

ESG Policy of the PGNiG Group

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1. Executive summary

Risks are opportunities

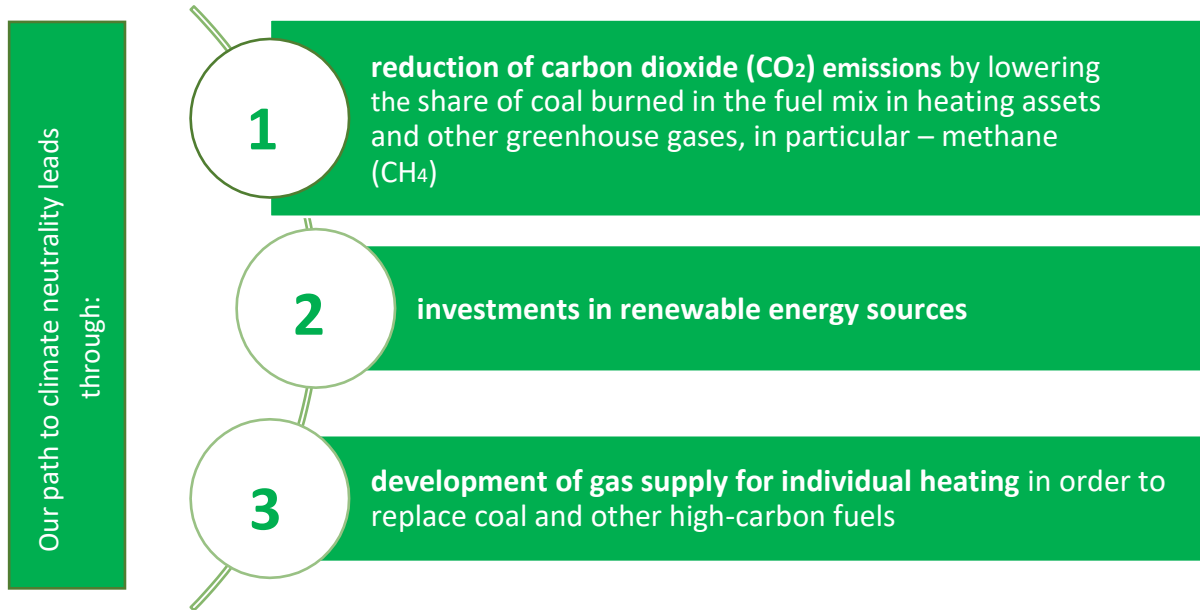
Polskie Górnictwo Naftowe i Gazownictwo Spółka Akcyjna (hereinafter: "PGNiG") responds to the global challenges of sustainable development, combating climate change, and to the need to consciously manage resources with respect for the environment. The ongoing climate changes have created a new paradigm, significantly affecting the fuel and energy industry. We are faced with new risks (but also opportunities), which PGNiG intends to address from the business, environmental, climate and social fronts.

PGNiG's contribution to climate neutrality by 2050

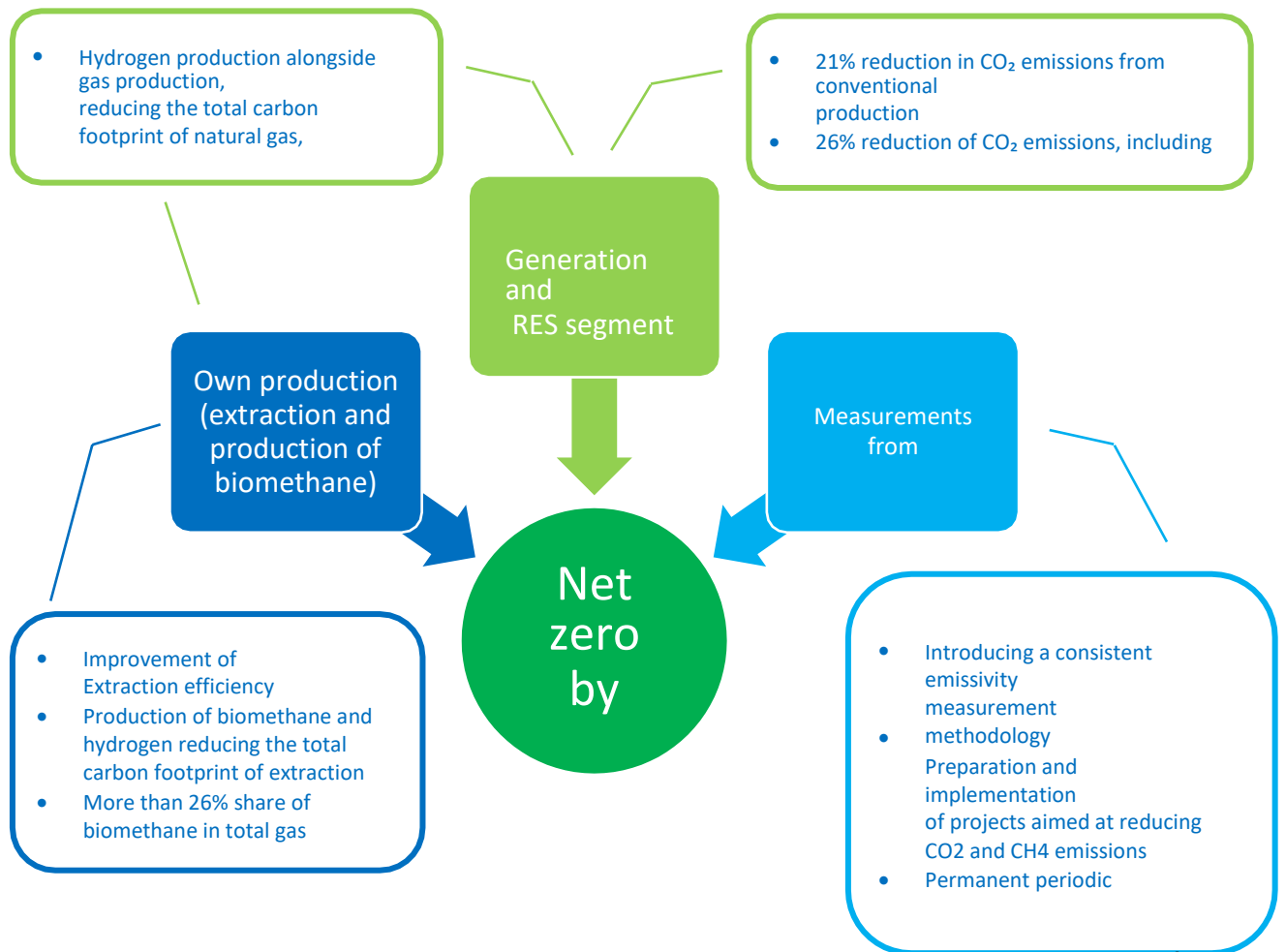
In order to meet the needs of our stakeholders, we have created the "ESG Policy" to emphasize the key issues of ESG (*Environmental, Social & Corporate Governance*) for PGNiG. This document presents the current status of the issues and our plans related to them.

The PGNiG Group's mission is to be a trusted provider of energy for homes and businesses. This requires the Group to be responsible for ensuring Poland's energy security. To this end, PGNiG has for years been building a diversified and flexible gas supply portfolio, which will enable it to meet the growing demand from the existing and new customers.

This commitment has resulted in our current efforts to provide "transition fuel" for Poland's energy transformation. Taking into account the principles of efficiency, the selected decarbonisation path takes into account the share of natural gas in the planned path to climate neutrality. Given the current conditions, it is not possible for the Polish economy to quickly depart from coal and develop renewable capacities without a stable base in the form of natural gas and biomethane.



The key aspect for PGNiG is to accept the role of gas as the fuel which enables the transformation from conventional fuels to RES and other new technologies.



PGNiG's initiatives support the following UN Sustainable Development Goals:

- Goal 1. - End poverty;
- Goal 3. - Good health and quality of life;
- Goal 4. - Good quality education;
- Goal 7. - Clean available energy;
- Goal 8. - Economic growth and work with dignity;
- Goal 9. - Innovation, Industry, Infrastructure;
- Goal 12. - Responsible consumption and production;
- Goal 13. - Climate action;
- Goal 15. - Life on land;
- Goal 17. - Partnerships for the goals.

2. Environment and climate (E)

2.1. Introduction

2020 was, next to 2016, the hottest year globally in the history of temperature measurement¹. It seems impossible to consider these results as merely a "deviation" from the norm. Also, the entire completed decade (2011-2020) was the warmest since the collection of this type of data began in the mid-19th century. Given that the global average air temperature was about 1.25 degrees Celsius higher in 2020 than pre-industrial levels (1850), the world is already very close to the target set by the 2015 Paris Agreement, under which signatory countries were to aim to reduce the global average temperature by no more than 1.5 degrees Celsius relative to the pre-industrial era.

Focusing on the results for just Europe and Poland, the data is even more alarming. While globally the average air temperature in 2020 reached levels close to the (record high) 2016, a steady upward trend is observed in Europe. 2020 was by far the warmest year in Europe on record for measurements, exceeding the average temperature of the previous record year, 2019², by 0.4 degrees Celsius. Record-breaking results are also observed in Poland: the winter of the turn of 2019/2020, i.e. the period from December 2019 to the end of February 2020, was the warmest winter season in the history of temperature measurements in Poland³.

The PGNiG Group is aware of the climate changes taking place, and therefore through its activities it seeks to reduce the human impact on the climate and to halt any further increase in the average air temperature.

