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Ladies and Gentlemen,

It is my great pleasure to present to you the GAZ-SYSTEM Group’s Sustainable Development Report for 2018.

Our last year’s activities and projects, reviewed in the Report, make me realise the high level of progress we managed to achieve in the implementation of the strategic goals which we set ourselves a few years ago as part of the Strategy of GAZ-SYSTEM S.A. The effects of our joint effort are clearly visible in all areas of the company’s operations, including the secure financial position of the Group, consistent implementation of a demanding and ambitious investment plan, and the development of internal processes related to the safety and management of the transmission network.

The year 2018 was a period abundant in events which defined the paths of growth for the GAZ-SYSTEM in the years to come – a time of ground-breaking decisions.

November 2018 saw the announcement, made jointly with our Danish partner, of an investment decision to build the Baltic Pipe, a strategic infrastructure project which will enable the creation of a new gas supply corridor from Norway. This is not the first attempt at the construction of the Baltic Pipe, but never before has this project reached the current stage of development. Our determination to deliver this complex venture within the adopted schedule is illustrated by the actions described in the Report, such as environmental surveys or the EU funding secured for the project.

As we have repeatedly emphasised, we intend to build a diversified, competitive natural gas market and regard the transit location of Poland as an opportunity for the development of regional market integration. These assumptions underpin our two investment decisions this year concerning the construction of gas interconnections with Lithuania and Slovakia. Both projects are of great importance for the growth of the regional natural gas market and the improvement of security of supply. In addition, the Lithuanian pipeline will greatly facilitate local gas network development in the regions of Podlase and Masuria, which have so far been poorly integrated into Poland’s natural gas market. Meanwhile, the infrastructure interconnection in the south, which is part of the growing North-South Gas Corridor, offers new gas supply diversification opportunities for the entire Central European region.

We are combining projects related to the development of the European transmission system with a steady expansion and development of the internal gas infrastructure. Our planned investment expenditure in the coming years is at an average level of PLN 2 billion annually, placing us among the largest investors on the Polish market.

This Report presents both our achievements so far, but also the challenges that await us in the years ahead. The review of our projects, investments, services and forms of stakeholder engagement is accompanied by a description of the company’s commitment to the continuous improvement of work safety and risk-free operation of our gas pipelines. This is our ultimate priority.

Our present accomplishments would not have been possible without the commitment and passion of the GAZ-SYSTEM’s employees and the professional approach of our partners and subcontractors.

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On behalf of the Management Board of GAZ-SYSTEM I hope that you will find this Report an enjoyable read.

Tomasz Stępień
President of the Management Board

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1. INTRODUCTION

1.1. Overview

Gas Transmission Operator GAZ-SYSTEM S.A. is a company of strategic significance for the Polish economy and energy security of the country. GAZ-SYSTEM is responsible for natural gas transportation and management of gas pipeline networks across the country. The company also plays the role of the independent operator of the section of the Yamal Pipeline crossing the territory of Poland.

The head office of GAZ-SYSTEM S.A. is located in Warsaw at 4 Mszczonowska Street, and the company’s branches are seated in: Gdańsk, Poznań, Rembertów, Tarnów, Świdnica and Wrocław.

GAZ-SYSTEM is wholly owned by the State Treasury and the owner’s supervision over the company is exercised by the Government Plenipotentiary for Strategic Energy Infrastructure. The company was founded in April 2004. Since December 2008, GAZ-SYSTEM S.A. has been the owner of Polskie LNG S.A., a company that was established with the purpose of building and operating the LNG terminal in Świnoujście. By virtue of the decision of President of the Energy Regulatory Office (President of ERO) GAZ-SYSTEM S.A. holds a licence for the transmission of gaseous fuels and has been designated as the Transmission System Operator in the territory of Poland.

On 6 December 2018, President of ERO issued a decision to extend the GAZ-SYSTEM’s licence for the transmission of gaseous fuels and a decision to extend the company’s designation as the Transmission System Operator in the territory of Poland. Thereby, the existing decisions which were valid until 2030 have been extended by further 38 years, i.e. until 6 December 2068.

1.2. Mission and Vision

**Mission**

We ensure safe transportation of natural gas in Poland and are actively engaged in the creation of an integrated transmission system in Europe.

In our day-to-day activities, we are committed to environmental stewardship and sustainable development.

**Vision**

The vision of the company is to ensure energy security and play an instrumental role as an operator integrating the transmission system in Europe through the following:

- creation of conditions for the development of a competitive natural gas market in Poland, and the companies operating in the sector;
- construction of interconnections with the transmission systems of the neighbouring countries as part of the European gas networks;
- development of modern gas pipeline network in Poland and offering services enabling its optimised utilisation.

1.3. Values

The definition of ethical standards and their observance reinforce a coherent organisational culture and corporate brand. Since 2016 the Code of Ethics has been applicable in the day-to-day operations, which defines the principles concerning the organisation, internal relations as well as relations with external stakeholders. In 2018 there were no changes to the Code of Ethics.

The transparent value system and clearly communicated standards of conduct make the employees of GAZ-SYSTEM more credible to each other and external stakeholders. They understand the behaviour standards the company expects of them, as well as those which are unacceptable.

The key values are:

- **Responsibility**
  
  Our actions are guided by responsibility towards stakeholders and the environment we operate in.

- **Commitment**
  
  We are fully committed to our activity – we appreciate the contribution of each employee to our present and future success.

- **Professionalism**
  
  We promote professionalism of our employees – we want to achieve our objectives through, above all, the continuous development of the knowledge and skills of our staff.

- **Teamwork**
  
  We believe that through cooperation we will be able to provide top quality services and therefore promote teamwork in our company. This entails opening up to others and their ideas.

- **Respect**
  
  We treat our stakeholders with the utmost respect and exhibit the highest standards of integrity.
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1.4. Corporate Governance

Day-to-day activities of the company are led by the Management Board which sets out the objectives and guidelines for the company’s operations, represents the company in external relations and ensures the efficiency and transparency of management. The members of the Management Board are appointed for a joint, three-year term by the Supervisory Board.

Composition of the Management Board (in 2018)
- Tomasz Stępień – President of the Management Board
- Artur Zawartko – Vice-President of the Management Board

According to the company’s Articles of Association, the Supervisory Board consists of 3 to 9 members appointed and dismissed by the General Shareholder Meeting. The Supervisory Board exercises constant supervision over the company’s activity across all areas.

Composition of the Supervisory Board
- Andrzej Maria Herman – Chairman
- Wojciech Arkuszewski – Deputy Chairman
- Paweł Pikus – Secretary
- Krzysztof Ogonowski – Member
- Dariusz Kocuń – Member

1.5. Organisational structure

As of 1 August 2018, new regulations were implemented in the company, which were meant to ensure the maximum possible functional alignment of the organisational reality with the current objectives and to improve management efficiency in each area. The organisational changes affected 10 of then existing 14 divisions and one office. The most significant modifications consisted in the creation of three new units:
- Administration Division
- Cybersecurity Division
- Baltic Pipe Division

and the merger of two organisational units into the Gas Market Development Division. In eight divisions there were internal organisational changes, including the division of responsibilities. Moreover, in two branches of the company Świeklany and Wrocław, project management sections were separated from the Investments Division.
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1.6. Scale of operations

GAZ-SYSTEM Group is aware of the fact that it has a significant impact on the procurement market and the business environment through the entire supply chain. Therefore, it strives to establish the highest standards in its business relations.

1.7. Supply chain

The GAZ-SYSTEM Group is aware of the fact that it has a significant impact on the procurement market and the business environment through the entire supply chain. Therefore, it strives to establish the highest standards in its business relations.

The Code is an important tool in the management of the supply chain and aims to:

- harmonise the standards of Supplier conduct
- identify good Supplier conduct practices
- enhance the quality of products and services delivered by Suppliers
- reduce the likelihood of ethical, social and environmental risks arising from the business activity carried out by Suppliers
- ensure the implementation of the CSR policies adopted by GAZ SYSTEM S.A. throughout the supply chain

In its day-to-day business GAZ-SYSTEM strives to:

- care about the quality of business relations
- promote good market practices
- exert a positive influence on society
- exert a positive impact on the environment
- ensure the implementation of the CSR policies adopted by GAZ SYSTEM S.A. throughout the supply chain

3005 total number of employees
7 number of organisational units
28 number of field operating units
PLN 516 m of net profit
1 key service transportation of gas through transmission network
100% interest of the State Treasury

GAZ-SYSTEM expects all its cooperating Suppliers to familiarise themselves with the Code and implement its provisions.
1.6. Scale of operations

GAZ-SYSTEM Group is aware of the fact that it has a significant impact on the procurement market and the business environment through the entire supply chain. Therefore, it strives to establish the highest standards in its business relations.

In order to build credibility and transparency of operations, as well as strengthen lasting relations with its business partners, the company has prepared the Supplier Code of Conduct.

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- exert a positive impact on the environment

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The GAZ-SYSTEM Group is aware of the fact that it has a significant impact on the procurement market and the business environment through the entire supply chain.

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GAZ-SYSTEM expects all its cooperating Suppliers to familiarise themselves with the Code and implement its provisions.
Building long-term Supplier relations based on the principles of corporate social responsibility is essential for the development of the company. As the gas industry is a demanding one and all projects involve advanced technologies, great importance is attached to establishing good relations with business partners, e.g. by organising the Supplier Day. Such a meeting was held on 20 March 2018 and was targeted at contractors providing engineering services, construction works, investor supervision services and material supplies. It was attended by over 200 representatives from nearly 100 companies.

In order to streamline the procurement process, efforts to further centralise material supplies were continued in 2018, resulting in the conclusion of over 110 contracts for successive supplies of materials. In addition, new ways of contracting materials under a dynamic purchasing system were tested.

In 2018, 1950 contracts with 992 Suppliers from all around Poland were concluded, for a total value of PLN 3,461,376,252.

Foreign suppliers accounted for 1.5% of all the suppliers in 2018.

The key Suppliers are:
- building contractors
- suppliers of pipes and fittings

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- building contractors
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length of transmission network

10,743 km
length of transmission network

10,743 km
1.9. Group overview

GAZ-SYSTEM is a significant player on the natural gas market in Poland. As the only company in Poland, it is designated as the operator of the national transmission system (high-methane E and low-methane Lw) and the Transit Gas Pipeline System (the Polish section of the Yamal - Western Europe gas pipeline).

Its tasks include the management of the transmission network and natural gas transport throughout the country, in order to deliver the fuel to distribution networks and to final customers.

The Group comprises GAZ-SYSTEM S.A., which is responsible for the transmission of natural gas through pipelines through the national transmission system and transit gas pipeline, and Polskie LNG S.A., responsible for the off-take of LNG delivered by sea.

1.10. Gas market services

Gas Transmission System

GAZ-SYSTEM’s core service is the transmission of natural gas through the transmission network across the country, with the purpose of supplying the fuel to the distribution network and to end customers connected to the transmission network. The transmission contract concluded between GAZ-SYSTEM and the system user is the basis for the provision of transmission services. The contract defines the allocated capacities, including the type product and indicates the entry and exit points. As part of the performance of transmission contracts, GAZ-SYSTEM provides long-term gas transmission services for annual, quarterly, monthly, as well as short-term - daily and within-day periods. By the end of 2018, GAZ-SYSTEM had 170 active transmission contracts in place, including 24 inter-operator transmission contracts (ITC).

Yamal - Western Europe Transit Gas Pipeline System

GAZ-SYSTEM provided gas transmission services via the Yamal-Western Europe section based on the allocated capacity under 64 transmission contracts.

In 2018, gas transmission volume remained at a similar level as in 2017. Imports from the East and intra-Community supplies decreased. However, the supply of liquefied gas imported by sea to the LNG terminal increased significantly.

<table>
<thead>
<tr>
<th>Zone</th>
<th>2017</th>
<th>2018</th>
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<tr>
<td>Imports [bcm]</td>
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<tr>
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<td>Mallnow reverse flow</td>
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<td>LNG Terminal</td>
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<td>Exports [bcm]</td>
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<td>2.5</td>
</tr>
</tbody>
</table>

In 2018, the transmission service was provided to:

- 65 physical entry points
- 922 physical exit points
- 11 virtual entry points
- 33 virtual exit points

Connections to the transmission network in 2018

- Number of applications: 86
- Number of connection conditions issued: 77
- Number of connection refusals: 2
- Number of connection agreements concluded: 36
- Number of connection agreements pending completion: 55
- Number of completed connection agreements: 10
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GAZ-SYSTEM is an active participant in the Intraday Market and undertakes balancing activities through the purchase and sale of standard short-term products on the TGE’s trading platform. In 2018, the natural gas purchase and sale volumes were, respectively, 772,113 MWh and 1,012,006 MWh.

On 30 October 2018, GAZ-SYSTEM concluded an annex to the Agreement with TGE concerning the rules of balancing the national system for low-methane (Lw) gas.

Consequently, two new points are in operation in the national system:
- Exit Point to the Gas Exchange Lw - ID 100005 (EIC 21Y00000000000134B)
- Entry Point to Gas Exchange Lw - ID 170005 (EIC 21Y00000000000134B)


As a participant of the European gas market, GAZ-SYSTEM fulfills transparency requirements at many levels. The company communicates with other market participants through:
- Information Exchange System
- GSA Platform
- Gas Inside Information Platform (GIIP)

**Information Exchange System**

The Information Exchange System enables the exchange of data between GAZ-SYSTEM and market participants through a dedicated IT platform. Its implementation was aimed at improving the quality of services and implementing the best standards focusing on customer needs.

**GSA Platform**

The GSA Platform is an advanced IT tool for offering capacity in natural gas transmission systems. System Users can purchase annual, quarterly, monthly, daily and within-day products in an auction.

The company continued its cooperation with the Czech transmission system operator Net4Gas s.r.o. under an agreement dated October 28, 2015, which provides for the allocation of bundled capacity at the Cieszyn interconnection point at the Polish-Czech border through the GSA Platform. In 2018, 8765 auctions of this product were held.

In line with the Transmission Network Code, the GSA Platform gives System Users (shippers) the opportunity to participate in the secondary market. I.e. make and accept offers in the secondary market for capacity trading.

**Product type** | **Number of auctions**
--- | ---
Within-day | 106,959
Daily | 6928
Monthly | 211
Quarterly | 181
Yearly | 210
**TOTAL** | **114,489**

Number of auctions by product offered in 2018. Source: GAZ-SYSTEM.

Since the REMIT Regulation

Introduced the data reporting obligation (April 2016) the GAZ-SYSTEM’s reporting system has already submitted 19,761 reports to the European Agency for the Cooperation of Energy Regulators (ACER)

7898 were submitted in 2018.

**Towarowa Giełda Energii (TGE)**

TGE as the principal Polish commodity exchange enables, inter alia, trading in natural gas. It offers numerous benefits to market participants:
- equal access to market information
- open, transparent and standardised rules for commercial transactions
- reduction of negotiation costs (automation of the process of searching for the best offer)
- high flexibility in concluding transactions
- effective management of commercial risk and risk resulting from volatility of prices and required volume of energy.

Since 2012, GAZ-SYSTEM and TGE have been cooperating to develop the gas market and establish a gas hub in Poland. The two companies work together to support the development and implementation of optimal solutions for market mechanisms, as well as regional cooperation in order to integrate the domestic market with the European one.
GAZ-SYSTEM is an active participant in the Intraday Market and undertakes balancing activities through the purchase and sale of standard short-term products on the TGE’s trading platform. In 2018, the natural gas purchase and sale volumes were, respectively, 772,113 MWh and 1,012,006 MWh.

On 30 October 2018, GAZ-SYSTEM concluded an annex to the Agreement with TGE concerning the rules of balancing the national system for low-methane (Lw) gas. Consequently, two new points are in operation in the national system:

- Exit Point to the Gas Exchange Lw - ID 100005 (EIC 21Y00000000000134B)
- Entry Point to Gas Exchange Lw - ID 170005 (EIC 21Y00000000000134B)


As a participant of the European gas market, GAZ-SYSTEM fulfills transparency requirements at many levels. The company communicates with other market participants through:

- Information Exchange System
- GSA Platform
- Gas Inside Information Platform (GIIP)

**Information Exchange System**

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<td><strong>TOTAL</strong></td>
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Number of auctions by product offered in 2018. Source: GAZ-SYSTEM.

On 16 October 2018, the GSA Platform was selected by the EU Agency for the Cooperation of Energy Regulators (ACER) as the tool for booking bundled capacity at the Polish-German border.

In 2018, 73 users were registered on the GSA Platform and submitted 60 offers for capacity resale, of which 53 were concluded with resale transactions.

**REMIT**

REMIT Rules define the principles of fulfilling the obligations resulting from the Regulation of the European Parliament and Council on the integrity and transparency of the wholesale energy market. Pursuant to Article 4(1) of this Regulation, GAZ-SYSTEM regularly publishes information on planned and unplanned events affecting the operation of transmission systems. The information is presented on the Gas Inside Information Platform (www.gasinsideinformationplatform.pl).

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1.11. Stakeholder relations

The stakeholder groups were identified on the basis of a workshop with the participation of employees of GAZ-SYSTEM and Polskie LNG, organised in January 2019 in the company’s head office. The starting point for the analysis was the business strategy and the implementation of the resulting activities, which are reflected in the nature of relations with the market environment.

1.12. Stakeholder engagement

The development of sustainable stakeholder relations through efficient dialogue on multiple communication platforms is a priority for GAZ-SYSTEM. The frequency of contacts is driven by the applicable regulations and generally accepted standards, and depends on the needs of both parties.

Stakeholder groups

- Government, State Treasury, regulatory authority (ERO)
- Employees
- Local governments
- Customers
- Market environment
- Employees of the ERO
- NGOs
- Trade associations
- Universities/schools
- Media
- Central government
- Local Communities
- Market environment
- State Treasury
- Employees of the ERO

Communication tools and techniques

- Government, State Treasury, regulatory authority (ERO)
  - Current reporting, official correspondence, presentations, speeches, meetings, industry conferences, website.

- Employees
  - Intranet, employee magazine, definition of good practices (Code of Ethics), meetings of the Management Board with employees, workshops, trainings, internal communication survey, notice boards, annual report.

- Local governments
  - Official correspondence, brochures, thematic conferences, direct meetings, workshops, website, annual report.

- Customers

- European Union
  - Current reporting, official correspondence, presentations, speeches, direct meetings, industry conferences, website.

- Market environment including other operators
  - Official speeches, meetings, industry conferences, website, annual report.

- Local Communities
  - Public consultations, information meetings, brochures, leaflets, meetings, workshops, information and promotion stands, website, annual report.
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### Stakeholder groups

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<tr>
<th>Stakeholder Group</th>
<th>Communication tools and techniques</th>
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<td>Government, State Treasury, regulatory authority (ERO)</td>
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<td>Employees</td>
<td>Intranet, employee magazine, definition of good practices (Code of Ethics), meetings of the Management Board with employees, workshops, trainings, internal communication survey, notice boards, annual report.</td>
</tr>
<tr>
<td>Local governments</td>
<td>Official correspondence, brochures, thematic conferences, direct meetings, workshops, website, annual report.</td>
</tr>
<tr>
<td>Customers</td>
<td>Dedicated website section, Publication of Urgent Market Messages (REMUT), GSA Platform, Information Exchange System (IES), market consultations, workshops, training on IES, Balancing Services Market and Information Exchange, customer satisfaction survey.</td>
</tr>
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<td>European Union</td>
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### Stakeholders’ Impact on GAZ-SYSTEM’s business

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<tr>
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<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td></td>
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<tr>
<td>Trade associations</td>
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Stakeholders’ Impact on GAZ-SYSTEM’s business. Source: GAZ-SYSTEM.
GAZ-SYSTEM is aware of its impact on the external environment and understands its role as the organisation that sets market standards. Therefore, the company strives to involve its stakeholders as broadly as possible, and to listen carefully to their concerns.

**Stakeholder groups**

- **Local communities**
  - Legal, technical and environmental aspects of investments: planned gas pipeline routes, reconstruction of drainage facilities, site reclamation after construction, compensation and valuation of damages, safety and maintenance of gas pipelines.
- **Customers**
  - Simplifying procedures and formalities, improving the offer of products and services, informing in advance about planned investments in the transmission system, supporting customers in achieving business objectives, creating conditions for the development of a competitive market.
- **Suppliers**
  - Simplifying procedures and formalities, improving the offer of products and services, informing in advance about planned investments in the transmission system, supporting customers in achieving business objectives, creating conditions for the development of a competitive market.
- **Media**
  - Current activities of the company, business decisions, involvement in the creation of the European gas market, domestic investments, cooperation with the local communities.

**Communication tools and techniques**

- **National industry organizations**
  - Meetings, conferences, debates, publications in trade magazines, websites, annual reports.
- **NGOs**
  - Website, public consultations, direct meetings, conferences, workshops.
- **Universities/schools**
  - Website, job fairs, educational fairs, GAZ-SYSTEM’s LinkedIn profile.
- **International industry organizations**
  - Meetings, conferences, debates, publications in trade magazines, ALSI platform presenting operational data of LNG terminal operation.
- **Suppliers**
  - Dedicated website section, annual meetings, trainings, definition of good practices (Code of Conduct for Suppliers), workshops, trade fairs.
- **Media**
  - Cooperation with industry portals, press releases, interviews, press materials on the company’s website, conferences, industry meetings, brochures, leaflets, spokesperson’s profile on Twitter, Baltic Pipe on Twitter, GAZ-SYSTEM channel and Baltic Pipe on YouTube.

Tools for communication with stakeholders. Source: GAZ-SYSTEM.

**Stakeholder group**

**Subject**

- **Local communities**
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Topics addressed by stakeholders. Source: GAZ-SYSTEM.
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Topics addressed by stakeholders, Source: GAZ-SYSTEM.
1.13. External initiatives adopted by the organisation

In 2018, GAZ-SYSTEM joined the 12th edition of the Responsible Companies Ranking, taking the 10th place among companies from the energy sector and 21st place in the overall classification. Questionnaires for the survey were prepared by Kazimierz University’s Centre for Studies of Positive Corporate Impact along with GAZ System Gazeta Prawna.

GAZ-SYSTEM is a partner of the Climate Partnership platform, a project held under the auspices of the Capital City of Warsaw, and organised by its Infrastructure Office. In 2018, GAZ-SYSTEM was recognised among the companies and non-governmental organisations that play a key role in the operation of the capital’s energy system. The company also contributed to the events organised as part of the project: 5th edition of the Warsaw Energy Day (June 2018) and the Climate Picnic (September 2018). October 2018 saw a group of employees from the company’s Rimboleszczyna Branch attend a tree planting scheme in the Municipal Forests of Warsaw’s Bistulek district. The event was attended by representatives of diplomatic missions, employees of the Ministry of Environment and the Infrastructure Office of the Capital City of Warsaw, children from Warsaw schools and other partners of the Climate Partnership platform. Altogether, about 3,000 seedlings were planted to enhance the district’s forest ecosystem.

The company has also been listed among nearly 150 companies demonstrating exemplary performance with regard to workplace safety culture. These organisations are associated in the Forum of Leaders of Workplace Safety at the Central Institute of Labour Protection – National Research Institute. The Forum of Leaders of Workplace Safety is a tool for creating healthy and safe workplaces and the dissemination and implementation of scientific and technological advances in the field of safety and occupational health protection. In 2018, GAZ-SYSTEM became a strategic partner of OZNAKI PRACY 2018, a competition staged by the Central Institute for Labour Protection – National Research Institute, which was held under the general theme of ‘Human at Work’.

Cooperation with Higher Education Institutions

Cooperation between GAZ-SYSTEM and AGH University of Science and Technology in Krakow has been going on for many years. The University is recognised as didactic background for the energy sector in Poland, whereas GAZ-SYSTEM is a leader in the industry. The company shares scientific and technical information and best practices with academic staff as well as supports the development of the University. Since 2017, the people who graduated AGH have had an opportunity to do an internship in GAZ-SYSTEM. In 2018, 10 finest graduates of Faculty of Dilling, Oil and Gas selected out of 24 candidates who applied, took advantage of this offer. The trainees had the opportunity to use their knowledge in the daily work in the areas such as operation of the natural gas transmission network, investments and repairs, health and the safety and gas dispatching.

1.14. Membership in Organisations

Among the most important forums in which the company is involved is the European Network of Transmission System Operators for Gas (ENTSOG), an organisation associating gas transmission network operators of the European Union. In 2018, the thematic scope of cooperation with ENTSOG concerned, among others, the position on the new gas package, preparation of a ten-year network development plan and implementation of network codes.

In December 2018, Tomasz Stępień, President of the Management Board at GAZ-SYSTEM, was appointed as Member of the Management Board of ENTSOG for the term of office from 1 January 2019 to 31 December 2021 along with 12 representatives of European transmission system operators.

As part of its involvement in Gas Infrastructure Europe (GIE), an organisation representing European gas infrastructure operators in Brussels, GAZ-SYSTEM contributed to the preparation of the position on the EU decarbonisation strategy until 2050. In December 2018, a representative of GAZ-SYSTEM was appointed to the Management Board of GIE.

Other industry organisations in which GAZ-SYSTEM is a member include:

- European Association for the Streamlining of Energy Exchange (EASEE-gas)
- European Association for the Streamlining of Energy Exchange (EASEE-gas)
- European Gas Research Group (GERG)
- Marcogaz Technical Association of the European Natural Gas Industry (Marcogaz)

On 9 October 2018, decade of GAZ-SYSTEM Office was summarised, including the company’s contribution to building a secure, competitive and sustainable energy market. The celebration meeting was attended by representatives of EU institutions, Permanent Representation of the Republic of Poland to the EU, Polish and foreign representatives of the energy sector and European industry organisations with which GAZ-SYSTEM cooperates on a daily basis to promote the development of the internal natural gas market in Europe.
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Cooperation with Higher Education Institutions

The company operates as part of the Energy Academy, an educational project delivered by the Lesław A. Paga Foundation to train young leaders in the energy sector. In 2018, 32 scholarship holders took part in the project, including students and graduates of engineering, technology, energy, law, management and finance programmes. GAZ-SYSTEM experts, who conduct workshops on the specific character of the gas market in Poland, have been helping novices take their first career steps for years. An important element of the project is the internship programme, as part of which three young professionals were given the opportunity to receive hands-on training at GAZ-SYSTEM in 2018. As part of its sponsoring activities, GAZ-SYSTEM also offers financial support to the Energy Academy.

Care for the health and safety of personnel

is an inseparable part of the company’s activity, which was further confirmed in 2018 by GAZ-SYSTEM being yet again awarded the Gold Card of the Leader of Safe Work as part of the 21st Forum of Leaders of Safe Work held in Warsaw.

