# Non-financial statement of PGE Polska Grupa Energetyczna SA and PGE Group for 2020

ended December 31, 2020

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# LETTER FROM THE PRESIDENT OF THE MANAGEMENT BOARD OF PGE POLSKA GRUPA ENERGETYCZNA SA

| GRI 102-14 | GRI 102-12 | GC-7 | GC-8 | GC-9 |

Ladies and Gentlemen,

In 2020, the business sector operated in difficult pandemic conditions. Ensuring Poland's energy security, but also providing safe working conditions for our employees, largely depended on the efficiency of our actions. We also did not forget those who needed help the most during the pandemic.

Already in the first month of the pandemic, we provided financial support to 17 hospitals. This assistance continued throughout the year. In total, in 2020 we donated PLN 6.7 million for activities related to the fight against COVID-19. The PGE Group also joined in the support of local entrepreneurs by initiating the nationwide social campaign “Polish – I buy it!”. But first and foremost, we passed the exam in responsibility for Poland's energy security. Every day our employees approached and continue to approach their duties with great responsibility and commitment. All this so that our workplaces, schools, hospitals and, above all, homes do not run out of electricity and heat necessary for everyday life.

At the same time, we made decisions relating to the implementation of the sustainable energy transition. In October 2020, we announced the new business strategy of the PGE Group. Our goal is climate neutrality in 2050 and 100% of green energy for our customers. We are beginning the transformation of the regions traditionally associated with lignite mining and conventional power generation. We have prepared a concept of transformation of the Bełchatów region, as well as a number of transformation projects for the Turów region. The transformation process for both regions is based on investments in renewable energy sources. Its important element is also a comprehensive retraining programme aimed at providing PGE Group employees with new skills and qualifications related to the development of low- and zero-carbon power generation technologies.

The market confirms that we are fulfilling our commitments and obligations. In the 2020 edition of the Ranking of Responsible Companies, the PGE Group was classified, for the third time in a row, as the leader of responsible business in the fuels, power generation and mining sector. In the general classification, it was ranked the fifth best company in Poland. The PGE Group takes constant effort to pursue each of the 17 United Nations Sustainable Development Goals. The new strategy of the PGE Group indicates four of them as particularly important. These are: Goal 7. Affordable and clean energy; Goal 11. Sustainable cities and communities; Goal 12. Responsible consumption and production and Goal 13. Climate action.

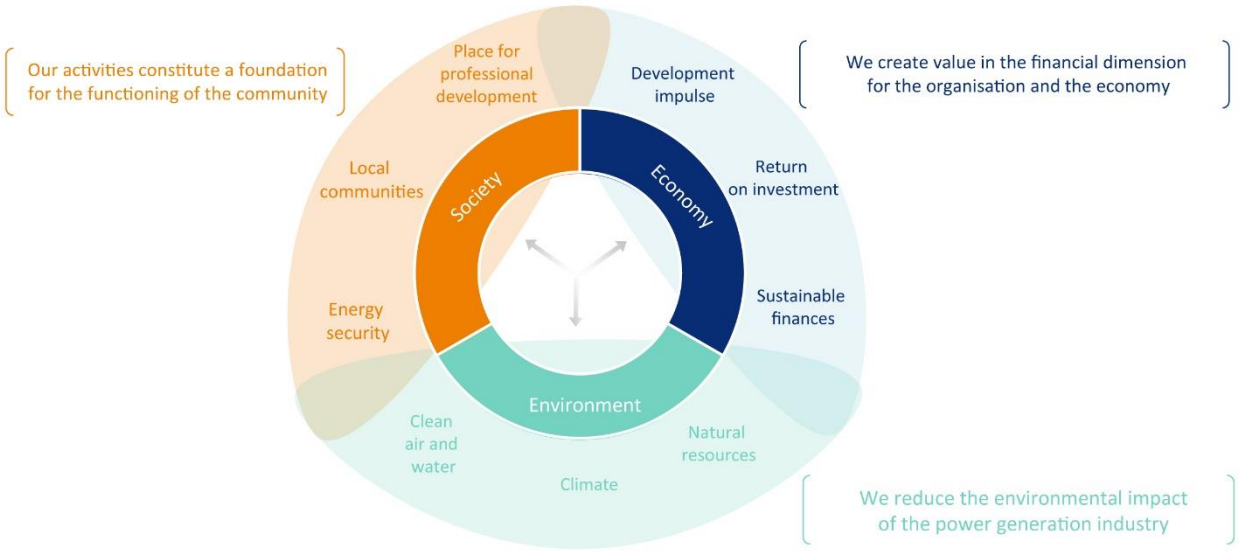
I would like to invite you to become familiar with this report and to thank all PGE Group employees for their involvement in the activities related to the area of Corporate Social Responsibility. Without their commitment, this report would not have been prepared.

Wojciech Dąbrowski
President of the Management Board
PGE Polska Grupa Energetyczna SA

# PGE Group strategy until 2030 with outlook to 2050

Energy transition, decarbonisation of power generation and climate neutrality are the key issues on which the new Strategy of the PGE Group focuses. Developed by the Management Board of PGE Polska Grupa Energetyczna appointed in February 2020, the Strategy was announced on October 19, 2020 and presents a concrete plan for a sustainable transition of the PGE Group towards zero-carbon power generation.

The new business strategy of the PGE Group is a response to the profound changes taking place in the energy sector in recent years and to the expectations of society, which to a large extent determine the directions of development for the whole industry. The PGE Group is the leader of transformation and modernisation of the energy sector in Poland; it supports the development of a market environment conducive to the energy transition. The transformation of the PGE Group will be carried out in a sustainable manner, in dialogue with social partners. PGE is aware of the impact of its operations on the environment – in the social, economic and environmental dimensions. Its activities are oriented towards maximising added value for all stakeholders.




**The sustainable transformation of the PGE Group**

## THE KEY DEVELOPMENT DIRECTIONS AND ACTIVITY REDUCTION AREAS

The PGE Group's key development areas will include offshore and onshore wind energy, photovoltaics, grid infrastructure, low-emission heat generation and modern energy sector services. The area of disinvestment and reduction of activities will include coal and lignite power generation, the nuclear power programme, hard coal trading and support areas outside the core business.

## MISSION AND VISION

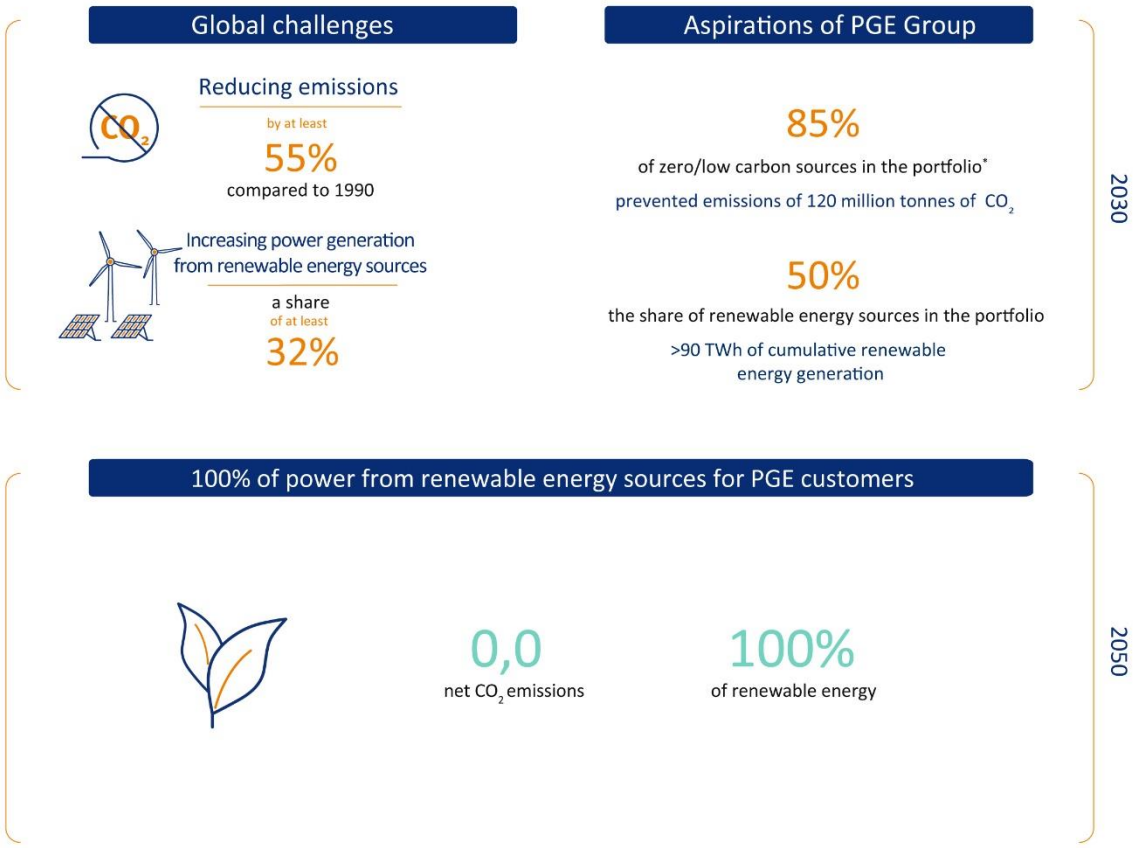
The mission of the PGE Group is to provide energy for a secure future. According to its long-term vision, PGE is to become the leader of sustainable energy transformation in Poland. The Group's vision translates into three strategic priorities:

- environmentally friendly energy generation,
- the provision of modern energy services,
- the efficient and effective functioning of the Group.


**The strategic priorities of the PGE Group**


**The activities of the PGE Group increasing positive environmental impact**

As the transformation leader, the PGE Group aims to reduce its environmental impact. A permanent reduction of emissions is planned through changes in generation technologies, expansion of the RES portfolio and enabling customers to participate in energy transformation thanks to attractive product offers. The share of low- and zero-emission sources in the generation portfolio will have reached 85 percent by 2030, and RES will have accounted for 50 percent of generated energy. By 2050, the PGE Group will have achieved climate neutrality and have supplied 100 percent of green energy to its customers.




**Aspirations of PGE Group**

The PGE Group is ready to carry out sector transformation processes and prepare the conventional base of the power generation system to operate under a new ownership structure. The Group will pioneer the development and operation of offshore wind energy. In 2030, the capacity of wind farms in the Baltic Sea is to reach 2.5 GW; in consequence of the implementation of further projects in new areas, in 2040 PGE will operate offshore wind farms with installed capacity of at least 6.5 GW. At the same time, in the coming years the programme of onshore wind and photovoltaic capacity development will be continued and the planned increase of new capacities is expected to reach over 1 GW and over 3 GW respectively by 2030. In the segment of Heat Generation, the Group plans to transform its system heat sources towards low- and zero-emission ones (by 2030 their share in heat generation is to exceed 70 percent) and simultaneously to promote the connection of individual heat sources to the grid or their replacement with environmentally friendly ones. By 2030, PGE plans to replace over 100,000 heat sources in the individual heat generation sector.

An important role in the energy transition will be played by the implementation of circular economy principles in all areas of the PGE Group's operations, which will contribute to further minimisation of environmental impact.

## MODERN ENERGY SERVICES

The foundation of the energy transformation is the network infrastructure and partnerships with customers. The Distribution segment will improve the energy supply quality parameters (reduction of energy supply interruptions by 8% in large cities and by 50% in other areas by 2025) as well as the efficiency, transparency and cost-effectiveness of connection processes. In order to fully utilise the potential of distributed sources and ensure safe operation of the system, it is necessary to modernise the grid and build energy storage facilities (plans provide for at least 800 MW by 2030). In order to achieve these goals, it is necessary to ensure financial stability and to develop support in the Distribution Systems Operators (DSO) regulatory model to guarantee success in confrontation with these challenges, which should translate into an expected increase in free flows by approximately PLN 0.7bn by 2030. The PGE Group wishes to maintain the highest customer satisfaction level in the market, resulting from the quality and range of energy services offered. The activities planned in this respect include the development of professional energy services and the integration of contact and sales channels. The assumed margin increase in the retail segment will amount to approximately PLN 0.4bn on average per year.

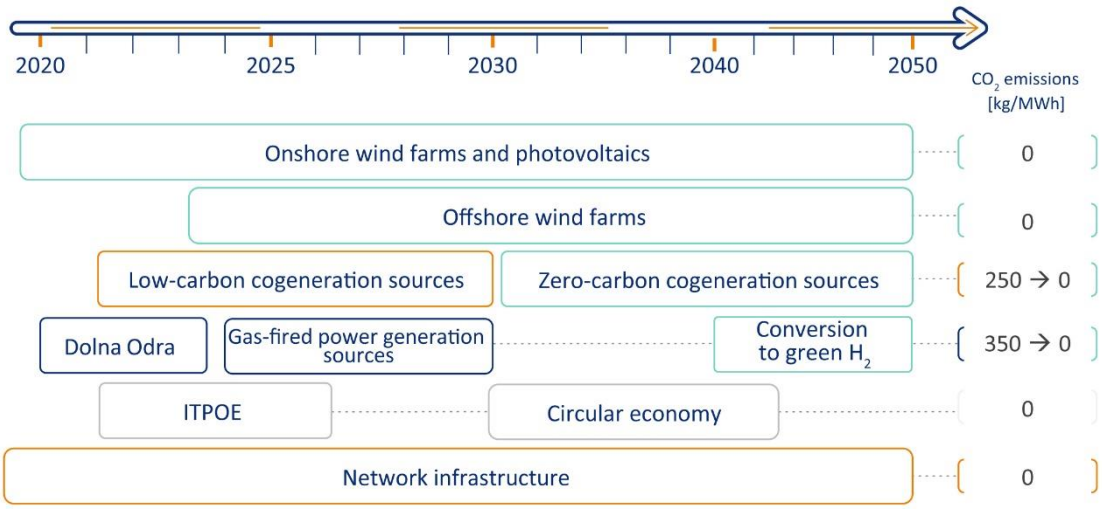
The Group plans to build additional value by ensuring customers' active participation in the energy transition by offering them, among other things, renewable energy installations and access to energy, capacity and system services markets (plans provide for 1 GW of capacity in market services). These segments are expected to contribute to the growth of EBITDA of the PGE Group's retail sales companies by approximately 25 percent by 2030.

## EFFICIENT AND EFFECTIVE ORGANISATION

To meet the challenges of the energy transition and competition, the PGE Group will continue to improve its operating effectiveness. The Group aims to reduce fixed costs by 15 percent. by 2025 and by 25 percent by 2030 in comparison the 2019 base (exclusive of effects in the Conventional Power Generation segment). The business profile will be evolving towards less labour-intensive operations and changes in core competencies. A leverage for the improvement of the Group's efficiency will be an effective ICT (Information and Communication Technology) area ensuring automation and digitisation of processes. Demographic trends will affect the Group's employment levels and employee career paths. The assumed decline in employment will be around 15 percent in 2030 and 50 percent in 2050 compared to the 2019 level and will be driven by the dynamics of demographic changes. This will require effective implementation of projects in the area of human capital management. Human resources development will be oriented towards the areas of renewable energy and modern energy services.

## INVESTMENTS

The PGE Group's investments will focus on renewable energy generation, the transformation of heat generation and the network infrastructure. The Group will not make new investments in (either generation or extraction) coal and lignite assets, and investment decisions concerning the construction of gas sources will be taken no later than in 2025. The total planned capital expenditures in the years 2021-2030 will amount to approximately PLN 75bn, of which approximately 50 percent. will be allocated to the development of renewable energy sources (offshore and onshore wind farms, photovoltaics, zero-emission co-generation sources). Another important area of capital expenditures will be regulated activities, including the grid infrastructure and low-emission co-generation sources.




**PGE Group investments until 2050**

## PLANNED FINANCIAL EFFECTS OF THE STRATEGY

As a result of the implementation of the Strategy, the PGE Group will build a stable EBITDA level, evolve in the green and regulated directions and reduce its exposure to market changes. EBITDA is expected to grow from over PLN 5bn in 2025 to over PLN 6bn in 2030. The ambitious investment programme will be implemented while maintaining a stable debt level and investment grade rating. The PGE Group's objective is to take full advantage of financing opportunities dedicated to green investments and off-balance sheet financing. The share of aid funds in the financial needs of the PGE Group should amount to at least 25 percent by 2030.

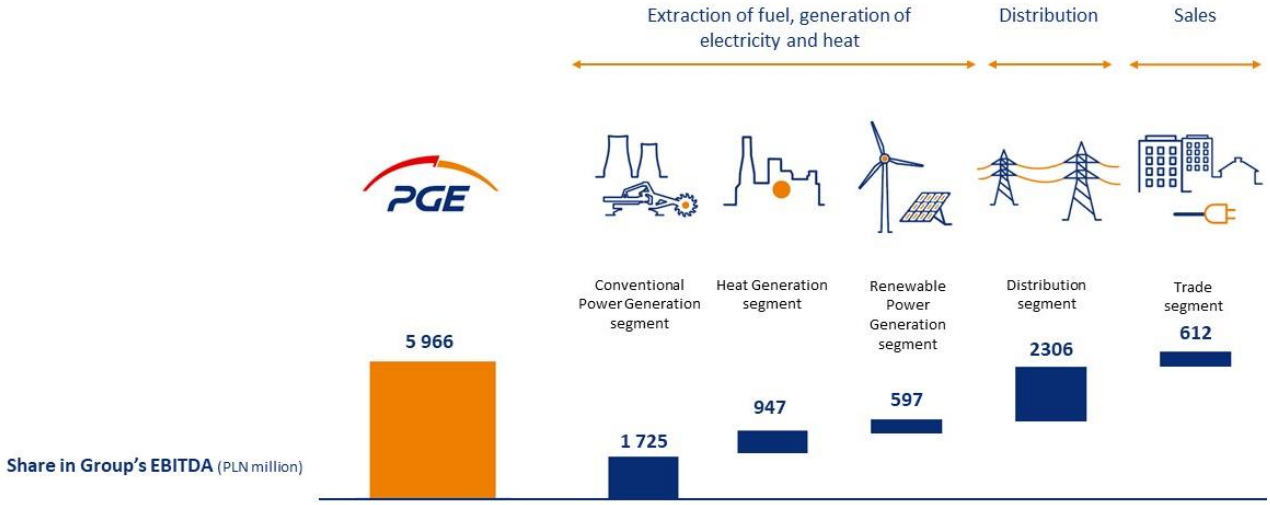
# GOVERNANCE

## 1. Business model

| GRI 102-1 | GRI 102-2 | GRI 102-7 | GRI 201-1 |

The PGE Capital Group (“PGE Group”) is the largest energy group in Poland. It generates approximately 40 percent of Poland's electricity and approximately 20 percent of the country's district heat, and its electricity distribution area covers about 40 percent of the country's territory. The PGE Group's parent company is PGE Polska Grupa Energetyczna SA (“PGE SA”).

The PGE Group operates across the entire value chain: it produces electricity and heat in both conventional and renewable power plants and CHP plants, and then supplies and sells them to customers across Poland, both households and businesses, institutions and local governments. In 2020, the PGE Group also began the process of integrating the management area of Combustion By-products (CBPs). The utilization of CBPs allows PGE to reduce the extraction of natural resources, limit its impact on the environment and reduce $CO_2$ emissions. In this way, the PGE Group implements measures aimed at making the energy sector waste-free, in line with the idea of a circular economy oriented towards climate protection.




| | | | | | | |
|---|---|---|---|---|---|---|
| **Sales revenue** (PLN million) | 45 766 | 25 251 | 4 899 | 1 091 | 6 396 | 29 017 |
| **EBIT** (PLN million) | 1 408 | -647 | 304 | 405 | 1 093 | 577 |
| **CAPEX** (PLN million) | 5 495 | 2 372 | 671 | 715 | 1 680 | 16 |
| **Market share** | | 33% electricity | 21% heat<br>6% and electricity from cogeneration | 9% renewable generation exclusive of biomass co-combustion and biogas | 25%* | 32%* |

*Data on electricity sales to end users and distribution for the first three quarters of 2020.

**The business model of the PGE Group in 2020**

The PGE Capital Group's business activities are currently organized in six segments:

## CONVENTIONAL POWER GENERATION

This segment deals with lignite mining as well as electricity and heat generation from conventional sources.

## HEAT GENERATION

This segment deals with electricity and heat generation from cogeneration sources, as well as the transmission and distribution of heat.

## RENEWABLE POWER GENERATION

This segment deals with electricity generation from renewable sources and in pumped storage hydro power plants, as well as the provision of system services.

## TRADE

This segment deals with wholesale trade in electricity in the domestic and foreign markets, sale of electricity to end users, trade in emission allowances, property rights and fuels, as well as the provision of Corporate Centre services to the companies belonging to the PGE Group.

## DISTRIBUTION

This segment deals with the provision of services related to the supply of electricity to end users by means of high-, medium-, and low-voltage networks and facilities. The company managing the segment – PGE Dystrybucja SA – acts in the capacity of the Distribution System Operator.

## OTHER ACTIVITIES

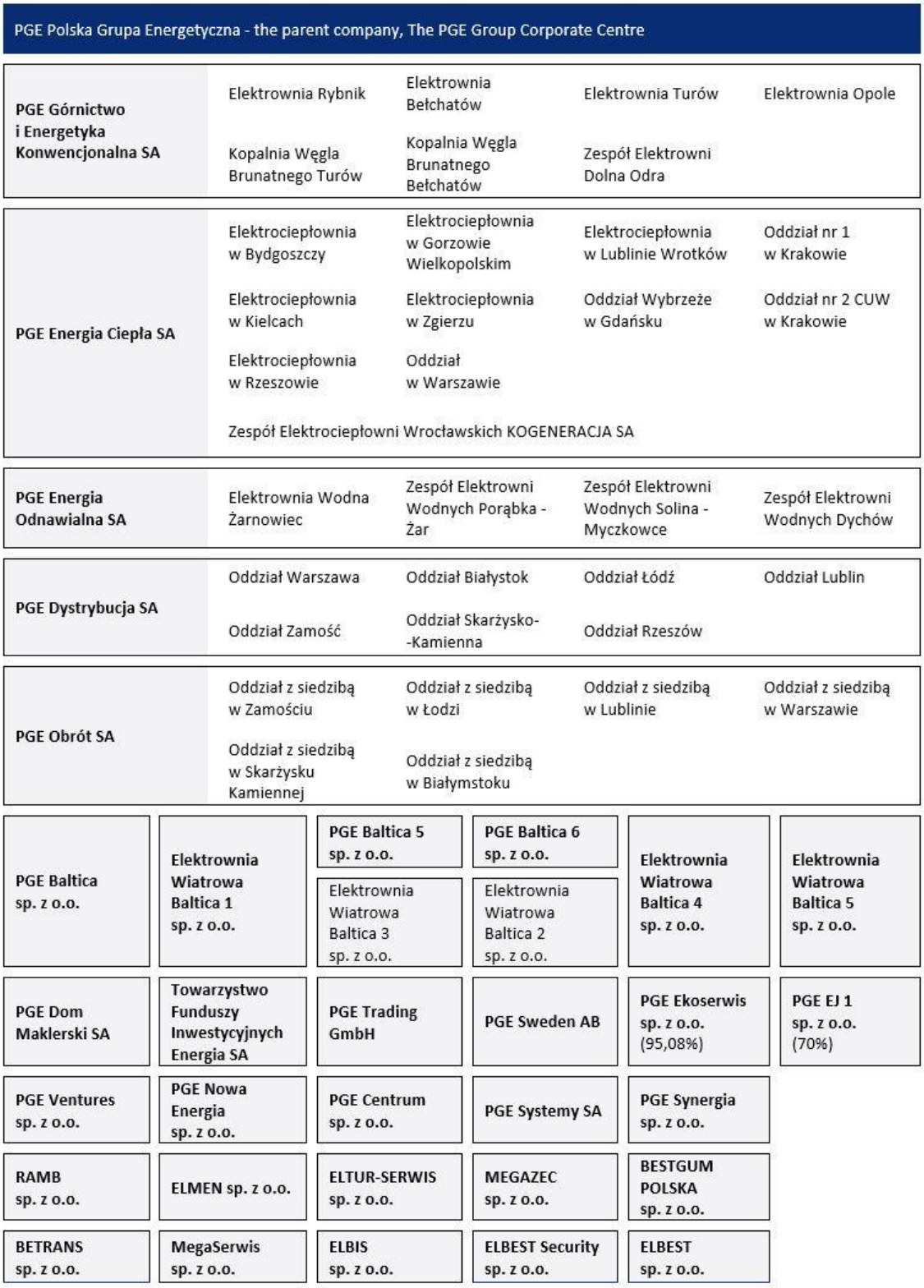
The PGE Capital Group comprises also companies which provide support services to PGE, e.g. obtain financing in the form of Eurobonds (PGE Sweden AB), provide IT services (PGE Systemy SA), perform accounting and HR services (PGE Synergia SA) and transport services, as well as support the operations of innovative start-ups (PGE Ventures sp. z o.o.).

The business segments of the PGE Group.

| | Key segment assets | Electricity volumes | Thermal energy volumes | Market position |
|---|---|---|---|---|
| **Conventional power generation** | | | | |
|  | 5 conventional power plants<br>2 combined heat and power plants<br>2 lignite mines | Net electricity production<br>**46.75 TWh** | Heat production<br>**5.41 PJ** | The PGE Group is the leader in lignite mining in Poland (approx. 87%).<br>The PGE Group is also the national leader in electricity generation and the largest producer of heat. |
| **Heat Generation** | | | | |
|  | 14 combined heat and power plants | Net electricity production<br>**8.72 TWh** | Heat production<br>**44.71 PJ** | The PGE Group is also the national leader in electricity generation and the largest producer of heat |
| **Renewable Power Generation** | | | | |
|  | 17 wind farms,<br>5 photovoltaic power plants,<br>29 run-of-river hydro power plants,<br>4 pumped storage power plants,<br>including 2 plants with natural inflow | Net electricity production<br>**2.66 TWh** | - | The PGE Group is the largest producer of electricity from renewable sources with a market share of approx. 9% (excluding co-firing of biomass and biogas) |
| **Distribution** | | | | |
|  | 295,613 km of distribution lines | Distributed electricity<br>**35.67 TWh** | - | The second largest electricity distributor in the country in terms of the number of customers |
| **Trade** | | | | |
|  | - | Sales of electricity to end users<br>**40.64 TWh** | - | The leader in wholesale and retail in Poland |

A simplified organisational chart of the PGE Capital Group. As at December 31, 2020

| GRI 102-45 |




Companies wholly owned by PGE S.A. (unless indicated otherwise).
PGE Energia Ciepła SA holds 58.07% of shares in Zespół Elektrociepłowni Wrocławskich Kogeneracja SA.
As of January 2, 2020, the Rybnik Branch was transferred to the Conventional Power Generation business line and became a branch of PGE Górnictwo i Energetyka Konwencjonalna SA.

## 2. Risk management

| GRI 102-11 |

As the Corporate Centre, PGE SA creates and implements solutions in the area of integrated risk management architecture. PGE SA develops risk management policies, standards and practices. It is at the central level that the Company designs and develops internal IT tools supporting the process referred to as "appetite for risk", i.e. the level of risk that the PGE Capital Group is prepared to accept in the pursuit of its business objectives, and determines adequate risk limits. The levels of risk appetite utilisation of and risk limits are also monitored.

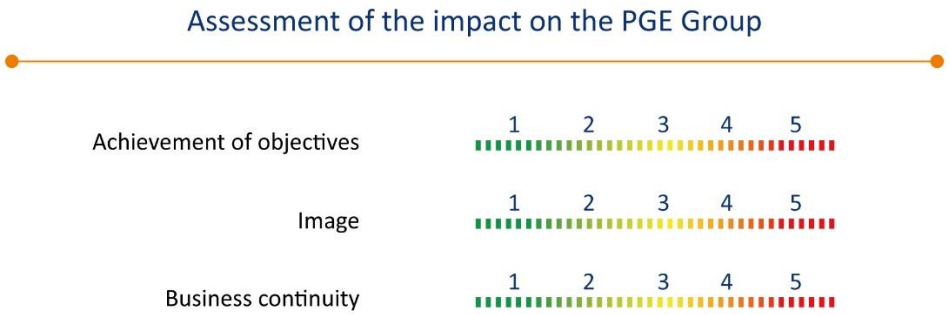
The Risk Committee operates at the highest management level. It is responsible for controlling risk exposures and reducing the scope of incurred risks to an acceptable level in relation to the implementation of the strategy and the achievement of business objectives. The Risk and Insurance Department of PGE SA integrates risk management processes in the Group, measures and reports market and corporate risk, as well as manages credit risks and insurance. The recipients of information and reports on risk are primarily the Management Board of PGE SA and the Management Boards of the PGE Group companies. The principles of managing these issues in the PGE Group are described in the following procedures: insurance management, market risk management in trading activities, corporate risk management, internal rating determination, credit risk management as well as in the Risk Committee Regulations and the policy of corporate risk management in the PGE Capital Group.

Risk identification covers the full spectrum of the Group's activities. The scope and complexity of the analysis is determined by the significance of a given risk with respect to both a particular company and the entire PGE Group. The higher a given risk is ranked, the more thorough its analysis and the more complex and rigorous reporting rules apply. Such an approach, on the one hand, guarantees the acquisition of full knowledge of the most important risks and the applied mitigating tools, and, on the other hand, it ensures that no stakeholder is overlooked in the reporting process.

Among the 10 most significant risks in the entire PGE Group is the climate risk related to ensuring an appropriate level of environmental protection. In this area, the highest possible risk management standards functioning in the PGE Group are applied. Issues related to climate risks are subject to rigorous requirements and guidelines resulting from the corporate risk management process. In the PGE Group, risks are assessed from both the long-term and current perspectives.

### THE LONG-TERM PERSPECTIVE

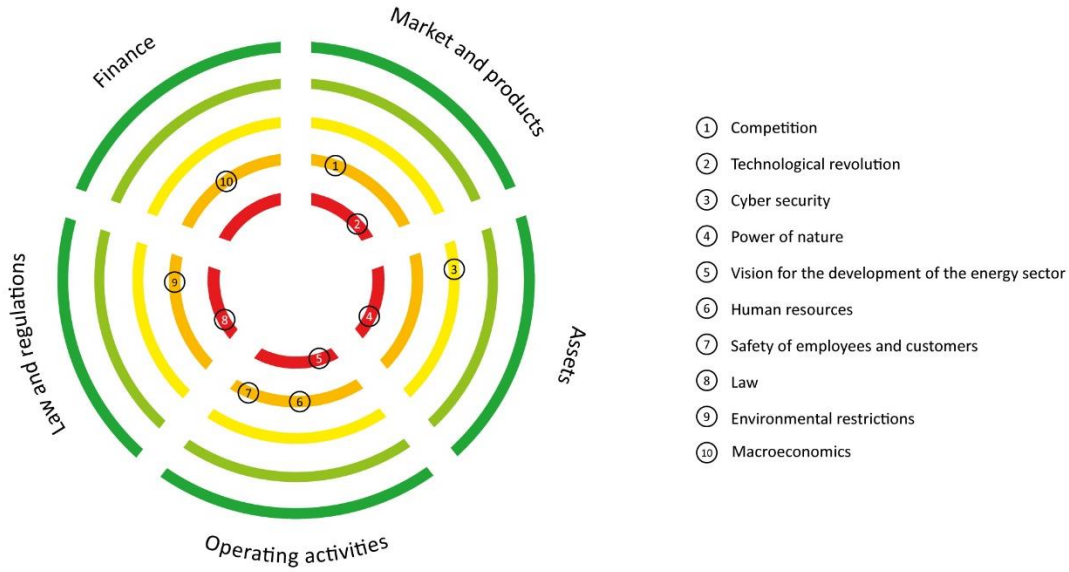
The purpose of an assessment is determined by the challenges and threats to confront the PGE Group over the next decade. Each long-term risk is assessed in terms of its impact on the achievement of business objectives, as well as influence on the Company's image and business continuity:



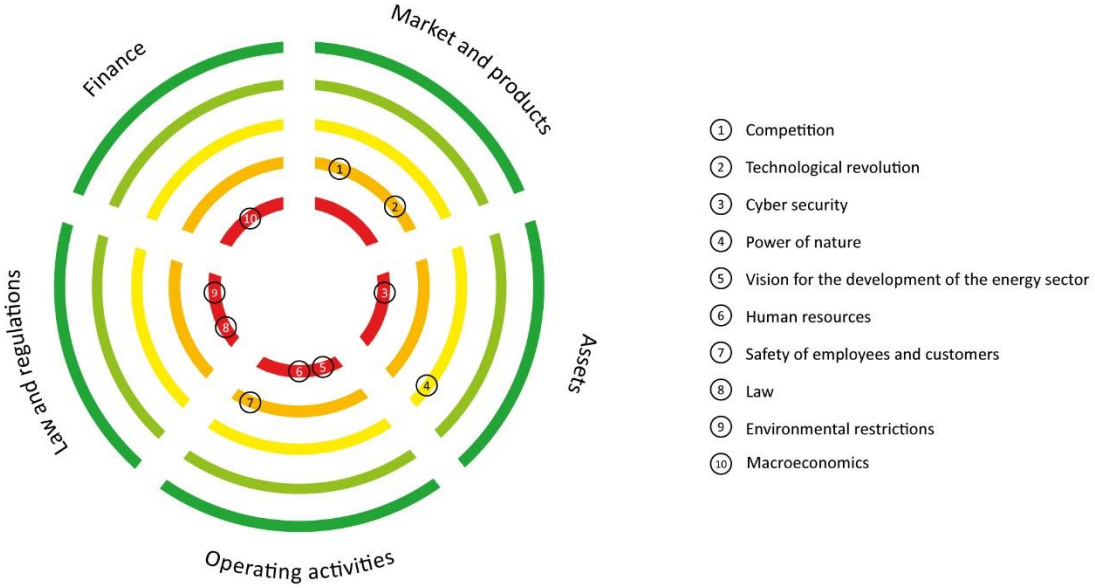

#### Assessment of long-term risks

The results of this assessment are presented after division into the following categories:

1. Market and products
2. Assets
3. Operating activities
4. Law and regulations
5. Finance




**A map of long-term risks: A scenario providing for the separation of the lignite/coal portfolio from the PGE Capital Group.**

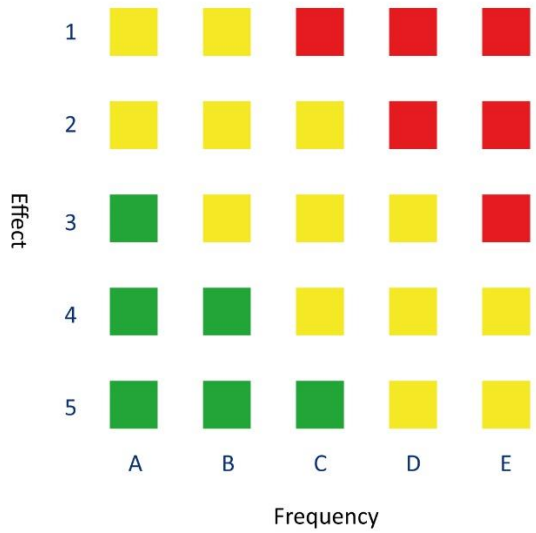



**A map of long-term risks: A scenario that does not take into account the separation of the lignite/coal portfolio from the PGE Capital Group.**

## THE CURRENT PERSPECTIVE

The overriding objective of risk assessment is to support decision-making processes carried out at the level of both the Corporate Centre and the subsidiaries of the PGE Group. Assessment are made with a time horizon of the following year. Due to the wide range of issues subject to assessment, the process is carried out in three stages:

Stage 1: An initial assessment and analysis of all identified risks, where each risk is assessed against two aspects: frequency (probability) of materialisation and consequences of potential materialisation. The highest rated risks are moved to the next stage of assessment.




**A risk map drawn up for each of the risks identified in current operations**

Stage 2: A quantitative assessment and an additional risk analysis to estimate the impact of each risk on financial performance and to determine the significance of the impact of individual factors that could cause a given risk to materialise. In the next step, mitigating tools and their effectiveness are identified and a method for dealing with the risk is defined.

Stage 3: The ten most significant risks for the PGE Group are selected from the risks qualified for stage 2. A separate report is prepared for each of them, including an in-depth risk analysis.