On the one hand, through continuous improvement of technological processes, research and development activities and business decisions, PGNiG seeks to minimize the harmful effects of its activities on the climate and the environment. By taking such measures, PGNiG intends to reduce direct CO₂ emissions from its business activities, which may occur in the course of natural gas production processes or the production of electricity and heat at PGNiG's facilities (scope 1 of CO₂ emissions under the international Greenhouse Gas Protocol), as well as indirect CO₂ emissions generated in the production of electricity purchased by PGNiG for its own use (scope 2 of CO₂ emissions).

On the other hand, through its activities PGNiG is directly involved in the process of Poland's energy transformation. This transformation is a particularly urgent yet difficult task in Poland, which, due to its rich coal deposits, has based its energy sector almost exclusively on this raw material for the past 100 years. In 2018, the base year for Poland's Energy Policy until 2040, coal's share in electricity generation was as high as 77%. Achieving the goals of reducing this level to less than 56% by 2030, while reducing CO₂ emissions by 30% compared to 1990, in the opinion of the authors of the indicated government document, will be led largely by increasing the use of **"transition fuel" in the energy transition, which is natural gas**⁴. The International Energy Agency ("IEA") indicates that the accelerated substitution of coal for natural gas over the past decade

¹ NASA, *2020 Tied for Warmest Year on Record, NASA Analysis Shows*

<https://climate.nasa.gov/news/3061/2020-tied-for-warmest-year-on-record-nasa-analysis-shows/>

² Copernicus, *2020 warmest year on record for Europe; globally, 2020 ties with 2016 for warmest year recorded*

<https://climate.copernicus.eu/2020-warmest-year-record-europe-globally-2020-ties-2016-warmest-year-recorded>

³ Instytut Meteorologii i Gospodarki Wodnej – Państwowy Instytut Badawczy, *Klimat Polski 2020*, p. 3.

⁴ Ministry of Climate and Environment, *Poland's Energy Policy until 2040*, Warsaw 2021, p. 35.

allowed to avoid nearly 600 million additional tons of CO₂ in 2018 compared to 2010 levels⁵. This has been due primarily to the shale gas revolution in the United States, which has led to a drastic transformation of the energy sector in North America – however, according to the IEA, the greatest potential for further substitution of coal for natural gas is in Europe⁶. Such activities allowed the UK to reduce emissions from the energy sector by as much as 50% in the last decade⁷. Importantly, until electricity storage technology reaches maturity, allowing for the creation of large-scale, low-cost storage, natural gas will play a key role in balancing an energy system increasingly based on zero-emission but "uncontrollable" renewable energy sources⁸.

Replacing coal with natural gas is necessary not only for climate reasons, but also from the perspective of actions aimed at improving air quality in Poland. According to the authors of the government program "Clean Air", about 45,000 people die in Poland annually due to diseases caused by air pollution, i.e. over 7 times more than as a result of passive smoking⁹. Smog is mainly caused by the accumulation of particulate matter, one of the main sources of which is the combustion of coal in home furnaces, and which is practically not formed during the combustion of natural gas¹⁰. Hence, in order to counteract this phenomenon, the Polish government aims to phase out coal burning in urban households by 2030, and in rural areas by 2040¹¹. Old and ineffective individual coal sources will therefore be replaced with low- and zero-emission units. With the simultaneous development of distribution infrastructure, natural gas will be able to become an alternative both for individual households and for municipal heating systems.

In light of the above, the role of natural gas as a "transition fuel" in Poland's energy transformation, which helps reduce the adverse impact on the climate and environment, is of key importance today. PGNiG, as the largest entity on the gas market in Poland, has been supporting the transformation of the Polish energy sector towards less emissions for over 10 years, but also takes steps to constantly reduce its own negative impact on the ecosystem.

2.2. Key activities of PGNiG in the scope of climate and environmental protection

January 2020 – Commencement of cooperation with the National Fund for Environmental Protection and Water Management on the "Clean Air" program

June 2020 – PGNiG's "Green Turn" - announcement of PLN 4 billion investment in renewable energy sources

July-August 2020 – Launch in August 2020 of the Energy Efficiency Improvement Program at the PGNiG Group. The program comprises energy optimization measures and neutralisation of the environmental impact of office facilities.

⁵ International Energy Agency, *The Role of Gas in Today's Energy Transitions*, Paris 2019, p. 7.

⁶ *Ibidem*, p. 10.

⁷ *Ibidem*, p. 65.

⁸ *Ibidem*

⁹ Clean Air Program, *About smog*

<https://czystepowietrze.gov.pl/warto-wiedziec-2/>

¹⁰ International Energy Agency, *The Role of Gas...*, p. 33.

¹¹ Ministry of Climate and Environment, *Poland's Energy Policy until 2040*, Warsaw 2021, p. 74.

As a result of the inventory carried out at the PGNiG Group, it was estimated that its own properties meet the criteria for the construction of solar installations with a total capacity of approx. 20 MW.

September 2020 – Commissioning of a CCGT unit at Stalowa Wola CHP Plant (PGNiG holds a 50% interest, the remaining 50% is held by Tauron Polska Energia), which replaced the existing coal-fired units at Stalowa Wola Power Plant, thus reducing emissions.

November 2020 – Installation of a pilot solar installation on the roof of one of the PGNiG Head Office buildings at ul. Kasprzaka 25 in Warsaw. The installation will produce over 42 MWh of green energy annually, which to a large extent will cover the electricity demand for this building.

April 2021 – Investment decision on construction of a 1 MWe solar farm at the Kawęczyn Heating Plant.

June 2021 – Preparation of an application by PGNiG TERMIKA in the area of hydrogen technologies and systems, for further implementation under the IPCEI mechanism. The main goal of the project is to develop an innovative and efficient system for production of green hydrogen (large-scale installation up to 50 MW) based on electricity generated in a cogeneration unit and its subsequent utilization for transportation purposes so as to achieve a significant reduction of greenhouse gas (hereinafter "GHG") emissions in the fuel supply chain. Moreover, it is assumed that hydrogen will be widely used for the purposes of urban transport, in particular bus transport.

December 2021 – Planned commissioning of a CCGT unit at the Żerań CHP plant, which will replace 5 coal-fired units, leading to a reduction in carbon dioxide emissions. As of 2016, 9 out of 11 coal units will be shut down in EC Żerań in this manner.

2.3. Climate-related risks and opportunities

In line with the recommendations prepared in 2017 by the *Task Force on Climate-related Financial Disclosures*, PGNiG analyzes the impact of climate-related phenomena on its operations in terms of risks and opportunities¹².

Climate-related risks primarily include:

- risks associated with the transition to a "zero carbon economy" (*transitional risks*);
- risks associated with the "physical" impact of phenomena resulting from climate change (*physical risks*);
- opportunities for PGNiG.

In PGNiG's opinion, the regulatory risks are the most important to the Group's business, and they will be discussed in more detail below. Following their presentation, the remaining risks will be briefly summarized.

¹² Task Force on Climate-related Financial Disclosures, *Final Report. Recommendations of the Task Force on Climate-related Financial Disclosures*, June 2017, pp. 5-7.

2.3.1. Regulatory risks

The main impact on the operations of PGNiG, as an entity operating predominantly in the European Economic Area (EEA), is the climate and environmental policy of the European Union. It not only provides a framework for PGNiG's future business decisions, but may also affect the profitability of investment projects initiated or implemented in the past. For this reason, PGNiG closely monitors the activities of the European Commission and other EU institutions, taking part in public consultations, as well as engaging in the decision-making processes through industry organizations or by presenting its recommendations to the Polish government. The horizontal program of the European Commission, which will integrate projects from various areas in the 2019-2024 term, is the European Green Deal.

The European Green Deal

The European Commission's communication on the European Green Deal ("EGD") was presented in December 2019. The most important long-term goal of the EGD is to bring the EU to **climate neutrality in 2050**. In addition, the Commission aims to protect, preserve and improve the EU's natural capital and protect the health and well-being of citizens from threats and negative effects related to the environment. These objectives are to be achieved through a number of initiatives covered by the EGD. The most important of these, from PGNiG's perspective, include: European Climate Law; Reform of the ETS system, challenges in the field of energy efficiency and Green Finance.

European Climate Law

In March 2020, the European Commission presented a draft Regulation of the European Parliament and of the Council establishing a framework for achieving climate neutrality and amending Regulation (EU) 2018/1999, the so-called "European Climate Law". After more than a year of negotiations, which focused on ambitions in terms of intermediate goals, in June 2021

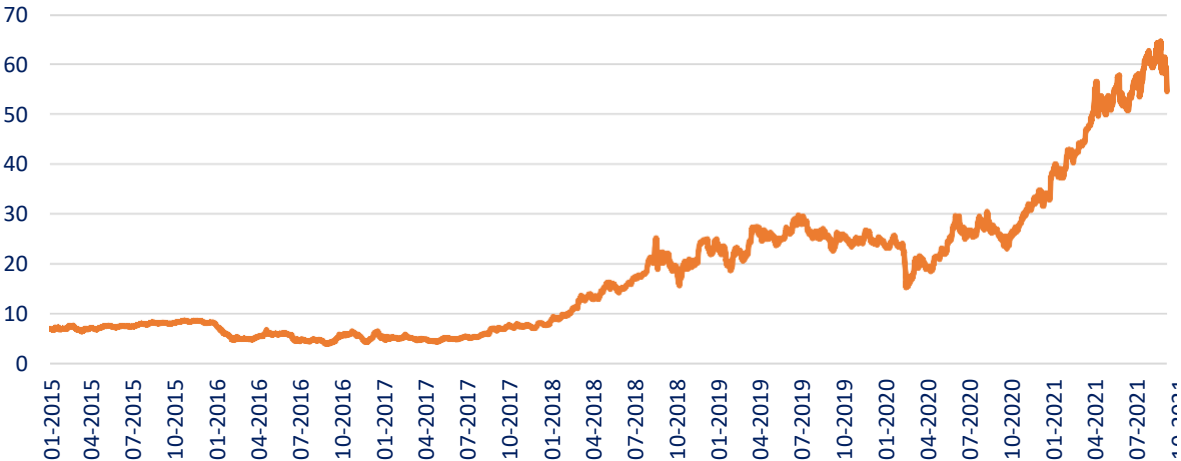
the European Parliament and the Council adopted the above-mentioned Regulation. It introduces a binding target to achieve climate neutrality across the EU by 2050. In addition, according to its Article 4, the EU's binding climate target for 2030 is to reduce net greenhouse gas emissions (emissions minus removals) in the EU by at least 55% by 2030 compared to 1990 levels). This means increasing the previous reduction target for 2030 at the level of 40% by another 15 p.p. The way to implement the above-mentioned more ambitious goals is to be achieved through the adoption of new and the revision of existing legal acts. Those of fundamental importance to PGNiG will be discussed below.