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2.1. Building a competitive market
2.2. Gas Hub in Poland
2.3. Investments of GAZ-SYSTEM S.A.
2.4. Investment process

EUROPEAN gas market
2

EUROPEAN gas market

2.1. Building a competitive market 31
2.2. Gas Hub in Poland 31
2.3. Investments of GAZ-SYSTEM S.A. 32
2.4. Investment process 45

Integration
2. COMMITMENT TO THE INTEGRATION OF THE EUROPEAN GAS MARKET

The priorities of GAZ-SYSTEM in the coming years will be to continue investment activities, including the expansion and modernisation of the national transmission system, and construction of interconnections to strengthen integration with other markets. GAZ-SYSTEM intends to take advantage of the development opportunity thanks to Poland’s transit location, as well as to create a Polish gas hub and make it a leading gas hub in Europe. In addition, the company continues efforts to develop its own gas storage facility.

Strategic goals

- Reinforcement of the company’s position on the modern energy market
- Creation and promotion of a gas hub in the region of Central and Eastern Europe
- Integration of the national transmission system with the European systems and strengthening its transit function in the region
- Development of internal infrastructure together with elimination of bottlenecks in the National Transmission System

Key actions

- Construction of interconnections with the Czech Republic, Slovakia, Lithuania, Denmark and Ukraine, along with the transmission infrastructure required for their optimal operation
- Construction of transmission infrastructure to avert obstacles to market development
- Construction of transmission infrastructure in areas where gas supply problems may occur
- Preparation of a concept for the construction of a gas storage facility and offering gas storage services
- Creation of a market for transmission services and new services for existing and new customers
- Promotion of Poland as a regional gas hub in Central and Eastern Europe
- Creation of conditions for the connection of commercial power plants

GAS-SYSTEM is actively involved in public debate on the future of the European gas market. In 2018, the company (either independently or through industry organisations) engaged in the following processes:

- Definition of the so-called gas package (amendment of the EU/national gas legislation)
- Proposals for amendments to the Gas Directive concerning its application to pipeline connections with third-party countries
- Debate on the long-term development of European energy markets
- Legislative process of amending the Regulation establishing the Connecting Europe Facility (CEF) and the Regulation on the European Regional Development Fund and the Cohesion Fund for the period of the financial perspective 2014-2027

The company also engaged in activities relating to national energy and regulatory policy. Efforts were continued to develop national regulations concerning the energy sector, while emphasising the need for the evolution of the Polish law towards enabling further development of the gas market in Poland, taking advantage of the capabilities of the gas infrastructure, ensuring security of gas supply and developing new services based on natural gas. The company submitted its comments, inter alia, on draft amendments to the energy law, tariff and system legislation, the Act on Electromobility and Alternative Fuels and other amendments to the energy law, tariff and system legislation.

2.1. Building a competitive market

The investments completed by GAZ-SYSTEM are of key importance for the development of an integrated and competitive natural gas market in Central and Eastern Europe and the Baltic Sea region, as well as for increasing the security and diversification of natural gas supply. In 2018, the company continued its efforts to deliver projects compliant with the objectives of the EU energy policy which were granted the PCI (Project of Common Interest) status by the decision of the European Commission. These include:

1. North - South Gas Interconnections in Central-Eastern Europe and South-Eastern Europe (NSI East Gas):
   - gas interconnection Poland – Czech Republic
   - western line of the North-South Corridor in Poland
   - gas interconnection Poland-Slovakia
   - eastern line of the North-South Corridor in Poland

2. BEMIP Action Plan (Baltic Energy Market Interconnections Plan)
   - Poland - Lithuania interconnection
   - Baltic Pipe
   - expansion LNG Terminal in Świnoujście

The company also engaged in activities concerning the organisation and functioning of the Polish gas market and the operators of transmission system operators.

2.2. Gas Hub in Poland

The geographical location of Poland in the Central and Eastern European region, investment plan focused on the development of interconnections being currently executed by GAZ-SYSTEM and the capacity expansion of the LNG Terminal in Świnoujście offer an opportunity for the Polish transmission system to play a key role in the process of the integration and liberalisation of the European gas market. The initiative to broaden the options for trading gas from different sources, not only could contribute to strengthening the economic position of Poland in the region but also have a positive impact on energy security.

The launch of the gas hub may bring Poland numerous benefits, including:

- reduced wholesale price for gas as a result of the integration of Central and Eastern European markets and the markets of the Baltic States
- facilitated access to transmission and balancing services for market participants
- entry of new players to the Polish market and increased competition among suppliers
- increased volumes of transmission through Polish networks
- increased significance of the Polish market in Europe through the integration with the neighbouring markets, i.e. Germany, the Czech Republic, Slovakia, Ukraine and the Baltic States
- more efficient capacity utilisation of interconnection points and the LNG Terminal in Świnoujście
- elimination of barriers to gas trade
- enhanced market transparency
2. COMMITMENT TO THE INTEGRATION OF THE EUROPEAN GAS MARKET

The priorities of GAZ-SYSTEM in the coming years will be to continue investment activities, including the expansion and modernisation of the national transmission system, and construction of interconnections to strengthen integration with other markets. GAZ-SYSTEM intends to take advantage of the development opportunity thanks to Poland’s transit location, as well as to create a Polish gas hub and make it a leading gas hub in Europe. In addition, the company continues efforts to develop its own gas storage facility.

Strategic goals

Reinforcement of the company’s position on the modern energy market
Creation and promotion of a gas hub in the region of Central and Eastern Europe
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Construction of transmission infrastructure to avert obstacles to market development
Construction of transmission infrastructure in areas where gas supply problems may occur
Preparation of a concept for the construction of a gas storage facility and offering gas storage services
Creation of a market for transmission services and new services for existing and new customers
Promotion of Poland as a regional gas hub in Central and Eastern Europe
Creation of conditions for the connection of commercial power plants

GAZ-SYSTEM is actively involved in public debate on the future of the European gas market. In 2018, the company (either independently or through industry organisations) engaged in the following processes:

- Definition of the so-called gas package (amendment of the EU natural gas legislation)
- Proposals for amendments to the Gas Directive concerning its application to pipeline connections with third-party countries
- Debate on the long-term development of European energy markets
- Legislative process of amending the Regulation establishing the Connecting Europe Facility (CEF) and the Regulation on the European Regional Development Fund and the Cohesion Fund for the period of the financial perspective 2021-2027

The company also engaged in activities relating to national energy and regulatory policy. Efforts were continued to develop national regulations concerning the energy sector, while emphasising the need for the evolution of the Polish law towards enabling further development of the gas market in Poland, taking advantage of the capabilities of the gas infrastructure, ensuring security of gas supply and developing new services based on natural gas. The company submitted its comments, inter alia, on draft amendments to the energy law, tariff and system legislation, the Act on Electromobility and Alternative Fuels and other legislative processes of amending the Regulation concerning its application to pipeline connections with third-party countries and the draft of the Act on gas trading.

2.2. Gas Hub in Poland

The geographical location of Poland in the Central and Eastern European region, investment plan focused on the development of interconnections being currently executed by GAZ-SYSTEM and the capacity expansion of the LNG Terminal in Świnoujście will offer an opportunity for the Polish transmission system to play a key role in the process of the integration and liberalisation of the European gas market. The initiative to broaden the options for trading gas from different sources, not only could contribute to strengthening the economic position of Poland in the region but also have a positive impact on energy security.

2.1. Building a competitive market

The investments completed by GAZ-SYSTEM are of key importance for the development of an integrated and competitive natural gas market in Central and Eastern Europe and the Baltic Sea region, as well as for increasing the security and diversification of natural gas supply. In 2018, the company continued its efforts to deliver projects compliant with the objectives of the EU energy policy which were granted the PCI (Project of Common Interest) status by the decision of the European Commission. These include:

1. North - South Gas Interconnections in Central-Eastern Europe and South-Eastern Europe (NSI East Gas):
   - gas interconnection Poland – Czech Republic
   - western line of the North-South Corridor in Poland
   - gas interconnection Poland-Slovakia
   - eastern line of the North-South Corridor in Poland

2. BEMIP Action Plan (Baltic Energy Market Interconnections Plan)
   - Poland – Lithuania interconnection
   - Baltic Pipe
   - expansion LNG Terminal in Świnoujście

The launch of the gas hub may bring Poland numerous benefits, including:

- reduced wholesale price for gas as a result of the integration of Central and Eastern European markets and the markets of the Baltic States
- facilitated access to transmission and balancing services for market participants
- entry of new players to the Polish market and increased competition among suppliers
- increased volumes of transmission through Polish networks
- increased significance of the Polish market in Europe through the integration with the neighbouring markets, i.e. Germany, the Czech Republic, Slovakia, Ukraine and the Baltic States
- more efficient capacity utilisation of interconnection points and the LNG Terminal in Świnoujście
- elimination of barriers to gas trade
- enhanced market transparency
2.3. Investments of GAZ-SYSTEM

The year 2018 was particularly important for the development of cross-border transmission infrastructure and cooperation with operators from neighbouring countries. GAZ-SYSTEM together with the transmission system operators of Denmark, Slovakia and Lithuania made final investment decisions on the implementation of the following gas interconnection projects: Baltic Pipe, Poland-Slovakia and Poland-Lithuania.

The most important investments carried out by the company are:

I. The Northern Gate, which consists of two key investments for the company:
   - Baltic Pipe
   - capacity expansion of the LNG Terminal.

II. Development of the national transmission system, including the construction of interconnections and key projects
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Legend

- Interconnection Poland-Ukraine
- Interconnection Poland-Slovakia
- Interconnection Poland-Lithuania
- LNG Terminal
- Baltic Pipe

Northern Gate - new supply corridor for the Central and Eastern European region

Northern Gate - underlying assumptions

- Diversification of supply sources
- Entry-exit zones in the region with competitive tariffs
- Flexible and a well-developed infrastructure
- Increased gas volumes transported through the transmission system
II. Expansion of the national transmission system, including:

- Investments being part of the North-South Corridor
- Gas Interconnection Poland – Slovak Republic
- Gas Interconnection Poland – Czech Republic
- Gas Interconnection Poland – Ukraine
- other key projects.

Key project name | No. | Key project name | No. | Key project name | No.
--- | --- | --- | --- | --- | ---
North-South Gas Corridor | | | | | |
6 | Lwówek - Odolanów gas pipeline (stage I Lwówek - Krobia) DN=1000, L=113.5 km | 7 | Lwówek - Odolanów gas pipeline (stage II Krobia - Odolanów) DN = 1000, L = 54.1 km | 8 | Czechów - Wieszczowice gas pipeline DN = 1000, L = 14 km | 9 | Czechów - Kiełczów gas pipeline DN = 1000, L = 33 km | 10 | Żelazków-Wrocław gas pipeline (section Bresz - Żebrze - Kiełczów) DN=1000, L=49 km | 11 | Żelazków-Wrocław gas pipeline (section Żelazków - Bresz) DN=1000, L=84 km | 12 | Żelazków- Kędzierzyn-Koźle gas pipeline DN = 1000, L = 17.4 km | 13 | Construction of Kędzierzyn-Koźle compressor station capacity = 23 MW | 14 | Twardy - Kędzierzyn-Koźle gas pipeline DN = 1000, L = 43.4 km | 15 | Twardy - Twarzeg gas pipeline DN = 1000, L = 34 km | 16 | Pogórka Woło - Twarzeg gas pipeline DN = 1000, L = 168 km | 17 | Strachocina - Pogórka Woło gas pipeline DN = 1000, L = 97.5 km | 18 | Construction of Strachocina Compressor Station capacity = 30 MW | 19 | Hermanowice - Strachocina gas pipeline DN = 700, L = 72 km | 20 | Poland - Czech Republic gas interconnection DN = 700, L = 52.5 km | 21 | Poland - Slovakia gas interconnection DN = 1000, L = 59 km | 22 | Poland - Ukraine gas interconnection (Hermanowice - state border) DN = 100, L = 1.5 km |

Project: Interconnections | | | | | |
23 | Gas Interconnection Poland - Lithuania (Rudka Skroda - state border) DN = 700, L = 185 km | 24 | Gas Interconnection Poland-Lithuania (Hołowczyce - Rudka Skroda) DN = 700, L = 153 km | 25 | Expansion of the Hołowczyce Compressor Station II for gas compression up to the pressure of 8.4 MPa |

Project: Key components | | | | | |
26 | Szczecin - Gdansk gas pipeline (stage V: Goleniów - Płoty) DN = 700, L = 41 km | 27 | Odolanów gas compressor station - stage 0 (relocation of compressor) capacity = 20 MW | 28 | Szczecin – Gdańsk gas pipeline (stage IV Reski - Witzlino, DN700, L =8 km | 29 | Gostyn - Wronów gas pipeline (Gostyn - Leśniewice stage I) DN = 1000, L = 60 km | 30 | Gostyn - Wronów gas pipeline (Leśniewice - Rawa Mazowiecka stage II) DN = 1000, L = 100 km | 31 | Gostyn - Wronów gas pipeline (Rawa Mazowiecka - Wronów stage III) DN = 1000, L = 156 km | 32 | Rembielcza - Mory gas pipeline DN = 700, L = 29 km | 33 | Construction of a connection to the Żerań CHP Plant (PGNiG Termika S.A.) | 34 | Pressure Reduction and Measurement Station Twarzeg in the area of Stawki (stage I) | 35 | Oświęcim - Twarzeg gas pipeline with the Pressure Reduction and Measurement Station Oświęcim (stage II) DN = 700, L = 50 km | 36 | Stokradz - Komorowice - Oświęcim gas pipeline (Stage III) DN = 500, L = 53 km |
II. Expansion of the national transmission system, including:

- Investments being part of the North-South Corridor
- Gas Interconnection Poland – Slovakia
- Gas Interconnection Poland – Czech Republic
- Gas Interconnection Poland – Ukraine
- other key projects.

Key project name

North-South Gas Corridor

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<td>Lwówek - Odolanów gas pipeline [stage II, Krobia - Odolanów] DN = 1000, L = 54.1 km</td>
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<td>10</td>
<td>Zabłociwce - Wrocław gas pipeline (section Bresz - Zębice - Kiełczów) DN = 1000, L = 49 km</td>
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<td>11</td>
<td>Zabłociwce - Wrocław gas pipeline (section Zabłociwce - Bresz) DN = 1000, L = 84 km</td>
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<td>12</td>
<td>Zabłociwce - Kętyżyn-Koźle gas pipeline DN = 1000, L = 17.4 km</td>
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<td>Construction of Kętyżyn-Koźle compressor station capacity ≥ 23 MW</td>
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<td>Twardost - Kętyżyn-Koźle gas pipeline DN = 1000, L = 43.4 km</td>
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<td>15</td>
<td>Twardost - Twarzew gas pipeline DN = 1000, L = 24.4 km</td>
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<tr>
<td>16</td>
<td>Pogórka Wola - Twarzew gas pipeline DN = 1000, L = 168 km</td>
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<tr>
<td>17</td>
<td>Strachocina - Pogórka Wola gas pipeline DN = 1000, L = 97.5 km</td>
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<td>Hermanowice - Strachocina gas pipeline DN = 700, L = 72 km</td>
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Project: Interconnections

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Project: Key components

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<td>Szczecin - Gdańsk gas pipeline (stage IV, Reski - Wiczlinio, DN = 700, L = 88 km)</td>
</tr>
<tr>
<td>29</td>
<td>Gustorzyn - Wronów gas pipeline (Gustorzyn - Leśniewicze stage II) DN = 1000, L = 60 km</td>
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<tr>
<td>30</td>
<td>Gustorzyn - Wronów gas pipeline (Leśniewicze - Rawa Mazowiecka stage II) DN = 1000, L = 100 km</td>
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<tr>
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<td>Skoczków - Komanowice - Ośląpim gas pipeline (stage III) DN = 500, L = 53 km</td>
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Map 1. Key investment projects of GAZ-SYSTEM S.A. Source: GAZ-SYSTEM.
The Baltic Pipe project consists of 5 main components:

1. Offshore gas pipeline through the North Sea

Construction of an offshore gas pipeline with a planned length of 105-110 km, connecting the Norwegian gas system in the North Sea with the Danish onshore system. The pipeline will be connected to the existing transmission infrastructure - the Europipe II pipeline - in the North Sea, thus providing access to gas from Norwegian fields.

Basic parameters:
- length: 105-110 km
- diameter: 800 mm
- pressure: 8.5-11 MPa

2. Expansion of the Danish gas transmission system

Construction of a receiving terminal in Nybro and about 200 km of gas pipelines in Denmark.

Basic parameters:
- length: 210-230 km
- diameter: 900 and 1000 mm
- pressure: 5-8 MPa

3. Gas compressor station in Denmark

Construction of a new gas compressor station in the southeastern part of Zeeland. The main function of the compressor station will be the compression of natural gas to enable its transport. The compressor station will ensure two-way gas transmission both from Denmark to Poland and from Poland to Denmark.

Basic parameters:
- pressure: 5-12 MPa

4. Offshore pipeline through the Baltic Sea

Construction of an offshore gas pipeline, approximately 275-310 km long, connecting Denmark with Poland. The pipeline will run through Danish, Polish and Swedish territorial waters.

Basic parameters:
- length: 250-310 km
- diameter: 900 mm
- pressure: 6.7-12 MPa

5. Expansion of the Polish gas transmission system

The import and transmission of natural gas through the Baltic Pipe requires additional investments in Poland. The offshore gas pipeline will land on the Baltic Sea coast in the West Pomeranian Voivodeship at one of the two locations (currently being verified and analysed). Depending on the selected route, the length of the transmission infrastructure will range from approx. 230 to 280 km. In addition, gas compressor stations will be built and modernised.

The scope of work includes the following tasks:
- Construction of a gas pipeline connecting the offshore pipeline with the national transmission system
- Construction of a gas pipeline from Goleniów to Łużów
- Capacity expansion of the Goleniów gas compressor station in the Zachodniopomorskie Voivodeship (up to 25 MW)
- Capacity expansion of the Oddolanów gas compressor station in Wielkopolskie Voivodeship (up to 30 MW)
- Construction of the Gustorzyn gas compressor station in the Kujawsko-Pomorskie Voivodeship (designed capacity: 20 MW).
Baltic Pipe Project

It is a strategic infrastructure project aimed at creating a new corridor for the supply of natural gas from Norway to the Danish and Polish markets, as well as to end users in neighbouring countries. The project is implemented in close cooperation with the Danish gas and energy transmission system operator Energinet. The Baltic Pipe will enable the transmission of gas from Poland to Denmark and Sweden. The Baltic Pipe offshore gas pipeline will transport 10 bcm of natural gas annually to Poland and 3 bcm of natural gas from Poland to Denmark.

The Baltic Pipe project consists of 5 main components:

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Baltic Pipe project under the Connecting Europe Facility (CEF) for the measure entitled “Strengthening the national gas transmission systems in Poland and Denmark for the Baltic Pipe project.”

The President Lech Kaczyński LNG Terminal in Świnoujście enables the offshore deliveries of liquefied natural gas by sea from any direction in the world. It plays a vital role in the integration of the domestic transmission system with other gas markets, providing real opportunities for diversification of gas supplies.

Polish LNG is currently implementing the LNG Terminal Expansion Programme, which is part of the global trend in the development of this technology. The use of LNG is fostered by the development of gas transport opportunities, including the expansion of the methane carrier fleet, as well as the strong competitive advantage of LNG in relation to the natural gas transported via pipelines. Of great importance for the growth of interest in LNG is also the location of gas deposits in those regions of the world which are difficult to connect via pipelines to the main consumers of this commodity.

The expansion programme includes:

- additional regasification facilities to increase the nominal regasification capacity of the terminal to 7.5 Billion Nm³/year,
- a third LNG tank to increase the flexibility of the LNG Terminal operation and ensure optimal process storage capacity,
- an LNG railway re-loading facility to extend the scope of services by the ability to load ISO containers and rail tankers, and enable reaching out to new potential customers,
- an additional what will enable the loading and unloading of tankers, reloading of LNG and loading of LNG bunkering vessels, and bunkering services.

The main advantages of LNG use are:

- flexibility of supply – LNG is both an effective means of gas supply diversification for some countries, and a source used to cover peak demand for gas,
- efficiency – during natural gas liquefaction into LNG its volume is reduced about 600 times. This means that from 100 m³ of LNG, 60 thousand m³ of natural gas is obtained after regasification,
- economics - the costs of transporting and storing LNG are lower than for natural gas. This is due, among other things, to the possibility of selecting suppliers from different parts of the world (optimisation of purchase and transport costs),
- environment – natural gas is an eco-friendly fuel. During combustion it generates much lower emissions than from coal, oil or other fossil fuels.
- safety – in case of contact with the air, LNG evaporates and is diluted. There is no possibility of contaminating the environment (sea water, soil) in case of an LNG leakage.

Modern technologies of LNG tank construction, special procedures and security systems ensure an exceptionally high level of safety at the regasification terminal.

EU support for the Baltic Pipe project

On 16 July 2018, EU Member States approved the European Commission’s proposal to provide financial support for the Baltic Pipe project under the Connecting Europe Facility (CEF) for the measure entitled “Strengthening the national gas transmission systems in Poland and Denmark for the Baltic Pipe project.”

Total maximum co-financing amount granted to date for the Baltic Pipe project EUR 51.4 million
Baltic Pipe project under the Connecting Europe Facility (CEF) for the measure entitled “Strengthening the national gas transmission systems in Poland and Denmark for the Baltic Pipe project.”

The Baltic Pipe – natural environment

Marine surveys include seabed mapping as well as studies of phyto- and zoobenthos, fish, marine mammals, birds and bats. However, the surveys are not limited to just flora and fauna, as they also covers areas such as hydrochemistry and geochemistry, as part of which water quality and seabed sediment properties are being analysed.

The potential impact of the Baltic Pipe on plants, habitats and invertebrates is investigated at the gas pipeline landing points. The potential impact of the Baltic Pipe on plants, habitats and sediment properties are being analysed.

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- environment – natural gas is an eco-friendly fuel. During combustion it generates much lower emissions to the atmosphere than coal, oil or other fossil fuels. Liquefied natural gas is additionally treated – its composition is about 99% of methane with a small (about 5%) share of other components.

The President Lech Kaczyński LNG Terminal in Świnoujście enables the offshore deliveries of liquefied natural gas by sea from any direction in the world. It plays a vital role in the integration of the domestic transmission system with other gas markets, providing real opportunities for diversification of gas supplies.
6129

total number of pipe welds along the Lwówek-Krobia gas pipeline
6129

total number of pipe welds
along the Lwówek-Krobia gas pipeline
North-South Gas Corridor

It will connect the LNG Terminal in Świnoujście and the Baltic Pipe, through Southern Poland, the Czech Republic, Slovakia and Hungary, with the LNG terminal in Croatia. The Corridor consists of a series of bi-directional cross-border interconnections and domestic gas pipelines, either already existing or at different stages of planning or construction.

The benefits of the North-South Gas Corridor will be noticed by all gas market participants:
- strengthening of regional gas markets integration
- improvement of security of supply enabling access to new sources of supply (LNG, Norway) for Central and Eastern Europe
- coordination of regional infrastructure projects
- harmonisation / standardisation of market rules
- enabling the implementation of regional prevention and emergency procedures in case of emergency situations

Poland - Lithuania (GIPL)

The most notable event in 2018, which was required to make the final investment decision, was the signing of two agreements:
- The Gas Interconnector Poland-Lithuania (GIPL) will contribute to the elimination of the so-called energy islands, i.e. regions dependent on gas supplies from one direction only, and also to the integration of the Baltic States into the European Union’s gas market. It will also ensure access to the global LNG market, e.g. via the Świnoujście Terminal. In 2018, GAZ-SYSTEM received planning permission for the gas pipeline. The Inter-TCO Agreement (ITA) of 11 August 2014, concluded by the following transmission system operators: GAZ-SYSTEM, Amber Grid (Lithuania), Conexus (Latvia) and Elering (Estonia), which is to regulate the TSOs’ mutual obligations arising from the implementation of ACER’s decision on cross-border cost allocation for the Poland-Lithuania interconnection.
- The Connection Agreement (CA), i.e. an agreement that regulates the legal, business and technical aspects of project implementation, and, moreover, constitutes a joint commitment of the parties to proceed with the project implementation.

Organisations in charge of Implementation:

GIPL:
- GAZ-SYSTEM – Polish Transmission System Operator
- AB Amber Grid – Lithuanian Transmission System Operator

The project is part of the priority EU infrastructure concept, i.e. the development of the so-called North-South Corridor. In April 2018, GAZ-SYSTEM and EUSTREAM a.s. concluded a Connection Agreement, under which both operators made positive investment decisions. The interconnection between Poland and Lithuania is due for completion by the end of 2021.

Organisations in charge of Implementation:

GIPL:
- GAZ-SYSTEM – Polish Transmission System Operator
- EUSTREAM a.s. – Slovakian Transmission System Operator

The interconnections with Lithuania and Slovakia are an essential element of the strategic investment efforts by GAZ-SYSTEM under the Northern Gateway, i.e. the Baltic Pipe and the expansion of the LNG terminal in Świnoujście.

Poland – Ukraine

In 2018, GAZ-SYSTEM and its Ukrainian counterparty conducted an assessment of the interest in gas transmission from Poland and the need to expand/upgrade the transmission systems of both operators. This concluded the so-called non-binding procedure, aimed at verifying the market’s interest in capacity on the Polish-Ukrainian border. Its results are a foundation for further joint analyses and studies on the development of infrastructure between transmission systems of Poland and Ukraine. In late 2018, the Poland-Ukraine interconnection project was included in the recommendations for projects of mutual interest of the Energy Community (an organisation established between the European Union and third-party countries). With a building permit expected in 2019, both operators are currently in the process of negotiating a business decision that would allow them to proceed to the project execution stage.

Organisations in charge of Implementation:

GIPL:
- GAZ-SYSTEM – Polish Transmission System Operator
- PJSC UKTRANSGAZ – Ukrainian transmission system operator

Poland – Czech Republic

The construction of an interconnection between Poland and the Czech Republic is in line with the priority infrastructure concept of the European Union, i.e. the development of the so-called North-South Corridor. In 2018, GAZ-SYSTEM continued the implementation of the project, and the building permit was obtained. Currently, both operators are in the process of negotiating a business decision that would allow them to proceed to the project execution stage.

Organisations in charge of Implementation:

GIPL:
- GAZ-SYSTEM – Polish Transmission System Operator
- Net4Gas s.r.o. – Czech Transmission System Operator

The project scope includes construction of:
- Ground infrastructure used for handling storage facility,
- Underground infrastructure,
- Connection pipeline with national gas transmission system.

Cavern Underground Gas Storage Facility (CUGS) Damasławek

Apart from gas pipeline projects, GAZ-SYSTEM is developing other facilities, one of them being the construction of a new cavern underground storage facility for gas, crude oil and liquid fuels.

