the company and appointment of a liquidator to carry out liquidation activities.

5.4. Changes in the Management Board and in the Supervisory Board

MANAGEMENT BOARD MEMBERS

As at 1 January 2023, the Management Board of the Company was composed as follows:

Name and surname of the Management Board	Position	
Wojciech Dąbrowski	President of the Management Board	from February 20, 2020
Wanda Buk	Vice-President for Regulatory Affairs	from September 1, 2020
Lechosław Rojewski	Vice-President for Finance	from June 9, 2021
Paweł Śliwa	Vice-President for Innovations	from February 20, 2020
Ryszard Wasilek	Vice-President for Operations	from February 20, 2020

On January 4, 2023, as a result of the qualification procedure, the Supervisory Board adopted Resolution No. 107/XII/2023 on the appointment of Mr. Rafał Włodarski to the Management Board of PGE S.A., entrusting the function of Vice President of the Management Board for Support and Development with effect from January 9, 2023.

On March 28, 2023 Mr. Ryszard Wasilek submitted his decision to stand down from the position of the Company's Vice-President of the Management Board for Operations, effective April 30, 2023.

On April 19, 2023, as a result of the qualification procedure, the Supervisory Board adopted resolution on the appointment of Mr. Przemysław Kołodziejak to the Management Board of PGE S.A. entrusting the function of Vice-President of the Management Board for Operations as of May 1, 2023.

As at the date of publication of this report, the Company's Management Board is composed of the following members:

- Wojciech Dąbrowski – President of the Management Board
- Wanda Buk – Vice-President for Regulatory Affairs
- Przemysław Kołodziejak – Vice-President for Operations
- Lechosław Rojewski – Vice-President for Finance
- Paweł Śliwa – Vice-President for Innovations
- Rafał Włodarski – Vice-President for Support and Development

SUPERVISORY BOARD MEMBERS

As at January 1, 2023, the Company's Supervisory Board was composed of:

Name and surname of the Supervisory Board	Position
Anna Kowalik	Chairman of the Supervisory Board
Artur Składanek	Vice-Chairman of the Supervisory Board – independent
Radosław Winiarski	Secretary of the Supervisory Board
Janina Goss	Supervisory Board Member - independent
Zbigniew Gryglas	Supervisory Board Member - independent
Tomasz Hapunowicz	Supervisory Board Member - independent
Marcin Kowalczyk	Supervisory Board Member
Mieczysław Sawaryn	Supervisory Board Member - independent

On February 9, 2023, the Company received the resignation of Mr Marcin Kowalczyk from membership in the Supervisory Board of PGE S.A. effective February 9, 2023.

On April 28, 2023, the Ordinary General Meeting of PGE S.A. appointed Mr. Cezary Falkiewicz to the Supervisory Board.

As at the date of publication of this report, the Company's Supervisory Board operates in the following composition:

- Anna Kowalik - Chairman of the Supervisory Board
- Artur Składanek - Vice-Chairman of the Supervisory Board
- Radosław Winiarski - Secretary of the Supervisory Board
- Cezary Falkiewicz - Supervisory Board Member
- Janina Goss - Supervisory Board Member
- Zbigniew Gryglas - Supervisory Board Member
- Tomasz Hapunowicz - Supervisory Board Member
- Mieczysław Sawaryn - Supervisory Board Member

As at January 1, 2023, the standing committees of the Supervisory Board functioned in following composition:

Name and surname of the member of the Supervisory Board	Audit Committee	Corporate Governance Committee	Strategy and Development Committee	Appointment and Remuneration Committee
Janina Goss	Member			Member
Zbigniew Gryglas		Member	Member	
Tomasz Hapunowicz		Chairman	Member	
Marcin Kowalczyk			Member	Member
Anna Kowalik	Member	Member	Member	Member
Mieczysław Sawaryn	Member	Member	Member	Chairman
Artur Składanek	Chairman		Member	
Radosław Winiarski	Member		Chairman	

On February 9, 2023, the Company received the resignation of Mr Marcin Kowalczyk from membership in the Supervisory Board of PGE S.A. effective February 9, 2023.