ETS reform

The EU's CO₂ Emissions Trading System is the core of the European Union's climate and energy policy. By requiring industrial and energy companies to cover their greenhouse gas emissions with an appropriate amount of allowances, the ETS leads to the internalization of external costs related to the negative impact on the climate. Although over the years the system has been criticized for providing too weak incentives for emission reductions due to the persistently low price of CO₂ emission allowances (EUAs), a sharp increase in allowance prices is visible in the 4th phase of the ETS (in the period 2021-2030). This is largely the result of the above-mentioned the decision to increase the reduction ambitions for 2030. The current EU ETS rules were designed in such a way as to reduce CO₂ emissions in sectors covered by the ETS by 43% by 2030 compared to 2005. Meanwhile, according to the *impact assessment* of the European Commission, if the European Climate Law increases the overall reduction target for 2030, it will have to cut emissions from CO₂ sectors by 54%

compared to 2005 in the baseline scenario¹³ (11 p.p. more than the current target). Achieving such an increased target will notably entail accelerating the rate of removal of emission allowances from the market, which will lead to a more rapid increase in their prices. With the amendments currently under preparation, the Commission expects the price of CO₂ allowances to increase to EUR 85 per tonne.

EUA allowance prices (spot, EUR / tCO₂e)



While CO₂ price increases over the XX-XX period have been favorable to natural gas, leading to the replacement of coal-fired generation with natural gas-fired generation (e.g., Germany produced 68% more electricity from natural gas than coal in 2020, while as recently as 2018 production from natural gas was 71% less than from coal), further price increases could accelerate the pace of the energy transition by providing incentives for the development of zero-carbon technologies that will also replace natural gas units. Additional pressure on natural gas may arise if the sectors so far excluded from the ETS – transport and construction – are included in the ETS, which will result in more competition for domestic gas stoves from solutions such as heat pumps.

Sustainable finance

In March 2018, the European Commission published an action plan on sustainable finance¹⁴. Its aim was to redirect capital in financial markets towards sustainable investments, allowing the EU to move closer to the 2015 Paris Agreement targets. To make this goal possible, in May 2018 the Commission presented a package of legislative proposals including a reform of the regulation on indices used as benchmarks; a regulation on so-called "taxonomies", and a regulation on the disclosure obligations for non-financial factors by financial market participants. As sustainable finance is a key element of the European Green Deal¹⁵, the Commission carried out a consultation in 2020 on the revision of the sustainable finance strategy, summarized in a report published in February 2021.

¹³ Commission Staff Working Document Impact Assessment, Stepping up Europe's 2030 climate ambition – Investing in a climate-neutral future for the benefit of our people, pp. 98-99.

¹⁴ Communication from the Commission to the European Parliament, the European Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions: Action Plan: Financing Sustainable Growth <https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52018DC0097&from=PL>

¹⁵ European Commission, Communication on the European Green Deal, p. 18.

In response to the comments expressed by the participants in the consultation, the Commission published in April 2021 a new package of regulations and legislative proposals aimed at further "greening" of the financial sector. From the perspective of PGNiG, the Commission's Delegated Regulation¹⁶, supplementing Regulation 2020/852 on taxonomy, is of key importance¹⁷. This delegated act establishes technical criteria for the qualification of economic activities as making a significant contribution to climate change mitigation or adaptation to climate change. Its significance results from the fact that only activities meeting the above-mentioned criteria can be considered "green" - a qualification that will in turn be fundamental to future decisions by investors seeking to "green" their portfolios. The decision on the qualification of natural gas activities has been postponed until the end of 2021. – PGNiG assumes that economic activities related to natural gas will be classified as a "transitional activities". At the same time, if a decision is made to completely exclude natural gas from the framework established by the taxonomy, PGNiG will have more difficult access to capital, which means that it will have to change its financing strategy.

Methane strategy

The Communication on the European Green Deal indicated that, as part of the plan to bring the EU to climate neutrality, measures will also be taken to reduce the emissions of the natural gas sector, including, in particular, the reduction of methane emissions. Realizing this announcement, the European Commission in October 2020 published a Communication on an EU strategy to reduce methane emissions. According to this strategy, the first step will be to tighten reporting requirements to ensure that companies use much more precise methods for measuring and reporting methane emissions than they do now. This is expected to contribute to a better understanding of the problem and to provide better information for further mitigation measures¹⁸. As regards the energy sector, the Commission is to make legislative proposals on an obligation to monitor, report and verify all energy-related methane emissions; obligations to improve leak detection and repair (LDAR) for leaks across the entire natural gas infrastructure, and consider legislation to eliminate routine releases to atmosphere and flaring of gas.

The announced regulations require PGNiG to make additional investments to accurately measure methane emissions from its natural gas production facilities and distribution infrastructure owned by the PGNiG Group.

2.3.2. Physical risks

According to the guidelines of *Task Force on Climate-related Financial Disclosures*¹⁹(TCFD), physical risks constitute, next to transition risks, the second primary category of climate risks.

Physical risks are associated with one-off intense weather events, such as increased rains, storms or hurricanes, and with more permanent changes in climate "trends"

¹⁶ Commission Delegated Regulation (EU) C/2021/4987 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by clarifying the content and presentation of information on

environmentally sustainable economic activities to be disclosed by enterprises subject to Art. 19a or 29a of Directive 2013/34/EU, and the method of compliance with this disclosure obligation [https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=PI_COM:C\(2021\)4987](https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=PI_COM:C(2021)4987)

¹⁷ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 <https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:32020R0852&from=PL>

¹⁸ European Commission, Communication on the EU strategy to reduce methane emissions, p. 4.

¹⁹ <https://www.fsb-tcf.org/>

leading, for example, to sustained observable increases in temperatures or rising sea levels.

PGNiG's extraction points in Poland and the Norwegian shelf are not exposed to such drastic changes as, for example, those faced by Russian mining companies in Siberia, where the melting of permafrost leads to the destabilization of the existing infrastructure. Nevertheless, rising temperatures in the tropics may hinder operations, e.g. in Pakistan, where exploration is carried out by a subsidiary of PGNiG. Therefore, PGNiG monitors all such risks, taking them into account when making further business decisions, and also endeavours to secure the existing drilling sites against weather anomalies which may lead to the destruction of the production infrastructure.

2.3.3. Opportunities for PGNiG

PGNiG endeavours to adjust its strategy and operational capabilities to make the most of the opportunities that arise.

Poland's energy policy until 2040

PGNiG is actively involved in Poland's energy transformation, the path of which is outlined in the Polish Energy Policy until 2040 (PEP2040) and the energy and climate policy of the European Union. The implications of PEP2040 and current global trends are a great opportunity for PGNiG, as it unequivocally treats natural gas as a "transition fuel" that will, in the coming years, replace coal in the energy mix, which has so far been the mainstay of the Polish power sector. In order to accelerate the transformation of small heat sources in households, PGNiG OD joined the Clean Air program by signing an agreement with the National Fund for Environmental Protection and Water Management in January 2020. PGNiG OD's role is primarily to verify access to the natural gas network for customers interested in using gas for heating purposes.