Planned basic parameters:
- Location – Damasławek salt dome (Kujawsko-Pomorskie Voivodeship), on the border of two municipalities: Janowiec Wielkopolski and Żnin.
- Technical parameters:
  - natural gas storage facility: working volume approx. 1-1.8 bcm
  - liquid fuel storage facility: approx.
    - propane, butane and propane-butan: 500 thousand m³
    - diesel oil: approx. 1 million m³
    - crude oil: approx. 1.5 million m³
    - base gasolines: 500 thousand m³

Sustainable Development Report 2018 | European gas market. Integration
North-South Gas Corridor

It will connect the LNG Terminal in Świnoujście and the Baltic Pipe, through Southern Poland, the Czech Republic, Slovakia and Hungary, with the LNG terminal in Croatia. The Corridor consists of a series of bi-directional cross-border interconnections and domestic gas pipelines, either already existing or at different stages of planning or construction.

The benefits of the North-South Gas Corridor will be noticed by all gas market participants:

- strengthening of regional gas markets integration
- improvement of security of supply enabling access to new sources of supply (LNG, Norway) for Central and Eastern Europe
- coordination of regional infrastructure projects
- harmonisation / standardisation of market rules
- enabling the implementation of regional prevention and emergency procedures in case of emergency situations

Poland - Lithuania (GIPL)

The most notable event in 2018, which was required to make the final investment decision, was the signing of two agreements:

- The Gas Interconnector Poland-Lithuania (GIPL) will contribute to the elimination of the so-called energy islands, i.e. regions dependent on gas supplies from one direction only, and also to the integration of the Baltic States into the European Union’s gas market. It will also ensure access to the global LNG market, e.g. via the Świnoujście Terminal. In 2018, GAZ-SYSTEM received planning permission for the gas pipeline. The Inter-TSO Agreement (ITA) of 11 August 2014, concluded by the following transmission system operators: GAZ-SYSTEM, Amber Grid (Lithuania), Conexus (Latvia) and Elering (Estonia), which is to regulate the ISO’s mutual obligations arising from the implementation of ACER’s decision on cross-border cost allocation for the Poland-Lithuania interconnection.

- The Connection Agreement (CA), i.e. an agreement that regulates the legal, business and technical aspects of project implementation, and, moreover, constitutes a joint commitment of the parties to proceed with the project implementation.

Organisations in charge of Implementation:

- GAZ-SYSTEM – Polish Transmission System Operator
- AB Amber Grid – Lithuanian Transmission System Operator

Length of connection on Polish side: 338 km
Capacity: PL-LT 2.4 bcm/year; LT-PL 1.9 bcm/year

Poland – Slovakia

The project is part of the priority EU infrastructure concept, i.e. the development of the so-called North-South Corridor. In April 2018, GAZ-SYSTEM and EUSTREAM a.s. concluded a Connection Agreement, under which both operators made positive investment decisions. The interconnection between Poland and Slovakia is due for completion by the end of 2021.

Organisations in charge of Implementation:

- GAZ-SYSTEM – Polish Transmission System Operator
- EUSTREAM a.s. – Slovakian Transmission System Operator

Length of connection on Polish side: 59 km
Capacity: PL-SK 4.3 bcm/year; SK-PL 5.7 bcm/year

Poland – Czech Republic

The construction of an interconnection between Poland and the Czech Republic is in line with the priority infrastructure concept of the European Union, i.e. the development of the so-called North-South Corridor. In 2018, GAZ-SYSTEM continued the implementation of the project, and the building permit was obtained. Currently, both operators are in the process of negotiating a business decision that would allow them to proceed to the project execution stage.

Organisations in charge of Implementation:

- GAZ-SYSTEM – Polish Transmission System Operator
- PJSC UKRTRANSGAZ – Ukrainian transmission system operator

Length of connection on Polish side: 1.5 km
Capacity: PL-UA 5-8 bcm/year; UA-PL 5-7 bcm/year

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The project scope includes construction of:

- Ground infrastructure used for handling storage facility.
- Underground infrastructure.
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Process of negotiating a business decision that would allow them to proceed to the project execution stage.

Organisations in charge of implementation:

- GAZ-SYSTEM – Polish Transmission System Operator
- PJSC UKRTRANSGAZ – Ukrainian transmission system operator

Length of connection on Polish side: 53 km
Capacity: PL-CZ 5 bcm/year; CZ-PL 6.5 bcm/year
If an internal market for natural gas is to be created within the European Union, substantial changes in access to transmission infrastructure, both domestic and cross-border, and diversification of gas supply directions and sources must take place first. The construction of the Poland-Lithuania interconnection has been recognised by the European Commission as one of the key infrastructure projects to enable the implementation of energy solidarity mechanisms and ensuring security of supply. In addition being of critical importance for the EU energy security, this is also an opportunity to eliminate the current isolation of the Baltic States from the European gas market. The interconnection will enable these countries to be integrated into the EU’s competitive gas market, which we want to build together. This is confirmed by the fact that the construction of the Poland-Lithuania interconnection has been repeatedly short-listed as an EU Project of Common Interest (PCI) within the natural gas sector. Preparatory work for the project received the maximum amount of EU financial support permitted for studies from the Connecting Europe Facility (CEF), i.e. 50 per cent. Of the total amount of over EUR 10m, Amber Grid received EUR 2.5m, while EUR 7.6m was granted to GAZ-SYSTEM. In addition, the project’s construction works, eligible for EU support under CEF, received a maximum co-financing of EUR 266.4m. Of the total co-financing amount, Amber Grid received almost EUR 58m, while over EUR 208m was granted to GAZ-SYSTEM. It is also of paramount importance that following the 2014 ACER decision on the cross-border allocation of project costs, GIPL construction, including part of the GIPL infrastructure costs in Poland, will be co-financed by Lithuania, Latvia and Estonia, in addition to EU funding. I am pleased to confirm that the construction of the GIPL pipeline engineered by the unit is the first gas pipeline designed by GAZ-SYSTEM in-house engineers.

2.4. Investment process

The investment process for the construction of gas pipelines begins with planning. On that basis, a feasibility study is prepared for largest projects. The next step consists in the selection of an engineering consultant that will prepare engineering design in line with all relevant formal and legal, safety, environmental and technical requirements. A host of permits and administrative decisions have to be obtained as part of the engineering stage. After obtaining a building permit, approval of the project documentation (engineering and detailed design) and signing the EPC contract, the construction stage begins.

Efficiency improvement

Investment process design stage

After the first stage of implementation of the 10-year gas pipeline construction plan was completed, an analysis of the issues experienced during the engineering works was undertaken. As a result, a new quality assurance system for project documentation was developed, with particular emphasis on its completeness and level of detail. A new approach to the preparation and acceptance of project documentation, its form and content was developed and implemented (checking and monitoring of documentation contracted from external engineering consultants). In addition, an engineering design unit was set up in the branches of Świerklany and Wrocław in 2018. The 700 mm Racibórz-Oświęcim pipeline engineered by the unit is the first gas pipeline designed by GAZ-SYSTEM in-house engineers.

Sustainable Development Report 2018 | European gas market. Integration

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Gas-pipeline construction process

**Marking of the pipeline route:**
- clearing the construction zone of trees, shrubs and any other identified objects
- collecting and protecting the topsoil layer, i.e. humus
-1. partial backfill of the laid gas pipeline, reconstruction of drainage systems and covering with native soil
- securing an insulation layer with soft soil

**Performance of tests, technical acceptance and commissioning operations**

**Obtaining of the permit to operate and formal handover of the pipeline for operation**

**Vegetation and humus removal:**
- clearing the construction zone of trees, shrubs and any other identified objects
- collecting and protecting the topsoil layer, i.e. humus
-1. dumping into a heap
- levelling of the terrain to facilitate the movement of construction machinery
- locally – construction of temporary roads

**Geodetic survey and routing:**
- determination of the exact route of the pipeline axis
- delineation of the construction zone and the locations of crossings with roads, railway lines, etc.

**Pipe welding and trenching:**
- welding of previously prepared pipes by joining them into sections
- inspection of joints (e.g., radiographic and ultrasonic examinations) to ensure the highest quality of pipe joints
- joint insulation and inspection of the pipeline’s insulation coating for tightness
- trenching to lay the pipeline at an appropriate depth to allow at least 1.2 m of earth to be backfilled from the top layer of the pipe

**Pipeline laying in the trench:**
- laying the pipeline in a trench with the use of side cranes and joining individual pipeline sections together
- as-built geodetic survey of the pipeline
- partial backfill of the laid gas pipeline, reconstruction of drainage systems and covering with native soil previously excavated from the trench, securing an insulation layer with soft soil

Construction phase

Earthworks are an indispensable stage of every gas pipeline project. In 2018, GAZ-SYSTEM implemented its investment plan using various technologies, including both traditional open trench and trenchless methods.

**Trenchless methods**

Thanks to trenchless technologies, GAZ-SYSTEM is able to lay underground gas pipelines without the need for trenching works under rivers, railway tracks, roads, etc. This modern earthworks technology is economic, environmentally friendly and the works are safe for the existing local infrastructure in the vicinity.

In 2018, nearly 170 trenchless crossings were built. The largest and the longest ones – executed using the HDD and Direct Pipe methods – made part of the North-South Corridor development. In addition to around a dozen major crossings, there were 158 pipe jacking crossings carried out with the use of steel pipe, horizontal controlled drilling and microtunneling techniques.

**The main benefits of trenchless technologies:**
- lower social costs: no disruption to traffic, less interference in the environment, less noise during works
- significant financial savings compared to traditional methods (lower costs of supplies, less safeguards and markings, lower equipment and transport costs)
- reduction of greenhouse gas emissions: less air pollution for residents

**Good practice**

"Safe implementation of strategic investments’ workshops"

These were sessions targeted at external contractors of GAZ-SYSTEM, aiming to review important aspects of occupational safety, health and fire protection prior to the commencement of work in order to ensure safe conditions for employees and the safety of local communities. The focus was on the high-risk stages of the project. A total of 129 people attended the workshops, including construction managers, site managers, representatives of the contractors’ OHS personnel, as well as project managers and other supervisors.

**Information on compensation payments**

Under a special act regulating gas infrastructure investments, the owners of properties located along the gas pipeline route are guaranteed compensation payments. The process of compensation is handled under an administrative procedure with supervision from the competent Voivode, at whose request, an independent expert performs a property valuation report as a basis for calculating the amount of compensation. Upon completion of the construction process, the Voivode issues an administrative decision specifying the amount of compensation due.
Gas-pipeline construction process

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- locally – construction of temporary roads.

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- trenching to lay the pipeline at an appropriate depth to allow at least 1.2 m of earth to be backfilled from the top layer of the pipe.

Pipeline deployment along the route:
- transport of pipes previously stored in storage yards and unloading along the gas pipeline assembly line,
- as-built geodetic survey of the pipeline,
- partial backfill of the laid gas pipeline, reconstruction of drainage systems and covering with native soil previously excavated from the trench, securing an insulation layer with soft soil.

Performance of tests, technical acceptance and commissioning operations

Obtaining of the permit to operate and formal handover of the pipeline for operation

Restoration of the site to its original condition:
- restoration of the initial topography,
- restoration of the original soil layer – spreading of the humus,
- reclamation of the area occupied for construction purposes.

Pipeline laying in the trench:
- laying the pipeline in a trench with the use of side cranes and joining individual pipeline sections together,
- as-built geodetic survey of the pipeline,
- partial backfill of the laid gas pipeline, reconstruction of drainage systems and covering with native soil previously excavated from the trench, securing an insulation layer with soft soil.

Marking of the pipeline route:
- marking with pegs, which will remain the only visible trace of the pipeline route between surface facilities.

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3.1. Safety of the national transmission network
3.2. GAZ-SYSTEM Branches – responsibility and safety in the field
3.3. Research and development for safety and quality of services
3.4. Environmental care

Smooth operation of the transmission system
3

Safety of SERVICES

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Smooth operation of the transmission system
One of GAZ-SYSTEM’s priorities as a company responsible for the transmission of gas through high-pressure pipelines is to ensure safe transport of this fuel. GAZ-SYSTEM is committed to ensuring the safety of the infrastructure under its control. The strategic character of the undertaken investments as well as the specific nature of the company’s operations require the maintenance of the most stringent standards in this respect.

3. SAFETY OF SERVICES. SMOOTH OPERATION OF THE TRANSMISSION SYSTEM

The SESP procedures and instructions define operating principles for typical network activities from commissioning of infrastructure, through day-to-day operation, to the decommissioning of a transmission network facility.

An annual technical assessment report is prepared for each transmission network facility, based on the operational activities performed and the incidents that occurred in the transmission network during the year. Depending on its results, a given item is recommended for further operation, repair, modernisation or decommissioning.

A key network figure is:
- 10,743 km length of transmission network
- 848 gas stations
- 34 system points
- 15 compressor stations

3.1. Safety of the national transmission network

GAZ-SYSTEM’s operational crews perform scheduled maintenance activities in the transmission network, including:

- inspections
- maintenance procedures
- checks
- measurements
- specialist maintenance inspections.

Their frequency is specified in the Transmission Network Operation and Maintenance Manual (SESP), which ensures that proper technical condition and operational safety of the transmission network is continuously maintained.

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- continued operation
- overhaul
- upgrading
- decommissioning.

The application of SESP in practice enables:

- early identification of potential disturbances
- continuity of the operation of the transmission
- implementation of the necessary preventive measures
- safe operation of the transmission network.

Gas Emergency Service

The objective of the 24/7 Gas Emergency Unit (GEU) is to respond to any signals concerning network failure incidents within the facilities operated by the company and reported by monitoring systems, the public, local administration, the Police and/or Fire Service. The core responsibilities of the GEU include: failure handling and recovery, elimination of other risks in the transmission system, implementation, as well as the supervision and safety protection of repair, investment and operation tasks within the transmission system. The performance of the GEU is subject to evaluation. For example, in 2018 the Gdańsk unit of the GEU received a high rating in the test of preparedness for carrying out tasks in emergency situations. The test was conducted within the framework of the Business Continuity Management System implemented in GAZ-SYSTEM and in accordance with the requirements of the ISO 22301 standard.

24-hour transmission network monitoring

The safe operation of the transmission network is ensured by an efficient supervision and control system. The operating parameters of the transmission network in terms of gas flow and pressure are subject to continuous 24/7 remote monitoring (24 hours) by the services responsible for system operation, i.e. the Central Gas Dispatch Centre and its Regional Branches.
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Technology for safety

GAZ-SYSTEM applies modern and proven technologies in the construction of gas pipelines, using both high-quality materials and state-of-the-art network safety and monitoring systems. The steel pipes have increased wall thickness and strength and are protected by special insulation and anti-corrosion systems. Implementation of such solutions means greater safety and reliability of network operation.

Certification and approval system

The individual components of the constructed facilities are subject to detailed testing and inspections upon the acceptance and commissioning of the installation. They carry all necessary certificates and approvals in respect of durability of materials and the suitability for use under pressure. In 2018, the company retained the ISO quality system certificate in welding (PN-EN ISO 3834-2:2007).

Cathodic protection

Thanks to cathodic protection, the transmission network is safeguarded against adverse effects of the external environment. In addition, the system helps locate defects in the insulation coating, identify the corrosive activity of the environment and undertake efforts to eliminate the causes of potential hazards.

Pipeline pigging

Pig inspections are carried out in order to clean gas pipelines, check their internal geometry, survey their foundations and identify defects and anomalies that may occur in the pipeline wall. The data thus obtained help assess the technical condition of the gas pipeline, which in turn allows the detection of corrosion-induced, metallurgical and material defects.

Testing and supervision

Before obtaining a permit to operate, the pipeline is subject to pressure testing for strength and tightness, as well as special tests (the so-called stress tests), carried out with involvement from the Office of Technical Inspection (UDT), as well as commissioning and final acceptance after the initial gas fill and start-up. The State Sanitary Inspectorate and the National Fire Service issue their respective opinions on the compliance of the gas pipeline project. The permit to operate the pipeline is issued by the relevant Voivode, following an inspection by the Voivodeship Construction Supervision Inspectorate.

TGPS operation and maintenance

GAZ-SYSTEM is also responsible for the operation of the line part of the Yamal-Europe transit gas pipeline located on the territory of Poland. The work, which mostly involves the company’s own resources, is based on an agreement with EuroPipe GAZ S.A, and is carried out by the operational crews of the Rembelszczyzna and Poznań Branches.

Upgrading and maintenance of the transmission network

In 2018, 417 tasks were carried out under the maintenance plan, 132 of which were completed. A total of PLN 55.6 million was allocated for this purpose. Additionally, the investment plan in the safety area featured 453 tasks, of which 102 were completed. PLN 119.4 million was allocated for this purpose.

Cooperation and education

Ensuring the efficiency and reliability of transmission systems is a priority for GAZ-SYSTEM. The company cooperates with all the services in order to comprehensively ensure the safety of people living in the vicinity of the transmission infrastructure. A practical element of this cooperation involves joint emergency drills and workshops, training sessions and conferences on the security of the transmission network. Moreover, as part of the OHS Academy, an educational campaign conducted by GAZ-SYSTEM, 72 meetings were held with representatives of the fire service, which included lectures with the commanding staff, technical visits and fire drills. The purpose was to familiarise the employees of the State Fire Service with the specific fire protection requirements of GAZ-SYSTEM facilities, in particular with respect to the combustibility and volatility of natural gas and the methods of conducting effective and efficient rescue operations in an emergency.
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Transmission Network Safety Enhancement Programme

In 2018, GAZ-SYSTEM adopted a programme to improve the safety of its transmission network. Its main objectives include:

- increasing the frequency of aerial inspections of pipeline routes;
- more efficient recording of violations of gas pipeline control zones and other incidents adversely affecting the gas pipeline safety;
- providing operating crews with additional inspection equipment and means of communication;
- improving the Risk and Reliability Assessment System;
- proposals for legal changes to facilitate the safe use of gas pipelines, their repairs and procedures in the event of control zone violations.

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Pig inspections are carried out in order to clean gas pipelines, check their internal geometry, survey their foundations and identify defects and anomalies that may occur in the pipeline wall. The data thus obtained help assess the technical condition of the gas pipeline, which in turn allows the detection of corrosion-induced, metallurgical and material defects.

Testing and supervision

Before obtaining a permit to operate, the pipeline is subject to pressure testing for strength and tightness, as well as special tests (the so-called stress tests), carried out with involvement from the Office of Technical Inspection (UDT), as well as commissioning and final acceptance after the initial gas fill and start-up. The State Sanitary Inspectorate and the National Fire Service issue their respective opinions on the compliance of the gas pipeline project. The permit to operate the pipeline is issued by the relevant Voivode, following an inspection by the Voivodeship Construction Supervision Inspectorate.

TGPS operation and maintenance

GAZ-SYSTEM is also responsible for the operation of the line part of the Yamal-Europe transit gas pipeline located on the territory of Poland. The work, which mostly involves the company’s own resources, is based on an agreement with Eurotransgas, and is carried out by the operational crews of the Rembelszczyzna and Poznań Branches.

Technology for safety

CRC Evans welding technology

This modern, fully automated welding technology was used for the first time during the construction of the Strachocina-Pogórska Wola gas pipeline in 2018. Its advantages include a much faster welding process and almost four-fold reduction in the amount of additional welding material in comparison to standard solutions.

Certification and approval system

In 2018, 417 tasks were carried out under the maintenance plan, 132 of which were completed. A total of PLN 55.6 million was allocated for this purpose. Additionally, the investment plan in the safety area featured 453 tasks, of which 102 were completed. PLN 119.4 million was allocated for this purpose.

Cooperation and education

Ensuring the efficiency and reliability of transmission systems is a priority for GAZ-SYSTEM. The company cooperates with all the services in order to comprehensively ensure the safety of people living in the vicinity of the transmission infrastructure. A practical element of this cooperation involves joint emergency drills and workshops, training sessions and conferences on the security of the transmission network. Moreover, as part of the OHS Academy, an educational campaign conducted by GAZ-SYSTEM, 72 meetings were held with representatives of the fire service, which included lectures with the commanding staff, technical visits and fire drills. The purpose was to familiarise the employees of the State Fire Service with the specific fire protection requirements of GAZ-SYSTEM facilities, in particular with respect to the combustibility and volatility of natural gas and the methods of conducting effective and efficient rescue operations in an emergency.
People and local communities are at the heart of our business, and this is not just a slogan. In addition to the procedures, equipment and monitoring itself, the human operator remains the crucial element of our gas network safety system. We do our utmost to ensure that our employees are well trained, aware of the existing risks and their individual responsibilities. GAZ-SYSTEM has training systems in place, from the units responsible for OHS to the foremen or managers of field units, who send people to perform specific operations on a daily basis. These people must be equipped with the latest equipment, but that is hardly all there is to it. In order to carry out their duties properly, they must also work together with the State Fire Service, the police and the Government Security Centre. These are our partners who provide us with the latest information on how and against what risks to protect our network. We strive to work in close partnership with the emergency response services in order to arrive at the best possible scenarios of joint action. Practical cooperation is indispensable, as it is difficult to replace experience and out-of-office work with computer simulations. I am glad that we were able to show our skills and equipment. They allow us to protect ourselves against failures and carry out our operations in a way that ensures the safety that is the basis of our business, and this is not just a slogan. In addition to the training systems, it is also important for the branches and Field Operating Units to provide us with the latest information on how to protect our network. We strive to work in close partnership with the State Fire Service and the Police, the operations of which are crucial for the safety of our gas transmission network. GAZ-SYSTEM has competent human resources, expertise and experience to ensure the safety of facilities, employees and communities living in the vicinity of the infrastructure serviced by the company. Great emphasis is placed on improving employee qualifications, quality of procedures and aligning internal company regulations to current requirements. A special function in this respect is played by the branches and Field Operating Units. The employees involved are appropriately qualified and authorised to supervise, coordinate and perform construction and installation tasks and work related to repairs and investments on the gas network, including construction of transmission network sections, connection works and emergency repairs. Some of the tasks are performed by the company’s in-house personnel – mainly by teams from the Gas Technical Emergency Service and Field Service Units, working in liaison with employees from the branches’ technical departments.

The safety of the entire transmission system is the foundation of GAZ-SYSTEM’s operations. GAZ-SYSTEM has competent human resources, expertise and experience to ensure the safety of facilities, employees and communities living in the vicinity of the infrastructure serviced by the company. Great emphasis is placed on improving employee qualifications, quality of procedures and aligning internal company regulations to current requirements. A special function in this respect is played by the branches and Field Operating Units. The employees involved are appropriately qualified and authorised to supervise, coordinate and perform construction and installation tasks and work related to repairs and investments on the gas network, including construction of transmission network sections, connection works and emergency repairs. Some of the tasks are performed by the company’s in-house personnel – mainly by teams from the Gas Technical Emergency Service and Field Service Units, working in liaison with employees from the branches’ technical departments.

Selected events:

- 13 September 2018, Kraków – a workshop for fire brigade and police units with GAZ-SYSTEM specialists. The exercises were attended by representatives of the Government Centre for Security and crisis management teams from the Małopolska region. The event was held under the honorary patronage of the Minister of the Interior and Administration.
- September 2018, training on the operation of the gas transmission network targeted at the commanders of rescue and firefighting units of the State Fire Service from Opole and Silesian Voivodeships.
- 24 October 2018, Poznań – Safety of gas transmission pipelines in Poland, a conference on the standards for gas transmission pipeline network management and proven technological solutions used to ensure network safety, held in conjunction with the State Fire Service and the Office of Technical Inspection.
- 25 and 30 October 2018, Stalowa Wola – a series of training sessions on technology solutions to ensure the safety of network operation and drills for fire service and GAZ-SYSTEM technical crews.

3.2. GAZ-SYSTEM Branches – responsibility and safety in the field

GAZ-SYSTEM has competent human resources, expertise and experience to ensure the safety of facilities, employees and communities living in the vicinity of the infrastructure serviced by the company. Great emphasis is placed on improving employee qualifications, quality of procedures and aligning internal company regulations to current requirements. A special function in this respect is played by the branches and Field Operating Units. The employees involved are appropriately qualified and authorised to supervise, coordinate and perform construction and installation tasks and work related to repairs and investments on the gas network, including construction of transmission network sections, connection works and emergency repairs. Some of the tasks are performed by the company’s in-house personnel – mainly by teams from the Gas Technical Emergency Service and Field Service Units, working in liaison with employees from the branches’ technical departments.

The safety of the entire transmission system is the foundation of GAZ-SYSTEM’s operations.

In 2018, 48 technical study visits to GAZ-SYSTEM’s facilities with Fire Brigade units and 24 fire drills were carried out with a total number of 1706 attendees involved.

Good practice

Thanks to cooperation between GAZ-SYSTEM’s Tarnów Branch (technology, structural engineering and construction) and Rzembołuczyna Branch (control and measurement instrumentation and automation, electrical systems), designs of typical measurement stations were developed, featuring universal and replicable solutions. The process systems of the stations were adapted to fit gas meters of various types and sizes operating in U1 and U2 modes. These standardised designs have been approved by the Office of Technical Inspection and their application significantly accelerates the engineering phase, which is limited to the adaptation of a typical facility to specific field conditions, and obtaining administrative approvals. These time savings are particularly important when it comes to urgent modernisation and timely completion of connection agreements.
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Coordination of emergency response to the gas pipeline failure in Murowana Goślina

On the night of 26 January 2018, a gas leakage from a high-pressure gas pipeline occurred at the Poznań-Rogoźno section in Murowana Goślina, followed by a gas combustion incident. On the same day, the section of the affected gas pipeline was separated and secured by GAZ-SYSTEM crews. An immediate decision was made to provide alternative means to restore gas supplies to consumers. For this purpose, LNG facilities were connected to two shut-down stations. The company was in ongoing contact with the services responsible for safety and assistance to the affected individuals, as well as with administrative and local government authorities. The Management Board of GAZ-SYSTEM set up a Crisis Management Team to coordinate actions related to the situation. Representatives of the company immediately arrived at the accident site. GAZ-SYSTEM also immediately activated two emergency phone lines which could be used by the affected parties (in matters concerning the removal of the failure, organisational matters, possible assistance). The victims were provided with psychological assistance at the Social Welfare Centre in Murowana Goślina.

As soon as possible, GAZ-SYSTEM initiated the process of compensating the victims for their losses, covering the majority of the damages incurred. The victims were provided with special support from the company and its insurer. In addition, GAZ-SYSTEM also engaged in charitable and sponsoring activities. The local community was given, among other things, donations to those most affected, the Voluntary Fire Brigade units in Murowana Goślina, and a donation for improving the condition of local roads (a total of PLN 300,100). The works related to restoring normal gas flow via the pipeline lasted from 26 January to 2 February 2018.

GAZ-SYSTEM employees also collected basic necessities (cleaning products, clothing, etc.) for three most affected families.

