



OUR
RESPONSIBILITY
2018

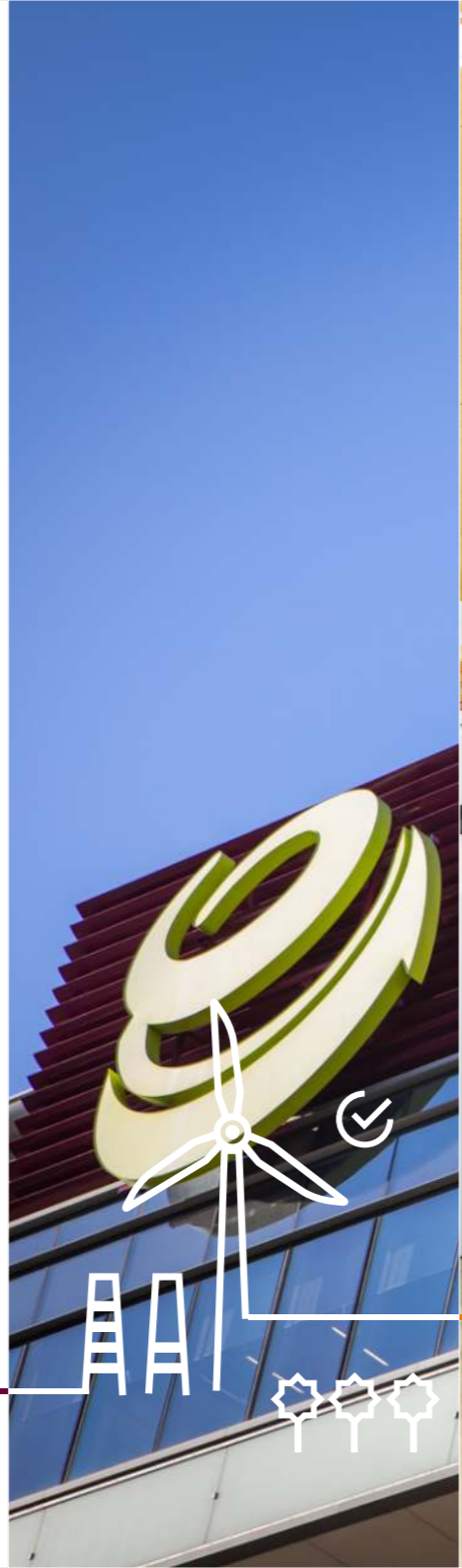


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About Energia Group



1.1

Message from the Board of Directors of Energa SA

102-14



Alicja Barbara Klimiuk
acting CEO of Energa SA



Jacek Kościelniak
VP of Finance



Grzegorz Ksepko
VP of Corporate Affairs



Dear readers,

We have summarised our activities in the field of sustainable development and corporate social responsibility in the year 2018. We would like to share our achievements and priorities with you, which is why we present you with this Energa Group's CSR report – 'Our Responsibility 2018'.

State-owned companies lead the way when it comes to doing business while respecting the interests and values of communities in which they operate. That's why sustainable development and responsibility for our employees, Customers, the society as a whole and the natural environment are so important to us.

2018 was a year of many positive changes in our organisation. We've completed the process of implementing the optimal structure within Energa Group – we reduced the number of group companies by half and lowered our administrative costs without cutting employment. Ensuring a stable, safe and friendly work environment is one of our priorities.

In 2018 we were also able to complete the implementation of the EMAS environmental management system in all companies comprising the Energa Group. This was a great achievement for us – Energa is the first Polish energy industry group to include so many companies under this important certification. We can also boast a number of pro-environmental projects across the entire area of the Group's operations.

In the 'Our Responsibility 2018' report, we discuss whether we've been able to achieve the objectives we had set ourselves and establish priorities for 2019 in all key areas of sustainable development and corporate responsibility: employee- and customer-related, environmental and social. We believe we made good use of the previous year. We hope you will find this report of interest.

Board of Directors of Energa SA

Alicja Barbara Klimiuk
acting CEO of Energa SA

Jacek Kościelniak
VP of Finance

Grzegorz Ksepko
VP of Corporate Affairs

Gdańsk, 14 March 2019

1.2 Company profile and business model



Energa Group in numbers

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102-2
102-7

Energa Group is one of Poland's four major energy groups, with a leading position in the Polish market with regards to the share of electric energy produced from renewable sources in total own production. The Group's basic operations include the production, distribution and trading in electricity and heat and the sale of natural gas.

Energa Group delivers and sells electricity to approx. 3 million Customers, both households and businesses. Energa Group is Poland's third largest integrated distribution system operator in terms of the volume of energy supplied. Its distribution network comprises a total of nearly 188 thousand kilometres of power lines and covers a total area of almost 75 thousand square kilometres, i.e. approx. 24% of the surface area of Poland.

G4-EU4



approx. 188k km

total length of power lines owned by the group



3 million

Customers



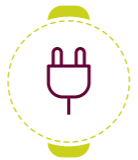
9 815

number of persons employed based on employment agreements



24 %

of the country's surface area



22.46 TWh

amount of energy supplied in 2018



61

number of power plants owned

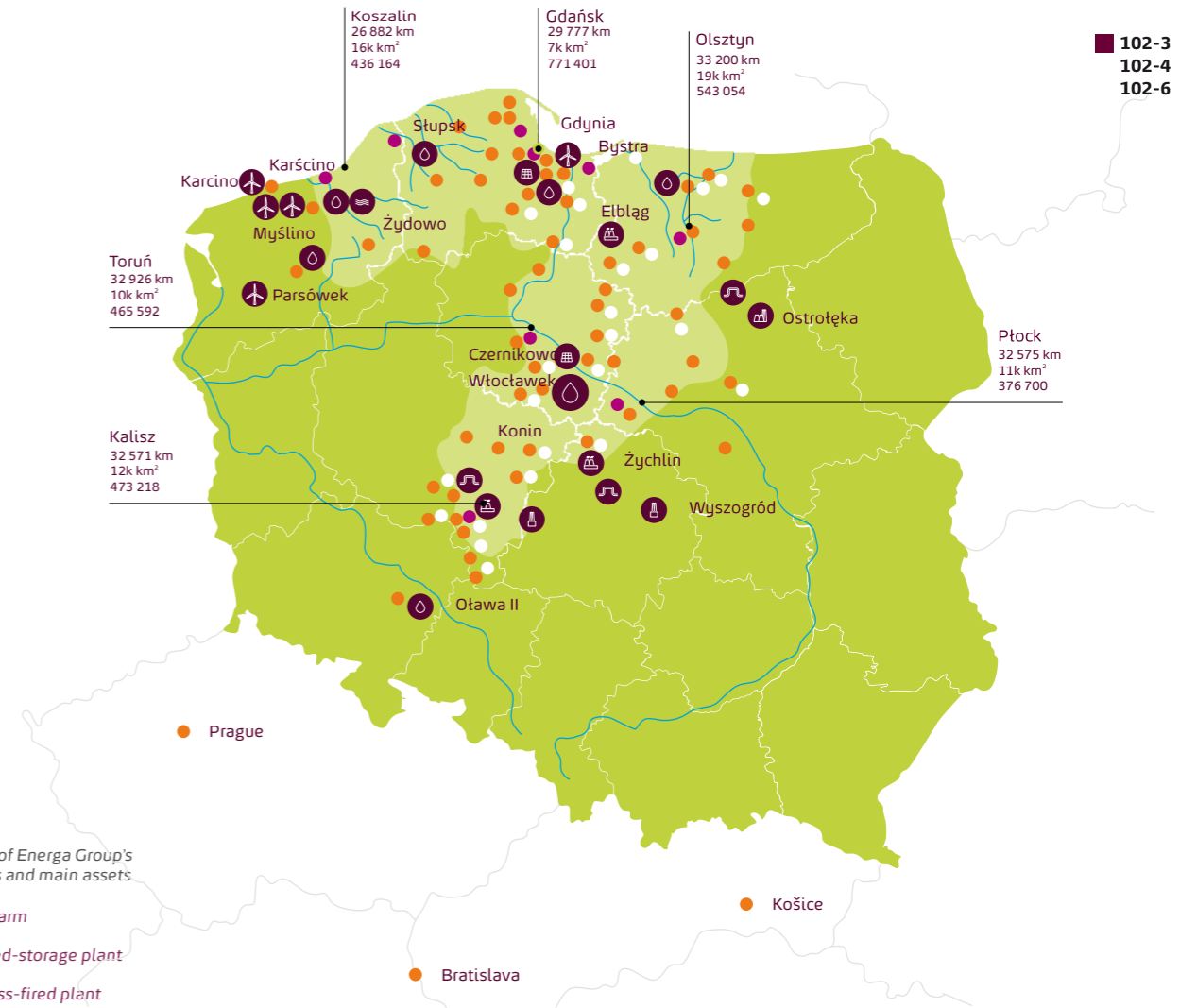
Locations of Energa Group's operations and main assets

- Wind farm
- Pumped-storage plant
- Biomass-fired plant
- Photovoltaic farm
- Combined heat and power plant
- Baseload power plant
- Heat plant
- Heat network
- Small hydroelectric power plant
- Large hydroelectric power plant

- Distribution of electricity
- Sale of electricity

- City or town
- Length of power lines
- Electricity distribution area
- Number of recipients connected to the grid
- Local branch offices of Energa Operator SA

- Head office of Energa SA
- Sales outlet
- Sales point
- Partner-operated point

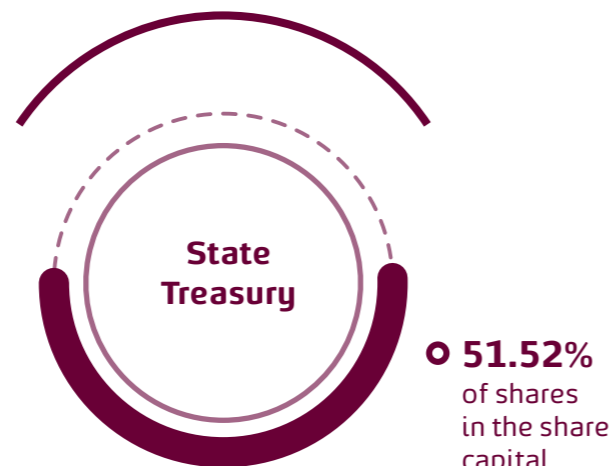


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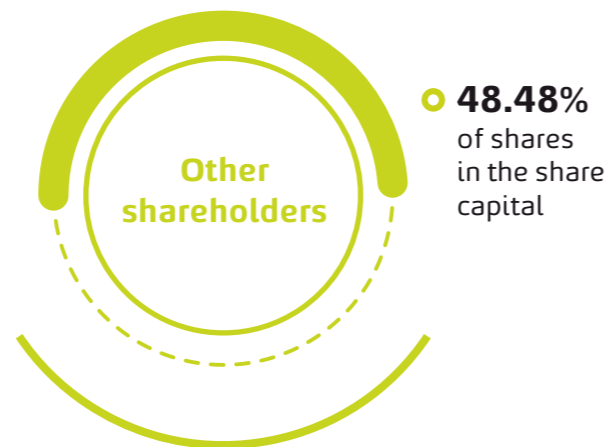
Business Model

102-1 ■ Energa Group's operations are focused on three key business lines: Production, Distribution and Sales of electricity and natural gas; these three areas create the value of the entire group of companies under the supervision of Energa SA as the managing company.

Energa SA with its registered office in Gdańsk is the parent company of all companies making up the group of companies – as their sole owner or majority shareholder. It exercises active ownership supervision, integrates key management and support functions within the Group and chooses the Group's strategic directions and its business and value management models. Since December 2013, the company's shares are publicly traded on the Warsaw stock exchange. Energa SA is included in the index of Poland's largest publicly traded companies (WIG20) and indexes of socially responsible companies: RESPECT Index and FTSE4Good Emerging.



Energa SA shareholding structure



Grzegorz Ksepko
VP of corporate affairs, Energa SA

Implementing the optimal group structure without negatively affecting our employees was a difficult task. We were able to achieve our objective with great success, as we managed to complete the entire process without any redundancies. The savings we made thanks to the restructuring process result from cost reductions achieved through reducing the management staff and centralising shared services (IT, sourcing, accounting). Thanks to these cuts, we were able to reduce costs that had previously been replicated in each individual company.

Implementing the Group's optimal structure

In 2018, Energa Group completed the process of implementing the Group's optimal structure, resulting in an increase in management efficiency, reduced number of companies and reduced operational costs, while maintaining the previous level of employment. The Group's restructuring had been underway since August 2017. The purpose of the changes was to create an organisation that would efficiently react to changes in the market, with uniform internal processes and able to fully utilise its own resources.

The effects of implementing the Group's optimal structure include shortening decision pathways, a more fluid management of investment budget, and improvement in the effective use of the competences possessed by employees of the Group's companies; in a wider perspective, the process enabled the Group to make significant savings. Corporate governance was strengthened and management procedures were simplified. The role of synergy and full utilisation of the potential of consolidated companies was made more significant. A reduction in the number of services outsourced to external contractors and entrusting these services to Group companies contributed to the rationalisation and optimisation

of business processes within the Group. Overlapping competences of companies were eliminated as part of consolidation processes, increasing the level of rational use of the employees' potentials. The project affected nearly 6.5 thousand employees, of which nearly half changed their employer within the Group. No redundancies were made as a result of the restructuring process, while hiring processes continued.

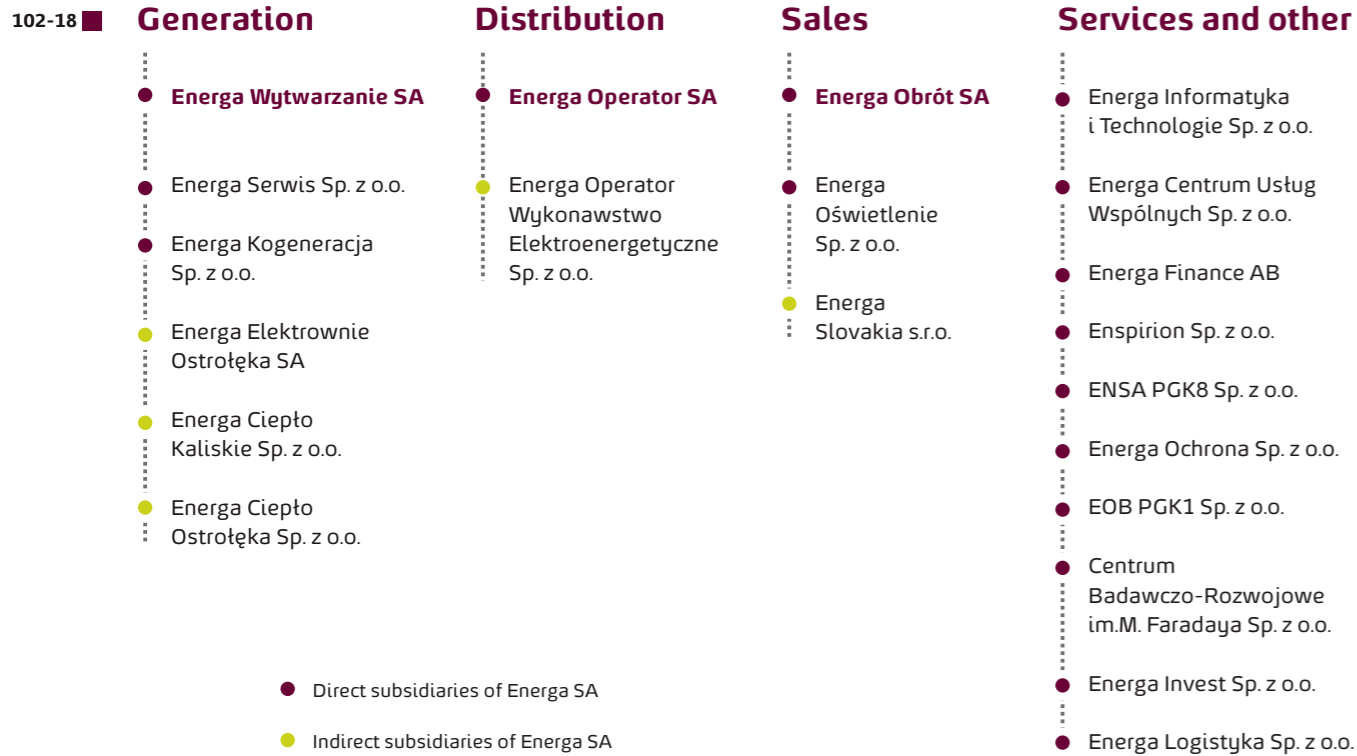
As concerns business lines, the Distribution Line underwent the most significant changes, with the 13 companies that originally made up the line being reduced to 2. The consolidation process in the Generation Business Line resulted in the reduction of companies from 9 to 6, and from 6 to 3 in the Sales Business Line. The process of implementing the optimal structure of Energa Group also affected the Services Business Line and other lines, where changes to the structure resulted in the reduction of the number of companies from 15 to 10.

As a result of the implementation of the Group's optimal structure, the number of Group companies was reduced by half and Energa Group currently comprises 22 companies, including Energa SA.

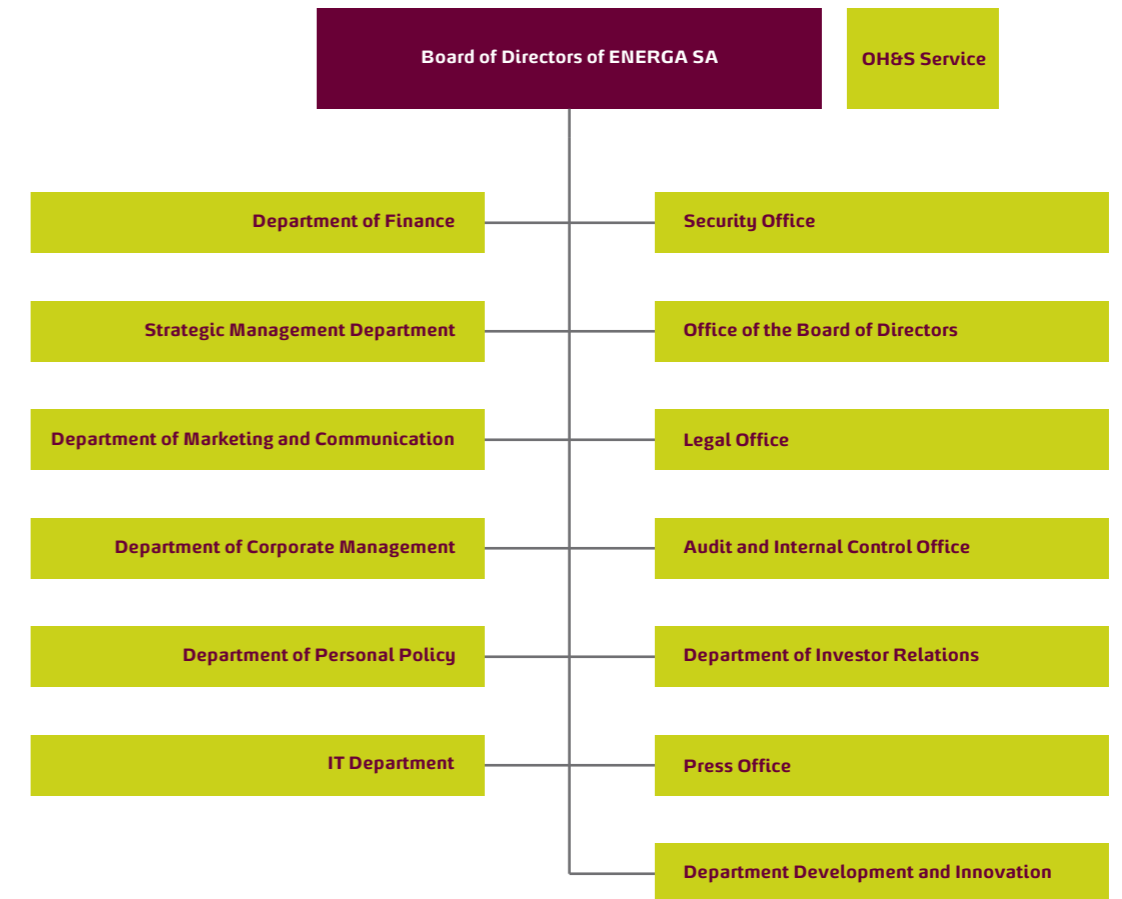
Structure of Energa Group*

*as of 31 December 2018

Energa SA



Organisational structure of Energa SA



Structure of the Board of Directors

Alicja Barbara Klimiuk
acting CEO of Energa SA



A graduate of the Faculty of Management at the University of Gdańsk. She completed a postgraduate course in management at the Warsaw School of Economics and a postgraduate course in controlling in business management at the University in Gdańsk. She has many years of experience in working in commercial companies partially owned by the State Treasury, including as the CEO of Energa SA. During the consolidation of GK Energa with the Power Plant Complex in Ostrołęka, she oversaw the spin-off process of the distribution system operator, the creation of the electricity trading company, and the restructuring of subsidiaries within GK Energa. Between 2006 and 2007, she was also a member of supervisory boards of companies such as Towarowa Giełda Energii S.A. w Warszawie, Zespół Elektrowni Ostrołęka S.A. and Cergia Energetyka Toruńska S.A.