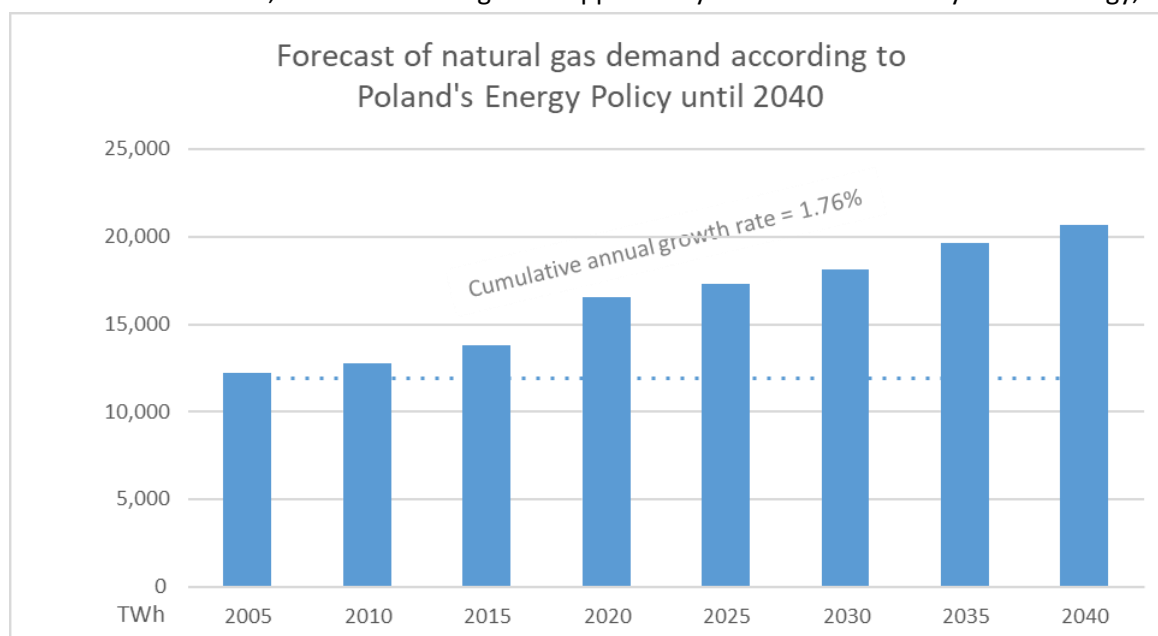
Key elements of PEP2040 ²⁰

<p>Energy transformation taking into account electricity self-sufficiency</p>	<p>Offshore wind energy, installed capacity will reach: approx. 5.9 GW in 2030 to approx. 11 GW in 2040</p>	<p>There will be a significant increase in installed photovoltaic capacity approx. 5-7 GW in 2030 and approx. 10-16 GW in 2040</p>	
<p>Increase in the share of RES in all sectors and technologies. In 2030, the share of RES in gross final energy consumption will be at least 23%</p> <ul style="list-style-type: none"> - not less than 32% in power generation (mainly wind and PV) - <u>28% in heating (increase by 1.1 pp. Y / y)</u> - 14% in transport (with a large contribution of electromobility) 	<p>In 2030, the share of coal in electricity generation will not exceed 56%</p>	<p>Reduction of the use of coal in the economy will take place in a manner ensuring fair transformation</p>	
<p>Energy efficiency will increase – for 2030 a target of 23% reduction in primary energy consumption was set vs. PRIMES2007 forecasts</p>	<p>The investment programs of TSOe and TSOg will be targeted at the development of renewable energy sources and active recipients and local balancing</p>	<p>In 2033, the first unit of a nuclear power plant with a capacity of approx. 1-1.6 GW will be commissioned. Subsequent units will be implemented every 2-3 years, and the entire nuclear program assumes construction of 6 units.</p>	
<p>By 2040 <u>the heating needs of all households will be covered by system heat and by zero- or low-emission heat individual sources</u></p>	<p>Natural gas will be a <u>bridge fuel</u> in the <u>energy transition</u></p>	<p>In 2030, the capacity will be reached to transport through gas networks a mixture containing about 10% of decarbonised gases</p>	<p>The natural gas, crude oil and liquid fuels <u>infrastructure will be expanded and diversification of supply routes will be ensured.</u></p>
<p>A number of activities will be aimed at improving air quality, including:</p> <ul style="list-style-type: none"> - <u>development of system heating (4-fold increase in the number of efficient heating systems by 2030)</u> - low-emission direction of transformation of individual sources (heat pumps, electric heating) - a shift away from burning coal in households in cities by 2030, and in rural areas by 2040; while maintaining the possibility of using smokeless fuel until 2040. - improving the energy efficiency of buildings. - development of low-emission transport, in particular aiming at zero-emission public transport by 2030 in cities with a population above 100 thousand residents 		<p>Reduction of the phenomenon of energy poverty to the level of max. 6% of households</p>	
<p>By 2030, GHG emissions will be reduced by approx. 30% compared to 1990.</p>		<p>The most anticipated development of energy technologies and R&D investments includes:</p> <ul style="list-style-type: none"> - energy storage technologies - smart metering and energy management systems - electromobility and alternative fuels - hydrogen technologies 	

²⁰ Poland's Energy Policy until 2040 – adopted by the Council of Ministers on February 2, 2021, p. 7

EU hydrogen strategy

The European Commission's plans for the development of the hydrogen market in the European Union constitute the second, medium and long-term opportunity for PGNiG. In its July 2020 strategy,



the Commission points to the key role of low-emission hydrogen produced from fossil fuels such as natural gas with simultaneous carbon capture in CCUS facilities on the way to full decarbonisation of hydrogen²¹. Given that today the vast majority of hydrogen used in industry is produced by steam reforming from natural gas, PGNiG seems naturally positioned to take part in this process. Hence, PGNiG's projects aimed at industrial hydrogen storage and transmission of this gas through the distribution network.

2.3.4. Climate risk management

In response to the aforementioned risks and opportunities, PGNiG introduced appropriate changes to the company's internal structure and organization of its work.

Firstly, PGNiG appointed a Management Board member directly responsible for climate-related issues. Responsibilities in this area were delegated to the Management Board Member for Strategy and Regulation.

Secondly, the tasks related to ongoing monitoring of climate risks and development of response strategies were assigned to the Risk Management Department in the Strategy Department.

²¹ The Commission's Communication, Hydrogen Strategy for a Climate Neutral Europe, Brussels, 8/07/2020, p. 6.

2.4. PGNiG's impact on the climate and the environment

The risks and opportunities related to climate change, as described above, are a fundamental point of reference for the PGNiG Group's operations, influencing its business decisions and shaping further directions of development.

However, given PGNiG's values, and in particular its commitment to pursue the Sustainable Development Goals adopted by the United Nations in 2015, the aspect of PGNiG's impact on the climate, environment and surroundings is of particular importance to PGNiG.

Every year, PGNiG aggregates and discloses data on its environmental impact as part of its reports on non-financial information. Using the standard developed by the Global Reporting Initiative, and taking into account the recommendations contained in the *Sustainability reporting guidance for the oil and gas industry* as well as selected guidelines contained in the Supplement on climate-related information reporting issued by the European Commission in Communication No. 2019/C 209/01 and recommendations published by the TCFD covering environmental reporting, PGNiG strives to reflect as faithfully as possible its impact on the ecosystem, following primarily the principle of publishing materiality information.

As a result, as indicated by the reports on non-financial information, the main "channel of influence" by PGNiG on the climate and the environment is greenhouse gas emissions. Although PGNiG also monitors its impact and seeks to mitigate its effects on e.g. biodiversity, water resources and waste management, it is the reduction of CO₂, CH₄ and other pollutants that is the main focus of PGNiG's attention. We take a strategic approach to emissions management, as they are at the top of the materiality matrix.

Recent years have shown a clear downward trend in PGNiG's emissions of all greenhouse gases and pollutants, as well as a clearly upward trend in the management of the latter. However, in order to fully commit to the EU's path to climate neutrality in 2050 as set out by the European Green Deal, PGNiG plans to intensify its climate mitigation efforts, aiming primarily at faster reduction of CO₂ emissions. These plans cover activities in all current segments of the PGNiG Group's operations and the development of new business lines.

Direct greenhouse gas emissions by the PGNiG Group's business segments

Direct greenhouse gas emissions broken down by operating segments of the PGNiG Group (in thous. Mt eCO ₂ *)	2020**	2019	2018
Upstream (Exploration and Extraction)	575.7	689.3	701.9
Downstream (Distribution, Storage and Trade)	103.0	107.2	101.5
Production	6,144.3	6,377.8	6,342.5
Other	2.4	2.5	3.0
Total (PGNiG Group)	6,795.4	7,176.7	7,148.8

* Equivalent eCO₂ calculated according to GWP (Global Warming Potential Value) in a 100-year time horizon (AR5) in accordance with the guidelines of IPCC (www.ipcc.ch)

** Data for 2020 from some PGNiG Group units include partial forecasts; at the time of publication of the Report, it was not technically possible to fully verify them.

Pollutants emitted into the air by the PGNiG Group in 2019-2020

Emissions of gases, dusts and substances (Mg)	2020		2019	
	PGNiG Group	PGNiG	PGNiG Group	PGNiG
CO ₂	6,242,844.5	408,675.0	6,556,513.1	391,951.9
CO ₂ biomass combustion	346,955.0	-	280,565.7	-
CH ₄	13,348.0	11,259.8	12,130.9	9,737.8
SO ₂	9,519.1	2,745.7	9,875.0	1,869.3
NO _x /NO ₂	5,958.3	494.1	6,556.5	406.4
CO	2,161.4	325.2	2,176.3	326.1
Particulate matter total	678.3	3.6	578.8	2.8
Total hydrocarbons	252.7	170.9	294.5	153.1
H ₂ S	0.4	0.4	0.4	0.4
Total	6,621,717.7	423,674.7	6,868,681.4	404,447.80

2.5. PGNiG's path to climate neutrality



RES

- Wind energy and photovoltaics
- PGNiG is the market maker of biomethane
- Prosumer energy



Activities in other areas obszarach

- Improving energy efficiency
- Low-emission car fleet
- Installation of photovoltaic systems at the PGNiG Group's facilities
- Digitalization of document workflow

2.5.1. Exploration and extraction

The Exploration and Extraction segment is one of the four most important segments of PGNiG's operations, in which the Company makes the largest capital expenditure every year. PGNiG is the largest natural gas producer in Poland, responsible for over 90% of the domestic production of this fuel.

The main environmental and climate impact of the segment's operations stems from methane emissions, which are considered the second most important cause, after carbon dioxide, of climate change. In line with the European Commission's methane emissions reduction strategy, PGNiG intends to implement a comprehensive process to reduce methane emissions from its natural gas production operations.

PGNiG SA, PGNiG Upstream Norway

- Measurement and estimation of the emissions level
- Reduction of emissions through the use of new technological solutions
- Cooperation with operators with the highest environmental standards in Norway
- Cooperation with the Norwegian government in the scope of greenhouse gas reduction strategies



Exploration and production



Power generation and heating

PGNiG TERMIKA Group

- Investment and acquisition projects increasing the share of low-emission and renewable sources in the fuel mix
- Optimizing the use of assets through digitalization of processes
- A decrease in the average emissivity by approx. 20% in 2035 compared to 2020.