Gas Quality Measurement Laboratory (LPJG)

LPJG’s research areas include analysis of gas composition, including analysis of sulphur compounds, water and hydrocarbons, temperature and dew point measurements; tests carried out in the operating environment, including noise, vibrations with local and general effects on human body, LPG also performs measurement and analytical inspections of process gas chromatographs and conducts training programmes on their operation and maintenance, as well as on equipment for measuring water dew point. In August 2018, the Polish Centre for Accreditation confirmed the extended competence of the Gas Quality Measurement Laboratory in Pogórkas Wola to measure noise emissions to the environment from installations, equipment and industrial plants. These tests help determine whether the noise levels emitted by the industrial infrastructure meet the acceptable legal standards, which is important from the perspective of the needs of the neighbouring communities.

Gas Meter Calibration Laboratory (LWG)

In December 2018, the Gas Meter Calibration Laboratory in Hołowczyce became an accredited Calibration Laboratory (No. AP 183) for calibration of turbine gas meters, following a relevant decision of the Polish Centre for Accreditation. The calibration of gas meters with natural gas under high pressure means an increased accuracy of gas fuel quantity measurement, thus offering enhanced reliability in settlements with consumers at the entry and exit points of the transmission network, as well as an improved transmission system balancing.

Our innovative workstation allows us to carry out various tests of measuring devices, as well as research and development activities in collaboration with external institutions, equipment manufacturers and research centres. The laboratory in Hołowczyce is Poland’s only facility that performs calibration of gas meters using high-pressure natural gas.

CNG technology development

In 2018, a study was undertaken to investigate the options for the development of CNG (Compressed Natural Gas) supply infrastructure using the assets of GAZ-SYSTEM. Among other things, the possibility of leading CNG tank trucks enabling the transport of large volumes of CNG to end consumers was analysed. Several variants of business models for the provision of this service were defined.

Waste energy management

Expert studies conducted in 2017 demonstrated that it is feasible to build systems for the recovery of waste energy from flue gases at selected gas compressor stations. Based on these findings, in 2018, preliminary preparations were made to construct a pilot system consisting of a heat exchanger mounted on the exhaust stack of a motor compressor (with the possibility of further expansion to include additional components). The recovered energy will then be used for the central heating of the selected gas compressor station.

HYREADY project

Initial guidelines for adapting gas networks to accept mixtures of natural gas with hydrogen were developed (with particular emphasis on the impact of fluctuating hydrogen concentration in natural gas). The elements of gas systems that will need to be adapted or replaced were defined, depending on the concentration of hydrogen in the transmitted blend.

Recommendations on changing the existing procedures applied by the operators in order to reduce the negative impact of hydrogen on the transmission network were also developed. These will be successively supplemented with guidelines for inclusion of further elements of gas infrastructure, i.e. end-user equipment or gas compressor stations. The studies carried out as part of the project were based on existing publications. The HYREADY project, which is delivered in cooperation with an international group of 13 companies, concerns practical aspects of the use of hydrogen in transmission networks.

3.3. Research and development for safety and quality of services

The company pursued research and development projects with its own resources and in partnership with companies from the gas sector and external research and development organisations. GAZ-SYSTEM’s R&D activity also includes its laboratories, i.e. the Gas Quality Measurement Laboratory (LPJG) in Pogórkas Wola (Małopolskie Voivodeship) and the Gas Calibration Laboratory (LWG) in Hołowczyce (Małopolskie Voivodeship).

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### Gas Quality Measurement Laboratory (LPJG)

**GRI 203-1**

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**CNG technology development**

In 2018, a study was undertaken to investigate the options for the development of CNG (Compressed Natural Gas) supply infrastructure using the assets of GAZ-SYSTEM. Among other things, the possibility of loading CNG tank trucks enabling the transport of large volumes of CNG to end consumers was analysed. Several variants of business models for the provision of this service were defined.

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3.4. Environmental care

Ensuring environmental sustainability is a key issue in the context of the company’s investments, operation and maintenance of its gas infrastructure. The areas of environmental protection management are based on our proprietary system solutions which combine relevant good practices, modern methods, as well as the experience and expertise of our employees. The Environmental Management System for the transmission of natural gas is in place throughout the country.

Getting employees involved in pro-environmental initiatives, organizing training and ensuring the efficient flow of information about environmental activities.

Continuous compliance with the legislation in force in the area of environmental protection and ongoing identification of and adaptation of the business to new legal requirements.

All GAZ-SYSTEM investments are carried out in a sustainable manner so as to minimise the negative impact of the projects on the environment. Environmental decisions must be obtained for the majority of GAZ-SYSTEM’s projects prior to the commencement of construction works.

In 2018, such decisions were obtained for:
- the southern section of the Poland-Lithuania gas pipeline (Hołowczyce - Rudka Skroda)
- expansion of the Hołowczyce 2 gas compressor station
- Stage 6 of the Szczecin-Gdańsk gas pipeline (Reszki-Wiczlino)

In the course of its investment projects GAZ-SYSTEM generates an impact on protected areas. The length of the gas pipeline network passing through such areas totals 2469 km, which constitutes 22.33% of the entire transmission network. In order to obtain an environmental decision, inventories and natural valuations of the area where the intended project is to be developed are carried out. Additionally, at the construction stage, works are carried out under environmental supervision with the environmental impact of the investment also being monitored. In some cases, monitoring is also carried out at the post-completion stage, depending on the conditions resulting from the decision on environmental conditions for a particular project.

GAZ-SYSTEM’s environmental goals are:
- improved efficiency of environmental management
- continued improvement of the environmental impact of implemented processes (e.g. investments, maintenance, operation, procurement)
- mitigation of negative impact on the environment, especially in waste management, water and sewage management, emission of pollutants into the air, noise emissions
- protection of plant and animal species
- rational consumption of utilities and resources
- full compliance with binding legal requirements
- raising environmental awareness among employees

The above objectives are pursued by:
- using best available technologies to achieve a high level of protection of the environment as a whole;
- reduction in the quantity of waste produced
- monitoring of water, air and soil pollution and contamination and ensuring compliance with permissible emission standards
- mitigation of noise emissions to an acceptable level with the use of best available technologies
- restoring elements of the environment to a proper condition

GRI 102-11

In 2018, as part of the international European Gas Research Group (GERG), transmission system operators from Spain, Belgium, the Netherlands, France, Italy and Poland signed an agreement on the assessment of the level of emissions from their transmission systems. The project aims to find the best methods of detecting and measuring volatile emissions from natural gas transmission systems. It also covers the testing of selected solutions and the preparation of guidelines for the development of a relevant European standard. The development of the standard will allow for realistic and uniform assessment of transmission system emissions by all European operators.

GRI 304-1

In 2018, such decisions were obtained for:
- the southern section of the Poland-Lithuania gas pipeline (Hołowczyce - Rudka Skroda)
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- protection of plant and animal species
- rational consumption of utilities and resources
- full compliance with binding legal requirements
- raising environmental awareness among employees
- mitigation of negative impact on biodiversity
- mitigation of noise emissions to an acceptable level with the use of best available technologies
- restoring elements of the environment to a proper condition
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4.1. Key objectives of OHS management
4.2. Safety and continuity of operations
4.3. Risk management
4

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4.3. Risk management
4. Safe workplace

Ensuring employee safety is a fundamental duty of an employer, which translates into the quality, comfort and general work environment. GAZ-SYSTEM’s occupational health and safety management system operates under non-certified European occupational health and safety management standards. The solutions are adapted to the legal requirements and needs of the company.

4.1. Key objectives of occupational health and safety management:

- continuous prevention of incidents and mitigation of their possible consequences
- raising employee awareness of safe-work principles
- control to ensure compliance with internal work-safety rules
- strict compliance with the applicable OHS legislation
- improving employee qualifications in OHS
- regular participation in OHS knowledge and experience exchange with other companies
- ensuring the application of the latest achievements of science and technology in the area of improvement of working conditions

4.2. Safety and continuity of operations

The main tasks of the committee include:

- review of working conditions
- periodic assessment of health and safety at work
- providing advice on measures taken by the employer to prevent accidents at work and occupational diseases
- putting forward proposals for the improvement of working conditions

Hazards identification, risk assessment and accident investigation

In order to minimise the risk of accidents, employees are trained on occupational safety rules, while each job position is subject to a comprehensive occupational risk assessment. This is carried out in conjunction with employee representatives, the Social Labour Inspectorate and an occupational physician. In addition to the complementary workplace risk assessment, an important role of the OHS service is to constantly strive to improve working conditions. The company has procedures in place to minimise risks to the health and life of its employees. Gathering information related to accident hazards allows for appropriate response prior to their occurrence, while their analysis supports the design of effective accident prevention measures.

In 2018, 66 accident-related events were reported in GAZ-SYSTEM, of which 28 were classified as accidents at work and 38 as other incidents (accident-related incidents, potential accident occurrences). With a view to meeting the needs related to the specific nature of work in places where explosive gas conditions may occur, a series of trainings was conducted at all branches of the company in 2018. These were addressed to all employees whose concerned with gas network works.

Campaign: ‘Let’s talk about safety at work’.

As part of the initiative, a series of sessions was held which involved the company’s OHS and Fire Departments and employees at all company branches, 11 Field Operation Units and three compressor stations. The purpose these meetings was to discuss important areas of occupational health and safety, to exchange experiences, observations and conclusions that help improve the company’s occupational safety culture.

Campaign: ‘First aid is easy’

This initiative included workshops on first aid and prevention of work-related accidents. The workshops were complemented by educational materials published in the company newsletter ‘GAZeta’. In addition, 35 employees took part in the 7th edition the GAZ-SYSTEM President Cup First Aid Championship.

Training: ‘Systems and equipment for use in explosion-prone areas’.

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Good practice

The ‘Safe LNG’ campaign, which was jointly developed by GAZ-SYSTEM and Polskie LNG companies. Included: meetings with residents, local authorities and students, as well as training sessions conducted by the Fire Service.

4.3. Risk management

GAZ-SYSTEM operates a corporate risk management system based on the ISO 31000 standard. In 2018, an assessment of the maturity of risk management in the company was carried out, based on the Risk Maturity Model (RMM), including the capability level to meet the objectives, proactivity and uniformity of organization. The key risks that may affect the company are closely related to its mission and development plans. The pursuit of those goals is supported by risk analysis that accompany the making of vital decisions, and by ongoing process risk management, including:

- transmission continuity assurance
- operational of the transmission system
- project management
- information security
- safe working conditions

Information Security Management System (ISMS)

In 2018, the company conducted numerous tests of response to emergency and crisis scenarios in the area of infrastructure protection, ICT communication and operational cooperation with security services, which demonstrated a high level of emergency response readiness to gas transmission disruptions. On 25 July 2018, the Business Continuity Forum was established, as a team of professionals in charge of defining objectives and making key decisions regarding the functioning of the BCMS, as well as BCMS Coordinators and their deputies, responsible for the implementation of the business continuity system guidelines. In 2018, both systems were subject to an external audit by an accredited certification body (BSI GROUP POLSKA Sp. z o.o.), following which the company retained its official certificates of compliance (ISO 27001:2013 and ISO 22301:2013).

Business Continuity Management System (BCMS)

In 2018, work on the BCMS system was geared towards practical verification of its performance. The company conducted numerous tests of response to emergency and crisis scenarios in the area of infrastructure protection, ICT communication and operational cooperation with security services, which demonstrated a high level of emergency response readiness to gas transmission disruptions. On 25 July 2018, the Business Continuity Forum was established, as a team of professionals in charge of defining objectives and making key decisions regarding the functioning of the BCMS, as well as BCMS Coordinators and their deputies, responsible for the implementation of the business continuity system guidelines. In 2018, both systems were subject to an external audit by an accredited certification body (BSI GROUP POLSKA Sp. z o.o.), following which the company retained its official certificates of compliance (ISO 27001:2013 and ISO 22301:2013).
4. Safe workplace

Ensuring employee safety is a fundamental duty of an employer, which translates into the quality, comfort and general work environment. GAZ-SYSTEM’s occupational health and safety management system operates under non-certified European occupational health and safety management standards. The solutions are adapted to the legal requirements and needs of the company.

4.1. Key objectives of occupational health and safety management:

- continuous prevention of incidents and mitigation of their possible consequences
- raising employee awareness of safe-work principles
- control to ensure compliance with internal work-safety rules
- strict compliance with the applicable OHS legislation
- improving employee qualifications in OHS
- regular participation in OHS knowledge and experience exchange with other companies
- ensuring the application of the latest achievements of science and technology in the area of improvement of working conditions

The main tasks of the committee include:

- review of working conditions
- periodic assessment of health and safety at work
- providing advice on measures taken by the employer to prevent accidents at work and occupational diseases
- putting forward proposals for the improvement of working conditions

4.2. Safety and continuity of operations

GAZ-SYSTEM operates two systems certified for compliance with international ISO standards:

- Information Security Management System (ISMS) complying with ISO 27001
- Business Continuity Management System (BCMS) compliant with ISO 22301

Good practice

The ‘Safe LNG’ campaign, which was jointly developed by GAZ-SYSTEM and Północne LNG companies, included: meetings with residents, local authorities and students, as well as training sessions conducted by the Fire Service.

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- transmission continuity assurance
- operation of the transmission system
- project management
- information security
- safe working conditions.

Campaign: ‘Let’s talk about safety at work’.

As part of the initiative, a series of sessions was held which involved the company’s OHS and Fire Departments and employees at all company branches, 11 Field Operation Units and three compressor stations. The purpose of these meetings was to discuss important areas of occupational health and safety, to exchange experiences, observations and conclusions that help improve the company’s occupational safety culture.

Campaign: ‘First aid is easy’

This initiative included workshops on first aid and prevention of work-related accidents. The workshops were complemented by educational materials published in the company newsletter ‘GAZela’. In addition, 35 employees took part in the 7th edition the GAZ-SYSTEM President Cup First Aid Championship.

Training: ‘Systems and equipment for use in explosion-prone areas’.

With a view to meeting the needs related to the specific nature of work in places where explosive gas conditions may occur, a series of trainings was conducted at all branches of the company in 2018. These were addressed to all employees whose concerned with gas network works.

Information Security Management System (ISMS)

2018 saw a thorough update and reconstruction of the system, adjusting its formula to the new structure of the company and new challenges.

Business Continuity Management System (BCMS)

In 2018, work on the BCMS system was geared towards practical verification of its performance. The company conducted numerous tests to response to emergency and crisis scenarios in the area of infrastructure protection, ICT communication and operational cooperation with security services, which demonstrated a high level of emergency response readiness to gas transmission disruptions. On 25 July 2018, the Business Continuity Forum was established, as a team of professionals in charge of defining objectives and making key decisions regarding the functioning of the BCMS, as well as BCMS Coordinators and their deputies, responsible for the implementation of the business continuity system guidelines. In 2018, both systems were subject to external audit by an accredited certification body (BSI GROUP POLSKA Sp. z o.o.), following which the company retained its official certificates of compliance ISO/IEC 27001:2013 and ISO/IEC 22301:2013.

Sustainable Development Report I Safe workplace. Risk management
357

number of participants in workshops on plants and equipment operated in explosion-prone areas
357

number of participants in workshops on plants and equipment operated in explosion-prone areas
5

Responsible growth and cooperation with local communities

5.1. Job valuation and personal development interview
5.2. Examples of corporate good practice
5.3. Acting together for the benefit of others
5.4. Communication along pipeline project routes
5

EFFECTIVE management

5.1. Job valuation and personal development interview
5.2. Examples of corporate good practice
5.3. Acting together for the benefit of others
5.4. Communication along pipeline project routes

Responsible growth and cooperation with local communities
GAZ-SYSTEM Group follows a structured human resources policy focused on professional development. The policy is based on the principle that the employees are the greatest source of potential for any company. Their knowledge, skills, quality of work and commitment determine the growth and competitive edge of the companies they work for. The belief that the harmonious implementation of the strategy, organizational culture, structure, processes and projects implemented by the organization directly affects the ability of the company to achieve its goals, helps to build a friendly workplace that is conducive to the atmosphere of cooperation and willingness to share knowledge. The responsible approach of GAZ-SYSTEM to human resources management is reflected in the definition of transparent and non-discriminatory rules with respect to e.g. hiring, employment, promotion and professional development of the employees. All the employees, regardless of their working time and type of contract are covered by the Collective Labour Agreement of 8 March 2007 for the employees of Gas Transmission Operator GAZ-SYSTEM S.A. The document sets forth the employee entitlements under the generally applicable labour regulations and additional benefits offered by the company. Any matters concerning employment and major organisational changes are subject to consultations with social partners.

5. EFFECTIVE MANAGEMENT. RESPONSIBLE GROWTH AND COOPERATION WITH LOCAL COMMUNITIES

5.1. Job valuation and personal development interview

In 2018, GAZ-SYSTEM undertook a process of job valuation to align the remuneration system within the company and to build a transparent list of job positions and compensation schedule. The project improved the company’s competitive position on the market and led to the development of an internal compensation standard. Following the evaluation of job positions, new development and promotion prospects opened were opened for employees. The next stage in the development of the company’s HR processes was the launch of the so-called personal development interview scheme. The pilot of this project was held in 2017 at the Gdańsk branch, and was rolled out to all organisational units in 2018. The personal development interview is an annual meeting between an employee and his/her superior, at which a plan for strengthening his/her competences and optimal directions of his/her professional development are jointly defined, taking into account the company’s needs and available opportunities.

5.2. Examples of corporate good practice

Blood donation campaign

GAZ-SYSTEM joined the National Energy Industry Blood Donation Effort ‘A Drop of Energy for Independence’. GAZ-SYSTEM was among the 13 companies which, in the year of the 100th Anniversary of Independence, joined the blood donation effort to support local blood banks under the slogan ‘A drop of Energy for Independence’. The event was held under the honorary patronage of the Ministry of Energy and the Ministry of Health.

28 and 29 October 2018 saw GAZ-SYSTEM and Polskie LNG employees attend the National Energy Industry Blood Donation Effort, as part of which a total of 14 litres of blood was collected. 7 litres were donated by employees in a special mobile blood donation station in Warsaw, while 9 litres came from Polskie LNG and GAZ-SYSTEM employees at the LNG terminal, where a blood collection point was provided on the premises of the Świnoujście State Fire Service.

Photographic competition

The 2018 edition of the ‘GAZ-SYSTEM for Nature’ eco-themed photo competition was held, as part of which 13 photos with the highest number of employees’ votes were selected to illustrate the company’s official 2019 wall calendar.

Pipe laying landscape

Karolina Talaśka, Poznań Branch

It’s not always plain sailing Gdańsk

Arkadiusz Furmankiewicz, Gdańsk Branch

GAZ-SYSTEM for Nature ecological photographic contest

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Exchange of Invention and Improvement Ideas

13 innovators joined the first edition of the company’s ‘Exchange of Invention and Rationalisation Ideas’. In total, 21 proposals for inventions and improvements were submitted relating to various areas of GAZ-SYSTEM’s activity. The largest groups included ideas concerning transmission system operation and work organisation improvement.

In September 2018, a 5-strong team representing GAZ-SYSTEM participated in 11th edition of the Tour de Gas, an international cycling race organised by the Slovakian transmission operator Eustream a.s.

Education

The company granted its support to:
- young people studying to become gas technicians (in vocational schools under the patronage of GAZ-SYSTEM),
- organisations working for science and education – in respect of organisation of workshops on: volunteering, journalism, social sensitivity for 87 children from 4 educational care centres; institutions involved in education and preserving historical remembrance.

Charity initiatives

Support for people suffering from difficult living conditions and people with disabilities was provided through non-governmental organisations, including food supplies, heating fuel, repairs of gas and central heating systems at those locations where works are carried out, as well as providing support to the blind and visually impaired.

Natural Energy Fund

The Natural Energy Fund is a grant competition which has been organised by GAZ-SYSTEM for nine years now. Each year sees schools, nurseries, foundations and associations, municipalities and entire cities apply for funding to realise their ideas for saving the natural environment. The competition is held in five selected provinces. The social partner of its 9th edition was the “Za górami, za lasami” Foundation.

- Number of competition entries: 112
- Number of beneficiaries: 22
- Total value of grants: PLN 218,787.03

Sponsorship activities

Sponsorship activities undertaken by GAZ-SYSTEM are consistent with the plans set out in the Corporate Strategy until 2025, the Company’s Corporate Image Policy and the Principles of Sponsorship Activities in the GAZ-SYSTEM Group, which are based on ‘Good Practices Regarding Sponsorship Activities by Companies with Treasury Shareholding’. Their objectives include:

- Establishing the image of the company as an enterprise responsible for the energy security of the country
- Creating the image of a credible and reputable employer
- Creating the image of an Industry expert
- Building the awareness of the need to develop gas infrastructure
- Building positive relations with stakeholders
- Winning sustainable public acceptance for undertaken investment projects

In 2018, GAZ-SYSTEM sponsored 153 projects, including:

- 52 projects classified as community projects: day events, festivals, picnics, town and commune festivals, events bringing together local communities
- 23 sporting projects: ping-pong tournament, running, cycling races, canoeing competitions, football tournaments for children and youth
- 43 cultural and arts projects: music events, dance events, music and film festivals
- 11 projects in the field of science and education: science picnics, events co-organised by universities
- 3 environmental initiatives: eco-song festival, ecological event for children
- 21 business and industry events

Sport and recreation

GAZ-SYSTEM sporting events

January: giant slalom ski championship

May: volleyball tournament

June: motorcycle rally

September: family cycling rally

September: sailing regatta

October: shooting tournament

5.3. Acting together for the benefit of others

Safety

Support was extended to 15 Voluntary Fire Brigade units carrying out emergency rescue activities, including life and property protection, prevention of fires and natural disasters, and ensuring the safety of local communities.

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Donations

Recipients of support in 2018 included institutions providing assistance and assistance to people suffering from cancer, social care institutions, social rehabilitation support, support for persons with disabilities, support for children suffering from difficult living conditions and organisations providing support to the blind and visually impaired.

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Good practice

‘A Useful Gift’

In March 2018, GAZ-SYSTEM delivered branches to the Warsaw Zoo after clearing the construction and assembly strip along the Żerań Canal and in its immediate vicinity. These branches were provided for the zoo’s herbivorous animals to bite on and play with.

www.youtube.com/watch?v=WgBg70hOgSM

Employee Volunteering

Initiative ‘GAZ-SYSTEM. Together for Nature’

346 volunteers – GAZ-SYSTEM employees – planted over 18 thousand trees. As tree seedlings require proper planting and subsequent care, the company undertook this task together with forest inspectorates from all over Poland. GAZ-SYSTEM celebrated the World Earth Day along with the employees of PGNiG TERMIKA and PG Wody Polskie by cleaning the banks of the Żerań Canal from the Żerań Port area to the border with Nieporęt commune. Three 7m³ containers were filled with waste. All three companies joined their efforts in an investment project to build a gas pipeline to connect the Rembelszczyzna compressor station to the Żerań CHP Plant.

Initiative: ‘GAZ-SYSTEM. Acting together for others’

373 employees took part in a Christmas collection of funds transferred to 6 care and educational institutions. The collected amount (PLN 29,017) was used by children’s homes to pay for Christmas gifts and parcels, winter holidays, excursions, visits to playrooms and bowling alleys. The fundraisers received invitations from children to celebrate Christmas Eve in a unique, seasonal atmosphere.

Local Initiatives Support Fund

GAZ-SYSTEM is committed to providing support for projects in education and science, sport, safety, culture and the arts, which serve the local communities in those locations where the company’s key investments are concentrated.

Objectives

- building positive relations with local communities
- gaining the approval of local communities for investment projects
- promoting the image of GAZ-SYSTEM as a responsible company engaged in the life of local communities

In 2018, 27 projects were implemented as part of the Fund, for a total value of over PLN 180,000.

<table>
<thead>
<tr>
<th>Tree Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak</td>
<td>1900</td>
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<tr>
<td>Elm</td>
<td>1000</td>
</tr>
<tr>
<td>Hawthorn</td>
<td>500</td>
</tr>
<tr>
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</tr>
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<tr>
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<tr>
<td>Hornbeam</td>
<td>1000</td>
</tr>
<tr>
<td>Fr</td>
<td>1000</td>
</tr>
<tr>
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</tr>
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Engaging in dialogue with local communities is equally important in the case of the Baltic Pipe project. GAZ-SYSTEM, striving for efficient and transparent communication of this investment project, hosted Poland’s first public hearing in Szczecin on 7 March 2018. The purpose of the meeting was to provide local communities, local authorities, NGOs and other stakeholders with information on the project and to enable them to submit comments at the earliest possible stage of its implementation. Similar public hearings had been held earlier in Denmark, Germany and Sweden.

In addition, in June and December 2018, public consultations were conducted in municipalities along the routes of the planned pipelines. The meetings were attended by large groups of stakeholders, including representatives of local communities, local governments, fishing organisations and owners of properties where the works are planned.
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### Communication of investments among local communities (organisation’s indicators). Source: GAZ-SYSTEM

<table>
<thead>
<tr>
<th></th>
<th>Poznań</th>
<th>Gdańsk</th>
<th>Wrocław</th>
<th>Gdańsk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of complaint</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of consultation meetings with local communities</td>
<td>165</td>
<td>500</td>
<td>444</td>
<td>159</td>
<td>160</td>
</tr>
<tr>
<td>Number of consultation meetings with representatives of local communities (meetings with local residents)</td>
<td>5</td>
<td>37</td>
<td>58</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Number of participants in consultation meetings</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of meetings with local authorities</td>
<td>53</td>
<td>35</td>
<td>13</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Workshops for Contractors and Subcontractors – design services and construction works</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Dialogue as part of the Baltic Pipe project**

- 4 PCI information meetings: Poland, Denmark, Germany and Sweden
- Public consultations in 23 municipalities along the route of the Goleniów-Lwówek gas pipeline and the gas pipeline connecting the offshore gas pipeline with the National Transmission System

### Communication activities concerning ongoing investment projects

Both at the design and construction stage, each investment project involves communication activities. These are aimed at reaching the local communities of those localities where a given project will be carried out.