Between 1992 and 1998, as the deputy mayor of the town of Suwałki, she oversaw matters concerning finances, capital works, geodesics, spatial management and commercial companies providing municipal services. Between 1998 and 2006, she was the CEO and deputy CEO of the Special Economic Zone in Suwałki and was responsible for overseeing the construction and development of infrastructure in the Zone and controlling the compliance of businesses with their permits.

Between 2008 and 2013, she ran her own business in the sector of investment and environmental impact report consulting. Since 2014, she has been the head of the Technology Transfer Centre at the Edward F. Szczepanik State School of Higher Professional Education in Suwałki, where she worked on a EU-funded project in the field of research and development to the benefit of businesses and the transfer of technology from science to business.

She is responsible for the functional supervision of the following areas of operation of Energa SA: Energa Group's strategy, regulatory policy, management of strategic assets, market analyses and development of the Group, research and development and innovations, mergers and acquisitions, IT.





Jacek Kościelniak
VP of Finance

A graduate of the Academy of Economics (currently the University of Economics) in Katowice, specialising in finance and accounting. He began his professional career in 1989 as an accountant, and went on to work as a finance specialist and head accountant in private limited liability companies. Between 1992 and 1998 he ran his own business, providing bookkeeping and tax, legal, and business consulting. He ran training courses in the field of taxes, bookkeeping and mandatory prevention of the introduction of assets obtained

from illegal or undisclosed sources into circulation. He also worked as an inspector for the National Cooperative Credit and Savings Union. Between 1998 and 2002, he worked as the head of the Finance Department at the Provincial Administration Office for the province of Śląskie. He also held positions as the chairman of the supervisory board of the Regional Development Agency for the region of Górny Śląsk and a member of the council of the Restructuring Fund for the region of Górny Śląsk. He was a member of the fifth term of the post-1989 Polish parliament, where he sat on the Public Finance Commission, and between January and November 2007 he was a secretary of state in the Prime Minister's Chancellery and the deputy chairman of the Standing Committee of the Council of Ministers.

Between 2007 and 2011, he was the deputy chairman of the Supreme Audit Office. He participated as an expert in the implementation of a twinning project relating to the improvement of the auditing potential of audit authorities in Georgia and Albania. He is also a member of the EUROSTAT Working Group, tasked with preparing and creating European standards of accounting in the public sector.

He is responsible for functional supervision of the following areas of operation of Energa SA: planning and financial analyses, financial reporting and consolidation, financial policy, managing the Group's financial risk, business controlling, remuneration of members of governing bodies of companies in Energa Group, investor relations, stakeholder relations.



Grzegorz Ksepko
VP of Corporate Affairs

Graduate of the Faculty of Law and Administration at the University of Gdańsk (2001). In 2004, he completed an apprenticeship as a public prosecutor at the Public Prosecutor's Office in Gdańsk and passed his bar exam. In November 2005, he was admitted to practice as a solicitor. In July 2006, he became a partner at the Głuchowski Siemiątkowski Zwara and Partners Law Office. In November 2010, he became a senior partner, thus becoming a member of the law firm's senior management. During his legal practice,

he specialised primarily in the law of commercial companies, services for businesses, criminal law, fiscal-criminal law, civil law, administrative law and in issues concerning the functioning of the crude oil and energy sector. He also provided legal services to other businesses, including consulting services with regards to broadly-defined corporate governance.

Between 2003 and 2007, he was a member of the supervisory board of Agencja Rozwoju Pomorza S.A. with its registered office in Gdańsk. He was one of the main authors of the lustration act and the amendment to the Institute of National Remembrance act, drawn up in 2006. He also participated in works on the draft of the consumer bankruptcy act, amendment to the act on the State Treasury's General Solicitor's Office, amendment to the press law act, amendment to the firearms and ammunition act, amendment to the criminal code, and worked on drafts of resolutions of the Minister of Regional Development concerning public aid. In 1996, he graduated from the 4th Summer School for Young Social and Political Leaders at the Polish Robert Schuman Foundation, and in 1997 he completed an English course at the University of California Los Angeles.

He is responsible for functional supervision of the following areas of operation of Energa SA: institutional relations, corporate and ownership governance in the Groups (with the exception of employment and remuneration of members of governing bodies of Energa Group companies), goal-oriented management, internal communication, CSR and environmental policy.

Building the values of Energa Group, divided by business lines



Generation

The **Generation Line** is a business unit whose lead entity is Energa Wytwarzanie SA. The unit works based on 4 business lines: Ostrołęka Power Plant, Water, Wind and Others (including CHP). It consolidates operations in the following key areas:

production of electrical energy from renewable sources:

- Hydroelectric power plant in Włocławek
- 44 small hydroelectric plants
- 5 wind farms in north-west Poland – Karcino, Karścino, Bystra, Myślino, Parsówek
- 2 photovoltaic farms near Gdańsk and in Czernikowo near Toruń; the unit also manages the Pumped-Storage Power Plant in Żydowo

production of electrical energy in a conventional power plant:

- company Energa Elektrownie Ostrołęka SA, Ostrołęka B power plant

cogeneration of heat and electrical energy:

- company Energa Kogeneracja Sp. z o.o. in: Elbląg CHP plant, Kalisz CHP plant, Żychlin CHP plant

generation of heat in heat plants:

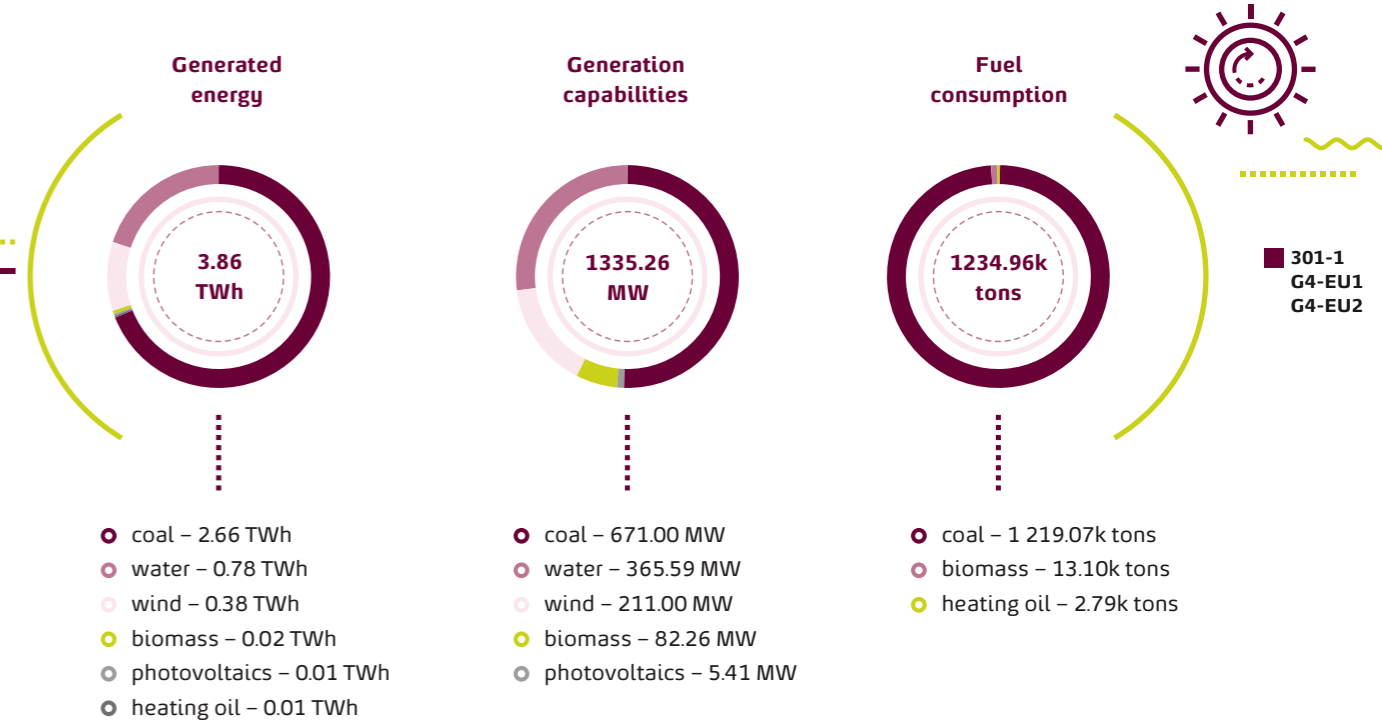
- company Energa Kogeneracja, Wyszogród heat plant, and company Energa Ciepło Kaliskie, Kalisz heat plant

heat distribution:

- Energa Ciepło Ostrołęka Sp. z o.o.
- Energa Ciepło Kaliskie Sp. z o.o.

support services:

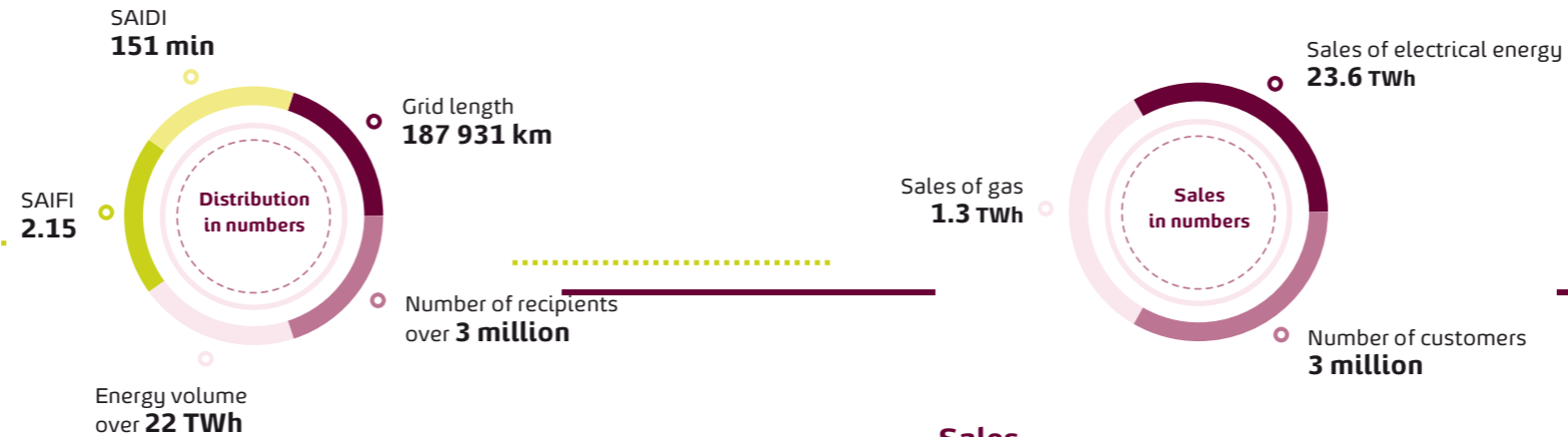
- Energa Serwis Sp. z o.o.



301-1
G4-EU1
G4-EU2

The increase in prices on the electricity and property rights market in 2018 translated into a significant improvement of the Company's financial results. Regulatory changes (amendments to the capital

works act with regards to hydroelectric plants, renewable energy sources act and water law act) resulted in the reversal of revaluation write-offs in the amount of PLN 262m.



Distribution

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102-6
102-10

The Distribution Line supports operations consisting in the distribution of electrical energy. The lead entity of this business line is company Energa Operator SA, granted the status of a Distribution System Operator based on a decision of the Chief of the Energy Regulatory Office. According to the requirements of the distribution permit, the business line is responsible for the development, operation and modernisation of distribution infrastructure in the area of its operations and for ensuring the supply of energy with the required quality parameters to recipients connected to its power grid.

In 2018, the Distribution Line underwent a thorough restructuring.

Energa Logistyka took over employees who had been responsible for the sales process at the following companies: Energa Operator SA (head office and local offices), Energa Operator Techniczna Obsługa Odbiorców, ZEP – Centrum Wykonawstwa Specjalistycznego and Energetyka Kaliska – Usługi Techniczne.

The following four existing companies responsible for capital improvement works were consolidated into a single entity, company Energa Operator Wykonawstwo Elektroenergetyczne Sp. z o.o.:

- Energetyka Kaliska – Usługi Techniczne Sp. z o.o.
- Przedsiębiorstwo Budownictwa Elektroenergetycznego ENBUD Słupsk Sp. z o.o.
- ZEP Centrum Wykonawstwa Specjalistycznego Sp. z o.o.
- Zakład Budownictwa Energetycznego Sp. z o.o.

Employees of company Energa Operator Techniczna Obsługa Odbiorców Sp. z o.o. were transferred to Energa Operator.

The following six companies responsible for grid operations were incorporated into the structures of the Lead Entity, Energa Operator:

- Energa Operator Eksploatacja Elbląg Sp. z o.o.
- Energa Operator Eksploatacja Gdańsk Sp. z o.o.
- Energa Operator Eksploatacja Kalisz Sp. z o.o.
- Energa Operator Eksploatacja Płock Sp. z o.o.
- Energa Operator Eksploatacja Słupsk Sp. z o.o.
- Energa Operator Eksploatacja Toruń Sp. z o.o.

Sales

The Sales Line focuses operations connected with trading in electrical energy and natural gas and providing customer service. The lead entity of the business line is company Energa Obrót SA.

The activities of **Energa Obrót SA** focus on trading in the domestic and international wholesale electrical energy market and selling energy and natural gas to individual, business and institutional Customers, as well as offering innovative, pro-environmental technologies and services. The company sells electrical energy to more than 3 million Customers, of which 2.6 million are households. Its operations focus on developing modern channels of communication with Customers, such as electronic channels (eBOK, mBOK – electronic and mobile customer service centres, respectively), telephone customer service centre (tBOK), as well as traditional channels, such as retail or partner outlets.

Company Energa Slovakia s.r.o. sells electrical energy and gas on foreign markets, mainly in Slovakia.

Services and other

Energa Group also includes joint stock companies, direct subsidiaries of Energa SA, that provide services in support of business processes of Group companies and completing tasks in areas of importance from the Group's perspective, such as:

- Energa Centrum Usług Wspólnych Sp. z o.o.
- Energa Informatyka i Technologie Sp. z o.o.
- Energa Logistyka Sp. z o.o.
- Energa Invest Sp. z o.o.
- Energa Ochrona Sp. z o.o.
- Enspirion sp. z o.o.
- Centrum Badawczo-Rozwojowe im. Faradaya.



We develop, providing our Customers with the best solutions.



We achieve the goals of our shareholders, Customers, employees and the community in a sustainable way, based on a reliable and modern infrastructure and a range of products and services tailor-made to existing needs, while respecting the natural environment and in accordance with rules of social responsibility.



Responsible development
Trustworthiness
Safety
Boldness and innovation
Lasting relations

Strategic programs



A Customer-oriented business model, enabling the efficient management of Customer-related values based on a coherent range of products and services

- Implementation of a Customer-oriented business model and development of new areas of operations
 - moving from the role of an electricity vendor to the role of a supplier of utilities and integrated solutions for households, businesses and local governments
 - an extensive range of products
 - new sales channels and new IT solutions
 - reorganisations of sales, service and billing processes

1. Infrastructure

Development of a modern power infrastructure in a manner enabling the creation of a stable base of revenue.

- An intelligent electricity distribution grid, enabling the storage and management of energy
- Development of broadband Internet access infrastructure
- Taking advantage of regulations stabilising revenues in the power and heat tariffs
 - Ostrołęka C, a new 1000 MW unit
 - maintenance and distribution of CHP infrastructure
- Construction of a hydropower plant on the Vistula river and other renewable energy

1.3 Non-financial risk management

102-11
102-15
103-2



Roles in the risk management process:

Risk management in Energa Groups is a continuous process, aimed at identifying potential events that might impact the achievement of strategic and operational goals. The process is simultaneously oriented on keeping the risk within established limits. It is based on international standards

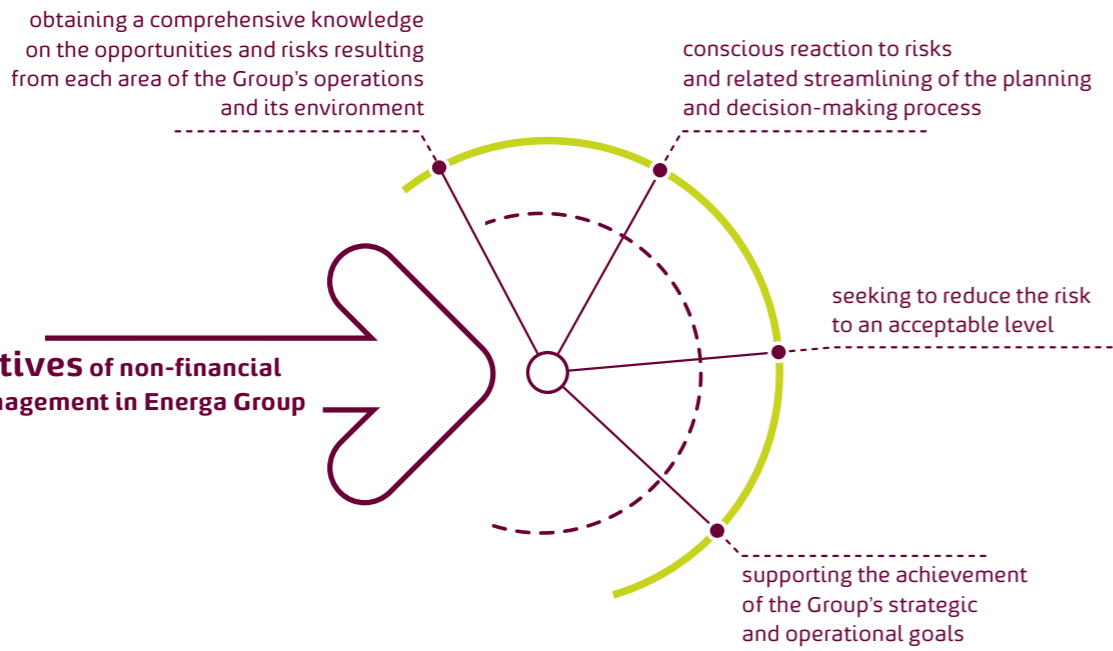
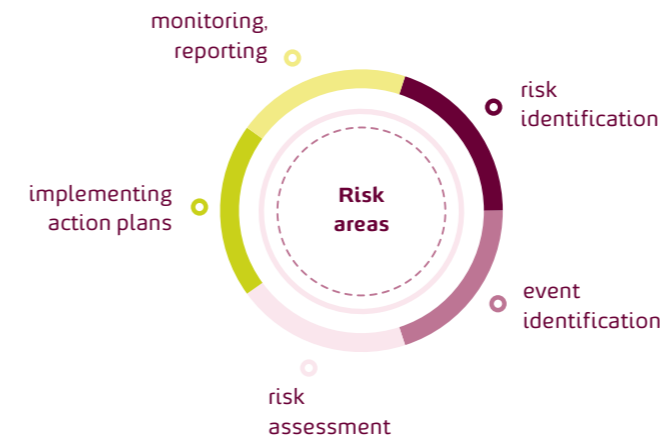
(ISO, COSO, FERMA) and is used in all business lines and on all levels of the organisation. It runs from the level of organisational units to senior management, from Group companies to the parent company – Energa SA.