PGNiG SA, PST, Gas Storage Poland, PGNiG OD

- Storage of biomethane and hydrogen
- Power to gas – hydrogen in salt caverns
- Alternative fuels in transport



Trading and Storage



Distribution

Polska Spółka Gazownictwa

- Increasing the share of renewable fuels in distributed fuel
- Increasing accessibility to low-emission fuel thanks to the expansion of the distribution network
- Developing a methodology for monitoring emissions and achieving

PGNiG net zero

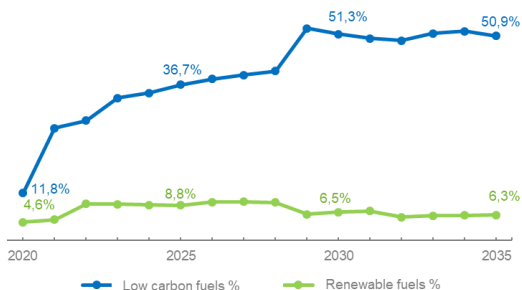
In line with the European Commission's strategy, the first step in this direction will be the pursuit of accurate measurement of methane emissions.

Upon completion of this stage, PGNiG plans to compare emissions from its installations with the average level of methane emissions in the *oil & gas* sector and with the results of companies with the lowest impact on the climate and environment. This comparison will then allow PGNiG to prepare a reduction strategy for the coming years and to select the technologies to be used to achieve the targets. The measures are planned to be implemented first at PGNiG's facilities in Norway, where, according to the current assumptions, the company will be able to benefit from cooperation with operators of the highest environmental standards and support from the Norwegian government. The solutions tested there will then be implemented at mining facilities in Poland and in other parts of the world.

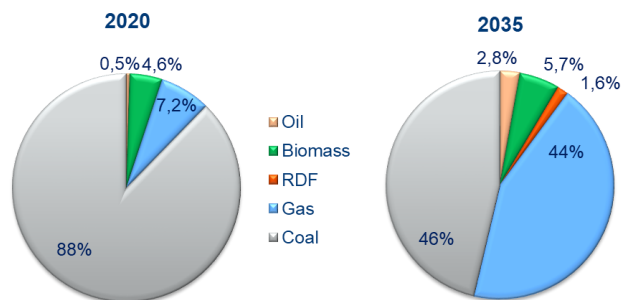
Moreover, in this segment, work is planned on projects concerning the reduction of CO₂ emissions and diesel consumption in diesel engines through the use of a CNG fuel-gas mixture, and the reduction of electricity consumption and CO₂ emissions through the installation of photovoltaic installations (Exalo Drilling).

2.5.2. Power Generation and Heat

Share of low-carbon and renewable fuels in the fuel mix



Share of individual fuels in the fuel mix



- Between 2020 and 2030, the share of low-carbon fuels (natural gas, biomass, RDF) in the fuel mix of the generation segment will increase by 39.5 p.p.
- In the same period, the share of renewable fuels (biomass, RDF biodegradable fraction) will increase by 1.9 p.p.
- The changes described above take into account the development of assets currently held in the portfolio of Termika Group and the planned acquisitions.
- Ultimately, a significant share of biomethane and hydrogen is possible as a result of the development of technologies for producing and distributing these fuels.
- Requirements related to the RED II Directive have not yet been addressed - there is a potential risk that the assumptions will not be met.

- In the years 2020-2030, a drastic change in the share of individual fuels in the fuel mix of Termika Group is planned
- A significant decrease in the share of coal by 42 p.p. will be compensated by an increase in the share of natural gas by nearly 37 p.p.
- As a result of the multi-year modernization program at PGNiG Termika plants and the related acquisitions, the share of coal will be reduced from 95% in 2017 to approximately 46% in 2035.

The Generation Segment (Power and Heat) is the main source of CO₂ emissions directly from the PGNiG Group's operations (Scope 1). This is due to the fact that the PGNiG Group companies base the electricity and heat production process mainly on hard coal. However, in the coming decade PGNiG plans to move away from this fuel and replace it with low- and zero-emission fuels.

By the end of 2021, a CCGT unit is to be commissioned at the Żerań CHP plant, replacing the existing coal units. CO₂ emissions per one unit of fuel from the CCGT unit will be 1.68 times lower than from existing coal units.

At Elektrociepłownia Siekierki, the construction of a multi-fuel unit is planned, which will rebuild the loss of thermal and electric power, resulting from the exclusion of the oldest coal-fired units, in a technology enabling an increase in the share of low-emission fuels (biomass and RDF), as well as the management of the remaining volume of processed municipal waste (RDF) in the Warsaw agglomeration. The project to build a multi-fuel unit is in line with the new goals and aspirations for climate neutrality, i.e. the European Green Deal as well as the Energy Policy of Poland until 2040. The main advantage of the project is the planned reduction of CO₂ emissions at PGNiG TERMIKA in the range of 300 to 400 thousand tons per year and increasing the share of renewable heat. This fulfills the requirements of: the Directive on the promotion of the use of energy from renewable sources, the Directive on the energy performance of buildings, and the new package of EU regulations "FIT for 55", concerning efficient district heating systems. Thus, it is assumed that the multi-fuel unit will be a much more environmentally friendly source of heat and power production than the coal-fired boilers used so far at Siekierki CHP Plant. Further on, the construction of a gas-steam unit is planned, which will fully eliminate the production of electricity and heat from coal at Siekierki CHP Plant. The planned start of the investment is 2026.

As a result of the above investments, in the years 2021-2030 the share of coal in the fuel mix of the PGNiG Group will drop to 42 p.p. To a large extent, it will be replaced by natural gas, but due to the initiatives described below, it will also be replaced by zero-emission sources.

In addition, the planned investments and upgrades relating to conventional assets, which will have a significant impact on reducing the share of coal burned in the fuel mix in the Group's district heating assets, will include upgrades and construction of thermal power plants.

2.5.3. Trading and storage

Direct CO₂ emissions from the Trading and Storage segment are negligible. A more significant problem is the uncontrolled emission of methane during storage. PGNiG plans to cover it with measures similar to those described in detail within the Exploration and Extraction segment. Once the emissions are accurately measured, steps will be taken to maximise their reduction.

However, the measures which PGNiG primarily plans to undertake in this segment, in order to contribute to the achievement of the EU climate neutrality target in 2050, are related to the expansion of its offering to include zero-emission products and related services, which will help reduce CO₂ emissions. To this end, PGNiG will gradually supplement its products with zero-emission gases (hydrogen, biomethane), and adapt its storage infrastructure so that it can be used to store these gases.

PGNiG SA is currently carrying out R&D&I projects related to hydrogen storage in salt caverns. In the 2030 and 2050 perspective, it will be possible to operationalize and commercialize the results of these works. The production of hydrogen and biomethane alone is planned as part of a new RES business line. For the time being, however, it remains at the R&D stage.

2.5.4. Distribution

Activities harmful to the environment and the climate in this area are primarily related to methane escaping during the transmission of natural gas. To counteract the problem, like in the Exploration & Extraction and the Trade & Storage segments, the PGNiG Group companies plan to first conduct detailed monitoring of emissions, which will then enable them to design appropriate measures aimed at reducing them as much as possible.

Moreover, in connection with the aforementioned plans to expand PGNiG's product offering to include zero- and low-emission gases, the PGNiG Group company Polska Spółka Gazownictwa will analyze the feasibility of adapting the existing distribution infrastructure to transmit e.g. hydrogen and biomethane, as well as, alternatively, the costs related to the construction of new gas pipelines dedicated to these fuels. Projects in this area are currently at the stage of research and development activities carried out within the PGNiG Group by the Central Measurement and Testing Laboratory.

2.5.5. New business line – RES

Announcing in 2020 the "Green Turn" policy, PGNiG began the process of diversifying its business, in which renewable energy sources will play an increasingly important role.

Providing the Polish economy with "transition fuel", PGNiG is aware that the future will belong to zero-emission sources and the company must be prepared for a long-term transition in that direction. While remaining a fuel company which may gradually replace natural gas with hydrogen and biomethane in the future, PGNiG also plans to invest in technologies which drive today's power growth in the power sector, i.e. wind farms and photovoltaic installations.

2.5.6. Other activities

The projects described above encompass the PGNiG Group's key actions aimed at thorough transformation of its core business segments in order to reduce their climate and environmental impact. However, PGNiG is also planning horizontal measures to reduce its carbon footprint, e.g. by replacing the car fleet with zero-emission vehicles and increasing energy efficiency.

All the Group's pro-climate measures serve to reduce our negative impact on the environment and have a positive impact on our relations with the environment.

3. Society (S)

3.1. Introduction

The social dimension of sustainable development concerns the impact of an organization on the environment in which it operates.

The strategic importance of the products that the Group supplies to its customers means that it plays a particularly important role in the daily lives of local communities and the general public. The nature and scale of our operations, and the presence of infrastructure used for exploration, production, storage and distribution of hydrocarbons, electricity and heat mean that the PGNiG Group is committed to building partnership-based relations with representatives of the local community, public administration, suppliers and contractors. This allows us to pursue common goals, which are important in ensuring Poland's energy security. The PGNiG Group creates opportunities for cooperation and builds understanding for mutual relations and interdependencies with particular groups of stakeholders, which are intertwined.