On June 6, 2023, the Supervisory Board of PGE S.A. by resolution No. 162/XII/2023 appointed Mr. Cezary Falkiewicz to the Committees: Appointment and Remuneration Committee, Strategy and Development Committee and Audit Committee.

As at the date of publication of this report, the permanent committees of the Supervisory Board operate in the following compositions:

Name and surname of the member of the Supervisory Board	Audit Committee	Corporate Governance Committee	Strategy and Development Committee	Appointment and Remuneration Committee
Cezary Falkiewicz	Member		Member	Member
Janina Goss	Member			Member
Zbigniew Gryglas		Member	Member	
Tomasz Hapunowicz		Chairman	Member	
Anna Kowalik	Member	Member	Member	Member

Mieczysław Sawaryn	Member	Member	Member	Chairman
Artur Składanek	Chairman		Member	
Radosław Winiarski	Member		Chairman	

5.5. Information about shares and other securities

SHAREHOLDERS WITH A SIGNIFICANT STAKE

Table: Shareholders holding directly or indirectly by subsidiaries at least 5% of the total votes at the General Meeting of PGE S.A. as at the publication date of this report:

Shareholder	Number of shares	Number of votes	% in total votes on General Meeting
State Treasury	1 365 601 493	1 365 601 493	60.86%
State Treasury's subsidiary – TF Silesia sp. z o.o.	18 697 608	18 697 608	0.84%
State Treasury and its subsidiary - total	1 384 299 101	1 384 299 101	61.70%
Others	859 413 893	859 413 893	38.30%
Total	2 243 712 994	2 243 712 994	100.00%

TREASURY SHARES

As at June 30, 2023 PGE S.A. and subsidiaries did not hold any treasury shares.

SHARES OF THE PARENT COMPANY OWNED BY THE MEMBERS OF MANAGEMENT AND SUPERVISORY AUTHORITIES

According to the best knowledge of the Management Board of the Company, none of the members of management and supervisory authorities of the Company held shares of the parent company or shares in entities related to PGE S.A at June 30, 2023.

5.6. Publication of financial forecasts

PGE S.A. did not publish financial forecasts.

5.7. Significant off-balance sheet items

Significant off-balance sheet items are described in notes 11 and 24 to the consolidated financial statements.

5.8. Branches of the Company

The company has a Branch of the Center for Knowledge and Development of the PGE Group with its registered office in Lublin.

6. Statement of the Management Board on the reliable preparation of the financial statements

To the best knowledge of the Management Board of PGE S.A., the half-yearly financial report, containing interim condensed consolidated financial statements of PGE Capital Group, interim condensed standalone financial statements for PGE S.A. and comparative data were prepared in accordance with the governing accounting principles, present a fair, true and reliable view of the material and financial situation of PGE Capital Group and its financial result.

The report of the Management Board on the activities of PGE Capital Group presents a true view of the development, achievements and situation of the Capital Group.

7. Statement on the entity authorised to audit the financial statements

The Management Board of PGE S.A. declares that the auditing company, which reviews the interim consolidated financial statements and interim condensed standalone financial statements for PGE S.A., was appointed in accordance with provisions of the law. The entity and the statutory auditors, who performed the review, fulfilled all the requirements for issuing an unbiased and independent report on the review, in accordance with the governing provisions and professional standards.

8. Approval of the Management Board's Report

The foregoing Management Board's Report on activities of PGE Capital Group was approved for publication by the Management Board of the parent company on September 26, 2023.

Warsaw, September 26, 2023

Signatures of members of the Management Board of PGE Polska Grupa Energetyczna S.A.