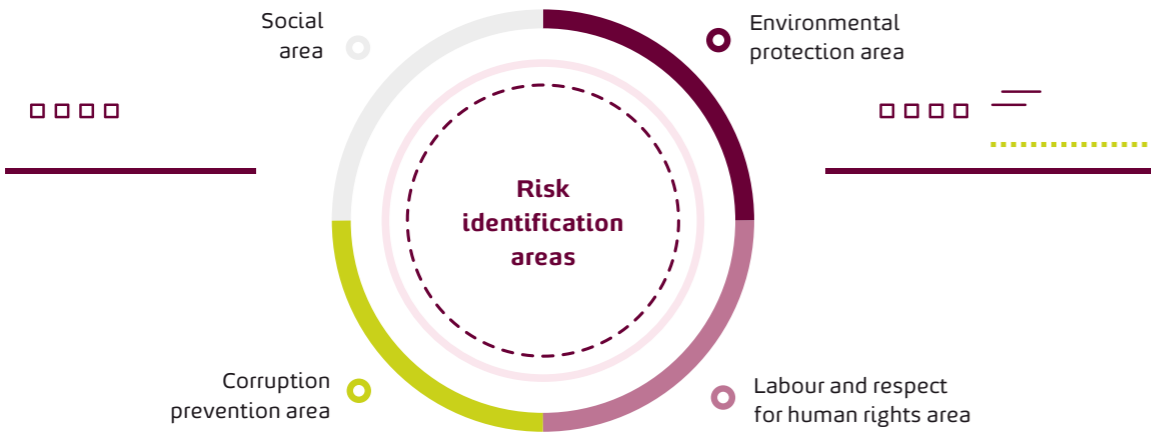
The formal framework of the Integrated Risk Management System within the organisation is governed by the 'Energa Group Risk Management Policy', incorporated in the cooperation agreement between individual companies of Energa Group.

The policy enables the application of uniform principles across the entire Group and specifies individual stages and roles in the risk management process.

- **BOARD OF THE DIRECTORS:** specifies the direction of risk management, supervises the process, accepts the results of risk reviews, accepts risk appetite
- **RISK UNIT:** coordinates the risk management process, carries out risk and action plan reviews and draws up reports from the above activities
- **RISK OWNER:** manages risk, creates and implements action plans, monitors risk, keeps risk within specified limits
- **EMPLOYEES:** provide information about risks and incidents and the potential ineffectiveness of control mechanisms
- **AUDIT COMMITTEE:** monitors the effectiveness of existing internal control and risk management systems within Energa Group
- **INTERNAL AUDIT:** carries out an independent and objective assessment of the risk management system

Stages of the risk management process:





Ongoing risk management within Energa Group is part of routine activities of organisational unit, carried out at all levels of Energa Groups. It involves the identification and assessment of risk in connection with the occurrence of significant changes and events (inside or outside the organisation). Verification of ongoing risk management takes the form of risk reviews, carried out every six months. During the reviews, risks and the strategy for their management are subjected to a comprehensive verification and assessment process. The result of this review is a report which is approved by the company's board of directors. The Group also carries out quarterly reviews of action plans, which involve the verification and update of risk management strategies in the context of actions aimed at mitigating risk.

Management in respect of risks related to environmental issues is carried out in accordance with the principles stipulated in 'Energa Group's environmental policy' (which require, among others, compliance with all legal regulations). Based on the precautionary principle, which results from environmental protection laws, actions are carried out that involve the implementation and improvement of suitable control mechanisms that mitigate risks related to environmental issues. As part of the functioning of the risk management system within Energa Group, risks related to products and services implemented in Group companies are identified and assessed.



Environmental protection area

Environmental protection risk	Risks that might result in a negative impact on the environment are identified in key Group companies (primarily in the Generation and Distribution Business Lines)
	The risk is related to ensuring compliance with provisions of environmental protection laws, norms and standards, as well as limitations with regards to capital works in particularly protected areas. Environmental protection in Energa Group is related to such issues as the emission of pollutants, CO2, SO2, waste storage, quality of fuels used in processes ran by companies, the technical condition of Group infrastructure (including devices used to protect the environment).
	Risk owners carry out activities aimed at improving environmental protection while carrying out their tasks and eliminating negative impact on the environment. An ISO 14001-compliant environmental management system and an ISO 50001-compliant energy management system are in effect in key Group companies. Companies carry out regular monitoring activities in respect of environmental aspects and operate emission monitoring systems.
	Energa Group is entered into the EMAS (EcoManagement and Audit Scheme) register, which means that the organisation meets very strict requirements with regards to environmental protection and operates on accordance with the principle of sustainable development. Organisational units dedicated to environmental protection operate within Group companies, and regular environmental audits are performed. Regulations related to the management of waste are in place in connection with processes aimed at mitigating waste-related risk.



Labour and respect for human rights area

Risk of Energia Group's personal policy

The risk is related to ensuring the suitable competences and appropriate staff, setting the standards of interaction with the labour market and staff and salary processes. Main mechanisms limiting this risk include existing internal regulations (such as 'Energia Group's Personal Policy', 'Mobbing and Discrimination Prevention Policy', 'Code of Ethics'), monitoring of legal regulations related to labour law, monitoring of indicators related to the labour area (personal controlling), regular training sessions or initiatives taken by HR units, e.g. related to age management.

Risk of occupational health and safety and fire safety

The risk is related to workplace accidents and occupational diseases of the Group's employees, as well as the potential outbreak of fires on the premises of Group companies. The risk is limited through the implementation of the Occupational Health and Safety Policy within Energia Group, training courses for employees in occupational health and safety and fire safety. Legal regulations are monitored and the Group cooperates with the Social Labour Inspection. A fire safety manual is found in every building used by the Group's companies.

Risk of social relations and labour unions

The risk is related to dialogue and relations with social partners (including labour unions). Energia Group places particular attention on maintaining appropriate relations with representatives of the community – a common community dialogue policy is in force within the Group. In order to maintain good communication with labour union organisations and representatives of the labour force, they are provided with information about any planned changes.

Corruption prevention area

Risk of abuse within Energia Group

The risk is related to situations and behaviours related to potential abuses committed by employees. In order to limit any potential corruption and other abuse within the Group, a 'Policy of Preventing Abuse and Conflict of Interest in Energia Group' has been adopted. Furthermore, a Code of Ethics is in force within Energia Group, specifying the values which the employees and the organisation itself should adhere to. Training courses are organised for employees, e.g. in anti-corruption activities, and the Group cooperates with law enforcement agencies in order to prevent any abuse.

Social area

Risk of Energia Group's image

The risk is related to the Group's activities which may affect its image. The risk is limited through existing regulations, such as rules of marketing activities, rules of corporate communication or rules of sponsoring activities. Media and the Group's environment are being monitored for the brand's presence.

Risk of CSR

The risk is related to activities in the area of corporate social responsibility carried out by the Group. In order to effectively manage risk within the Group, a 'Strategy for Sustainable Development and Responsible Business in Energia Group' has been implemented. The Group also engages in dialogue with stakeholders.

Risk of Customer service and Customer relations

The risk is related to the quality and standards of Customer service in Energia Group. 'Rules of Supervision and Coordination of Customer Service Processes in Energia Group' are currently in force within the Group, which regulate the area related to the Group's Customers. Service standards and customer indicators are reviewed and monitored on an ongoing basis. The websites of individual Group companies feature manuals for Customers of Energia Group, detailing such procedures as reporting and resolving issues important to Customers.

Risk of communication (capital market and the media)

The risk is related to communicating information about the activities of Energia Group with representatives of the capital market and the media. The risk is limited through ongoing monitoring of the media, sending press releases and organising press conferences concerning important events and the Group's plans. Regular surveys for analysts and investors are also carried out in order to assess the Group's communication activities. Employees of the Group participate in investor conferences and activities taken in respect of individual investors (e.g. Individual Investor's Day).





1.4 Values and ethics management

102-16 ■ Values and principles are what creates each organisation's culture, make it stand out in the business environment and among stakeholders, and build its positive image. They also guarantee a competitive advantage and positively impact the shaping of internal relations. That's why Energa Group's strategy in seeking to achieve its business goals is based on four values defined in the 'Energa Group's Business Strategy for 2016-2025', adopted in November 2016 and included in 'Energa Group's Code of Ethics' that regulates ethical matters.

Overarching values in 'Energa Group's Code of Ethics'

Responsible development

- determining business goals and seeking to achieve them while maintaining balance with identified risks, being aware of the consequences of and taking responsibility for all actions and decisions
- being aware of the expectations and needs of stakeholders, balancing them and taking them into account when planning and carrying out activities
- developing the organisation while ensuring compliance with laws, ethical standards and other regulations applicable to its operations.
- ensuring organisational culture, improvement of the employee's satisfaction and commitment
- the organisation's social responsibility, being open to dialogue with the environment, providing support to local communities and being involved in their lives
- respect for the natural environment, combined with ensuring that the negative impact of the organisation's operations on the environment is limited and that requirements and restrictions in this regard are complied with

Trustworthiness and safety

- looking at the organisation's development from a long-term perspective, maintaining a balance between business goals and undertaken risk
- ensuring energy safety of the Customers using modern and reliable technology and a wide range of products and services
- achieving the goals and plans set for the organisation, keeping promises and declarations
- being aware of the impact of the organisation's actions and decisions on its image and reputation
- avoiding behaviours that are dubious from the point of view of legality and ethical standards
- caring for the safety and health of employees, implementing actions aimed at reducing the number of workplace accidents, ensuring a friendly and safe work environment

Boldness and innovation

- setting and achieving ambitious goals, using ideas for innovations and challenging the status quo
- thinking about new directions of actions and opportunities for the organisation's development, being aware of and assessing the risk
- seeking and creating innovative solutions, useful from a business point of view and meeting the needs and expectations of Customers
- making efforts to achieve and maintain leading positions in relevant sectors of the market, improving the knowledge and skills of employees

Lasting relations

- maintaining deep and long-lasting relations with Customers, implementing a business model oriented on the needs of Customers
- respect, openness and understanding for the expectations of stakeholders, being ready to meet these expectations in the interests of the organisation
- productive cooperation within organisational units and between Energa Group entities
- using the effect of scale of the organisation's operations resulting from the cooperation between Group entities and profiting from the implementation of joint solutions that are useful from a business perspective



Each employee is required to comply with the values and rules adopted by the organisation, stipulated both in 'Energa Group's Code of Ethics' and documents complementing the Code: **'Policy of Preventing Abuse and Conflict of Interest in Energa Group'** and **'Mobbing and Discrimination Prevention Policy'**.

Energa Group's Code of Ethics



102-16 ■
102-17

'Energa Group's Code of Ethics' determines the rules of conduct of each employee in relations with the external environment and within the group based on the organisation's strategic values, defining work standards and preferred conduct.

- We observe the law
- We act fairly
- We treat others with respect
- We act in a transparent manner, we communicate in an open and considered way
- We create a friendly and safe work environment
- We treat our business partners fairly
- We maintain a neutral worldview and do not express political opinions while at work
- We do not abuse the resources of Energa Group

Employees who have any doubts in matters concerning the Group's ethical values and principles or notice any deviations from these value and principles may contact the compliance unit by sending an email to compliance@energa.pl at Energa SA or can speak directly to their supervisors.

The Board of Directors of Energa SA appointed a Compliance System Representative, whose role within the organisation is defined as the 'ethics spokesperson'. The representative acts as the head of the Compliance Team and the role of their function is to ensure the compliance of the activities of the organisation (and its employees) with legal standards, i.e. compliance of Energa Group with the values and principles stipulated in the Code of Ethics.

All employees are required to familiarise themselves with the above principles and standards. Employees sign relevant declarations, kept in their personnel files, confirming that they familiarised themselves with the document.

Employees learn about the Code of Ethics during their onboarding training. The Code is presented during an introductory presentation, which discusses in detail issues such as what is the Code of Ethics and what rules it introduces, what is abuse and how to prevent it, how to avoid any situations that are dubious from the perspective of possible corruption, how to act in an ethical and fair manner, where to report any cases of abuse, mobbing or discrimination. Whenever any regulations are updated, including the Code of Ethics, employees are immediately notified of this fact by means of suitable means of communication, including email or intranet, where all current policies and principles applicable within Energa Group or its individual companies are published.



Krystyna Kmieciak-Baran
Coordinator of the Inquest Commission

In 2018, the Inquest Commission received 21 complaints from various Energa Group companies, concerning various cases of improper conduct. This constitutes a significant increase in comparison with 2017, where only 8 such complaints were received. The increased number of complaints indicates that employees trust the Commission and its activities and their growing awareness. I believe this to be an important success of the organisation, indicating its growing maturity.

Inquest Commission

An Inquest Commission operates within Energa Group and is responsible for investigating any complaints of conduct that might constitute mobbing or discrimination, as well as other improper conduct. The Inquest Commission acts as an Ethics Commission within Energa Group.

Activity of the Inquest Commission:

	2017	2018
Number of complaints submitted	8	21
Number of complaints resolved	5	17
Number of complaints currently investigated	2	4
Number of complaints found to be valid	5	14

On average, members of the Commission spend around 69 hours on analysing one complaint, which includes the analysis of documents, hearing witnesses, meetings and drawing up recommendations. In 2018, members of the Inquest Commission spent 1450 hours in total working for the Commission on a volunteer basis.



Preventing corruption

102-11 ■
103-1 (205)
103-2 (205)
103-3 (205)
205-1
205-2
205-3

In 2018, Energa Group updated its internal requirements related to the comprehensive prevention of abuse. The **'Policy of Preventing Abuse and Conflict of Interest in Energa Group'** was implemented as part of the cooperation agreement between Energa Group companies. This ensures a standardisation of requirements in respect of all employees with regards to reacting to any cases of violating applicable laws, internal regulations and other principles and standards, in particular those that might be classified as corruption, misappropriation or other forms of abuse or conflict of interest.

Procedures provided for in the document are aimed at preventing abuse and conflicts of interest, as well as ensuring due care when investigating any irregularities and suspicions as to the legitimacy of activities of Energa Group employees.

Implementation and application of the document is accompanied by informational activities aimed at all employees of Energa Group using available means of internal communication.

No instances of corruption were identified within Energa Group in 2019.





Respect for everyone and diversity in management and supervisory bodies

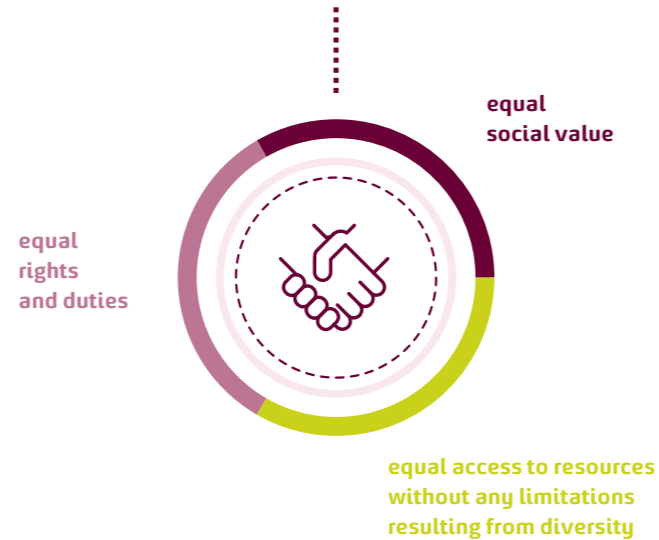
103-1 (405) ■
103-2 (405)

We see diversity as a source of new possibilities. Differences among our employees stimulate development, inspire and allow our teams to surprise us with their ideas. We take advantage of this potential and use it to create innovations. Energa ensures that every person can fairly and fully participate in all areas of the Group's activity on an equal footing.



These values are expressed in 'Energa Group's Code of Ethics'

Energa assigns to its employees:



We respect the dignity of every person

irrespective of their nationality, race, religion, gender, education, professional standing, sexual orientation, disability or political affinity.

We do not accept any discrimination.



Jacek Kościelniak
VP of Finances, Energa SA



We are one of the largest taxpayers in the Pomeranian region and an entity with a huge financial impact on our environment. That's why we approach the issue of payments made by Energa Group companies in a conscious and responsible manner. Implementing the split payment mechanism is a symptom of this attitude. Thanks to this mechanism, the risk related to tax payments made by the Group has been significantly reduced.

Responsible management of the supply chain

Energa Group is aware of the benefits that come from operating in a responsible manner. We strive to ensure that our care for ethics, respect for human rights and care for the environment are shared not only by individual Group companies, but our partners as well. That's why we include relevant clauses in contracts signed with contractors.

As part of the **new Group management model**, an improved, rationalised model of purchasing has been implemented within Energa Group; the model is based on two sourcing centres, i.e.:

- **Energa Informatyka i Technologie Sp. z o.o.** – IT-related purchases
- **Energa Logistyka Sp. z o.o.** – purchases of power-grid related materials and other strategic materials, as well as storage services in respect of such materials.

The supply chain comprises mainly suppliers of fuel (e.g. coal, biomass, etc.) and components of the power infrastructure (e.g. power cables, transformer stations, switches, counters, etc.)

In order to reduce tax risks related to VAT tax payments, the split payment mechanism was implemented in all Group companies, starting from the date on which the relevant regulations came into force in Poland, i.e. since 1 July 2018. Energa began its initial preparations to implement the split payment mechanism as far back as in 2017. Energa SA's VP of Finances, Jacek Kościelniak, issued in November 2017 a recommendation to all Group companies, instructing them to use this mechanism.

The split payment mechanism involves splitting the payment into two parts::

- **the net amount**, which goes into the supplier's account
- **the due VAT amount**, which goes to a special supplier's account, a so-called VAT account.

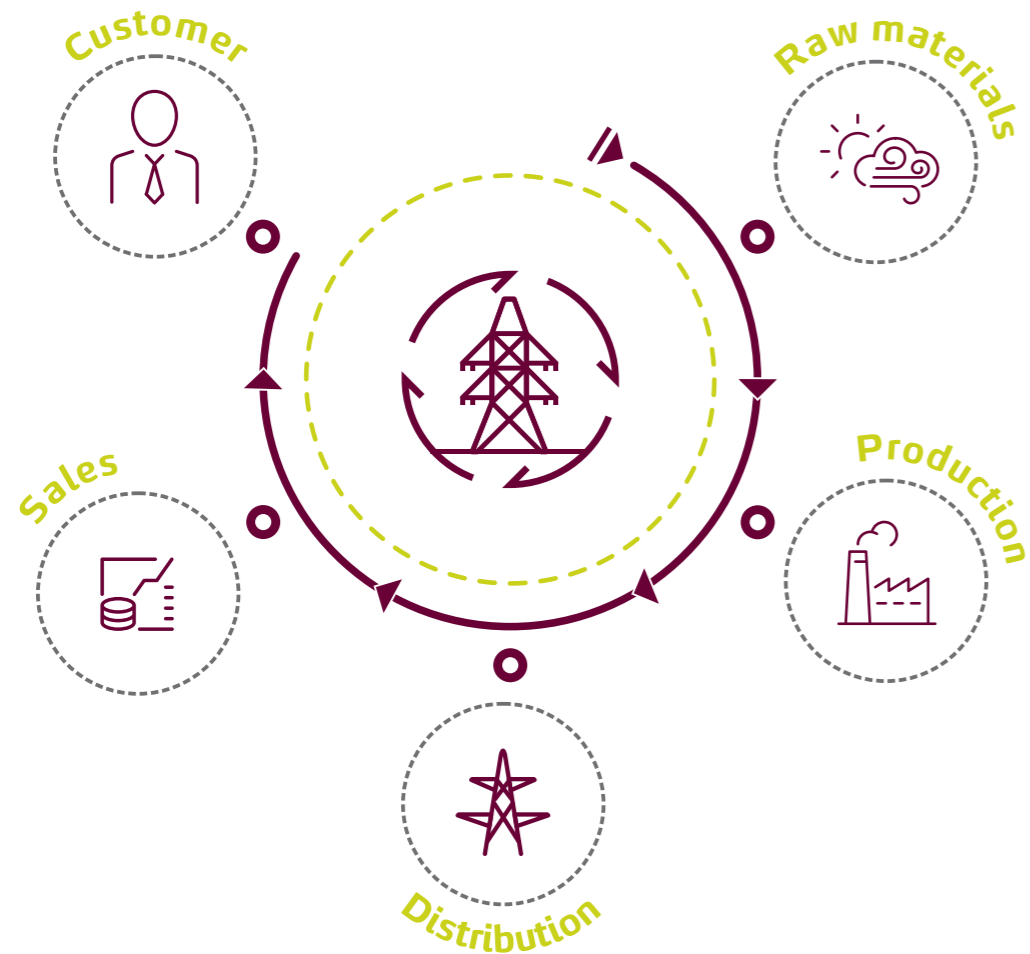
Since 1 July 2018, the split payment mechanism has been in general use among all Energa Group entities. The benefits of the use of this mechanism by a responsible taxpayer include:

- prevention of the application of so-called VAT sanctions in respect of the buyer
- lack of joint and several liability of the buyer for the vendor's tax liabilities
- securing the right to deduct the input tax by meeting the prerequisite of exercising due care in relations with a business partner.