- **3500** school starter kits
- **130** residents meetings with residents (nearly 1500 participants)
- **110** information and publicity stands
- **160** meetings with local authorities
- **160** posters, brochures and leaflets
- **66** educational workshops for young people in 48 schools (nearly 1600 students in total)
- **20** communication workshops
- **PLN 156 million** of local taxes transferred to communes in respect of infrastructure built

### Workshops for Contractors and Subcontractors – design services and construction works

- **7** workshops for Contractors and Subcontractors – design services and construction works
- **500** participants in consultation meetings
- **444** participants in consultation meetings
- **159** participants in consultation meetings
- **93** participants in consultation meetings
- **160** participants in consultation meetings
- **1521** participants in consultation meetings

### Number of complaints about failure to provide complete information

- **0** complaints in consultation meetings
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### Number of meetings with local authorities

- **53** meetings with local authorities
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- **58** consultation meetings with representatives of local communities (meetings with local residents)
- **26** consultation meetings with representatives of local communities (meetings with local residents)
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- **1** workshop for Contractors and Subcontractors – design services and construction works
- **0** workshops for Contractors and Subcontractors – design services and construction works
- **1** workshop for Contractors and Subcontractors – design services and construction works
- **4** workshops for Contractors and Subcontractors – design services and construction works
6.1. Highlights
6.2. Values
6.3. Corporate Governance
6.4. Supply chain
6.5. Development of the company
6.6. Stakeholder relations
6.7. Environmental care
6.8. Biodiversity
6.9. Economic performance
6.10. Scale of operations
6.11. Polskie LNG’s 2018 Events Calendar

Security of supply
Security of supply
Polskie LNG S.A. is the owner and the operator of the President Lech Kaczyński LNG Terminal in Świnoujście. The company was established in 2007 by Polskie Górnictwo Naftowe i Gazownictwo S.A. (PGNiG). On 8 December 2008, 100 percent of shares in Polskie LNG Sp. z o.o. were acquired by GAZ-SYSTEM S.A. On 1 January 2010, Polskie LNG Sp. z o.o. was transformed into a joint-stock company.

By virtue of a licence granted by the President of EOG for natural gas liquefaction and LNG regasification in liquefied natural gas facilities until 31 December 2030, Polskie LNG provides LNG re-gasification services (long-term and short-term), and the additional service is the reloading of LNG into road tankers.

As part of the regasification activity, the LNG Terminal Operator provides the following services to the user: LNG unloading from the tanker, process storage, LNG regasification, and delivery of natural gas to the exit point from the LNG terminal.

Polskie LNG is headquartered in Świnoujście at 1 Ku Morzu Street. The company also has an office in Warsaw. Polskie LNG does not have any subsidiaries, affiliates or joint ventures.

Polskie LNG has implemented and maintains an Integrated Management System for Quality and Environmental Management, Occupational Health and Safety, Information Security and Corporate Risk Management. Currently, the Integrated Management System comprises of certified quality, environmental and health and safety management systems. In addition, the Information Security Management System (ISO 27001) and the Corporate Risk Management System have also been integrated. (ISO 31000 - the system is not subject to certification).

Our corporate values:
- Accountability: we are committed to pursuing our objectives and tasks, taking in consideration of the interests of the company and its stakeholders
- Safety: we adhere to the highest internationally recognised procedures and standards
- Teamwork: we build bonds and undertake joint group activities towards shared goals within and among teams.
- Environment: we operate with respect for the natural environment while engaging in a broad range of environmental activities
- Development: we are committed to developing our capabilities to the benefit of our company and our employees.
- Effectiveness: we undertake initiatives and support activities to reach our goals.

Mission
The mission of the company is to actively support the security and reliability of LNG imports to the Polish and European gas system, and to cooperate with other parties in the development of competition on the gas market.

Vision
The vision of Polskie LNG is to become a significant player in the European natural gas transmission system in order to actively support the country’s energy security by ensuring the reliable operation of the LNG Terminal. The company will achieve the above owing to a competent team of people applying state-of-the-art standards and acting in accordance with the principles of sustainable development, as well as through the diversification of services and application of clean, safe and modern technologies.

6.3. Corporate Governance
The Management Board represents the company and conducts its business with respect to all court and out-of-court activities. The President of the Management Board and other members of the Management Board, including the Vice-President of the Management are appointed and dismissed by a resolution of the Supervisory Board or the General Shareholder Meeting.

The composition of the Management Board in the financial year 2018 changed as follows:
From 1 January 2018 to 12 March 2018, the Management Board of the company was composed of:
- Bartłomiej Stoma – Vice-President of the Management Board

From 13 March 2018 to 31 December 2018, the Management Board of the company was composed of:
- Paweł Jakubowski – President of the Management Board
- Bartłomiej Stoma – Vice-President of the Management Board

All changes in the composition of the Management Board were systematically entered in the National Court Register.

The Supervisory Board exercises constant supervision over the company’s activity across all areas. Members of the Supervisory Board are appointed and dismissed by the General Meeting by way of a resolution.

As at 31 December 2018, the Supervisory Board was composed of the following members:
- Izabella Łyś-Górzkowska – Chair of the Supervisory Board
- Artur Zawartko – Deputy Chair of the Supervisory Board
- Alicja Ostanek – Secretary of the Supervisory Board
- Krzysztof Jackowiak – Member of the Supervisory Board
- Marusz Krzeczka – Member of the Supervisory Board

In accordance with the company’s Quality Manual, which describes the Integrated Management System, the Management Board of Polskie LNG is responsible for setting the company’s business policy and defining (confirming) its strategic goals, as specified in the company’s strategy and other documents, and for translating them into functional objectives defined for particular organisational units. The Company’s Management Board is responsible for ensuring the availability of resources necessary to achieve the set objectives and to conduct Management Reviews as required by the Procedure: “Management Review Process at Polskie LNG S.A.”.
Polskie LNG S.A. is the owner and the operator of the President Lech Kaczyński LNG Terminal in Świnoujście. The company was established in 2007 by Polskie Górnictwo Naftowe i Gazownictwo S.A. (PGNiG). On 8 December 2008, 100 percent of shares in Polskie LNG Sp. z o.o. were acquired by GAZ-SYSTEM S.A. On 1 January 2010, Polskie LNG Sp. z o.o. was transformed into a joint-stock company.

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As part of the regasification activity, the LNG Terminal Operator provides the following services to the user: LNG unloading from the tanker, process storage, LNG regasification, and delivery of natural gas to the exit point from the LNG terminal.

Polskie LNG is headquartered in Świnoujście at 1 Ku Morzu Street. The company also has an office in Warsaw. Polskie LNG does not have any subsidiaries, affiliates or joint ventures.

### Mission

The mission of the company is to actively support the security and reliability of LNG imports to the Polish and European gas system, and to cooperate with other parties in the development of competition on the gas market.

### Vision

The vision of Polskie LNG is to become a significant player in the European natural gas transmission system in order to actively support the country's energy security by ensuring the reliable operation of the LNG terminal. The company will achieve the above owing to a competent team of people applying state-of-the-art standards and acting in accordance with the principles of sustainable development, as well as through the diversification of services and application of clean, safe and modern technologies.

### Values

Polskie LNG has implemented and maintains an Integrated Management System for Quality and Environmental Management, Occupational Health and Safety, Information Security and Corporate Risk Management. Currently, the Integrated Management System comprises of certified quality, environmental and health and safety management systems. In addition, the Information Security Management System (ISO 27001) and the Corporate Risk Management System have also been integrated. (ISO 31000 - the system is not subject to certification).

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- **Safety**: we adhere to the highest internationally recognised procedures and standards
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- **Environment**: we operate with respect for the natural environment while engaging in a broad range of environmental activities
- **Development**: we are committed to developing our capabilities to the benefit of our company and our employees.
- **Effectiveness**: we undertake initiatives and support activities to reach our goals.

### Code of Ethics

Polskie LNG’s Code of Ethics is based on the core values of the company. They are the foundation for the development of a model of competence and standards of employee behaviour on the business market, in the natural and social environment, as well as in employer-employee relations.

The Code explicitly states that the company’s policy is based on equal opportunities, regardless of race, nationality, gender, sexual orientation, degree of fitness and age. The company has implemented a procedure to counteract mobbing, discrimination and sexual exploitation. A union representative and an anti-mobbing committee were appointed, whose task is to collect data on possible manifestations of mobbing or sexual harassment and to undertake all necessary actions to counteract such behaviours.

### Corporate Governance

The Management Board represents the company and conducts its business with respect to all court and out-of-court activities. The President of the Management Board and other members of the Management Board, including the Vice-President of the Management are appointed and dismissed by a resolution of the Supervisory Board or the General Shareholder Meeting.

The composition of the Management Board in the financial year 2018 changed as follows:

From 1 January 2018 to 12 March 2018, the Management Board of the company was composed of:
- Bartłomiej Słoma – Vice-President of the Management Board
- Paweł Jakubowski – President of the Management Board
- Baranowicz Słoma – Vice-President of the Management Board

All changes in the composition of the Management Board were systematically entered in the National Court Register. The Supervisory Board exercises constant supervision over the company’s activity across all areas. Members of the Supervisory Board are appointed and dismissed by the General Meeting by way of a resolution.

As at 31 December 2018, the Supervisory Board was composed of the following members:
- Izabella Kysińska – Chair of the Supervisory Board
- Artur Zawartko – Deputy Chair of the Supervisory Board
- Alicja Orłowska – Secretary of the Supervisory Board
- Krzysztof Jackowski – Member of the Supervisory Board
- Mateusz Kieferling – Member of the Supervisory Board

In accordance with the company’s Quality Manual, which describes the Integrated Management System, the Management Board of Polskie LNG is responsible for setting the company’s business policy and defining (confirming) its strategic goals, as specified in the company’s strategy and other documents, and for translating them into functional objectives defined for particular organisational units. The Company’s Management Board is responsible for ensuring the availability of resources necessary to achieve the set objectives and to conduct Management Reviews as required by the Procedure: “Management Review Process at Polskie LNG S.A.”.
6.4. Supply chain

Global LNG trade involves four stages:

1. Production of natural gas and its transportation to a liquefaction terminal.
2. Liquefaction, storage and loading for transport.
3. Transport to the regasification terminal.
4. Regasification and entry into the transmission system or reloading of LNG onto road tankers.
6.4. Supply chain

Global LNG trade involves four stages

- Production of natural gas and its transportation to a liquefaction terminal
- Liquefaction, storage and loading for transport
- Transport to the regasification terminal
- Regasification and entry into the transmission system or reloading of LNG onto road tankers
4.4 million m$^3$

volume of gas unloaded at the LNG Terminal in 2018
4.4 million m$^3$

volume of gas unloaded

at the LNG Terminal in 2018
Liquefied natural gas is transported to the terminal in Świnoujście (from Qatar, Norway and the USA) by some of the largest Q-Flex methane carriers in the world. Then, the fuel is brought back to gaseous state through the process of heating it up (known as regasification). Then, already in a volatile form, the gas is injected into the National Transmission System and then delivered to individual customers.

### Examples of applications for liquefied natural gas

- Supply of natural gas to final customers
- Shaving short-term gas demand peak experienced during 3 to 4 weeks per year
- Supply of gas to customers not yet connected to the gas transmission (distribution) network
- Supply of gas to small and medium towns and villages, where fuel is supplied from the so-called LNG satellite stations
- Fuel for motor vehicles: buses, locomotives, helicopters and supersonic aircrafts (the need to protect the atmosphere from toxic components contained in the vehicle exhaust fumes)
- Fuel for power plants
- Supply of gas to customers temporarily cut off from the supply of gas from pipelines (maintenance, repair)
- Cold source – LNG may be used for cooling and air separation purposes as well as in low-temperature installations
- Power supply for electricity and/or heat producing fuel cells

Polskie LNG currently has a contract with one customer, i.e. PGNiG S.A. Apart from delivering gas after its regasification by the terminal to the transmission network, the company reloads LNG into tank trucks for PGNiG. PGNiG’s customers or carriers acting on behalf of PGNiG as its customers. In fact, the terminal in Świnoujście serves a large group of LNG traders operating on the retail market and LNG carriers with whom it cooperates on an ongoing basis in order to provide LNG reloading services. In 2018, there were no significant changes to the size, structure, ownership or form of ownership. Since January 2018, PGNiG has had the booking for 100 percent of the regasification capacity of the terminal (in earlier years it was about 60 percent) and 100 percent of the LNG loading capacity on road tankers (compared to about 30 percent in previous years).

In 2018, the number of cargoes unloaded at the terminal increased. As in previous years, Qatar was the prevailing origin of deliveries, followed by the USA and Norway (deliveries from the latter country also increased in 2018). The number of road tankers loaded also increased.

23 – number of LNG cargoes
1794 – number of loaded road tankers
24 – internal record for road tankers loaded during one day

### 6.5. Development of the company

The demand for natural gas in Central and Eastern Europe and the Baltic Sea area is growing. Thanks to the expansion and new functionalities, the LNG Terminal in Świnoujście will be able to accommodate it. The implementation of the expansion project is also a response to a number of European regulations, specifically climate and environmental legislation which forces out transformation towards low-carbon fuels.

The year 2018 was a time of many challenges for Polskie LNG. The company managed to significantly improve its performance in terms of receiving and unloading gas carriers from all over the world, as well as loading tanker trucks. An additional service of loading LNG onto ISO-containers was launched. Thanks to this, we are gaining very valuable experience. Notably, the LNG Terminal Expansion Programme was initiated, as part of which a project team was established and professional engineering staff in relevant specialisations was recruited from the market. The structuring of the Programme including its detailed parameters (Programme Definition), the adoption of the Strategic Investment Directions and the Contracting Strategy, and the development of a new process model for the terminal installation helped ensure a systematic and consistent implementation of the initial assumptions. This enabled us to obtain a complete set of environmental and location decisions at the end of 2018, and planning permission to build SCVs shortly beforehand. Then, in late 2018 and early 2019, we launched two key tender procedures [for the onshore and offshore part]. We also successfully completed the process of notifying state aid to the European Commission in order to obtain subsidies for the implementation of the programme. The expansion of the terminal and the consequent offering of additional terminal functionalities will make Poland a key player driving the development of the LNG market in the entire region of Central and Eastern Europe. I can already confidently say that Świnoujście has become our window on the world – on the global LNG market, of which we are now an integral part. Thanks to the LNG Terminal in Świnoujście, and through access to independent energy sources, we are creating new opportunities for the development of the Polish energy sector, and thus the Polish economy. The widespread use of LNG in various sectors – e.g. in public transport – is part of not only the national but also the European agenda for combating air pollution and improving the quality of life. Liquefied natural gas is a clean and efficient fuel, so it has a future ahead of it, and we want to be an important part of it.

Paweł Jakubowski, President of Polskie LNG
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Paweł Jakubowski, President of Polskie LNG
Primarily from the sense of responsibility for the balanced Polskie LNG’s obligations towards local communities result for several years now.

The LNG Terminal is an important feature not only of the Polish economy, but also of the West Zachodniopomorskie Province (a part of the National Park Wolin) and the Świnoujście in the Baltic Sea. The terminal is located about 25 km from the historical town of Świnoujście, about 50 km from Goleniów and 150 km from Szczecin.

The terminal’s location has enabled it to take advantage of the unique location of Świnoujście: the point of entry for Baltic Sea winds from the Baltic with minimal adverse impact on the bays and the lagoon, and on the impact on the marine environment.

A consistent, reliable and effective manner.

Communication activities are intended to promote the corporate image of Polskie LNG as:

- the driving force of the LNG market development in Poland and the region
- the company leading an investment project of key importance for Poland and the region under the Terminal Expansion Program
- a thriving, modern and innovative company creating and providing new and innovative services to its customers
- a company ensuring Poland’s energy security

In its dialogue with the stakeholders, Polskie LNG strives to ensure consistent standards, promote open and reliable communication, strengthen the company’s image as well as disseminate and increase knowledge about the company.

The most important issues are: ensuring positive relations with local communities and authorities in the locations where the company operates; supporting education and cultural activities; increasing knowledge about the company’s undertakings and providing local charity support. Polskie LNG received the United Nations Global Compact award for its efforts to promote sustainable development and the Silver Card of the Safety at Work Leader.

Polskie LNG is also a member of the major organisations active on the world and domestic natural gas markets:

- Baltic Ports Organisation (BPO)
- International Group of Liquefied Natural Gas Importers (GIIGNL)
- The Society of International Gas Tanker and Terminal Operators (SITOTO)
- Polish Chamber of Natural Gas Industry (IGG)
- Gas LNG Europe (GLE) in cooperation with GAZ-SYSTEM

**6.6. Stakeholder relations**

The LNG Terminal is an important feature not only of the Polish economy, but also of the West Zachodniopomorskie Province and Świnoujście. As one of the largest Polish investments of recent years, it plays an important role for the local community in a number of ways. The company, acting in a socially responsible manner, focuses on key areas related to the life of the inhabitants of Świnoujście and has been implementing numerous local and regional projects for several years now.

Polskie LNG puts emphasis on:
- education
- sport
- safety
- environment
- culture and art

Polskie LNG’s obligations towards local communities result primarily from the sense of responsibility for the balanced development and coexistence of three key elements related to project: economy, society and natural environment. The company’s CSR Policy has been developed, based on close relations with the environment as well as support for local initiatives. In achieving its business goals, the company consistently takes social interest and local economic and environmental needs into account.

One of the key commitments of Polskie LNG undertaken as part of social dialogue was a new model of a cooperation which involves stakeholders in the decision-making process concerning financial support for projects to benefit Świnoujście and its residents. The overriding objective was to ensure that all enquiries concerning the possibility of providing co-financing for various types of projects submitted to Polskie LNG were assessed in a transparent manner and using uniform criteria. The basic assumption and commitment of Polskie LNG with respect to stakeholder relations is to conduct communication activities in a consistent, reliable and effective manner.

In view of Świnoujście’s valuable natural assets and its role as a spa and tourist resort the terminal is located about 750 metres from the coastline (to ensure the preservation of historic forts and bunkers and the unique grey dunes). The facility is located about 1 km away from the edge of the spa resort zone. The terminal is connected to the wharf by an overhead LNG flueway, all has the least impact on the natural environment and provides residents and tourists with easy access to the beach and historic buildings. The space was used in an economical manner, while preserving forest patches to the north and south of the terminal. Similar criteria were applied prior to the expansion of the Świnoujście LNG Terminal. Close monitoring was conducted using data for post-execution monitoring. The results of the surveys were incorporated into the site selection and environmental conditions for the LNG terminal expansion process.

**6.8. Biodiversity**

The area covered by the monitoring of the environmental impact covers the area within 100 m around the onshore part of the LNG terminal, the stretch of beach and dune habitats adjacent to the offshore part and a reference area comprising a stretch of beaches and dunes located approx. 2 km to the east of the project site.

In respect of the abiotic environment, the monitoring includes:

- surface water and groundwater, in accordance with the environmental decisions
- water intake and discharged wastewater, in accordance with the integrated permit and water law permits
- air pollutant emissions, noise emissions, electromagnetic fields and waste management, in accordance with the environmental decision and the integrated permit

In respect of the biotic environment, the monitoring includes:

- natural habitats and plant species
- fungi and lichens
- invertebrate fauna
- vertebrate animal fauna, including birds
- winter monitoring of bats

The LNG terminal site is limited to a small area (approximately 0.002 ha) in relation to the entire Wolin and Uznam Natura 2000 area which totals 30,771.95 ha.

**6.7. Environmental care**

Environmental care is an integral part of Polskie LNG’s business strategy. It is a core element of the company’s operations, as part of the Environmental Management System (ISO 14001) implemented and maintained by the company. It is an effective tool allowing to identify environmental risks in a systematic manner and to effectively implement the “Environmental Policy” for the purpose of mitigating the negative impact on the external environment. Prior to the commencement of the terminal construction, the company had developed plans including the environmental conditions of the project, which was sited in a Natura 2000 area.
Expansion of President Lech Kaczyński LNG Terminal

- Expansion plan
- Stan obecny
  1. Third tank
  5. LNG unloading berth
  11. LNG tanker loading station
  2. LNG reloading to rail
  6. Seawater intake
  12. Water tank
  3. Second berth
  7. LNG storage tanks
  13. Administrative buildings, control room
  4. Additional SCVs
  8. SCVs
  14. Flare
  10. Measurement station

6.6. Stakeholder relations

The LNG Terminal is an important feature not only of the Polish economy, but also of the West Zachodniopomorskie Voivodeship and Świnoujście. As one of the largest Polish investments of recent years, it plays an important role for the local community in a number of ways. The company, acting in a socially responsible manner, focuses on key areas related to the life of the inhabitants of Świnoujście and has been implementing numerous local and regional projects for several years now.

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- a company ensuring Poland’s energy security

In its dialogue with the stakeholders, Polskie LNG strives to ensure consistent standards, promote open and reliable communication, strengthen the company’s image as well as disseminate and increase knowledge about the company.

The most important issues are: ensuring positive relations with local communities and authorities in the locations where the company operates; supporting education and cultural activities; increasing knowledge about the company’s undertakings and providing local charity support. Polskie LNG received the United Nations Global Compact award for its efforts to promote sustainable development and the Silver Card of the Safety at Work Leader.

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6.8. Biodiversity

The area covered by the monitoring of the environmental impact covers the area within 100 m around the onshore part of the LNG terminal, the stretch of beach and dune habitats adjacent to the offshore part and a reference area comprising a stretch of beaches and dunes located approx. 2 km to the east of the project site.

In respect of the abiotic environment, the monitoring includes:
- surface water and groundwater, in accordance with the environmental decisions
- water intake and discharged wastewater, in accordance with the integrated permit and water law permits
- all pollutant emissions, noise emissions, electromagnetic fields and waste management, in accordance with the environmental decision and the integrated permit

In respect of the biotic environment, the monitoring includes:
- natural habitats and plant species
- fungi and lichens
- invertebrate fauna
- vertebrate animal fauna, including birds
- winter monitoring of bats

The LNG terminal site is located to a small area (approximately 0.002 ha) in relation to the entire Wolin and Ustron Natura 2000 area which totals 30,771.95 ha.
6.9. Economic performance

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>net revenue from sales</td>
<td>PLN 355,063,672.13</td>
<td>PLN 371,837,369.57</td>
</tr>
<tr>
<td>net revenue from sales</td>
<td>PLN 120,373,371.07</td>
<td>PLN 128,722,573.71</td>
</tr>
</tbody>
</table>

According to the IUCN red list:
- Flora: none
- Animals: 146 species, including: 139 LC (least concern) species, 3 LR(LC) species (lower risk: least concern species), 4 LR(NT) species (lower risk: near threatened species).

According to domestic red lists:
- Polish Red Data Book of Plants: 1 CR (critically at risk) species.
- Polish Red Data Book of Plants and Fungi: 1 VU (vulnerable) species.
- Red List of Macrofungi in Poland: 3 species EN (endangered); 2 species V (vulnerable) species.
- Red list of endangered and vulnerable animals in Poland: 25 species, including: 4 CR (critically endangered) species, 3 EN (seriously endangered) species, 4 VU (vulnerable) species, 3 NT (nearly threatened) species, 7 LC (least concern) species, 4 DD (data deficient) species.

6.10. Scale of operations

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>borrowed capital / liabilities</td>
<td>45.66%</td>
<td>43.48%</td>
</tr>
<tr>
<td>equity / liabilities</td>
<td>54.34%</td>
<td>56.52%</td>
</tr>
<tr>
<td>net revenue from sales</td>
<td>PLN 355,063,672.13</td>
<td>PLN 371,837,369.57</td>
</tr>
<tr>
<td>other operating income</td>
<td>PLN 32,565,390.15</td>
<td>PLN 35,992,979.08</td>
</tr>
<tr>
<td>financial income</td>
<td>PLN 2,510,806.89</td>
<td>PLN 2,719,257.55</td>
</tr>
<tr>
<td>total revenues</td>
<td>PLN 390,139,869.17</td>
<td>PLN 410,549,606.20</td>
</tr>
<tr>
<td>operating expenses</td>
<td>PLN 234,690,301.06</td>
<td>PLN 243,114,795.86</td>
</tr>
<tr>
<td>other operating expenses</td>
<td>PLN 3,932,395.45</td>
<td>PLN 4,905,273.51</td>
</tr>
<tr>
<td>financial expenses</td>
<td>PLN 23,205,011.53</td>
<td>PLN 9,763,746.33</td>
</tr>
<tr>
<td>total expenses</td>
<td>PLN 261,827,708.04</td>
<td>PLN 257,783,815.70</td>
</tr>
<tr>
<td>economic value</td>
<td>PLN 128,312,161.13</td>
<td>PLN 152,765,790.50</td>
</tr>
<tr>
<td>payroll and employee benefits</td>
<td>PLN 32,352,729.81</td>
<td>PLN 36,246,070.09</td>
</tr>
<tr>
<td>taxes and charges</td>
<td>PLN 43,036,501.65</td>
<td>PLN 51,939,129.60</td>
</tr>
</tbody>
</table>
6.9. Economic performance

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>net revenue from sales</td>
<td>PLN 355,063,672.13</td>
<td>PLN 371,837,369.57</td>
</tr>
<tr>
<td>net revenue from sales</td>
<td>PLN 120,373,371.07</td>
<td>PLN 128,722,573.71</td>
</tr>
</tbody>
</table>

According to domestic red lists:
- Polish Red Data Book of Plants – 1 CR (critically at risk) species.
- Polish Red Data Book of Plants and Fungi – 1 VU (vulnerable) species; 1 CR (critically endangered) species.
- Red List of Macrofungi in Poland: 3 species EN (endangered); 2 species V (vulnerable)
- Red list of endangered and vulnerable animals in Poland: 25 species, including: 4 CR (critically endangered) species, 3 EN (seriously endangered) species, 4 VU (vulnerable) species, 3 NT (near threatened) species, 1 DD (data deficient) species.

6.10. Scale of operations

- Total number of employees: 194 persons
- Maximum regasification capacity: 570,000 m³/h (5 billion m³ per year)
- Capability to reload LNG onto road tankers during the year: 95,000 tonnes
- Capacity to accept LNG vessels with a capacity ranging from 120,000 to 216,000 m³
- Capacity of LNG storage tanks: 160,000 m³ each
### 6.11. 2018 Highlights in Polskie LNG

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughout</td>
<td>Presentation of the LNG Terminal as part of a roadshow held in the USA, Norway, Australia and France.</td>
</tr>
<tr>
<td>March</td>
<td>Appointment of Mr. Paweł Jakubowski as President of the Management Board by the General Meeting of Shareholders.</td>
</tr>
<tr>
<td>April</td>
<td>Technical dialogue meetings on the project to expand the President Lech Kaczyński LNG Terminal.</td>
</tr>
<tr>
<td>May</td>
<td>Adoption of the draft concept of the Świnoujście LNG Terminal Expansion Programme by the Management Board of Polskie LNG.</td>
</tr>
<tr>
<td>June</td>
<td>Issuance by the Governor of Zachodniopomorskie Voivodship of a decision of 21 June 2018 on planning permission to Polskie LNG for the construction of an investment project involving the expansion of regasification capacity of the LNG terminal in Świnoujście.</td>
</tr>
<tr>
<td>August</td>
<td>Conclusion by Polskie LNG and the University of Western Australia of a collaboration agreement on knowledge exchange and LNG technology development during the Polish-Australian Energy Forum in Sydney.</td>
</tr>
<tr>
<td></td>
<td>Adoption by the Polskie LNG Management Board of the company’s strategic investment directions, the definition of the Świnoujście LNG Terminal Expansion Programme, including the budget and time schedule of the Programme, as a long-term material and financial plan of the company.</td>
</tr>
<tr>
<td>September</td>
<td>Joining the Baltic Ports Organisation (BPO), the largest regional association of the Baltic Sea area, bringing together 45 partners from 9 countries.</td>
</tr>
<tr>
<td>November</td>
<td>Joint organisation of a visit to Poland by Rick Perry, Secretary of the US Department of Energy, together with the government.</td>
</tr>
</tbody>
</table>

**December**

- Approval of the new LNG regasification tariff by the President of the Energy Regulatory Office.
- Conclusion of an agreement with the Szczecin and Świnoujście Seaports Authority regarding joint implementation of the Wharf part of the LNG Terminal Expansion Programme.
- Official announcement of the launch of the tender procedure by Polskie LNG, to select the contractor for the three key components of the President Lech Kaczyński LNG Terminal Expansion Programme in Świnoujście.
- Collaboration agreement with the Main School of Fire Service including joint research and training projects and access to specialist equipment.
## 6.11. 2018 Highlights in Polskie LNG

### Throughout the year
- Presentation of the LNG Terminal as part of a roadshow held in the USA, Norway, Australia and France.