**President
of the
Management
Board**

Wojciech Dąbrowski

**Vice-
President
of the
Management
Board**

Wanda Buk

**Vice-
President
of the
Management
Board**

**Przemysław
Kołodziejak**

**Vice-
President
of the
Management
Board**

Lechosław Rojewski

**Vice-
President
of the
Management
Board**

Paweł Śliwa

**Vice-
President
of the
Management
Board**

Rafał Włodarski

Glossary

Ancillary control services (ACS)	services provided to the transmission system operator, which are indispensable for the proper functioning of the National Power System and ensure the keeping of required reliability and quality standards.
Achievable capacity	the maximum sustained capacity of a generating unit or generator, maintained continuously by a thermal generator for at least 15 hours or by a hydroelectric generator for at least five hours, at standardized operating conditions, as confirmed by tests.
ARA	USD hard coal price index in EU. Loco in harbours Amsterdam-Rotterdam-Antwerp
Balancing market	a technical platform for balancing electricity supply and demand on the market. The differences between the planned (announced supply schedules) and the actually delivered/off-taken volumes of electricity are settled here. The purpose of the balancing market is to balance transactions concluded between individual market participants and actual electricity demand. The participants of the balancing market can be the generators, customers for electricity understood as entities connected to a network located in the balancing market area (including off-takers and network customers), trading companies, electricity exchanges and the TSO as the balancing company.
Base, baseload	standard product on the electricity market: a constant hourly power supply per day in a given period, for example week, month, quarter or year.
BAT	Best Available Technology
Best Practices	Documents „Best Practice for WSE Listed Companies 2016” adopted by the resolution of the WSE Supervisory Board of October 13, 2015 and effective from January 1, 2016 until June 30, 2021 and „Best Practice for WSE Listed Companies 2016 2021” adopted by the resolution of the WSE Supervisory Board of March 29, 2021 and effective from July 1, 2021.
Biomass	solid or liquid substances of plant or animal origin, subject to biodegradation, obtained from agricultural or forestry products, waste and remains or industries processing their products as well as certain other biodegradable waste in particular agricultural raw materials.
Black energy	popular name for energy generated as a result of combustion of black coal or lignite.
CCGT	Combined Cycle Gas Turbine
Circular economy	system that minimises the consumption of resources and the level of waste as well as emissions and energy losses by creating a closed loop of processes in which waste from one process is used as resources in other processes so as to maximally reduce the quantity of production waste
Co-combustion	the generation of electricity or heat based on a process of combined, simultaneous combustion in one device of biomass or biogas together with other fuels; part of the energy thus generated can be deemed to be energy generated with the use of renewable sources.
Co-generation	the simultaneous generation of heat and electricity or mechanical energy in the course of one and the same technological process.
Constrained generation	the generation of electricity to ensure the quality and reliability of the national power system; this applies to generating units in which generation must continue due to the technical limitations of the operation of the power system and the necessity of ensuring its adequate reliability.
CVC fund	Corporate Venture Capital; in the CVC model, portfolio companies, aside from financial support, receive the opportunity to verify their ideas in a corporate setting
Distribution	transport of energy through distribution grid of high (110 kV), medium (15kV) and low (400V) voltage in order to supply the customers.
Distribution System	a power company engaging in the distribution of gaseous fuels or electricity, responsible for traffic in the gas or electricity distribution systems, current and long-term security of operation of the system, the operation, maintenance, repairs and