102-9
103-1 (414)
103-2 (414)

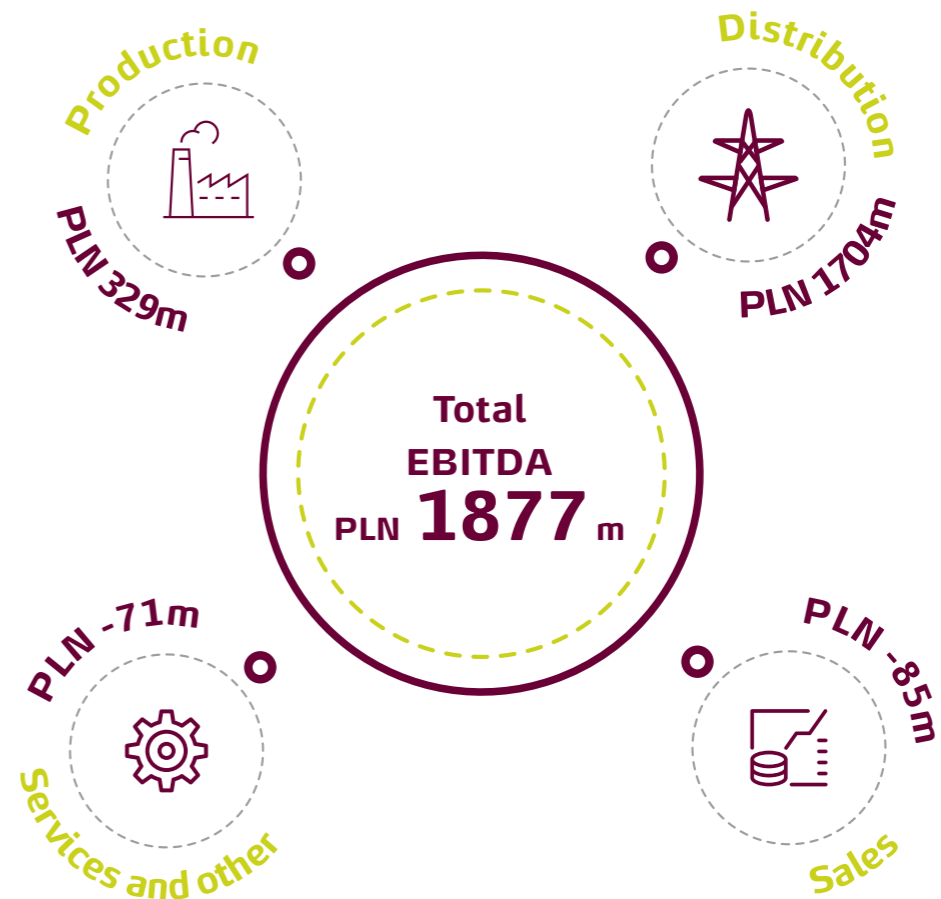
414-1

Supply chain



102-2

Model of building the Group's values



102-7



Membership in organisations



Union of Entrepreneurs and Employers

Centre of Transfer Prices

Association of Polish Electrical Engineers

Polish Committee of Large Electric Systems CIGRE

European Distribution System Operators for Smart Grids

Polish Research Laboratory Club POLLAB

National Chamber of Commerce of the Electronic and Telecommunications Industry*

Economic Society Polish Power Plants

Commodity Clearing House

TUW PZUW

Prime Alliance

Polish Electricity Association

Pomeranian Digital Innovation Hub

Chamber of Commerce of the Energy Industry and Environmental Protection

Polish National Foundation

Polish Power Exchange

EURELECTRIC Brussels

Polish Corporate Treasurers Association PCTA

Association of Energy Trading

Chamber of Commerce of Polish Heating Industry

Polish Association of Professional CHP Plants

Institute of Internal Auditors IIA Poland

Polish Association of Listed Companies

LABIOMEN National Network of Supervised Laboratories

Technical Committee no. 276 at the Polish Committee for Standardization

Consortium for the Registration of Combustion Byproducts

Polish Power Transmission and Distribution Association

* membership ceased as of 30/09/2018

Bolded names indicate organisations that included a representative of Energa Group in their management, supervisory or executive bodies in 2018.

Energa group actively participates in the works of many organisations and initiatives, the most important of which are listed above. Membership in industry, business and social organisations gives the Group a platform for cooperation, exchange of experiences and ideas between the entities involved and enables us to access unique expert knowledge.

In 2018, the Group focused primarily on becoming more involved in the activities of those initiatives that it already was a member of. Examples include the Group's collaboration with the Chamber of Commerce of the Energy Industry and Environmental Protection and Polish Electricity Association, who was involved in many important initiatives from the perspective of the Group's interest and the entire Polish power industry.

Through the Polish Electricity Association, Energa Group is also able to delegate its representatives to work in committees of EURELECTRIC, one of the most reputable and influential industry associations which represents the shared interests of power companies on the European level. Due to achieving its goal, which was Poland's accession to the AGN convention, and the creation of the Wody Polskie SA company, Energa Group

discontinued its participation in UN Global Compact's 'Inland Navigation Development Program', simultaneously engaging in negotiations on becoming involved in other, equally important initiatives in the area of corporate social responsibility.

MARCH

Energia SA received the Bulls and Bears statuette, awarded by the 'Parkiet' magazine for the best company traded on the WIG20 index. During the period assessed by the jury, the company recorded a 38% increase in share price and excellent financial results



Awards and commendations

MAY

Energia Obrót SA's consultant, Beata Woźniak from Gdańsk, reached the final of the Telemarketer of the Year 2018 competition, in the 'Customer Service' category. Nearly 180 participants representing 30 companies competed in this year's edition. The competition promotes best practices in remote customer service and professionalism among telephone consultants.



JULY

Energia Wytwarzanie SA won the National Ecological Award, the 'EKOJANOSIK Polish Green Ribbon' prize. The company was distinguished for implementing pro-environmental projects with a significant effect on the improvement of the natural environment. In this year's edition, 600 entities from across the country took part in the competition. The winner was chosen by the National Ecological Council



2018

JUNE

Energia SA received the main award in the 'corporate social responsibility' category. The organiser of the competition recognised the Group's efforts in the area of construction and strategy while taking account of social interests, environmental protection and relations with stakeholders. The award was given at the Forum Wizja Rozwoju event held in Gdynia.



APRIL

Energia Group received a commendation and a diploma as a 'Transparent Company 2017'. The title of a 'transparent company' is given to those companies who comply with their duties to inform investors in an exemplary manner and improve the quality of communication with all participants in the market.



AUGUST

Energia Obrót SA received the second prize in the Leader 2017 competition, in the Industry 4.0 category, organised by the 'Gazeta Bankowa' magazine. The company was recognised for its online forms, enabling customers to enter into electricity supply agreements online. The innovative system enables users to sign away a counter to another person, switch to another tariff category or payment plan via the Internet.

DECEMBER

Energia Group received the PROGRESS 2018 – Pearl of Innovation award. When choosing the award winner, the competition jury assesses the level of innovation of projects submitted for the competition, the manner of their implementation and their impact on the economy and society. This year's award was given for such achievements as implementing the 'feed-in tariff' solution in hydroelectric plants and 'smart parking' solutions in the city of Gdańsk.



SEPTEMBER

Energia Wytwarzanie SA received the EKO-ORZEŁ award in the 'protection of the air' category. Among many capital works projects, the Regional Environmental Protection and Water Management Fund in Toruń distinguished the construction of a 3.77 MW photovoltaic farm in the municipality of Czernikowo near Toruń, which currently constitutes one of the largest installations of its type in Poland.



For the fifth time, Energia SA has been included in the stock market RESPECT Index, published by the Warsaw Stock Exchange. To join this prestigious group, the company had to undergo a detailed, three-stage verification, carried out by an independent auditor. Qualities subject the assessment included the company's appeal to investors, corporate governance, level of communication with stakeholders and activities undertaken as part of broadly-defined corporate social responsibility



Energa



2

Lasting relations with our Customers



2.1 Lasting relations with our Customers



Energa Group's mission is to develop while providing our Customers with the best solutions, both in the field of sales of energy and its continuous and uninterrupted distribution. The Group's operations are based on two foundations: our Customers and our infrastructure.

Energa Group's Sales Business Line shapes its relations with our Customers in a responsible

manner, based on dialogue and with the goal of keeping apprised of the Customers' needs and providing them with comfort and security. Company Energa Obrót SA, the lead entity of the Business Line, is building a Customer-oriented business model, enabling it to manage value in an effective manner based on a consistent range of products and services. The company implements new IT solutions, reorganises the sales, service and billing processes and develops new sales channels.

Priorities for 2019

1. Implementing the omni-channel online sales and Customer service system, as well as a mobile application.
2. Implementing and developing a solution consisting in offering Customers our products based on a cafeteria model.
3. Implementing and developing a range of technological products and services and monitoring the effectiveness of their sales.

Priorities for 2019

4. Optimising existing customer service models, enabling us to achieve out objective of moving to an internal service model with partial use of external services, and achieving the following benefits:
 - a. reducing the helpline handle time through optimising the system and implementing internal organisational actions,
 - b. ensuring full e-mail-based customer service via the EOB without outsourcing any services,
 - c. automatizing sales processes with a view to improve sales result and associating Genesys (dialler) solutions with online applications,
 - d. implementing additional contact channels (chat, contact form) in the Genesys system and integrating it with customer service systems,
 - e. achieving the expected NPS level after providing customer service via telephone and email.
5. Implementing a quarterly review of our range of products offered to households and businesses.
6. Building our own electrical vehicle charging infrastructure.
7. Implementing tools for managing our Customers' experience, and in consequence optimising our Customer service standards.
8. Achieving the following levels of SAIDI and SAIFI parameters:
 - SAIDI: 156 min,
 - SAIFI: 2.00*

* These objectives for 2019 with regards to reliability parameters result from the provisions of the applicable 'Quality Regulations for 2016-2020'. The quality regulations model for 2016-2020 was re-evaluated in 2020 based on experiences collected during the two years of its functioning in the five largest Distribution System

Operators in Poland (including Energa Operator SA). If any changes are made by the Regulatory Authority with regards to the functioning of the mechanisms of the existing quality regulation, the objectives for 2019 in respect of reliability parameters may be updated during the year.

Objectives for 2018

Development of a new range of products, combined with the sales of electricity

Achievement of objectives

By implementing a new business model within the organisation, the company constantly expands its portfolio of products, dedicated both to households and businesses. Additionally, by building awareness among its Customers that the company sells not only electricity, but also other services of interest to corporate Customers, the company expanded its portfolio by an 'Efficiency products package'.

Since 24 September 2018, the company offers 15 new technical services:

- 'Enterprise's Energy Audit'
- 'Energy Efficiency Audit'
- 'Energy Audit'
- 'Consulting on external financing sources'
- 'Feasibility study'
- 'Technical design'
- 'Modernisation of measuring equipment'
- 'Customer Connection'
- 'Infrastructure modernisation'
- 'Construction of end-user substations'
- 'Optimisation of parameters'
- 'Energy management strategy'
- 'Visualisation of consumption profiles'
- 'Transformer station inspections'
- 'Power installation inspections'.



With regards to the development of the range of products dedicated to individual Customers, the company entered into 8 partnerships on 1 October 2018, and as a result 7 products were made available to Customers: EnerGra, Make An Appointment, Utilities Consumption Monitoring, Online Monitoring, On the Road with Energra, Loyalty in Business, Take TV Wherever You Go. Furthermore, in Q4 2018, the company carried out the requisite implementation and system actions, enabling it to commence selling heat pumps, one of the cheapest sources of heating based on 'green energy'. A return on the investment can be achieved in as few as 5 to 7 years, while the pump's lifecycle is 15 to 20 years. This cheap source of heat can be installed in new buildings, but modernisation of existing heat installations is also possible.

Development of the range of products and services aimed at local governments

A new model of sales for public institutions was created and implemented. Customers and their margin portfolios were assigned to specific customer service specialists, who were provided with support staff.

Increasing the profitability of sales to Customers in the mass and business markets

Customers were allocated into separate segments. The purpose of segmentation was to provide the organisation with an image of uniform groups, enabling it to improve the effectiveness of its activities with regards to:

1. adapting the range of products to the needs of a specific group of Customers,
2. communication addressed to a given group,
3. adapting sales channels in a way ensuring their more effective use,
4. managing service channels in a manner consistent with the needs of specific groups of Customers,
5. standardising the above processes in respect of specific customer groups.

Increase of profitability of sales to Customers in the mass and business markets were achieved through consciously directing dedicated products to selected groups of Customers and reducing the organisation's costs in the areas of sales (targeted campaigns) and customer service (process optimisation, dedicated communication, reducing handle time, redirecting selected groups of Customers to alternative service channels and automatization of channels).

5 customer profiles were defined, their needs with regards to products were defined and they were presented with recommended products. In May 2018, the products to be implemented were selected, and in 2018 product ranges addressed to SOHO Customers (EnerGra, Make an Appointment) and individual Customers (Healthy Energra, Multi-benefits and packages of insurance services [housing assistance, third-party liability insurance, medical insurance], assigned to specific profiles). Online and telephone support was also provided to the sales team. The organisation was able to reduce the total cost of processing letters with applications and complaints, a system used to monitor the number of visitors was implemented in partner outlets, enabling the introduction of a queue management system. The number of transactions per 1000 support calls from individual Customers was increased.

Objectives for 2018

Increased awareness of the new range of products offered by Energa Group, supported by the creation of a digital world for Customers

Achievement of objectives



Increased awareness of the new range of products is achieved by implementing the "Online Sales and Customer Service System at Energa SA".

- The newly-implemented system is a comprehensive platform whose main objectives include:
- providing users of the Platform with a full portfolio of products tailor-made to fit their needs,
 - enabling Customers to complete the full sales process via the Platform, including the choice of products,
 - enabling Customers to commence the process of purchasing products and services offered by Energa Obrót (e.g. by filling in online forms on the system's webpage) and resume the process via other contact channels, e.g. sales outlets or helpline, if the online process is interrupted;
 - enabling a wide range of actions to be carried out by the Customers themselves, e.g. bidding forms, applications for connection and automatization of contracts, checking the balance or paying online
 - enabling Customers to efficiently switch between various websites operated by Energa Obrót (Platform and e-Store) using a single login; each website will have matching artwork and functions so that the Customers will not feel as if they've moved from one website to another..

Implementation of the sales and Customer service platform is carried out in accordance with a schedule, modified and approved by the steering committee of the Development Program. In 2018, business assumptions were created, a technical design was prepared and programming works were commenced after a supplier for the services was selected and support provided by companies Energa Obrót SA and Energa Informatyka i Technologie Sp. z o.o. was ensured.

Implementing the project using agile methodology through developing products using iterative and incremental approach (i.e. weekly UX sprint, bi-weekly sprint development) ensured the acceptance of the basis of developed products by the design team and the creation of additional functions of the system defined by the business side of the organisation.

Building our own electrical vehicle charging infrastructure.

The eMobility project, the aim of which is the construction of our own electrical vehicle charging infrastructure, was continued in 2018. On 30 October 2018, a decision was made by the steering committee of the Development Program to modify the scope and schedule of the project. The aim is for the project to include the installation of 54 charging points (including the takeover of 7 charging points installed by ENSPIRION) by 31 December 2019. The following was accomplished by 31 December 2018:

1. Lease agreements were signed with 8 partners in respect of the locations where the charging stations are to be located
2. The process of signing partnership agreements and the capital works process with the participation of the Energy Efficiency Department was decided
3. The terms of the agreement with ENSTO for the delivery of semi-fast electrical vehicle charging terminals were agreed
4. The business model of the electrification of urban transport was prepared

Optimising Customer service through a reduction of handle time using the single contact approach and automatization of procedures, resulting in a reduction in the number of complaints

2018 was a breakthrough year for the company in terms of minimising customer complaints and adjusting the processes used to handle them. The number of overdue complaints was the lowest in history and amounted to 1733 PPE as of 24 December 2018, which constituted a 97% improvement compared to November 2017. Furthermore, 90% completed consultations were closed within 7 days – this parameter improved six-fold in the space of one year.

Thanks to this improvement, 90% of complaints submitted by Customers from the mass market can be closed within up to 12 days, meaning that complaints are handled more than twice as fast compared to the same period in 2017.



Objectives for 2018

Achievement of objectives

Implementing the Strategic Model of Competence and achieving a synergy in the operation of organisational units

The company formulated five priorities in the development of soft competences among its employees:

- building close relations with Customers, based on reliability and quality
- searching for simple solutions when acting and communicating
- showing commitment and energy at work
- believing that nothing is impossible
- concentrating on the positive aspects of changes, attempting to understand them and focusing on that which can be realistically influenced

The Human Resources Management Office introduced a series of training courses for:

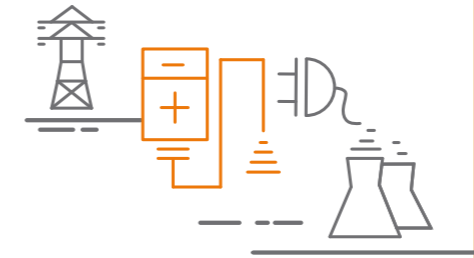
- employees of sales outlets, as part of which by 6 December 2018, 70 employees received training in matters related to sales, Customer service, relation building, communication techniques in the negotiation process, practical aspects of the agreement signing process and ways of dealing with Customer's emotions
- young managers ('Manager's ABC') – the purpose of training is to provide managers with knowledge and simple tools that will enable them to improve their team-leading skills, develop employees, better deal with stressful situations and achieve their objectives
- customer call centre employees, which focused on rehearsing most popular scenarios of conversations with Customers and working out new standards of Customer service for 1st and 2nd line consultants.

Connecting new entities to the distribution grid, both customers and suppliers

A significant increase in the number and power of microinstallations connected to the grid each year (power sources with an installed power of up to 50 kW), almost 99% of which are household photovoltaic installations: from 793 installations with a power of 5.6 MW in 2015 to 4414 installations with a power of 33.2 MW in 2018.

A significant decrease in the power of renewable energy sources connected to the medium- and high-voltage grids each year: from 674 MW in 2015 to 26 MW in 2018.

Expansion of an intelligent electrical energy distribution grid, enabling the storage and local management of energy



In 2018, the research section of the project concerning the construction of a Local Balancing Area (LOB) was completed; as part of this section, a research laboratory was constructed, comprising separate areas researching technologies related to grids, customers, existing and newly-constructed generating sources, energy storage system, new components of grid automatics and the LOBster system overseeing the operation of the LOB. On 22/11/2018, the Board of Directors of Energa Operator adopted a resolution to commence the launch of LOB, which according to the terms of the funding agreement must take place in 2019.

Results of the research part of the LOB project indicated that technical losses can be significantly reduced and voltage can be stabilised within the LOB.

After launching the project in 2019, we will commence monitoring the effects.

Providing customers with the highest possible level of energy security, defined as the uninterrupted supply of electricity of a sufficient quality:

- average system duration of SAIDI at a level of 182 min;
- average system frequency of SAIFI at a level of 2.33

The objectives with regards to reliability parameters result from the provisions of the 'Quality Regulations for 2016-2020'.

In comparison with previous years, no instances of anomalous weather resulting in large-scale grid failures were recorded. However, due to adverse weather conditions, an increased number of failures occurred in the area of the local unit in Płock, as a result of which that unit had to declare a crisis situation caused by mass failures. Despite this situation, objectives set for EOP with regards to SAIDI and SAIFI reliability parameters in 2018 were met.

The SAIFI parameter is 17% below the planned level and equals 151 min., while SAIFI equals 2.15, i.e. 8% below the specified target.

2.2 Scale of cooperation



Energa Obrót SA sells electricity, gas, and additional services offered to Customers both as individual products and in packages. Customers of the company's services come from all segments of Customers – industry, large, medium and small enterprises, as well as households. At the end of Q3 2018, Energa Group provided services to approx. 3 million customers; over 2.7 million of these were Customers in the 'G' payment plan, while the rest was made up of Customers in the 'C', 'B' and 'A' payment plans, in descending order.