It is worth noting that elements related to climate risks constitute the core of about a dozen risks, with the risk of ensuring an appropriate level of environmental protection having been classified as one of the most significant risks for the Group.

## CLIMATE RISKS

In the PGE Group, climate-related risks are analysed in the context of the impact of both climate change on the conducted business activities and the conducted business activities on climate change. The business activities conducted by the PGE Group cause a serious environmental impact. The analysis of related risks, the identification and continuous improvement of both pro-environmental solutions and monitoring measures allow the Company to effectively manage and minimise its environmental impact and simultaneously to care about the financial results of the PGE Capital Group. Solutions developed by the PGE Group facilitate its development and sustainable transformation in line with climate requirements and interests of all stakeholders. In the context of the climate protection risk, PGE analyses issues related to the legality of its operations. This relates primarily to issues related to the fulfilment of environmental requirements applicable to the activities conducted by the PGE Group companies and resulting from the necessity to obtain concessions. As part of the risk management process, a separate group of risks related to compliance has been separated, which is subject to additional analytical and reporting requirements.

In 2020, risks arising from the possibility of failing to meet environmental requirements and risks associated with obtaining and maintaining mining concessions were assessed as the most significant on a Group-wide scale 2020 and were qualified for the in-depth analysis stage (Stage 3).

In the long-term perspective, assessments cover the following:

- the impact of environmental restrictions on the requirements applicable to electricity and heat generation and mining activities,
- the impact of $CO_2$ emission allowance price volatility on financial performance,
- the possible impact of changes in the economic and geopolitical situation causing fluctuations of macroeconomic indexes and raw materials prices on the PGE Group,
- adaptation to changing conditions and minimisation of emissions. This concerns risks related to the volume of generation from conventional and renewable energy sources as well as the efficiency of the generation sources operated by PGE.
- investing in new technologies – risk analysis is a structured and permanent element of each investment project and is carried out to ensure both its economic efficiency and favourable (or prevent unfavourable) environmental impact,
- how the technological revolution leading to changes in the functioning of the energy market may affect the PGE Capital Group,
- customer behaviours and preferences – risks associated with the structure of customers, their fluctuation and factors that determine their decisions are analysed,
- reputation – the activities of the key PGE Group companies and how they may affect the PGE brand are assessed. Impact on PGE's image is one of the criteria for assessing each of the long-term risks.

As an energy group, PGE is subject to the physical effects of climate change. The monitoring of the materialisation of risks related to this area and the prevention of their negative consequences are carried out at the level of the Corporate Centre. The monitoring of environmental risks is an integral element of the activities of the Risk and Insurance Department. Besides providing insurance cover, it analyses how weather-related factors may affect the continuity of processes related to lignite mining, as well as electricity and heat generation and distribution. In addition, the impact of the forces of nature and the severity of extreme weather conditions on the PGE Group's operations is assessed from the long-term perspective.

When analysing risks, PGE does not focus only on their negative aspects, but also treats them as challenges and takes advantage of opportunities which may arise from changes. Such an approach allows the PGE Group to respond actively to dynamically changing conditions in which it operates, as well as to build and strengthen its position in the market. Effective implementation of solutions developed in the Group translates into more efficient management of the Group's resources across the entire value chain and affects the quality of energy services provided.

By focusing investments on renewable energy generation sources, PGE is changing its mix of electricity and heat generation technologies, thus reducing its exposure to such factors as emission allowance prices and fuel prices.

## 3. Ethics and compliance

The PGE Group management system's functioning and continuous improvement are based on legal regulations, adopted values and ethical standards of operation. The PGE Group operates in compliance with the law, internal regulations and high ethical standards. Consequently, it requires compliance with the same rules of conducting business from its counterparties.

The PGE Capital Group has in place a compliance management system based on the recommendations of the ISO 19600 Compliance Management Systems (CMS) standard, which provides guidelines for establishing, creating, implementing, evaluating, maintaining and improving an effective and flexible compliance management system within an organisation. The system is also consistent with the standards set by the Warsaw Stock Exchange: "Recommended standards for a compliance management system with respect to counteracting corruption and a whistleblower protection system in companies listed on the markets organised by the Warsaw Stock Exchange".

On the part of the PGE SA Management Board, the person responsible for the Compliance area is President of the Management Board Wojciech Dąbrowski. The PGE Group has an organizational structure dedicated to the performance of compliance tasks. In PGE SA, it is the Compliance Department, whose director, acting in the capacity of Compliance Officer, reports directly to the Audit Committee of the PGE Supervisory Board. The companies and branches of the PGE Group appoint Compliance Coordinators who report to the head of the Compliance Department in PGE SA with respect to the performance of their tasks. These persons are also provided with an appropriate direct reporting path to the Management Board of a given company. Currently, there are 52 Compliance Coordinators in the PGE Group.

The Compliance Management System in the PGE Group comprises the Corporate Centre and 24 direct subsidiaries of PGE SA, actively conducting business activities, i.e. PGE Górnictwo i Energetyka Konwencjonalna, PGE Energia Ciepła, PGE Energia Odnawialna, PGE Baltica, PGE EJ1, PGE Dystrybucja, PGE Obrót, PGE Systemy, PGE Dom Maklerski, PGE Synergia, MEGAZEC, Elbest, Elbest Security, BESTGUM POLSKA, PTS BETRANS, ELBIS, PUP ELTUR-SERWIS, MegaSerwis, ELMEN, RAMB, PGE Centrum, PGE Ventures, PGE Nowa Energia and PGE Ekoserwis. In indirect subsidiaries, the compliance system is implemented through their supervisory companies. The implemented solutions apply to all employees of the PGE Capital Group and other persons performing work for the Group, regardless of their positions.

The overarching objective of the Compliance Department is to establish and implement uniform rules, standards, roles and responsibilities in the effective management of the compliance process in the PGE Capital Group so as to enable it to build an organisational culture based on compliance with the law, ethical principles and principles of sustainable business.

This objective is pursued through the following:

- support in the implementation of the development directions set out in the PGE Group Strategy, taking into account the applicable laws and internal regulations;
- the implementation of clear and transparent processes to ensure that breaches of the rules can be identified, explained and promptly remedied;
- the minimisation the risk of non-compliance that may result in penalties, sanctions, or loss of reputation and credibility as a result of non-compliance with regulations and standards that are sanctioned by the law or constitute the best practices in the field;
- education and communication with respect to issues related to compliance with the law and internal regulations as well as an attitude of integrity.

### THE SYSTEM FOR COMMUNICATING IRREGULARITIES

| **GRI 102-17** |

Employees and other stakeholders have the right and duty to report incidents of non-compliance, including suspected or occurring irregularities whose consequences can be detrimental to the companies of the PGE Capital Group. It is particularly important to report criminal and corrupt activities, violations of employee rights or conflicts of interest. A person reporting irregularities is called a whistleblower. Everybody can be a whistleblower, in particular an employee, consultant, contractor, subcontractor or supplier.

Incidents may be reported in several ways, including a notification sent to:

- the immediate superior,
- the relevant compliance unit,
- the email address: uczciwybiznespge@gkpge.pl
- using the hotline at: + 48 22 340 12 02
- and by post to the Director of the Compliance Department at the following address: ul. Mysia 2, 00-496 Warsaw, with an envelope marked as "for the attention of Compliance Officer", including anonymously.

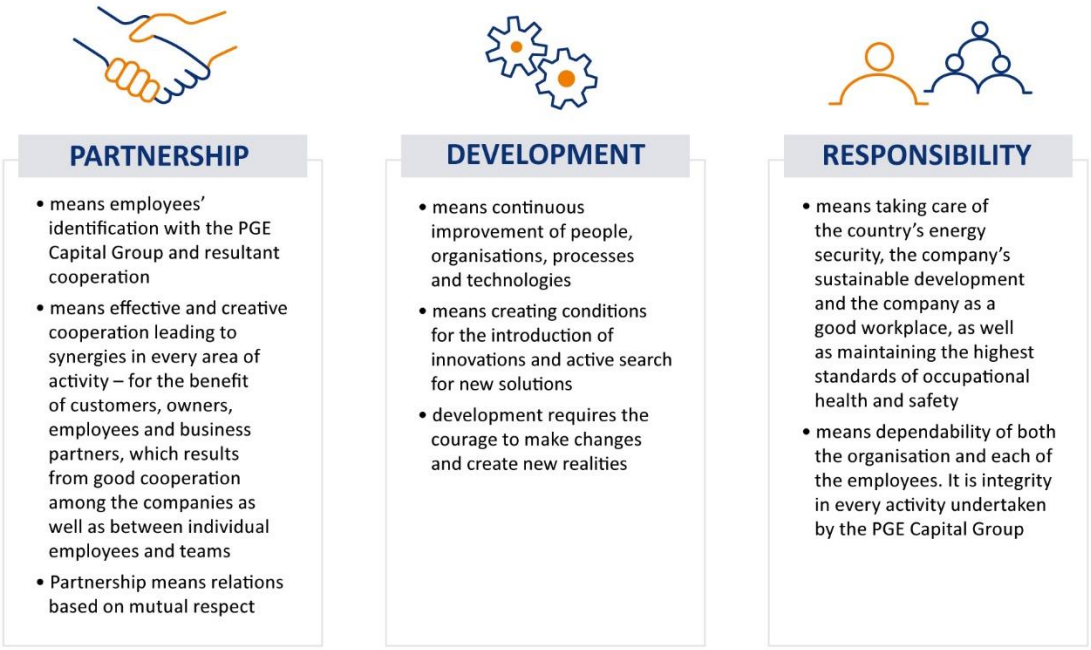
Individuals who report non-compliance are granted the whistleblower status and are protected. A whistleblower may not face retaliation from employees, other persons or the employer for reporting a non-compliance event.

Organisational units managing documentation relating to persons mentioned in non-compliance reports collect personal data within the framework of Non-compliance Incidents Reports in a matter guaranteeing complete safety of such persons. Such documentation is processed with due diligence, in a manner consistent with the applicable personal data protection regulations and internal by-laws. Access to such data is restricted to authorised persons only. A register of reported incidents is maintained internally by the Compliance Department. Approximately 23 percent of incidents reported in the PGE Group in 2020 were related to the area of human rights.

## POLICIES AND OTHER REGULATIONS OF THE COMPLIANCE MANAGEMENT SYSTEM

| GRI 102-16 |

The main document in the area of ethics and compliance is the PGE Group Code of Ethics, which constitutes an overarching declaration and basis for other internal regulations and guidelines. The document describes basic ethical values and standards which the organisation expects from all employees and other persons performing work for the PGE Group. The Code indicates and defines common key values and ethical principles of the PGE Group.




### The values of the PGE Group

The Code of Conduct for Business Partners of PGE Group Companies is a tool for communicating requirements regarding operating standards to suppliers and contractors of the PGE Group companies. This document presents in a transparent way minimum expectations from business partners of the PGE Group companies in terms of ethics and compliance with the law. One of the principles of conduct set out in the Code of Ethics reads as follows: "We do not tolerate corruption or dishonest behaviours". In order to implement this principle, the PGE Group Anti-Corruption Policy has been implemented, which sets out the rules binding the companies of the PGE Group with respect to counteracting corruption, defines the basic terms, indicates which activities or behaviours are proper and acceptable in business contacts, regulates the issue of business gifts and invitations to trips and events (the so-called rules of hospitality). The policy also sets out instructions on how to act in the event of irregularities.

Besides codes and policies, the PGE Group has also adopted regulations defining how the compliance management system is organised. These are:

- The Regulations of Compliance Management in the PGE Capital Group
- The general procedure for reporting and handling non-compliance incidents in the PGE Group and for protecting whistleblowers.

The procedure defines in detail the principles for handling reports or information on suspected or factual non-compliance incidents that occur in the PGE Capital Group companies.

The compliance management system in the PGE Group is monitored and improved on an ongoing basis based on gained experience. It is adjusted to changes in the applicable legal regulations and new guidelines, for example:

- Directive (EU) 2019/1937 of the European Parliament and of the Council of October 23, 2019 on the protection of persons who report breaches of Union law,
- the CBA publication of December 2020: "Anti-corruption guidelines for public administration on uniform institutional arrangements and rules of conduct for officials and persons belonging to the PTEF group",
- "Recommended standards for a compliance management system with respect to counteracting corruption and a whistleblower protection system in companies listed on the markets organised by the Warsaw Stock Exchange".

In 2021, updates to the PGE Group anti-corruption policy and the procedure for reporting and handling non-compliance incidents in the PGE Group and for protecting whistleblowers are planned.

It is also planned to implement an anti-money laundering and counter-terrorist financing procedure defining a group-wide standard in this respect, in particular for those PGE Group companies that are not obliged institutions.

## HUMAN RIGHTS

| GC-1 | GC-2 | GC-4 | GC-5 | GC-6 |

All activities of the PGE Group are consistent with the Universal Declaration of Human Rights, the standards of the International Labour Organisation and the obligations of the United Nations Global Compact. The Group conducts its operations with respect for the rights to dignity, freedom of association, freedom of opinion, freedom of expression and privacy.

Human rights issues are addressed in a number of internal documents and procedures. One of the most important is the PGE Capital Group's Code of Ethics. Risks related to compliance with human rights, such as discrimination in employment, mobbing and harassment, employment of children, "black market" employment, employment in dangerous conditions, are eliminated by using a permanent employment contract as the basic form of employment, ensuring the highest standards of organising a safe working environment, objective and non-discriminatory criteria of hiring and promoting employees. Respect for diversity is understood in terms of race, gender, sexual orientation, age, culture, marital status, as well as religious and political beliefs, freedom of membership in social and professional organisations. PGE also fulfils all obligations related to the protection of health and life in the workplace. The same standards of observing human rights are expected of business partners of PGE Group companies; therefore, contracts with business partners include ethical clauses regulating this issue.

## STRENGTHENING THE ORGANISATION'S ETHICAL CULTURE, EDUCATION AND COMMUNICATION

Providing employees and other persons performing services for the benefit of the PGE Group companies with information on the Code of Ethics of the PGE Capital Group – its values and common principles – constitutes a foundation for the functioning of the compliance system. The PGE Group conducts intensive activities aimed at building the awareness of the organisation's expectations and adopted rules of conduct. Continuity of these activities is important for maintaining the knowledge and awareness at an appropriate level.

The PGE Group companies hold regular training sessions on compliance and ethics issues, as well as training for employees who are newly hired or return to work after periods of long absence.

Communication on ethical issues is carried out on an ongoing basis. The texts of the Code of Ethics and the Code of Conduct for Business Partners of the PGE Capital Group companies are available to employees and stakeholders on the websites of the PGE Group and the particular companies. In each of the companies, posters and leaflets informing about the values and principles are available together with a hotline number to report non-compliance. In 2020, the ethical principles were reminded to employees through the available internal channels: in the "Pod Parasolem" magazine (6 articles) and on the Intranet of the PGE Group (9 articles). The monitors located in the PGE headquarters presented videos with statements made by managers on how they understood and implemented the PGE values in their work. Additionally, in 2020 the curricula of other training courses conducted in the companies of the PGE Group contained elements concerning attitudes and behaviours reflecting the PGE values. The training programme entitled "The Development Network" is based on such PGE Group values as Partnership, Development, Responsibility. The ethical principles have also been introduced into the internal regulations applicable to selected business and operational areas. These measures aim to translate the values and principles into the language of practical behaviours and attitudes.

## 4. Dialogue with stakeholders

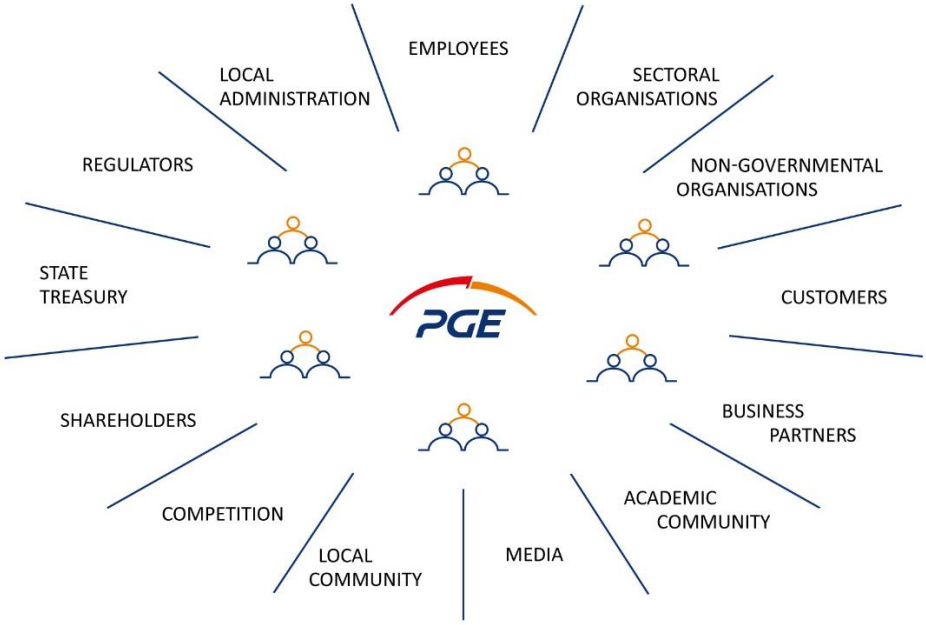
A successful course of the transformation process depends on its good understanding by all PGE stakeholder groups and their active contribution to the process of changes. PGE makes every effort to ensure that the energy transition is fair, transparent and carried out in accordance with arrangements reached in the dialogue process.

### STAKEHOLDERS OF THE PGE GROUP

| GRI 102-40 | GRI 102-43 |

The PGE Group holds cyclical dialogue sessions or stakeholder panels to learn the opinions and expectations of both the business and local communities. Invitations to such meetings are sent to representatives of the following key groups: the government administration, the regulator, the media, industry and non-governmental organizations, academic communities, investors, representatives of local communities and employees.

The stakeholder panel planned for 2020 could not take place in the expected form and on the agreed date due to the pandemic, so the PGE Group conducted other forms of dialogue with its key stakeholders, using online solutions. Meetings with potential business partners or workshops for contractors from the energy and other sectors were held in this way.




**The key stakeholders of the PGE Capital Group**

In preparation for changes planned by the Ministry of State Assets and concerning improvements in the management of capital groups, on the initiative of the Management Board of PGE SA, a decision was made within the PGE Group to enter into a General Agreement whose parties are PGE Polska Grupa Energetyczna SA and over 30 companies from the PGE Capital Group. The companies entered into the Agreement voluntarily, thereby confirming their will to hold an open dialogue at the management level and to pursue common objectives set forth in the PGE Group's strategy. The Agreement will allow PGE to implement effectively its business strategy, strengthen the PGE brand, and increase benefits resulting from cooperation among the companies within the Group.

Another example of dialogue building at the management level is the establishment of the PGE Group Holding Council by the Management Board of PGE Polska Grupa Energetyczna in June 2020. Its purpose is to share relevant information and experience on the forum and to increase the effectiveness of the PGE Capital Group's operations. The Holding Council also strengthens supervision over individual segments and companies in the PGE Group. It is also to fulfil advisory functions, define potential risks and recommend solutions. Its task is also to supervise the implementation of the Strategy of the PGE Group.

In the area of dialogue with external stakeholders, the PGE Group companies organise, among other things, energy forums with representatives of local authorities and conduct social consultations accompanying investments. In 2020, PGE Baltica held online meetings with potential contractors as part of a tender for geotechnical surveys for a wind farm project on the Baltic Sea. PGE Energia Ciepła organised workshops for contractors from the energy and other related sectors, at which it presented planned investments and the rules for the proper preparation of tender procedures based on the public procurement law.

## SOCIAL RESPONSIBILITY

Sustainable transformation requires comprehensive changes, in both the functioning of the Company and its environment. One of its key dimensions is the social aspect. The PGE Group's responsibility in this respect consists in preparing employees, customers, business partners and local communities for its principles in the best possible way. The implemented directions of changes are beneficial to all parties, taking into account aspects of particular importance for the natural environment, resource management and future generations.

The established objective is inevitably connected with the decarbonisation of power generation. It will have a huge impact on the lives of the inhabitants of, among others, the Bełchatów region. PGE Górnictwo i Energetyka Konwencjonalna, a PGE Group company, employs over 8,000 people in the Bełchatów Complex. PGE is aware of its obligation to undertake actions aimed at the development of the local intellectual and infrastructural potential. In November and December 2020, PGE, in cooperation with the research firm 4P Research Mix, carried out a survey in Bełchatów to identify the mood of the region's inhabitants related to the phasing out of mining and to examine how the Bełchatów Complex affects the life of the local community. The obtained responses illustrate the expectations of Bełchatów residents towards PGE, the largest employer in the region, and also allow for the identification of concerns related to the planned transformation process in the region.

The survey found that residents expected above all that the process of moving away from lignite would be spread over time, allowing them to prepare for the changes. They also expect the government and PGE to engage in dialogue with residents and to inform them of their intentions for the region, which will allow them to plan for the future and reduce uncertainty, stress and a sense of lack of control. For the respondents, it is also important to receive support in the employee re-training process. The funding of training, especially in professions related to RES, will enable younger workers to retrain. Residents count on support for the creation of new jobs in Bełchatów.

PGE is aware of the challenges posed by the planned transformation and therefore it is already preparing to fill the gap to be left by the conventional power generation industry. The planned projects related to the first stage of Bełchatów transformation will exceed PLN 4.5 billion.

## STAKEHOLDERS' EXPECTATIONS

| GRI 102-44 || GRI 102-47 |

This Report is a response to the expectations of internal and external stakeholders. Besides showing how the individual business areas of the PGE Group prepare for the implementation of the strategy, it also describes the activities undertaken in the four areas (society, environment, workplace and market) indicated by stakeholders in the previous years as important issued for the PGE Group to address in its non-financial information statement.

### SOCIETY

- Educational activities concerning the functioning of the electricity and heat market, energy efficiency as well as the safe use of energy and electricity infrastructure (including education of children and young people)
- Support for local communities, active implementation of the good neighbourhood policy; actions at the level of individual companies

### ENVIRONMENT

- Investing in environmental projects, financing research projects focused on reducing environmental impact, investments aimed at increasing the share of power generation from renewable energy sources
- Reducing the environmental impact of the conducted business activities
- Emissions to the atmosphere (types and quantity of substances emitted – measurements, targets)

### WORKPLACE

- Business ethics, managing ethics in organisations (including anti-corruption measures)
- Promoting occupational health and safety
- Generation gap management

### MARKET

- Investments in power generation from renewable energy sources
- Ensuring energy security – providing dependable access to electricity and heat

**Internal and external stakeholders' expectations vis-à-vis the PGE Capital Group**

# SOCIETY

PGE operates throughout the country and is an entity that plays an important role for local communities. The PGE Group conducts dialogue with its stakeholders, promoting the values of partnership, development and responsibility.

## 1. Employees

Employees are the capital of the PGE Group. Based on their experience, commitment and competencies, PGE conducts its business activities. 2020 was a landmark year for the Human Capital Management area, not least because of the need to respond quickly and meet the challenges of the pandemic. It was the final year of the Human Capital Management strategy announced in 2015. Its aim was to support business operations in their effective implementation. A uniform job architecture and competency model were implemented across the Group. The Corporate Principles of Human Capital Management were also introduced, together with their application procedures adapted to local specificities. The PGE implemented state-of-the-art tools, such as SAP HR, a human resources system which allows, among other things, employee self-service, uniform recording of processes and events, data consistency and access to current management information.

The result of the introduced Human Capital Management Strategy is an effective reorganisation of the area of human capital management.

### A FAIR ENERGY TRANSITION

As at December 31, 2020, the PGE Group employed 41,629 persons. At present, the most significant challenge in the HR area is to prepare employees for the process of a sustainable transition. This is the key objective of the new human resources management strategy which the PGE Group companies have been invited to develop. A working team has been established which, having prepared conclusions resulting from a detailed analysis of the business strategy, will develop solutions responding to the challenges of the individual segments of the Group's operations.

One of the initiatives is the plan to establish a Competence and Qualification Development Centre in Bełchatów (CQDC). In 2020, its concept was developed and presented to the Marshal of the Łódzkie province by the President of the Management Board of PGE SA, Wojciech Dąbrowski. The project was submitted to "The Territorial Fair Transformation Plan of the Łódzkie Province". Design documentation and a feasibility study necessary for the establishment of the CQDC were prepared. According to the assumptions, the centre will become an educational and training facility aimed at retraining the staff of the energy sector (especially the conventional energy sector) in directions determined by the needs of the sustainable transformation programme.

A working team for the Turów Complex transformation programme is working on a coherent and comprehensive concept for the transformation of the Turów lignite mine and power plant branches. Developed in PGE SA in cooperation with other companies, initiatives for the transformation of the Turów complex were sent to the Marshal Office of the Dolnośląskie province to be included in "The Territorial Fair Transformation Plan of the Dolnośląskie Province".

### RESPONDING TO DEMOGRAPHIC TRENDS

A special place in the new business strategy is devoted to demographic trends, including the deepening generation gap, which may have a very significant impact on the future of the PGE Group. Currently, the proportion of the working age population is 63 percent. According to forecasts, in 2050 the potential workforce in Poland will account for 56 percent of the population. By 2050, the size of the population of mobile working age (18-44) is expected to decrease by 6 million (i.e. 39 percent), with the greatest loss occurring by 2035. Demographic forecasts of the Central Statistical Office (CSO) predict that by 2050 the median age will increase to 50.1 years for men and 54.8 years for women, and the rate of ageing will be the highest in the next 10 years.

Poland will become one of the oldest societies in Europe. In PGE, models and forecasts are made that take these assumptions into account. Demographic changes require appropriate measures for each age group.

In 2020, "A concept for bridging the generation gap in PGE GiEK" was developed, the purpose of which is to define actions and systemic solutions in the area of, among others, employee retraining, as well as rules and standards for employee mobility, which will enable the efficient allocation of resources during the implementation of projects, investments or operational tasks. Minimisation of the generation gap is also possible through the proper use of experience and knowledge of PGE Group employees, the implementation of mentoring programmes, and precise planning of succession in the areas of key importance to the Group's operations. The PGE Group attaches great importance to the development of internship and apprenticeship programmes, as well as cooperation with technical schools and universities.

The PGE Group participates in successive editions of the "Energy for the Future" internship programme, providing internships for university students. It is a programme carried out under the auspices of the Ministry of Climate in cooperation with the energy companies such as PKN ORLEN, PGNiG and PSE. In the fourth edition of the programme, which ended in September 2020, 29 interns took part. The fifth edition of the programme started in October 2020.

The implementation of internship programmes and patronage classes has been going on continuously for several years. PGE cooperates closely with schools to improve the quality and effectiveness of vocational education and to help them to adapt their curricula to future needs. PGE GiEK supports 27 school forms with more than 660 pupils in the Zgorzelecki, Bełchatowski and Pajęczański districts. The Company helps to educate, among others, future electricians, mechanics, power engineers, as well as automatics and mechatronics technicians. Theoretical knowledge is important, but practical skills of students are also indispensable, that is why, within the framework of cooperation, apprenticeships are organised to prepare candidates for obtaining qualification certificates. As part of the programme, scholarships are awarded to outstanding pupils who achieve the best results in vocational subjects and show particular commitment during apprenticeships and other forms of vocational training. The first grant holders and beneficiaries of the programme have already started work in the Turów Power Plant Branch.

An analysis of changes occurring in the employment structure of the production plants of PGE Energia Ciepła persuaded the company to initiate a project entitled "An Energetic Career with PGE Energia Ciepła" in cooperation with a group of technical secondary schools. The participating schools are integrated into a single network for the exchange of information and cooperation aimed at the training of personnel in the energy sector. Within the framework of the project, students have the opportunity to acquire appropriate technical and professional skills, while close cooperation between the company with and the schools makes it possible for the latter to adapt their curricula to the market needs of the Polish heat generation sector. Currently PGE Energia Ciepła cooperates with 10 schools located in Cracow, Gdańsk, Toruń (two schools), Wrocław, Bydgoszcz, Rzeszów, Zielona Góra, Gorzów Wielkopolski and Lublin. As part of the project, since its inception, over 600 students have taken part in classes at various CHP plants operated by the company, over 120 students have completed apprenticeships and 41 graduates already work as energy sector specialists at various locations within PGE Energia Ciepła.

For several years PGE Dystrybucja has cooperated with 19 vocational and sectoral schools located in its territory of operation. In each of the company's branches there are schools with which cooperation agreements have been signed. Their pupils visit PGE Dystrybucja's offices and learn the specificity of the work of energy sector specialists, as well as systematize their knowledge of the Polish energy market, the PGE Capital Group and the role of the Distribution System Operator. They also participate in one month's training programmes. The activities undertaken are aimed at supporting the development of vocational education in the energy sector and promoting PGE Dystrybucja's operations among potential future employees of the company.

PGE Energia Odnawialna entered into its first cooperation agreement with the Group of Secondary Schools in Siedlce. At present, the company provides patronage for 6 secondary schools (in Wejherowo, Gorlice, Radom, Opole, Zgorzelec and Siedlce), where it supports the teaching process in the following specialist subject: "Technician of renewable energy devices and systems". The company also financed the purchase of state-of-the-art educational laboratory equipment such as heat pumps, wind and water turbines, portable educational sets with solar pumps, solar collectors or educational sets dedicated to energy storage.

The direction of offshore wind energy development indicated in the business strategy implies the need to educate experts in many fields, not only the technical one. It opens up new prospects for cooperation between businesses and the world of science in the area of research and educational projects. The PGE Group companies are signatories to "The letter of intent on cooperation in the development of offshore wind power generation in Poland" signed on July 1, 2020. As part of the implementation of the partnership guidelines, working groups were established in selected areas. One of them is defining desired future competencies for offshore wind energy generation.

One of the ways of minimising the generation gap is also automation and robotisation of time-consuming processes. The PGE Group has the advantage that many systemic IT solutions have already been implemented due to the dispersed nature of the organisation. Digital solutions are to facilitate work, not replace people, so that employees spend less time on reproductive activities and more time on their greatest strengths, i.e. conceptual work, improvements and innovations.

## AWARENESS OF OUR COMPETENCIES

The new strategy poses new challenges for the PGE Group, requiring new competencies and qualifications. In order to know in which direction employees' competencies should be developed and to identify developmental needs, in 2021 an assessment of competencies will be carried out across the PGE Group. Based on its results, individual employee development plans will be prepared. It will also provide employers with information on employees' skills and their potential development directions. Using the acquired information on the strengths of the Group's employees and knowledge of the areas in which their qualifications and competencies should be enhanced, PGE will be able to build appropriate development programmes, create centres of expertise for internal needs and support employees in their re-organisation and retraining.

The competencies assessment is also connected with the development of a database that will make it possible to create, among other things, a list of qualifications and competencies held by employees in the PGE Group, which will create conditions for the efficient transfer of interested people within the Group.

## OCCUPATIONAL HEALTH AND SAFETY

| **GRI 403-1** | **GRI 403-2** | **GRI 403-3** | **GRI 403-5** |

One of the key areas subject to continuous improvement is the area of occupational health and safety. In 2020, the Management Board of PGE SA adopted *The Occupational Health and Safety Policy in the PGE Capital Group.* It defines a framework for actions and the setting of objectives for all companies in the Group. This is because the area of occupational health and safety is recognised as a key value for the organisation's development. The policy also defines long-term strategic projects and the rules of their implementation. It was developed in cooperation with representatives of all companies and consulted with all PGE Group companies. By mid-2021, it will have been implemented in all companies of the PGE Capital Group. The policy takes into account the requirements of the latest ISO 45001 standard for Occupational Health and Safety Management Systems and the guidelines included in the Labour Code. The Management Boards of the subsidiaries were allocated proactive and reactive OHS objectives covering both the implementation of OHS improvement activities in the particular PGE Group companies as well as issues related to OHS incidents. The top management are strongly involved in occupational health and safety issues and, therefore, such issues are discussed at meetings of the PGE SA Management Board. In 2020, an IT tool was implemented to collect information on occupational health and safety incidents across the PGE Capital Group, including accidents at work and serious near misses. The knowledge gained in this way is translated into actions in the area of OHS, for example in the form of alerts addressed to other locations to take preventive measures.

Each newly hired employee undergoes training in occupational health and safety, appropriate to the duties and hazards of a particular job. Before starting work, the qualifications required for a given position are confirmed. Employees undergo regular periodic occupational health and safety training at a frequency depending on the nature of their work and occupational hazards. Each employee is allowed to leave their workstation when they believe that there is a direct threat to their life or health, in accordance with the provisions of the Labour Code. Employees are encouraged to report situations that they believe may pose a potential health risk to themselves and others to their immediate superiors or OHS specialists. In special cases, they may do this through the system dedicated to the reporting of non-compliance incidents. In such situations, they are treated as whistleblowers and are covered by the same protection rules as those applicable to the procedure: “The reporting and handling of non-compliance incidents in the PGE Group and the protection of whistleblowers”.
The PGE Group actively cooperates with authorities and institutions dealing with occupational health and safety issues. Some PGE Group companies are members of the CIOP [Central Institute for Labour Protection] Safe Work Leaders Forum.

## ICT SECURITY

Given the importance of the Group's infrastructure for the power system and the progressing digitalisation, PGE regards ICT security issues as a matter of primary importance.

Within the PGE Group, the ICT infrastructure and ICT security are managed by the company PGE Systemy. Infrastructure security issues are the responsibility of the IT Security and Business Continuity Department of PGE Systemy, whose structure also includes a specialist PGE-CERT team responsible for handling ICT security incidents. Counteracting cyber attacks takes place on many levels. PGE-CERT monitors threats to system security, reacts to detected incidents and undertakes actions related to the coordination of incident handling.

To secure the infrastructure, technical safeguards are in place to protect the PGE Group against malware, targeted attacks and denial of service attacks. Thanks to the implemented software, computers functioning in the PGE Group network are monitored on a continuous basis. Procedures regulating employees' rights and obligations with respect to IT security have been implemented in the entire Group. Among other things, it is prohibited to use company IT devices for private purposes, to use social media except when it is necessary (PGE Group profiles), to log into private e-mail accounts and to use unsecured Wi-Fi networks.

It is very important to build IT security awareness among the employees of the PGE Group through education and ongoing provision of information on possible and existing threats, as well as the principles of safe use of computers, the Internet and company mobile phones. Articles and information on this topic are published in the PGE Group’s internal media.

Access to corporate resources from the Internet is based on encrypted VPN connections. In order to enable PGE Group employees to work remotely, the VPN infrastructure as well as the group communication and teleconferencing environment have been developed.

Employees are equipped with PKI (Public Key Infrastructure) certificates, which are used to secure e-mail messages and to sign documents electronically. The disk content encryption function is enabled in all computer equipment used for remote work. Instructions and advice for employees on IT security rules for remote work have been developed and published on the PGE Group intranet.

## WORKING UNDER EPIDEMIC CONDITIONS

**GRI 403-4** | **GRI 403-5** | **GRI 403-6** | **GRI 403-7** | **GRI 404-2** |

The need to respond to the crisis caused by the coronavirus pandemic at the beginning of 2020 created a completely new reality for all PGE Group companies, which had to face new challenges. The Corporate Centre monitors the situation on an ongoing basis and continuously communicates the principles, conditions and other relevant issues in this regard across the PGE Group.

The PGE Group companies developed principles for the functioning of all processes under epidemic conditions. All locations were equipped with means necessary for functioning in such conditions (e.g. disinfectants, protective masks, visors, etc.). The availability and inventories of such equipment throughout the Group were monitored on an ongoing basis by the Corporate Centre. The subsidiaries established local crisis teams based on the so-called Emergency/Crisis Teams, which were prepared in advance for similar circumstances. Their main task was to ensure continuity of operation, to develop emergency scenarios and principles of remote work, to prepare daily reports and communications for employees, to coordinate all activities, to develop guidelines on sanitary regime principles in areas such as work organisation, shift handover, training, recruitment or delegations. The work of the crisis teams was supervised by the central Crisis Team based in the Corporate Centre. It cooperated effectively with its counterparts in the PGE Group subsidiaries, the Ministry of State Assets and the Ministry of Climate and Environment. Cooperation was also established with entities of the Sanitary and Epidemiological Authorities to ensure a smooth flow of information. The team regularly discussed the current situation. Employees were kept informed on the current pandemic situation, including changes in the legal environment, guidelines and rules for maintaining safety.