As part of its exploration and extraction activities, PGNiG maintains good relations with the local community, local government and local media, pursuing a reliable information policy and social dialogue. The company informs about the purpose of the work, the scope, issues related to the safety of people and the environment as well as the benefits of the company's presence for the local community. These activities are preceded by a good recognition of the location of conducted prospecting works, identification of risks related to potential inconveniences for the local community (e.g. noise emission, increased vehicle traffic, etc.) and their mitigation. Moreover, good relations with the environment are built also through the company's participation in the life of local communities, i.e. support for local social organizations and involvement in important cultural and sports events.

The companies of the Group support events and projects important to local communities in the areas where they operate. In particular, sponsorship and charity activities finance initiatives that build the desired image of the Group and of individual companies. Support is given to activities that contribute to the development of society, in particular in the following areas: patriotic and historical events, social affairs, science and education, sports and healthy lifestyle, culture and arts, and ecology and environmental protection.

From 2020 onwards, support for the fight against the COVID-19 pandemic has taken on particular importance, which is implemented on two levels. Internally, the Group's focus has been on ensuring the safety of employees and continuity of work, which is tantamount to ensuring the reliability of gas, electricity and other services. Externally, the Group supported local communities by providing material and financial assistance to health and care institutions. The beneficiaries included social welfare homes, hospices and organizations supporting veterans.

Moreover, one of the key components of the value of PGNiG SA and the entire Group is our employees, who are instrumental in achieving the Group's strategic goals. Thus, the personnel strategy is based on the premise that employees are the Company's key and primary resource, and their knowledge, skills, quality of work and commitment are a decisive factor behind the Company's development and competitiveness, both on the domestic and international markets.

PGNiG builds among its employees a culture of safe work, which translates into appropriate behaviors, attitudes and actions. A number of actions are taken in order to continuously improve the safety level of all persons staying on the premises of the plant, also taking care of the safety of people from outside. All newly hired employees undergo health and safety training. Moreover, within the scope of diversity policy, family-friendly initiatives are undertaken, for example income-related social support for the employee's entire family or the provision of more time for the family in the form of shortened working days, individual flexible adjustment of employment conditions to the situation of parents or transparent presentation of statutory benefits for parents, e.g. parental leave.

3.2. Risks related to the social area

In line with the industry non-financial reporting guidelines *Sustainability reporting guidance for the oil and gas industry*²², the PGNiG Group is required to disclose the most important non-financial risks.

Accordingly, companies from the oil and gas industry, including the PGNiG Group, act responsibly: avoiding, mitigating and managing the negative impacts they may be exposed to through their own actions and business relations, as well as seeking opportunities to positively influence their surroundings.

This includes respecting human rights, supporting social and economic development, including providing access to employment, procuring local goods and services, improving infrastructure, supporting healthcare services, and developing local businesses and employees' skills.

Social aspects			
No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
1	Image risk – negative perception of PGNiG's and the entire Group's business, communication and marketing activities by stakeholders, including local communities (e.g. negative publications in traditional and social media).	<ul style="list-style-type: none"> • Internal rules governing contacts with the media and employees' use of social media, • Building long-term relationships with the media, • Ongoing monitoring and constant contact with key journalists, • Quick analysis of the situation and reaction and response to unfavorable articles, • Ongoing monitoring of social media, • Internal regulations regarding crisis communication, • Good practices for business operations in the field, including dialogue with stakeholders in new investments. 	medium
2	Risk of inconvenience to local communities related to conducting research work.	<ul style="list-style-type: none"> • Application of new technological solutions. Implementation of pro-development investments, • Reliable analysis of the location of the planned works, cooperation between organizational units responsible for designing of exploration works (surveyors, geologists, drillers) and identification of the impact of works on the environment (environmental protection services), cooperation with the local government, • Educational and information campaigns aimed at providing current information on the implemented projects. 	medium

²² <https://www.ipieca.org/our-work/sustainability/performance-reporting/sustainability-reporting-guidance/>

Social aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
3	Risk of conflict with the local community resulting in difficulties in conducting mining activities.	<ul style="list-style-type: none"> • Creating a climate of cooperation by implementing an activity plan in the field of sponsorship, image-building events and CSR projects, • Cooperation with local government authorities, • Educational and information campaigns aimed at providing current information about implemented projects, • Talks with the local community, open/individual meetings, negotiations and mediations. 	high
4	Negative perception of the company's pro-social activities by the external environment – poor assessment of the activities undertaken by PGNiG (insufficient fulfillment of expectations, no response to needs). This makes it difficult to conduct activities in the field, and increases the costs of communication with the local community and stakeholders.	<ul style="list-style-type: none"> • Activities of the sponsorship committee, • Coordination of activities with the Ignacy Łukasiewicz PGNiG SA Foundation. • Social media channels enabling fast and interesting communication. 	medium
5	Interruption of comprehensive customer service during the COVID-19 pandemic.	<ul style="list-style-type: none"> • Establishing the Team for the prevention and counteracting of COVID-19, one of the goals of which is to ensure the continuity of the Company's and the Group's operations in the context of ensuring the country's energy security, as well as ensuring efficient communication and safety of employees as well as customer service during the pandemic, • Development of comprehensive remote customer service – at times contact only by phone and Internet, • Ongoing monitoring of the epidemiological situation. 	high

Employee aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
1	The risk of competency gaps in key areas. Given the nature of the PGNiG Group companies, a broad spectrum of competences is unique to the industry. These competences are hard to access, and if the Group loses its employees or fails to upgrade their competences, it is often difficult to regain them or obtain them from the market.	<ul style="list-style-type: none"> • Continuous improvement of competences through various forms of training, • Implementation of a training programme for executives and managers, • Implemented key job identification system and described key competences at PGNiG to identify them and provide opportunities for conscious development. • Planning of employee recruitment, introduction of a system of incentives to inform in advance about retirement. Programmes to effectively attract successors, e.g: <ul style="list-style-type: none"> ○ We encourage you to learn (technicians), ○ Thermal Engineering for the Power Industry (engineers), ○ Mentoring Academy – an innovative development program for employees of the Extraction Branch and the Odolanów Branch of PGNiG. • Regulations in the Company's Collective Bargaining Agreements concerning, among other things, retirement schemes and incentives to transfer knowledge. 	medium
2	Loss of key employees. Given the nature of the Company, the loss of key employees entails the risk of difficulties in attracting a new employee from the market.	<ul style="list-style-type: none"> • Implementation of incentive and loyalty systems, wage and non-wage benefits, • List of key positions, preparing a competence model to monitor and develop universal, managerial and technical competences, • Performing replacements for key positions. 	medium
3	A lack of candidates with specific competences ready to take up a job. Difficulties may relate in particular to	<ul style="list-style-type: none"> • Problem identification, referral program. • Risk reduction is influenced by: <ul style="list-style-type: none"> ○ recognition of the Company on the local market, ○ a wide range of non-wage benefits, 	medium

Employee aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
	those areas that are characterized by a narrow field of specialization.	<ul style="list-style-type: none"> ○ the company's participation in job fairs, ○ searching for candidates in alternative sources, including Career Office, OLX, pracuj.pl, ○ an implemented internal recruitment procedure specifying the rules and stages of recruitment. ● Monitoring salaries in the market. ● Motivating employees, including raising qualifications, and creating guidelines for improving the professional qualifications of employees. ● Regulations for updating descriptions and valuation of jobs. 	
4	Risk of conflict with trade unions.	<ul style="list-style-type: none"> ● Regular meetings with the social side, ● Providing periodic information on the situation of a given company and its plans, ● Reliable preparation of documentation submitted for approval to trade unions, enabling their efficient analysis. 	high
5	Sick leave, quarantine, isolation disrupting workflow / no possibility of quick substitution.	<ul style="list-style-type: none"> ● Establishing the Team for preventing and counteracting COVID- 19, one of the objectives is to ensure continuity of the Company's and Group's operations in the context of ensuring national energy security, ● Maintaining the sanitary regime in workplaces and safe working conditions, ● Increasing the possibility of remote work. 	high

Health and safety aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
1	Occupational risk for workplaces determined on the basis of identified hazards occurring at workplaces.	<ul style="list-style-type: none"> ● The occupational risk assessment team reviews/verifies and updates occupational risk assessment cards according to the adopted method. ● The procedure for hazard identification and occupational risk assessment, of which the rules for review/verification and updating of Occupational Risk Assessment Sheets are an integral part. 	medium
2	An accident at work due to improper organization of work, failure to follow procedures or use of improper means of protection, or occupational disease listed in the list of occupational diseases. Risk of a temporary shutdown of production caused by a collective, serious or fatal accident at work. The risk caused by the identification of an occupational disease.	<ul style="list-style-type: none"> ● Implementation of QHSE management system, including the awareness and behavioral improvement program. ● Timely and systematic training of employees in health and safety. ● Identification and recording of near misses. ● Compliance with applicable laws and internal procedures in this regard. ● Maintaining constant supervision during the performance of particularly dangerous works. ● Appropriate selection of means of protection against hazards. ● Conducting active and proactive activities to improve working conditions. ● Subjecting employees to periodic and control medical examinations. 	medium
3	Failure to act by employees in the event of an emergency.	<ul style="list-style-type: none"> ● Development of a system for reporting health and safety hazards, taking into account the scopes of responsibility, supervision over the process of identifying hazards, during the occupational risk assessment. ● Conducting a practical test of evacuation conditions in buildings. ● Providing additional training to employees on emergency procedures. ● Compliance with the applicable procedures in this regard. 	medium