Energa Obrót SA focuses on improving the effectiveness of its sales activities and continues to develop its sales network. Similarly to the 2014-2017 period, the number of partner outlets across the country increased. The sales network includes:

- 9 own sales outlets + 1 outlet operated by an external partner with cities and towns with the largest concentrations of Energa Obrót SA's Customers
- 11 sales points (islands) in shopping malls in selected cities and towns across Poland
- 62 outlets operated by external partners

The Customer portfolio is built both on the basis of the acquisition of customers outside of the area of operations of Energa Group's Distribution System Operator, as well as loyalty-building activities, aimed at protecting existing Customers from being poached by competition. Sales of utilities in foreign markets is also constantly developed: in Slovakia, where the Group has operated before, and in the Czech Republic, where the Group's operations are in their initial stage. In 2018, new companies joined Energa Obrót SA's portfolio of business Customers: Aldi, Sfinks Polska, Polmlek Group, PKP S.A., PKP PLK S.A., Iglotex Group, Poczta Polska, Żabka, JSW KOKS SA, Auchan, Rovese sourcing group, the Carrefour chain, Vesuvius, Airbus, Black Hawk, SYLVA, Wirtualna Polska Media.



9

own sales outlets



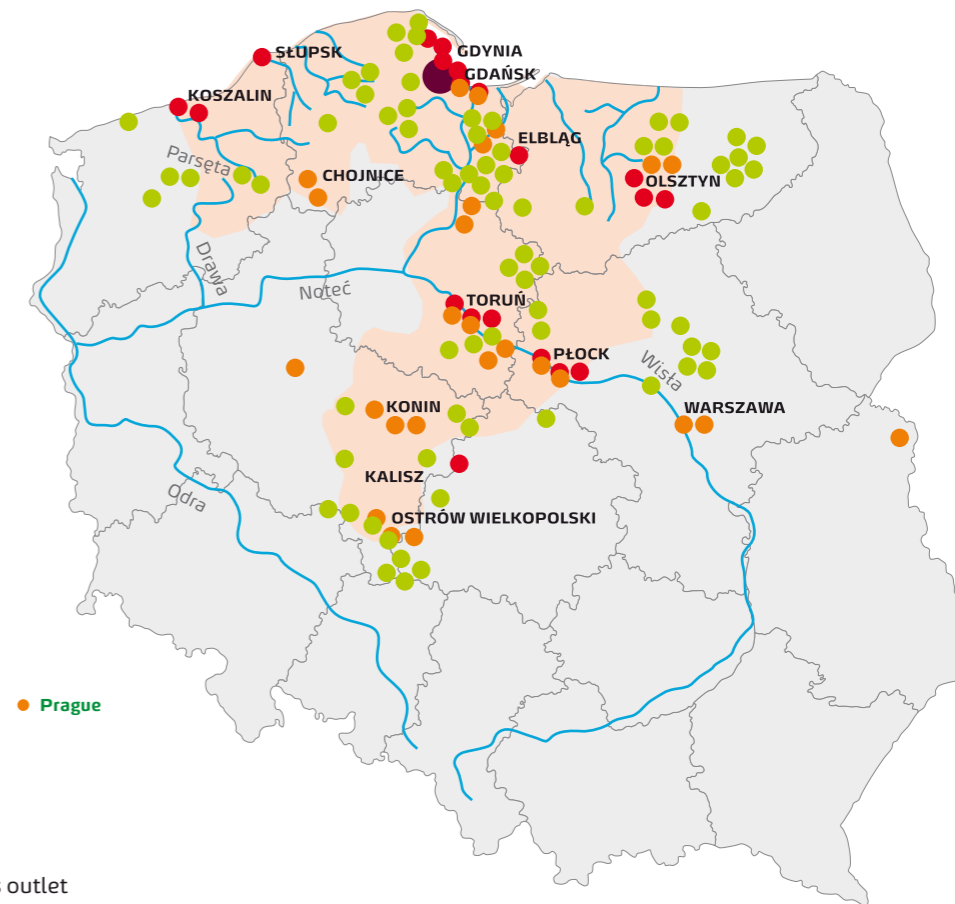
11

sales points in shopping malls



62

externally-operated outlets



● Sales outlet

● Sales point

● Partner-operated point

● Head office of Energa SA

■ Distribution of electricity

■ Sales of electricity

● Bratislava

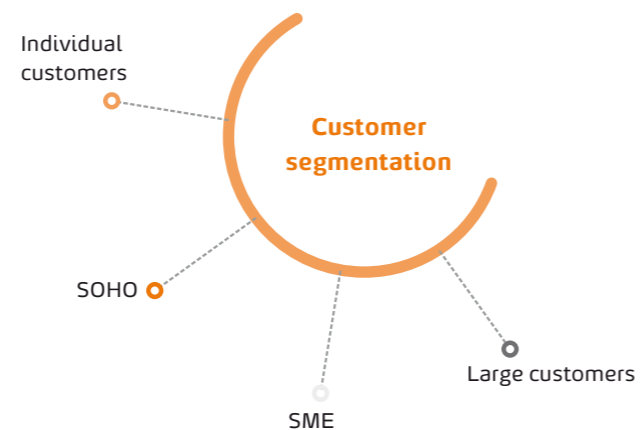
● Košice

The following services are provided in the outlets shown on the above map:

- signing new agreements or extending existing ones
- activating products
- signing over counters
- handling complaints.

Energa Obrót SA constantly monitors the shifting conditions in the market. The most significant changes in this area in 2018 include a rapid rise in prices on the Polish Power Exchange, discontinuation of sale of electricity by Energy Centre and Energy for Business, introduction of exchange obligations, adoption of the act on amending the excise tax act and certain other acts of 28 December 2018 and other regulatory and legal changes, as well as changes to the internal organisation of the Group (including transformations of its business model). Company Energa Obrót SA reacts to the changes in its environment by modifying its strategy to fit these changes, e.g. by intensively working on implementing a new pricing policy, compliant with the requirements of the act, aimed at alleviating the effects of the rise in the prices of electricity in 2019.

At Energa Obrót SA, we've observed an increase in the sales of electricity with above-average dynamics (increase by 1207.7 GWh, i.e. by 6.2%). In consequence, the share of Energa Obrót SA in the sale of energy to end customers by large trading enterprises rose



from 17.4% to nearly 18%. The monthly monitoring carried out by the Energy Regulatory Office shows that in 2018, over 84 thousand households and 14 thousand institutions switched their electricity providers. Since the start of the liberalisation of the electricity market, i.e. since mid-2007, by the end of March 2018 around 563 thousand households and close to 194 thousand institutions switched their electricity providers. Today, providers – both large electricity companies and independent entities – pursue small and medium enterprises (SOHO, SME) instead of the largest customers.

SOHO (Small Office/Home Office) – enterprises operating small offices, usually in residential abodes (e.g. architects, lawyers, freelancers)
 SME small and medium-sized enterprises



Number of TPA (Third-Party Access) customers by distribution system operators

Distribution system operator	Number of TPA customers		Energy supplied to TPA customers (MWh)
	Dec 2017	Dec 2018	Jan-Dec 2018
PGE Dystrybucja S.A.	191 561	209 571	17 093 479
Energa Operator SA	164 623	182 552	10 199 733
TAURON Dystrybucja S.A.	200 220	223 895	33 389 382
ENEA Operator Sp. z o.o.	112 985	113 694	8 369 463
Innogy Stoen Operator Sp. z o.o.	61 565	71 410	4 046 755
PKP Energetyka S.A.	1 014	1 139	867 862
Polenergia Dystrybucja Sp. z o.o.	461	522	191 274

In 2018, Energa Obrót SA supported the ex-Customers of companies Energia dla Firm S.A. i Energetyczne Centrum S.A., EC Andrychów, Barton Energia sp. z o.o., Corrente dla Domu sp. z o.o. sp.k., who lost their electricity providers due to the above

companies ceasing to sell electricity. As a result, Energa Obrót SA became a backup provider for 25 thousand Customers in the following payment plans:

G11	G12	C	B
17 258 Customers	3 813 Customers	3 689 Customers	71 Customers

The company opened special helplines for Customers, where they were able to receive information on how to quickly and safely switch back to Energa. Due to the increased traffic in sales outlets and increased number of calls to the helpline, customer service opening hours were extended. Individual Customers who wished to speak to helpline consultants were able to do so from 7AM until 10PM, while the helpline for corporate Customers was open from 8AM until 6PM. Changes were also made to accommodate Customers who preferred to speak to a consultant in a sales outlet. Outlets were open from 8AM until the last Customer who came to the outlet by 5PM. During the period covered by the report, 8617 contracts were signed with existing Customers of companies

Energia dla Firm, Energetyczne Centrum, EC Andrychów and other companies.

Energa Operator SA provides services to all Customers of Energa Group, including TPA Customers who signed direct contracts for the provision of distribution services with the company. These Customers exercised their right to switch their electricity provider.

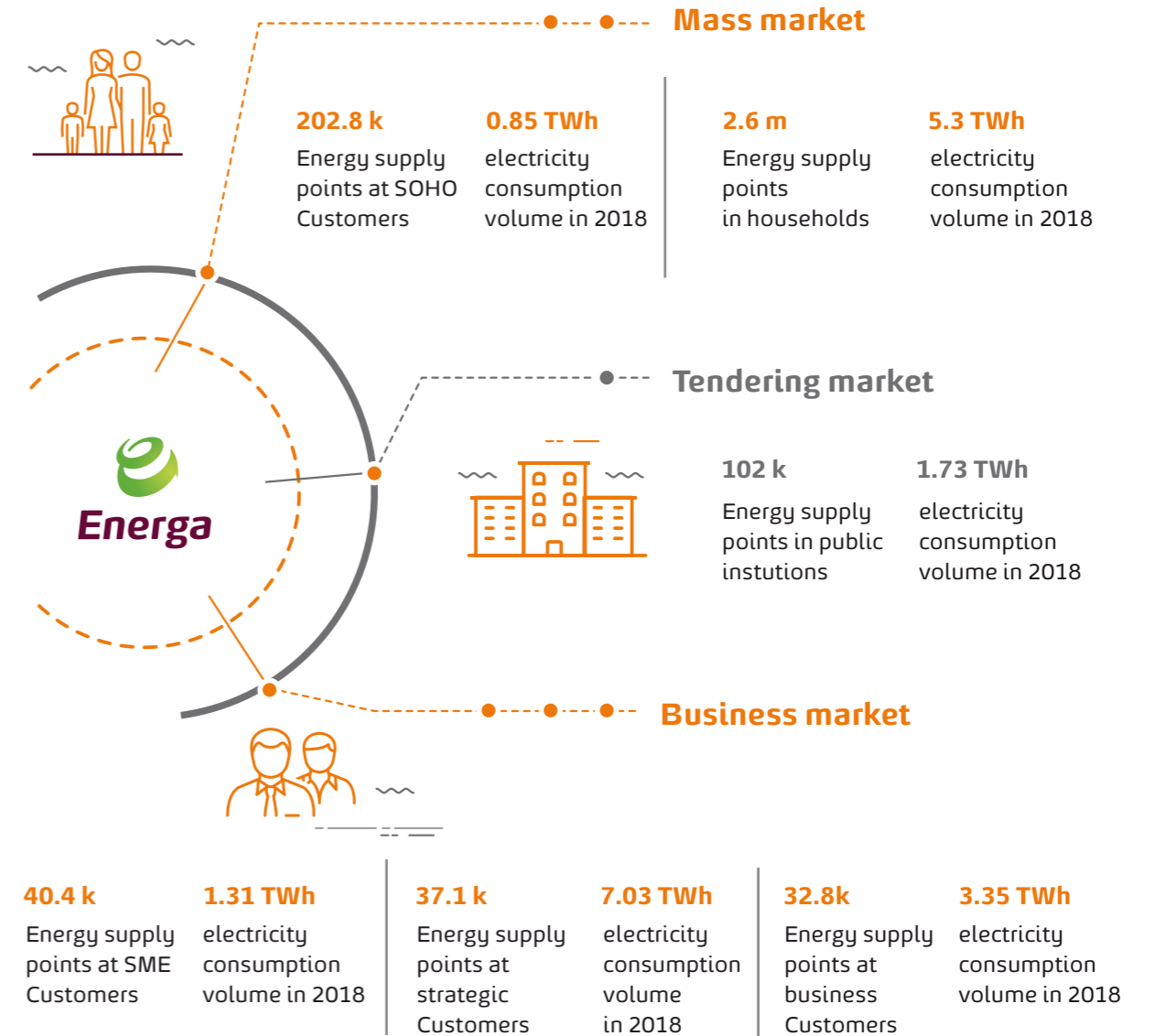
Data at the end of 2018:

comprehensive	2 900 941
TPA	185 431
Total	3 086 372

102-7
G4-EU3

Number of registered individual, industry, institutional and commercial users (data on users connected to the grid by company Energa Operator SA)

User type	Number of users	
	2017	2018
individual	2 749 848	2 796 251
industrial	7 208	7 551
institutional	10 943	11 086
commercial	273 455	271 484
TOTAL	3 041 454	3 086 372



2.3

102-2 ■ Trustworthy products and innovations

Energa Group's mission is to provide its Customers with the best solutions and products and services adapted to their needs. To complete this mission, company Energa Obrót SA constantly works on expanding its portfolio of products. It also implements a new customer-oriented business model and develops new areas of operation.

In October 2018, Energa Obrót SA introduced a package of 15 efficiency-boosting products into its range of services. The company constantly expands its portfolio dedicated to business Customers, e.g. with the compensation of passive power stipulated in the energy efficiency act, which involves providing business Customers with a custom-designed capacitor battery. Compensation of passive power reduces costs, improves quality and enables a more effective use of electrical energy. Costs of passive energy may be reduced by up to 95%. In 2018, the service was purchased by 50 of our most aware Customers. The product is made up of two parts:

- delivery of compensation of passive power, i.e. implementing efficiency-boosting modernisations, installing a passive power compensation unit – leading to a reduction in the consumption of passive energy and reduction of costs resulting from exceeding passive power
- diagnostics and maintenance of compensation of passive power, i.e. a service involving regular inspections and diagnosing and remedying the effects of the improper operation of the passive power compensation unit installed with the Customer.



approx. PLN **6.5 m**
value of investment in photovoltaics

Furthermore, in order to take advantage of the development potential of photovoltaic station, the Energy Efficiency Department at Energa Obrót SA prepared two special sales processes in respect of the EnerSol product for business Customers. Photovoltaic units are a modern and environmentally friendly solution that brings many benefits to Customers:

- affecting bill amounts
- ability to sell surplus energy
- reducing the emission of pollutants related to the conventional generation of electricity
- development of activities in the field of corporate social responsibility
- professional support of a dedicated advisor
- customised offer.

In 2018, the Local Market Department entered into a preliminary agreement with one of our business Customers for the construction of a photovoltaic installation with an installed power of 2 MW. The installation will be located in the village of Wędkowy in the municipality of Tczew and will cover an area of over 4 hectares. The Customer was offered a comprehensive solution comprising the entirety of activities required to construct and operate a photovoltaic installation:

- pre-project advice
- advice related to obtaining funding for the project
- assistance in obtaining a pre-qualification to participate in auctions of energy from renewable sources
- creation of the construction design
- construction of the installation
- guarantee of purchasing energy produced by the installation.



15
new technical services

The potential of the dynamic development of photovoltaics in Poland was also used when expanding the range of products aimed at individual Customers. Energa Obrót SA offers the construction of photovoltaic microinstallations, which first generates solar energy and only later uses electricity from the grid. This solution is particularly beneficial in light of the amended renewable energy sources act of 2016. The regulation created a mechanism making it possible to use free energy from the grid in return for sending energy to the grid from the microinstallation. Thanks to this solution, savings of up to 80% can be achieved on annual costs of electricity.

Energa Obrót SA also develops its sales network, creates new sales channels and optimises existing channels. Its product portfolio is constantly expanded with new categories: basic range of products, medical services, savings zone, insurance, auto assistance and TV. The company also expanded its portfolio with the 'Package of Efficiency-Boosting Products'. Since 24 September 2018, the company offers 15 new technical services. In Q3, the company introduced additional products aimed at Customers in the mass and SOHO markets:

- EnergGRA
- Make An Appointment
- Online Monitoring
- Utility Consumption Monitoring.

The anti-smog offer, aimed at individual Customers, is of particular interest. The offer is designed for Customers who use electricity for heating purposes or to charge electrical vehicles. As part of this offer, Customers are billed for energy at special, low rates during night time, therefore the largest savings can be made by installing and operating energy-hungry devices when the rates are low. The product is offered under the name 'The Night is Full of Energy'.

The 'Storage Heaters and Heat Pumps' offer was related to the anti-smog offer and comprised comprehensive services in respect of the capital works process related to installing modern heating systems based on storage heaters or heat pumps. The offer was dedicated mostly to individual Customers not connected to district heating systems, who:

- use coal-fired heaters for heating purposes (residents of tenement houses, older apartment blocks and houses, detached houses, etc.)
- plan to build a detached house
- plan to replace or modernise their heating system.

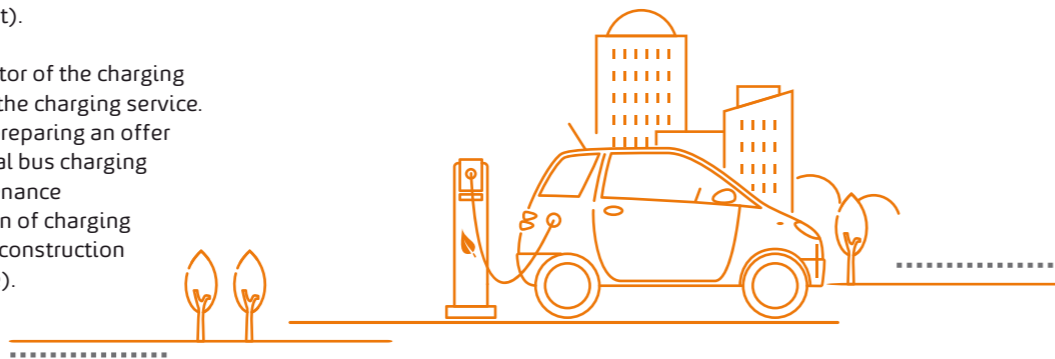


The main idea behind this solution is the promotion and increase in the availability of modern heating technologies with a limited negative effect on the pollution in the local natural environment. Additionally, the offer can be used to support the rate-based product from the anti-smog offer. The product was made available for purchase simultaneously with the introduction of a special promotional offer, as part of which the company offered additional funding for the purchase of a heating system based on an accumulation heater or heat pump. The offer was valid from 1 March until 31 December 2018 and applied to the first 100 agreements made for the sale of accumulation heaters or heat pumps.

As part of the company's development program for 2018, the e-Mobility project was initiated, whose purpose was to launch the electrical automotive sector at Energa Obrót SA. According to plans, by 31 December 2019, 54 publicly-available electrical vehicle charging points are to be installed: 6 DC points (fast) and 48 AC points (semi-fast).

The company is to act as an operator of the charging infrastructure and the provider of the charging service. Works have also commenced on preparing an offer involving the provision of electrical bus charging services (construction and maintenance of infrastructure) and the provision of charging services for business Customers (construction and maintenance of infrastructure).

Implementation of the e-Mobility structure will lead to direct benefits for Energa Group, including the creation of own infrastructure (i.e. new locations of supply and sale of electricity) and reinforcement of Energa's position as the leading brand in the Polish electromobility market. Thanks to this, the Group will be able to capture strategic locations for electrical vehicle charging infrastructure and obtain key business partners, significantly increasing the entry barrier for competitor in this area. The described concept of the construction an EV charging network is aimed at taking advantage of the opportunity that may be afforded to Energa Group by the development of the electromobility market in Poland. An additional goal is to ensure that Group companies will participate in the implementation of the innovative program of developing electromobility in Poland.



Energa Obrót SA carries out regular analyses of regulatory changes to regulations. If these changes affect model agreements, they are implemented in these agreements. Changes in model agreements and introduction of new model agreements are each time consulted with a law office and a personal data protection specialist. If the Energy Regulatory Office, Negotiations Coordinator at the Chief of the Energy Regulatory Office or the Office of Competition and Consumer Protection indicate any irregularities, the company implements corrective action aimed at eliminating them and supervises their implementation until the work is complete.