Employers in the PGE Group adapted work rules in their facilities to the epidemic situation. Where possible, the handover of shifts took place in a non-contact manner, and the outgoing shift does not contact the incoming shift. Contact with people coming to the companies from outside was kept to a minimum. Some employers organised flu vaccinations for employees. Regulations concerning the principles of remote work were implemented and materials concerning good practices in remote work were developed for PGE Group employees.

Employees of some companies have been able to use a special line offering psychological support for those who may have felt the discomfort of isolation and increased tension due to the pandemic. Willing employees have been able to participate in online training with a psychologist on managing stress and emotions in times of crisis and rapid change.

To support managers, a set of Good Managerial Practices has been developed with examples and advice on how to transfer managerial tools to the online world (remote working for managers, remote communication, emotions and stress). The HR team supported managers in coping with the management of remote working teams by means of cyclical online training courses entitled “The Manager in Hard Times”. They focused on development in two areas: management of oneself and one's effectiveness while working remotely, and remote team management.

Volunteers from the PGE Group actively supported the operation of helplines of the National Health Fund and the Chief Sanitary Inspectorate. A total of 130 volunteers from the PGE Group were involved in the work of both helplines.

The activities of employee volunteers were redirected towards issues related to the pandemic. Support was provided to insurgents, veterans, senior citizens and former PGE employees.

## HEALTH PROMOTION PROGRAMMES

| **GRI 401-2** | **GRI 401-6** |

PGE offers all its employees comprehensive medical packages in private health care facilities run by Enel-Med and other medical partner across the country. Employees can quickly benefit from professional medical care, i.e. medical consultations with various specialists and diagnostic tests. In the autumn-winter period, each employee can receive a free flu vaccination preceded by a medical consultation. Additionally, each employee using medical care has the possibility to buy health care packages for their family members.

PGE Polska Grupa Energetyczna undertakes various activities to promote a healthy lifestyle and proper nutrition. Examples of such activities are competitions for the best active leisure activity or the company blog entitled “The Green Side of Energy” and divided into the following sections: “ECOhealth”, “ECOkitchen”, “ECOBeauty” and “ECOtrends”.

In order to assist Employees in maintaining an active and healthy lifestyle, PGE organizes e.g. internal corporate wellness programmes concerning such issues as the healthy spine, fighting stress, proper nutrition and physical activity. Many companies have their own sports teams or sports associations. Additionally, PGE SA employees can use the Multisport card, which offers new possibilities during the pandemic period.

## PROJECTS FOR EMPLOYEES

| GRI 403-7 |

The year 2020 forced all employers within the PGE Group to change their priorities and modify many projects. Despite the difficult period, the most important measures were implemented.

For the Corporate Centre (PGE SA), it was a period of major structural and organisational changes. Due to the need to improve the efficiency of the Company's operations, the organisational structure was changed, which in the next step led to a reduction in employment. On September 25, 2020, the Voluntary Leave Programme (VLP) was announced in PGE SA. Ninety-two employees applied, and seventy-six received their employer's consent to participate in the programme. On November 4, 2020, the Company started a process of collective redundancies that lasted until December 15, 2020. As part of the collective redundancies, the employer terminated contracts with 23 employees. The Company offered the departing employees a vocational support programme. It was designed to help each employee redefine their goals, analyse their own predispositions and enhance their qualifications and skills. The dismissed employees were able to choose the elements of the programme that they regarded as the most useful for them. These elements included the following:

- training and workshop activities
- practical guidance and training
- psychological support
- individual consultancy
- tests of professional predispositions and personality potential
- professional business photography sessions.

Each employee participating in the Voluntary Leave Programme or dismissed under the collective redundancies process received a package of important information and a book entitled "Restart Your Career".

An employee opinion survey (EOS) was conducted for the first time in PGE SA. Its purposes included measuring employees' involvement, development opportunities, leadership, safety and well-being at work, and, given the current situation, issues related to the COVID-19 pandemic. The survey was completely anonymous. Ninety percent of the Company's employees participated in it. The results will be presented in the first quarter of 2021. Subsequently, on the basis of the results, an improvement action plan will be developed together with employees. Last year, a similar survey was also conducted for the 14th time in PGE Energia Ciepła and its subsidiaries.

In 2020, the HR team made efforts to run the training courses that had been planned before the pandemic. Language, computer and soft skills development courses were organised and conducted in an online format. PGE SA launched a programme called "Networks of Development" and conducted in the form of 90 minutes' webinars. A total of 49 training sessions were conducted with the participation of 434 employees. In 2020, the second edition of the HR Business Partner Academy was conducted. The Academy is an internal development programme preparing future HR business partners from across the PGE Group to work effectively with managers. Also, a three-semester MBA degree programme run in cooperation with the Warsaw University of Technology came to an end. Its participants included 40 managers from the PGE Group. Another project finalised in 2020 was PROInv Academy, or the Programme of Effective Management of Investment Projects.

The Company launched a new e-learning programme focusing on counteracting bullying, discrimination and harassment in the workplace. It was obligatory for all employees. The provisions of the procedure for counteracting mobbing and discrimination were updated. The document was forwarded to all employers in the PGE Group with a recommendation for implementation at the local level.

## CONTINUOUS PERSONNEL DEVELOPMENT

| GRI 403-7 |

Like every year, also in 2020 PGE employees very actively participated in the Global Management Challenge – a competition that consists in an advanced simulation of running a business. Despite the pandemic, 26 teams from the PGE Group began the struggle in the 20th edition of the games. The FullJoin team from PGE Systemy was the winner of the national final and was advanced to the world final. The AtomicPeople team (PGE Systemy + PGE SA) took the third place in the national final.

The PGE Group may also boast about number of awards in the area of occupational health and safety, which testifies to its extraordinary efforts to promote safe work. In a competition organised by the Central Institute for Labour Protection and called The Forum of Safe Work Leaders, PGE Górnictwo i Energetyka Konwencjonalna, Turów Power Plant Branch received the Golden Card of the Safe Work Leader for the years 2021-2022. Among the Company's branches, the Dolna Odra Power Plant Complex and the Bełchatów Power Plant are also the holders of the Golden Cards of the Safe Work Leader. The Bełchatów Power Plant Branch won the third place at the regional stage of the 27th edition of "The Employer-Organiser of Safe Work" competition organised in 2020 by the Regional Labour Inspector in Łódź, in the category of industrial plants employing more than 249 people.

Employees of the Elektrownia Bełchatów Branch conduct extensive activities in the area of improvement innovations and optimisation initiatives. In 2020, the Power Plant conducted the 13th Innovation Ranking. Its result was the implementation of 40 innovations submitted by 78 authors. Innovations generate benefits by increasing efficiency and improving working conditions, organisation and ergonomics at the workplace.

The Departmental Social Labour Inspector at the Opole power plant received an award in the competition for "The Most Effective Social Labour Inspector" organised by the State Labour Inspectorate in Opole.

In 2020, PGE Dystrybucja was awarded the Silver Card of the Safe Work Leader by the Central Institute for Labour Protection at the National Research Institute in Warsaw.

In 2020, PGE Energia Ciepła's commitment to improving occupational health and safety was also recognised. The company received distinctions in the Chief Labour Inspector's competition called "The Employer – a safe work organiser". The Company was second at the Mazowieckie province stage of the competition (PGE Energia Ciepła), second at the Kujawsko-Pomorskie province stage of the competition (PGE Energia Ciepła Bydgoszcz Cogeneration Plant) and fourth at the Małopolskie province stage of the competition (PGE Energia Ciepła Branch no. 1 in Kraków). It is worth noting that the OHS specialist in Lublin Wrotków Cogeneration Plant Branch won first place in the regional stage of the competition called "The OHS specialist – the employer's best advisor" and organised by the National Association of OHS Employees – Branch in Lublin and the Regional Labour Inspectorate of the State Labour Authority in Lublin. The Social Labour Inspector from EC Zielona Góra received the main award in the national competition for "The Most Active Social Labour Inspector in 2020" organised by the National Labour Authority.

## INTERNAL COMMUNICATION WITHIN THE COMPANY

| **GRI 403-4** |

The PGE Group regards internal communication as an indicator of its responsibility towards its employees. PGE makes every effort to ensure that internal communication reflects the culture of the organisation and the quality of relations between employees and the management staff.

Internal communication during the pandemic proved to be one of the key areas on which the PGE Group focused to ensure employees' sense of security. Employees were kept informed about the epidemic situation on an ongoing basis via the intranet (IPK), the newsletter or the company magazine entitled "Pod Parasolem". Regular announcements were sent out, from the levels of both the whole Group and individual companies, which kept employees informed about particularly important issues related to safety during the pandemic.

A tab "Coronavirus – information" was created on IPK; it has more than 1,000 page views per month. In 2020, nearly 100 articles were published there, for example: daily reports on the coronavirus, legal acts, current information on safety rules, information on the functioning of individual PGE Group companies during the pandemic, principles of the employee volunteering programme and information related to the #stay-at-home campaign. During the autumn and winter seasons, a special campaign dedicated to PGE Group employees was conducted. Titled "It doesn't have to be the flu season", it was prepared in cooperation with a family medicine doctor.

In addition, an HR newsletter was launched for PGE SA employees in 2020. It is distributed on a monthly basis and contains the most relevant information in the area of human resources, including information related to work safety during the coronavirus pandemic. A similar newsletter is also published in PGE Energia Ciepła.

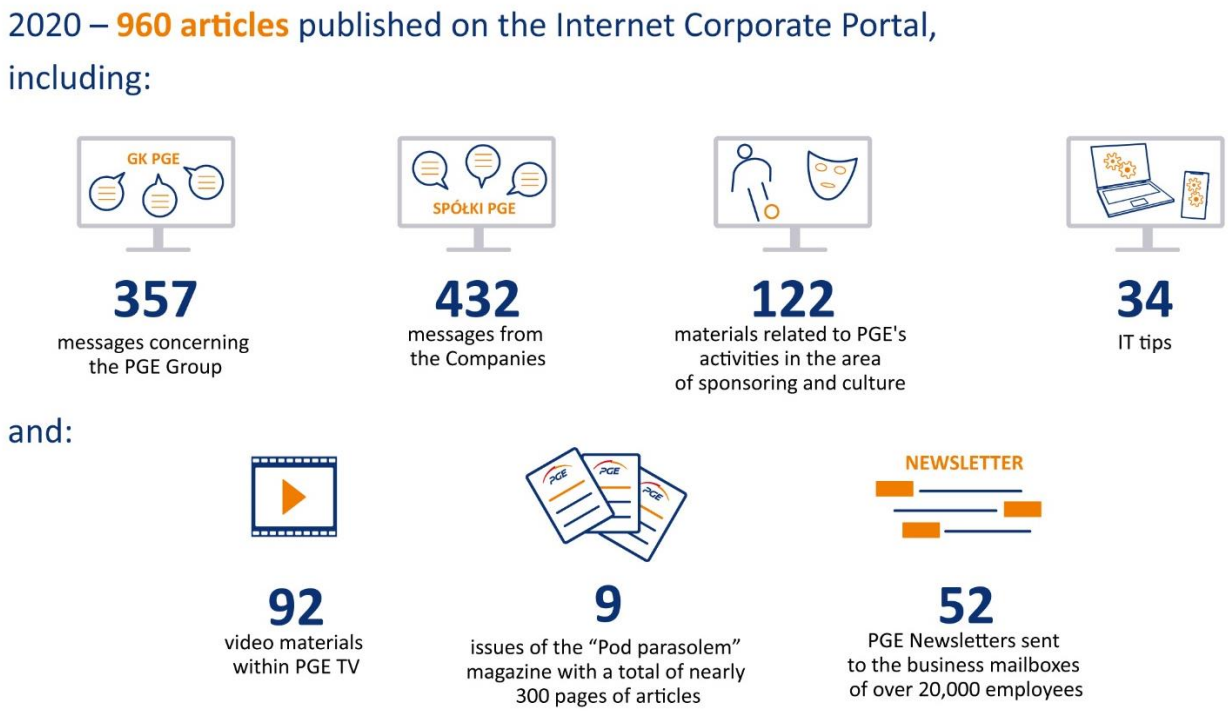
Managerial communication during the pandemic period moved online. Meetings were held in the form of video or teleconferences. PGE Systemy, which provides ICT services to the Group companies, introduced even more effective solutions that supported communication among employees through IT resources. Changes were also made to the formal document circulation, electronic signatures replaced handwritten ones, and many processes previously functioning in the SAP system only were adjusted to the requirements of the new situation.

## IMPORTANT COMMUNICATION TOOLS

Internal communication also played a key role in the announcement of the Company's new business strategy. On the initiative of the PGE SA Management Board, a series of meetings was held in the traditional and on-line formats for employees of the following companies: PGE GiEK, PGE SA, PGE Dystrybucja, PGE Obrót, PGE Energia Odnawialna, PGE Baltica and PGE Energia Ciepła. They were attended by a total of over 3,200 people.
The key principles of the strategy aimed at achieving climate neutrality by 2050 were presented from the perspective of each company. The Management Board also answered questions from employees. In addition, a dedicated box was set up on the company intranet for questions from employees to the management.

In 2020 modern forms of communication such as PGE TV were developed. Apart from current video materials, every quarter the most important events in the PGE Group were summarised in a film format. The film had a total of 7000 views. Published for 12 years, the employee magazine "Pod Parasolem" was also moved online. It is supplemented with a newsletter containing abbreviated versions of all articles published in the magazine along with links to their full content.

Internal communication was also an important aspect in maintaining relations among employees. This is because it is based on not only messages sent from the employer to the employee, but also the employee's involvement, which allows the latter to present their opinions, initiatives and ideas.




**Internal communication in numbers**

## COOPERATION WITH TRADE UNIONS

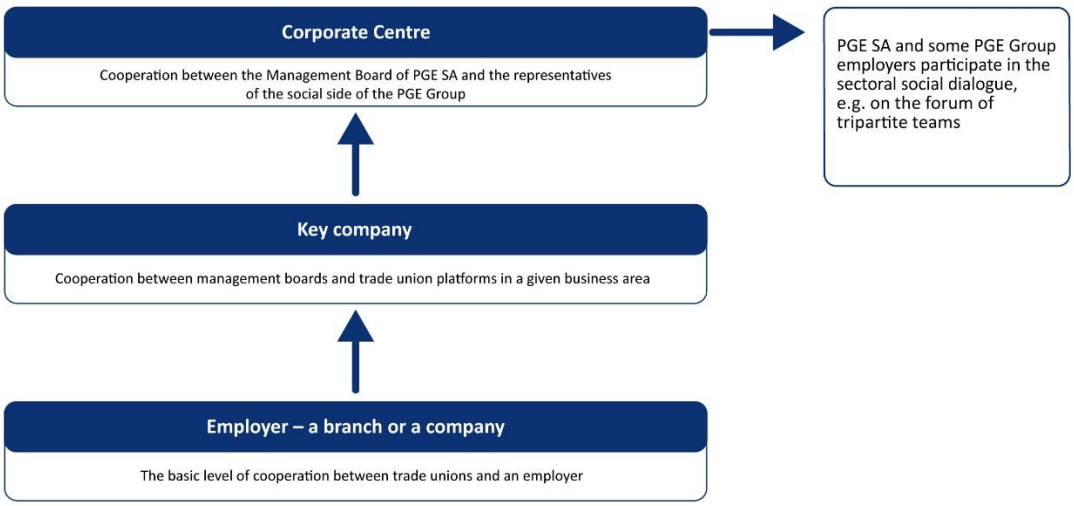
| GC-3 |

There is one Intra-Group Trade Union Organisation in PGE SA. As at December 31, 2020 there were 128 different trade unions functioning throughout the PGE Group.
The building of relations with trade unions is regulated by the Corporate Principles of Social Relations in the PGE Capital Group, which have been in force since January 1, 2016. In accordance with the Trade Union Act, the basic level of cooperation among social partners is a branch or a company if it is an independent employer within the meaning of Article 3 of the Labour Code.

Another level of cooperation is the forum of the particular PGE Group companies, where topics common to all employers in a given area are discussed. Social dialogue at this level takes place between management boards and trade union platforms that bring together trade unions operating in given workplaces and having convergent sectoral interests. The principles of cooperation at the level of key companies are usually regulated in a dedicated covenant or cooperation agreement whose parties include employers and companies.

In matters of strategic importance for the entire PGE Group, social dialogue is conducted at the Corporate Centre level between the Management Board of PGE SA and representatives of the social side of the PGE Group. In relations with the social partner, the principle of company dialogue prevails and talks are transferred to a higher level in the event that talks at the level of employers or companies do not yield expected results.

PGE SA, as well as some of the PGE Group employers, are participants in the sectoral social dialogue, which is conducted, among others, on the forum of tripartite teams.




**A model of cooperation with trade unions**

## NEW STRATEGY OF THE PGE GROUP AND THE AREA OF SOCIAL DIALOGUE

In connection with the development of a new business strategy, on May 28, 2020 the Management Board of PGE SA organised a meeting with the social partner of the PGE Group at the PGE National Stadium, under full sanitary regime, which was also attended by representatives of the management boards of all Business Lines. The managers presented economic and business conditions and prospects, taking into account the situation in the power generation sector and the need for its restructuring.

Along with the announcement of the new PGE strategy, a decision was made to organise an online meeting with representatives of all trade unions functioning in the PGE Group on October 26, 2020. The members of the PGE SA Management Board presented the principles of strategy implementation and answered questions of the meeting participants. On November 5, 2020, a meeting on this topic was also organised for the Intercompany Organisation No. 2897 of the “Solidarity” Trade Union operating in PGE SA.

On December 2, 2020, on the initiative of Minister Artur Soboń, Government Representative for the Transformation of Power Generation and Coal Mining Companies, four sectoral teams with the participation of the social partner were established in the PGE Group in the areas of: Distribution, Trading, Heating, Generation (including lignite mining). They provide a forum for social partners to discuss the situation of individual employers and companies in the context of the transformation of a given industry.

## DIALOGUE WITH SOCIAL PARTNERS

In late September and early October 2020, the trade union organisations functioning in the PGE Capital Group, represented by the Protest and Strike Committee of the PGE Group, submitted disputed demands concerning, among other things, previously concluded contracts and agreements on cooperation between the parties to the thirty employers.

In order to guarantee social peace in the PGE Capital Group, PGE SA initiated talks with the Protest and Strike Committee to develop ways to jointly resolve collective disputes in the workplaces. An example of cooperation at the level of employers and individual business segments of the PGE Group is the agreement concluded on December 21, 2020 in PGE Energia Odnawialna between the Confederation of Trade Unions of PGE Energia Odnawialna and the Management Board of the company. It allows for the unification of the human resources and payroll policies in the divisions and the conduct of a dialogue supporting investments in renewable energy sources. The agreement ended unresolved collective disputes in the company, and the Confederation of Trade Unions of PGE Energia Odnawialna withdrew from the Protest and Strike Committee of the PGE Capital Group. In PGE Systemy, a PGE Group company, the agreement ending a collective dispute was signed on December 30, 2020.

The parties also agreed to refine the principles of social dialogue in PGE Systemy and to conduct future talks between the trade unions and the employer.

PGE encourages dialogue with employers, i.e. in the individual companies and branches of the PGE Group. The result of the talks at the Corporate Centre level was an agreement entered into on January 14, 2021 between PGE SA and the Protest and Strike Committee of the PGE Capital Group concerning the schedule of cooperation between the employers and the social partner in the scope of agreeing on the level of full-time employment and dealing with the remaining demands of trade unions submitted under the procedure of collective disputes.

Irrespective of talks conducted in the particular areas of the Group's activities at the PGE SA level, with the participation of representatives of the management boards of the key companies, the parties continue to discuss issues requiring decisions at the level of the PGE Capital Group level and concerning, among other things, the trade unions' salary demands and the possibility of their fulfilment in the current financial situation of the Group.

## 2. Contractors and suppliers

The PGE Group conducts its activities and commercial relations in a transparent manner, based on internal procedures and strictly defined rules of cooperation with its business partners.

Standards in the process of planning and conducting purchases as well as selecting contractors are defined in the General Procurement Procedure of the PGE Capital Group, thanks to which the procurement process in the Group has been unified. All companies which have adopted the PGE Group Code of Ethics are obliged to apply the procedure. Certain companies are also obliged to comply with the public procurement regulations. Before a final decision is made on the selection of a contractor, an appropriate analysis and assessment is made as to whether the supplier operates in compliance with the law and has a reputation of an ethical and fair company. PGE puts effort into eliminating potential or actual conflicts of interest with its suppliers.

In 2020, changes were introduced to the General Procurement Procedure of the PGE Capital Group, which increased the competitiveness of conducted procurement procedures. Among other things, the possibility of using closed procedures in which a limited number of contractors are invited to participate was restricted. Benefits resulting from this changes include:

- greater transparency of procedures,
- a higher level of competitiveness,
- increased procurement efficiency,
- increased attractiveness of offers,
- improved recognisability of the PGE Group on the market.

Additionally, regulations were introduced to increase supervision over the non-competitive procedure, i.e. sole-source procurement, by introducing the necessity to obtain the consent for its application in the form of a resolution of the management board for purchase with a minimum value of PLN 100,000. The internal regulations were supplemented with provisions aimed at preventing the so-called “money laundering” related to the payment of a security deposit in procurement procedures. A principle was introduced according to which a security deposit paid in cash will be returned to a contractor to the same bank account from which it was paid, unless a contractor indicates a different bank account with a relevant justification. Information about a contractor's request for a security deposit to be returned to another bank account has to be forwarded, before a return is made, to the compliance area in order to analyse the admissibility of making such a return.

In 2020, PGE SA was audited by the Supreme Chamber of Control. The scope of the audit covered the development and implementation of purchase procedures in the Company, their use in making purchases and the functioning of mechanisms for controlling the application of purchase procedures over the past few years. The final report found no violations in the area of purchases and positively assessed the development and implementation of purchase procedures in the Company.

### PRINCIPLES OF COOPERATION WITH BUSINESS PARTNERS

The rules governing cooperation with business partners are defined first of all in the Code of Ethics of the PGE Capital Group, which is a set of values and principles in force in the entire PGE Group. Among other things, it defines the PGE Group's approach to building business partnerships. The Code of Ethics of the PGE Capital Group is supplemented by the following practical guidelines:

a) The Good Procurement Practices
b) The Code of Conduct for Business Partners of the Companies in the PGE Capital Group

Business partners are natural persons, legal persons or organisational units without legal personality, operating in the public or private sector, with whom the PGE Group has any business relations. In particular, these are contractors, suppliers' subcontractors, consultants, wholesale trading partners, agents, financial institutions, industry organisations and other entities with which the PGE Group companies conduct business cooperation of a similar nature.

Good procurement practices are a set of recommended attitudes and principles that should be followed by employees and potential business partners during tender procedures. The principles are based on four aspects of cooperation: partnership, transparency, fair competition and information security. The good procurement practices also include the principle of "no gifts", which is binding for employees initiating a procurement process (submitting a purchase application), members of committees and all persons participating in the process and persons performing contracts concluded as a result of the procurement process.

The PGE Group's expectations towards its business partners are set out in the Code of Conduct for Business Partners of the Companies in the PGE Capital Group. The content of this document is available on the companies' websites (most often in the section dedicated to procurement procedures). Additionally, the obligation to comply with laws and ethical standards, with direct reference to the provisions of the Code of Conduct for Business Partners of the Companies in the PGE Capital Group, is applied as a standard element of contracts.

In order to mitigate the risk of incurring financial or reputational losses resulting from establishing or maintaining a business relationship with a partner who does not comply with the law and ethical principles, the PGE Group companies examine available information on their business partners in accordance with internal regulations, in particular in the areas of procurement raw materials for production and trade.

When formulating offer evaluation principles, the PGE Group promotes innovative solutions that streamline internal processes through their automation and those that limit the negative impact on the natural environment through, for example, lower paper consumption, water consumption and greenhouse gas emissions, as well as pro-ecological waste management. It is required that supplied products possess marketing authorisations for the Polish and European markets.

In the course of the procurement process, the PGE Group informs its contractors that they must familiarise themselves and comply with the Code of Conduct for Business Partners of the Companies in the PGE Capital Group and the Good Procurement Practices. This is also an example of the implementation of corporate social responsibility in the area of procurement. Contractors and subcontractors are obliged to comply with regulations relating to information security, environmental protection, occupational health and safety, and to take actions aimed at reducing the nuisance caused by construction works to local communities.

The PGE Group uses conditions of participation and criteria that appreciate decent remuneration of employees hired by the contractor. Employment based on full time work contracts is promoted, in particular in the following areas: the call centre, IT support, security services, cleaning services, as well as repair and construction services. The following aspects are subject to inspection: the contractor is not in arrears with statutory payments (social insurance, taxes), the contractor has appropriate insurance, permits and certificates, and ensures a high level of occupational health and safety. Every contract with suppliers, subcontractors and business partners contains clauses that address labour issues, fire safety requirements, waste management, property protection and environmental protection.


**The clauses contained in every contract between PGE companies and their suppliers, subcontractors or business partners.**

The website https://www.gkpge.pl/bip/Przetargi contains information for potential contractors. They should familiarise themselves with *The Rules for the Use of the PGE Group Procurement System*. The document defines the principles and procedures of using the system, the rules for the submission of offers and other documents in procurement procedures. Contractors are also supported by *The End User Manual* available at https://www.gkpge.pl/bip/Przetargi, in both the Polish and English language versions.

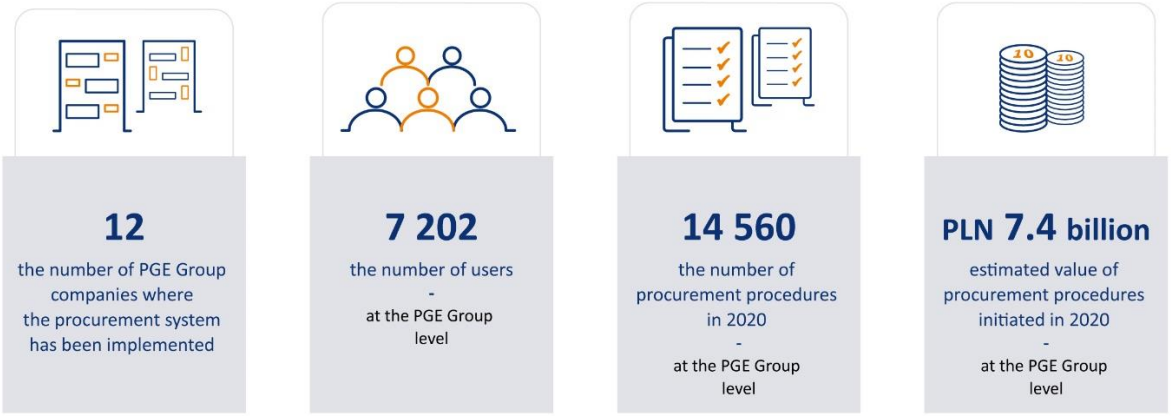
## ONE SYSTEM FOR THE PROCUREMENT PROCESS

The PGE Group's procurement system, the implementation of which was completed in 2020, is probably the largest customised procurement system implemented in Poland. It is also the second largest IT system in the PGE Group. In 2020, it handled the procurement needs of 12 companies (PGE SA, PGE GiEK, PGE Obrót, PGE Energia Odnawialna, PGE EJ1, PGE Ventures, PGE Centrum, PGE Nowa Energia, PGE Synergia, PGE Systemy, PGE Baltica and PGE Energia Ciepła), but it is ready to extend its coverage to the other PGE Group companies.

Within the scope of procurement procedures conducted in 2020, 5,204 contractors submitted offers in the procurement system. The procedures resulted in contracts being awarded to 4,132 contractors. The vast majority of payments to external contractors were made within contractual deadlines. In the case of PGE SA, the share of timely payments exceeded 99.86 percent. In the case of the other PGE Group companies, the shares of timely payments equalled respectively:

- PGE GiEK – 99.85 percent
- PGE Energia Ciepła – 97.07 percent
- PGE Energia Odnawialna – 95.21 percent
- PGE Dystrybucja – 98.44 percent
- PGE Obrót – 99.38 percent
- PGE Centrum – 96.52 percent
- PGE Dom Maklerski – 99.98 percent of the total.

This data proves that the PGE Group has a responsible approach to building business relations with its suppliers.




**There are 13,257 contractors in the procurement system database (as at December 31, 2020).**

Within the framework of the implementation of the procurement system, PGE was one of the first corporations to launch a module supporting a time-limited electronic procurement process for generally available services, supplies or works. At present, work is underway on a new external website for the system and additional tools to make it easier for potential contractors to commence cooperation with the PGE Group.

## ADAPTATION TO THE NEEDS OF BUSINESS PARTNERS

In view of the unique circumstances of the year 2020, it was particularly important to rely on efficient and open communication with current and potential business partners. In April 2020, the PGE Group introduced the possibility to track the opening of bids online in its procurement procedures. This solution is aimed at maintaining the highest standards in the implementation of procurement procedures. In addition, the PGE Group organised a series of online meetings with potential contractors interested in the execution of investment projects planned by the Group. The meetings concerned the tender for geotechnical tests for wind farms on the Baltic Sea and investments to be implemented by PGE Energia Ciepła. During the meetings potential and current contractors were able to familiarise themselves with the Company's investment plans and discuss the principles of proper preparation for tender procedures.

The KOGENERACJA Wrocław CHP Complex, a part of PGE Energia Ciepła, held a remote competitive dialogue based on video conferences with six consortia that submitted requests to participate in the tender for the construction of the Nowa Czechnica CHP plant in Siechnice. The participating consortia were represented by the following corporations: Siemens, RAFAKO, Mostostal Warszawa, Control Process, Mitsubishi Hitachi Power Systems Europe GmbH and Polimex Mostostal. The dialogue with potential contractors resulted in an exchange of comments and observations on the basis of which the subject of the contract was described. All companies taking part in the negotiations were invited to submit their bids for the construction of the Nowa Czechnica CHP in Siechnice. A unit fired with low-carbon gaseous fuel will replace the currently operated coal-fired unit.

## THE PROCUREMENT PROCESS AND THE NEW STRATEGY OF THE PGE GROUP

According to the new business strategy of the PGE Group, procurement units will support investment processes related to renewable energy sources. They will also be responsible for coordinating and supervising procurement processes related to, for example, infrastructural projects such as the construction of energy storage facilities. Within the area of procurement, further professionalisation of tools supporting this area is planned, in particular the existing procurement system of the PGE Group.

## 3. Customers

The PGE Group is a modern and reliable supplier of electricity and heat. In 2020, the PGE Group companies (mainly PGE Obrót and PGE Centrum) engaged in the sale of electricity supplied approximately 5.5 million customers with over 41,000 MW of electricity. In 2020, PGE Dystrybucja, a company licensed to distribute electricity and providing electricity supply services within the PGE Group, distributed nearly 35,700,000 MW of electricity on an area of 122,400 km$^2$ (approximately 38 percent of Poland's territory).

PGE Energia Ciepła generates and supplies heat to approximately 2 million customers in large cities such as: Cracow, Gdańsk, Gdynia, Wrocław , Rzeszów, Lublin, Bydgoszcz and Kielce. The company is also present in Toruń, Zielona Góra, Gorzów Wielkopolski, Zgierz and Siechnice, where it also distributes heat to end customers. In these cities, heat is supplied to consumers via district heat networks with a combined length of 640 kilometres.

### POLICIES AND STANDARDS

The high quality of relations with customers is one of the priorities in the operations of the PGE Group. This is reflected in the adopted and consistently implemented policies and management standards, such as the Code of Good Practice for Distribution System Operators, the Service Quality Books, and the Customer Service Procedures and Standards. These documents precisely describe the processes related to sales, after-sales services and connections, as well as other issues related to energy sales and distribution. The Customer Service Standards emphasise timeliness, quality and comprehensiveness of services. All customer enquiries are handled within 14 days (if additional analyses or clarifications are required – within 30 days), and each enquiry is analysed and used to improve the service provision processes.

The application of the adopted standards is systematically monitored and reported. For example, complaints submitted by customers are analysed thoroughly. Conclusions from such analyses often constitute grounds for introducing changes in internal processes, thanks to which the standards of offered services are being continuously improved. Marketing surveys are also carried out periodically, allowing for multidimensional monitoring of customer satisfaction.

### CUSTOMER SERVICE IN THE NEW CIRCUMSTANCES

The Covid-19 pandemic had an impact on both the PGE Group and its customers. Understanding the serious impact that power outages may have on society and the economy, the PGE Group decided to suspend its debt collection activities aimed at customers with arrears in the payment for supplied electricity as of the second quarter of 2020. At the same time, in order to minimise interruptions in energy supply in the particularly difficult initial period of the pandemic, from mid-March to mid-June 2020 PGE Dystrybucja carried out primarily technical works to ensure safe operation of the grid, so that the supply of electricity remained uninterrupted, in particular to facilities important for the security of the state and its citizens (hospitals, water treatment plants, sewage treatment plants, etc.). For this purpose, modernisation, investment and maintenance works were limited, with focus on ensuring uninterrupted energy supply.

At the initial stage of the pandemic, out of concern for the health of employees and customers, a decision was made to close the network of PGE customer service outlets. Some employees of the PGE Obrót Customer Service Offices reinforced the manning of the Contact Centre, which took over all customer service tasks. To ensure the continuity of operations of the remote channel, a decision was made to apply a distributed work system – call centre consultants were given the option of remote work. It was possible thanks to the full commitment of all employees of the IT units in the PGE Group companies, who had to reconfigure the PGE ICT network within a very short deadline. All Customer Service Outlets run by PGE Dystrybucja were also shut down. Customers were served on a case-by-case basis by appointment, under a full sanitary regime. PGE Centrum, operating in Warsaw under the brand name LUMI, also closed its customer service outlet.

In parallel, an internet campaign was carried out to inform customers about the transfer of all services to remote channels and the possibility of entering into an agreement without having to leave home. During this period, an upward trend in the use of this possibility was observed. The number of enquiries related to agreements and offers submitted through the remote channels of PGE Obrót increased from the beginning of the pandemic, i.e. from March 2020, to the end of December 2020, by 69 percent compared to the entire year 2019, i.e. to an average of 31,000 enquiries per month.

The maintenance of service provision continuity would not have been possible without changes to the applicable processes and previously prepared improvements concerning, among other things, the conclusion of agreements. In PGE Obrót, the process of entering into energy sales agreements on a remote basis was prepared, based on secure digital signatures. The company also promoted the possibility to sign documents by means of the following:

- a trusted profile (a free service made available via the ePUAP platform),
- a qualified signature (a commercial service),
- the eDO App, an application for the holders of an ID card with an electronic layer.

These solutions reduced the circulation of paper documents in commercial relations between PGE Obrót and customers.

In 2020, communication with Lumi's customers was also carried out through remote channels. For this company, the courier service for signing paper documents was abandoned and the entire process of entering into agreements became fully online. The Autenti electronic signature was used for the purpose of agreement execution. The increasingly efficient Lumi hotline service was also a major advantage. In the fourth quarter of 2020, the call answering rate was 90 percent (75 percent for the whole year).

Immediately after the closure of the direct service network, work began on its restructuring to ensure that the offices were properly equipped for reopening. In order to ensure a complete sanitary regime, all outlets were equipped with glass panels separating staff from customers, as well as with disinfectants. The manner of service provision was adapted to the maximum allowable number of people served at the same time. Employees were provided with the necessary personal protective equipment, such as masks and gloves. The offices were reopened in mid-May, with the exception of those facilities whose locations in Power Distribution Districts did not guarantee the work safety of maintenance teams.

Thanks to IT systems developed over the years, the companies and district heating divisions belonging to PGE Energia Ciepła were able to remotely manage the operation of district heating networks, receive and record customer requests and provide comprehensive customer services during the 2020 pandemic. An important system used in the provision of customer services is telemetry, which allows remote monitoring of the operation of nodes and consumer installations. The telemetry system also provides information on the location of disturbances in the functioning of the network and nodes, so it is possible to react remotely and quickly in advance, even before a disturbance is noticed by the customer.

Thanks to these technological solutions, during the pandemic period it was and is still possible, on the one hand, to ensure constant and optimal operation of the district heating network and to maintain a high quality of customer services and, on the other hand, to ensure employee safety.