### March
- Appointment of Mr. Paweł Jakubowski as President of the Management Board by the General Meeting of Shareholders.

### April
- Technical dialogue meetings on the project to expand the President Lech Kaczyński LNG Terminal.

### May
- Adoption of the draft concept of the Świnoujście LNG Terminal Expansion Programme by the Management Board of Polskie LNG.

### June
- Issuance by the Governor of Zachodniopomorskie Voivodship of a decision of 21 June 2018 on planning permission to Polskie LNG for the construction of an investment project involving the expansion of regasification capacity of the LNG terminal in Świnoujście.

### August
- Conclusion by Polskie LNG and the University of Western Australia of a collaboration agreement on knowledge exchange and LNG technology development during the Polish-Australian Energy Forum in Sydney.
- Adoption by the Polskie LNG Management Board of the company’s strategic investment directions, the Definition of the Świnoujście LNG Terminal Expansion Programme, including the Budget and Time Schedule of the Programme, as a long-term material and financial plan of the company.

### September
- Joining the Baltic Ports Organisation (BPO), the largest regional association of the Baltic Sea area, bringing together 45 partners from 9 countries.

### November
- Joint organisation of a visit to Poland by Rick Perry, Secretary of the US Department of Energy, together with the government.

### December
- Approval of the new LNG regasification tariff by the President of the Energy Regulatory Office.
- Conclusion of an agreement with the Szczecin and Świnoujście Seaports Authority regarding joint implementation of the Wharf part of the LNG Terminal Expansion Programme.
- Official announcement of the launch of the tender procedure by Polskie LNG, to select the contractor for the three key components of the President Lech Kaczyński LNG Terminal Expansion Programme in Świnoujście.
- Collaboration agreement with the Main School of Fire Service including joint research and training projects and access to specialist equipment.
7

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7.3. Highlights 105
7.4. Tables and indicators 111
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7.6. Contact 130

About THE REPORT
7

About THE REPORT

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7.6. Contact  130

Summary
Independent auditor’s report on the summary consolidated financial statements

To the General Meeting and the Supervisory Board

of Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A.

Opinion

The summary consolidated financial statements, which comprise the summary consolidated balance-sheet as at 31 December 2018, the summary consolidated profit-and-loss account, the summary consolidated statement of cash flows for the year ended on that date and financial ratios, were derived from the audited consolidated financial statements of the Group in which Gas Transmission Operator GAZ-SYSTEM S.A. (“Parent Company”) is the Parent Company (“Group”) for the year ended 31 December 2018.

In our opinion, the attached summary consolidated financial statements are consistent, in all material respects, with the audited consolidated financial statements in accordance with the criteria set forth in the Polish Accounting Act, the accounting principles (policy), adopted by the Group and the legal regulations and articles of association applicable to the Group, as applicable to the preparation of the audited consolidated financial statements.

Summary consolidated financial statements

The summary consolidated financial statements do not contain all the disclosures required by the Polish Accounting Act (Dz.U. 2019.35) and the adopted accounting principles (policy) of the Group, in which Gas Transmission Operator GAZ-SYSTEM S.A. is the Parent company. The review of the summary consolidated financial statements and the auditor’s report thereon should not replace a full review of the audited consolidated financial statements and the related auditor’s report. The summary consolidated financial statements and the audited consolidated financial statements do not reflect the effects of events that occurred after the date of our report on the audited consolidated financial statements.

Audited consolidated financial statements and our report

We expressed an unmodified opinion on the audited consolidated financial statements in our report dated 29 March 2019.

Responsibility of the Management Board of the Parent Company for the summarized consolidated financial statements

The Management Board of the Parent Company is responsible for the preparation of the summary consolidated financial statements in accordance with the provisions of the Polish Accounting Act, the adopted accounting principles (policy) and the legal regulations and articles of association applicable to the Group.

Responsibility of the Auditor

We are responsible for expressing an opinion on whether the summary consolidated financial statements are consistent in all material respects with the audited consolidated financial statements based on our procedures carried out in accordance with International Auditing Standard (IAS) 810 (Revised) “Engagements to Report on Summary Financial Statements”.

The auditors responsible for issuing this report of the independent auditor are Barbara Misterska-Dragan acting on behalf of Misters Audytor Adviser sp. z o.o., having its registered office in Warsaw, registered under number 2704, and Wiesław Leśniowski acting on behalf of Biuro Audytorskie SADREN sp. z o.o., having its registered office in Warsaw, registered under number 100.

Barbara Misterska - Dragan lic. No. 2704 Warsaw, 31 May 2019
ul. Wiśniowa 40/5, 02-520 Warsaw

Wiesław Leśniowski lic. No. 9264 Warsaw, 31 May 2019
ul. Siemianówka 16, 00-810 Warsaw

The consolidated financial statements cover two organisations: GAZ-SYSTEM S.A. and Polskie LNG S.A.

GRI 201-7

7.1. Economic performance

Balance Sheet (PLN million)

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>At 31/12/2017</th>
<th>At 31/12/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Non-current assets</td>
<td>9,719</td>
<td>10,791</td>
</tr>
<tr>
<td>1</td>
<td>Intangible assets</td>
<td>195</td>
<td>223</td>
</tr>
<tr>
<td>2</td>
<td>Plant and equipment</td>
<td>9,405</td>
<td>10,432</td>
</tr>
<tr>
<td>3</td>
<td>Long-term receivables</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Long-term investments</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Long-term accruals</td>
<td>118</td>
<td>136</td>
</tr>
<tr>
<td>B</td>
<td>Current assets</td>
<td>1,732</td>
<td>1,906</td>
</tr>
<tr>
<td>1</td>
<td>Inventories</td>
<td>122</td>
<td>168</td>
</tr>
<tr>
<td>2</td>
<td>Short-term receivables</td>
<td>245</td>
<td>341</td>
</tr>
<tr>
<td>3</td>
<td>Short-term investments</td>
<td>1,355</td>
<td>1,387</td>
</tr>
<tr>
<td>4</td>
<td>Short-term accruals</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total assets</td>
<td>11,461</td>
<td>12,697</td>
</tr>
<tr>
<td>A</td>
<td>Equity</td>
<td>4,825</td>
<td>7,260</td>
</tr>
<tr>
<td>1</td>
<td>Share capital</td>
<td>3,772</td>
<td>3,772</td>
</tr>
<tr>
<td>2</td>
<td>Other capital</td>
<td>2,754</td>
<td>3,072</td>
</tr>
<tr>
<td>3</td>
<td>Accumulated profit (loss)</td>
<td>-130</td>
<td>-38</td>
</tr>
<tr>
<td>4</td>
<td>Net profit/loss</td>
<td>493</td>
<td>516</td>
</tr>
<tr>
<td></td>
<td>Write-off of net profit during the financial year</td>
<td>-64</td>
<td>-62</td>
</tr>
<tr>
<td>B</td>
<td>Liabilities and provisions for liabilities</td>
<td>4,626</td>
<td>5,437</td>
</tr>
<tr>
<td>1</td>
<td>Provisions for liabilities</td>
<td>455</td>
<td>562</td>
</tr>
<tr>
<td>2</td>
<td>Long-term liabilities</td>
<td>958</td>
<td>1,049</td>
</tr>
<tr>
<td>3</td>
<td>Short-term liabilities</td>
<td>526</td>
<td>719</td>
</tr>
<tr>
<td>4</td>
<td>Accruals</td>
<td>2,687</td>
<td>3,107</td>
</tr>
<tr>
<td></td>
<td>Total equity and liabilities</td>
<td>11,451</td>
<td>12,697</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
Independent auditor’s report on the summary consolidated financial statements
To the General Meeting and the Supervisory Board
of Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A.

Opinion
The summary consolidated financial statements, which comprise the summary consolidated balance-sheet as at 31 December 2018, the summary consolidated profit and loss account, the summary consolidated statement of cash flows for the year ended on that date and financial ratios, were derived from the audited consolidated financial statements of the Group in which Gas Transmission Operator GAZ-SYSTEM S.A. (“Parent Company”) is the Parent Company (“Group”) for the year ended 31 December 2018.

In our opinion, the attached summary consolidated financial statements are consistent, in all material respects, with the audited consolidated financial statements in accordance with the criteria set forth in the Polish Accounting Act, the accounting principles (policy) adopted by the Group and the legal regulations and articles of association applicable to the Group, as applicable to the preparation of the audited consolidated financial statements.

Summary consolidated financial statements
The summary consolidated financial statements do not contain all the disclosures required by the Polish Accounting Act (Dz.U.2019.35l) and the adopted accounting principles (policy) of the Group, in which Gas Transmission Operator GAZ-SYSTEM S.A. is the parent company. The review of the summary consolidated financial statements and the auditor’s report thereon should not replace a full review of the audited consolidated financial statements and the related auditor’s report.

The summary consolidated financial statements and the audited consolidated financial statements do not reflect the effects of events that occurred after the date of our report on the audited consolidated financial statements.

Audited consolidated financial statements and our report
We expressed an unmodified opinion on the audited consolidated financial statements in our report dated 29 March 2019.

Responsibility of the Management Board of the Parent Company for the summarized consolidated financial statements
The Management Board of the Parent Company is responsible for the preparation of the summary consolidated financial statements in accordance with the provisions of the Polish Accounting Act, the adopted accounting principles (policy) and the legal regulations and articles of association applicable to the Group.

Responsibility of the Auditor
We are responsible for expressing an opinion on whether the summary consolidated financial statements are consistent in all material respects with the audited consolidated financial statements based on our procedures carried out in accordance with International Auditing Standard (IAS) 810 (Revised) “Engagements to Report on Summary Financial Statements”.

The auditors responsible for issuing this report of the independent auditor are Barbara Misterska-Dragan acting on behalf of Biuro Audytorskie SADREN Sp. z o.o., having its registered office in Warsaw, registered under number 100. We expressed an unmodified opinion on the audited consolidated financial statements in our report dated 29 March 2019.

Barbara Misterska - Dragon lic. No. 2581 Warsaw, 31 May 2019
u. Wiśniowa 40/5, 02-520 Warsaw

Wiesław Leśniewski lic. No. 9264 Warsaw, 31 May 2019
ul. Srebrna 16, 00-810 Warsaw

Notes to the summary consolidated financial statements

7.1. Economic performance

The consolidated financial statements cover two organisations: GAZ-SYSTEM S.A. and Polskie LNG S.A.

Balance Sheet (PLN million)

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>At 31/12/2017</th>
<th>At 31/12/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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</tr>
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<td>223</td>
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<tr>
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<td>0</td>
</tr>
<tr>
<td>4</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
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<td>118</td>
<td>136</td>
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<tr>
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<td>1,906</td>
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<td>1,387</td>
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<tr>
<td>4</td>
<td>Short-term accruals</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total assets</td>
<td>11,461</td>
<td>12,697</td>
<td></td>
</tr>
</tbody>
</table>

A
| 1   | Share capital | 3,772 | 3,772 |
| 2   | Other capital | 2,754 | 3,072 |
| 3   | Accumulated profit (loss) | -130 | -38 |
| 4   | Net profit/loss | 493 | 516 |
|     | Write-off of net profit during the financial year | -64 | -62 |
| B   | Liabilities and provisions for liabilities | 4,626 | 5,437 |
| 1   | Provisions for liabilities | 455 | 562 |
| 2   | Long-term liabilities | 958 | 1,049 |
| 3   | Short-term liabilities | 526 | 719 |
| 4   | Accruals | 2,687 | 3,107 |
| Total liabilities | 11,451 | 12,697 |

Source: GAZ-SYSTEM.
### Income Statement (PLN million)

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>1-12.2017</th>
<th>1-12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Income from sales and equivalent income</td>
<td>2,293</td>
<td>2,372</td>
</tr>
<tr>
<td>2</td>
<td>Costs of operating activities</td>
<td>1,738</td>
<td>1,784</td>
</tr>
<tr>
<td>2.1</td>
<td>Depreciation</td>
<td>439</td>
<td>321</td>
</tr>
<tr>
<td>2.2</td>
<td>Consumption of materials and energy</td>
<td>364</td>
<td>403</td>
</tr>
<tr>
<td>2.3</td>
<td>Contracted services</td>
<td>260</td>
<td>298</td>
</tr>
<tr>
<td>2.4</td>
<td>Taxes and charges</td>
<td>204</td>
<td>219</td>
</tr>
<tr>
<td>2.5</td>
<td>Wages and salaries</td>
<td>341</td>
<td>393</td>
</tr>
<tr>
<td>2.6</td>
<td>Social insurance and other benefits</td>
<td>95</td>
<td>112</td>
</tr>
<tr>
<td>2.7</td>
<td>Other allocated costs</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>2.8</td>
<td>Value of goods and materials sold</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Profit (loss) on sales (1-2)</td>
<td>555</td>
<td>588</td>
</tr>
<tr>
<td>4</td>
<td>Other operating income</td>
<td>126</td>
<td>145</td>
</tr>
<tr>
<td>5</td>
<td>Other operating expenses</td>
<td>49</td>
<td>95</td>
</tr>
<tr>
<td>6</td>
<td>Operating profit (loss) (3+4-5)</td>
<td>632</td>
<td>638</td>
</tr>
<tr>
<td>7</td>
<td>Financial income</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>Financial expenses</td>
<td>40</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>Profit (loss) on ordinary activities (6+7-8)</td>
<td>619</td>
<td>634</td>
</tr>
<tr>
<td>10</td>
<td>Extraordinary profits (losses)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Profit/loss before taxation (9+10)</td>
<td>619</td>
<td>634</td>
</tr>
<tr>
<td>12</td>
<td>Income tax and deferred taxes</td>
<td>126</td>
<td>118</td>
</tr>
<tr>
<td>13</td>
<td>Net profit/loss</td>
<td>493</td>
<td>516</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

### Cash Flow Statement

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>1-12.2017</th>
<th>1-12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cash flow from operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Net profit/loss, taking into account profit-sharing payment</td>
<td>429</td>
<td>454</td>
</tr>
<tr>
<td>2</td>
<td>Total adjustments</td>
<td>594</td>
<td>513</td>
</tr>
<tr>
<td>3</td>
<td>Net cash from operating activities (1+2)</td>
<td>1,023</td>
<td>967</td>
</tr>
<tr>
<td>B</td>
<td>Cash flow from investment activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Receipts</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Capital expenditures</td>
<td>888</td>
<td>1,389</td>
</tr>
<tr>
<td>3</td>
<td>Net cash flows from investment activities (1-2)</td>
<td>-874</td>
<td>-1,379</td>
</tr>
<tr>
<td>C</td>
<td>Cash flow from financing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Receipts</td>
<td>296</td>
<td>611</td>
</tr>
<tr>
<td>2</td>
<td>Outflows</td>
<td>414</td>
<td>167</td>
</tr>
<tr>
<td>3</td>
<td>Net cash flows from financing activities (1-2)</td>
<td>-118</td>
<td>-1,379</td>
</tr>
<tr>
<td>D</td>
<td>Total net cash flow (A.3 ± B.3 ± C.3)</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>E</td>
<td>Balance-sheet increase/decrease in cash and cash equivalents</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>F</td>
<td>Cash and cash equivalents at beginning of period</td>
<td>1,324</td>
<td>1,355</td>
</tr>
<tr>
<td>G</td>
<td>Cash and cash equivalents at end of period</td>
<td>1,355</td>
<td>1,387</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
### Income Statement (PLN million)

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>For 1-12.2017</th>
<th>For 1-12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Income from sales and equivalent income</td>
<td>2,293</td>
<td>2,372</td>
</tr>
<tr>
<td>2</td>
<td>Costs of operating activities</td>
<td>1,738</td>
<td>1,784</td>
</tr>
<tr>
<td>2.1</td>
<td>Depreciation</td>
<td>439</td>
<td>321</td>
</tr>
<tr>
<td>2.2</td>
<td>Consumption of materials and energy</td>
<td>364</td>
<td>403</td>
</tr>
<tr>
<td>2.3</td>
<td>Contracted services</td>
<td>260</td>
<td>298</td>
</tr>
<tr>
<td>2.4</td>
<td>Taxes and charges</td>
<td>204</td>
<td>219</td>
</tr>
<tr>
<td>2.5</td>
<td>Wages and salaries</td>
<td>341</td>
<td>393</td>
</tr>
<tr>
<td>2.6</td>
<td>Social insurance and other benefits</td>
<td>95</td>
<td>112</td>
</tr>
<tr>
<td>2.7</td>
<td>Other allocated costs</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>2.8</td>
<td>Value of goods and materials sold</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Profit (loss) on sales (1-2)</td>
<td>555</td>
<td>588</td>
</tr>
<tr>
<td>4</td>
<td>Other operating income</td>
<td>126</td>
<td>145</td>
</tr>
<tr>
<td>5</td>
<td>Other operating expenses</td>
<td>49</td>
<td>95</td>
</tr>
<tr>
<td>6</td>
<td>Operating profit (loss) (3+4-5)</td>
<td>632</td>
<td>638</td>
</tr>
<tr>
<td>7</td>
<td>Financial income</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>Financial expenses</td>
<td>40</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>Profit (loss) on ordinary activities (4+7-8)</td>
<td>619</td>
<td>634</td>
</tr>
<tr>
<td>10</td>
<td>Extraordinary profits (losses)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Profit/loss before taxation (9+10)</td>
<td>619</td>
<td>634</td>
</tr>
<tr>
<td>12</td>
<td>Income tax and deferred taxes</td>
<td>126</td>
<td>118</td>
</tr>
<tr>
<td>13</td>
<td>Net profit/loss</td>
<td>493</td>
<td>516</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM

### Cash Flow Statement

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>1-12.2017</th>
<th>1-12.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cash flow from operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Net profit/loss, taking into account profit-sharing payment</td>
<td>429</td>
<td>454</td>
</tr>
<tr>
<td>2</td>
<td>Total adjustments</td>
<td>594</td>
<td>513</td>
</tr>
<tr>
<td>3</td>
<td>Net cash from operating activities (1+2)</td>
<td>1,023</td>
<td>967</td>
</tr>
<tr>
<td>B</td>
<td>Cash flow from investment activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Receipts</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
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Source: GAZ-SYSTEM.
7.2. Defining the content

The process of defining the contents of the report started with the selection of topics which are relevant from the internal perspective of the company as well as questionnaires addressed to the representatives of key stakeholder groups. The work on the 2018 report was also based on the analyses of relevant aspects and stakeholders undertaken in previous years. The key criteria were relevance, completeness and presentation of the content, where appropriate, in the broader context of sustainable development. The data discussed in the report were gathered in a reliable manner, which is guaranteed by the professional data gathering system implemented by the organisation. Both employees and external stakeholders were involved in the preparation of the annual report.

The process of defining important aspects of reporting consisted of:

- analysis of image-related research and media information
- internal consultation meetings with employees on key aspects of the company’s operations
- results of surveys measuring customer satisfaction
- results of questionnaires addressed to representatives of the most important stakeholders.

Material aspects identified in the process of defining the report content

The definition of relevant aspects and their boundaries was carried out through the involvement of stakeholders, using the principles of relevance of topics according to the GRI Standard. Priority topics for the organisation have been identified in terms of their impact on the economic, social and environmental environment, as well as issues with a significant impact on stakeholder decisions and perceptions.

Financial indicators:

<table>
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<tr>
<th>Aspects</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and labour aspects</td>
<td>Relations between employees and management</td>
</tr>
<tr>
<td></td>
<td>OHS</td>
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<td></td>
<td>Training and education</td>
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</tr>
<tr>
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<td>Energy</td>
</tr>
<tr>
<td></td>
<td>Water and Effluents</td>
</tr>
<tr>
<td></td>
<td>Biodiversity</td>
</tr>
<tr>
<td></td>
<td>Emissions</td>
</tr>
<tr>
<td></td>
<td>Effluents and waste</td>
</tr>
<tr>
<td>Product liability aspects</td>
<td>Marketing and labelling of products and services</td>
</tr>
<tr>
<td></td>
<td>Customer privacy</td>
</tr>
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The economic results presented above in chapter 7.1 represent summarised consolidated financial statements prepared in accordance with the accounting principles (policy) adopted by the Group, the Accounting Act and the provisions of law and the Articles of Association applicable to the Group.

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<td>Economic aspects</td>
<td>Indirect economic impacts</td>
</tr>
<tr>
<td></td>
<td>Prevention of corruption</td>
</tr>
<tr>
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7.3. Highlights

January

- Conclusion of a contract with PANGAZ Engineering Office for the development of design documentation for the gas pipeline connecting Poland with Lithuania (GIPL) and the infrastructure necessary for its operation.
- Announcement of the first competition within the INGA Joint Venture implemented by GAZ-SYSTEM, NCBiR and PGNiG. INGA is an industrial research and development support program in the gas industry.
- Commencement of the implementation phase regarding the connection gas pipeline at the Żerań Heat and Power Plant (geodetic marking of the route with the participation of environmental supervision, clearing of trees and shrubs, grubbing of trees, bushes and undergrowth, along with the tidying up of the area).

February

- Selection of the design engineer, Tractebel Engineering S.A., for the development of project documentation for the construction of a 30-kilometre section of the Rembelszczyzna - Mary gas pipeline with a diameter of 700 mm and working pressure of 8.4 MPa.

March

- The commissioning of a new PKN Orlen S.A. heat and power plant in Płock, to which GAZ-SYSTEM provides firm gas transmission service.
- Announcement of consultations regarding a draft amendment to the Transmission Network Code (TNC).
- Update of the REMIT Regulations. The content was supplemented e.g. by provisions defining the market monitoring mechanisms in GAZ-SYSTEM, through appointing an interdisciplinary Committee for Market Monitoring.
- Closing by GAZ-SYSTEM of another edition of the call for applications for the Local Initiatives Support Fund grant contest.
- Commencement of the ‘Let’s talk about work safety’ campaign as part of preventive activities of the GAZ-SYSTEM’s OHS Academy.
- Participation of the President of the Management Board of GAZ-SYSTEM, Tomasz Stępień, representatives of GAZ-SYSTEM and Polskie LNG in the Australasian Oil & Gas Exhibition & Conference in Perth (gas and fuel industry).
- Participation of representatives of GAZ-SYSTEM in, and preparation of the company stand at the Warsaw Gas Days exhibition.
- Organization of the GAZ-SYSTEM Supplier Day - meeting with contractors for engineering services, construction works, construction supervision and material suppliers, with the participation of the President of the Management Board of GAZ-SYSTEM, Tomasz Stępień, and the President of the Board of Polish LNG, Paweł Jakubowski.
- Workshops concerning proposals for changes in the TNC with market participants: clients, representatives of the Ministry of Energy, Energy Regulatory Office, Commodity Exchange (TGE) and Office of Technical Inspection.

Significance matrix. Source: GAZ-SYSTEM.

- Very important aspects
- Moderately important aspects
- Unimportant aspects
7.3. Highlights

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<tr>
<th>April</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Congress of the Polish Gas Industry in Łódź with the participation of the Vice-President of the Management Board of GAZ-SYSTEM, Artur Zawartko, and representatives of GAZ-SYSTEM.</td>
</tr>
<tr>
<td>Publication by GAZ-SYSTEM and UKRTRANSGAS (Ukraine) of invitations to participate in a non-binding market screening procedure.</td>
</tr>
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</tr>
</tbody>
</table>

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</tr>
<tr>
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</tr>
<tr>
<td>Commencement of works on the construction of the Tworóg - Tworzeń gas pipeline. Contractor: a consortium of PORR S.A. and Denys NV. Investor's supervision: ECWIG GmbH, designer's supervision: Tractebel Engineering S.A., the design engineer of the project documentation.</td>
</tr>
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</tr>
<tr>
<td>Signing by the transmission system operators of the Baltic countries and Poland of an agreement on the cross-border cost allocation for the Gas Interconnection Poland-Lithuania (GIP).</td>
</tr>
<tr>
<td>Signing, with the EU Executive Agency for Innovation and Network (INEA), of a tripartite agreement for the cost-sharing of engineering works for the Baltic Pipe project under the Connecting Europe Facility (CEF) 'Preparatory work for the Baltic Pipe project until obtaining the necessary building permits in Poland and Denmark'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltic Science Festival at the Gdańsk University of Technology. GAZ-SYSTEM’s company stand.</td>
</tr>
<tr>
<td>Central and Eastern Europe TSO's Metrological Forum in Janów Podlaski and Hołowczyce. Meeting with representatives of gas transmission operators from: Croatia, Lithuania, Latvia, Poland, Romania, Slovakia, Ukraine and Hungary, in partnership with manufacturers of measuring devices. Signing of the Connection Agreement by GAZ-SYSTEM and the operator of gas transmission systems of Lithuania, Amber Grid, regulating the legal, business and technical aspects of the Gas Interconnection Poland-Lithuania (GIP).</td>
</tr>
<tr>
<td>Warsaw Energy Days - GAZ-SYSTEM’s company stand.</td>
</tr>
<tr>
<td>22nd Science Picnic of the Polish Radio and the Copernicus Science Centre – GAZ-SYSTEM’s company stand.</td>
</tr>
<tr>
<td>World Sea Days in Szczecin - with the participation of Vice-President of the Management Board of GAZ-SYSTEM, Artur Zawartko. Company stand.</td>
</tr>
<tr>
<td>Approval by the President of the Energy Regulatory Office of Tariff No. 12 of gas transmission services. (Effective from 1 January to 31 December 2019).</td>
</tr>
<tr>
<td>Technical commissioning of the second stage of the Lwówek - Odolanów gas pipeline.</td>
</tr>
<tr>
<td>Settlement of the grant contest of the Local Initiatives Support Fund. A total of PLN 200,000 in grants for 29 initiatives of local communities in Kędzierzyn-Koźle, Świnoujście and the municipality of Sanok.</td>
</tr>
<tr>
<td>Launch of the second gas compressor station in the Wielkopolska region (15th in the National Transmission System) at the Odolanów transmission point. Investment value: approx. PLN 23 million.</td>
</tr>
<tr>
<td>Approval by GAZ-SYSTEM of the recommended variant of the offshore gas pipeline route option proposed by the contractor for technical and environmental documentation, i.e. Ramboll company.</td>
</tr>
<tr>
<td>The route is about 275 km long and runs through Danish and Polish sea areas and through the Swedish exclusive economic zone (a stretch of about 80 km). The preferred final locations were also indicated – Faxe South in Denmark and Niechorze-Pogorzelica in Poland. Approval of the recommendation does not, however, make the decision on the gas pipeline routing conclusive.</td>
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Baltic Science Festival at the Gdańsk University of Technology. GAZ-SYSTEM’s company stand.