Furthermore, employees of Energa Obrót SA analyse such sources as industry websites to check for any decisions issued by authorities, identified irregularities, unfair practices, etc., verifying whether corresponding circumstances exist within the company, and if so, they implement actions aimed at eliminating them as fast as possible.

Detailed information about the range of products offered by Energa Obrót SA can be found on the below website:

www.energa.pl



2.4 Honest communication



Magdalena Siwerska
simple language coordinator
at Energa Obrót SA

Everyone who gave simple language a chance knows that there is no going back from this path. All this thanks to the commitment of the Simpler project team, who shows incredible passion in removing all that is difficult and unfriendly from our company language. Today we are proud to present such documents as a new, simplified comprehensive consumer contract, the attached general terms and conditions, offer regulations (e.g. Actual Billing) and applications (e.g. Application for Overpayment Refund). It's the first change of this kind in the energy industry.

and – most importantly – the language used by employees when speaking to Customers. Energa Obrót SA collaborated with Tomasz Piekot, Ph.D., head of the Simple Polish Studio in Wrocław. Simple language is a language standard recommended to all authors and institutions who author texts addressed to the mass customer, the idea of which was created at the University of Wrocław. As part of the project, volunteer coaches (employees of the company) ran over 20 workshops for employees who have direct contact with the Customer. As a result of the project, more than 100 documents, forms and announcements on the helpline were simplified; these included the comprehensive contract, general terms and conditions, offer regulations or applications.

103-1 (417) ■ Sales Business Line

103-2 (417)

Energa Obrót SA strives to improve its standard of communication with the Customer. During the previous year, the company implemented principles governing communication with Customers, thanks to which Customer service will be more efficient and provided based on uniform standards. The purpose of this action was to ensure that Customers receive uniform communication from various employees of Energa Group, so that Customers who contact various employees of Energa Group receive full, verified and consistent information. As part of the standardisation process, answers to Customers' most frequently asked questions were made uniform.

The most important part of the company responsible for the optimisation of processes is the Customer Relations Management Department. Work performed by this department includes the continuation of corrective action in respect of complaint and request handling. In consequence, the company is able to minimise the number of overdue issues and improve parameters with regards to internal consultation completion deadlines, directly affecting the timely handling of customer complaints.

As part of the Simpler project, in 2018 the company simplified the language spoken among employees

The company has commenced the implementation of the third stage of the project, the purpose of which is to implement an online sales and Customer service system with a mobile app available. The projected date of launching the new website and application is Q2 2019.

Works also continue on implementing a system enabling the sale of the company's range of product based on the cafeteria model. Cafeteria is a new, innovative approach to the sales process, involving the customisation of the offer to the Customer's needs and presenting the Customer with a number of variants and options, from which they can choose only that which they actually need. To improve the effectiveness of sales channels and ensure the full use of the potential of the current range of products, the company prepared a model for the sale of its technological range of products based on the lead model.

The sales model used by EOB assumes that sales and customer service channels (own sales outlets and helpline) actively present the company's range of products to individual Customers who meet the selection criteria specified for a given product and obtain the contact data and required consents (cold lead) from Customers who express an initial interest. The data is then given to dedicated technological advisors. Technological advisors contact the Customers who expressed an initial interest in order to provide them with a more detailed description of the product and then gathers the data required to prepare an offer. The data is then provided to a partner who works out the details and prepares a contract.



The sales area dedicated to business Customers was restructured, and numerous additional processes were implemented, including a regular monitoring of sales result, new work tools, KAM travel route planning, individual meetings between regional sales managers and business Customer advisors, and the company's range of products was customised to meet the needs of identified groups of potential customers.

In order to improve the commitment of employees and their identification with the values of the company, as expressed in Energa Group's Business Strategy for 2016-2025, actions aimed at implementing an organisational culture were initiated, including cultural workshops for the management and rank-and-file employees, as well as communication activities promoting cultural priorities chosen by the company's board:

- ⋮
- building close relations with Customers, based on
- ⋮ reliability and quality
- searching for simple solutions when acting and
- ⋮ communicating
- showing commitment and energy at work, leading
- ⋮ to tangible benefits and satisfaction from work
- believing that nothing is impossible, thus helping
- ⋮ in taking matters to a successful conclusion
- concentrating on the positive aspects of changes,
- ⋮ attempting to understand them and focusing on
- ⋮ that which can be realistically influenced.

The purpose of these priorities is to introduce a new quality to the organisation by improving cooperation, efficiency and a feeling of being a part of the Group.



Improvements in Customer service implemented from 1 October 2018:

The Company opened a new D2D (door to door) sales channel for the mass market, as part of which the company's representatives, wearing an ID tag and authorised to enter into contracts on behalf of Energa Obrót SA, will visit the Customer at their house. This enables the Customer to sign the contract without having to wait in line and unnecessary formalities. The representative will take care of all matters related to activating the services. Customers may rescind the agreement within 14 days, meaning that they have ample time to familiarise themselves with the offer in detail and reflect on its terms and conditions. The company prepared a standards manual for its representatives, containing a set of specific principles and guidelines they need to follow in order to provide Customers with a sense of security and an attractive offer.

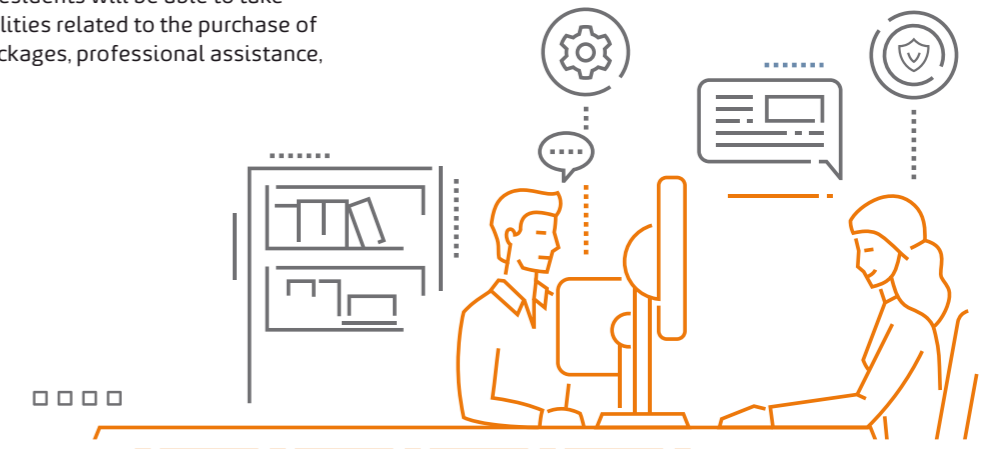
Energa Obrót SA changed the pricing coefficient from 3 to 2 in the model reserve contract for the sale of electricity, thanks to which the price of energy for customers with reserve contracts is lower.

Employees of the company's own sales outlets and outlets operated by partners may consent to extending the payment date by 6 months. This solution is available to both individual Customers and small businesses. Such consent may be given in respect of amounts overdue by no more than 2 months. Employees enter into an agreement with the Customer, pursuant to which the Customer undertakes to pay the overdue amounts in instalments, guaranteeing that the Customer will continue to be supplied with electricity, provided that they make the payments on time. Instalment agreements may be made in respect of debts of no more than PLN 5k.

In 2018, the company opened sales and Customer service points in municipalities where no sales outlets are operated by Energa or with whom it cooperates as part of the 'Dynamic Seniors with Energy' program. Around 200 local authorities were invited to participate in the 'Energa in Your Municipality' project. As part of the project, mobile sales and Customer service points will be set up in the territories of participating municipalities, providing Customers with direct access to company employees.

At the mobile points, residents will be able to take care of required formalities related to the purchase of electricity, medical packages, professional assistance,

online TV, insurance. Sales and Customer service points operate on a regular duty shift basis. First employee duty shifts took place during the summer and were met with much interest on the part of Customers. Residents of each municipality are informed about planned duty shifts through local media, websites, local social media, and text messages.



Distribution Business Line

The Customer Service Management Department at Energa Operator SA, a company responsible within Energa Group for the distribution of electricity, supervises Customer service provided via the following contact channels: telephone, electronic, face to face. Services are provided through each channel based on guidelines formulated in internal procedures and information scripts.

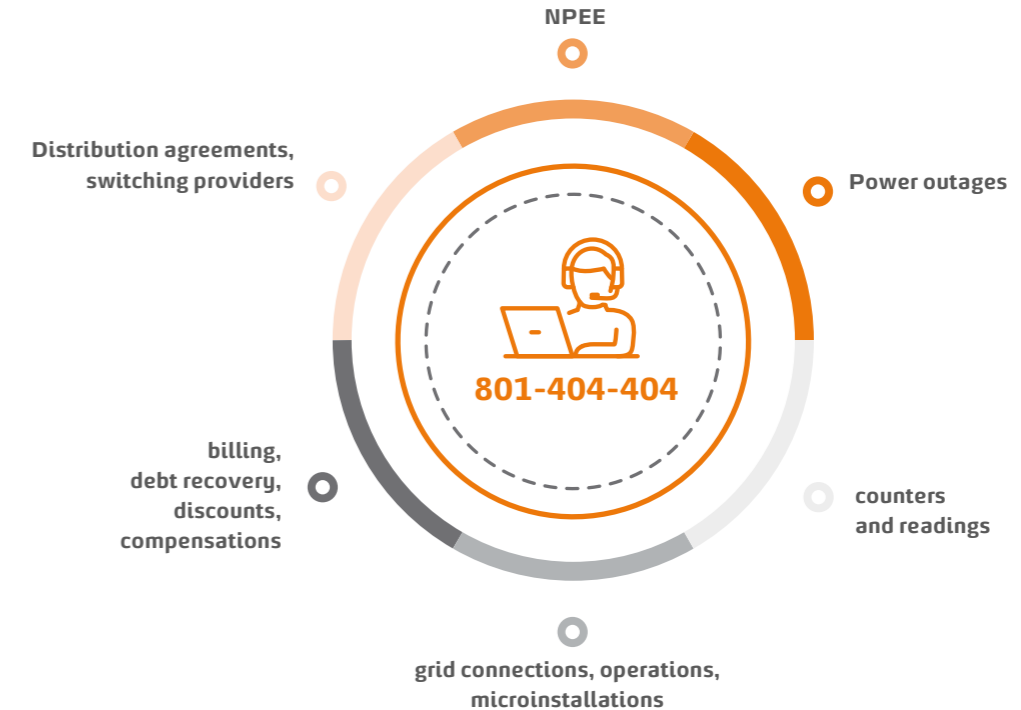
- the document titled 'Rules governing the handling of matters reported via the Call Centre' contains guidelines concerning the handling of matters reported via telephone, text message or by electronic means. The document was created in order to improve the quality of call handling services provided by an external company, significantly improving the standard of contacts with Customers and enhancing the company's image. The document contains e.g. basic principles that must be followed by employees during telephone conversations with Customers, sample scenarios of conversations or guidelines enabling call centre consultants to know what data to obtain from a Customer in order to make a positive identification to solve their problems and how to obtain that data.

- Scripts, verification tests and Customer service scenarios for Call Centre consultants on the Moodle e-learning platform: each new helpline employee must undergo training on the Moodle platform prior to commencing work. After familiarising themselves with service scripts and successfully passing a verification test, they will be able to access Customer service scenarios, significantly facilitating the provision of Customer service.
- the purpose of the document titled 'Rules governing face to face Customer service' is to streamline the rules governing face to face contact with Customers, taking into account the changes resulting from the updates to personal data protection regulations.
- the purpose of the document titled 'Rules governing correspondence with Customers' is to standardise the rules applicable to correspondence with customers based on currently applicable personal data protection regulations and guidelines applicable in letter templates.
- a change was made to the IVR announcement to adapt it to the Customers' needs and make it easier for them to choose the appropriate type of call.

IVR (interactive voice manager) is the name of a system used in telecommunications to enable the provision of interactive services to the caller. IVR works as an automated call centre. The caller listens to pre-recorded messages and chooses the relevant item on the menu using a phone capable of DTMF tone dialling.

Types of customer calls

Due to the development of and changes to the EOP structure, the existing classification of Customer calls had to be modified. The modification ensured transparency, thanks to which it's easier to connect to an operator that handles a specific category of calls when calling 801-404-404.



The IVR announcement has been supplemented to include required messages concerning the provisions of GDPR.

Contactis Emergency now enables recording of alarm calls, making it possible to handle such calls in a more efficient manner.



2.5 Friendly customer service

Sales Business Line

In the period covered by this report, Energa Obrót SA introduced online Customer service through the live chat service on its website and using Facebook Messenger. The use of new communication tools improves the quality of Customer service, reduces frequency of contact via other channels and enables the company to offer its Customers additional products and services, while Customers are able to have their requests processed online within an average time of 13 minutes and 21 seconds. Customers who used this new form of communication positively assessed this solution:

- 92% of Customers are satisfied with service provided through live chat
- 9 out of 10 Customers would recommend this form of contact
- 21 080 conversations were held over a period of 9 months (starting from 22 January 2018)
- 15.3% of conversations were converted into sales
- from July until the end of September, 115 Customer contacts were made using Messenger.



92%
Customers
satisfied with
web chat service



21 080
conversations

In 2018, the use of model principles, good practices and standards described in Customer service standard manuals was improved. In the previous year, two manuals were updated and new manuals for consultants of the 1st and 2nd service line in the Customer Call Centre and mass market D2D network advisors were implemented. At the current time, 8 manuals standardising procedures in all Customer contact channels are in use. Guidelines included in these manuals specify the rules that must be followed by advisors and consultants during contact with Customers, both during the sale of products and post-sale services. Employees are familiarised with standards manuals during training courses.



15.3%
conversion into sales



in the space of 3 months,
115 contacts
were made using Messenger

The purpose of implementing standards is to ensure a high-quality, professional service, as well as building awareness among employees as to who the Customer is and what are their needs and expectations. Attention to relations is one of the company's basic values, and ensuring professional and reliable Customer service constitutes a priority.

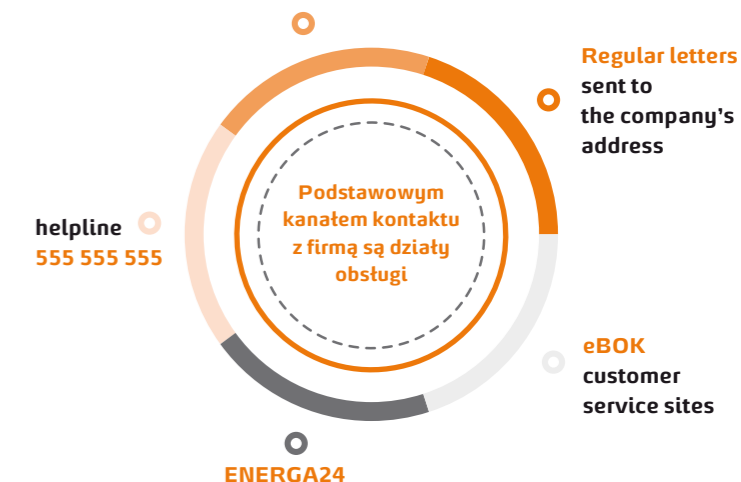
Customers are afforded additional support in solving unusual issues by Energa's Customer Spokesperson. The Spokesperson provides support in the most complicated and lengthy matters. The main tenet of the Spokesperson's activities is that they are independent from the Customer service channels operated by the company. The Spokesperson does not handle complaints and requests or debt recovery process, but is responsible for analysing any responses sent and verifying whether the complaint handling process was duly carried out.

Complaints and opinions addressed to the Customer Spokesperson may be sent using a special online form, providing the reference number of an earlier complaint. The Spokesperson will handle the cases where standard contact possibilities were exhausted and the Customer does not agree with the responses received.



90%
of completed
consultations were
closed within 7 days

Online form at:
www.energa.pl/kontakt



2018 was a pivotal year for the company in terms of minimising the number of customer complaints and requests and adjusting the processes used to process them. The number of overdue matters was the lowest in history and as of 24 December 2018 concerned 1733 PPEs (Electricity Supply Points), which constituted a 97% improvement compared to November 2017. Furthermore, 90% completed consultations were closed within 7 days – this parameter improved six-fold in the space of one year. Thanks to this improvement, 90% of complaints submitted by Customers from the mass market can be closed within up to 12 days, meaning that complaints are handled more than twice as fast compared to the same period in 2017.

G4-EU27 ■ Number of households disconnected from the grid due to failing to pay electricity bills, broken down by the disconnection period

Number of Customers broken down by the time elapsed between disconnection and paying the electricity bill in order to be reconnected	Energa Obrót SA			
	2015	2016	2017	2018
up to 48 hours	0	0	22 802	31 598
48 hours – 1 week	0	0	2 850	3 950
1 week – 1 month	61 867	24 552	1 995	2 765
1 year and more	0	0	0	0

G4-EU27 ■ Number of Customers broken down by the time elapsed between paying the overdue electricity bill and reconnection to the grid

Number of Customers broken down by the time elapsed between paying the overdue electricity bill and reconnection to the grid	Energa Obrót SA			
	2015	2016	2017	2018
up to 48 hours	0	0	22 802	31 598
48 hours – 1 week	51 985	0	2 850	3 950
1 week – 1 month	0	20 446	1 995	2 765

417-2 ■ Total number of non-compliances with regulations and voluntary codes of conduct relating to the marking of and information concerning products and services, broken by type of consequences

	2017	2018
Non-compliances with regulations resulting in a fine or financial penalty	9	3
Non-compliances with regulations resulting in a warning	0	0
Non-compliances with voluntary codes of conduct	0	0
TOTAL	9	3

Total number of non-compliances with regulations and voluntary codes of conduct regulating issues related to marketing communication, including advertising, promotion and sponsoring, broken by type of consequences

417-3

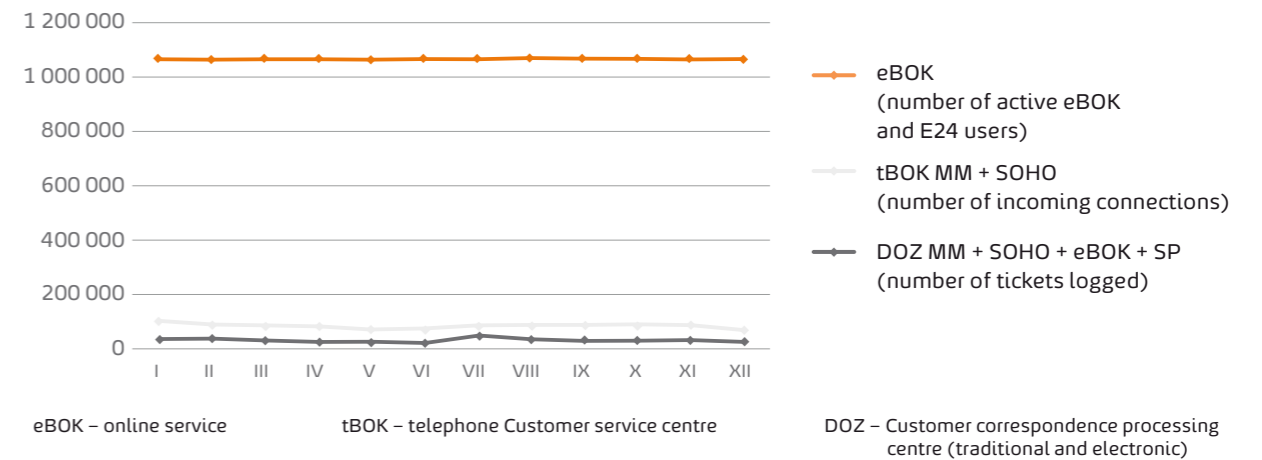
	2016	2017	2018
Non-compliances with regulations resulting in a fine or financial penalty	0	0	0
Non-compliances with regulations resulting in a warning	0	0	0
Non-compliances with voluntary codes of conduct	0	0	0
TOTAL	0	0	0

Monetary value of significant penalties resulting from non-compliance with laws and regulations related to the supply and use of goods and services