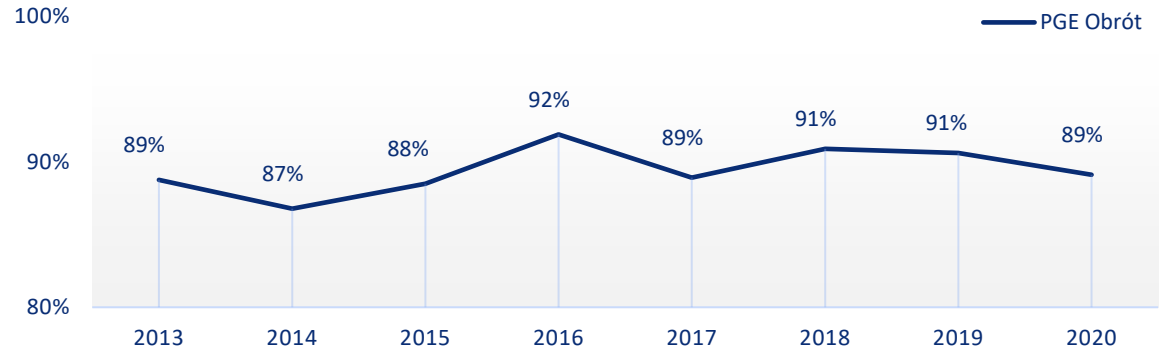
The pandemic caused lasting changes in customer behaviours that have and will continue to affect the development of the service provision area in the PGE Group. Despite the opening of the traditional customer service outlets, many customers continue to choose remote channels. The PGE Obrót Contact Centre handled 75 percent more calls in the fourth quarter of 2020 than in the same period of 2019.

## CUSTOMER SATISFACTION

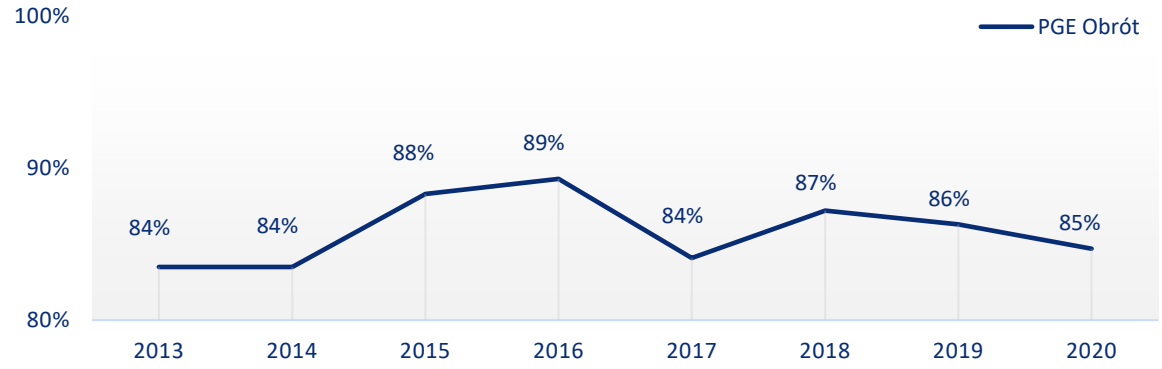
PGE provides its services to customers in the areas of distribution, electricity sales and heating.

Despite the many challenges that last year brought to all energy sellers, the Customer Satisfaction Index (CSI) in the case of PGE Obrót remained at a high level, among both G tariff and C1 tariff customers.

Tariff G customers



Tariff C1 customers



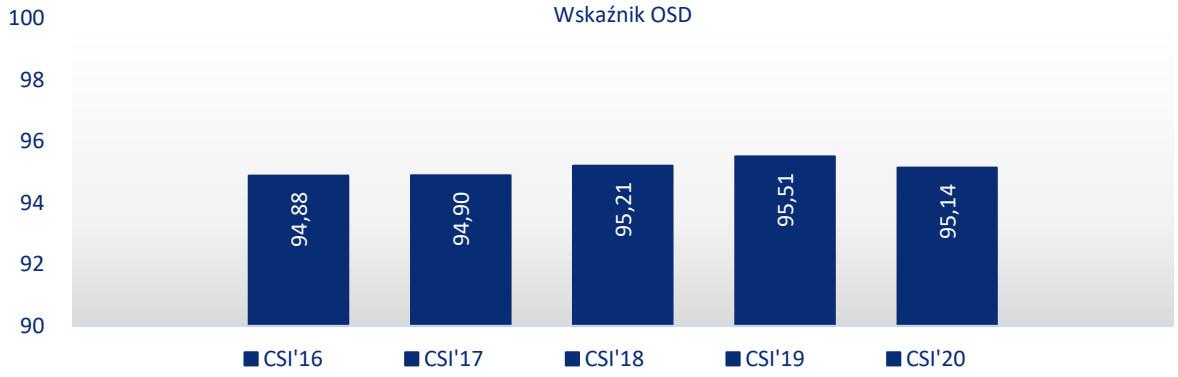

**CSI (Customer Satisfaction Index)**

For customer satisfaction, the issue of dependable electricity supply is of crucial importance. That is why PGE Dystrybucja has been monitoring customer satisfaction with its services for six years. Their analysis covers the connection process and contact with the emergency service. PGE Dystrybucja also monitors satisfaction with direct contacts with company electricians.

The 991 emergency hotline response rate was, on days without weather-related mass emergencies, approximately 92 percent. Customer satisfaction rates are also very high. The Consumer Satisfaction Index (CSI) concerning contact with the 991 emergency hotline amounted to 91 percent and to 93 percent in the case of contact with the PGE Obrót hotline. It resulted from the high standard of work and commitment of all consultants who, especially during the period when the direct service network was shut down, accepted significantly more calls from PGE customers compared to previous years.


**991 Hotline performance rating (0-100)**

Source: 4P Research Agency 2015-2020




**Satisfaction with contact with electricians**
**CSI (0 - 100)**

Source: 4P Research Agency 2015-2020

Due to the pandemic, the planned marketing research related to customer satisfaction with district heating services was postponed until 2021. The results of PGE Energia Ciepła customer satisfaction surveys from the previous year are available in the non-Financial information statement for the year 2019.

## ATTENTION TO EVERY CUSTOMER

One of the priorities of PGE Obrót is to provide services to people with various disabilities. Nearly 80 percent of PGE Obrót customer service outlets are equipped with ramps for wheelchairs or are located on the ground floor of buildings. Additionally, people who have problems with access to customer service outlets may use remote channels. For the comfort of people with disabilities, appropriate standards have been developed depending on the type of a customer's disability. All brick-and-mortar customer service outlets of PGE Obrót are also equipped with magnifying glasses for the elderly and visually impaired. Thanks to this, they can easily and independently read documents and familiarise themselves with the content of an offer or an agreement. PGE Obrót has been granted the OK Senior certificate. The certification process and the OK Senior Quality Label may be used by an entity which offers high-quality services and products intended for the Customer 60+. Moreover, in 2020 PGE Obrót was once again awarded the Customer Friendly Company certificate.

## THE NEW BUSINESS STRATEGY AND CUSTOMER SERVICE

The development of remote channels is consistent with the new business strategy of the PGE Group. The area of customer relations is one of the main elements of the PGE Group's development in the coming years. The integration of contact channels, as well as the improvement and unification of service provision standards will be the foundation for further development of the retail area focusing on ensuring energy and heat comfort for customers. An important element will be support for customers planning to become energy prosumers.

Besides the development of remote channels, PGE plans to rebuild the network of direct service outlets so as to be even closer to customers and better meet their expectations. PGE wants to provide customers with products and services through friendly and always available service and sales channels. PGE's ambition is to achieve the CSI of 85 percent. The competencies of employees and integrated product and service solutions should make it possible. In the long run, the PGE Group wants to become an energy integrator for its customers.

The PGE Group continuously pays attention to its customers' welfare and warns them about unfair practices of some energy suppliers who often impersonate proven and reliable brands such as PGE. To this end, it conducts its own educational and information campaigns in both the traditional and internet media. In this respect, he PGE Group also actively cooperates with local government administration units and the police.

## 4. Local communities

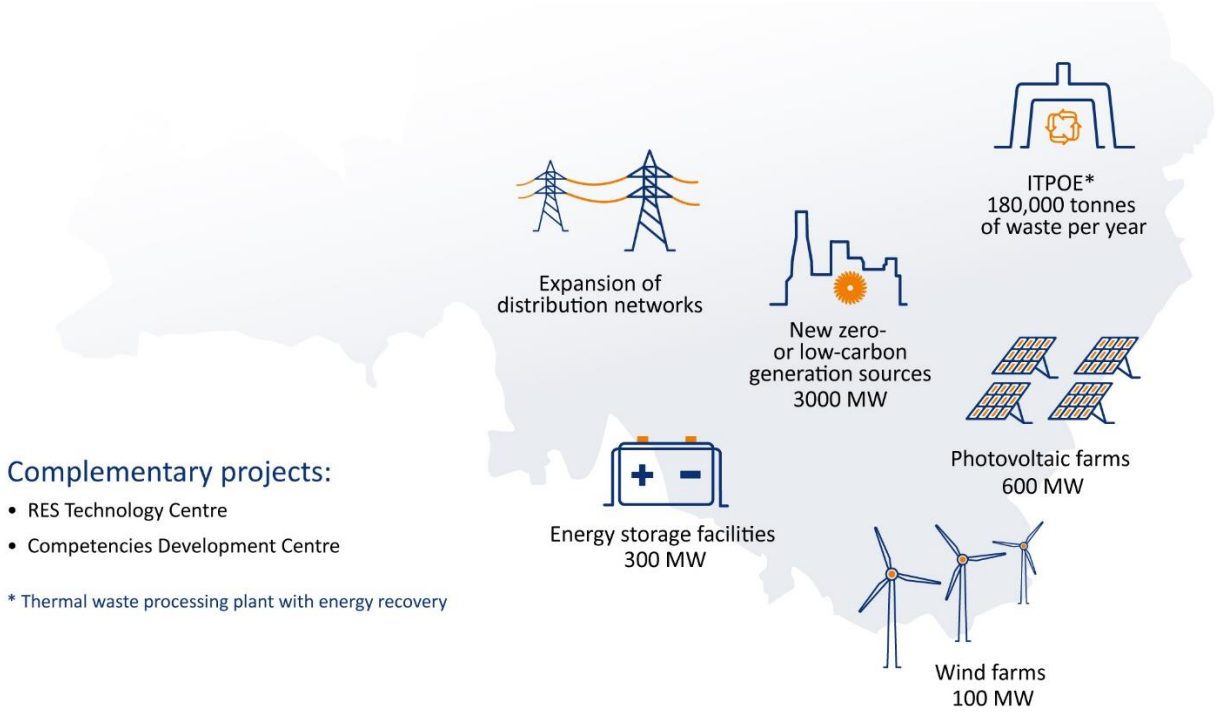
| GRI 203-1 |

PGE is a partner of local communities, listens to their needs and takes them into account in its plans for a energy transition. The PGE Group makes sure that entrepreneurs and employees in the energy sector as well as residents of coal and lignite regions are part of the entire transition process and actively participate in it.

The largest employer in the Bełchatów region is the PGE Capital Group comprising PGE Górnictwo i Energetyka Konwencjonalna and its subsidiaries providing support services to the Bełchatów power plant and lignite mine. The objective of the just transition is to implement changes in a way taking into account the creation of new jobs for employees of the mining industry, as well as the interests of local communities and local governments, the natural environment, investors and entrepreneurs. PGE strives for the just transition to be carried out in accordance with good change management practices, which emphasise coordination, long-term planning and multifaceted cooperation among social, business, local government and central government partners. PGE has prepared a just transition concept that presents a plan of investment projects in a complementary way, along with their justification and implementation schedule. In the case of the Bełchatów region, it presents concrete investment projects for the years 2021-2043 that will create approximately 15,000 new jobs in modern sectors of the economy. The implementation of this ambitious plan depends on the involvement of many entities, also at the national level, as it exceeds the capacities of the PGE Group.

The plan includes projects such as:

- a thermal waste transformation plant with energy recovery and a capacity of 180,000 tonnes of waste per year
- three wind farm projects with a capacity of about 100 MW
- photovoltaic farms with a capacity of about 600 MW
- energy storage facilities with a capacity of up to 300 MW
- a RES technology centre based on the assets of the current support companies, which are to transform themselves into entities specialising in renewable energy projects
- a competencies development centre – a programme dedicated to employees of the power plant and the lignite mine who, due to their age, will not be able to acquire retirement entitlements before the complex is shut down




### Just Transition – Bełchatów Region 2050

The just transition concept provides for the transformation of the Bełchatów region, whose local economy is based on conventional energy, into a region of energy production from zero- and low-carbon sources. In this way, the region will remain an important centre on the map of Poland's power generation sector. In order to carry out a multifaceted transformation process in a fully responsible manner, aid will have to be obtained, as the scale of necessary projects exceeds the financial capabilities of Polish companies.

Currently, on the part of PGE, a working team for the Turów complex transformation programme is engaged in developing a coherent and complete concept of actions aimed at the transformation of the Turów lignite mine and power plant. Among various feasible undertakings, the following projects are being taken into consideration:

- the construction of photovoltaic farms with a capacity of about 100 MW
- the construction of wind farms with a capacity of up to 150 MW
- the construction of energy storage facilities
- the construction of a new CHP plant for the district heating network in Bogatynia
- the construction of a Turów lignite mine museum

Besides the activities of the team developing the Turów complex transformation programme, PGE GiEK has intensified the activities of the South-West Energy Cluster, which operates in the Zgorzelec district. It is one of the elements of preparation for the energy transition of the region. The Cluster will focus on developing a regional transformation programme and ensuring retraining opportunities for the employees of the Turów complex so that they are able to find employment in new branches of the economy.

PGE takes care of the development of the regions where it conducts its business activities. It supports local projects and events, the activities of public benefit organisations, with particular focus on joint pro-environmental initiatives. PGE's social commitment was confirmed by its being ranked for the third time as the Social Responsibility Leader, taking first place in the Responsible Companies Ranking in the categories of fuels, power generation and mining. The Group also achieved fifth position in the general classification of the 14th edition of the ranking examining the quality of corporate social responsibility management.

## SOCIAL INVOLVEMENT OF PGE

The scope of cooperation with local communities is determined by The General Procedure for the Management of Social Involvement Activities in the PGE Group. The Group's approach to building relations with stakeholders is also defined in The Code of Ethics of the PGE Capital Group.

In 2020, PGE's social activity was primarily focused on supporting the fight against the coronavirus pandemic. Since the beginning of the pandemic in March 2020, PGE Group companies and the PGE Foundation have allocated PLN 6.7 million for this purpose. Donations went to hospitals, emergency stations and other medical institutions. They were earmarked, among other things, for the purchase of necessary medical equipment for the treatment of patients suffering from COVID-19, equipment for automatic disinfection, and the purchase of personal protective equipment. Furthermore, the PGE Group provided 10 vehicles for hospitals and the Territorial Defence Forces, and supported the Institute for the Economy of the Elderly, donating over 100 litres of disinfectant fluids.

Parallel to activities supporting direct involvement in counteracting the pandemic, PGE joined actions aimed at promoting responsible consumer attitudes. It initiated a nationwide social campaign called "Polish – I buy it!" and promoting consumer patriotism, encouraging Poles to choose local producers and service providers, as well as to make conscious consumer choices. The project was initiated by the employees of the PGE Group and was conducted under the patronage of the Ministry of State Assets.

In May 2020, the internal media of the PGE Group initiated a blog entitled "Polish – I buy it!". A month later, PGE launched a dedicated website www.polskiekupujeto.pl with a guide section, educational spots and posts encouraging people to choose Polish products. PGE employees from all over Poland were involved in creating the content of the internal blog and the public website.

Developing the social campaign "Polish - I buy it!", PGE established cooperation with the authors of the Pola application, thanks to which it is possible to easily and quickly check whether a given product is manufactured in Poland. Thanks to cooperation with PGE, the application is being constantly developed, and the database of Polish products and companies is constantly expanding. PGE also prepared an advertising spot and a tutorial showing how to use the Pola application and identify Polish products and brands when shopping in either brick-and-mortar or online shops.

During the Christmas season, PGE Polska Grupa Energetyczna launched a Christmas edition of the "Polish – I buy it!" campaign under the slogan "Let's support Polish entrepreneurs and producers ... not only once in a blue moon!". A related guide book was also prepared. It was entitled "Safe shopping in internet shops" and was available on the website www.polskiekupujeto.pl. It consists of articles devoted to, among others, the safety of internet transactions and conscious consumer choices. It also contains information on how to use the Pola application when shopping online.

## FORESTS FULL OF ENERGY

For many years, the PGE Group has been involved in and initiated pro-environmental activities. “Forests Full of Energy” is a project of the PGE Group that for 20 years has been pursuing the same objective – the reconstruction of Polish forests and improvement of air quality and groundwater levels. In the previous years, trees were planted in locations indicated and prepared by foresters from Regional Directorates of State Forests. In 2020, due to the pandemic, PGE changed the formula of the project and initiated cooperation with institutions involved in nature protection. PGE established cooperation with, among others, the Biebrzański National Park. The first joint project financed by the PGE Foundation was the rescue of a 100-year-old tree growing in front of the Biebrzański National Park headquarters. The PGE Foundation also supported the installation of photovoltaic panels in the park territory, which will reduce carbon dioxide emissions. Photovoltaic systems with a capacity of 20 and 10 kW will be installed on two main buildings belonging to the Biebrzański National Park, i.e. the Education and Management Centre in Osowiec-Twierdza and the Animal Rehabilitation Centre located in Grzędy.

Within the framework of the “Forests Full of Energy” project, the PGE Group also supports the revitalization of the Crooked Forest – a natural feature of historic importance located in the Gryfino Forest Inspectorate in Western Pomerania. With the financial support of the PGE Foundation, an educational and tourist attraction will be created, based on the exposition of the most beautiful fragments of the Crooked Forest. The project is being executed in cooperation with the commune of Gryfino, the Gryfino Forest Inspectorate and the PGE Foundation, which is the strategic partner of the project.

## HELPING THOSE MOST IN NEED

The PGE Group supports local activities aimed at social welfare, including assistance for individuals and families who find themselves in difficult situations. In the summer of 2020, the PGE Foundation made a donation of PLN 1 million to Caritas operating in the Podkarpacie region to help the inhabitants affected by the flood. During the Christmas season, the PGE Foundation also gave Christmas parcels to senior citizens who had suffered in the flood.

Christmas gifts from the PGE Foundation were also sent to the veterans of the Home Army and Poles living in the Vilnius region, thanks to the cooperation of soldiers from the 4th Warmia and Mazury Territorial Defence Brigade named after Brigadier General Bolesław Nieczuja-Ostrowski Association and the Odra Niemen Association.

The PGE Group also supports local communities through its employee volunteer programme. PGE volunteers support Warsaw Insurgents, senior citizens and retired PGE Employees. They help with shopping and food deliveries. At the early stage of the pandemic, PGE employees sewed masks for medical institutions.

PGE Group employees are also actively involved in blood donations. Since the beginning of 2020, they have donated over 326 litres of blood.

Furthermore, PGE Energia Ciepła, a PGE Group company, is conducting a nationwide programme entitled “We Share Heat”, which is targeted at to the most needy recipients, including public benefit organisations, who use district heat systems in cities where PGE Energia Ciepła has its CHP plants. In 2020, as part of the programme, the company transferred nearly PLN 415,000 to cover the costs of heating and hot water for recipients in need in 11 Polish cities.

## NURTURING NATIONAL IDENTITY

The year 2020 was a time of important historical anniversaries for Poland. PGE was involved in the promotion of patriotic attitudes and the development of national awareness in society. On the 76th anniversary of the Warsaw Uprising, PGE paid tribute to the power engineers fighting in defence of the Powiśle Power Plant in Warsaw by organizing a ceremony entitled “The Power Plant Employees in the Uprising”. As part of the celebrations, on August 1, a special multimedia presentation devoted to the power plant employees participating in the uprising was shown on a screen located at Kahla Square in Warsaw. From August 1, for 63 days, the façade of the PGE headquarters at 2 Mysia Street in Warsaw showed a large-format picture dedicated to the power plant employees who took part in the Warsaw Uprising.

On the occasion of the anniversary of the Uprising, Bartas Szymoniak composed a work entitled “They”. It was created as part of the PGE Foundation's project called “Tables of Remembrance”, which aims to restore the memory of the Tchorek Plaques. They commemorate the places where Poles were executed during World War II. As part of the project, next to each Karol Tchorek plaque, PGE places a plaque with information in Polish and English together with a QR code, thanks to which it is possible to download a special mobile application on a smartphone, enabling to locate the existing plaques and learn about the history of each place commemorating German crimes. A special website, www.tablicepamieci.pl, was also created. It provides up-to-date information on the project.

In August, the PGE Foundation prepared a TV spot commemorating the 100th anniversary of the Battle of Warsaw, the great victory of Polish soldiers over the Bolsheviks. On the occasion of the Independence Day, PGE prepared a campaign called “Energy Independence” and dedicated to the history of the development of the Polish power generation industry after the regaining of independence in 1918.

In 2020, PGE continued and developed its cooperation with the Warsaw Uprising Museum. Within the framework of strategic cooperation, PGE assumed patronage of the museum's original programme entitled "Family meetings with history". The aim of the programme is historical education and conveying the testimonies of the participants of the Uprising through family visits to this unique place and participation in activities conducted by educators from the museum in the form of an interactive game.


**PGE is the strategic partner of the Warsaw Uprising Museum**

PGE has been a partner of the Warsaw Uprising Museum since 2016 and has been its strategic partner since July 2020. In 2020, the museum was visited virtually by nearly 800,000 people, and more than 1.5 million people took part in online lessons organised by the museum. The museum's online offer, including virtual tours, lessons, outdoor classes, lectures, meetings for children or historical walks around the city, was seen by 3.5 million people.

## PGE SUPPORTS POLISH PHILHARMONIC MUSICIANS

Support for Polish high culture is an important element of PGE's involvement in the promotion of Polish music and the preservation of Polish traditions. Supporting 13 philharmonic orchestras across Poland, the PGE Group is one of the most recognisable patrons of high culture in the country. PGE has been supporting the National Philharmonic in Warsaw for a long time and since 2012 it has carried the honorary title of the Patron of the Year.

PGE Energia Ciepła, a company from the PGE Capital Group, has assumed patronage of the Polish Baltic Philharmonic in Gdańsk, the Karol Szymanowski Philharmonic in Cracow, the National Forum of Music in Wrocław, the Toruń Symphony Orchestra, the Tadeusz Baird Philharmonic in Zielona Góra, the A. Malawski Podkarpacka Philharmonic in Rzeszów, the Gorzów Philharmonic – the Centre for Artistic Education, the Świętokrzyska Philharmonic in Kielce, Opera NOVA in Bydgoszcz and the Henryk Wieniawski Philharmonic in Lublin. Meanwhile, PGE Górnictwo i Energetyka Konwencjonalna is the patron of the Mieczysław Karłowicz Philharmonic in Szczecin, The Józefa Elsnera Philharmonic in Opole. Thanks to PGE's patronage, the philharmonics are able to organise concerts of the highest quality and to host the most outstanding artists.

2020 was the year of new rules for all cultural institutions, including philharmonics. Live concerts were partly cancelled and music was presented mainly online. However, the pandemic time did not cause Poles to stop wanting to experience the joy and beauty of orchestral music. For example, in 2020, the Polish Baltic Philharmonic was visited by as many as 60,000 viewers, and videos on the philharmonic's YouTube channel were viewed 54,000 times. The 14 concerts that the Philharmonic made available only online have so far been accessed close to 13,000 times. In the virtual audience of each concert there were on average more than 900 viewers, that is as many as would have filled the Philharmonic Hall before the pandemic in overbooking.

In the spring of 2020, together with the philharmonics of which it is a patron, PGE launched campaigns entitled #stayathome and enjoy music and "Listen to the energy of the City". As part of the former, musicians invited their listeners to take part in the #stayathome campaign by recording from their homes a fragment of "Spring" ("La Primavera") by Antonio Vivaldi. The latter, in turn, is a virtual musical walk around interesting beauty spots of Poland which was created to enrich the home musical education of the youngest music lovers during the quarantine period, to arouse their childish curiosity and encourage them to visit Polish cities as soon as the tourist season begins.

## EDUCATIONAL PROGRAMME "THE ADVENTURES OF CIEPŁOSŁAW THE CAT"

In September 2020, PGE Energia Ciepła launched a new educational project for children from forms I-III of primary schools called "The Adventures of Ciepłosław the Cat". Its objective is to build ecological awareness among the youngest, to teach them how heat is generated and where electricity comes from. The action enjoys the honorary patronage of the Minister of National Education. As part of the programme, 5 lesson scenarios, 3 educational games, 20 online workshop tasks and 5 animated films were prepared. All participating schools were invited to join a competition to create a comic strip about the adventures of Ciepłosław the Cat related to heat.

## SAFE ENERGY

In the first two months of 2020, an educational campaign entitled "Safe Energy" was conducted among young children by employees of PGE Dystrybucja. This action has a long tradition and takes various forms in the company's branches. However, its objective is one and the same: to teach children how to use electricity safely and economically. Children visit field units and learn about the work of power technicians and engineers in various areas, power dispatching or power emergency services. Sometimes power technicians and engineers visit schools and kindergartens and tell children where electricity comes from, what its sources are, how to use electricity safely and how to behave near power equipment. Through such meetings, children learn the emergency number for the electricity service and when to call it.

Power technicians and engineers from the Warsaw Branch have been organising "Safe Lessons" for over twenty years. A special attraction for younger children is the opportunity to try on elements of an electrician's uniform and to inspect a vehicle used by the power emergency service. "Lessons" are an opportunity to not only learn about the secrets of the work of electricians, but also provide a large dose of knowledge, and at the same time to have fun and participate in quizzes with prizes. Such meetings are often conducted in cooperation with the police, municipal police or firefighters, thus extending the scope of safety prevention to other areas. In the Białystok branch of the company, the "Safe Summer Holidays" and "Safe Winter Holidays" projects are executed in cooperation with municipal services. Sometimes, in order to consolidate knowledge, a project is accompanied by art competitions with prizes. In Zamość, children learn the safety rules concerning contact with electrical appliances through literature for the youngest as part of the competition entitled "I read and draw with energy" . During activities, children listen to stories about electricity and take part in discussions about electricity and its importance in everyday life. A meeting ends with an art competition whose purpose is to produce a work which is an artistic interpretation of the previously read literary texts and a reflection of the knowledge gained by children during the meeting. In the Rzeszów branch of PGE Dystrybucja, an integral element of the project is trips to the Museum of Podkarpacie Power Generation Industry. Energetic guides show visitors with a real return to the past, to be precise, to the year 1909, when the first power plant in Rzeszów was established. Under the supervision of a guide, visitors can see tools used by power engineers at that time, such as Szpotański counters, ammeters, wattmeters, assembly devices, control clocks from the first power plant in Rzeszów, safety devices, etc.

## SPORTS SPONSORSHIP

Due to the pandemic, the year 2020 was a time of major changes and challenges in PGE's sports sponsorship activities. During that period PGE SA entered into 16 sports sponsorship agreements , including:

- 2 agreements concerning support for sports teams,
- 1 league naming rights agreement,
- 7 agreements concerning support for amateur sport for children and young people,
- 5 agreements concerning support for sports events,
- 1 agreement concerning support for an individual sportsperson.

There were also two promotional campaigns and five special campaigns conducted on social media.

In 2020 the cooperation agreements with two clubs playing in the highest competition classes of the most popular disciplines were extended: Stal Mielec (the football premier league) and Spójnia Stargard (the basketball Energa Basket league). Within the scope of executed naming rights agreements, these teams participate in matches under names containing the PGE brand: PGE FKS Stal Mielec and PGE Spójnia Stargard, similarly to one of the best volleyball teams in Poland, PGE Skra Bełchatów, with which PGE has cooperated since 2009.

After five fruitful years of cooperation with the Speedway Ekstraliga, a decision was made to sign a new naming rights agreement with PGE Ekstraliga. The PGE brand will accompany the competitions of the best eight clubs in Polish speedway for the next three seasons.

PGE pays special attention to supporting the sport of children and young people. In 2020 the company inaugurated two strategic projects in the locations of the PGE Group's facilities. Their objective was to support the GKS Bełchatów Academy as well as basketball groups for youngsters in Turów Zgorzelec. The GKS Bełchatów Academy trains approximately 350 young sportspeople aged 5 to 18 in two sections: football and wrestling. On the other hand, PGE Turów Zgorzelec has basketball teams for youngsters and an e-sports section, which is a new element in PGE's sponsoring activities. Involvement in this project is a part of the PGE Group's new strategy opening the Company to modern energy services and modern solutions in business.

In 2020 PGE also signed sponsorship agreements to support children and young people training various sports disciplines in the following clubs: LTS Legionovia (girls' volleyball), Widzew Łódź Academy (football), Gwardia Opole Academy (handball), Young Bison Białystok Basketball Academy (basketball), MKS Lublin (girls' handball). The development of youth groups is also an important element of sponsorship agreements concluded by PGE with PGE Spójnia Stargard, PGE Stal Mielec and PGE Skra Bełchatów.

Despite the ongoing pandemic, the PGE Group participated in the organisation of a few important sports events in 2020. Three agreements were signed with the Polish Speed Skating Association concerning sponsorship of the following events: the World Juniors Championship, the Polish Multithlon Championship and the Polish Distance Skating Championship. Once again, “PGE’s biggest PE lesson” turned out to be a great success. Although it was organised in an online format, it managed to secure the participation of 3,000 pupils. At the beginning of 2020 PGE also sponsored the Piasts Ski Race.

PGE also continues cooperation with Zofia Klepacka, a Polish windsurfing medallist, who is one of the main candidates for an Olympic medal at this year's Olympic Games in Tokyo. In 2020, Zofia Klepacka won the Polish championship in the RS:X and open foil classes, as well as the bronze medal at the European Championship.

The coronavirus pandemic changed the face of PGE's social involvement, forcing the Company to use modern technologies, including the social media, more intensively. PGE encouraged not only philharmonic musicians, but also sponsored athletes to participate in its special events. They, in turn, promoted the “#stayathome but be in touch” campaign and participated in the “Distance counts in life” campaign aimed at reminding people to maintain a necessary distance to others during the pandemic.

# ENVIRONMENT

| GC-7 | GC-8 | GC-9 |

The PGE Group undertakes many activities in various fields related to environmental and climate protection. In its activities, it follows the principle of sustainable development, consciously shaping relations between economic growth and care about the natural environment. PGE is increasingly investing in renewable energy sources. The PGE Group's priority is to reduce the environmental impact of its operations and to protect the natural ecosystem. PGE consciously and responsibly builds and increases its competitive advantage with respect for the natural environment by aiming to reduce pollutant emissions.

Pro-environmental investments play an important role among various projects of the PGE Group. In 2020 alone, the PGE Group companies incurred approximately PLN 1.6 billion in environmental protection investments, out of which more than PLN 600 million was allocated for strategic development investments in renewable energy. The remaining part of the capital expenditures comprised investments related to the adjustment of power generation assets to the requirements of the BAT Conclusions, development investments in new gas-fired units, as well as modernisation and restoration investments aimed at increasing plants' operational efficiency. This confirms the commitment of the PGE Group to actions reducing environmental nuisance and supporting responsible use of natural resources. In 2020, the companies of the PGE Group implemented 24 research and development projects in the field of environmental protection. The scope of the projects is shown in the table on pages 101-109.

## 1. Environmental protection management in the PGE Group

The management of the environmental protection area is defined in the environmental protection policy of the PGE Capital Group. It defines rights and obligations, as well as processes and activities relevant to environmental protection. The policy defines the following elements:

- general principles, rights and obligations in the field of environmental protection applicable in the PGE Group,
- processes and activities carried out in the PGE Group and being of key importance for environmental protection,
- key roles defined in the environmental management process for relevant levels of the organisational structure of management of the PGE Group,
- environmental processes in the particular business lines, taking into account the specific character of each line,
- constantly raising the awareness of the PGE Group's employees in the field of environmental protection.

The environmental protection policy obligates all PGE Group companies to care about the environment. They take a systematic approach to preventing and mitigating their impact on the environment and climate, monitor regulatory changes and meet all legal requirements. Due to the specificity of their operations, the environmental indices presented in this statement refer to selected organisational units for which a given issue is relevant from the point of view of reporting obligations and environmental impact. Environmental impact management issues are included in the Code of Ethics of the PGE Group, which states that all employees are obliged to use natural resources in a rational way, and in the declaration of the Management Board of PGE SA on the environmental policy. In this declaration, the Management Board has assumed the obligation to continuously improve activities aimed at protecting and improving the state of the environment and to prevent pollution by implementing high and economically justified technological standards. The Management Board's declaration is available on the PGE Group's website at:

*https://www.gkpge.pl/zrownowazony-biznes/obszary-dzialalnosci/z-szacunkiem-dla-ziemi*

In PGE SA, a team responsible for the implementation, maintenance and improvement of the environmental management system based on the PN-EN ISO 14001:2015 standard has been in place since 2019. To ensure that the environmental policy in the PGE Group is effectively implemented, administrators and coordinators of the environmental management system have been appointed in the particular companies.

The PN-EN ISO 14001:2015 standard is certified in the majority of the PGE Group companies. The basic task of the ISO 14001 standard is to support environmental protection and pollution prevention in a manner that takes into account socio-economic needs, in accordance with the principles of sustainable development. The environmental management system compliant with the PN-EN ISO 14001:2015 standard identifies and monitors the PGE Group's influence on the environment, taking into account environmental impacts in the context of risks and opportunities for individual environmental aspects, internal and external factors, as well as stakeholders. The fulfilment of legal requirements for environmental protection and the volume of emissions to the environment are monitored on an ongoing basis.

## EMAS

The EcoManagement and Audit scheme is a EU environmental certification system which functions on the basis of the EU Regulation on the voluntary participation by organisations in a system of eco-management and audit. EMAS is a tool supporting the implementation of a culture of sustainable development as well as effective management of available resources and energy in organisations.

Two branches of PGE Górnictwo i Energetyka Konwencjonalna, the Opole Power Plant and the Dolna Odra Power Plant Complex, as well as the Wybrzeże CHP Plant, a branch of PGE Energia Ciepła, have implemented EMAS PI:2999. Together with the prepared environmental declaration, it is subject to annual verification by an independent accredited examiner. It is worth noting that the Opole Power Plant is an organization with the longest history of registration in the national EMAS system. It was entered in the register for the first time in 2005, and its first position there proves that the Opole Power Plant is the national leader in this field.

## 2. Climate awareness

The PGE Group's response to climate protection is the announcement of a new business strategy and the adoption of the achievement of climate neutrality by 2050 as one of its strategic objectives.

In relation to the assumptions and objectives defined in the strategy adopted by the Management Board of PGE SA and published in October 2020, the Group continues its efforts to reshape its power generation portfolio towards low- and zero-carbon sources. The effects of the actions taken are already visible, and the positive trend related to the reduction of emissions will continue in the coming years.

As the Polish leader of a sustainable energy transition towards environmentally friendly energy, PGE commits to reducing its impact on the environment through the following:

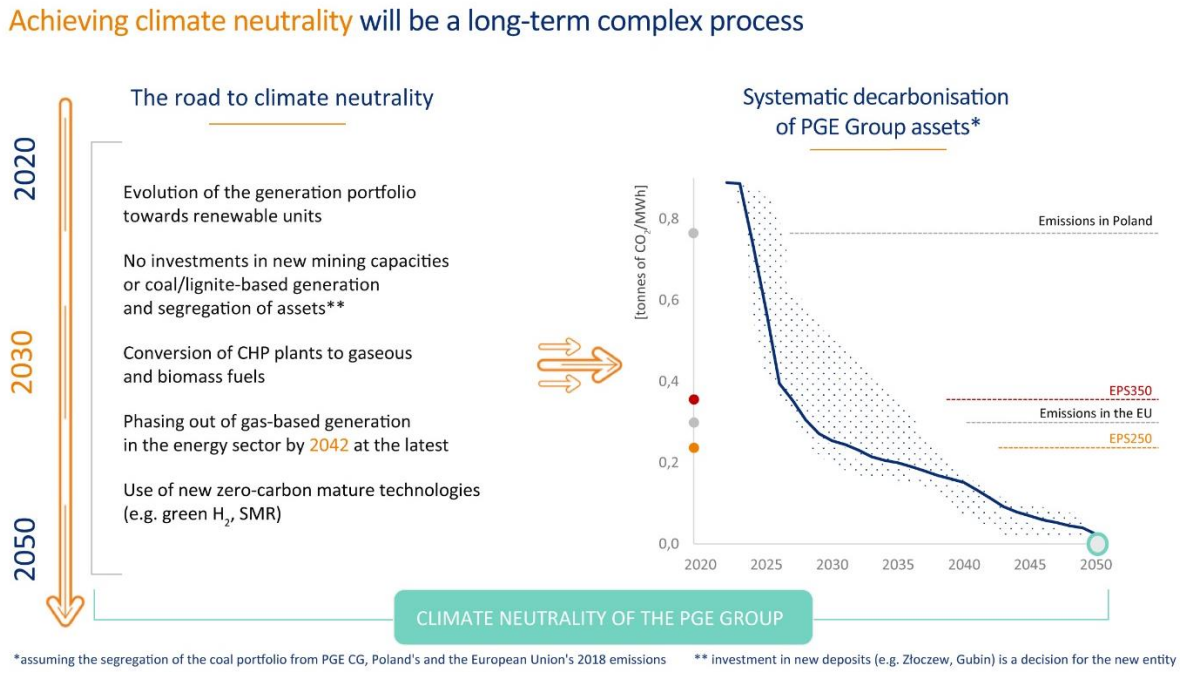
- reducing the carbon footprint of our generation capacities by changing technology, expanding the RES portfolio and enabling customers of the Group to participate in the transition,
- increasing the use of renewables and reducing the carbon footprint of the portfolio,
- developing a circular economy,
- achieving climate neutrality by 2050 at the latest.