Central and Eastern Europe TSO’s Metrological Forum in Janów Podlaski and Holowczyce. Meeting with representatives of gas transmission operators from: Croatia, Lithuania, Latvia, Poland, Romania, Slovakia, Ukraine and Hungary, in partnership with manufacturers of measuring devices.

Signining of the Connection Agreement by GAZ-SYSTEM and the operator of gas transmission systems of Lithuania, Amber Gid, establishing the legal, business and technical aspects of the Gas Interconnection Poland-Lithuania (GIP).

Warsaw Energy Days - GAZ-SYSTEM’s company stand.

June

22nd Science Picnic of the Polish Radio and the Copernicus Science Centre – GAZ-SYSTEM’s company stand.

World Sea Days in Szczecin - with the participation of Vice-President of the Management Board of GAZ-SYSTEM, Artur Zawartko. Company stand.

Approval by the President of the Energy Regulatory Office of Tariff No. 12 of gas transmission services. (Effective from 1 January to 31 December 2019).

Technical commissioning of the second stage of the Lwówek - Odolanów gas pipeline.

Settlement of the grant contest of the Local Initiatives Support Fund. A total of PLN 200,000 in grants for 29 initiatives of local communities in Kędzierzyn-Koźle, Świnoujście and the municipality of Sanok.

Launch of the second gas compressor station in the Wielkopolska region (15th in the National Transmission System) at the Odolanów transmission point. Investment value: approx. PLN 23 million.

Opening of the annual interconnection capacity auctions.

Commencement of the construction of the Goleniów - Płoty gas pipeline.

Approval by GAZ-SYSTEM of the recommended variant of the offshore gas pipeline route option proposed by the contractor for technical and environmental documentation. i.e. Ramboll company.

The route is about 275 km long and runs through Danish and Polish sea areas and through the Swedish exclusive economic zone (a stretch of about 80 km). The preferred landing locations were also indicated - Faxe South in Denmark and Niechorze-Pogorzelica in Poland. Approval of the recommendation does not, however, make the decision on the gas pipeline routing conclusive.
<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Decision of the Regional Director for Environmental Protection in Gdańsk on environmental conditions for project titled “Construction of a high-pressure gas pipeline, 8 km long: DN 700 MOP 8.4 MPa with accompanying infrastructure Szczecin - Gdańsk, Stage VI Rzeczyca - Wełczyn.”</td>
</tr>
<tr>
<td></td>
<td>Amendment of the company’s organizational regulations, effective as of 1 August 2018.</td>
</tr>
<tr>
<td></td>
<td>Additional co-financing under the Connecting Europe Facility – CEF for the Baltic Pipe project for pre-investment works. The maximum co-financing amount granted for the entire activity: EUR 18.3 million.</td>
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<td>Meeting with representatives of Ukrainian gas companies at the Gas Meter Calibration Laboratory (LWG) in Holowczyce.</td>
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<tr>
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<td>A set of decisions of the President of the Office of Technical Inspection authorizing the use of technical equipment of the DN1000 Lwówek - Odolanów gas pipeline, Stage 2 Króbów - Odolanów, approx. 54 km long.</td>
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<td>Completion of drilling survey concerning the future location of the underground gas storage facility. A meeting to thank the local community, representatives of the authorities and institutions involved for co-operation and participation in the completed phase of the project (Świątków, municipality of Janówiec Wlkp.).</td>
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<td></td>
<td>Picnic with Climate in Warsaw - GAZ-SYSTEM’s company stand.</td>
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<tr>
<td></td>
<td>Signing contracts for the development of project documentation and performing designer’s supervision over the construction of the Gustowny - Wronów gas pipeline at the sections of Gustowny - Leśniewice (OTS-IP company) and Leśniewice - Rawa Mazowiecka (consortium of EKF Consulting Engineers Polska and PONG GAZOPROJEKT).</td>
</tr>
<tr>
<td></td>
<td>Final acceptance of the DN 1000 Króbów - Odolanów gas pipeline.</td>
</tr>
<tr>
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</tr>
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<td>September</td>
<td>The Ensuring Security of Supply and Green Energy Transition Denmark and Poland in the European Union conference in Copenhagen with the participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień.</td>
</tr>
<tr>
<td></td>
<td>Signing of patronage contracts with classes on the profiles of IT technician, mechanic technician, mechatronics technician in the E. Kwaśniewski Technical Schools Complex in Grodzisk Wielkopolski, and of gas engineering technician, sanitary engineering technician at Technical School No. 3 in Łódź.</td>
</tr>
<tr>
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<td>Signing by GAZ-SYSTEM of the cooperation agreement with the operator of the National Power Grid – Polskie Sieci Elektroenergetyczne.</td>
</tr>
<tr>
<td></td>
<td>Commencement of construction of the 10 km long high-pressure gas pipeline DN500 on the route between Rzemietkarzyna Compressor Station and Zarzec Heat and Power Plant. Building Contractors: JT S.A. and TESGAS S.A.</td>
</tr>
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<td>The Energy Future Congress in Warsaw with the participation of representatives of GAZ-SYSTEM.</td>
</tr>
<tr>
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</tr>
<tr>
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<td>2nd edition of the OHS Services Forum in Warsaw with the participation of GAZ-SYSTEM representatives.</td>
</tr>
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</tr>
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</tr>
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</tr>
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<td></td>
<td>Official commencement of construction of the Slovakian part of the cross-border gas pipeline connecting transmission systems of Poland and Slovakia, with the participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień, in Veľké Kapušany in Slovakia.</td>
</tr>
<tr>
<td></td>
<td>The “Personality of Energy 2018” award for President of the Management Board of GAZ-SYSTEM, Tomasz Stepień, and Saulius Bilys, President of Amber Grid, for making a positive investment decision regarding the construction of the gas interconnection between Poland and Lithuania.</td>
</tr>
<tr>
<td></td>
<td>4th Energy Congress in Wrocław with the participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień.</td>
</tr>
<tr>
<td></td>
<td>Poznań Science Night - GAZ-SYSTEM’s company stand.</td>
</tr>
<tr>
<td></td>
<td>Participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień, and Vice-President of the Management Board of GAZ-SYSTEM, Artur Zawartko, in the ‘Polish Energy at the 100th Anniversary of Independence’ gala in Warsaw.</td>
</tr>
<tr>
<td></td>
<td>The Future of Baltic Energy Security conference in Washington with the participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień.</td>
</tr>
<tr>
<td></td>
<td>Completion of the Gas Infrastructure Alignment Project: transfer of 13 segments of gas infrastructure, along with the attached rights, and 62 facilities to Polska Spółka Gazownictwa (PSG).</td>
</tr>
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<td></td>
<td>Appointment of the management board of GAZ-SYSTEM for another three-year term (Decision of the Extraordinary General Meeting of Shareholders dated October 1, 2019).</td>
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<td></td>
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</tr>
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|     | Completion of drilling survey concerning the future location of the underground gas storage facility. A meeting to thank the local community, representatives of the authorities and institutions involved for co-operation and participation in the completed phase of the project (Świątków, municipality of Janówiec Wlkp.).
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|     | Completion of the construction of the Czeszów - Kiełczów gas pipeline.
|     | The ‘Personality of Energy 2018’ award for President of the Management Board of GAZ-SYSTEM, Tomasz Stepień.
|     | 4th Energy Congress in Wrocław with the participation of President of the Management Board of GAZ-SYSTEM, Tomasz Stepień.
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7.4. Tables and indicators

GRI 102-8
Total number of employees by the type of employment contract, position, region and gender

| Total number of employees (without members of the management body) | 3005 |
| Percentage of employees covered by collective agreements | 100 proc. |
| Full-time employees | 2993 |
| Part-time employees | 12 |
| Employees with definite-term contract | 285 |
| Employees with indefinite-term contract | 2720 |
| Number of women | 784 |
| Number of men | 2221 |
| Age below 30 | 245 |
| Age 30-50 | 1817 |
| Age over 50 | 943 |

Source: GAZ-SYSTEM.

<table>
<thead>
<tr>
<th>Number of persons employed at senior management level</th>
<th>women</th>
<th>men</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of persons employed at middle management level</td>
<td>695</td>
<td>1761</td>
<td>2456</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

<table>
<thead>
<tr>
<th>Structure of employment by location</th>
<th>women</th>
<th>men</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td>454</td>
<td>428</td>
<td>922</td>
</tr>
<tr>
<td>Gdańsk Branch</td>
<td>24</td>
<td>146</td>
<td>170</td>
</tr>
<tr>
<td>Poznań Branch</td>
<td>42</td>
<td>307</td>
<td>349</td>
</tr>
<tr>
<td>Rembelszczyzna Branch</td>
<td>56</td>
<td>313</td>
<td>369</td>
</tr>
<tr>
<td>Świętlany Branch</td>
<td>54</td>
<td>240</td>
<td>294</td>
</tr>
<tr>
<td>Tarnów Branch</td>
<td>59</td>
<td>570</td>
<td>629</td>
</tr>
<tr>
<td>Wrocław Branch</td>
<td>53</td>
<td>217</td>
<td>272</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
7.4. Tables and indicators

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Total number of employees by the type of employment contract, position, region and gender

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<tr>
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</table>

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<tr>
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<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2993</td>
</tr>
<tr>
<td>Part-time</td>
<td>12</td>
</tr>
<tr>
<td>Employees with definite-term contract</td>
<td>285</td>
</tr>
<tr>
<td>Employees with indefinite-term contract</td>
<td>2720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of women</th>
<th>Number of men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women</td>
<td>784</td>
<td>2221</td>
</tr>
<tr>
<td>Number of men</td>
<td>2221</td>
<td>784</td>
</tr>
<tr>
<td>Age below 30</td>
<td>245</td>
<td>1817</td>
</tr>
<tr>
<td>Age 30-50</td>
<td>1817</td>
<td>245</td>
</tr>
<tr>
<td>Age over 50</td>
<td>943</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

<table>
<thead>
<tr>
<th>Location</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>42</td>
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<td>349</td>
</tr>
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<td>313</td>
<td>369</td>
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<td>Świętokrzyski Branch</td>
<td>54</td>
<td>240</td>
<td>294</td>
</tr>
<tr>
<td>Tarnów Branch</td>
<td>59</td>
<td>570</td>
<td>629</td>
</tr>
<tr>
<td>Wrocław Branch</td>
<td>55</td>
<td>217</td>
<td>272</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

Workshops for gas market participants organized by GAZ-SYSTEM.

The ’Silver Laurel of Innovation’ award for GAZ-SYSTEM for project ‘Stand for calibration of gas meters under working pressure’.

Signing of the Agreement on strategic dialogue in the area of energy between Poland and the USA. Press conference with the participation of the Secretary of State in the Chancellery of the Prime Minister, Piotr Naimski, and US Secretary of Energy, Rick Perry, as well as representatives of the management boards of GAZ-SYSTEM and Polskie LNG.

Congress 590 in Poznań with the participation of Vice-President of the Management Board of GAZ-SYSTEM, Artur Zawartko.

Decision of the General Meeting of Shareholders dated November 30, 2018 on appointing Krzysztof Jackowski for the position of Vice-President of the Management Board of GAZ-SYSTEM (from January 1, 2019).

Final investment decisions regarding the Baltic Pipe gas pipeline taken by GAZ-SYSTEM and Energinet. The undertaking to build a gas pipeline with a total length of approx. 900 km onshore and offshore.

Signing of a tripartite agreement with the EU Executive Agency for Innovation and Network (INEA) for subsidizing pre-construction works related to the Baltic Pipe project under the Connecting Europe Facility (CEF) ‘Strengthening the National Gas Transmission Systems in Poland and Denmark for the Baltic Pipe project’.

Signing a contract with MGGP S.A. for the development of project documentation along with obtaining a building permit for the Skoczów - Komorowice - Olśnica gas pipeline.

Obtaining administrative permits for the connecting gas pipeline Rembelszczyzna Compressor Station – Jerzman Heat and Power Plant.

Agreement on co-operation between GAZ-SYSTEM and the Main School of Fire Service in Warsaw. Decision of President of the Energy Regulatory Office on the extension of the GAZ-SYSTEM license for the transport of gaseous fuels, and the decision to extend the period of designation of the company as the operator of the gas transmission system on the territory of Poland.

Location decision of the Governor of Pomorskie Voivodeship for the high-pressure gas pipeline between Szczytno and Gdańsk, stage VI, section Reszki - Wiczlino.

Signing by the Government Representative for Strategic Energy Infrastructure, Piotr Naimski, and the Minister of Energy, Climate and Municipal Services of Denmark, Lars Christian Lilleholt, of an agreement regulating the legal status of certain infrastructure elements of the Baltic Pipe project located in Denmark (including the Everdrup gas compressor station), during the UN climate summit COP24 in Katowice.
Employees who have received anti-corruption training, broken down by type of employment and age

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>Number of Employees who received training</th>
<th>Percentage of Employees who received training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite term employment</td>
<td>255</td>
<td>89%</td>
</tr>
<tr>
<td>Indefinite term employment</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Full-time</td>
<td>254</td>
<td>8%</td>
</tr>
<tr>
<td>Part-time</td>
<td>2</td>
<td>17%</td>
</tr>
<tr>
<td>Below 30 years of age</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Age 30-50</td>
<td>158</td>
<td>9%</td>
</tr>
<tr>
<td>Age over 50</td>
<td>95</td>
<td>10%</td>
</tr>
</tbody>
</table>

In 2018, the percentage of employees who were informed about the organisation’s anti-corruption policy and procedures was 100%.

| Number of Business Partners of the Organization | 992 |
| Number of Business Partners of the Organization that were informed about the organization’s anti-corruption policy and procedures | 992 |
| Percentage of Business Partners of Organizations that were informed about the organization’s anti-corruption policy and procedures | 100 proc. |

GRI 302-1
Internal energy consumption

| Source: GAZ-SYSTEM on the basis of the GUS G-02b report for 2018. |
| Total consumption of energy from non-renewable sources (purchased and from own sources - generated within the organisation’s own activity) and types of fuels used |
| Natural gas and coke oven gas | 120,928 dam³ |
| Liquid fuels (petrol + diesel) | 1164.2 Mg |
| Total energy consumption | 122,092.2 GJ |
GRI 102-8 (cont.)

<table>
<thead>
<tr>
<th>Employment contract, including:</th>
<th>women</th>
<th>men</th>
<th>łącznie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite-term contract</td>
<td>44</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>Definite-term contract</td>
<td>4</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Trial-period contract</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Contract on commission</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Short-term contract</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Managerial contract</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Source: Polskie LNG.

GRI 202-1

Ratio of standard entry level wage by gender compared to local minimum wage on a given market at significant locations of operation

Average monthly entry level wage (in the main locations) in PLN

<table>
<thead>
<tr>
<th></th>
<th>women</th>
<th>PLN 3,440.00</th>
<th>men</th>
<th>PLN 3,440.00</th>
<th>łącznie</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLN 3,440.00</td>
<td>164%</td>
<td></td>
<td>164%</td>
<td></td>
<td>164%</td>
</tr>
</tbody>
</table>
| Source: GAZ-SYSTEM.

In 2018, the percentage of employees who were informed about the organisation's anti-corruption policy and procedures was 100%.

Number of business partners of the organization

<table>
<thead>
<tr>
<th></th>
<th>992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of business partners of the organization that were informed about the organization’s anti-corruption policy and procedures</td>
<td>992</td>
</tr>
<tr>
<td>Percentage of business partners of organizations that were informed about the organization’s anti-corruption policy and procedures</td>
<td>100 proc.</td>
</tr>
</tbody>
</table>

GRI 205-2 Communication and training on anti-corruption policies and procedures

| Number of members of management bodies | 2 |
| Number of members of management bodies who were informed about anti-corruption policies and procedures | 2 |
| Number of members of management bodies who received training in anti-corruption measures | 2 |
| Percentage of members of management bodies informed about anti-corruption policies and procedures | 100 proc. |
| Percentage of members of management bodies who received training in anti-corruption measures | 100 proc. |

Source: GAZ-SYSTEM.

GRI 302-1 Internal energy consumption

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas and coke oven gas</td>
<td>120,928 dam³</td>
</tr>
<tr>
<td>Liquid fuels (petrol + diesel)</td>
<td>1,164.2 Mg</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>122,092.2 GJ</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM on the basis of the GUS G-02b report for 2018.
Total energy consumption

### Electricity

- 2.35 GJ
- 65.38 GWh

### Thermal energy

- 333,388.02 GJ

### Total consumption

- 333,390.37 GJ

Source: GAZ-SYSTEM on the basis of the GUS G-02b report for 2018.

Total energy consumption within the organisation

- 455,482.57 GJ

Source: GAZ-SYSTEM on the basis of the GUS G-02b report for 2018.

---

**Polskie LNG**

The terminal has an installation for fuel combustion (natural gas) with a nominal power of 177.5 MW which includes the vaporiser system, two CO\(_2\) boilers and two glycol boilers. In accordance with the requirements of the European Greenhouse Gas Emission Trading Scheme, the monitored gas in the installation is CO\(_2\). The implemented CO\(_2\) monitoring and reporting system in the terminal installation ensures that the emissions comply with the monitoring plans and applicable laws.

According to the report approved by an external CO\(_2\) verifier in 2018, Polskie LNG emitted 66,344 tonnes of CO\(_2\). Indirect emission of greenhouse gases is mainly related to the supply of electricity to the LNG Terminal. By converting energy consumption in 2018 into the volume of indirect emissions, the calculated emission volume amounted to 32,741 tonnes of CO\(_2\).

---

**GRI 305-1**

**Water discharge by quality and destination (GAZ-SYSTEM)**

The amounts of water collected and the amount of sewage introduced into waters or the ground as part of the company’s activity were determined based on data provided to the Państwowe Gospodarstwo Wody Wodne Polskie (PGW WP) as part of quarterly inspections in 2018 regarding compliance by the company with the conditions set in administrative decisions issued under the act dated July 20, 2017 Water Law with regard to:

- water abstraction – 123,431.93 m\(^3\)
- introduction of sewage into waters or into the ground – 114,171.61 m\(^3\)
- discharge into waters - rainwater or snowmelt, included in open or closed rainwater drainage systems used for rainfall discharge or collective sewage systems within the city’s administrative limits – 28,742,42 m\(^3\)

Source: GAZ-SYSTEM based on the statement of the company transferred to the Państwowe Gospodarstwo Wody Wodne Polskie (PGW WP).

---

**GRI 305-2**

**Total indirect greenhouse gas emissions**

According to the report approved by an external CO\(_2\) verifier in 2018, Polskie LNG emitted 66,344 tonnes of CO\(_2\). Indirect emission of greenhouse gases is mainly related to the supply of electricity to the LNG Terminal. By converting energy consumption in 2018 into the volume of indirect emissions, the calculated emission volume amounted to 32,741 tonnes of CO\(_2\).

---

**GRI 305-7**

**NO\(_x\), SO\(_x\), and other significant air emissions by type and weight (in kg)** Polskie LNG

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane (C(_2))</td>
<td>821,962.20</td>
</tr>
<tr>
<td>Carbon monoxide (CO)</td>
<td>6512.18</td>
</tr>
<tr>
<td>Hydrofluorocarbons (HFCs)</td>
<td>176.99</td>
</tr>
<tr>
<td>Non-methane volatile organic compounds (NMVOC)</td>
<td>23,088.13</td>
</tr>
<tr>
<td>Nitrogen oxides (NO(_x)/NO(_2))</td>
<td>11,325.04</td>
</tr>
<tr>
<td>Sulphur oxides (SO(_x)/SO(_2))</td>
<td>0.22</td>
</tr>
<tr>
<td>Polycyclic aromatic hydrocarbons (PAHs)</td>
<td>0.000021</td>
</tr>
<tr>
<td>Suspended particulate matter (PM10)</td>
<td>334.58</td>
</tr>
</tbody>
</table>

Source: Polskie LNG.

---

**Sustainable Development Report | About the Report. Summary**
Polskie LNG

The terminal has an installation for fuel combustion (natural gas) with a nominal power of 177.5 MW which includes the vaporiser system, two CO₂ boilers and two glycol boilers. In accordance with the requirements of the European Greenhouse Gas Emission Trading Scheme, the monitored gas in the installation is CO₂. The implemented CO₂ monitoring and reporting system in the terminal installation ensures that the emissions comply with the monitoring plans and applicable laws.

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- discharge into waters - rainfall or snowmelt, included in open or closed rainwater drainage systems used for rainfall discharge or collective sewage systems within the city’s administrative limits – 28,742,42 m³

NOx, SOx, and other significant air emissions by type and weight (in kg) Polskie LNG

<table>
<thead>
<tr>
<th>Emission Category</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane (CH₄)</td>
<td>821,962.20</td>
</tr>
<tr>
<td>Carbon monoxide (CO)</td>
<td>6512.18</td>
</tr>
<tr>
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<td>176.99</td>
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<tr>
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</tr>
<tr>
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<td>11,325.04</td>
</tr>
<tr>
<td>Sulphur oxides (SOx/SO2)</td>
<td>0.22</td>
</tr>
<tr>
<td>Polycyclic aromatic hydrocarbons (PAHs)</td>
<td>0.000021</td>
</tr>
<tr>
<td>Suspended particulate matter (PM10)</td>
<td>334.58</td>
</tr>
</tbody>
</table>

Source: Polskie LNG.
### Total volume of planned discharges of waste water

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM based on the statement of the company transferred to the Państwowe Gospodarstwo Wodne Wody Polskie (PGW WP).

### Total volume of unplanned discharges of waste water

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0</td>
</tr>
</tbody>
</table>

### Polskie LNG

#### Industrial wastewater from fire pump tests

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume (m³)</th>
<th>Place of discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial wastewater from fire pump tests</td>
<td>349.50,0</td>
<td>Baltic Sea</td>
</tr>
</tbody>
</table>

Source: Polskie LNG.

#### Industrial wastewater - 8060 - HVAC

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume (m³)</th>
<th>Place of discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial wastewater - 8060 - HVAC</td>
<td>763.00</td>
<td>Baltic Sea</td>
</tr>
</tbody>
</table>

#### Industrial wastewater from SCV interceptor plants

<table>
<thead>
<tr>
<th>Category</th>
<th>Volume (m³)</th>
<th>Place of discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial wastewater from SCV interceptor plants</td>
<td>42,741 m³</td>
<td>Sewerage System of the SSSA*</td>
</tr>
</tbody>
</table>

Source: Polskie LNG.

* Szczecin and Świnoujście Seaports Authority

### GRI 307-1

Amount of significant fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations

<table>
<thead>
<tr>
<th>Category</th>
<th>Total amount of significant fines (in PLN)</th>
<th>Total number of non-financial sanctions</th>
<th>Disputes resolved through resolution mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>20,000</td>
<td>2 (1 instruction and 1 post-audit order)</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM on the basis of audit reports.

### GRI 401-1

Total number and hiring rates of new employees and employee turnover by age group, gender and region

<table>
<thead>
<tr>
<th>Total company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of new employees by gender and age</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>below 30</td>
</tr>
<tr>
<td>30-50 years</td>
</tr>
<tr>
<td>above 50</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>Hiring rate</td>
</tr>
<tr>
<td>Employees (total)</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
Total volume of planned discharges of waste water: 0 m³
Total volume of unplanned discharges of waste water: 0 m³

Source: GAZ-SYSTEM based on the statement of the company transferred to the Państwowe Gospodarstwo Wodne Wody Polskie (PGW WP).

Polskie LNG

<table>
<thead>
<tr>
<th>Category</th>
<th>odbranik</th>
<th>Rola</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial wastewater from fire pump tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial wastewater - 8060 - HVAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial wastewater from SCV interceptor plants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Polskie LNG.
Szczecin and Świnoujście Seaports Authority

GRI 307-1
Amount of significant fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations

<table>
<thead>
<tr>
<th></th>
<th>women</th>
<th>men</th>
<th>total/average</th>
</tr>
</thead>
<tbody>
<tr>
<td>total amount of significant fines (in PLN)</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total number of non-financial sanctions</td>
<td>2 (1 instruction and 1 post-audit order)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disputes resolved through resolution mechanisms</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM on the basis of audit reports.

GRI 401-1
Total number and hiring rates of new employees and employee turnover by age group, gender and region

<table>
<thead>
<tr>
<th></th>
<th>women</th>
<th>men</th>
<th>total/average</th>
</tr>
</thead>
<tbody>
<tr>
<td>below 30</td>
<td>24</td>
<td>53</td>
<td>77</td>
</tr>
<tr>
<td>30-50 years</td>
<td>60</td>
<td>135</td>
<td>195</td>
</tr>
<tr>
<td>above 50</td>
<td>3</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>TOTAL</td>
<td>87</td>
<td>208</td>
<td>295</td>
</tr>
</tbody>
</table>

Hiring rate
11% 9% 10%*

Employees (total)
784 2221 3005

Source: GAZ-SYSTEM.
Hazard identification, risk assessment and accident investigation

GRI 403-2

Accidents at work

<table>
<thead>
<tr>
<th></th>
<th>women</th>
<th>men</th>
</tr>
</thead>
<tbody>
<tr>
<td>total days of incapacity for work due to accidents at work</td>
<td>645</td>
<td>0</td>
</tr>
<tr>
<td>number of fatal, group and severe accidents</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Benefits and health promotion programmes for employees

Private health-care
Access to and provision of health care services to employees, their family members and seniors. The agreement covers the provision of medical services, including comprehensive specialist consultations, tests and diagnostic procedures.

Insurance
Group life insurance contract for employees and their immediate family members. Employees can choose between two sponsored policies and four policies with a voluntary premium.

Employee Retirement Scheme
A form of group, voluntary saving for an additional pension. It is organised by the employer in consultation with the social partner.

Benefit package
It includes partial financing of leisure, sports, recreation, cultural and educational activities or support in case of accidents, etc., for those who have worked for the employer for more than 10 years, sick leave is paid in 100%, additional holidays are granted in the event of marriage or death of a close relative.

Source: GAZ-SYSTEM.

Polskie LNG

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Source: GAZ-SYSTEM.

Polskie LNG

Company Social Benefits Fund
Under the programme, funds are allocated, inter alia, for co-financing of organized holidays of employees and other eligible persons, financial support to persons in particularly difficult life situations, financial support to eligible persons in the event of accidents.