Ethical aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
1	The risk of corruption and bribery.	<ul style="list-style-type: none"> • Application of the rules contained in the PGNiG Group's Anti-Corruption and Anti-Fraud Procedure; the PGNiG Group's Anti-Corruption and Fraud Policy; the PGNiG Group's Code of Ethics; the PGNiG Group's Ethics and Compliance Management System; and the Managers' Transparency Policy. The documents support and regulate in particular the management of the risk referred to above, • Providing employees with information and educational activities, including regular training courses that increase the level of knowledge of regulations, values among employees and their awareness of the potential consequences of violations, including ethical and anti-corruption training. 	medium
2	Loss of the Company's reputation as a reliable and trustworthy organization may result in far-reaching negative legal consequences.	<ul style="list-style-type: none"> • Legal regulations implemented in the Group, i.e. the Anti-Corruption and Fraud Prevention Policy at the PGNiG Group, the PGNiG Group Code of Ethics, and the Ethics and Compliance Management System at the PGNiG Group; • Making the employees aware of the applicable regulations, access to the documents, obligation to be familiar with the regulations, and employee training. 	high
3	<p>The risk of adverse disposition of company property by a corrupt employee, including:</p> <ul style="list-style-type: none"> • fraud (false statements in the performance of a service), • property theft, • obtaining and using information that constitutes: business secrets, sensitive commercial information, personal data and classified information unlawfully, • manipulation of data related to reporting in order to avoid professional consequences or obtain a bonus, • conflict of interest; • bid rigging, • cybercrime, • disclosing contact details of potential customers of the PGNiG Group, • misappropriation of the assets of the PGNiG Group. 	<ul style="list-style-type: none"> • Compliance with the provisions of the documents: <ul style="list-style-type: none"> ○ Code of Ethics, ○ Data protection principles, ○ The principles of counteracting abuse and guidelines for anti-corruption proceedings: <ul style="list-style-type: none"> ○ The Procedure for compliance risk management at PGNiG S.A. "Compliance Program", ○ Instructions regarding the processing of information constituting a PGNiG S.A. secret, ○ PGNiG S.A. anti-corruption and gift procedure; ○ Policy of counteracting corruption and abuses of gifts at the PGNiG Group, ○ Instructions for awarding orders and making expenses, ○ Investment execution procedure, ○ Rules of conduct regarding the calculation of contractual penalties, ○ Contract templates. • EB2B purchasing platform, • Institutional control, • Functional control. 	high
4	Accepting/giving a gift without reporting it to the benefits register.	<p>Raise awareness among employees through appropriate communication of anti-corruption regulations. Periodically remind employees by email to comply with anti-corruption regulations. Employees are required to:</p> <ul style="list-style-type: none"> • report information about accepted or given gifts, • report identified corruption incidents, • declaring that no corruption events have taken place. 	low
5	Insufficient awareness among employees (regardless of position) of the need to monitor and report on risks or violations, including the occurrence of corruption events.	<ul style="list-style-type: none"> • Preparation of newsletters for internal communication, • Conducting training to raise awareness and knowledge, • Adequate internal adjustment. 	high
6	Data leakage or loss.	<ul style="list-style-type: none"> • Data protection policy, • Crisis Procedure, • Corporate Secrecy Procedure. 	high
7	<p>Risk of failure to respect employee rights. Actions, behaviours concerning or directed against an employee, e.g. unequal treatment, discrimination,</p> <p>workplace bullying.</p>	<ul style="list-style-type: none"> • Compliance with the Code of Ethics on counteracting workplace bullying, which applies to all employees, defines preventive measures and rules of conduct in situations when workplace bullying is reported (issues concerning mobbing are contained in the internal anti-workplace bullying policy, which is part of the Company's Regulations). 	medium

Ethical aspects

No.	Non-financial risks identified	The method of counteracting the materialization of risk	Relevance
		<ul style="list-style-type: none"> • Each newly hired employee reads and signs the Information on the provisions on equal treatment in employment (Art. 941 of the Labor Code) and gets acquainted with the content of the Company's Labor Regulations. • Training and education in this area, especially for managers. 	

3.3. Our commitments:

- Commitment to the development of social and intellectual capital in Poland by opening up to new initiatives and supporting pro bono projects and, in the time of the pandemic, also providing support in its prevention and maintaining safety.

IMPLEMENTATION OF THE COMMITMENT:

- Conducting strategic and long-term social involvement programs by the PGNiG Foundation and the PGNiG Group companies, especially those that fulfil the objectives of public and socially useful activities to promote and support health care and social welfare, physical education and sport, environmental protection, youth education and scientific activities, and culture as national heritage.
- Sponsorship support of sports, cultural and scientific events in the area of the Foundation's activity aimed at the development of social capital.
- From 2020 onwards, support for the fight against the COVID-19 pandemic, in which all Group entities with the PGNiG Foundation at the forefront have been involved, is very important.

MEASUREMENT:

The PGNiG Group companies together with the PGNiG Foundation supported over 550 initiatives and events in 2020 (of which PGNiG alone nearly 140) compared to over 500 projects in 2019. The number of beneficiaries of the social program activities of the PGNiG Group together with the Foundation is estimated at 20 million in 2020. Such a large number of beneficiaries is due to the fact that in 2020 most of the activities were dedicated to the fight against the pandemic. In 2019, the number of recipients of the Group's support and social projects was estimated at over 365,000 people.

- **Conducting dialogue with the local community in line with the best standards developed at the PGNiG Group ("good neighbor")**

IMPLEMENTATION OF THE COMMITMENT:

- Standardizing the key principles of dialogue with external stakeholders within the PGNiG Group, including local communities, authorities, non-governmental organizations, etc., sharing experiences within the PGNiG Group in this regard.
- Conducting information and education campaigns on the PGNiG Group's standards in project execution, including information on aspects of environmental protection, occupational safety or the local community, dialogue, objectives of the works, as well as the benefits and risks involved.
- Providing support for local initiatives as part of building a positive image of the PGNiG Group among the local community.
- Employee involvement in social activities. In 2020, the ongoing support of local communities in supporting the fight against the COVID-19 pandemic was very important.

GOAL: Each field investment is carried out with the consent and support of the local community after dialogue with important stakeholders of a given project.

- Freedom of association and collective bargaining, i.e. the right of employees to join any trade union organization and negotiate employment conditions.

IMPLEMENTATION OF THE COMMITMENT:

There are many trade unions operating at the PGNiG Group. PGNiG takes particular care to to conduct social dialogue based on the independence of the parties, acting in accordance with the law, as well as trust, seeking compromise and adherence to the adopted rules.

GOAL: Every employee has the freedom of association.

- **Employment stability** – promoting and implementing high standards of employment of employees.

IMPLEMENTATION:

The vast majority of employees at the PGNiG Group are employed on open-ended employment contracts, which is a cornerstone of employment stability and building the Company's value through human capital.

MEASUREMENT:

In 2020, 96% of PGNiG employees, and 90% of employees in the entire PGNiG Group, were employed under open-end for an indefinite period.

- **Occupational health and safety** - implementation of uniform management standards in the area of occupational health and safety in order to constantly increase the level of safety of employees, people staying on the premises of PGNiG, and the local community.

IMPLEMENTATION:

- Positive certification and implementation of the ISO 45001:2018 standard regarding the occupational health and safety management system.
- Implementing norms and standards resulting from good practices, promoting safe solutions to minimize accidents at work.
- Continuous improvement of qualifications and building awareness of employees, including their role and involvement in the tasks performed, in the area of occupational health and safety.
- Continuous building of a work safety culture among employees through the exchange of knowledge and skills between employees and representatives of the entire PGNiG Group (competitions, conferences, cooperation with rescue services).

GOAL: No fatal accidents at work and a steady decrease in the number of all accidents at work.

- Increasing employees' knowledge of the values and ethical principles in the work environment. GOAL: No proven cases of discrimination, bullying in the workplace.

- Responsible management of the entire value chain based on transparent cooperation principles taking into account social, environmental and safety criteria and human rights.

IMPLEMENTATION:

- Implementation of an ethics training program for employees.
- Defining the desired ethical attitudes for selected roles and the scope of work of selected groups of employees (e.g. customer service, relations with local governments, etc.).
- Proactively informing about the PGNiG Group's policies and expectations towards suppliers in this area.

4. Corporate governance (G)

4.1. Introduction

Corporate governance is a system of controls and procedures to ensure the proper management of an enterprise. The quality of corporate governance is demonstrated by factors such as professional management, the structure of the board of directors, the supervisory board, and a well-structured governance system. Good corporate governance reduces the company's riskiness and is designed to ensure that key decisions are made in line with the interests of the company and its shareholders²³.

PGNiG applies the "Code of Best Practice for WSE Listed Companies", which is a set of corporate governance rules. Since 2002, issuers of shares listed on the WSE Main Market have been subject to them under the Stock Exchange Regulations.

In accordance with the Good Practices of 2021, PGNiG:

- ensures adequate communication with investors and analysts by pursuing a transparent and effective information policy;
- is managed by the Management Board, whose members act in the interests of PGNiG and bear responsibility for its activities. It is the responsibility of the board of directors to lead the company, to be involved in setting and achieving its strategic objectives, and to ensure the company's efficiency and security;
- is supervised by an effective and competent supervisory board. The members of the Supervisory Board act in the interests of PGNiG and are guided in their conduct by the independence of their opinions and judgments. In particular, the Supervisory Board provides opinions on the Company's strategy and reviews the work of the Management Board in achieving the set strategic objectives, as well as monitors the Company's performance;
- maintains effective systems of: internal control, risk management and supervision of compliance with the law, and performs an effective internal audit function, depending on the size of the company and the type and scale of operations;
- encourage shareholders' involvement in the company's affairs. The general meeting respects the rights of shareholders and seeks to adopt resolutions without infringing on the legitimate interests of particular groups of shareholders;
- has transparent procedures for preventing conflicts of interest and entering into related party transactions under conditions where conflicts of interest may arise.