The development projects currently underway have already contributed to a steady reduction in our net total average carbon footprint.

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|
| **$CO_2$ emissions in t/MWh** | 0.98 | 0.98 | 0.96 | 0.95 | 0.93 | 0.88 | 0.84 | 0.83 |

**Net average $CO_2$ emissions of PGE power generation units (t/MWh), including heat generation**

Simultaneously with the implementation of the new strategy of the PGE Group, decarbonisation of power generation units will be accelerated. As a result, by 2030 PGE will have contributed to reducing $CO_2$ emissions by 120 million tons.




**PGE Group's road to climate neutrality**

The person overseeing issues related to reducing the PGE Group's impact on the climate is Wojciech Dąbrowski, President of the Management Board of PGE Polska Grupa Energetyczna.

The applied and planned solutions are adapted to the specific character of the PGE Group companies. Conducting its operations and planning new initiatives, each of them treats the reduction of its impact on the environment and climate as a priority. In 2021, a team of internal experts was appointed to calculate the carbon footprint of the PGE Group in all three scopes. The results will be presented in the statement of non-financial information for the year 2021.

## RENEWABLE ASSETS

Renewable assets are a key element of the ongoing energy transition, leading to a reduction in carbon dioxide emissions into the atmosphere and thus increasing the share of renewable energy sources in the National Power System.

The PGE Group's long-term strategic objective is to provide its customers with energy generated from renewable sources by 2050, which will be possible through the implementation of the following:

- the offshore programme
- the PV programme
- other RES investment projects (including the onshore programme)

In 2020, the RES portfolio was expanded by nearly 140 MW, mainly in the form of wind assets, but also by four one-megawatt photovoltaic installations in the Lubelskie, Podkarpackie and Lubuskie provinces. In total, the PGE Group already has over 1.1 GW of installed capacity in RES, of which nearly 700 MW comes from wind farms.

The implementation of RES projects will contribute to the diversification of the PGE Group's fuel mix, an increase in installed capacity in renewable energy sources, and thus the implementation of the EU climate policy.

## PV PROGRAMME

The PGE Group is running a programme for the development of the Group's photovoltaic installations whose strategic goal is to achieve 3 GW of solar power capacity by 2030 and ensure that the PGE Group is the leader in the development of photovoltaic power plants in Poland. In 2020, PGE Energia Odnawialna commissioned four one-megawatt photovoltaic farms: PV Lesko, PV Bliskowice, PV Lutol 1 and PV Lutol 2.

As part of the PGE Group's programme for the construction of photovoltaic installations, preparatory works are underway for the first stage of the construction of photovoltaic farms on the premises of the Bełchatów Power Plant. Eventually, by the end of 2025, PGE will have built installations with a total capacity of over 600 MW in the Bełchatów area.

## OFFSHORE PROGRAMME

The PGE Group is running a programme for the construction of offshore wind farms. By 2030, the PGE Group will have built 2.5 GW of offshore wind farms within the framework of the strategic partnership with the global leader of the sector, the Danish company Ørsted. The construction of the Baltica 2 and Baltica 3 farms will mark the beginning of the PGE Group's development in the offshore wind energy sector. Another offshore wind farm, Baltica 1, with a capacity of 0.9 GW, is to be commissioned after 2030. Taking into account the scale of planned investments, the PGE Group plans to develop its potential to independently operate and maintain offshore wind farms.

## OTHER RES INVESTMENTS

In the second quarter of 2020, PGE completed the project of building two onshore wind farms (Karnice II and Rybice/Starza) with a total combined rated capacity of 97 MW. The windmills included in the project are located in the Zachodniopomorskie province.

PGE acquired the already functioning Skoczykłody Wind Farm. The farm is located in the Łódzkie province and its capacity equals 36 MW. It consists of twelve three-megawatt turbines. The efficiency of the farm reaches nearly 32 percent and the annual generation is close to 100 GWh.

Another project supporting the development of renewable energy sources was the commissioning of Poland's first electricity storage facility using Tesla Powerpack modules in Rzepedź, Podkarpackie province. The installation was designed to support the reliability of the local distribution network. The container-based energy storage facility was built under the Innovative Network Services project.

## COMBINED HEAT AND POWER GENERATION

The new business strategy of the PGE Group establishes low- and zero-carbon objectives also in the area of heat generation. Reducing $CO_2$ emissions and increasing the share of RES in heat generation are key elements supporting the consistency of the PGE strategy with the "Green New Deal" adopted at the European Union level. The development investment projects under preparation and entering the implementation stage aim to use gas-fired CHP plants as replacements for coal-fired heat generation sources.

The heat generation sector is currently in a period of transition. The key directions of change are diversification of the fuel mix and investments in cogeneration. As the leader of the heat market in Poland, PGE Energia Ciepła also wants to be the leader of the transition in the heat generation sector.

The company is focused on increasing the share of renewable energy sources in heat generation. It analyses innovative solutions whose application aims at achieving climate policy objectives in a sustainable manner. In view of the growing expectations of customers and society as well as supporting the achievement of national and international climate policy targets, PGE Energia Ciepła is replacing coal-fired sources with new low-carbon sources fired with gas or oil. The company builds new generation units characterised by greater operational flexibility and reliability.

The current investment projects include in particular the following:

- the construction of new gas-fired cogeneration plants – Siechnice, Bydgoszcz, Kielce, Zgierz. Other locations – Gdynia, Gdańsk, Kraków, Rzeszów – are at the stage of preparatory works,
- the construction of a new reserve and peak load boiler house with a capacity of 130 MW in the Wybrzeże Branch in Gdańsk; it will consist of oil/gas-fired and electrode boilers supplied with electricity,
- the modernisation of the gas turbine in Zielona Góra – a major overhaul of the gas turbine.

Investment projects with a longer time horizon, i.e. programmes for the development of the existing generation units in Cracow, Gdańsk and Wrocław, are also at the conceptual stage. Decisions on their implementation will have been taken by 2030. The development projects under analysis provide for the use of a hydrogen-ready technology allowing co-firing of hydrogen, which in the long term offers an opportunity to significantly reduce $CO_2$ emissions in cogeneration systems.

The investment programme prepared by PGE Energia Ciepła constitutes an integral part of a long-term process of strengthening the company's position on the heat market and as a partner for cities and regions in their sustainable development.

## REDUCING GREENHOUSE GAS EMISSIONS

The PGE Group conducts systematic activities aimed at reducing greenhouse gas emissions. Specific emissions of carbon dioxide are being systematically reduced. This is the result of asset modernisation and development investments. Each year high capital expenditures are allocated for this purpose. Among other things, combustion processes are being optimised and solutions are being introduced to improve generation efficiency, increase effectiveness of fuel and raw material use and reduce energy intensity of generation processes and auxiliary purposes.

The Bełchatów Power Plant is a significant point source of greenhouse gas emissions. This is due to the fact that it is the largest unit in Poland and in the world generating electricity based on the combustion of lignite, which causes the accumulation of emissions in one location and their significant absolute values. It should be emphasised that in 2020 the Bełchatów Power Plant reduced its $CO_2$ emissions by 15 percent compared to those in 2012. In this period, $CO_2$ emissions decreased by approximately 5 million tonnes.

The implementation of projects providing for the combustion of natural gas as a transitional fuel supports the transition towards climate neutrality. The construction of two new CCGT units in the Dolna Odra Power Plant is a project of strategic importance for the Polish economy and at the same time important from the perspective of lowering the costs of the energy transition. The average $CO_2$ emission values of the new units are more than twice lower than the current average emission values for power generation in the National Power System (NPS). This means that energy production in the new units will result in a reduction of $CO_2$ emissions from energy production in the NPS by approximately 2-3 million tonnes per year. Reduction in emissions is achieved not only by changing the fuel to natural gas, but also by using the latest state-of-the-art gas turbines whose power generation efficiency exceeds 63 percent. For comparison, CCGT power plants with turbines of the previous generation achieve 59-60 percent efficiency, while the most modern coal-fired units – about 46 percent efficiency.

## MODERNISATION OF GENERATION ASSETS VERSUS GENERATION EFFICIENCY

Depending on the location, the modernisation programmes cover different scopes of adaptation works. Besides those concerning adaptation to the requirements of the BAT Conclusions, it is possible to distinguish modernisation projects that had a positive impact on the efficiency of generation and thus on energy efficiency. Lower consumption of electricity means lower $CO_2$ emissions. In 2020, the modernisation of units 1-3 in the Turów Power Plant was completed. In addition to adaptation to the indicated emission parameters, an improvement in electricity generation efficiency of approximately 2 percent was achieved for each unit. This reduced the amount of lignite fired to generate the same volume of electricity. In the case of the Bełchatów and Turów lignite mines, the sources of $CO_2$ emissions are related to operational activities and concern mainly transport and fugitive emissions. Both branches ensure that a rational transport policy is pursued on their premises and with regard to business trips and employee commuting. Reduction of fugitive emissions is mainly based on extensive fogging and sprinkling systems, as well as closures of sites generating large volumes of dust.

## INCREASE IN CONNECTION CAPACITY

The majority of investments in the area of electricity distribution in 2020 was related to the modernisation and development of the medium- and low-voltage electricity network and the construction of transformer stations. These investments will allow an increase in the connection capacity of the distribution network, including for renewable energy sources, as well as an improvement in electricity outage rates and a further reduction of network losses. The energy efficiency of electricity equipment is increased by replacing transformers and purchasing metering equipment, including modern electricity meters. Renewable energy sources constitute an important element of sustainable development bringing about measurable economic and ecological effects. In 2020, 157,000 renewable energy micro-installations were connected to the PGE Dystrybucja network, which was over two and a half times more than in 2019 and over 8 times more than in 2018. The installed capacity is almost 950 MW, which is almost three times more than in 2019, and almost nine times more than in 2018.

These actions are important from the point of view of the planned reduction of energy production from conventional sources and constitute an integral part of the implementation of positive actions in the context of climate change prevention.

## 3. Circular economy

One of the factors influencing the achievement of climate neutrality by the PGE Group by 2050 is the implementation of the principles of a circular economy in all areas of activity.

The EU's circular economy package provides for the reduction and ultimately elimination of landfills and is a challenge for the power generation and mining industries. PGE follows the principles of a circular economy, seeking the widest possible applications for the generated by-products of combustion. Closing the circulation of raw materials and increasing the degree of their utilisation is an important process in the PGE Group due to the growing importance of efficient use of resources, reduction of waste generation in favour of by-products and minimisation of environmental impact.

### COMBUSTION BY-PRODUCTS

By-products of combustion are the result of electricity and heat production in power generation units fired with fossil fuels. The management of combustion by-products in the PGE Group, based on the circular economy principles, leads to the use of waste as valuable substances in other branches of the economy (the cement, construction, road building and mining industries), and in consequence to a reduction in the volume of final waste. In 2020 alone, a total of 4.33 million tonnes of valuable commercial materials, including ash, slag and gypsum from flue gas desulphurisation systems, were generated in power plants and combined heat and power plants belonging to the PGE Group during the production of electricity and heat.

The reuse of combustion by-products in various industrial sectors brings tangible environmental benefits. The negative impact of landfills, both for people and the environment, is reduced as there is no need to allocate new land for their construction, together with accompanying infrastructure.

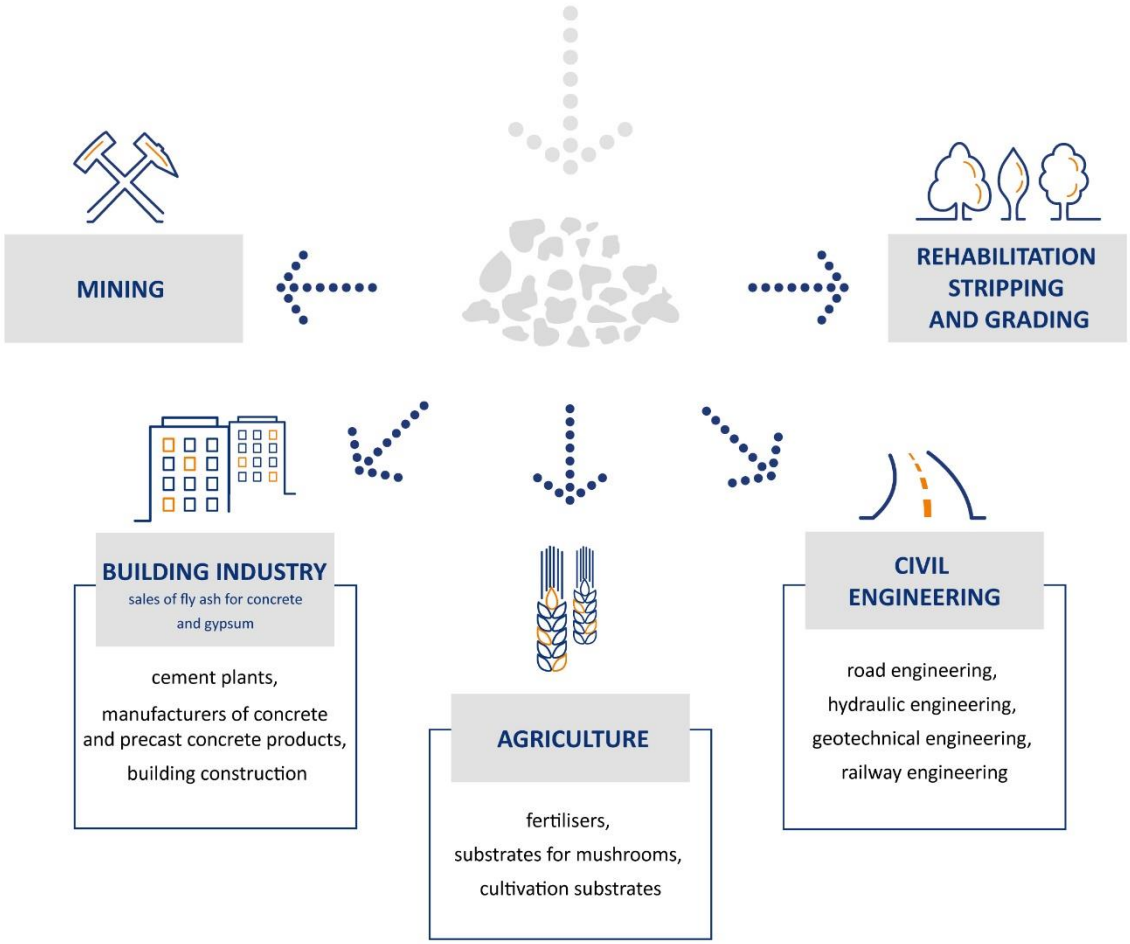
By-products of combustion successfully replace natural raw materials (e.g. natural gypsum, aggregate), thus reducing their extraction as well as emissions that accompany their extraction. The responsible use of secondary raw materials, such as gypsum from flue gas desulphurisation plants, is a good example of implementing the principle of priority for secondary raw materials in economic processes. Such measures help to protect fossil resources for future generations.

Another important aspect is the reduction of greenhouse gas emissions in production cycles that use combustion by-products. A case in point is the reduced carbon footprint of cement production processes using fly ash or gypsum board production processes using synthetic gypsum. The use of ash with a high calcium content from commercial power generation reduces $CO_2$ emissions that accompany the industries producing traditional binders such as cement or lime. In this way, the conventional power generation sector contributes to the avoidance of $CO_2$ emissions due to the use of combustion by-products supplied from power plants to cement production factories. According to a report prepared by the National Centre for Emissions Balancing and Management, thanks to the production of binders from combustion by-products, which successfully replace cement and natural lime in selected geotechnical applications – mainly in road construction, $CO_2$ emissions can be reduced by almost 568,000 tonnes over a period of five years.

Since the beginning of its operations, PGE has been gathering knowledge on the anthropogenic minerals produced in consequence of its activities. The reuse of by-products of combustion has accompanied the energy and heat generation sector for over 20 years. Measures taken by the PGE Group and aimed at closing technological cycles are in line with the European Union's policy oriented towards the industrial use of by-products, the protection of natural resources and the minimisation of adverse environmental impact. The following processes and assets are classified as being in line with the circular economy principles:

- a sustainable supply chain for raw and other materials,
- reduction of energy losses and material waste,
- rehabilitation and restoration of investment values of post-industrial sites.

Cement and concrete manufacturers, ceramic producers, as well as mining and road construction companies benefit from the use of proven and safe solutions. Products made using combustion by-products meet all the requirements applicable to building materials and products.



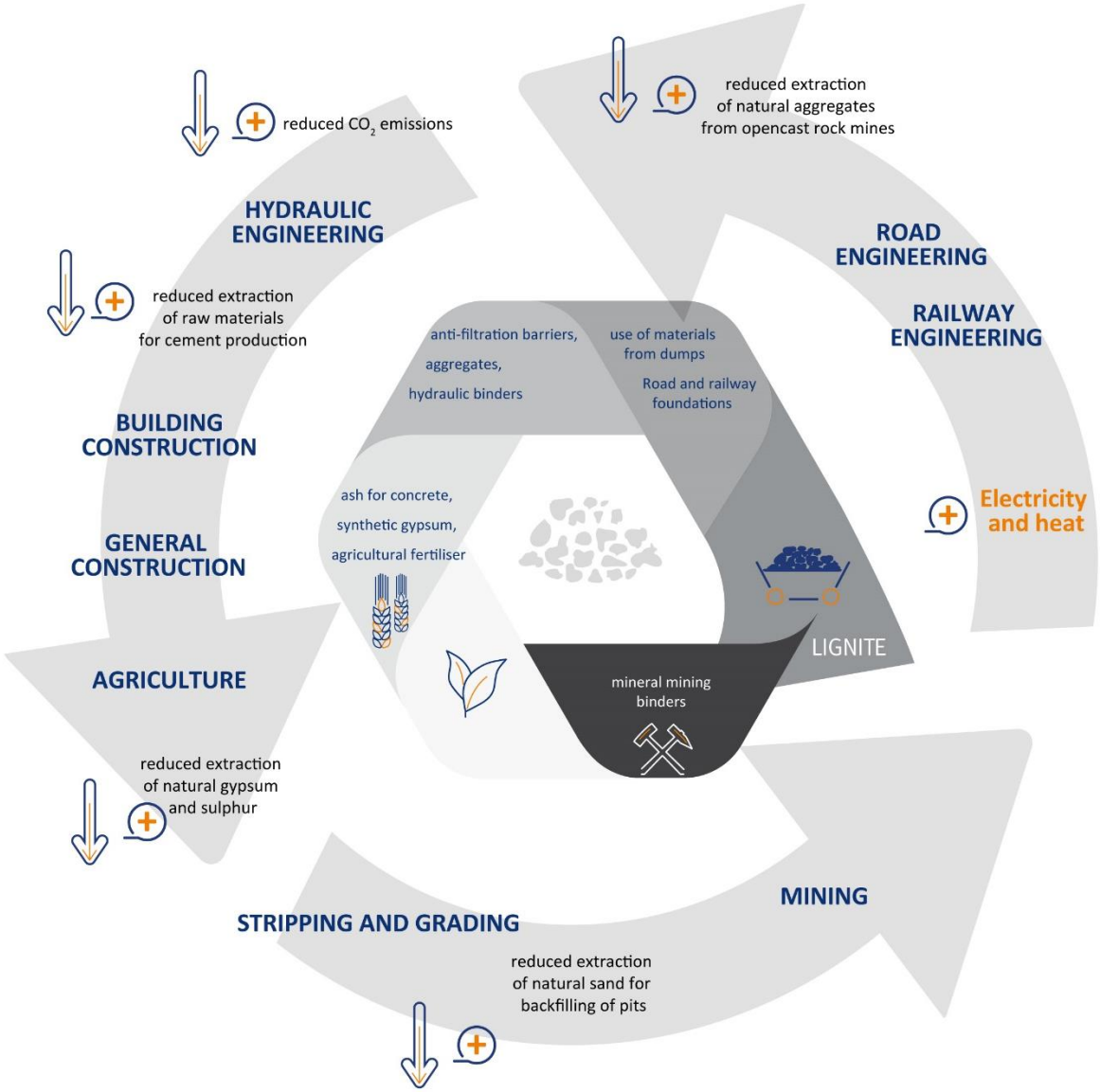

### The market for combustion by-products

Anthropogenic minerals produced in PGE, such as gypsum from flue gas desulphurisation plants, ash and slag or ash-slag mixtures used as raw materials for production are subject to a number of tests before they are granted a marketing authorisation. The process of using anthropogenic minerals in the construction industry is supervised by the Building Research Institute. The products have been registered under the international REACH system. As part of the registration, combustion by-products have undergone comprehensive toxicological, ecotoxicological and mutagenic tests in accordance with the requirements set out by the European Chemicals Agency (ECHA). Tests carried out in laboratories of the highest world standard have unequivocally confirmed that these substances are safe and pose no threat to humans, animals and the environment.

Synthetic gypsum (calcium sulphate) produced in flue gas desulphurisation installations in power plants and cogeneration plants within the PGE Group (Bełchatów Power Plant, Opole Power Plant, Dolna Odra Power Plant Complex, Turów Power Plant, Cracow Combined Heat and Power Plant, Wybrzeże Combined Heat and Power Plant), whose generation technologies are based on the wet lime method, has properties similar to those of natural gypsum and can successfully replace its natural equivalent. Differences between natural and synthetic gypsum in terms of chemical composition and trace element content are insignificant. Synthetic gypsum is widely used in the building industry, for example in the production of plasterboards.

In connection with the application of calcium-based flue gas desulphurisation methods in power plants and combined heat and power plants belonging to the PGE Group, synthetic gypsum is produced, which turns out to be a good substitute for natural gypsum, and the majority of the substance's components (99 percent) are compounds identical to mineral substances of natural origin. In 2020 alone, 2.43 million tonnes of gypsum from flue gas desulphurisation systems were produced in the PGE power plants and combined heat and power plants.

By-products of combustion are also used in the rehabilitation and macro-levelling of post-industrial and degraded land, restoring many areas to their former landscape and natural conditions. They are also widely used in the mining industry to protect the structural integrity of pits.




### By-products of combustion in a circular economy

Tasks in the field of circular economy are planned within the companies dedicated to support and conduct activities in the field of waste and combustion by-products management, i.e. PGE Ekoserwis sp. z o.o. and Epore sp. z.o.o.

With regard to the management of waste and by-products of combustion in PGE Group companies (PGE Górnictwo i Energetyka Konwencjonalna and PGE Energia Ciepła), there are specific technical and geographical conditions, but the main objective is their economic utilisation instead of storage in landfills.

## THERMAL WASTE PROCESSING PLANTS WITH ENERGY RECOVERY

The PGE Group operates one Thermal Waste Processing with Energy Recovery (TWPER) plant in the city of Rzeszów. This plant is located on the premises of the existing combined heat and power plant, in the direct vicinity of the reloading base as well as the sorting and composting plant of the Municipal Utilities Enterprise. This allows a controlled and safe recovery of energy from municipal waste and the simultaneous generation of electricity and heat. The applied technology is environmentally safe, modern and proven in over 300 cities around the world. Thanks to the use of state-of-the-art filters, the TWPER plant meets the strictest EU requirements for environmental standards. It is also a major step towards the complete elimination of landfill in the region.

Two new investment projects will be realised by PGE Energia Ciepła as part of the circular economy initiative:

- the second line in the TWPER plant in Rzeszów
- a TWPER plant on the premises of the Bełchatów Power Plant.

Both projects are currently at the preparatory stage and are to be launched in the years 2023-2024.

Thermal waste processing with energy recovery plants are an indispensable element of a sustainable circular economy due to the reduction of waste stored in landfills and its thermal processing generating electricity and heat.

## OIL MANAGEMENT

Oil management is an example of using the principles of a circular economy in the PGE Group companies. Necessary for the correct functioning of hydro- and turbine-sets, oil is treated and purified for reuse on an ongoing basis. Systems are in place to minimise oil consumption and maximise oil reuse (e.g. systems for filtering and capturing oil vapour, leakproof oil sumps, separators and oil separators).

## 4. Waste

The activities of the PGE Group companies, in particular the generation of electricity and heat in power plants and combined heat and power plants, result in the production of waste that cannot always be reused or utilised. With a view to protecting natural resources and minimising the adverse impact on the environment, the activities of the PGE Group are aimed at reducing the volume of waste deposited in landfills.

In 2020, PGE was actively involved in the work on the development of the national Waste Database system, which made it possible to develop an effective tool for all participants in the waste management process.
The Group's companies are adapting to the new waste management requirements and new obligations are being fulfilled on an ongoing basis. Since January 1, 2020, the PGE Group has been participating in the national Waste Database system and fulfilling all related obligations on an ongoing basis. Waste management is carried out in accordance with the provisions set out in the applicable administrative decisions (integrated permits and sectoral decisions).

The Group companies use their resources reasonably. The rehabilitation of post-industrial sites is an integral stage in the process of terminating mineral extraction operations. The decommissioning of pits is aimed at making them usable and restoring them to the environment. The minerals accompanying lignite deposits play an important role in the sustainable supply chain of raw and other materials. Tue utilisation of such minerals contributes to rational lignite deposit management and protection of the earth's surface. All generated waste that is not utilised on the companies' premises is transferred to external companies that hold relevant permits and authorisations.

The generated volume of hazardous waste decreases year by year. For the entire PGE Group, a reduction of approximately 2.8 percent was observed in 2020 compared to 2019. In 2020 only PGE Energia Odnawialna produced a greater volume of waste than in the previous years. This was related to the modernisation works carried out in the Dębe Hydroelectric Power Plant, including the disassembly of the hydrosystem, and auxiliary installations. Such waste is transferred to an authorised waste management entity.

Particularly noteworthy is the significant reduction in the generation of non-hazardous waste. Across the PGE Group, 5.28 million tonnes of non-hazardous waste was generated in 2020, which was over 12 percent less than in 2019.

In the case of PGE Dystrybucja, the volume of produced waste depended on the scope of operations carried out on the power grid, the occurrence of failures and investment projects under execution.

The development of the Live Working technology, which is considered to be a modern technology of conducting power network operations without the necessity of shutting down power supply lines, influences the maintenance of the quality standards of the transmission and distribution services, as well as reduces losses in the transmission of electricity. An important advantage of the Live Working technology is also the extension of the operating time of switching devices (disconnectors, interrupters and circuit breakers), which has an impact on reducing the amount of waste generated in this area.

## 5. Water management

| GRI 303-1 (2018) | GRI 303-2 (2018) | GC-8 | GC-9 |

PGE is aware of limited water resources and spares no effort to use them in a sustainable manner. In its operations, it uses water responsibly for the benefit of the entire ecosystem.

Processes related to water and wastewater management in PGE Group installations are carried out mainly on the basis of the Water Law Act and other executive acts dedicated to water and wastewater management. They are carried out in accordance with administrative decisions issued by competent authorities, such as integrated permits or sectoral decisions (water permits). The PGE Group continuously monitors the quantity and quality of water abstracted and wastewater discharged in accordance with administrative decisions issued in this respect.

For technological needs of installations within the PGE Group, water from surface water intakes is mainly used after undergoing purification processes. In order to reduce the amount of raw water consumption, closed circuits are used in the majority of cases, and used process water and wastewater are introduced to other processes. Wastewater generated by production operations undergoes treatment, including multi-stage treatment, and is then discharged to surface waters or transferred to municipal enterprises.

### WATER MANAGEMENT IN POWER PLANTS

Conditions for water and wastewater management are set out in relevant permits, including mainly integrated permits and water permits. The Branches of PGE GiEK SA carry out ongoing monitoring of the quantity and quality of water abstracted and wastewater discharged.

For technological purposes, water from surface water intakes is used and subsequently undergoes purification and treatment processes, with the exception of the Szczecin CHP plant which uses internal sea water. In order to reduce raw water consumption, closed circuits are used and used process water and wastewater are introduced to other processes. Wastewater generated by production operations in power plants and cogeneration plants undergoes treatment, including multi-stage treatment, and is then discharged to surface waters or transferred to municipal enterprises.

Depending on environmental conditions, the branches utilise appropriate water treatment and wastewater treatment technologies to ensure compliance with all environmental requirements. Adaptation to the requirements of the BAT conclusions in PGE Górnictwo i Energetyka Konwencjonalna means also the reduction of emissions to water from flue gas purification systems utilised in the process of electricity generation. In this respect, wastewater treatment plants undergo modernisation and extension processes.

At the Dolna Odra Power Plant and Pomorzany CHP Plant, surface and underground water is abstracted, whereas at the Szczecin CHP Plant, internal sea water is abstracted. All active groundwater intakes are surrounded by direct water protection zones. The power plants of the branch are equipped with facilities to reduce pollutants contained in wastewater. Depending on the type of wastewater, it is treated in a chemical or biological treatment plant, in a mechanical treatment plant, or it is neutralised. Depending on the composition of wastewater, it is treated in one or two facilities. Rainwater and snowmelt from the branch premises are treated by means of settling tanks and separators.

The Turów Power Plant closes water circulation in production processes by diverting used water for treatment and subsequently returning it to production processes. The construction of a wet flue gas desulphurisation plant for the new power unit no. 7 in Turów is currently underway. Wastewater treated in the plant will be reused in technological processes. In order to reduce water consumption and the volume of wastewater discharge, water from the desalination of the main cooling system or, in emergencies, water discharged from the compressor cooling system is used instead of raw water for most of the year to supply water to the flue gas desulphurisation plant for units 4-6.

In October 2020, PGE Górnictwo i Energetyka Konwencjonalna entered into a contract for the expansion of the industrial wastewater treatment plant at the Turów Power Plant. Worth over PLN 120 million, the project will have been completed within 30 months from the execution of the contract. It is a measure aimed at improving the environmental conditions in the surroundings of the Turów Complex and ensuring the Turów Power Plant's compliance with future EU and national environmental requirements.

The planned industrial wastewater treatment plant will be based on modern, highly efficient membrane technologies such as microfiltration and reverse osmosis. The efficiency of reverse osmosis is approximately 96-98 percent, which means that over 96 percent of all pollutants will be retained in the process. This will be the first in Poland and one of few in the European Union such a wide application of the aforementioned technologies in the field of wastewater treatment. Thanks to this project, the Turów Power Plant will be the first power utility to reuse treated wastewater in its technological systems. Consequently, it will be a wastewater-free power plant. The new wastewater treatment plant will be the largest in the Polish energy sector. It will use membrane technologies with a total capacity of over 14,000 $m^3$ per day. The implementation of this investment will have a positive impact on the border river Nysa Łużycka.

At the Opole Power Plant, all wastewater from plant's premises is treated in a final wastewater treatment plant. Some types of industrial wastewater are subject to multi-stage treatment. Industrial wastewater and rainwater are directed to the final mechanical-chemical wastewater treatment plant, where they undergo the coagulation process. Wastewater from households is treated using the activated sludge method in a biological system also located at the final wastewater treatment plant. Treated industrial and domestic wastewater is discharged through a common carrier pipe to the Odra river. In order to improve the sedimentation of inflowing suspended solids in raw wastewater and to improve and automate the discharge of sediments to the sedimentation plots, a new radial settling tank with an integrated coagulation chamber was built in 2019. The new settling tank increased the operational reliability of the wastewater treatment plant and created a reserve capacity for the equipment at the treatment plant. The new settling tank operates as a primary element of the wastewater treatment system. The design capacity ensures the capture and treatment of the incoming wastewater flow of up to a nominal volume of 3200 $m^3$/h and has a hydraulic reserve.

In order to reduce water consumption and the volume of wastewater discharge, water used in the Bełchatów Power Plant is reused in closed internal circuits and is not discharged outside the system. Used process water is reused in slagging operations and to replenish losses in the hydro ash removal system. Domestic wastewater and rainwater or snowmelt are moved to the wastewater treatment plant of the Bełchatów Lignite Mine Branch.

At the Rybnik Power Plant, all wastewater from the power plant premises is processed in wastewater treatment plants: an industrial wastewater treatment plant and a flue gas desulphurisation plant wastewater treatment plant. The Rybnik Power Plant uses closed water circuits wherever it is possible. The power plant does not reuse any treated wastewater due to the fact that water from water intakes is used in internal processes and only when there is no possibility to use it is discharged as wastewater.

## WATER MANAGEMENT IN MINES

The extraction of lignite deposit based on the opencast method, carried out in the Bełchatów and Turów lignite mines, requires prior drainage of the rock mass, which has a significant impact on hydrogeological conditions and results in changes in hydrodynamic relations. Water management in lignite mines is connected with both sunk drainage and face drainage of open pits. Water from pits is discharged to field settling ponds for final purification by natural sedimentation of suspended solids supported by a plant filter or to dedicated treatment plants. Each of the opencast lignite mines operated by PGE conducts planned water protection activities. Drainage facilities used to ensure water purity are being expanded and modernised.

Drainage water in the Bełchatów Lignite Mine is captured in pits and discharged through ditches to settling ponds. The concept of settling ponds is based on the technology of natural suspended solids sedimentation supported by a plant filter. Water from sunk drainage is discharged through a system of ditches and canals in quantities and with physical and chemical parameters that do not exceed the statutory limits specified in the applicable water law decision. Water discharged to surface watercourses maintains at least class II purity. In order to protect water purity in the existing natural watercourses of the region, the Bełchatów Lignite Mine operates mechanical and biological wastewater treatment plants. For water protection, it is important to operate the following facilities:

- sedimentation ponds for face drainage water,
- a protective barrier for the "Dębina" salt dome to maintain an even water level in the rock mass surrounding the salt dome.

In 2020, the Turów Lignite Mine Branch discharged mine water coming from face drainage of the pit, as well as well water and domestic wastewater into external watercourses. The quality of well water allows its direct discharge into external watercourses. Mine water and domestic wastewater were treated at five on-site wastewater treatment plants. The branch's mine water treatment plants are equipped with the Actiflo system. It is a highly effective process for reducing suspended solids. The volume of mine water discharge depends on the level of precipitation. In 2020, it was approximately 10 million $m^3$. The parameters in terms of quantity and quality of discharged wastewater are determined by the requirements specified in the applicable water permits. The quality and quantity of discharged water and wastewater are monitored on an ongoing basis.

## WATER IN HEAT GENERATION AND DISTRIBUTION

In PGE Energia Ciepła, both surface and underground water is used to produce process water. Several plants also use water from municipal water supply systems. Depending on the size of the plant, the source and composition of raw water, different water preparation techniques are used, such as lime softening, filtration, ion exchange, ultrafiltration, reverse osmosis and electrodeionisation. In each case, the complete water preparation sequence consists of a combination of several of the above techniques.