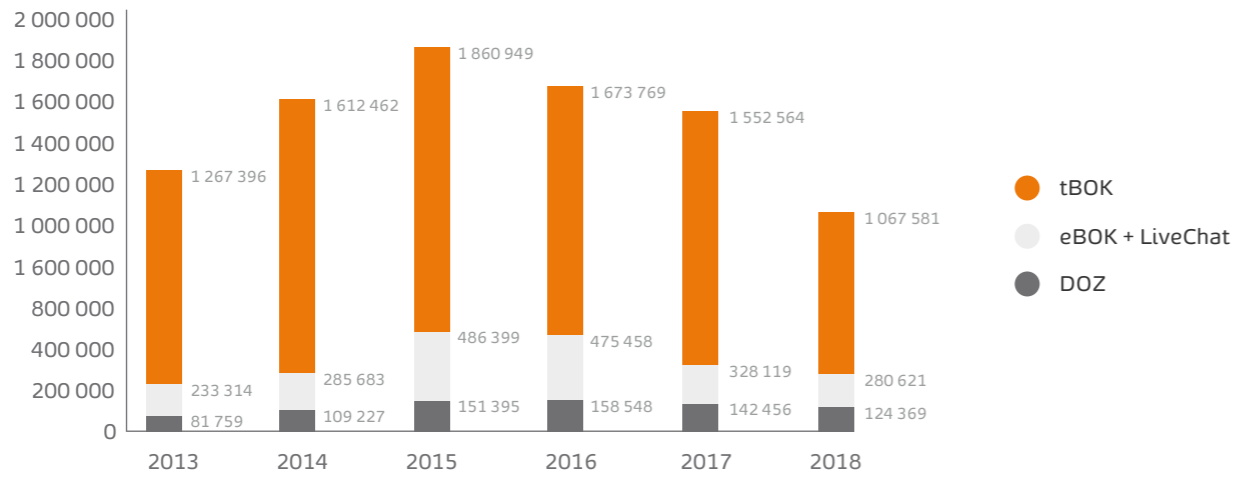
419-1

	2016	2017	2018
Total value of penalties (in PLN) imposed on the organisation as a result of non-compliance with laws and regulations related to the supply and use of goods and services	160 000	26 460 000	112 693

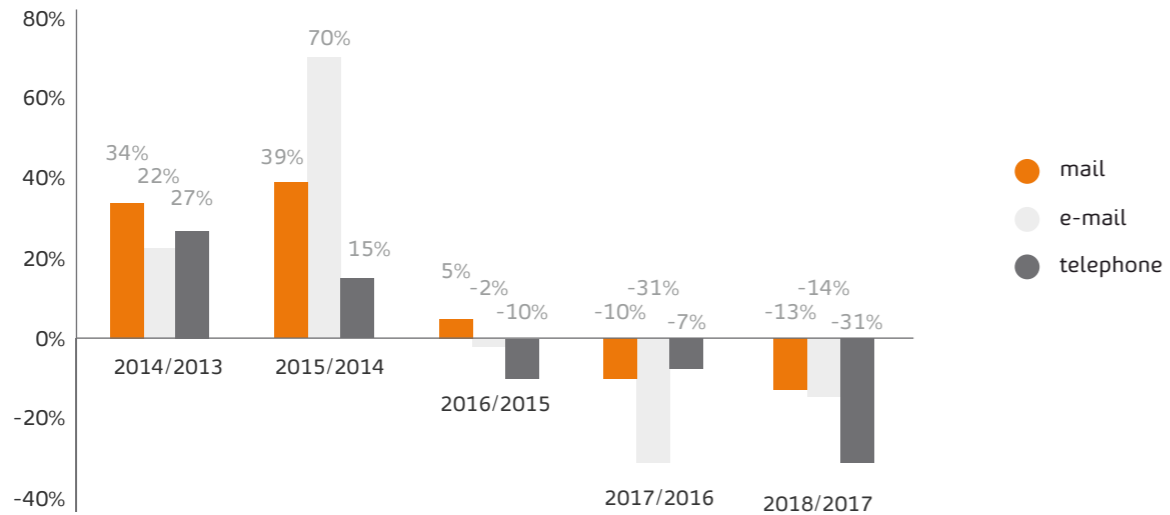
Traffic in contact channels in 2018



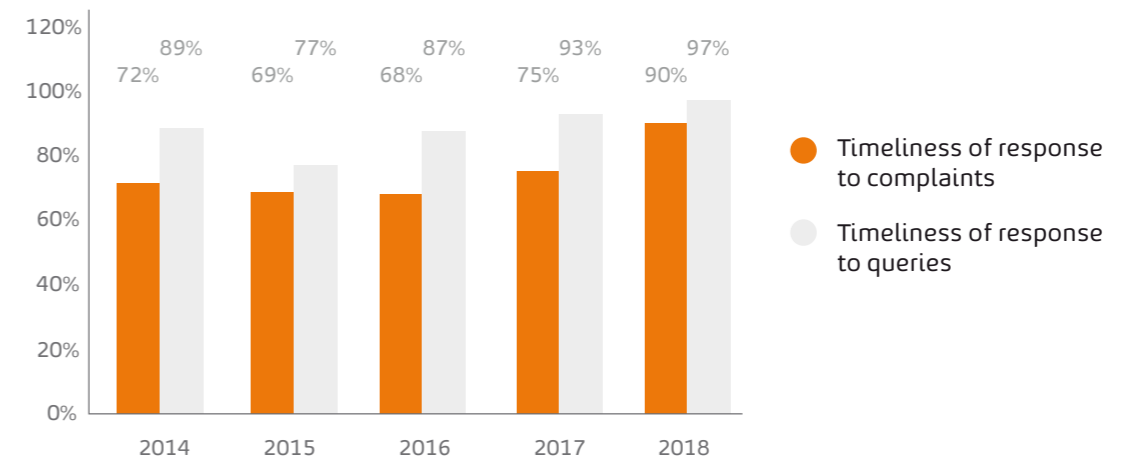
Traffic in contact channels in 2018



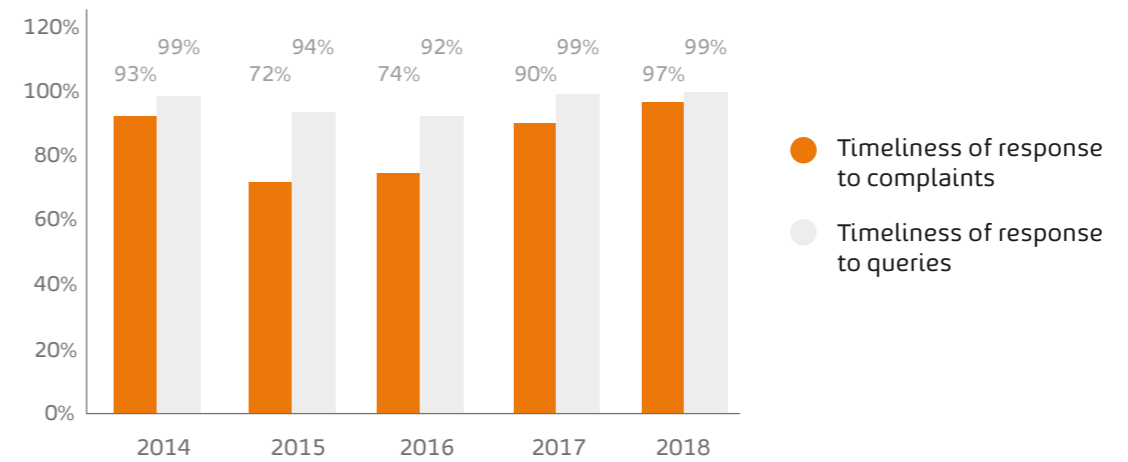
Dynamics of change in Customer use of various contact channels in 2013-2018



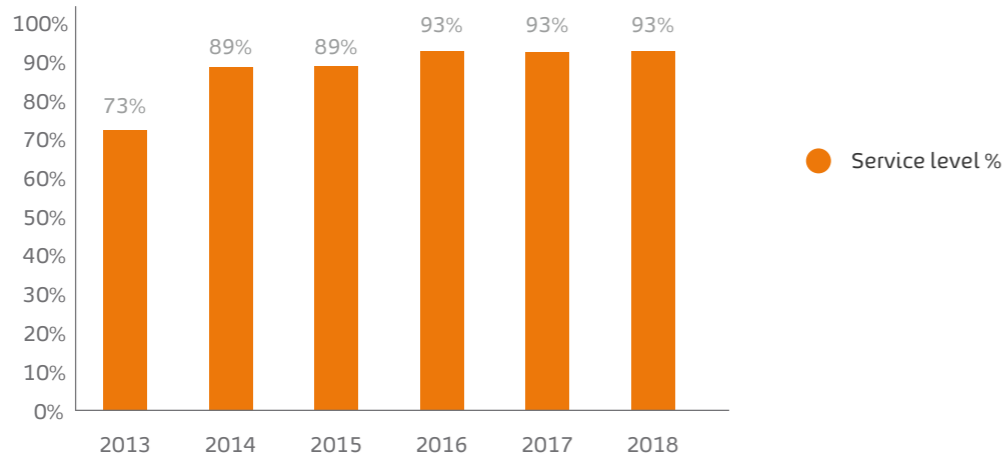
Timeliness of response to Customer correspondence in 2014-2018



Timeliness of response to Customer emails in 2014-2018



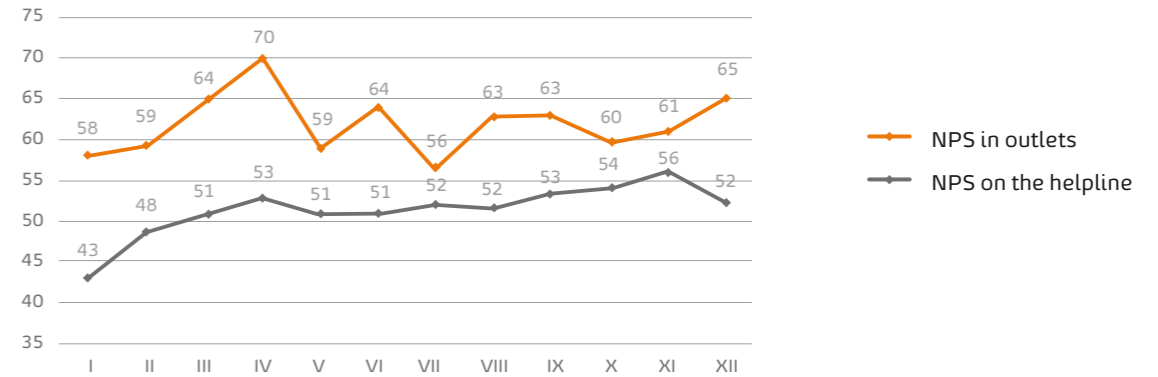
Service level at the Customer call centre in 2013-2018



The expectations of Customers of Energa Obrót SA are becoming higher and higher with regards to the quality of service provided in the course of sales and post-sales processes. Due to this, the company constantly monitors the quality standards in sales and service channels using monthly quality research carried out with the 'mystery customer' method. Ongoing analysis and use of the results of research for implementing corrective action, including employee training, is aimed at constantly improving the quality of service, which directly translates into the satisfaction of persons and businesses that use the company's services.

Additionally, Energa Obrót SA carries out an ongoing monitoring of Customer satisfaction levels in each sales and service channel by means of an automatic measurement of the Net Promotor Score (NPS) indicator. NPS indicates whether Customers would recommend other people to contact the company. The below graph presents the results of NPS measurements in sales outlets and on the helpline during individual months of 2018.

Results of NPS measurements in sales outlets and on the helpline in 2018



The level of Customer satisfaction with customer service in outlets remains stable, NPS in December 2018 amounted to 65. The satisfaction level with regards to the helpline is slightly lower, but has been on an upward trend through the entirety of 2018, and in December 2018, NPS reached 52. Both channels maintain a constant quality of customer service, which translates into a stable satisfaction level.

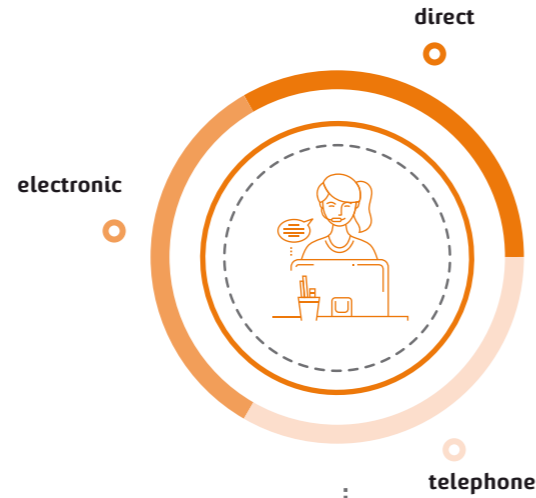
Model contracts include provisions related to the amicable resolution of any disputes.



Distribution Business Line

Energa Operator SA provides its Customers with the following contact channels:

- direct – Customer Service Offices (BOO), Connection Service Points (POP)
- telephone – 991 emergency number, distribution helpline 801-404-404
- electronic – text message, online form



991 emergency number

Call categories	danger to life
	emergency

991	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Ratio of answered calls lasting up to 20 sec	94.07%	98.21%	96.27%	94.76%	98.65%	96.48%	93.85%	91.33%	92.82%	96.17%	96.86%	53.83%
Ratio of answered calls	98.84%	99.59%	98.66%	97.94%	99.75%	99.51%	99.00%	98.41%	98.74%	99.45%	99.26%	70.55%



Data regarding the helpline at 801-404-404

failure reports	counters, readings	billing, debt recovery, discounts, compensations
grid connections, operations, microinstallations	distribution agreement, switching providers	illegal electricity connections

801-404-404	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Ratio of answered calls lasting up to 20 sec	92.66%	96.81%	98.26%	95.39%	98.83%	94.60%	92.96%	89.63%	94.01%	96.27%	95.13%	56.60%
Ratio of answered calls	98.81%	99.67%	99.89%	99.66%	99.92%	99.66%	99.70%	99.34%	99.72%	99.79%	99.75%	62.51%

Data regarding communication via text messages and emergency online form

Category:	improper supply of electricity
	power outage

Electronic queries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Ratio of queries answered within 15 minutes	99.98%	100%	100%	99.79%	99.71%	99.81%	99.90%	99.66%	99.41%	99.93%	99.85%	80.61%

List of cases handled through the following contact channels:

Helpline 991

991	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Number of calls transferred to an agent	31 986	28 689	33 818	35 634	34 273	31 817	42 252	40 864	32 555	32 252	26 685	16 452

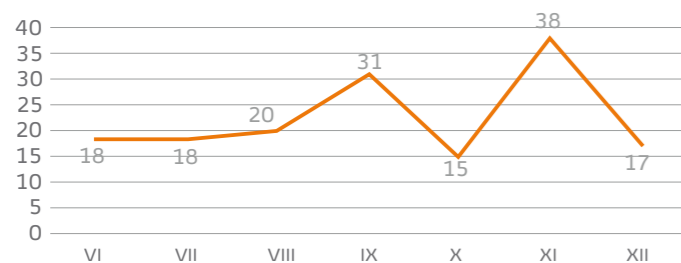
804-404-404 helpline

801-404-404	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Number of calls transferred to an agent	18 261	18 096	17 907	18 183	16 582	16 007	17 229	16 117	18 857	20 010	16 480	6 292

Text message, emergency online form

Electronic queries	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Number of queries	8 996	524	650	947	679	7 917	1 009	1 475	1 184	1 515	668	748

Results of NPS measurement on the 911 helpline in 2018



Queries received through the Infos system

distribution / comprehensive contract	distribution / comprehensive / distribution market entity contract	debt recovery	overpayments
measurements / technical customer service	payable services	information, clarification	other
grid connection	equipment operation	claims	complaints against an employee
switching providers	real property	conformity program	documentation

2018 Infos	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
TOTAL number of queries	13 617	12 673	14 533	13 508	12 334	12 696	12 779	12 554	13 918	15 794	13 456	12 522

Results of audits of conversations via Energa Operator SA's Infoline - 2018

Conversation quality	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Knowledge of the subject (maximum 9 pts)	8.23	8.46	8.72	8.97	7.64	7.00	6.81	6.53	6.98	6.68	6.68	6.15
Knowledge of the subject - target level	9	9	9	9	9	9	9	9	9	9	9	9
Contact with the Customer (maximum 21 pts)	20.48	19.74	20.10	20.22	19.35	19.15	19.31	19.11	19.29	19.20	19.32	19.05
Contact with the Customer - target level	21	21	21	21	21	21	21	21	21	21	21	21
Total (maximum 30 pts)	28.71	28.21	28.82	29.18	26.99	26.15	26.12	25.65	26.27	25.80	26.00	25.20
Deviation	-1.29	-1.79	-1.18	-0.82	-3.01	-3.85	-3.88	-4.35	-3.73	-4.20	-4.00	-4.80

Complaint handling and timeliness of response to complaints in 2018

Timeliness of complaint handling in INFORS in ascending order	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Energa Operator SA	97.38%	97.71%	98.36%	97.64%	98.14%	97.66%	97.38%	97.20%	98.25%	97.53%	97.93%	99.30%

- In order to monitor Customer service quality standards, the Customer Service Management Department at Energa Operator SA carries out the following internal activities and tests**
- Statistical indicators: calls answered, calls answered within 20 seconds, electronic queries answered within 15 minutes
 - Audits of conversations held by consultants to check for consistency with service scripts (emergency calls, distribution calls) - content
 - Audits of conversations held by consultants to check for service quality – consistency with guidelines stipulated in the contract
 - Audits of conversations held by consultants to check for consistency with the 'Rules governing handling of calls to the Call Centre' document
 - Creation of a test version of training sets for newly-employed employees, based on the Moodle platform
 - Creation of a test version of interactive customer service scenarios for consultants, based on the Moodle platform
 - verification of training and test materials used by the provider of Call Centre services
 - Regular video conferences with the provider of Call Centre services in relation to ongoing cooperation, organised biweekly
 - Regular video conferences with the provider of Call Centre services aimed at summarising ongoing cooperation and discussing parameters, organised on a quarterly basis

Additional guidelines created by Energa Operator SA or as a result of the work performed by Polish Power Transmission and Distribution Association Units:

- Good Distribution System Operator Practice document
- the 'Guidelines Related to Outgoing Correspondence Addressed to Customers' document
- the 'Rules Governing the Handling of Calls by the Call Centre' document

Due to the deteriorating level of services rendered by the company providing Call Centre services, a decision was made to terminate further cooperation with the external provider of helpline services.

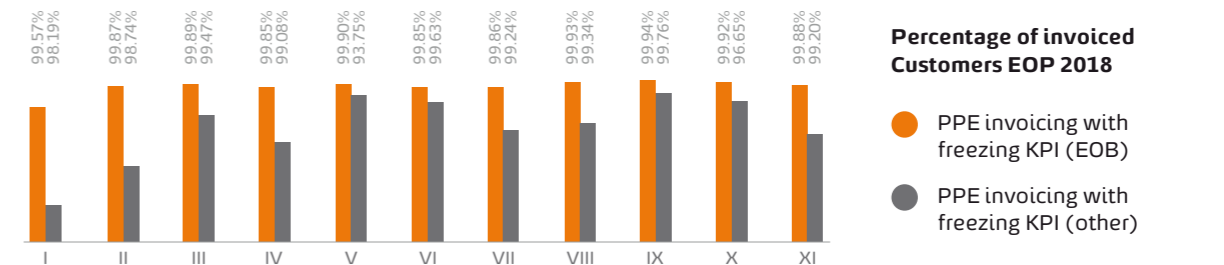
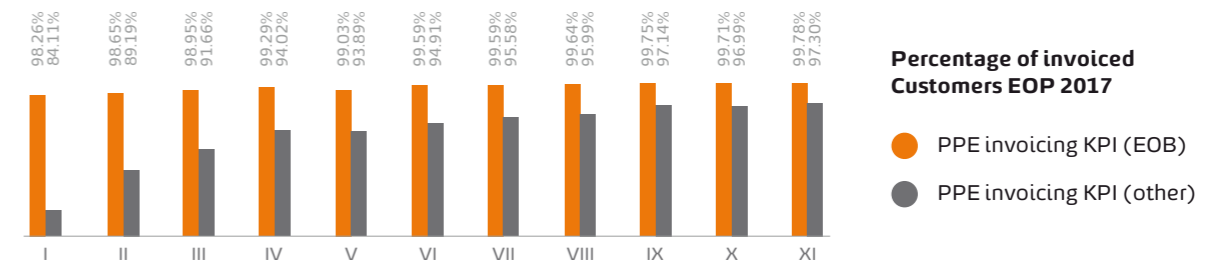
As a result, the operation of the distribution helpline at 801-404-404 was temporarily suspended. Starting in January, operation of the 991 emergency number was fully taken over by the Department of Distribution at Energa Operator SA.