²³ Guidelines for ESG Reporting. A guide for companies listed on the WSE, Steward Redqueen, May 2021, p. 41

- The procedures provide for ways to identify, disclose and manage such situations;
- has a remuneration policy specifying the form, structure and method of determining remuneration of members of the Company's governing bodies and its key managers.

The PGNiG Group operates in accordance with ethical principles, respecting human rights and complying with applicable laws. The overriding document regulating the indicated area is the Code of Ethics of the PGNiG Group, implemented both at PGNiG and the Group's entities. The Code of Ethics is a set of rules underlying the PGNiG Group's ethical conduct. It contains provisions underlining PGNiG's commitment to avoid all forms of bribery and corruption, both active and passive. The organization acts transparently and in compliance with applicable laws, including free of any form of corruption or bribery. Caring for the PGNiG Group's reputation, the goals related to this area are pursued through internal regulations. The organisation adopts rules of conduct based, among others, on the principles of the United Nations Charter. They relate to human rights, labor standards, environmental protection and combating corruption, as well as compliance with legal regulations. PGNiG conducts verification of its key business partners, during which it requires the disclosure of information on the counterparty's anti-corruption policies. In procurement proceedings, it excludes counterparties convicted of selected offences, including human trafficking, child labour, employment of illegally staying foreigners under conditions of special exploitation, terrorism and corruption offences. The Company conducts training on ethics, workplace bullying, discrimination, anti-corruption measures, which is mandatory for all employees. The trainings focus on four PGNiG values: quality, responsibility, partnership and credibility.

The PGNiG Group's anti-corruption and fraud prevention policy and the PGNiG anti-corruption and gift policy serve the function of making employees aware of corruption risks and introduce rules for managing such risks through standards for dealing with contractors, rules for procurement procedures and rules on giving and accepting gifts, as well as gift reporting, periodic declarations and ad hoc reporting of corruption incidents. Additionally, they introduce a number of assumptions adopted on the basis of previous experience related to the application of the relevant procedures currently in force as well as related to the cyclical process of mapping the compliance risk in the Company. Partnership-based relations and good cooperation with suppliers are an important part of PGNiG's operations. In its dealings with partners, the Company adheres to the adopted values and communicates its approach by providing relevant documents. It is worth noting that the PGNiG Group takes a responsible approach to cooperation with entities selected through a tender. Procurement procedures are prepared and conducted in compliance with the principles of proportionality, transparency, expediency, economy, reliability, fair competition and equal treatment of contractors, while respecting the Group's interests. Moreover, the activities related to the preparation and conducting of the purchase procedure are performed by persons ensuring impartiality and objectivity. Contractors are selected on the basis of internal regulations and purchasing instructions.

4.2. Our commitments

- **Opposition to violations of human rights.**

The Code of Ethics of the PGNiG Group is based on the foundations of ethics. It uniformly outlines the framework and standards of employee conduct that are acceptable and desirable across the Group. It is our priority to ensure that no human rights violations occur. The ethical standards adopted here are reflected in the documents supporting their implementation. These include the Managers' Transparency Policy, which introduces an enhanced corporate culture ensuring transparency at the PGNiG Group companies. There is also an internal anti-workplace bullying and anti-discrimination policy in place at PGNiG S.A., which requires employees to refrain from harassment and discrimination in the workplace and specifies what actions should be taken in the event of reported violations.

On the other hand, the procedure for reporting and handling whistleblowing at PGNiG SA implements the Company's obligations under the law, including, among others, Article 97d of the Act on Public Offerings and Conditions for Introducing Financial Instruments to an Organized Trading System and on Public Companies dated 29 July 2005, as well as the obligations under Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons reporting breaches of EU law.

Whistleblowing in the professional environment is an expression of the employee's sense of responsibility for the proper, efficient and stable functioning of the company and for the safety of his/her colleagues. Unethical or illegal behavior can jeopardize the trust of customers and business partners that has been built up over many years, and can have severe financial consequences. The risk of such negative effects can be minimized if the organization is aware of the irregularities in advance.

By creating an environment of trust, PGNiG aims to encourage our employees to fully cooperate. To that end, solutions ensuring confidentiality for whistleblowers have been implemented. The procedure is a key element of protecting the integrity and reputation of PGNiG, which requires active support from all employees. Reporting irregularities is the right of every employee, closely linked to care for the good name of PGNiG and proper performance of their duties.

- **"No" for corruption cases**

One of the overriding principles of the entire PGNiG Group is to act in an honest and ethical manner. PGNiG and the PGNiG Group companies have a reputation for integrity both in their management practices and in their relations with contractors and customers, and it is important to maintain this reputation. In view of the above, it is of paramount importance that the PGNiG Group as a whole, as well as each of its employees and co-operating entities, take measures to prevent and combat any signs of corrupt practices.

The PGNiG Group's Code of Ethics refers to the United Nations Convention Against Corruption as one of the Group's action frameworks. The PGNiG Group's policy provides for an unconditional obligation to observe the applicable anti-corruption regulations in the course of our business, including the applicable international regulations and anti-corruption regulations in other countries where the PGNiG Group operates.

Employees are required to observe the principles of ethics, honesty and integrity in all undertaken actions, including business transactions, and in relations with any person or organization. Each employee, regardless of their position, is required to act in compliance with the law, taking into account the anti-corruption regulations

which are also contained in the Group's Code of Ethics. In view of the above, the PGNiG Group's Anti-Corruption and Fraud Prevention Policy and the PGNiG Group's Anti-Corruption and Corporate Governance Procedure were introduced. The purpose of the Policy and Procedure is, in particular, to define the obligations of PGNiG and its employees and associates in respect of compliance with the rules and prevention of corruption and fraud, and to provide information and guidelines for employees and associates in identifying signs of corruption. In addition, business partners have the opportunity to read the anti-corruption rules in force at PGNiG at <https://pgnig.pl/dzialania-spoleczne/odpowiedzialny-biznes/compliance-i-etyka-w-gk-pgnig>. As part of its concluded contracts, the Company applies anti-corruption clauses in legal transactions, which also include sanctions.

The PGNiG Group condemns the use of any form of corruption in its operations. The goal of all companies from the PGNiG Group is the complete elimination of any corruption incidents that may take place at the PGNiG Group.

The Anti-Corruption and Fraud Prevention Policy at the PGNiG Group supplements the provisions of the PGNiG Group Code of Ethics with control mechanisms designed to prevent incidents which may constitute corruption or abuse.

The PGNiG Group does not tolerate any abuses, understood as any acts which are in breach of the criminal law provisions binding on employees as natural persons, the provisions on the liability of collective entities for acts prohibited under penalty, and the provisions on acts of unfair competition, whether committed to the detriment of the Company or the Group as a whole, or to the detriment of business partners and economic transactions.

Among the abuses, the PGNiG Group pays special attention to corruption, understood both as bribery and venality in contacts with persons performing public functions, and bribery in relations with business partners.

Apart from the generally applicable laws, the PGNiG Group also endeavours to comply with the international standards contained in the ISO 37001 anti-corruption standard, as well as with the standards recommended for anti-corruption compliance management systems and whistleblower protection systems at companies listed on the markets operated by the Warsaw Stock Exchange.

The policy provides for an unconditional obligation to comply with the applicable criminal law, including anti-corruption regulations, in the course of our business, taking into account international regulations and conventions of the OECD, the UN and the Council of Europe, as well as regulations implemented in all countries where the PGNiG Group operates.

In terms of abuses other than corruption, the PGNiG Group pays special attention to preventing economic abuse, such as financial fraud and distorting public tenders, as well as all practices that distort fair competition, which also significantly damage the reputation of companies and may lead to losses.

Every employee, regardless of their position, is required to act in accordance with local, national and international law. One of PGNiG's most important priorities is to conduct business in accordance with applicable laws. Moreover, employees are obliged to avoid situations that may lead to a

conflict of interest with entities or business partners with which the Company cooperates.

- **Security and data protection**

PGNiG operates the Information Security Management System (ISMS) certified for compliance with the PN-EN ISO/IEC 27001:2017-06 standard. It is based on the Information Security Policy (ISP) and the Teleinformation Security Policy (TSP). They constitute the framework for the rules for processing information, including in particular personal data, in the Company. In addition, PGNiG comprehensively protects personal data in the Company and selected entities of the PGNiG Group, which is reflected in the applicable Data Protection Policy of the PGNiG Group.

Information security for PGNiG means:

- protection of information resources and the means for its processing;
- ensuring the security and continuity of information processing;
- systematic risk management by identifying resources, related threats and selecting measures to protect resources;
- analysis of changes introduced in the Company and their influence on the security of information resources.

The main goals of ISMS implementation are to ensure data security and ensure the continuity of the services provided. They are implemented by:

- ensuring compliance of activities with applicable law;
- protection of the IT systems used against unauthorized access, physical destruction and the activity of malicious software;
- raising employees' awareness of security and involving them in the protection of information;
- ensuring continuous analysis of the risk of information loss;
- ensuring the improvement of the Information Security Management System.

A special solution is the rules of incident management defined under TSP, which bring together the rules of responding to ICT incidents, taking into account the coordination of the implementation of actions resulting from incidents by the Management Board Representative for ISMS.

The rules applicable within the ISMS are subject to continuous monitoring and change management in accordance with the certified rules for supervising the documentation of integrated management systems.

All persons with access to PGNiG's information resources are obliged to comply with the rules adopted in the System and care for its development and effectiveness of the implemented solutions.

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