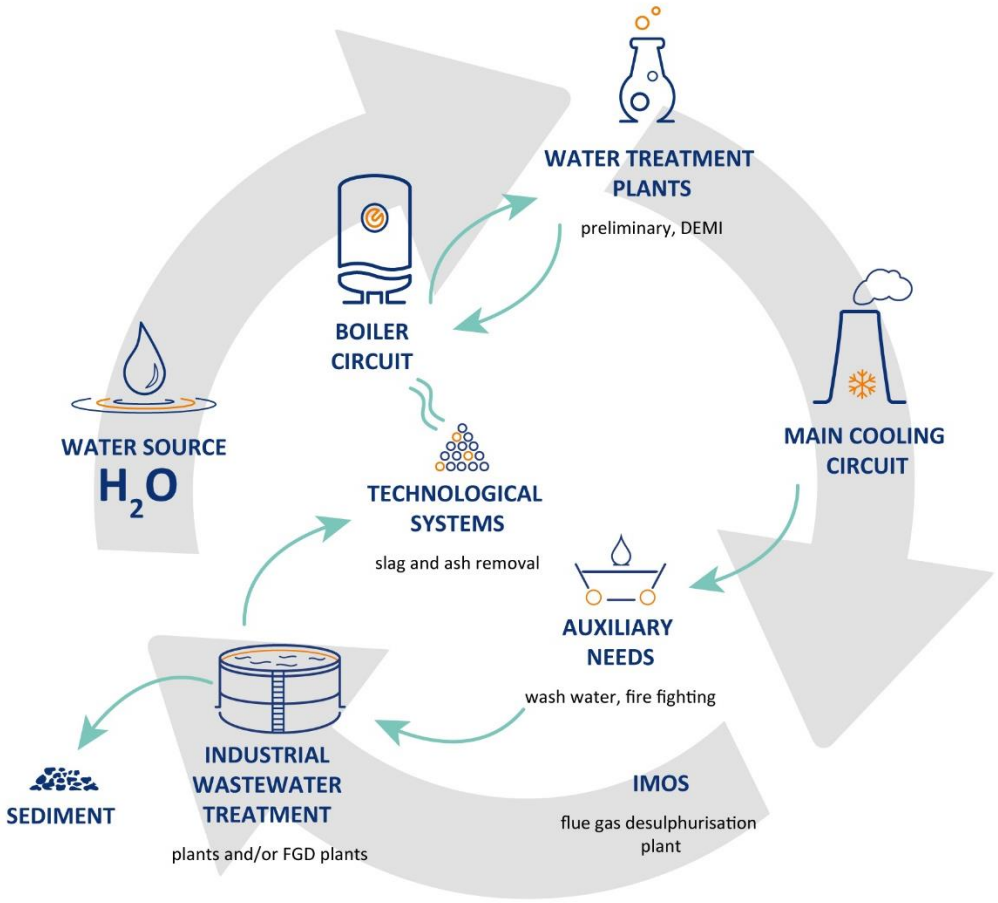
Water is prepared for the needs of a variety of systems, and its main points of reception include the following:

- district heating networks,
- water and water/steam systems of heat generation units,
- closed cooling systems,
- wet flue gas desulphurisation plants.

Depending on technological requirements, water is supplied to reception points after various stages of preparation. At each stage of water preparation, particular attention is paid to its reasonable use. Many wastewater streams generated in the course of water preparation are returned to the process. An example of this is reuse of filter washings, water recovered from post-softening sludge, concentrates from reverse osmosis or electrodialysis processes, or regenerated brine from the softening process. As far as its composition allows it, wastewater generated in other installations is also returned to the process. Examples of this include the following:

- returning so-called hot wastewater as a source for the water preparation process,
- using frequently rainwater or drainage water for water production,
- returning treated wastewater coming from the desulphurisation process to the desulphurisation process if its composition meets the required criteria, which directly depends on the quality of combusted coal,
- using part of domestic wastewater after treatment as a source of water to replenish losses in the closed cooling system (Kraków CHP Plant). Work is underway to use treated wastewater from the municipal treatment plant as a source of process water,
- using wastewater as a source of water for process water systems or for replenishing water in ash and slag removal systems.

Among the more stringent requirements of the BAT conclusions concerning nitrogen and sulphur oxides removal, requirements were introduced concerning the parameters of wastewater from wet flue gas desulphurisation plants. The most important parameters include concentrations of metals and metalloids in wastewater. In order to adjust the wet flue gas desulphurisation plants functioning in Cracow, Wrocław, Gdańsk and Gdynia, a number of measures have been planned to increase the efficiency of the wastewater treatment process accompanying this desulphurisation method. The existing flue gas desulphurisation plants are equipped with highly efficient wastewater treatment systems. However, due to the requirements related to the reviewed BAT conclusions, their operation will be further optimised. Consequently, wastewater will meet the required parameters, and at the Gdynia location, a modern and proprietary technology of heavy metals capture based on the INNUPS method will be additionally implemented. This technology was developed within the scope of a research and development project. It is an example of the widest possible reuse of produced anthropogenic minerals and precious elements, in line with the principles of a circular economy applicable in the PGE Group.




**A diagram of water circulation in electricity and heat generation processes in the PGE Group**

The PGE Group companies that do not conduct production processes use water only for current administrative needs.

## 6. Land rehabilitation and biodiversity

| GRI 304-1 |

PGE restores the usefulness and natural character of post-mining areas in order to recreate their previous environmental features or shape new ones. To this end, types and methods of land rehabilitation are defined and visions of landscape after completed rehabilitation activities are presented. The types (forest, water, agricultural, municipal, industrial) and methods of rehabilitation must be in line with the local land development plan. Another important element is properly selected technical solutions and the quality of work to be performed. The deadline for completing rehabilitation works is also significant.

The rehabilitation of post-mining areas in lignite mines consists of a number of design, technical, organisational and executive measures. Within this process, the following stages can be distinguished:

- preliminary (preparatory) rehabilitation – it consists in determining what factors condition the correct course of the rehabilitation process. At this stage, elevation surveying is performed, mining maps are drawn up, as well as cost and design documentation is prepared,
- basic (technical) rehabilitation – it consists in stripping and grading operations, including earthworks. Thanks to this, the waste rock dump is appropriately shaped into a system of slopes and shelves, water conditions are regulated by means of hydrotechnical facilities and equipment, and access roads are built or rebuilt,
- specific (biological) rehabilitation – it consists in improving the air and water properties of the soil, eliminating excessive acidification, supplementing missing nutrients, introducing green and tree vegetation to recreate the biological conditions of the area and protect it against surface erosion,
- post-rehabilitation activities – they comprise the cultivation and maintenance of vegetation, i.e. work performed on already afforested areas. If there occur any losses in the forest stand due to the influence of any external factors (drying, destruction by animals, etc.), particular locations have to be afforested again. Such locations are identified during periodic inspections.

### POLAND'S UNIQUE LAND REHABILITATION PROCESS

The post-mining areas of the Bełchatów Lignite Mine are being rehabilitated primarily as forest land. It can be provisionally estimated that about 5,500 ha (including protective strips of land around water reservoirs) will be eventually made available for afforestation purposes. So far, the Bełchatów Lignite Mine has handed over more than 1,500 hectares of rehabilitated and afforested land to the State Forests.

The rehabilitation of post-mining areas in the Bełchatów Lignite Mine is carried out on the basis of a technological project for the Bełchatów Field and the Szczerców Field, as well as on the basis of annual detailed technical projects for individual areas.

The total area of 2,296 ha was rehabilitated from the beginning of the project until the end of 2020. All rehabilitation works were completed at the external waste rock dump of the Bełchatów Field, i.e. Mount Kamieńsk. At present, the external waste rock dump of the Szczerców Field and the internal dump of the Bełchatów Field are being rehabilitated.

Mount Kamieńsk is a flagship example of comprehensive land rehabilitation activities conducted by PGE Górnictwo i Energetyka Konwencjonalna. At 395 m above sea level, it is the highest hill in central Poland. It was formed from 1,354 billion $m^3$ of overburden taken off in the process of stripping successive layers of lignite. At present, it is one of the main tourist attractions in central Poland. A ski lift, hiking and cycling routes and a 620-metre long sledge run make Mount Kamieńsk an important point on the map of summer and winter sports enthusiasts.

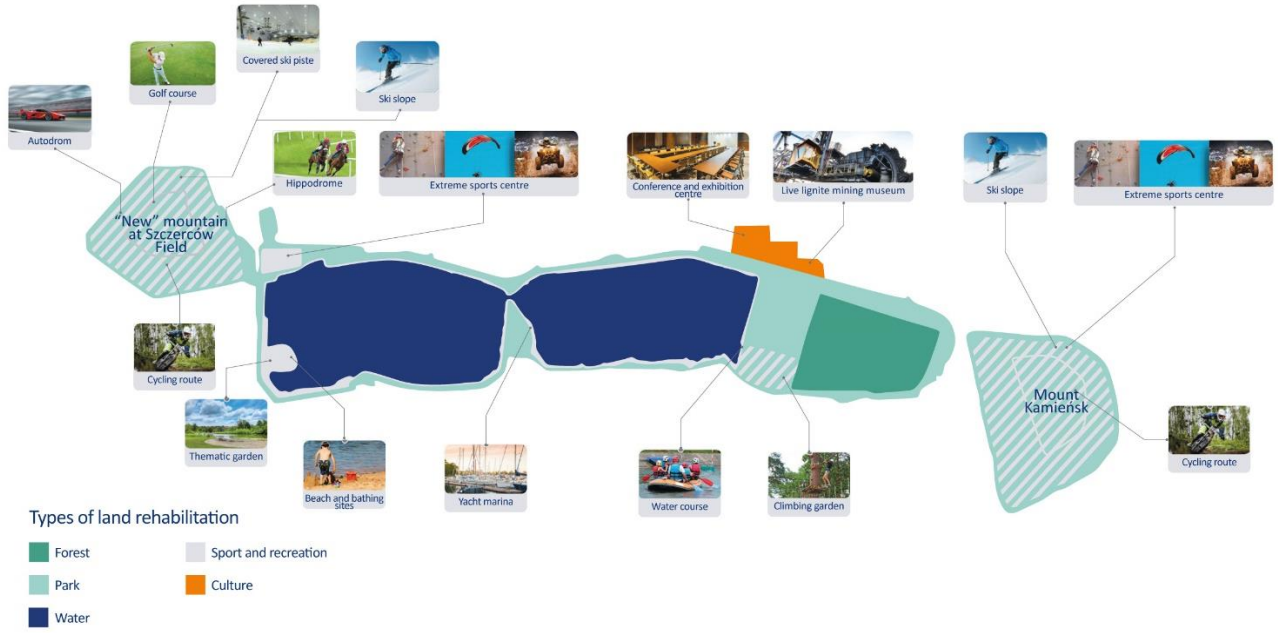
The company also completed the formation of a second dump, this time at the Szczerców Field. This process took 17 years and resulted in the creation of a “twin” Mount Kamieńsk. The dump was formed from almost 1 billion $m^3$ of overburden covering lignite deposits. Currently, the mountain has a surface area of 1114 ha and a relative height of approximately 170 m. By the end of 2020, more than 4 million trees had been planted on the mountain as part of the rehabilitation process, thus ensuring the area’s biodiversity. The surface of the mountain is also covered with a lot of grassy plants, and among animal species living there, it is possible to distinguish the roe deer, wild boar, hare and fox. Among birds, open field and meadow bird species predominate. The mountain is a habitat for the lark, field and wood pipit, partridge, pheasant and many other species. Two pairs of the rare common ringed plover have inhabited the unformed parts of the mountain for many years. This area is also patrolled by ravens, buzzards and kestrels. Cranes can also be found on the slopes of the mountain.

The rehabilitation of the dump aims at its afforestation, taking into account the recreational function based on forests, cycle paths, a golf course, autodrome, hippodrome and a ski slope. A photovoltaic farm will also be built at the top of the mountain.

In the area of the Bełchatów Field, works are underway on corrections and additions to afforestation from the rehabilitation carried out in the previous years. The objectives of the rehabilitation process include the following:

- afforestation of the internal dump of the Bełchatów Field (the area on the western side of the dump, adjacent to a planned water reservoir),
- afforestation as well as recreational, agricultural (cultivation of energy crops) and commercial (construction of a wind farm) activities on the external waster rock dump of the Szczerców Field,
- creation of water reservoirs in the mining pits of the Bełchatow and Szczerców Fields,
- recreational and sports facilities as well as afforestation in the shore areas.

In the short term, the main task of the Bełchatów Lignite Mine in this area will be the rehabilitation of both final pits and the building of a large leisure and recreation complex based on water reservoirs. The scale of difficulty of this project has no equivalent in Poland.




## Rehabilitation plans for the Bełchatów Lignite Mine

Research, design and execution works in this area are being carried out well in advance of the date for the termination of mining operations. In the first place, rehabilitation will comprise the post-mining pit of the Bełchatów Field. However, water-oriented rehabilitation will be possible for both final pits simultaneously.

The water surface of the two reservoirs may have a combined surface area of more than 4,000 hectares. The most impressive is their maximum depth of approximately 170 metres. This means that the Bełchatów lakes will be deeper than Hańcza, the deepest lake in Poland. The reservoirs will be filled with water after 2050, when all mining works aimed at preparing the post-mining pits in the Szczerców Field for flooding will have been completed. The water level in both reservoirs will be rising gradually, which will take approximately 20 years. The surface area of the final pits in both fields will be about 4300 ha (2100 ha in the Bełchatów Field and about 2190 ha in the Szczerców Field). The remaining areas will be partly sold and partly rehabilitated by afforestation or for other special purposes. A special type of land rehabilitation – apart from typical afforestation around the future reservoir, a different tree stand was taken into consideration. It was planned to base the afforestation process on tree species typical of parks rather than forests in order to make the shoreline more attractive.

## LUNGS OF BOGATYNIA

In the case of the Turów Lignite Mine, the rehabilitation of the external waste rock dump, which has been carried out since the 1960s, is aimed at the afforestation of the area. It is conducted on an ongoing basis in locations where mining operations were permanently terminated. As a result of the works carried out, the slopes and shelves of the dump are finally shaped, the slopes are stabilised by controlled rainwater drainage, the top layer of the soil is strengthened and the whole area is protected against erosion, the volume of rainwater runoff is reduced by increasing soil retention, the quality of water flowing from the dump is improved and fugitive emissions are reduced.

The rehabilitated external dump of the Turów Lignite Mine Branch is a forest complex with the surface area of over 21 $km^2$, which, apart from possessing attractive landscape features, constitutes an invaluable oxygen generating area of the Bogatynia commune. It is also a diverse natural environment where habitats and ecological corridors are created.

The result of the rehabilitation works carried out since the 1960s is dynamically growing multi-species tree stands forming components of the forest environment, including the soil and its specific microflora as well as the local microclimate. The rehabilitated soil is characterised by relatively rich biological life. In 2020, the rehabilitation works on the post-mining areas of the internal dump were being continued. The biological rehabilitation aimed at afforestation covered the area of 12 ha. A wildlife inspection was carried out on 47 ha of the forefield in order to establish the principles of continuing lignite extraction operations in compliance with the principles of species protection.

The effects of the performed rehabilitation works contribute first of all to the improvement of the quality of basic environmental components, i.e. air, water and soil. Fugitive emissions of dust from the waste rock dump decrease in parallel to the growth of the afforested areas. The anthropogenic forest complex formed on the external dump contributes significantly to the increase of the afforestation rate of the industrialised region. Although the age structure of afforestation is characteristic of young forests, it is already an important landscape and climatic factor for the Bogatynia commune.

## LAND REHABILITATION IN OTHER PRODUCTION COMPANIES OF THE PGE GROUP

Land rehabilitation activities are also carried out by the company PGE Energia Ciepła. After the termination of operations at a given landfill, the landfill is formally closed and subsequently undergoes the process of green rehabilitation. Vegetation is introduced, grass covers are made and trees are planted. Where possible, measures are planned to restore the economic functions of particular areas. Stripping and grading operations are performed in order to adapt an area to various economic functions of an industrial, service or municipal character.

In the case of PGE Energia Odnawialna, the technological processes, operation of equipment and current investment projects do not cause interference with the biodiversity of protected areas. The green areas in the possession of the company are maintained by dedicated maintenance teams. There are also Special Areas of Conservation Nature 2000 in the vicinity of the company's facilities. PGE Energia Odnawialna participates in the costs of restocking rivers and lakes with fish in accordance with the provisions of water permits, and constructed fish ladders enable unimpeded fish migration.

In 2020, PGE Energia Odnawialna continued to monitor wildlife birds and bats at its Resko II, Kisielice II, Karwice, Lotnisko and Wojciechowo wind farms.

Conducted wildlife research projects provide data on the factual impact of the company's activities on species richness. Observations made during nature monitoring showed positive effects of the activities carried out so far. The inspections of the functioning wind farms did not indicate any need to take any special measures to protect biodiversity. Should such need arise, preventive measures will be taken. Biological research will be continued in the following years.

## 7. Bird protection

PGE is committed to bird protection. To this end, it takes specific measures to increase their safety as well as to enhance the possibility of maintaining and reintroducing various bird species.

### RESTORATION OF THE PEREGRINE FALCON POPULATION

The peregrine falcon is one of the rarest bird species, which became practically extinct in Poland twenty years ago. Currently, there are 50 pairs of falcons in Poland and they are under strict species protection. The PGE Group has been actively working for the restoration of the peregrine falcon population in Poland for 18 years.

Over the years, falcons have taken a liking to PGE chimneys. For the first time ornithologists spotted a pair of falcons on the premises of the Dolna Odra Power Plant Complex in 2003 and then the first nestlings were ringed. In the following years, the birds settled down in specially prepared habitats located on the chimneys of the cogeneration plants in Gdynia, Gdańsk, Toruń, Lublin, as well as on the chimneys of the power plant in Bełchatów, and the Dolna Odra Power Plant Complex. In 2020, a total of 18 chicks hatched and were ringed in six nests located on the premises of PGE branches. Since 2003, 83 young falcons have fledged from nests located on PGE Group installations, which accounts for 17.3 per cent of all peregrine falcons born in Poland since 2000 (479 nestlings in total).

As part of activities related to the restoration of the peregrine falcon species, PGE cooperates with the “Falcon” Wild Animals Association. Within the scope of this cooperation, cameras were placed on the falcon nesting boxes located on the premises of the cogeneration plants in Gdynia, Toruń and Lublin. Thanks to this, birds and their activities can be watched online at www.peregrinus.pl.

This possibility to observe the family life of the peregrine falcon aims to spread the knowledge of actions taken to restore the species. It also allows an indirect contact with nature, especially its unreachable parts, as in the case of the peregrine falcon, which usually has its nest at an altitude of one hundred metres. Observing the life of peregrine falcons is an extremely popular pastime. Statistics show that the highest number of nest viewing visits occurs in May. In this month alone, more than 400,000 views of the aforementioned website showing nests located on PGE chimneys can be recorded. The Group organises regular contests for names for young falcons. Each time as many as 3,000 people submit their naming proposals. Posts and videos promoting PGE's activities in the field of peregrine falcon protection are published on PGE's YouTube channel and social media.

PGE also supports the “Falcon” Association in information and education activities, encouraging local communities to take an interest in the life of wild birds. At the Gdynia Combined Heat and Power Plant, it is a tradition to invite pupils from the nearby primary school to a "live" nature lesson during which they have the opportunity to see the process of ringing young birds.

Besides falcons, the premises of the Dolna Odra Power Plant Complex are also inhabited by bank swallows, which nest in the disused section 4 of furnace waste dump, as well as kestrels, whose nests are located on the power plant chimney. As their habitat, swallows have adapted the slopes created as a result of ash-slag removal. Their protection consists mainly in protecting young birds, which often fall out of their nests during the first flights.

### SAFETY OF STORKS

PGE is also involved in the protection of storks which, due to the location of their nests on electric poles, are particularly exposed to the risk of being electrocuted. For years, metal platforms have been erected for storks on poles above power lines and their nests have been moved to these platforms. This prevents direct contact between storks and power lines, which significantly reduces the risk of electrocution, especially for young birds. Currently, there are more than 26,500 such platforms in the company’s areas of operation, with more than 1,000 installed in 2020 alone. A half of them are located in the territory of the Białystok branch of PGE Dystrybucja where, due to exceptionally favourable living conditions, the occurrence of storks is the highest in Poland. In order to protect birds, the power infrastructure of PGE Dystrybucja is additionally equipped with special protection devices such as platforms, deterrents and coloured balls suspended on power lines.

The company also cooperates with associations and foundations whose aims include bird protection. These organisations include the following:

- the Białystok branch of the Polish Society for the Protection of Birds,
- the EcoLogical Group from Siedlce,
- the “Give the Stork a Chance” Association from Kozubszczyzna, and
- the Lublin Ornithological Society.

Within the scope of cooperation with the Polish Society for the Protection of Birds, the project called "Protection of the white stork in the river valleys of eastern Poland" was executed in the years 2017-2020. Its main objective was to reduce white stork mortality due to electrocution. In the years 2018-2020, PGE technical teams installed protective measures on 250 medium-voltage facilities, 80 reflective rotary markers over the Biebrza and Narew rivers, 60 protective devices on power line poles and built 35 platforms for stork nests. As part of stork protection, PGE also repairs damaged platforms. Such works are performed from mid-October to the end of February, when storks are in Africa for the autumn-winter period. The months from March to October are the stork protection season.

## PROTECTION OF BIRDS AGAINST COLLISION WITH WINDMILLS

Bird protection also applies to PGE wind farms located in the areas constituting passage routes for selected species. The turbines of the Lotnisko Wind Farm and the neighbouring Wojciechowo Wind Farm are periodically shut down to allow a safe passage of cranes to their feeding grounds and back.

Additionally, an innovative system developed by a Polish company to warn and protect birds from collisions with turbine blades was tested at the Lotnisko Wind Farm in 2020. The system consists of dedicated proprietary software working with 24 HD cameras mounted in eight modules on a windmill tower. It is able to detect birds approaching the turbine within two seconds and then automatically select an appropriate action to minimise the risk of collision.

The objective of the pilot study was to assess the effectiveness of the system in terms of detecting birds flying at different distances from a windmill and to determine the scale of cases where a turbine shut-down would occur due to the detection of an object other than a bird.

The pilot study confirmed that the system successfully detected birds, assigned them to groups and tracked their flight paths and directions. The next stage provides for tests of the system with respect to an automatic selection of an action to minimise the risk of collision: a light or sound signal, and eventually a turbine shut-down. The second stage of the pilot study will last until August 2021.

# ABOUT THIS STATEMENT

| GRI 102-47 |

This non-financial information statement of PGE Polska Grupa Energetyczna and the PGE Capital Group is prepared in accordance with the requirements of the amended Accounting Act implementing Directive 2014/95/EU into Polish law. The statement presents non-financial information for the period from January 1 to December 31, 2020. The statement includes consolidated data for the PGE Capital Group and for the parent company – PGE Polska Grupa Energetyczna SA. The PGE Capital Group comprises 75 companies in which PGE Polska Grupa Energetyczna SA directly or indirectly holds over 50 percent of shares. The non-financial information statement covers 42 companies in which employment is reported.

In addition to selecting the most important topics from the perspective of both the company and its environment, the authors of the statement, following both internal and external consultations, also chose indices that best reflect the specific character of the PGE Group's activities. They also describe PGE's involvement in the environmental, employment, social, human rights and anti-corruption areas.

The reporting of non-financial information of PGE Polska Grupa Energetyczna and the PGE Capital Group takes into account selected indexes of the Global Reporting Initiative (GRI) standards in the 2016 version, unless the year 2018 is indicated in the table below. The statement also includes the Group's own indices and a reference to the 10 principles of the Global Compact.

## 1. GRI content index and Global Compact principles

The GRI Standards indices and the Global Compact principles included in this statement and applicable to the PGE Capital Group and the company PGE SA.

| Index | | Global Compact principles | Page |
|---|---|---|---|
| **Profile disclosures** | | | |
| **GRI-102-1** | Name of the organisation | | 8 |
| **GRI-102-2** | Activities, brands, products and services | | 8 |
| **GRI-102-3** | Location of headquarters | | Poland, Warsaw |
| **GRI-102-4** | Location of operations | | PGE Group operates mainly in the territory of Poland |
| **GRI-102-7** | Scale of the organisation | | 8-10 |
| **GRI-102-11** | Precautionary principle or approach | | 12-15, 89-100 |
| **GRI-102-12** | External initiatives | **GC-7**<br>**GC-8**<br>**GC-9** | 3 |
| **GRI-102-14** | Statement from senior decision maker | **GC-7**<br>**GC-8**<br>**GC-9** | 3 |
| **GRI-102-16** | Values, principles, standards and norms of behaviour | **GC-10** | 17 |
| **GRI-102-17** | Mechanisms for advice and concerns about ethics | | 16 |
| **GRI-102-40** | List of stakeholder groups | | 19 |
| **GRI-102-43** | Approach to stakeholder engagement | | 19-20 |
| **GRI-102-44** | Key topics and concerns raised | | 20 |

| | | | |
|---|---|---|---|
| **GRI-102-45** | Entities included in the consolidated financial statements | | 11 |
| **GRI-102-47** | List of material topics | | 20, 64 |
| **GRI-102-50** | Reporting period | | January 1, 2020 – December 31, 2020 |
| **GRI-102-51** | Date of most recent report | | March 2020 (non-financial information statement for 2019) |
| **GRI-102-50** | Reporting period | | annual |
| **GRI-102-53** | Contact point for questions regarding the statement | | 115 |
| **GRI-102-55** | GRI content index | | 64-67 |
| | | | |
| **GRI-201-1** | Direct economic value, generated and distributed | | 8 |
| | | | |
| | Approach to the environment | **GC-7**<br>**GC-8**<br>**GC-9** | 44-63 |
| **GRI 303-1** (2018) | Interaction with water as a shared resource | **GC-8**<br>**GC-9** | 55-58 |
| **GRI 303-2** (2018) | Water management | **GC-8**<br>**GC-9** | 55-58 |
| **GRI 303-3** (2018) | Water withdrawal by source | | 69-70 |
| **GRI 303-4** (2018) | Total volume of wastewater by quality and destination | | 70 |
| **GRI 304-1** | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | **GC-8** | 59-61 |
| **GRI 305-1** | Direct greenhouse gas emissions | | 68 |
| **GRI 305-7** | Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions | | 68 |
| **GRI 306-2** | Waste by type and disposal method | | 72-75 |
| **GRI 307-1** | Non-compliance with environmental laws and regulations | **GC-8** | 76 |
| | Use and dissemination of environmentally friendly technologies | **GC-9** | 44-63 |
| **GRI-EU5** | Allocation of CO2 emissions allowances or equivalent, broken down by carbon trading framework | | 68 |

| | | | |
|---|---|---|---|
| **GRI-203-1** | Infrastructure investments and services supported | | 38-43 |
| **GRI-EU28** | Power outage frequency (SAIFI) | | 87 |
| **GRI-EU29** | Average power outage duration (SAIDI) | | 87 |

| | | | |
|---|---|---|---|
| | Human rights | **GC-1**<br>**GC-2**<br>**GC-4**<br>**GC-5**<br>**GC-6** | 18 |
| | Freedom of association and the right to collective bargaining | **GC-3** | 28 |
| **GRI-102-8** | Information on employees and other workers | **GC-6** | 78 |
| **GRI-102-41** | Collective bargaining agreements | **GC-3** | 80 |
| **GRI 401-1** | New employee hires and employee turnover | **GC-6** | 80-81 |
| **GRI 401-2** | Benefits provided to full-time employees that are not provided to temporary or part-time employees | | 24 |
| **GRI 403-1** (2018) | Occupational health and safety management system | | 23 |
| **GRI 403-2** (2018) | Hazard identification, risk assessment and accident investigation | | 23 |
| **GRI 403-3** (2018) | Occupational health and safety services | | 23 |
| **GRI 403-4** (2018) | Employee participation, consultation and communication on occupational health and safety | | 24.26 |
| **GRI 403-5** (2018) | Employee training in occupational health and safety | | 23, 24 |
| **GRI 403-6** (2018) | Health promotion programmes for employees | | 24 |
| **GRI 403-7** (2018) | Prevention and mitigation of impacts on health and safety in the workplace | | 25 |
| **GRI 403-9** (2018) | Type and rate of work-related injuries by gender | | 85-86 |

| | | | |
|---|---|---|---|
| **GRI 404-1** | Average hours of training per year per employee | | 82 |
| **GRI 404-2** | Programmes for upgrading employee skills and transition assistance programmes | | 25 |
| **GRI 404-3** | The percentage of employees undergoing regular work performance assessments and career development reviews broken down by gender | | 82 |
| **GRI 405-1** | Diversity of governance bodies and employees | | 83-84 |
| | | | |
| **GRI 412-2** | Employee training on human rights policies or procedures | **GC-1**<br>**GC-2** | 87 |
| | | | |
| **GRI 205-1** | Operations assessed for risks related to corruption | **GC-10** | 88 |
| **GRI 205-2** | Communication and training about anti-corruption policies and procedures | **GC-10** | 88 |

## 2. Significant indicators for PGE Group and PGE SA

### SELECTED INDICES RELATING TO ENVIRONMENTAL ISSUES IN THE PGE GROUP:

### $CO_2$ emissions

$CO_2$ emissions from the Group's main plants and allocation of free $CO_2$ emission allowances for 2020
| GRI 305-1 | GRI EU-5 |

| | $CO_2$ emissions in 2020* | Allocation of allowances for $CO_2$ emissions in 2020** | $CO_2$ emissions in 2019 | $CO_2$ emissions in 2018 | $CO_2$ emissions in 2017 |
|---|---|---|---|---|---|
| **Total for power plants and CHP plants of PGE Capital Group** | **59,518,765** | **1,034,097** | **60,663,255** | **70,186,803** | **70,184,384** |

* $CO_2$ emissions verified by a certified $CO_2$ emission examiner
** free $CO_2$ emission allowances allocated for 2020

The volume of $CO_2$ emissions indicated above relates to all installations of the PGE Capital Group that operate under the EU ETS system. The volume of $CO_2$ emissions is calculated on the basis of and in accordance with the legal regulations applicable to the ETS system, in particular with decisions of competent authorities allowing the emission of greenhouse gases from installations.

### Other emissions

Emission of $NO_x$, $SO_2$ and other relevant compounds emitted to atmosphere by PGE GiEK and PGE EC in 2020
| GRI 305-7 |

| | PGE GiEK | | | | PGE EC | | | |
|---|---|---|---|---|---|---|---|---|
| **Weight of relevant air emissions [tonnes]** | **2020** | **2019** | **2018** | **2017** | **2020** | **2019** | **2018** | **2017** |
| $NO_x$ | 36,278 | 37,179 | 47,966 | 47,014 | 7298 | 12,120 | 9453 | 14,667 |
| $SO_2$ | 39,012 | 36,831 | 63,130 | 55,631 | 7997 | 9,689 | 7330 | 7,710 |
| Particulate matter | 1,268 | 1,324 | 2,492 | 2,145 | 560 | 821 | 509 | 628 |
| **Emissions for net power produced from all generation capacities [kg/MWh]:** | | | | | | | | |
| $NO_x$ | 0.78 | 0.86 | 0.89 | 0.89 | 0.35 | 0.47 | 0.48 | 0.72 |
| $SO_2$ | 0.83 | 0.85 | 1.18 | 1.05 | 0.38 | 0.38 | 0.38 | 0.38 |
| Particulate matter | 0.03 | 0.03 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |

## Water and wastewater management

Water withdrawal for production purposes by source in 2020
| **GRI 303-3 (2018)** |

| | PGE GiEK | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Total volume of water withdrawn for production purposes from the following sources** | **1,242,121,026** | **823,248,035** | **1,042,814,300** | **1,176,371,368** |
| surface water, including water from wetlands, rivers and lakes | 1,239,164,139* | 821,829,162 | 1,040,611,060 | 1,174,331,818 |
| groundwater | 2,530,558** | 1,204,452 | 1,713,527 | 1,365,177 |
| rainwater directly collected and stored by the organisation | - | - | - | - |
| wastewater from another organisation | 39,704*** | 2,297 | 3,824 | 13,495 |
| municipal water supply and supply from other water companies | 386,625**** | 212,124 | 485,889 | 660,878 |

* increase due to inclusion of Rybnik Power Plant and minor increases in ZEDO and ELT related to construction/modernisation works
** increase due to inclusion of Rybnik Power Plant
*** only industrial wastewater is included; household wastewater is not included as not all streams are metered (some companies account for wastewater volumes on a lump sum basis); increase caused by inclusion of Rybnik Power Plant and higher demand in ZEDO
**** increase due to inclusion of Rybnik Power Plant and small increases in ZEDO and KWBT

| | PGE EC | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Total volume of water withdrawn for production purposes from the following sources** | **46,191,007** | **588,941,446** | **528,781,596** | **731,062,150** |
| surface water, including water from wetlands, rivers and lakes | 42,809,425 | 578,765,341 | 524,456,463 | 726,729,661 |
| groundwater | 1,814,720 | 8,417,680 | 2,901,560 | 2,892,267 |
| rainwater directly collected and stored by the organisation | - | 16,867 | - | - |
| wastewater from another organisation | - | 1,744 | - | - |
| municipal water supply and supply from other water companies | 1,566,862 | 1,739,814 | 1,423,573 | 1,440,222 |

Total volume of wastewater by quality and destination in 2020

| **GRI 303-4 (2018)** |

| | PGE GiEK | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Factual total wastewater volume** | **37,021,636** | **21,856,562** | **16,409,935** | **20,188,192** |
| Volume of wastewater broken down by: | | | | |
| rivers | 33,796,938 | 21,838,460 | 16,226,412 | 19,681,161 |
| lakes | 3,211,909 | - | - | - |
| soil | - | - | - | 452 |
| municipal companies – sewerage system | 12,788 | 18,102 | 183,523 | 506,579 |
| Water from mine drainage / mine water – treatment | 200,947,318 | 213,285,383 | 211,854,878 | 214,919,799 |
| Cooling water from the open cooling circuit that does not require treatment | 1,120,985,368** | 706,037,989 | 916,984,342 | 1,054,634,377 |

| | PGE EC | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Factual total wastewater volume** | **4,899,580** | **13,856,612** | **9,052,857** | **10,442,419** |
| Volume of wastewater broken down by: | | | | |
| rivers | 3,705,975 | 7570498 | 4,925,721 | 7,349,568 |
| lakes | 112,949 | 1,107,433 | 2,719,147 | - |
| soil | - | - | - | - |
| municipal companies – sewerage system | 1,080,656 | 1,356,110 | 598,577 | 2,153,594 |
| Water from mine drainage / mine water – treatment | not applicable | not applicable | not applicable | not applicable |
| Cooling water from the open cooling circuit that does not require treatment | 33,194,176 | 542,577,388 | 541,288,560 | 723,422,747 |

| | PGE EO | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Factual total wastewater volume** | **90,563** | **107,699** | **283,790** | **224,798** |
| Volume of wastewater broken down by: | | | | |
| rivers | 83,793 | 99,636 | 279,028 | 220,607 |
| lakes | - | - | - | - |
| soil | - | - | - | - |
| municipal companies – sewerage system | 6,769 | 8,063 | 4,762 | 4,191 |
| Water from mine drainage / mine water – treatment | not applicable | not applicable | not applicable | not applicable |
| Cooling water from the open cooling circuit that does not require treatment | 850.5 | 1000 | 4,683 | 35,784 |

| | PGE Dystrybucja | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Factual total wastewater volume** | **684** | **617** | **1,352** | **1,034** |
| Volume of wastewater broken down by: | | | | |
| rivers | 72 | 52 | 303 | 133 |
| lakes | - | - | - | - |
| soil | 612 | 565 | 1049 | 901 |
| municipal companies – sewerage system | - | - | - | - |
| Water from mine drainage / mine water – treatment | not applicable | not applicable | not applicable | not applicable |
| Cooling water from the open cooling circuit that does not require treatment | not applicable | not applicable | not applicable | not applicable |