Operator (DSO)	indispensable expansion of the distribution network, including connections to other gas or power systems.
Energy cluster	civil-law arrangement that may include natural persons, legal entities, scientific units, research institutes or local government units, concerning the generation, distribution or trade in energy and energy demand balancing, with this energy being from renewable sources or other sources or fuels, within a distribution grid with nominal voltage below 110 kV, within the operational area of the given cluster, not exceeding the area of one district (powiat) in the meaning of the act on district authorities) or 5 municipalities (gmina) in the meaning of the act on municipal authorities; an energy cluster is represented by a coordinator, which is a cooperative, association, foundation appointed for this purpose or any member of the energy cluster indicated in the civil-law arrangement
ERO	Energy Regulatory Office (pol. URE).
EUA	European Union Allowances: transferable CO ₂ emission allowances; one EUA allows an operator to release one tonne of CO ₂ .
EU ETS	European Union Greenhouse Gas Emission Trading Scheme) EU emission trading scheme. Its operating rules are set out in the ETS Directive, amended by the Directive 2009/29/EC of the European Parliament and of the Council of April 23, 2009 (OJ EU L. of 2009, No. 140, p. 63–87).
EV	Electric vehicle
FIT/FIP	Feed-in-Tariff (FIT) and Feed-in-Premium (FIP): system of subsidies to the market price of electricity performed by Zarządca Rozliczeń S.A.
Generating unit	a technically and commercially defined set of equipment belonging to a power company and used to generate electricity or heat and to transmit power.
GJ	Gigajoule, a unit of work/heat in the SI system, 1 GJ = 1000/3.6 kWh = approximately 278 kWh.
GPZ	main power supply point, a type of transformer station used for the processing or distribution of electricity or solely for the distribution of electricity.
Green certificate	popular name for energy generated from renewable energy sources.
GW	gigawatt, a unit of capacity in the SI system, 1 GW = 10 ⁹ W.
GWe	one gigawatt of electric capacity.
GWt	one gigawatt of heat capacity.
HCl	hydrogen chloride.
Hg	mercury.
HICP	Harmonised Index of Consumer Prices
High Voltage Network (HV)	a network with a nominal voltage of 110 kV.
IED	Industrial Emissions Directive
IGCC	Integrated Gasification Combined Cycle.
Installed capacity	the formal value of active power recorded in the design documentation of a generating system as being the maximum achievable capacity of that system, confirmed by the acceptance protocols of that system (a historical value, it does not change over time.
IRGiT	Izba Rozliczeniowa Giełd Towarowych S.A. (commodities clearing house)
IRZ	Cold Intervention Reserve Service – service consisting of maintaining power units ready for energy production. Energy is produced on request of PSE S.A.
ITRE	European Parliament Committee on Industry, Research and Energy
KRI	Key Risk Indicator
KSE	the National Power System, a set of equipment for the distribution, transmission and generation of electricity, forming a system to allow the supply of electricity in the territory of Poland.
KSP	the National Transmission System, a set of equipment for the transmission of electricity in the territory of Poland.

kV	kilo volt, an SI unit of electric potential difference, current and electromotive force; 1kV= 103 V.
kWh	kilowatt-hour, a unit of electric energy in the SI system defined as the volume of electricity used by the 1 kW equipment over one hour. 1 kWh = 3,600,000 J = 3.6 MJ.
kWp	a power unit dedicated to determining the power of photovoltaic panels, means the amount of electricity in the peak of production.
Low Voltage Network (LV)	a network with a nominal voltage not exceeding 1 kV.
LTC	long-term contracts on the purchase of capacity and electricity entered into between Polskie Sieci Elektroenergetyczne S.A. and electricity generators in the years 1994-2001.
Medium-voltage network (MV)	an energy network with a nominal voltage higher than 1 kV but lower than 110 kV.
MEV	Minimum Energy Volumes.
MSR	Market Stability Reserve (relating to CO ₂)
MW	a unit of capacity in the SI system, 1 MW = 10 ⁶ W.
MWe	one megawatt of electric power.
MWt	one megawatt of heat power.
NAP	National emissions Allocation Plan, prepared separately for the national emission trading system and for the EU emission trading system by the National Administrator of the Emission Trading System.
NAP II	National CO ₂ emissions Allocation Plan for the years 2008-2012 prepared for the EU emission trading system adopted by the Ordinance of Ministers of July 1, 2008 (Dz. U. of 2008, No. 202, item 1248).
NH ₃	ammonia
Nm ³	normal cubic meter; a unit of volume from outside the SI system signifying the quantity of dry gas in 1 m ³ of space at a pressure of 101.325 Pa and a temperature of 0°C.
NO _x	nitrogen oxides.
N:W ratio	Ration of volume of overburden removed in m ³ to the mass of extracted coal in tons
OTF	Organised Trading Facilities
Operational Capacity Reserve (ORM)	ORM constitutes of generation capacities of active Production Scheduling Units (JGWa) in operation or layover, representing excess capacity over electricity demand available to the TSO under the Energy Sale Agreements and on the Balancing Market in unforced generation
Peak, peakload	a standard product on the electricity market; a constant power supply from Monday to Friday, each hour between 7:00 a.m. and 10:00 p.m. (15-hour standard for the Polish market) or between 8:00 a.m. and 8:00 p.m. (12-hour standard for the German market) in a given period, for example week, month, quarter or year.
Peak power pumped storage plants	special type of hydro-power plant allowing for electricity storage. It uses the upper reservoir, to which water is pumped from the lower reservoir using electricity (usually excessive in system). The pumped storage facilities provide ancillary control services for the national power system. In periods of increased demand for electricity, water from the upper reservoir is released through the turbine. This way, electricity is produced.
PJ	Petajoule, a unit of work/heat in the SI system, 1 PJ = approx. 278 GWh
Property rights	negotiable exchange-traded rights under green and co-generation certificates