Non-salary components of remuneration
Employees are entitled to the following benefits: Employee Retirement Scheme, group insurance, private medical care, sports and recreation services and subsidized meals.

Source: Polskie LNG.

GRI 402-1

Minimum notice periods regarding operational changes, including an indication of whether these periods are specified in collective agreements

Employees receive information about changes to or new regulations through an internal document distribution system, collective emails and publications on the intranet. Meetings of the management board with representatives of social partners are regularly held. Since December 2017, an agreement has also been in place defining the principles of cooperation of the Employer with the Employee Council in the process of informing and consulting employees (based on Article 5 of the Act dated 7 April 2006 on informing and consulting employees).

The agreement lays down, among other things, the rules for the Employee Council to obtain information on the following:

- the activity and economic situation of the employer and the expected changes in this respect the state, structure and expected changes in employment and measures aimed at maintaining the level of employment
- activities that may bring about significant changes in work organisation or the basis of employment.

The document also regulates the procedure for employing consultants and experts, as well as organizational issues.

The Corporate Collective Labour Agreement is in force in the company, which specifically defines employees’ rights resulting from universally binding labour law provisions. The terms of consultation (negotiation) in the case of issues related to employment are set out in the applicable labour law and in the Act dated May 23, 1991 on trade unions (in the case of employees associated in trade union organizations).

Source: Polskie LNG.

Polskie LNG

The bodies operating in the Polskie LNG include the Employee Council, Social Labour Inspectors and two trade union organizations with whom consultations are carried out to the extent required by law. The responsibilities and rights of the employees and the management are described in Work Regulations and the Organizational Regulations. All information regarding organization and internal regulations are regularly published and are accessible to all employees via the intranet.

Source: Polskie LNG.

Polskie LNG

Employees are entitled to the following benefits: Employee Retirement Scheme, group insurance, private medical care, sports and recreation services and subsidized meals.

Source: Polskie LNG.

GRI 403-2

Hazards, risk assessment and accident investigation

<table>
<thead>
<tr>
<th></th>
<th>accidents at work</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of accidents at work</td>
<td>28</td>
</tr>
<tr>
<td>women</td>
<td>6</td>
</tr>
<tr>
<td>men</td>
<td>22</td>
</tr>
<tr>
<td>number of fatal, group and severe accidents</td>
<td>0</td>
</tr>
<tr>
<td>fatal</td>
<td>0</td>
</tr>
<tr>
<td>group</td>
<td>1</td>
</tr>
<tr>
<td>severe</td>
<td>0</td>
</tr>
<tr>
<td>total days of incapacity for work due to accidents at work</td>
<td>645</td>
</tr>
<tr>
<td>women</td>
<td>39</td>
</tr>
<tr>
<td>men</td>
<td>586</td>
</tr>
<tr>
<td>accident frequency rate</td>
<td></td>
</tr>
<tr>
<td>women</td>
<td>9.31</td>
</tr>
<tr>
<td>men</td>
<td>7.65</td>
</tr>
<tr>
<td>accident severity rate</td>
<td></td>
</tr>
<tr>
<td>women</td>
<td>9.91</td>
</tr>
<tr>
<td>men</td>
<td>26.64</td>
</tr>
<tr>
<td>number of persons affected by occupational diseases</td>
<td>0</td>
</tr>
<tr>
<td>days lost</td>
<td>7753</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
Hazard identification, risk assessment and accident investigation

GRI 403-2

<table>
<thead>
<tr>
<th>Accidents at work</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of accidents at work</td>
</tr>
<tr>
<td>women</td>
</tr>
<tr>
<td>men</td>
</tr>
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</tr>
<tr>
<td>fatal</td>
</tr>
<tr>
<td>group</td>
</tr>
<tr>
<td>severe</td>
</tr>
<tr>
<td>total days of incapacity for work due to accidents at work</td>
</tr>
<tr>
<td>women</td>
</tr>
<tr>
<td>men</td>
</tr>
<tr>
<td>accident frequency rate</td>
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</tr>
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<td>women</td>
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<tr>
<td>men</td>
</tr>
<tr>
<td>number of persons affected by occupational diseases</td>
</tr>
<tr>
<td>days lost</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

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Source: Polskie LNG.

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Source: GAZ-SYSTEM.

**Polskie LNG**

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Under the programme, funds are allocated, inter alia, for co-financing of organized holidays of employees and other eligible persons, financial support to persons in particularly difficult life situations, financial support to eligible persons in the event of accidents.

**Non-salary components of remuneration**
Employees are entitled to the following benefits: Employee Retirement Scheme, group insurance, private medical care, sports and recreation services and subsidized meals.

Source: Polskie LNG.

GRI 402-1

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Source: Polskie LNG.

**Non-salary components of remuneration**

Employees are entitled to the following benefits: Employee Retirement Scheme, group insurance, private medical care, sports and recreation services and subsidized meals.

Source: Polskie LNG.

Source: Polskie LNG.

Source: GAZ-SYSTEM.
GRI 404-1
Total hours of training annually per employee

<table>
<thead>
<tr>
<th>Number of training hours (1 hour = 60 min) broken down by gender and category of employees in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakdown by structure</td>
</tr>
<tr>
<td>senior management</td>
</tr>
<tr>
<td>women</td>
</tr>
<tr>
<td>919</td>
</tr>
<tr>
<td>middle management</td>
</tr>
<tr>
<td>1652</td>
</tr>
<tr>
<td>other employees</td>
</tr>
<tr>
<td>9868</td>
</tr>
<tr>
<td>TOTAL training hours</td>
</tr>
<tr>
<td>12,439</td>
</tr>
</tbody>
</table>

Breakdown by organisational division

<table>
<thead>
<tr>
<th>Head Office</th>
<th>Branch in Gdańsk</th>
<th>Branch in Poznań</th>
<th>Branch in Rembelszczyzna</th>
<th>Branch in Świękłany</th>
<th>Branch in Tarnów</th>
<th>Branch in Wrocław</th>
<th>TOTAL training hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6868</td>
<td>859</td>
<td>1027</td>
<td>796</td>
<td>1015</td>
<td>863</td>
<td>1011</td>
<td>12,439</td>
</tr>
<tr>
<td>8261</td>
<td>3014</td>
<td>5039</td>
<td>5213</td>
<td>3756</td>
<td>11,689</td>
<td>3078</td>
<td>40,050</td>
</tr>
<tr>
<td>15,129</td>
<td>3873</td>
<td>6066</td>
<td>6009</td>
<td>4711</td>
<td>12,552</td>
<td>4089</td>
<td>52,489</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

Average number of training hours (1 hour = 60 min) broken down by gender and category of employees in 2018

<table>
<thead>
<tr>
<th>Breakdown by structure</th>
<th>women</th>
<th>men</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>senior management</td>
<td>46</td>
<td>35</td>
<td>81</td>
</tr>
<tr>
<td>middle management</td>
<td>24</td>
<td>18</td>
<td>42</td>
</tr>
<tr>
<td>other employees</td>
<td>14</td>
<td>17</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

GRI 405-1
Diversity of staff and management bodies

<table>
<thead>
<tr>
<th>Breakdown by structure and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Board</td>
</tr>
<tr>
<td>below 30</td>
</tr>
<tr>
<td>30-50 years</td>
</tr>
<tr>
<td>above 50</td>
</tr>
<tr>
<td>Supervisory Board</td>
</tr>
<tr>
<td>below 30</td>
</tr>
<tr>
<td>30-50 years</td>
</tr>
<tr>
<td>above 50</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

Total hours of training per employee

<table>
<thead>
<tr>
<th>17</th>
</tr>
</thead>
</table>

Average number of training hours per woman

<table>
<thead>
<tr>
<th>16</th>
</tr>
</thead>
</table>

Average number of training hours per man

<table>
<thead>
<tr>
<th>18</th>
</tr>
</thead>
</table>
### GRI 404-1

**Total hours of training annually per employee**

<table>
<thead>
<tr>
<th>Number of training hours (1 hour = 60 min) broken down by gender and category of employees in 2018</th>
<th>women</th>
<th>men</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakdown by structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>senior management</td>
<td>919</td>
<td>2377</td>
<td>3296</td>
</tr>
<tr>
<td>middle management</td>
<td>1652</td>
<td>7529</td>
<td>9181</td>
</tr>
<tr>
<td>other employees</td>
<td>9868</td>
<td>30,144</td>
<td>40,012</td>
</tr>
<tr>
<td><strong>TOTAL training hours</strong></td>
<td>12,439</td>
<td>40,050</td>
<td>52,489</td>
</tr>
</tbody>
</table>

| **Breakdown by organisational division** |       |     |       |
| Head Office | 6868 | 8261| 15,129|
| Branch in Gdańsk | 859 | 3014| 3873|
| Branch in Poznań | 1027 | 3039| 4066|
| Branch in Rembelszczyzna | 796 | 5213| 6009|
| Branch in Świękłany | 1015 | 3756| 4771|
| Branch in Tarnów | 863 | 11,689| 12,552|
| Branch in Wrocław | 1011 | 3078| 4089|
| **TOTAL training hours** | 12,439| 40,050| 52,489|

Source: GAZ-SYSTEM.

<table>
<thead>
<tr>
<th>Average number of training hours (1 hour = 60 min) broken down by gender and category of employees in 2018</th>
<th>women</th>
<th>men</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakdown by structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>senior management</td>
<td>46</td>
<td>55</td>
<td>52</td>
</tr>
<tr>
<td>middle management</td>
<td>24</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>other employees</td>
<td>14</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.

### GRI 405-1

**Diversity of staff and management bodies**

<table>
<thead>
<tr>
<th><strong>Breakdown by structure and age</strong></th>
<th>Management Board</th>
<th>Supervisory Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>below 30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>30-50 years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>above 50</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Breakdown by structure and age</strong></th>
<th>Management Board</th>
<th>Supervisory Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>below 30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>30-50 years</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>above 50</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
total employee training hours in 2018

52,489
total employee training hours in 2018

52,489
### 7.5. GRI content index

#### GRI 102-55

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
<th>Page in the report</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-1</td>
<td>Name of the organisation.</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-2</td>
<td>Primary brands, products or services</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-3</td>
<td>Location of organisation’s headquarters</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-4</td>
<td>Number of countries where the organisation operates and names of those countries</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-5</td>
<td>Nature of ownership and legal form</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-6</td>
<td>Markets served</td>
<td>●</td>
<td></td>
<td>8, 82</td>
</tr>
<tr>
<td>102-7</td>
<td>Scale of operations</td>
<td>●</td>
<td></td>
<td>12, 93</td>
</tr>
<tr>
<td>102-8</td>
<td>Overview about employees</td>
<td>●</td>
<td></td>
<td>12, 93, 111, 112</td>
</tr>
<tr>
<td>102-9</td>
<td>Value chain</td>
<td>●</td>
<td></td>
<td>12, 14, 83</td>
</tr>
<tr>
<td>102-10</td>
<td>Significant changes in the organisation and its supply chain</td>
<td>●</td>
<td></td>
<td>12, 85</td>
</tr>
<tr>
<td>102-11</td>
<td>Precautionary principle</td>
<td>●</td>
<td></td>
<td>60, 91</td>
</tr>
<tr>
<td>102-12</td>
<td>External initiatives adopted by the organisation</td>
<td>●</td>
<td></td>
<td>26, 90</td>
</tr>
<tr>
<td>102-13</td>
<td>Membership in associations</td>
<td>●</td>
<td></td>
<td>27, 90</td>
</tr>
<tr>
<td>102-14</td>
<td>Statement of the top management</td>
<td>●</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>102-15</td>
<td>Key impacts the organisation has on its environment, risks and opportunities</td>
<td>●</td>
<td></td>
<td>4, 65, 89</td>
</tr>
<tr>
<td>102-16</td>
<td>Organisation’s values, principles, standards and norms of behaviour</td>
<td>●</td>
<td></td>
<td>8, 85</td>
</tr>
<tr>
<td>102-40</td>
<td>List of the organisation’s stakeholder groups</td>
<td>●</td>
<td></td>
<td>22, 90</td>
</tr>
<tr>
<td>102-41</td>
<td>Percentage of employees covered by collective agreements</td>
<td>●</td>
<td></td>
<td>70, 110</td>
</tr>
<tr>
<td>102-42</td>
<td>Identification and selection of stakeholder groups engaged by the organisation</td>
<td>●</td>
<td></td>
<td>22, 90</td>
</tr>
<tr>
<td>102-43</td>
<td>Organisation’s approach to stakeholder engagement</td>
<td>●</td>
<td></td>
<td>22, 90</td>
</tr>
<tr>
<td>102-44</td>
<td>Key topics and concerns that have been raised through stakeholder engagement</td>
<td>●</td>
<td></td>
<td>25</td>
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<tr>
<td>102-45</td>
<td>List of entities covered by the consolidated financial statements</td>
<td>●</td>
<td></td>
<td>99</td>
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</tbody>
</table>

#### Employee categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>30-50 years</td>
<td>17</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>above 50</td>
<td>3</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>43</td>
<td>63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Middle management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>30-50 years</td>
<td>54</td>
<td>243</td>
<td>297</td>
</tr>
<tr>
<td>above 50</td>
<td>15</td>
<td>169</td>
<td>184</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>69</td>
<td>417</td>
<td>486</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other indicator of diversity - not applicable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other employees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>77</td>
<td>204</td>
<td>281</td>
</tr>
<tr>
<td>30-50 years</td>
<td>471</td>
<td>1226</td>
<td>1697</td>
</tr>
<tr>
<td>above 50</td>
<td>147</td>
<td>761</td>
<td>908</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>695</td>
<td>1761</td>
<td>2456</td>
</tr>
</tbody>
</table>

*Source: GAZ-SYSTEM.*
### Employee categories

#### Breakdown by structure and age

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>30-50 years</td>
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</tr>
<tr>
<td>above 50</td>
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<td><strong>TOTAL</strong></td>
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<td>43</td>
<td>63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Middle management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>30-50 years</td>
<td>54</td>
<td>243</td>
<td>297</td>
</tr>
<tr>
<td>above 50</td>
<td>15</td>
<td>169</td>
<td>184</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>69</td>
<td>417</td>
<td>486</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other indicator of diversity - not applicable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other employees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 30</td>
<td>77</td>
<td>204</td>
<td>281</td>
</tr>
<tr>
<td>30-50 years</td>
<td>471</td>
<td>1226</td>
<td>1697</td>
</tr>
<tr>
<td>above 50</td>
<td>147</td>
<td>761</td>
<td>908</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>695</td>
<td>1781</td>
<td>2476</td>
</tr>
</tbody>
</table>

Source: GAZ-SYSTEM.
Only internal assurance was made.

Material aspects identified in the process for defining report content

There were no restatements.

The report does not contain any significant changes in relation to the previous report.

The report covers the period from 1 January to 31 December 2018.

December 2018

Questions and comments concerning the report should be directed to the Corporate Communication and Marketing Division of GAZ-SYSTEM. sekretariat.bk@gaz-system.pl phone: +48 22 220 15 46

This report has been prepared in accordance with the guidelines provided in the International non-financial reporting standard of the Global Reporting Initiative, in accordance with the GRI Standard using the core option.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-46</td>
<td>Process of defining the content of the report</td>
<td>•</td>
<td>103</td>
</tr>
<tr>
<td>102-47</td>
<td>Material aspects identified in the process for defining report content</td>
<td>•</td>
<td>103</td>
</tr>
<tr>
<td>102-48</td>
<td>Restatements of information and the underlying reasons</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-49</td>
<td>Significant changes in relation to the previous report</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-50</td>
<td>Reporting period</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-51</td>
<td>Date of most recent previous report</td>
<td>•</td>
<td>December 2018</td>
</tr>
<tr>
<td>102-52</td>
<td>Reporting cycle</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-53</td>
<td>Contact point for questions regarding the report</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-54</td>
<td>Claims of reporting in accordance with the GRI Standards</td>
<td>•</td>
<td>–</td>
</tr>
<tr>
<td>102-55</td>
<td>GRI content index</td>
<td>•</td>
<td>125</td>
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<tr>
<td>102-56</td>
<td>External assurance</td>
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<td>Only internal assurance was made.</td>
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**Detailed indicators**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
<th>Page in the report</th>
</tr>
</thead>
</table>

### Economic aspects

| Economic performance | 203-1 | Direct economic value generated (revenues) and distributed (operating costs, wages, salaries, payments to investors and the government, social investment) | • | 99 |
| Market presence | 202-1 | Ratio of standard entry-level wage by gender compared to local minimum wage on a given market at significant locations of operation | • | 112 |
| Indirect economic impacts | 203-1 | Infrastructure investments and services supported | • | 31, 39, 58 |
| Procurement practices | 204-1 | Proportion of spending on local suppliers at significant locations of operation | • | 78.2 per cent of spending on suppliers from Poland |
| Anti-corruption | 205-1 | Communication and training about anti-corruption policies and procedures (management bodies, employees, business partners) | • | 112 |
| Anti-competitive behaviour | 206-1 | Total number of legal actions for anticompetitive behaviour, anti-trust, and monopoly practices and their outcomes | • | W 2018 r. nie odnotowano takich przypadków |

### Environmental aspects

| Energy | 302-1 | Energy consumption (electricity, heat, cooling, steam) within the organization – from renewable and non-renewable sources | • | 113 |
| Biodiversity | 304-1 | Operational sites owned, leased, managed, or adjacent to, in protected areas, and areas of high biodiversity value outside protected areas | • | 61, 91 |
| | 304-4 | UICN Red List species and national conservation list species with habitats in areas affected by operations | • | 91 |
| Emissions | 305-1 | Direct greenhouse gas emissions (from sources owned or controlled by the reporting organisation) | • | 114 |
| | 305-2 | Indirect greenhouse gas emissions | • | 115 |
| | 305-7 | Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions | • | 115 |
| Effluents and wastes | 306-1 | Water discharge | • | 115, 116 |
| Environmental Compliance | 307-1 | Amount of significant fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations | • | 116 |

| 126 | 127 |
**Process of defining the content of the report**

- **Material aspects identified in the process for defining report content**
  - There were no restatements.
- **Significant changes in relation to the previous report**
  - The report does not contain any significant changes in relation to the previous report.
- **Reporting period**
  - The report covers the period from 1 January to 31 December 2018.
- **Date of most recent previous report**
  - December 2018
- **Contact point for questions regarding the report**
  - The company reports on a yearly basis.
  - Questions and comments concerning the report should be directed to the Corporate Communication and Marketing Division of GAZ-SYSTEM. Sekretariat.bk@gaz-system.pl. Phone: +48 22 220 15 46

---

**Economic aspects**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
<th>Page in the report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic performance</strong></td>
<td>201-1</td>
<td>Direct economic value generated (revenues and distributed (operating costs, wages, salaries, payments to investors and the government, social investment))</td>
<td>●</td>
<td>●</td>
<td>99</td>
</tr>
<tr>
<td><strong>Market presence</strong></td>
<td>202-1</td>
<td>Ratio of standard entry level wage by gender compared to local minimum wage on a given market at significant locations of operation</td>
<td>●</td>
<td>●</td>
<td>112</td>
</tr>
<tr>
<td><strong>Indirect economic impacts</strong></td>
<td>203-1</td>
<td>Infrastructure investment and services supported</td>
<td>●</td>
<td>●</td>
<td>31, 39, 58</td>
</tr>
<tr>
<td><strong>Procurement practices</strong></td>
<td>204-1</td>
<td>Proportion of spending on local suppliers at significant locations of operation</td>
<td>●</td>
<td>●</td>
<td>14</td>
</tr>
<tr>
<td><strong>Anti-corruption</strong></td>
<td>205-2</td>
<td>Communication and training about anti-corruption policies and procedures (management bodies, employees, business partners)</td>
<td>●</td>
<td>●</td>
<td>112</td>
</tr>
<tr>
<td><strong>Anti-competitive behaviour</strong></td>
<td>206-1</td>
<td>Total number of legal actions for anticompetitive behaviour, anti-trust, and monopoly practices and their outcomes</td>
<td>●</td>
<td>●</td>
<td>W 2018r. nie odnotowano takich przypadków.</td>
</tr>
</tbody>
</table>

**Environmental aspects**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
<th>Page in the report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy</strong></td>
<td>301-1</td>
<td>Energy consumption (electricity, heat, cooling, steam) within the organization – from renewable and non-renewable sources</td>
<td>●</td>
<td>●</td>
<td>113</td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
<td>304-1</td>
<td>Operational sites owned, leased, managed, in adjacent to, protected areas and areas of high biodiversity value outside protected areas</td>
<td>●</td>
<td>●</td>
<td>61, 91</td>
</tr>
<tr>
<td><strong>Emissions</strong></td>
<td>305-1</td>
<td>Direct greenhouse gas emissions (from sources owned or controlled by the reporting organisation)</td>
<td>●</td>
<td>●</td>
<td>114</td>
</tr>
<tr>
<td><strong>Effluents and waste</strong></td>
<td>306-1</td>
<td>Water discharge</td>
<td>●</td>
<td>●</td>
<td>115, 116</td>
</tr>
<tr>
<td><strong>Environmental Compliance</strong></td>
<td>307-1</td>
<td>Amount of significant fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations</td>
<td>●</td>
<td>●</td>
<td>116</td>
</tr>
</tbody>
</table>

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**Detailed indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Title</th>
<th>Reporting level</th>
<th>Comments</th>
<th>Page in the report</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-46</td>
<td>Process of defining the content of the report</td>
<td>●</td>
<td></td>
<td>103</td>
</tr>
<tr>
<td>102-47</td>
<td>Material aspects identified in the process for defining report content</td>
<td>●</td>
<td></td>
<td>103</td>
</tr>
<tr>
<td>102-48</td>
<td>Restatements of information and the underlying reasons</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>102-49</td>
<td>Significant changes in relation to the previous report</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>102-50</td>
<td>Reporting period</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>102-51</td>
<td>Date of most recent previous report</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>102-52</td>
<td>Reporting cycle</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>102-53</td>
<td>Contact point for questions regarding the report</td>
<td>●</td>
<td></td>
<td>–</td>
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<tr>
<td>102-54</td>
<td>Claims of reporting in accordance with the GRI Standards</td>
<td>●</td>
<td></td>
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</tr>
<tr>
<td>102-55</td>
<td>GRI content index</td>
<td>●</td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>102-56</td>
<td>External assurance</td>
<td>○</td>
<td>Only internal assurance was made.</td>
<td>–</td>
</tr>
</tbody>
</table>
### Social and labour aspects

<table>
<thead>
<tr>
<th>Subject</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>401-1</td>
<td>Total number and hiring rates of new employees and employee turnover by age group, gender and region</td>
<td>●</td>
<td></td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>401-2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, broken down by significant location of operation</td>
<td>●</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>Labour/ Management Relations</td>
<td>402-1</td>
<td>Minimum notice periods regarding operational changes, including indication whether or not they are laid down in collective agreements</td>
<td>●</td>
<td></td>
<td>118, 119</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>403-1</td>
<td>Occupational health and safety management system</td>
<td>●</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>403-2</td>
<td>Hazard identification, risk assessment and accident investigation</td>
<td>●</td>
<td></td>
<td>64, 119</td>
</tr>
<tr>
<td></td>
<td>403-4</td>
<td>Worker participation, consultation, and communication on occupational health and safety</td>
<td>●</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>Training and education</td>
<td>404-1</td>
<td>Average hours of training per year per employee, by gender and employee category</td>
<td>●</td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Diversity and equal opportunity</td>
<td>405-1</td>
<td>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</td>
<td>●</td>
<td></td>
<td>121</td>
</tr>
</tbody>
</table>

### Human rights aspects

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<thead>
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</tr>
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<tbody>
<tr>
<td>Non-discrimination</td>
<td>406-1</td>
<td>Incidents of discrimination and corrective actions taken</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Freedom of association and collective bargaining</td>
<td>407-1</td>
<td>Operations and supplies in which the right to freedom of association and collective bargaining may be at risk, and actions taken to protect these rights.</td>
<td>●</td>
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</tr>
</tbody>
</table>

### Aspects related to the impact on the social environment

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<th>Comments</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Local communities</td>
<td>413-1</td>
<td>Percentage of operations with implemented local community engagement, impact assessments, and/or development programs (community impact assessments, community development, consultation, stakeholder involvement)</td>
<td>●</td>
<td></td>
<td>100 per cent in accordance with the “GAS SYSTEM Reputation Policy”, each project at both the design and construction stage is covered by communication activities aimed at reaching the local communities of those municipalities and towns where the project will be carried out, as well as the public and local environmental organisations.</td>
</tr>
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### Product liability aspects

<table>
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<tbody>
<tr>
<td>Marketing and labelling of products and services</td>
<td>417-1</td>
<td>Type of product and service information required by the organization’s procedures for product and service information and labelling, and percentage of significant product and service categories subject to such information requirements (e.g., composition, disposal method, etc.).</td>
<td>●</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Customer privacy</td>
<td>418-1</td>
<td>Total number of substantiated complaints regarding breaches of customer privacy and laws of customer data.</td>
<td>●</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Compliance with socio-economic regulations</td>
<td>419-1</td>
<td>Amount of significant fines and total number of non-monetary sanctions for non-compliance with laws and socio-economic regulations.</td>
<td>●</td>
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<tr>
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<td>●</td>
<td>No such cases were reported in 2018.</td>
<td>–</td>
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List of acronyms

ACER - Agency for the Cooperation of Energy Regulators
BCMS - Business Continuity Management System
BEMIP - Baltic Energy Market Interconnection Plan
CA - Connection Agreement
CEF - Connecting Europe Facility
CNG - Compressed Natural Gas
ENTSOG - European Network of Transmission System Operators for Gas
FNE - Natural Energy Fund
FWI - Local Initiatives Support Fund
GCP - Point de connexion au réseau
GERG - European Gas Research Group
GIE - Gas Infrastructure Europe
GIPL - Gas Interconnection Poland - Lithuania
GRI - Global Reporting Initiative
GIA - Institute of Gasprom (Chamber of Natural Gas Industry)
INEA - Innovation and Networks Executive Agency
ITC - Transmission Network Code
ISO - International Organization for Standardization
IT - Inter-TSO Agreement
KDG - National Gas Dispatch Centre
LNGS - Liquid Natural Gas
MUP - Inter-operator Transmission Contract
NC BAL - Network Code/Netcode on Gas Balancing of Transmission Networks
NCBR - National Centre for Research and Development
NC CAM - Network Code on Capacity Allocation Mechanisms in gas transmission systems
NC TAR - Network Code on harmonised transmission tariffs structures for gas
PCI - Project of Common Interest
PGIG S.A. - Polskie Górnictwo Naftowe i Gazownictwo S.A.
TJE - Field Operation Unit

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We would like to thank everyone who contributed to the creation of this Sustainability Report for 2018.
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