## Waste management

Total weight of waste broken down by waste type and disposal method in 2020
| GRI 306-2 |

| | PGE GiEK | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Volume of hazardous waste broken down by disposal method:** | **1188** | **1385** | **1,606** | **1,058** |
| Recovery (including energy recovery) | 859 | 523 | 602 | 521 |
| Recycling | 270 | 304 | 158 | 189 |
| Mass burn | - | - | - | - |
| Neutralisation | 133 | 188 | 183 | 216 |
| Storage at landfills | - | 38 | 177 | 27 |
| On-site storage and warehousing | 173 | 323 | 821 | 105 |
| Other (e.g. transfer to authorised recipients) | - | - | - | - |
| **Volume of non-hazardous waste broken down by disposal method:** | **4,843,940** | **5,665,324** | **7,095,232** | **5,333,626** |
| Recovery (including energy recovery) | 1,256,648 | 1,714,784 | 2,089,246 | 1,994,905 |
| Recycling | 7061 | 20,700 | 6,314 | 9,323 |
| Mass burn | - | - | - | 7 |
| Neutralisation | 13,913 | 9,558 | 3,027 | 14,393 |
| Storage at landfills | 3,537,658 | 3,938,929 | 4,949,595 | 3,238,673 |
| On-site storage and warehousing | 30,605 | 1,951 | 53,363 | 76,325 |
| Other (e.g. transfer to authorised recipients) | - | - | - | - |

| | PGE EC | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Volume of hazardous waste broken down by disposal method:** | **4,669** | **4,691** | **80** | **67** |
| Recovery (including energy recovery) | 290 | 4,430 | 12 | 4 |
| Recycling | 57 | 36 | 59 | 46 |
| Mass burn | - | - | - | - |
| Neutralisation | 37 | 725 | 9 | 10 |
| Storage at landfills | - | 1 | - | 0.6 |
| On-site storage and warehousing | 4285 | 1.3 | - | - |
| Other (e.g. transfer to authorised recipients) | - | 0.2 | 0.3 | 6.8 |
| **Volume of non-hazardous waste broken down by disposal method:** | **432,622** | **366,606** | **423,674** | **571,048** |
| Recovery (including energy recovery) | 161,558 | 481,603 | 143,775 | 271,536 |
| Recycling | 194,833 | 4,718 | 261,792 | 282,192 |
| Mass burn | - | 85,459 | - | - |
| Neutralisation | 27,744 | 7,376 | 21 | 9 |
| Storage at landfills | 2,256 | 12,772 | 15,582 | 12,600 |
| On-site storage and warehousing | 47,157 | 231 | 66 | 69 |
| Other (e.g. transfer to authorised recipients) | 25 | 219 | 2,409 | 4,621 |

| | PGE EO | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Volume of hazardous waste broken down by disposal method:** | **285** | **11** | **12** | **102** |
| Recovery (including energy recovery) | - | 1 | - | 6.5 |
| Recycling | - | - | - | - |
| Mass burn | - | - | - | - |
| Neutralisation | 39 | 3 | 4 | 5 |
| Storage at landfills | 21.5 | 1.5 | - | - |
| On-site storage and warehousing | 220 | 3.5 | 5 | 66 |
| Other (e.g. transfer to authorised recipients) | 4.7 | 2 | 15 | 24 |
| **Volume of non-hazardous waste broken down by disposal method:** | **218** | **213** | **79** | **193** |
| Recovery (including energy recovery) | - | - | - | - |
| Recycling | - | - | - | 0.3 |
| Mass burn | - | 2 | - | - |
| Neutralisation | 171 | 3 | 2 | 1 |
| Storage at landfills | 10 | 12 | 77 | - |
| On-site storage and warehousing | 297 | 164 | - | 74 |
| Other (e.g. transfer to authorised recipients) | 47 | 32 | - | 118 |

| | PGE Dystrybucja | | | |
|---|---|---|---|---|
| | **2020** | **2019** | **2018** | **2017** |
| **Volume of hazardous waste broken down by disposal method:** | **1,969** | **2,253** | **2,141** | **2,350** |
| Recovery (including energy recovery) | - | - | - | - |
| Recycling | - | - | - | - |
| Mass burn | - | - | - | - |
| Neutralisation | - | - | - | - |
| Storage at landfills | - | - | - | - |
| On-site storage and warehousing | - | - | - | - |
| Other (e.g. transfer to authorised recipients) | 1,969 | 2,253 | 2141 | 2350 |
| **Volume of non-hazardous waste broken down by disposal method:** | **4,561** | **4,821** | **3,425** | **6,913** |
| Recovery (including energy recovery) | - | - | - | - |
| Recycling | - | - | - | - |
| Mass burn | - | - | - | - |
| Neutralisation | - | - | - | - |
| Storage at landfills | - | - | - | - |
| On-site storage and warehousing | - | - | - | - |
| Other (e.g. transfer to authorised recipients) | 4,561 | 4,821 | 3425 | 6,913 |

Monetary value of penalties and total number of non-financial sanctions for non-compliance with environmental laws and regulations in companies with the highest environmental impact [PLN].
| GRI 307-1 |

| PGE GiEK | 2020 | | comment |
|---|---|---|---|
| **Value of fines not yet imposed but assessed for non-compliance with environmental laws and regulations** | **PLN 15,893** | 1) Administrative penalty for exceeding the environmental usage limits specified in the water permit in 2017 (KWT – PLN 3,523),<br>2) Administrative penalty for exceeding the (hourly) limits of mercury emissions to the air in 2017 (ELT – PLN 5,110),<br>3) Administrative penalty for exceeding the nightly mine noise emission limits in 2017 (KWB – PLN 7,260) | In connection with the implementation of investment projects eliminating the reasons for imposing penalties, the Company submitted requests to the competent Provincial Environmental Protection Inspectors for postponements of the penalty payment deadlines:<br>1) in a letter of January 8, 2021, KWT requested a postponement of the penalty payment deadline in the amount of PLN 3,523,<br>2) in a letter of January 4, 2021, ELT requested a postponement of the penalty payment deadline in the amount of PLN 3,523 and a reduction of the penalty amount,<br>3) in a letter of October 13, 2020 KWB requested a reduction of the penalty in the amount of PLN 7,260 by the amount of its own expenditures on the investment (the purchase of real estate) eliminating the reason for the penalty. |

| PGE GiEK | 2020 | | comment |
|---|---|---|---|
| **Value of fines not yet imposed but assessed for non-compliance with environmental laws and regulations** | **PLN 252,796** | 1) An estimated amount of the administrative penalty for KWB's exceeding the nightly mine noise emission limits in 2018 (PLN 53,687), 2019 (PLN 62,156) and 2020 (PLN 92,095).<br>2) An estimated amount of the penalty for ELT's exceeding the mercury emission limits (in 2018 and 2019 – PLN 44,858) | Estimated amounts of potential penalties for exceeding noise emission limits by KWB in the villages of Kamień 36 (from August 9, 2018) and Janówka 57 (from July 31, 2020) |

| PGE EC | **2020** | | **comment** |
|---|---|---|---|
| **Value of fines reduced (remitted) in a given year for non-compliance with environmental laws and regulations** | **PLN 13,052** | The sum of penalties imposed by the Provincial Environmental Protection Inspectorate for 2018 and 2019. For each penalty, the Company submitted "A request to postpone the administrative penalty payment deadline and to recognise it as an expenditure for the project under implementation". The Provincial Environmental Protection Inspectorate postponed the deadlines for the payment of both penalties until December 31, 2020. | On January 12, 2021, two requests were submitted to the Provincial Environmental Protection Inspectorate for a reduction in the amounts of the fines and their recognition as expenditures for the implementation of projects. On February 8, 2021, the Provincial Environmental Protection Inspectorate issued relevant decisions reducing the penalties in question to zero, and recognising them as expenditures on the investment project that eliminated the reason for the imposition of the penalties. |

## SELECTED INDICES RELATING TO ENVIRONMENTAL ISSUES IN PGE SA

The indices below present the Company's approach to managing its environmental impact in terms of energy, water and paper consumption at the headquarters of PGE SA.

| Annual electricity consumption at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| Energy for administrative purposes (MWh) | 1,594 | 1,698 | 1,864 |
| Energy for administrative and technical purposes (server rooms) (MWh) | 909 | 1,084 | 1,192 |

Energy consumed for administrative purposes decreased slightly in comparison to that of last year. This may have been influenced by the pandemic period and the performance of office work on a remote basis.

| Annual thermal energy consumption at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| Annual consumption of thermal energy (in GJ) | 6,980 | 6,675 | 6,940 |
| Annual consumption of thermal energy (in GJ/m$^3$) | 0.06 | 0.06 | 0.06 |

The annual consumption of thermal energy increased slightly year-on-year due to the earlier start of the heating season.

| Annual consumption of sheets of paper at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| Office Printing Paper (translated into A4-size sheets) | 873,085 | 1,139,950 | 1,019,889 |
| Paper consumption for office printing (A4 sheets/person) | 1,317 | 1,768 | 1,800 |

The consumption of paper per employee fell year-on-year by over 34 percent. This may have been influenced by the pandemic period and the performance of office work on a remote basis.

| Annual water consumption and sewage disposal at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| Annual water consumption and sewage disposal (m$^3$) | 4,152 | 7,391 | 7,301 |
| Annual water consumption and sewage disposal (m$^3$/person) | 6.3 | 11.5 | 12.9 |

Remote work contributed to reduction in water consumption and sewage disposal volumes.

| Annual consumption of toner cartridges at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| Annual consumption of toner (cartridges) | 183 | 173 | 135 |
| Annual consumption of toner (cartridge/person) | 0.27 | 0.26 | 0.24 |

| Energy-saving LED fixtures at the PGE SA headquarters | | | |
|---|---|---|---|
| | **2020** | **2019** | **2018** |
| LED fixtures (percent) | 66 | 65 | 60 |

Due to the pandemic period, refurbishment work was halted, so the extent of light fixture replacement was reduced.

## SELECTED INDICES RELATING TO EMPLOYEE ISSUES IN THE PGE GROUP AND PGE SA

The number of employees broken down by type of employment, type of employment contract and gender (in persons).
As at December 31, 2020
| GRI 102-8 | GC-6 |

| PGE Group | Data for 2018 | | | Data for 2019 | | | Data for 2020 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Women** | **Men** | **Total** | **Women** | **Men** | **Total** | **Women** | **Men** | **Total** |
| **Total number of employees** | 8,522 | 33,241 | 41,763 | 8,704 | 33,576 | 42,280 | 8,173 | 32,271 | 40,444 |
| Number of employees employed on a full-time basis | 8,429 | 33,133 | 41,562 | 8,613 | 33,462 | 42,075 | 8,083 | 32,170 | 40,253 |
| Number of employees employed on a part-time basis | 92 | 106 | 198 | 91 | 114 | 205 | 90 | 101 | 191 |
| Number of employees with employment contracts for an indefinite period | 7,601 | 30,986 | 38,587 | 7,590 | 30,835 | 38,425 | 7,318 | 30,099 | 37,417 |
| Number of employees with employment contracts for a definite period | 920 | 2,253 | 3,173 | 1,114 | 2,741 | 3,855 | 855 | 2,172 | 3,027 |
| Employees with contracts of mandate (A) | 383 | 575 | 958 | 283 | 504 | 787 | 157 | 483 | 640 |
| Employees with contracts for specific work (B) | 1 | 7 | 8 | 0 | 3 | 3 | 0 | 6 | 6 |
| Number of self-employed workers | 2 | 22 | 24 | 0 | 22 | 22 | 3 | 7 | 10 |
| Ratio of self-employed workers to all employees | 0.02% | 0.07% | 0.06% | 0% | 0.07% | 0.05% | 0.04% | 0.02% | 0.03% |

| PGE SA | Data for 2018 | | | Data for 2019 | | | Data for 2020 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Women** | **Men** | **Total** | **Women** | **Men** | **Total** | **Women** | **Men** | **Total** |
| **Total number of employees (as at December 31, in a given year)** | 313 | 315 | 628 | 331 | 336 | 667 | 311 | 307 | 618 |
| Number of employees employed on a full-time basis | 301 | 307 | 608 | 322 | 327 | 649 | 302 | 300 | 602 |
| Number of employees employed on a part-time basis | 12 | 8 | 20 | 9 | 9 | 18 | 9 | 7 | 16 |
| Number of employees with employment contracts for an indefinite period | 296 | 291 | 587 | 311 | 308 | 619 | 295 | 290 | 585 |
| Number of employees with employment contracts for a definite period | 17 | 24 | 41 | 20 | 28 | 48 | 16 | 17 | 33 |
| Employees with contracts of mandate (A) | 4 | 11 | 15 | 4 | 3 | 7 | 1 | 1 | 2 |
| Employees with contracts for specific work (B) | 0 | 0 | 0 | 0 | 2 | 2 | | 1 | 1 |
| Number of self-employed workers | | | | | | 0 | | | 0 |
| Ratio of self-employed workers to all employees | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

The number of employees covered by collective bargaining agreements. As at December 31, 2020
| **GRI 102-41** | GC-3 |

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| Number of employees | 41,763 | 42,283 | 40,444 |
| Number of employees covered by collective bargaining agreements | 31,393 | 32,339 | 30,861 |
| Percentage of employees covered by collective bargaining agreements (in relation to all employees) | 75.2% | 76.5% | 76.3% |

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| Number of employees | 628 | 667 | 618 |
| Number of employees covered by collective bargaining agreements | 4 | 1 | 1 |
| Percentage of employees covered by collective bargaining agreements (in relation to all employees) | 1% | 0% | 0% |

Total number of newly hired employees, employees who left the workforce and employee turnover broken down by age and gender (in persons) As at December 31, 2020
| **GRI 401-1** | GC-6|

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of employees** | **41,763** | **42,283** | **40,444** |
| **Total number of newly hired employees in the reporting period, including:** | **2,785** | **3,040** | **1,927** |
| Women | 855 | 1,065 | 579 |
| Men | 2,022 | 2,935 | 1,348 |
| Persons aged below 30 | 1,020 | 1,274 | 568 |
| Persons aged between 30 and 50 | 1,578 | 2,221 | 1,076 |
| Persons aged over 50 | 278 | 465 | 283 |
| **Percentage of newly hired employees in the reporting period, including:** | **7%** | **7%** | **5%** |
| Women | 2% | 3% | 1% |
| Men | 5% | 7% | 3% |
| Persons aged below 30 | 2% | 3% | 1% |
| Persons aged between 30 and 50 | 4% | 5% | 3% |
| Persons aged over 50 | 1% | 1% | 1% |
| **Total number of employees who left the workforce during the reporting period, including:** | **2,688** | **2,711** | **3,695** |
| Women | 774 | 698 | 1,031 |
| Men | 1,960 | 2,080 | 2,664 |
| Persons aged below 30 | 363 | 398 | 394 |
| Persons aged between 30 and 50 | 910 | 887 | 1,078 |
| Persons aged over 50 | 1,461 | 1,493 | 2,223 |
| **Percentage of employees who left the workforce during the reporting period, including:** | **6%** | **6%** | **9%** |
| Women | 2% | 2% | 3% |
| Men | 5% | 5% | 7% |
| Persons aged below 30 | 1% | 1% | 1% |
| Persons aged between 30 and 50 | 2% | 2% | 3% |
| Persons aged over 50 | 3% | 4% | 5% |

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of employees** | **628** | **667** | **618** |
| **Total number of newly hired employees in the reporting period, including:** | **81** | **77** | **83** |
| Women | 39 | 36 | 33 |
| Men | 42 | 41 | 50 |
| Persons aged below 30 | 28 | 31 | 11 |
| Persons aged between 30 and 50 | 46 | 43 | 61 |
| Persons aged over 50 | 7 | 3 | 11 |
| **Percentage of newly hired employees in the reporting period, including:** | **13%** | **12%** | **13%** |
| Women | 6% | 5% | 5% |
| Men | 7% | 6% | 8% |
| Persons aged below 30 | 4% | 5% | 2% |
| Persons aged between 30 and 50 | 7% | 6% | 10% |
| Persons aged over 50 | 1% | 0% | 2% |
| **Total number of employees who left the workforce during the reporting period, including:** | **49** | **40** | **132** |
| Women | 20 | 16 | 53 |
| Men | 29 | 24 | 79 |
| Persons aged below 30 | 11 | 9 | 19 |
| Persons aged between 30 and 50 | 26 | 24 | 77 |
| Persons aged over 50 | 12 | 7 | 36 |
| **Percentage of employees who left the workforce during the reporting period, including:** | **8%** | **6%** | **21%** |
| Women | 3% | 2% | 9% |
| Men | 5% | 4% | 13% |
| Persons aged below 30 | 2% | 1% | 3% |
| Persons aged between 30 and 50 | 4% | 4% | 12% |
| Persons aged over 50 | 2% | 1% | 6% |

The average annual number of training days per employee broken down by gender and employment structure (in persons). As at December 31, 2020

| GRI 404-1 | GC-6 |

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of training days (total in given year)** | **53,551** | **48,487.75** | **42,105.00** |
| **Total number of employees** | **41,763** | **42,280** | **40,444** |
| **Average number of training days per employee in the reporting period – total** | **1.3** | **1.2** | **1** |
| **Average number of training days per employee during the reporting period, including:** | **2.8** | **2.3** | **3.6** |
| Women | 1.5 | 1.14 | 1.38 |
| Men | 1.4 | 1.2 | 1 |
| Top management (Management Board and directors) | 4.8 | 7.1 | 3.4 |
| Managerial positions | 3.4 | 2.4 | 1.9 |
| Other employees | 1.1 | 1 | 1 |

Average hours of training per year per employee broken down by employment category and gender
| GRI 404-1 |

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of training days (total in given year)** | **1,597** | **2,481.3** | **492** |
| **Total number of employees** | **628** | **667** | **618** |
| **Average number of training days per employee in the reporting period – total** | **2.5** | **3.7** | **0.8** |
| **Average number of training days per employee during the reporting period, including:** | **2.7** | **3.8** | **0.7** |
| Women | 2.9 | 3.4 | 1.2 |
| Men | 3.3 | 4.1 | 0.8 |
| Top management (Management Board and directors) | 2.9 | 6.6 | 1.6 |
| Managerial positions | 3.7 | 4 | 1.3 |
| Other employees | 2.3 | 3.4 | 1 |

The percentage of employees undergoing regular work performance assessments and career development reviews broken down by gender.
As at December 31, 2020
| GRI 404-3 | GC-6 |

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Percentage of employees undergoing regular work performance assessments broken down by gender:** | **23.5%** | **23.5%** | **15.4%** |
| Number of employees receiving regular work performance assessments | 9,804 | 9,923 | 6,228 |
| Number of women receiving regular work performance assessments | 2,764 | 2,899 | 2,396 |
| Number of men receiving regular work performance assessments | 7,039 | 7,024 | 3,832 |
| Number of managers/directors (managerial positions, names may vary from company to company) | 1072 | 1,256 | 1,119 |
| **Percentage of employees receiving regular work performance assessments (women and men together – percentage of total number of all employees)** | | | |
| women (percentage of all women) | 32.1% | 33.3% | 29.3% |
| Men (percentage of men out of all men) | 21.1% | 20.9% | 11.9% |
| Directors, managers | 37.2% | 43.7% | 38.3% |

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Percentage of employees undergoing regular work performance assessments broken down by gender:** | **100%** | **100%** | **100%** |
| Number of employees receiving regular work performance assessments | 628 | 667 | 618 |
| Number of women receiving regular work performance assessments | 313 | 331 | 311 |
| Number of men receiving regular work performance assessments | 315 | 336 | 307 |
| Number of managers/directors (managerial positions, names may vary from company to company) | 153 | 156 | 151 |
| **Percentage of employees receiving regular work performance assessments (women and men together – percentage of total number of all employees)** | | | |
| women (percentage of all women) | 100% | 100% | 100% |
| Men (percentage of men out of all men) | 100% | 100% | 100% |
| Directors, managers | 100% | 100% | 100% |

The composition of governing and supervising bodies, as well as the personnel broken down by gender and age. As at December 31, 2020

| GRI 405-1 | GC-6 |

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Number of members of the Management Board** | **86** | **95** | **89** |
| **Number of members of the Management Board, including:** | | | |
| Women | 7 | 8 | 9 |
| Men | 79 | 87 | 80 |
| age: under 30 | 0 | 0 | 0 |
| age: 30-50 | 47 | 55 | 62 |
| age: over 50 | 39 | 38 | 27 |
| **Number of members of the Supervisory Board** | **181** | **190** | **197** |
| **Number of members of the Supervisory Board, including:** | | | |
| Women | 52 | 57 | 54 |
| Men | 129 | 133 | 143 |
| age: under 30 | 0 | 3 | 2 |
| age: 30-50 | 123 | 128 | 137 |
| age: over 50 | 58 | 57 | 58 |
| **Total number of employees** | **41,763** | **42,281** | **40,444** |
| **Number of employees in each of the following categories:** | | | |
| Women | 8,522 | 8,706 | 8,173 |
| Men | 33,241 | 33,575 | 32,271 |
| age: under 30 | 3,041 | 3,457 | 3,059 |
| age: 30-50 | 20,856 | 20,641 | 19,550 |
| age: over 50 | 17,866 | 18,183 | 17,835 |
| **Percentage of members of the Management Board, including:** | | | |
| Women | 8.1% | 8.4% | 10.1% |
| Men | 91.9% | 91.6% | 89.9% |
| age: under 30 | 0% | 0% | 0% |
| age: 30-50 | 54.7% | 57.9% | 69.7% |
| age: over 50 | 45.3% | 40% | 30.3% |
| **Percentage of members of the Supervisory Board, including:** | | | |
| Women | 28.7% | 30% | 27.4% |
| Men | 71.3% | 70% | 72.6% |
| age: under 30 | 0% | 1.6% | 1% |
| age: 30-50 | 68% | 67.4% | 69.5% |
| age: over 50 | 32% | 30% | 29.4% |
| **Percentage of employees, including:** | | | |
| Women | 20.4% | 20.6% | 20.2% |
| Men | 79.6% | 79.4% | 79.8% |
| age: under 30 | 7.3% | 8.2% | 7.6% |
| age: 30-50 | 49.9% | 48.8% | 48.3% |
| age: over 50 | 42.8% | 43% | 44.1% |

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Number of members of the Management Board** | **6** | **6** | **6** |
| **Number of members of the Management Board, including:** | | | |
| Women | 0 | 0 | 1 |
| Men | 6 | 6 | 5 |
| age: under 30 | 0 | 0 | 0 |
| age: 30-50 | 2 | 2 | 5 |
| age: over 50 | 4 | 4 | 1 |
| **Number of members of the Supervisory Board** | **8** | **8** | **8** |
| **Number of members of the Supervisory Board, including:** | | | |
| Women | 2 | 2 | 2 |
| Men | 6 | 6 | 6 |
| age: under 30 | 0 | 0 | 0 |
| age: 30-50 | 4 | 4 | 4 |
| age: over 50 | 4 | 4 | 4 |
| **Total number of employees** | **628** | **667** | **618** |
| **Number of employees in each of the following categories:** | | | |
| Women | 313 | 331 | 311 |
| Men | 315 | 336 | 307 |
| age: under 30 | 96 | 78 | 54 |
| age: 30-50 | 448 | 499 | 480 |
| age: over 50 | 84 | 90 | 84 |
| **Percentage of members of the Management Board, including:** | | | |
| Women | 0% | 0% | 16.7% |
| Men | 100% | 100% | 83.3% |
| age: under 30 | 0% | 0% | 0% |
| age: 30-50 | 33.3% | 33.3% | 83.3% |
| age: over 50 | 66.7% | 66.7% | 16.7% |
| **Percentage of members of the Supervisory Board, including:** | | | |
| Women | 25% | 25% | 25% |
| Men | 75% | 75% | 75% |
| age: under 30 | 0% | 0% | 0% |
| age: 30-50 | 50% | 50% | 50% |
| age: over 50 | 50% | 50% | 50% |
| **Percentage of employees, including:** | | | |
| Women | 49.8% | 49.6% | 50.3% |
| Men | 50.2% | 50.4% | 49.7% |
| age: under 30 | 15.3% | 11.7% | 8.7% |
| age: 30-50 | 71.3% | 74.8% | 77.7% |
| age: over 50 | 13.4% | 13.5% | 13.6% |

Implementation of the Voluntary Leave Programme (VLP) (persons).

| PGE Group | |
|---|---|
| **VLP in 2020** | 135 |
| **VLP in 2019** | 26 |
| **VLP in 2018** | 88 |

| PGE SA | |
|---|---|
| **VLP in 2020** | 22 |
| **VLP in 2019** | 0 |
| **VLP in 2018** | 0 |

Type and rate of injuries, occupational diseases, lost days and absenteeism, as well as the total number of work-related fatal accidents broken down by gender.
| GRI 403-9 |

| PGE Group | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of all accidents at work, including:** | **155** | **171** | **176** |
| Women | 16 | 15 | 13 |
| Men | 140 | 158 | 164 |
| **Number of fatal accidents** | **0** | **1** | **3** |
| Women | 0 | 0 | 0 |
| Men | 0 | 1 | 3 |
| **Number of collective accidents** | **1** | **2** | **1** |
| Women | 0 | 0 | 0 |
| Men | 2 | 4 | 2 |
| **Number of serious accidents** | **2** | **2** | **2** |
| Women | 0 | 0 | 0 |
| Men | 2 | 2 | 2 |
| **Number of light accidents** | **152** | **166** | **170** |
| Women | 16 | 15 | 12 |
| Men | 136 | 151 | 158 |
| **Accident frequency index*** | **3.71** | **4.04** | **4.35** |
| **Accident severity index**** | **24.05** | **21.42** | **22.35** |
| **Absenteeism index***** | **10,608** | **12,445** | **11,675** |
| Women | 1,129 | 1,556 | 582 |
| Men | 9,423 | 10,889 | 11,093 |

* Accident frequency index calculated according to the following formula = number of accidents per year/number of employees (as at the end of the year) x1000
** Accident severity index calculated according to the following formula = total number of days of work incapacity of victims of accidents at work/number of victims
*** Absenteeism index is the total number of days of absence due to work accidents (calendar days) - with respect to PGE Group companies

| PGE SA | Data for 2018 | Data for 2019 | Data for 2020 |
|---|---|---|---|
| **Total number of all accidents at work, including:** | **1** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 1 | 0 | 0 |
| **Number of fatal accidents** | **0** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 0 | 0 | 0 |
| **Number of collective accidents** | **0** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 0 | 0 | 0 |
| **Number of serious accidents** | **0** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 0 | 0 | 0 |
| **Number of light accidents** | **1** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 1 | 0 | 0 |
| **Accident frequency index** | **1.59** | **0** | **0** |
| **Accident severity index** | **0** | **0** | **0** |
| **Absenteeism index** | **0** | **0** | **0** |
| Women | 0 | 0 | 0 |
| Men | 0 | 0 | 0 |

In 2020, the number of accidents in the mining, manufacturing and distribution companies decreased by about 15 percent compared to 2019. In the service companies, the number of accidents increased by about 38 percent. The vast majority of accidents was related to falls associated with walking and minor cuts and injuries associated with manual handling of objects. Conducting operations under the epidemic conditions resulted in increased OSH risks due to fewer resources that could be devoted to work inspections. Three fatal accidents occurred in 2020. They were thoroughly investigated by the company's services and competent authorities. Appropriate preventive measures were taken. Lessons learned from all incidents that occurred in 2020 were incorporated into the framework action plan for 2021.

## SELECTED INDICES RELATING TO SOCIAL ISSUES IN THE PGE GROUP

PGE cares about the reliability of supplies and the lowering of the SAIDI and SAIFI indices. Additionally, the PGE Group's own indices are presented in the chapter “Society”.

| GRI EU-28 | GRI EU-29 |

| Operational data | 2020 | 2019 | 2018 |
|---|---|---|---|
| **SAIDI index [minutes] (average duration of electricity supply interruptions), including:** | **251** | **261** | **299** |
| Planned | 40 | 58 | 87 |
| Unplanned with catastrophic | 211 | 203 | 212 |
| **SAIFI index [units] (average frequency of electricity supply interruptions), including:** | **3.67** | **3.88** | **3.92** |
| Planned | 0.24 | 0.31 | 0.47 |
| Unplanned with catastrophic | 3.43 | 3.57 | 3.45 |

## SELECTED INDICES RELATING TO HUMAN RIGHTS AND ANTI-CORRUPTION ISSUES IN THE PGE GROUP AND PGE SA

As at December 31, 2020, compliance structures functioned in 25 companies belonging to the PGE Group: PGE SA, PGE GiEK, PGE Energia Ciepła, PGE Energia Odnawialna, PGE Dystrybucja, PGE Obrót, PGE EJ1, PGE Nowa Energia, PGE Synergia, PGE Systemy, PGE Ventures, PGE Baltica, PGE Centrum, PGE Dom Maklerski, Bestgum, Betrans, Elbest Security, Elbis, Elbest, Elmen, Eltur Serwis, MegaSerwis, Megazec, Ramb and PGE Ekoserwis. Each of them conducted dedicated employee training on human rights policies and procedures taking into account human rights aspects. The companies were also assessed, among other things, with respect to the risk of corruption.

Due to the fact that the total number of people working in these companies represents 96.1% of all employees of the Group, the following indexes are presented as aggregated data (for the PGE Group).

Training of employees of PGE Group companies in the field of human rights policies and procedures taking into account human rights aspects

| GRI 412-2 | GC-1 | GC-2 |

| PGE Group | 2020 |
|---|---|
| Total number of hours of training | 1,499* |
| Number of employees trained | 38,182 |
| Percentage of employees trained | 99% |

| PGE SA | 2020 |
|---|---|
| Total number of hours of training | 450.5 |
| Number of employees trained | 479 |
| Percentage of employees trained | 93.4% |

For the purposes of this statement, the calculation of the total number of hours of training is based on the assumption that training courses conducted on an e-learning basis are calculated as the product of the number of person-training courses and the duration of a training class equal to one hour (1h), while training courses conducted traditionally or online are the product of the number of training courses and the duration of a training class equal to 1.5 hours.

Training in the Code of Ethics, including a training module regarding respect for human rights, is organised in the PGE Group once every three years. Each employee who successfully passes the examination at the end of the training receives a certificate. The number of employees trained means the number of employees who held valid training certificates as at 12. 2020.

The total number and percentage of companies assessed for corruption.
| GRI 205-1 | GC-10 |

| | 2020 |
|---|---|
| Number of companies assessed for corruption risk | 25 |
| Percentage of companies assessed for corruption risk | 100% |

## Training in anti-corruption policies and procedures

In the area of counteracting corruption, the PGE Group companies are bound by the provisions of the Code of Ethics and the Anti-Corruption Policy of the PGE Capital Group. They are in force in a vast majority of the PGE Group companies. The provisions concerning anti-corruption measures are also included in the Code of Conduct for Business Partners of the PGE Capital Group Companies, which, together with the Code of Ethics, is posted, among others, on the website of each company. The companies are obliged to ensure that all their employees are familiar with, and trained in, the principles included in these documents. The conduct of training activities is reported on a quarterly basis. In addition, internal regulations include provisions aimed at mitigating the risk of corruption. This applies to the areas that are particularly vulnerable to it, such as purchasing or sponsoring activities.

As part of communication activities, a survey was conducted to check PGE employees' knowledge of anti-corruption rules. The survey was conducted in the selected companies of the Group: PGE Polska Grupa Energetyczna SA, PGE GiEK SA, PGE Energia Odnawialna SA, PGE Obrót SA, PGE EJ1, PGE Baltica, PGE Centrum, PGE Nowa Energia and PGE Venture. Over 400 employees participated in the survey. The vast majority, over 80 percent, of them provided correct answers, which means that their knowledge of the regulations applicable in the Group in this respect is thorough.

Training in anti-corruption policies and procedures.
| GRI 205-2 | GC-10 |

| PGE Group | 2020 |
|---|---|
| Percentage of Management Board and Supervisory Board members who were trained in anti-corruption measures | 84% |
| Percentage of employees who were trained in anti-corruption measures | 72% |
| Percentage of employees in managerial positions who were trained in anti-corruption measures | 65% |
| Percentage of other employees who were trained in anti-corruption measures | 72% |

| PGE SA | 2020 |
|---|---|
| Percentage of Management Board and Supervisory Board members who were trained in anti-corruption measures | 100% |
| Percentage of employees who were trained in anti-corruption measures | 94.7% |
| Percentage of employees in managerial positions who were trained in anti-corruption measures | 96.4% |
| Percentage of other employees who were trained in anti-corruption measures | 94.2% |

## 3. Risks tables

IDENTIFIED RISKS AND RISK MANAGEMENT METHODS IN THE AREA OF ENVIRONMENTAL ISSUES IN THE PGE CAPITAL GROUP AND PGE SA

| ENVIRONMENTAL ISSUES IN THE PGE GROUP | |
|---|---|
| Risk of illegality of activities in the context of climate protection | |
| resulting from non-compliance of the PGE Group's activities with the applicable environmental regulations in all aspects, in particular the standards for emission of pollutants to the atmosphere, water and soil | |
| **The current perspective** | **The long-term perspective** |
| Risk that legal requirements relating to climate protection will not be met | Risk of tightening environmental restrictions related to electricity and heat generation as well as mining activities |
| Mitigating measures | |
| Monitoring continuously environmental laws and regulations, with particular attention paid to:<br>the BAT Conclusions, IED Directive, ETS Directive<br>water and wastewater management<br>waste management<br>measurement of emissions<br>Analysis of interrelations between environmental aspects and activities of particular companies of the PGE Group as well as products and services offered by them (The list of environmental aspects together with the risks and opportunities analysis)<br>Reducing interference with the natural environment:<br>adjusting installations to the requirements of the BAT Conclusions<br>using the most efficient solutions for wastewater treatment, flue gas treatment, water abstraction<br>work on a new concept for the utilisation of combustion waste and by-products<br>ensuring supply of coal with appropriate parameters (lower ash and sulphur content)<br>an environmental management system allowing, among other things, the monitoring and supervision of major air pollutant (SO2, NOx, dust) emissions from individual installations | |

| Risk of impact of volatility of $CO_2$ emission allowance prices | |
|---|---|
| resulting from the modification of the $CO_2$ emissions trading scheme (ETS), allowance price volatility and exchange rate fluctuations | |
| **The current perspective** | **The long-term perspective** |
| Risk related to uncertainty of future level of market commodity prices in the context of open positions of the PGE Group | Risk of fluctuations in macroeconomic indices and prices of raw materials affecting the PGE Group's operations |
| Mitigating measures | |
| Optimisation of generation assets with the development of production scenarios for updated electricity and $CO_2$ market parameters<br>Monitoring of energy, $CO_2$, gas, coal and certificate markets as well as sectoral trends<br>Monitoring of risk exposure, determination of risk limits and hedging strategies for trading activities | |

| Risk of fluctuations in electricity generation | |
|---|---|
| resulting from a reduction in generation capacity or interruptions in electricity generation | |
| **The current perspective** | **The long-term perspective** |
| Electricity generation volume risk | Risk related to technological changes |
| Mitigating measures | |
| Generation planning taking into account facilities failure rates and greenhouse gas emission limits<br>System for real-time monitoring of the status and operating parameters of generation units<br>Service agreements for efficient and rapid repair of breakdowns and failures<br>Business continuity plans<br>Qualified staff with required authorisations | |

| Risk of technological revolution | |
|---|---|
| resulting from the use of insufficiently tested new technologies and an insufficient level of competence in this field | |
| **The current perspective** | **The long-term perspective** |
| Risks associated with the direction and process of investing | Risk related to technological changes |
| Mitigating measures | |
| Long-term development plan<br>Investment-specific risk analysis<br>Public consultations<br>Cooperation with central and local government authorities<br>Monitoring of expected available connection capacities for generation sources<br>Safeguards in agreements with contractors<br>Analyses of impact of installations on the environment | |

| Risk of changes in customer behaviours and preferences | |
|---|---|
| resulting from unattractive sales offers and poor customer service | |
| **The current perspective** | **The long-term perspective** |
| Risks related to customer retention and acquisition | Risks arising from changing ways of electricity sales and offers development |
| Mitigating measures | |
| Customer needs surveys<br>Differentiation of the product offer<br>Customer satisfaction surveys<br>Monitoring of products and prices offered by competitors<br>eCommerce development as an opportunity to use additional ideas for implementing new product solutions<br>Counterparty credit risk management system | |

| Reputational risk |
|---|
| resulting from adverse events and negative information published in the media, as well as from inadequate brand management and information policy in relation to the internal and external environment |

| **The current perspective** | **The long-term perspective** |
|---|---|
| Risks related to reputation and management of the PGE brand | Impact on PGE's reputation is one of the criteria for assessing each of the long-term risks. Examination covers the extent of the impact on reputation and image and the strength of the impact that risk materialisation may have on these aspects |

| Mitigating measures |
|---|
| Cooperation with the media and monitoring of the media environment, including social media<br>Crisis communication procedure<br>Assessment of effectiveness of communication channels<br>Brand strategy and its monitoring<br>Systematic internal communication<br>Meetings between managers and employees<br>Dialogue with social partners |