Prosumer	end customer who purchases electricity under a comprehensive agreement and generates electricity only from renewable sources at a micro-installations for own purposes, unrelated to economic activities
PSCMI1	Polish Steam Coal Market Index 1 - average level of prices of coal dust sold to industrial-scale power plants in Poland
RAB	Regulatory Asset Base.
Red certificate	a certificate confirming generation of electricity in co-generation with heat.
Red energy	popular name for electricity co-generated with heat.
Regulator	the President of ERO, fulfilling the tasks assigned to him in the energy law. The regulator is responsible for, among others, giving out licenses for energy companies, approval of tariffs for energy companies, appointing Transmission System Operators and Distribution System Operators.
Renewable Energy Source (RES)	a source of generation using wind power, solar radiation, geothermal energy, waves, sea currents and tides, flow of rivers and energy obtained from biomass, landfill biogas as well as biogas generated in sewage collection or treatment processes or the disintegration of stored plant or animal remains.
RIG	Readiness Interventional Reserve - the power plant's readiness to provide the active power generation service or its consumption at the request of PSE.
SCR	Selective catalytic reduction
SNCR	Selective non-catalytic reduction
Start-up	early-stage company established in order to build new products or services and characterised by a high level of uncertainty. The most common features of start-ups are: short operational history (up to 10 years), innovativeness, scalability, higher risk than in the case of traditional businesses but also potential higher returns on investment
Tariff	the list of prices and rates and terms of application of the same, devised by an energy enterprise and introduced as binding on the customers specified therein in the manner defined by an act of parliament.
Tariff group	a group of customers off-taking electricity or heat or using services related to electricity or heat supply to whom a single set of prices or charges and terms are applied.
TGE	Towarowa Gielda Energii S.A. (Polish Power Exchange), a commodity exchange on which trading can take place in electricity, liquid or gas fuels, extraction gas, emission allowances and property rights whose price depends directly or indirectly on electric energy, liquid or gas fuels and emission allowances, admitted to commodity exchange trading.
TPA, TPA rule	Third Party Access, the owner or operator of the network infrastructure to third parties in order to supply goods/services to third party customers.
Transmission of electricity	transport of electricity through high voltage (220 and 400 kV) transmission network from generators to distributors.
Transmission System Operator (TSO)	a power company engaging in the transmission of gaseous fuels or electric energy, responsible for traffic in a gas or power transmission system, current and long-term security of operation of that system, the operation, maintenance, repair and indispensable expansion of the transmission system, including connections with other gas or power systems. In Poland, for the period from July 2, 2014 till December 31, 2030 Polskie Sieci Elektroenergetyczne S.A. was chosen as a TSO in the field of electricity transmission.
TWh	terawatt hour, a multiple unit for measuring of electricity unit in the system SI. 1 TWh is 10^9 kWh.
Ultra-high-voltage network (UHV)	an energy network with a voltage equal to 220 kV or higher.
V (volt)	electrical potential unit, electric voltage and electromotive force in the International System of Units (SI), $1 \text{ V} = 1\text{J}/1\text{C} = (1 \text{ kg} \times \text{m}^2) / (\text{A} \times \text{s}^3)$.
W (watt)	a unit of power in the International Systems of Units (SI), $1 \text{ W} = 1\text{J}/1\text{s} = 1 \text{ kg} \times \text{m}^2 \times \text{s}^{-3}$.

Yellow certificate	a certificate confirming generation of energy in gas-fired power plants and CCGT power plants.
Yellow energy	popular name for energy generated in gas-fired power plants and CCGT power plants.
ZHZW	Commercial Management of Generation Capacities.