## ENVIRONMENTAL ISSUES IN PGE SA

| Environmental protection risk |
|---|
| resulting from the consequences of inadequate environmental protection measures or the possibility of occurrence of extraordinary events |

| Mitigating measures |
|---|
| Monitoring of technical condition and modernisation of equipment and installations<br>Monitoring of environmental laws and regulations<br>Adaptation of the company's internal regulations and its environmental protection activities to changing legal regulations<br>Reporting to competent authorities and institutions responsible for environmental management<br>Reducing interference with the natural environment<br>Use of the most effective solutions and highly efficient environmental technologies<br>Outsourcing the disposal of harmful substances to a specialised entity holding a waste management licence |

## IDENTIFIED RISKS AND MANAGEMENT METHODS IN THE AREA OF EMPLOYEE ISSUES IN THE PGE CAPITAL GROUP AND PGE SA

### LABOUR ISSUES IN THE PGE GROUP

**OHS risk**

arising from the consequences of companies', employees' and other persons' non-compliance with occupational health and safety regulations and rules

Mitigating measures

Inspections of the working environment
Training of employees in occupational health and safety and provision of
job-related instructions before an employee is allowed to work in a specific position
Employing staff with qualifications and health conditions appropriate for the needs of the company
Initial and periodic medical examinations
Periodic assessment of the technical condition of buildings, equipment and installations
Regulations governing the use of protective equipment and work tools

**Social dialogue risk**

related to failure to reach an agreement between the companies' governing bodies and social partners, which could lead to strikes/collective disputes

Mitigating measures

Organisation of meetings regarding the market situation of PGE Capital Group
Meetings to present information on the manner and scope of planned changes
Conducting employee surveys
Ongoing analysis of trade union activities
Dialogue with social partners

**Human resources risk**

resulting in an undesirable personnel turnover

Mitigating measures

Competitive remuneration system in comparison to other employers
Regulations applicable to the recruitment process
Employee development management
Cooperation with secondary schools and universities providing education in relevant subjects
Mentoring
Training on the Code of Ethics

## EMPLOYEE ISSUES IN PGE SA

### OHS risk

arising from the consequences of non-compliance with occupational health and safety rules and regulations by the companies, employees and persons working for the companies

Mitigating measures

Inspections of the working environment (measurements, reviews)
Training of employees in occupational health and safety and provision of job-related instructions before an employee is allowed to work in a specific position
Employing staff with qualifications and health conditions appropriate for the needs of the company
Initial and periodic medical examinations
Regulations governing first aid in the event of an accident at work
Periodic inspections of workplaces
Periodic technical condition assessments (inspections of buildings and installations)
Ongoing analysis of costs related to ensuring proper conditions for the safe performance of work

### Social dialogue risk

related to failure to reach an agreement between the companies' governing bodies and social partners, which could lead to strikes/collective disputes

Mitigating measures

Organisation of meetings regarding the market situation of PGE Capital Group
Informing employees about the company's current situation and future plans (effective internal communication)
Meetings to present information on the manner and scope of planned changes
Dialogue with social partners
Ongoing analysis of trade union activities

### Human resources risk

resulting in an undesirable personnel turnover

Mitigating measures

Implemented rules for the hiring and remuneration of employees
Monitoring of the labour market with regard to remuneration and incentive systems
Planning occupational development according to the needs of staff and individual business units
Training on the Code of Ethics
Linking salaries and incentive payments to periodic work performance assessments
Internal and external training

## IDENTIFIED RISKS AND RISK MANAGEMENT METHODS IN THE AREA OF SOCIAL ISSUES IN THE PGE CAPITAL GROUP AND PGE SA

### SOCIAL ISSUES IN THE PGE GROUP

**Third party damage risk**

relating to the possibility of material, personal or financial damage resulting from the core business of the companies

Mitigating measures

Monitoring of technical condition of equipment and installations
Inspections of the working environment
Measurement of noise emissions and electromagnetic fields
Use of protective measures that reduce threats to the environment
Employee training
Appropriate preparation of the workplace
Periodic inspection of the state of security of facilities and individual assets

**Risk of infringement of consumers' collective interests**

resulting from a possible lack of due diligence
in the area of competition and consumer protection

Mitigating measures

Use of judicial decisions of the Court for Protection of Competition and Consumers and opinions of the President of the Office for Protection of Competition and Consumers
Compliance with internal standards on information marking
Ensuring easy access to company regulations
Employee training
Verification of the legality of contracts
Verification of existing internal regulations for possible abuse of the dominant position
Legal consultations
Monitoring of the regulatory environment

| Reputational risk |
|---|
| resulting from adverse events and negative information published in the media, as well as from inadequate brand management and information policy in relation to the internal and external environment |
| **Mitigating measures** |
| Cooperation with the media and monitoring of the media environment, including social media<br>Compliance with procedures for managing internal, external and crisis communications<br>Assessment of effectiveness of communication channels<br>Brand strategy and its monitoring<br>Systematic internal communication<br>Meetings between managers and employees<br>Internal training for the management |

## SOCIAL ISSUES IN PGE SA

| Human resources risk |
|---|
| resulting in an undesirable personnel turnover |
| **Mitigating measures** |
| Competitive remuneration system in comparison to other employers<br>Attractive non-wage benefits system<br>Monitoring of the labour market with regard to remuneration and incentive systems<br>Development of bonus regulations based on transparent and uniform motivation principles<br>Use of objective performance assessments methods<br>Linking salaries and incentive payments to periodic work performance assessments<br>Planning occupational development according to the needs of staff and individual business units<br>Internal and external training<br>Friendly working atmosphere |

## IDENTIFIED RISKS AND RISK MANAGEMENT METHODS IN THE AREA OF HUMAN RIGHTS IN THE PGE CAPITAL GROUP AND PGE SA

| **RESPECT FOR HUMAN RIGHTS IN THE PGE GROUP** |
|---|
| Risk of bullying and harassment incidents |
| related to the possibility of material, personal or financial damage resulting from the actions of employees |
| Mitigating measures |
| Training for employees and managers<br>Whistleblower function – possibility to report irregularities observed in the organisation<br>Shaping a friendly working environment, appropriate rules of social coexistence and respecting the dignity and personal rights of employees |
| Risk of discriminatory actions against employees |
| resulting from possible commission of unlawful acts |
| Mitigating measures |
| Work regulations<br>Employee training<br>Internal standards for reporting irregularities and providing information |

## RESPECT FOR HUMAN RIGHTS IN PGE SA

**Risk of bullying and harassment incidents**

related to the possibility of material, personal or financial damage resulting from the actions of employees

Mitigating measures

Training for employees and managers
Whistleblower function – possibility to report irregularities observed in the organisation
Impartial Advisor function – possibility to contact an external entity about mobbing incidents

**Risk of discriminatory actions against employees**

resulting from possible commission of unlawful acts

Mitigating measures

Work regulations
Employee training
Internal standards for reporting irregularities and providing information

# IDENTIFIED RISKS AND RISK MANAGEMENT METHODS IN THE AREA OF COUNTERACTING CORRUPTION IN THE PGE CAPITAL GROUP AND PGE SA

| GC-10 |

## ISSUES RELATED TO FRAUD AND CORRUPTION IN THE PGE GROUP

### Risk of fraud and corruption

resulting from possible commission of unlawful acts

Mitigating measures

The Code of Ethics of the PGE Capital Group
The anti-corruption policy of the PGE Capital Group
Employee training
Monitoring of business activities to identify and explain incidents that are unusual for a reasonably run business
An implemented fraud reporting system ensuring confidentiality of persons reporting irregularities
Internal monitoring (compliance control) of the company's processes and internal regulations
Easy access to regulations concerning the functioning of the company (codes, rules, principles)
Employees' declarations of the absence of conflicts of interests

### Purchase risk

resulting from possible errors in the process of purchasing materials and services

Mitigating measures

The purchase policy of the PGE Capital Group and the General Purchase Procedure of the PGE Capital Group
The Code of Conduct for Business Partners of the Companies in the PGE Capital Group
Obligation to comply with the provisions of the Good Purchase Practices and the Code of Ethics
Analysis of the provisions of the Terms of Reference before their approval, in particular the conditions for participation and the General Purchase Procedure
Communication and employee training
Application of the system for the assessment and qualification of contractors
Additional random verification of individual purchase procedures and the purchasing plan
Exemption declarations by participants in procedures
Documentation of the course of purchase procedures

# ISSUES RELATED TO FRAUD AND CORRUPTION IN PGE SA

| Risk of fraud and corruption |
|---|
| resulting from possible commission of unlawful acts |
| Mitigating measures |
| The Code of Ethics of the PGE Capital Group<br>The anti-corruption policy of the PGE Capital Group<br>Easy access to regulations concerning the functioning of the company (codes, rules, principles)<br>Cyclical review of internal regulations<br>Initial and periodic training of employees<br>Employees' declarations of the absence of conflicts of interests<br>Monitoring of business activities to identify and explain incidents that are unusual for a reasonably run business<br>Monitoring of actions related to the issue of powers of attorney<br>Ongoing supervision of tasks assigned to employees and monitoring of compliance of such tasks with allocated scopes of duties<br>An implemented fraud reporting system ensuring confidentiality of persons reporting irregularities<br>Internal monitoring (compliance control) of the company's processes and internal regulations |

| Purchase risk |
|---|
| resulting from possible errors in the process of purchasing materials and services |
| Mitigating measures |
| The purchase policy of the PGE Capital Group and the General Purchase Procedure of the PGE Capital Group<br>The Code of Conduct for Business Partners of the Companies in the PGE Capital Group<br>Obligation to comply with the provisions of Good Purchase Practices and the Code of Ethics<br>Analysis of the provisions of the Terms of Reference before their approval, in particular the conditions for participation and the General Purchase Procedure<br>Communication and employee training<br>Application of the system for the assessment and qualification of contractors<br>Additional random verification of individual purchase procedures and the purchasing plan<br>Exemption declarations by participants in procedures<br>Documentation of the course of purchase procedures |

## 4. Research and development projects in the field of environmental protection

In 2020, the PGE Capital Group implemented 24 research and development projects in the field of environmental protection with a total value of over PLN 19 million. Cooperation in this area was conducted with 23 external partners.

| # | Name of project | Company | Objective of project | Project partners |
|---|---|---|---|---|
| **Reduction of emissions** | | | | |
| 1 | Technology for the production of activated carbon and a method of its dosage to reduce mercury emissions from combustion processes in power boilers | PGE GiEK Bełchatów Power Plant Branch | Mastering the technology for the production of lignite-based sorbents and a method of their dosage into the flue gas discharge system in order to comply with the required emission limits under the BREF/BAT conclusions. | Institute of Power Engineering Warsaw, Institute for Chemical Processing of Coal Zabrze |
| 2 | Examining the effectiveness of using selected types of dust sorbents to reduce mercury emissions in the Bełchatów Power Plant | PGE GiEK Bełchatów Power Plant Branch | Selecting an optimum mercury emission reduction technology for power unit no. 14 in the Bełchatów Power Plant. The subject of research will be the dosing of bromine salt mixtures into the fuel and the dosing of activated carbon or activated coke dust into flue gases. | "ENERGOPOMIAR" sp. z o.o. Power Generation Industry Measurement and Research Plant JSW Innowacje S.A. |
| 3 | Developing a low-cost method of increasing the efficiency of flue gas desulphurisation plants | PGE GiEK Bełchatów Power Plant Branch | Developing and testing a technology to reduce $SO_2$ emissions to the levels specified in the new BREF/BAT environmental conclusions for sulphur oxide emissions below 130 mg/Nm$^3$. | RAFAKO Racibórz |
| 4 | Developing a technology to increase the efficiency of sulphur dioxide capture in FGD absorbers by using a sorbent with increased reactivity without the necessity of grinding | PGE GiEK Bełchatów Power Plant Branch | Constructing an alternative increased-activity sorbent dosing installation as well as developing and testing an optimum operating algorithm for the FGD sorbent feeding installation. This will allow the maintenance of an allowable level of SOx emission into the atmosphere in the event of using coal with significant sulphation or a breakdown of limestone mills. | "ENERGOPOMIAR" sp. z o.o. Power Generation Industry Measurement and Research Plant Omya sp. z o.o. ATMO PROJEKT Environmental Protection Projects and Consultancy GRAŻYNA PORWAŃSKA |

| | | | | |
|---|---|---|---|---|
| 5 | Selecting a supplementary technology for halide-based reduction of mercury emissions and determining its impact on FGD effluents in the Bełchatów Power Plant | PGE GiEK Bełchatów Power Plant Branch | Developing an optimum mercury emission reduction technology based on dosing halogen compounds to flue gases, supplemented by methods to reduce mercury re-emission from FGD plant absorbers. The conducted research will also make it possible to determine whether the construction of an FGD process water treatment plant is justified. | "ENERGOPOMIAR" sp. z o.o. Power Generation Industry Measurement and Research Plant<br>IEM FörderTechnik GmbH<br>Vosteen Consulting GmbH |
| 6 | Treating flue gases from the thermal waste conversion process using a newly developed regenerable sorbent material | PGE Energia Ciepła | Increasing the effectiveness and reducing the cost of removing mercury (Hg) generated in the process of thermal waste treatment with energy recovery from flue gases by:<br>1) optimising the treatment process – mainly sorbent injection<br>2) developing a sorbent material being a cheaper alternative to the currently used pulverised activated carbon (PAC)<br>Decreasing the cost of the currently used sorbent (activated carbon), which cannot be regenerated, by replacing it with a cheaper sorbent material to be developed within the scope of the project and characterised by the possibility of regeneration and reuse.<br>Reducing the cost of the heavy metal flue gas cleaning process by optimising the process aimed at reducing sorbent consumption in relation to the amount of waste processed. | AGH (Academy of Mining and Metallurgy) in Cracow |

| | | | | |
|---|---|---|---|---|
| 7 | A predictive and diagnostic system to support the operation of SCR installations | PGE Energia Ciepła | Developing a predictive-diagnostic tool for the proper management of catalysts, which is of key importance for NOx reduction performance and the operating and maintenance costs of SCR installations.<br>A predictive-diagnostic tool will be based on an Access database system that will enable efficient access to large amounts of data by multiple users, rapid organisation, control and retrieval of information and automated calculations. The diagnostic tool will be used by PGE EC to optimise the management of catalysts (packages and modules) in its SCR installations. | The project was executed by PGE Group experts within the scope of their competencies |
| 8 | A photovoltaic laboratory | PGE Energia Odnawialna | The aim of the project is to build a photovoltaic laboratory based on different solar energy conversion technologies in PV cells and to compare the parameters of monocrystalline, polycrystalline, thin-layer cells based on products offered by different manufacturers with different declared quality parameters. An analysis of optimising several types of installed inverters, including inverters for prosumer applications, with different types of PV panels and test cooperation with several types of energy storage facilities (prosumer batteries). | City of Siedlce |
| 9 | New control algorithms for wind turbines | PGE Energia Odnawialna | The aim of the project is to apply a new technology for measuring wind strength and direction using a modern horizontal lidar to diagnose anomalies in the measured values. Obtained data will be used to develop new algorithms allowing for optimal operation of the equipment. | The project was executed by PGE Group experts within the scope of their competencies |

| | | | | |
|---|---|---|---|---|
| 10 | An experimental method of a modal analysis of a hydro power plant transmission gear | PGE Energia Odnawialna | The aim of the project is to design an experimental diagnostic system that will enable the hydrosystem operator to react to symptoms of undesired behaviour of a small hydroelectric power plant's hydrogenerator transmission gear. The system will also allow the operator to prepare in advance appropriate maintenance or repair measures for the time of scheduled technical inspections of the unit. | Wrocław University of Technology, Department of Mechanics and Materials Science, Faculty of Mechanical Engineering |
| 11 | Energy storage facilities integrated with the photovoltaic farm on Mount Żar | PGE Energia Odnawialna | The aim of the project is to build an energy storage facility integrated with a 500 kW / 750 kWh photovoltaic farm on Mount Żar and to examine in real conditions cooperation of such an energy storage facility with a photovoltaic farm and the way the energy storage system integrated with a PV farm affects the grid. | CIM-mes Projekt sp. z o.o. |
| 12 | A hybrid electricity storage facility at the Żarnowiec Pumped Storage Hydro Power Plant | PGE SA/PGE Energia Odnawialna/ PGE Inwest 14 | The aim of the project is to build a battery-based electricity storage facility with estimated parameters of 200-205MW / 800-820MWh at the Żarnowiec Pumped Storage Hydro Power Plant to support the operation of the Żarnowiec Power Plant and to balance generation from wind farms. | The project was executed by PGE Group experts within the scope of their competencies |
| 13 | An electric vehicle charging system integrated into lighting infrastructure | PGE Dystrybucja | The construction of a new system to manage a LV network, using distributed mobile energy sources (electric cars), for the purpose of improving energy efficiency in the network, reducing peak load power in the network, reducing losses (limiting power transfers) and carrying out research and analysis on the operation of charging stations within the electricity network, managing this process and using innovative technologies such as V2G. | Lublin University of Technology |

| | | | | |
|---|---|---|---|---|
| 14 | Managing the operation of a low voltage distribution network, taking into account the active role of the prosumer | PGE Dystrybucja | Developing and constructing an integrated and automated management system for LV distribution network infrastructure cooperating with dispersed energy sources and accumulators installed in prosumer installations. The result of the project will be dedicated devices for LV networks: LLE and CLE digital relays, together with a management system integrated with a SCADA class system. Thanks to optimised network operation management capabilities, the quality of energy supplied to consumers will improve and the number and power of RESs that can be connected to the network will increase without the need for its reconstruction. | Apator Elkomtech<br>Łódź University of Technology<br>Lublin University of Technology |
| 15 | A system for autonomous fault reduction in the depth of a power grid | PGE Dystrybucja | Introducing an autonomous system for MV networks whose task will be to quickly isolate the place where a short circuit occurred and to reconfigure the network so that power supply can be restored to consumers in an optimum manner. The implementation of the solution will reduce the number of trips made by service vehicles to locate faults in the field and, as a consequence, reduce the number of kilometres travelled and fumes emitted, as well as limit the area of environmental damage caused during such trips. The change in the network structure will also have a positive impact in the case of repair works, for example reduction in the use of power generators having a negative impact on the environment (noise, exhaust fumes). | Apator Elkomtech<br>MindMade |

| | | | | |
|---|---|---|---|---|
| 16 | An intelligent LV network reconfiguration system with a support system for assembly services | PGE Dystrybucja | The project will integrate switching units with a safety control system provided with new functionalities and create an IT module for dynamic optimisation of the operation of the power grid. The aforementioned switching units will be connected to a computational module. The solution will make it possible to connect the existing infrastructure with the network layout optimisation module in order to carry out operations of dynamic LV network reconfiguration, allowing for optimisation of energy losses and automatic isolation of failed network fragments. Automatic reconfiguration of LV networks both reduces technical losses of electricity distribution to consumers and enhances the reliability and flexibility of the power system. The application developed within the scope of the project for assembly services will provide accurate information about the place of fault occurrence, which will eventually limit the number of field trips of technical vehicles (to specific faults, without the need to locate them), thus reducing the number of kilometres driven and the level of exhaust emissions, as well as environmental damage caused during trips to locate faults. | Apator Elkomtech Globema |

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| 17 | Universal block power supply system (UBPSS) | PGE SA /PGE Dystrybucja | A universal block power supply system (UBPSS) for HV/MV/LV networks will be introduced as a process innovation to PGE Dystrybucja S.A. The use of project results will increase the connectivity of producers using RESs. This will be achieved through the development of a mobile device consisting of 4 automated and compatible blocks, i.e. an HV cable service module, an HV/MV mobile transformer station module, a MV/LV mobile transformer station module and a monitoring module. Due to their appropriate design, the blocks will be able to work with each other in different configurations, which will allow a more efficient and reliable connection with the network of producers / consumers during the expansion and modernisation of the infrastructure. | The project was executed by PGE Group experts within the scope of their competencies |
| 18 | Innovative network services to improve quality and reliability of electricity supply | PGE SA /PGE Dystrybucja | Commissioning a pilot energy storage facility with a power of 2.1 MW and capacity of 4.2 MWh, located in Rzepedź in the operational area of the Rzeszów Branch. The main objective of the project is to verify optimum procedures for energy flow management and integration of energy storage facilities with the MV distribution network. The start-up of the energy storage system in Rzepedź will improve the reliability of electricity supply in an innovative way – as an alternative to the development of the traditional network. The construction of a traditional MV line involves the need to cut down a large area of forest for the technological strip of the line. The use of energy storage facilities is a good solution to improve the reliability of electricity supply to end customers in areas where there is a lack of backup power supply units and constitutes an alternative to the expansion of the traditional network, which will have a significant impact on the environment and landscape. | Griffin Group Energy |

| # | Name of project | Company | Objective of project | Project partners |
|---|---|---|---|---|
| Reduction of the amount of pollutants in wastewater | | | | |
| 19 | Examining the process of separating a mixture of boric acid and hydrochloric acid | PGE GiEK Bełchatów Power Plant Branch | The project provided for research to be conducted in laboratory conditions and then the selection, in pilot studies to be conducted at the Silesian University of Technology, of the optimum technology for the removal of boron from FGD wastewater, i.e. a mixture of hydrochloric acid and boric acid. | Faculty of Chemistry of Silesian University of Technology in Gliwice, "ENERGOPOMIAR" sp. z o.o. Power Generation Industry Measurement and Research Plant |
| 20 | A demonstration installation for the INNUPS technology – the removal and recovery of heavy metals and boron from IMOS wastewater based on the ion exchange resins method | PGE Energia Ciepła | An analysis of sales opportunities for metal concentrates and calcium borate recovered from an INNUPS installation. This project is related to an investment project in which a demonstration installation based on the INNUPS technology is being constructed in Gdynia. The installation under construction is based on a system of ion exchange columns with the primary purpose of removing metals, metalloids and boron from wet desulphurisation wastewater. As part of the project, the installation will have to ensure the ability to meet the requirements of the BAT Conclusions. The aim of the research project will be to obtain metal and boron concentrates from the regeneration of ion exchange columns and the recovery of metals from non-regenerable resin, and then to assess the market value of the resulting products. | Purolite sp. z o.o. |
| 21 | Using wastewater from a municipal treatment plant as the main source of water supply for generation units in Cracow | PGE Energia Ciepła | Analysis of the possibility of using treated wastewater from a municipal wastewater treatment plant in a generating unit of PGE EC in Cracow. Possibility of obtaining large savings through optimisation of water and sewage management, reduction of water withdrawal and preparation costs. | Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji SA in Cracow |

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| 22 | Waste heat recovery from wastewater at the IMOS plant in Cracow | PGE Energia Ciepła | Reducing the cost of producing district heat or heat for auxiliary needs of a CHP plant by recovering and utilising waste heat from the IMOS plant. The use of waste heat from the IMOS plant increases the efficiency of the CHP plant and reduces $CO_2$ emissions. | The project was executed by PGE Group experts within the scope of their competencies |

| # | Name of project | Company | Objective of project | Project partners |
|---|---|---|---|---|
| Utilisation of combustion by-products | | | | |
| 23 | Developing a cement production technology with the use of combustion by-products produced in the PGE Group and minerals accompanying lignite deposits | PGE SA | The aim of the project is to develop new innovative cement formulations using stored combustion by-products and minerals accompanying lignite deposits. In addition, the plans provide for the development of technological and raw material guidelines indicating the possibility of wider utilisation of minerals accompanying lignite deposits in the Bełchatów Lignite Mine and combustion by-products stockpiled in the waste dumps of the Bełchatów Power Plant. | PGE Ekoserwis sp. z o.o. |

| # | Name of project | Company | Objective of project | Project partners |
|---|---|---|---|---|
| Animal protection | | | | |
| 24 | Automatic monitoring and bird protection methods at wind farms | PGE Energia Odnawialna | The project aims to reduce the harmful impact of wind farms on birds. The system will monitor and catalogue the migrations of various bird species that inhabit the area of wind farms. The mechanism will analyse information recorded by devices mounted on the turbines and will aim to eliminate collisions of birds with wind turbines on wind farms. | Bioseco |

## 5. Approval of the non-financial statement

This non-financial statement of PGE Polska Grupa Energetyczna SA and the PGE Group for the year 2020 was approved for publication by the Management Board of the parent company on March 22, 2021.

Warsaw, March 23, 2021

Signatures of the Members of the Management Board of PGE Polska Grupa Energetyczna SA:

| | | |
|---|---|---|
| **President of the Management Board** | **Wojciech Dąbrowski** | *Signed with qualified electronic signature* |
| **Vice President of the Management Board** | **Wanda Buk** | *Signed with qualified electronic signature* |
| **Vice President of the Management Board** | **Paweł Cioch** | *Signed with qualified electronic signature* |
| **Vice President of the Management Board** | **Paweł Strączyński** | *Signed with qualified electronic signature* |
| **Vice President of the Management Board** | **Paweł Śliwa** | *Signed with qualified electronic signature* |
| **Vice President of the Management Board** | **Ryszard Wasiłek** | *Signed with qualified electronic signature* |

## 6. Glossary of industry terms

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|---|---|
| BAT | Best Available Technology |
| Biomass | the biodegradable fraction of products, waste or residues of biological origin from agriculture, including vegetal and animal substances, forestry and related industrial sectors, including fisheries and aquaculture, processed biomass, notably in the form of briquettes, pellets, biochar and biocarbon, as well as the biodegradable fraction of industrial or municipal waste of plant or animal origin, including waste from waste treatment installations and waste from the treatment of water and wastewater, in particular sewage sludge, in accordance with the regulations applicable to waste with respect to eligibility of energy fraction recovered from thermal waste treatment |
| Biodiversity | the biological diversity of life forms on the Earth |
| BREF | Best Available Techniques Reference Document |
| $CO_2$ | carbon dioxide |
| CCI | Corporate Community Involvement |
| CSR | Corporate Social Responsibility |
| Distribution | transportation of energy via high voltage (110 kV), medium voltage (15 kV) and low voltage (400V) distribution networks to customers |
| Pumped storage power plant | a special type of a hydroelectric power plant that allows electricity to be stored. For this purpose, the upper water reservoir is used. Using excess electricity, water is pumped from the lower reservoir to the upper one. Pumped storage plants provide regulatory services to the national power system. During periods of increased demand for electricity, water from the upper reservoir is released onto the turbine. In this way, electricity is generated. |
| EMAS | Eco Management and Audit Scheme. It is an EU environmental certification scheme which functions on the basis of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of November 25, 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) |
| HPP | hydro power plant |
| EU ETS | European Union Emission Trading Scheme. It is a key element in the EU's climate change policy and its main tool for reducing greenhouse gas emissions in a cost-effective way. It is the world's first and so far largest emission allowance market. |
| European Green Deal | An action plan for a sustainable economy in the European Union. It aims to achieve climate neutrality by 2050. Achieving this goal will require a socio-economic transition in Europe: one that is cost-effective, fair and socially sustainable. The new programme consists of initiatives in a number of closely related fields, such as climate, environment, energy, transport, industry, agriculture and sustainable financing. The EU will also provide financial support and technical assistance to individuals, businesses and regions most affected by the transition to a green economy. This will be done through the just transition mechanism that is expected to provide EUR 150 billion to the most affected regions in the years 2021-2027. |
| Photovoltaic farm | Installation for the generation of electricity using solar radiation |
| Offshore farm | An offshore wind farm |
| Onshore farm | An onshore wind farm |
| GJ | gigajoule, SI unit of energy, 1 GJ = 1000/3.6 kWh = approx. 278 kWh |
| GWh | gigawatt hour, unit of electrical energy, 1 GWh =1,000,000 kWh |

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| Circular economy | a system that minimises the consumption of raw materials and waste volumes as well as emissions and energy losses by creating a closed-loop of processes where waste from one process is used as raw material for another, thus reducing generation to a maximum extent |
| IED | Industrial Emissions Directive |
| FGD | Flue gas desulphurisation |
| TWPER | Thermal waste processing plant with energy recovery |
| Power generation unit | a separate unit of equipment belonging to a power utility and used for generating electricity or heat, as well as power evacuation, described by means of technical and commercial data |
| Cogeneration | simultaneous generation of heat and electrical or mechanical energy in the same technological process |
| NPS | National Power System, a collection of devices and equipment for the distribution, transmission and generation of electricity, connected to form a system allowing the supply of electricity in the territory of Poland |
| kWh | kilowatt hour, SI unit of electrical energy describing how much energy a 1 kW appliance consumes in one hour, 1 kWh = 3,600,000 J = 3.6 MJ |
| WF | Wind farm |
| OffWF | Offshore wind farm |
| MW | SI unit of power, 1 MW = $10^6$ W |
| MWh | megawatt hour, unit of electrical energy, 1 MWh=1000 kWh |
| $Nm^3$ | normal cubic metre; a non-SI unit of account denoting the volume of dry gas contained in 1 $m^3$ at a pressure of 1013 hPa and a temperature of 0°C |
| $NO_x$ | nitrogen oxides |
| Renewable energy sources (RES) | sources using wind, solar, geothermal, wave, current, tidal and river gradient energy, as well as energy obtained from biomass, landfill biogas, and biogas produced in the process of sewage disposal or treatment, or decomposition of stored plant and animal remains |
| Distribution system operator (DSO) | an electricity undertaking distributing gaseous fuels or electricity, responsible for network traffic within the gas distribution system or electricity distribution system, the current and long-term security of the system's operation, the operation, maintenance, repair and necessary development of the distribution network, including connections with other gas systems or other electricity systems |
| DSC | A description of the subject of the contract |
| RES | Renewable energy source – a renewable, non-fossil energy source, including wind energy, solar energy, aerothermal energy, geothermal energy, hydrothermal energy, hydro energy, wave, current and tidal energy, energy obtained from biomass, biogas, agricultural biogas and bioliquids |
| Renewable energy prosumer | a final customer purchasing electricity on the basis of a comprehensive agreement, producing electricity exclusively from renewable energy sources in a micro-installation to be used for their own purposes, not related to their business activity |
| PV installation | A photovoltaic installation |
| Regulator | President of the ERO who performs the tasks assigned to them by the Energy Law. Their responsibilities include issuing licenses for electricity undertakings and approving energy tariffs, as well as appointing transmission and distribution system operators |
| Rehabilitation | Restoration of the usefulness and natural character of areas transformed by human activity through the recreation of their environmental features or formation of new ones |

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|---|---|
| SAIDI | System Average Interruption Duration Index - an index of the average (mean) system interruption duration (long, very long and catastrophic), expressed in minutes per customer per year, being the sum of the product of its duration and the number of customers exposed to the consequences of interruptions during the year divided by the total number of customers served. SAIDI does not include interruptions shorter than 3 minutes and is determined separately for planned and unplanned interruptions. It applies to outages on low voltage (LV), medium voltage (MV) and high voltage (HV) networks, while the SAIDI index in the quality tariff does not include outages on LV networks |
| SAIFI | System Average Interruption Frequency Index – an index of the average (mean) system frequency (number) of interruptions (long, very long and catastrophic), representing the number of customers exposed to the consequences of all such interruptions during the year divided by the total number of customers served. SAIFI does not include interruptions shorter than 3 minutes and is determined separately for planned and unplanned interruptions. It applies to outages on low voltage (LV), medium voltage (MV) and high voltage (HV) networks, while the SAIFI index in the quality tariff does not include outages on LV networks |
| Low voltage (LV) network | An electricity network with rated voltage of up to 1 kV |
| Medium voltage (MV) network | An electricity network with rated voltage of between 1 kV and 110 kV |
| High voltage (HV) network | An electricity network with rated voltage of 110 kV |
| $SO_x$ | sulphur oxides |
| Start-up | an enterprise at an early stage of development, created with a view to building new products or services and operating under conditions of high uncertainty. The most frequently mentioned characteristics of start-ups include the following: short operating history (up to 10 years), innovativeness, possibility of expansion, higher risk than in “traditional” enterprises, but also potentially higher return on investment. |
| ToR | Terms of Reference |
| Tariff | a set of prices, rates and conditions for their application, drawn up by an electricity undertaking and introduced as binding for particular customers under a statutory procedure |
| CBP | combustion by-products |
| CSI | customer satisfaction index |
| CLI | customer loyalty index |
| Co-firing | the generation of electricity or heat based on the co-firing, in a single device, of biomass or biogas with other fuels; part of energy produced in this way can be considered as energy from a renewable energy source |

## 7. Useful links

**About the PGE Group**

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|---|---|
| The PGE Group website | https://www.gkpge.pl/ |
| PGE Baltica | https://www.gkpge.pl/pge-baltica |
| PGE Centrum | https://lumipge.pl/ |
| PGE Dystrybucja | https://pgedystrybucja.pl/ |
| PGE EJ1 | https://pgeej1.pl/ |
| PGE Energia Ciepła | https://pgeenergiaciepla.pl/ |
| PGE Energia Odnawialna | https://pgeeo.pl/ |
| PGE Górnictwo i Energetyka Konwencjonalna | https://pgegiek.pl/ |
| PGE Nowa Energia | https://pgene.pl/ |
| PGE Obrót | https://pge-obrot.pl/ |
| PGE Systemy | https://pgesystemy.pl |
| PGE Ventures | https://pgeventures.pl |
| PGE Dom Maklerski | https://dmpge.pl/ |
| Zrównoważony biznes | https://www.gkpge.pl/zrownowazony-biznes |
| Fundacja PGE | https://www.gkpge.pl/fundacja |

**Strategy of the PGE Group**

The strategy of the PGE Capital Group until 2030 with an outlook until 2050
https://www.gkpge.pl/strategia2030

**Environmental statements**

Environmental statement of PGE SA https://www.gkpge.pl/zrownowazony-biznes/obszary-dzialalnosci/z-szacunkiem-dla-ziemi
EMAS Environmental Statement, Opole Power Plant https://elopole.pgegiek.pl/Ochrona-srodowiska/Deklaracja-srodowiskowa
EMAS Environmental Statement, PGE Energia Ciepła https://pgeenergiaciepla.pl/o-spolce/system-zarzadzania

**Values and principles in the PGE Group**

The Code of Ethics of the PGE Capital Group https://www.gkpge.pl/compliance
The Code of Conduct for Business Partners of the Companies in the PGE Capital Group https://www.gkpge.pl/compliance
PGE Dystrybucja Compliance Programme https://pgedystrybucja.pl/spolka/O-Spolce/Program-Zgodnosci
The Code of Good Practices for Distribution System Operators
https://pgedystrybucja.pl/o-spolce/dzialalnosc/kodeks-dobrych-praktyk-operatorow-systemow-dystrybucyjnych
Consumer Rights Collections https://www.gkpge.pl/Oferta/Strefa-Klienta/Regionalna/Zbiory-Praw-Konsumenta

**Statements and reports**

Non-financial information statement of PGE Polska Grupa Energetyczna SA and the PGE Capital Group for the year 2019
https://www.gkpge.pl/Relacje-inwestorskie/content/download/51577/plik/Sprawozdanie%20niefinansowe%20GKPGE%202019.pdf
PGE Integrated Report for 2019 https://raportzintegrowany2019.gkpge.pl/

**Green Office Certificates**

About Green Office certification: https://www.gkpge.pl/zrownowazony-biznes/obszary-dzialalnosci/z-szacunkiem-dla-ziemi
Green Office in PGE GiEK: https://pgegiek.pl/CSR2/realizowane-programy-csr/zielone-biuro/zielone-biuro
Green Office in PGE Obrót: https://pge-obrot.pl/O-Spolce/green-office

**Management Systems**

PGE Górnictwo i Energetyka Konwencjonalna https://pgegiek.pl/Osiagniecia
PGE Energia Ciepła https://pgeenergiaciepla.pl/o-spolce/polityki-i-certyfikaty
https://www.kogeneracja.com.pl/pl/o-grupie/zintegrowany-system-zarzadzania/
http://www.ec.zgora.pl/o-firmie/zsz-w-eczg
https://pgetorun.pl/o-spolce/system-zarzadzania

**Traineeship programmes**

Energy for the Future traineeship programme https://www.gkpge.pl/kariera/energia-dla-przyszlosci
Energy Career Programme https://pgeenergiaciepla.pl/o-spolce/spoleczna-odpowiedzialnosc-biznesu/energetyczna

# Contact

| GRI 102-53 |

If, after reading this statement, you would like to share your insights or ideas, please feel free to contact us. We look forward to receiving your emails:

Dorota Borkowska
CSR Division
Department of Corporate Communication and Marketing PGE SA
E-mail: komunikacja.csr@gkpge.pl