Timeliness of handling queries submitted by Customers and vendors:	Timeliness of preparing distribution agreements as part of the ZS process	Handling telephone calls:
queries sent through Infos.Net	preparing C2 and B agreements	service level for the 991 helpline
verification of documents	preparing G and C1 agreements	service level for the 801-404-404 helpline

2018 was a year of many changes in the system. By the end of November 2018, a total of 228 changes were made to the CC&B billing system used by Energa Operator SA. All these changes significantly impacted the following indicators:

- Indicators related to grid connection:**
- Timeliness of specifying grid connection conditions
 - Timeliness of performing grid connection agreements

Invoicing



Timeliness of handling queries:

Year	All	Timely handled	Annual timeliness
2018	315 699	308 217	97.63%
2017	245 904	205 719	83.66%

2.6

Caring for sensitive Customers

103-1 (EU) ■
103-2 (EU)

Pursuant to section 3 subsection 13c of the Energy Law Act, a sensitive consumer of electricity is a person who has been granted a housing benefit within the meaning of section 2 subsection 1 of the Housing Benefits Act of 21 June 2001 (Journal of Laws of 2017, item 180), and who is a party to a comprehensive contract or a contract for the sale

of electricity made with an energy enterprise, and who resides at the location to which electricity is supplied.

Provisions and procedures directly relating to sensitive consumers are included in all model contracts that the company enters into with its Customers:

Definition of a sensitive consumer: sensitive consumer: a person who receives a housing benefit pursuant to section 2 subsection 1 of the Housing Benefits Act, who is a party to a comprehensive contract or a contract for the sale of electricity made with an energy enterprise, and who resides at the location to which electricity is supplied

Guidance regarding the installation of a pre-paid counter in the abode of a sensitive consumer and related obligations applicable to the consumer and the distributor: the distributor is required to install a pre-paid counter – at its own expense – in the abode of a sensitive consumer, if requested by the sensitive consumer; if the sensitive consumer requests the distributor to install a pre-paid counter, the distributor will install it at its own expense within 21 days.



The company does not keep any statistics with regards to sensitive Customers, as no 'sensitive Customer' column is included in the comprehensive contract or electricity sales contract. The only source of this information may be the declaration which is made when a consumer requests for the installation of a pre-paid counter. Furthermore, housing benefits are paid out directly to beneficiaries, and therefore only social welfare authorities may possess data on the number of such consumers.

Furthermore, a new functionality was implemented in queuing machines in Energa Obrót SA's customer service centres. These machines now give priority service to disadvantaged persons. Since 6 September 2018, the following persons are eligible for priority service:

- pregnant women
- parents with children below the age of 3
- persons in wheelchairs
- persons aged 75 and over.

Apart from the 'House', 'Business' and 'Visit Scheduled Online' categories, a new button appeared on queuing machines: 'Priority Service'. After pressing this button, the Customer must state the disadvantaged group to which they belong. The machine will give priority to persons who scheduled a visit beforehand, and then will alternately allocate places in the service queue to persons from the disadvantaged queue and the regular queue.

The company still offers a product for families with multiple children who hold the Large Family Card, enabling them to further reduce their electricity bills. Energa Obrót SA is the only electricity provider that participates in the program. The Large Family Card is a system of discounts and additional benefits for families with at least three children. Holders of the Card can access the services of many cultural institutions, recreation and sports centres and bookstores across Poland at cheaper rates. Holding the Card also ensures reduced bills for electricity supplied by Energa.

2.7

Safety of personal data

103-1 (418) ■
103-2 (418)
103-3 (418)

On 23 May 2018, Attachment no. 7 ('Rules Governing the Management of Incidents Related to Security within EG') and Attachment no. 9 ('Rules Governing the Organisation of Personal Data Protection within EG') to Energa Group's cooperation agreements were updated to comply with the requirements of GDPR.

On 11 July 2018, Attachment no. 8 ('Rules Governing the Security of Information within EG') was updated to comply with the requirements of GDPR and resulting principles of personal data protection applicable within Energa Group companies.

Energa Operator SA is currently in the process of implementing new regulations resulting from the changes to Energa Group's cooperation agreement:

At the end of January 2018, as part of works carried out by PBSG, an external company, under the supervision of the Personal Data Protection Services Department, an analysis of IT systems operated by company Energa Operator SA with a view to determining their compliance with GDPR was completed. In November 2018, a business analysis and a risk analysis in respect of IT systems was concluded; the analyses were carried out as part of the above task pursuant to an instruction issued by the CEO of Energa Operator on 08/10/2018, no. 39/2018.

During the previous year, 1405 employees of Energa Operator completed on-site training, while 67 persons completed an e-learning course during their onboarding process.

Personal data protection policies applicable within Energa Group regulate the following aspects:

- Declaration of the Board
- Rules Governing the Outsourcing of Personal Data Processing within Energa Group
- Rules Governing the Handling of Personal Data Breaches within Energa Group
- Rules Governing the Obtaining of Personal Data Processing Consents within Energa Group
- Rules Governing Compliance with Reporting Obligations Related to the Processing of Personal Data within Energa Group
- Rules Governing the Exercise of Rights of Data Subjects within Energa Group
- Rules Governing Training Courses in Personal Data Protection within Energa Group
- Rules Governing the Management of Personal Data Protection Risk within Energa Group



Joanna Karbowskiak

Board's representative responsible for data safety at Energa Obrót SA

2018 constituted a huge challenge for Energa Obrót SA due to the implementation of the EU General Data Protection Regulation (GDPR). The revolutionization of the approach to the protection of personal data resulting from GDPR contributed to a reinforcement of conscious administration of the data of our Customers and employees by our organisation.

We were able to succeed by transforming the implementation project into a constant process that complies with two principles: protection of privacy and minimisation of data processing. Thanks to this achievement, we can be proud to assure that we guarantee the protection of the data entrusted to our organisation.

In 2018:

- 3 complaints related to the breach of privacy were registered within Energa Obrót SA – these complaints were not considered by the Personal Data Protection Office and therefore their validity could not be determined
- 4 complaints related to the disclosure, theft or loss of Customer data were registered within Energa Operator SA. Two of the reported incidents were found to be valid.

Valid complaints related to the disclosure of personal data:

1. The first complaint was complaint was settled in the course of communication with the Customer. The Customer accepted the company's explanations and voluntarily agreed not to press any claims.
2. The other complaint is currently being examined. The Customer was notified of the circumstances and scale of the incident. He refused to accept the proposed compensation, requesting for a higher amount than was offered. The company refused to negotiate with the Customer and the Customer complained against the company to the chief of the Personal Data Protection Office.

Energa Group takes action aimed at ensuring the compliance of personal data processing with legal requirements. In connection with the EU regulation concerning the protection of personal data, GDPR, which superseded the provisions of the Polish data protection act, Energa standardised its management of data protection, adapting its solutions to new guidelines. A new structure was implemented in the area of personal data protection, introducing uniform solutions in this area that apply to the entire Group, and an effective implementation of the regulation (EU) of the European Parliament and of the Council in this regard has been prepared. A Personal Data Protection Department operates within company Energa Centrum Usług Wspólnych Sp. z o.o., tasked with ensuring compliance with obligations related to the protection personal data imposed on Group companies.

The Security Department at Energa SA plays the main role in the process of ensuring the security of personal data. Furthermore, an ABI (Data Security Administrator) Forum was created in order to ensure uniformity of actions in this regard within the entire Energa Group, foster cooperation during the process of implementing GDPR, and formulate recommendations of good practices with regards to the protection of personal data.

■ 418-1

2.8

Geographical availability

Cooperation with local governments with a view to develop a prosumer generation

Interest in the development of dispersed generation on the microsource level (including prosumer generation) has been on the rise for the past few years, both among local governments and private individuals. Specific local governments support this development, helping to acquire EU funding. Energa Operator SA is interested in ensuring the appropriate quality of generating equipment (primarily photovoltaic panels and inverters) connected to the low-voltage grid, which must meet specific technical standards and requirements. This is of foremost importance for maintaining the quality of electricity supplied to other entities connected to the grid. That's why Energa Operator SA has carried out information campaigns in all municipalities where it operates in order to spread awareness how important it is that devices connected to the grid meet the requisite technical requirements.



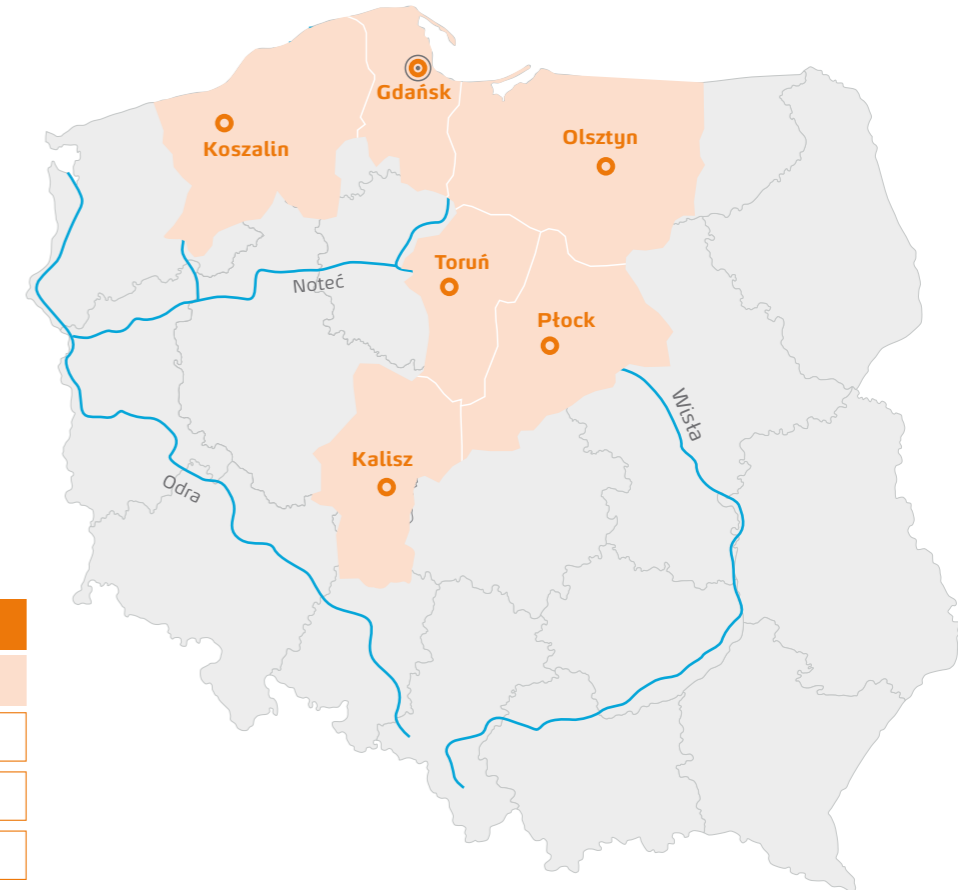
Supporting regional development

The power grid must undergo constant technological modernisation in order to meet new challenges, which appear somewhat spontaneously as a result of the country's economic and civilizational development. Traditional power grid solutions may be effective in respect of isolated instances where dispersed microgeneration installations and consumers connected to the same low-voltage line affect each other.

However, given the effect of scale, already visible in some areas of Energa Operator SA's operations, simple measures may be insufficient. That's why the company's overarching goal is to, on the one hand, ensure energy security to all entities connected to the distribution grid and, on the other, to support the development of new civilizational (prosumer microgeneration) and technological (electromobility) trends.

Local office	High-voltage power lines (110kV) [km]		Medium-voltage power lines (15 kV, 20kV, 30kV) [km]		Low-voltage power lines with connections (0.4 kV) [km]	
	aerial	cable	aerial	cable	aerial	cable
Gdańsk	911	34	5 226	4 078	7 740	11 788
Kalisz	1 099	0	9 718	1 593	14 557	5 604
Koszalin	1 167	0	8 838	2 859	5 585	8 433
Olsztyn	1 247	1	11 685	2 126	11 781	6 360
Płock	892	0	10 857	1 125	15 940	3 761
Toruń	1 105	15	8 874	1 814	14 324	6 794
Energa Operator SA	6 421	50	55 198	13 595	69 927	42 740

Energa Operator SA's head office and local offices



- Head office
- ⊙ Local offices

2.9 Security and stability of supply

103-1 (EU) ■
103-2 (EU)

Energa Group's objective is to ensure the energy security of its Customers, meaning the continuous supply of energy that meets specific quality standards. Observed and projected upwards trends in the number of customers and their energy demand in a natural manner force the Group to constantly develop and modernise its power grid. The Group's task is to ensure that the directions of development are not chosen haphazardly and that any action taken will be rational in technical and economic terms. That's why it's so important to regularly monitor changes in the power system, and that's why Energa Operator SA prepares and implements grid development concepts, in particular with regards to high- and medium-voltage grids.

Development concepts are created for the coming several or several dozen years, enabling the identification of potential hazards to the operation of the grid that might appear in the future. Concepts also include proposed actions that could neutralise these hazards and enable the analysis of innovative technologies.

Development concepts are regularly updated, resulting in the adjustment of plans to match reality and improve the level of correctness of directions of development. In consequence, specific projects resulting from these plans, included in the High-Voltage Grid Development Program or schedules of works and expenditure (in respect of all types of grids) constitute an optimal investment variant. Furthermore, the High-Voltage Grid Development Program enables the ongoing management of the portfolio of capital works performed on the grid depending on changes in the investment environment.

The High-Voltage Grid Development Program – a multi-year rollout capital works plan of Energa Operator SA, constituting a list of capital works to be completed within 110 kV grids, resulting from the connection of additional entities to the grid, general increase in demand for power within the grid, infrastructure replacement demands in order to ensure energy security for Customers of Energa Operator SA.

The schedule of works and expenditures enables the organisation to manage its capital works portfolio in the following areas:

- construction of new 110 kV/medium-voltage stations (GPZ), including connections to the 110 kV grid
- construction or modification of 110 kV power lines
- expansion of the medium-voltage grid – construction of new power lines originating from 110 kV/medium-voltage stations
- construction of medium-voltage/low-voltage stations, enabling the shortening of low-voltage power supply lines
- construction of low-voltage power lines, enabling the connection of new Customers

Apart from customers, producers of power are also connected to the grid; these mostly include renewable energy sources (in the previous 5 years, more than 300 energy sources were connected to high- and medium-voltage grids, of which non-renewable sources constituted isolated cases), contributing to the ever-increasing potential of dispersed generation.

Dispersed generation has a significant effect on the phenomena present in the power grid, and therefore on the energy security of customers, in particular with regards to the quality of energy. Energa Operator SA monitors power flows in individual lines, enabling it to identify hazards and take action in order to minimise them. That's why capital works related to increasing the load capacity of each line or constructing new line connections are so important; these capital works include:

- increasing the diameter of working cables
- using HTLS (low-sag) power lines
- increasing the operating temperature of power lines
- building new power lines
- increasing the power of 110 kV/SN transformers in GPZ grid stations.

The distribution grid has been undergoing a change in its character over the past few years. The receiving grid, where energy flows one way (to the customer) is changing into a prosumer grid. This creates new possibilities for the energy or grid services market, but complicates the operation of the existing distribution system.

Energa Operator SA modernises the grid to reduce the number of failures and their scope of effect by:

- carrying out comprehensive works on the medium-voltage and low-voltage grids, aimed at eliminating those elements that are most prone to failures and at limiting the effect of external factors, i.e. surges, dense forestation, etc. (e.g. by replacing uninsulated cables with insulated ones in the low-voltage grid or installing medium-voltage lines in forested areas, using partially-insulated cables in other areas, etc.)
- installing automatics that enable a significant reduction in the scope and duration of failures in the deep parts of the grid, on lines most prone to failures.

Distribution of electrical energy is a phenomenon susceptible to dynamic circumstances prevalent within the grid. The basic obligation set by Energa is to reduce the effects of these circumstances on the Group's customers to the maximum possible extent. The planned construction of several 110/15kV stations (GPZ stations) is also set to have a significant effect on the security of operation of the medium-voltage grid. These installations are built mostly for the purposes of connecting large customers to the grid, far away from existing GPZ stations. Each new station will shorten existing medium-voltage lines, which, apart from enabling the connection of new customers, constitutes an added value in the form of an improvement in the security of supply of electricity to Customers connected to the medium-voltage or low-voltage grid, ensuring a specific quality of supplied energy irrespective of fluctuations, grid load or unpredictable and erratic energy generated by dispersed sources.

The purpose of the above-described activities of Energa Operator SA is to meet this requirement. Some of the actions are local in range and are meant to provide Customers with ongoing protection, while the purpose of others is to globally increase the security of operation of the grid managed by Energa Operator SA. Each of these actions transform our grid into a system that is more reliable and open to new challenges.



Activities related to ensuring energy security

In April 2018, implementation of the document 'Concept of operation of a low-voltage transfer grid and a 110 kV distribution grid as a closed grid within the area of operations of Energa Operator SA until the year 2030' was commenced; its purpose is to determine the capital works that are required in the high-voltage grid in a long-term perspective (until 2030).

A number of program guidelines for new GPZ stations and high-voltage line were drawn up; their purpose is to increase connection capabilities and improve SAIDI/SAIFI indicators (by shortening medium-voltage lines) in respect of the following facilities: GPZ Drobin, GPZ Nowy Staw, GPZ Aleksandrów Kujawski, GPZ Gdańsk Politechnika, GPZ Łebno, LWN Żarnowiec – Łebno – Sierakowice, LWN Grzmiąca – Marcecin Leśna.

Program guidelines are currently being prepared in respect of the following facilities: GPZ Gołymin, RS Windyki, GPZ Powidz, LWN Łęczycza – Pątek, LWN Recz – Kalisz Pomorski, GPZ Kruszyn, LWN Płock – Lipno, GPZ Tomaszkowo, LWN Bytów – Kościerzyna, LWN Elbląg Gronowo – Malbork Rakowiec – annual activities are taken on an ongoing basis.

In June 2018, a short-circuit analysis was carried out in respect of typical occurrences within the medium-voltage grid with a view to optimise the cross-section of the return wire in medium-voltage cables.

In October 2018, launching a pilot concept of the development of the medium-voltage grid in the area of two distribution regions where high SAIDI/SAIFI values were registered was planned.

Works continued on a model of rules governing cooperation with municipalities as part of the urban development approval process (within the internal unit of the Polish Power Transmission and Distribution Association), implemented within Energa Operator SA on an ongoing basis.

Ongoing cooperation on the approval of local zoning plans with provincial administration authorities in provinces where Energa Operator SA operates.

As far as energy security is concerned, Energa Group consistently continues the implementation of actions commenced in previous years, aimed at improving the reliability of power supply, increasing the grid's resistance to adverse weather and minimising the frequency and duration of power outages. A key action in this regard is the implementation of capital works related to the modernisation and replacement of the distribution grid, which includes installing and insulating aerial medium- and low-voltage lines and automatizing the medium-voltage grid.

Other important component contributing to the reduction of power outages include comprehensive logging operations and maintaining the level of completion of planned works without disconnecting customers through using live work technologies in medium-voltage and low-voltage grids, using power generators and concentrating works performed during a single disconnection.

Completion of a project related to the wide-scale implementation of smart power grid solutions that will encompass the entire area of Energa Operator

SA's operations perfectly fits the plan of activities aimed at improving the quality of energy supply and services provided to customers, as well as ensuring the stability and flexibility of the system. The project is a continuation of works completed as part of other, smaller-scale projects, such as the implementation of the Smart Grid on the Hel Peninsula or Smart Toruń, the effects of which enabled the organisation to commence actions under the current project. As part of the project, key elements forming part of smart power grids are being installed: remotely controlled switches and switching gear in the medium-voltage grid, power storage system and the implementation of innovative functionalities in the SCADA control system. Functionalities of the SCADA system will enable e.g. analysing the impact of entities connected to the grid on the operation of the medium-voltage grid, automatic reconnection of power following a failure in the medium-voltage grid and optimisation of operation of the medium-voltage grid. The main effect of these actions is to improve the reliability of the grid's operation and significantly reduce the time needed to resume the supply of power following a failure in the grid.

The above activities result in significant benefits for customers every year, as reflected by the values of power reliability indicators, SAIDI and SAIFI, recorded by Energa Operator SA.

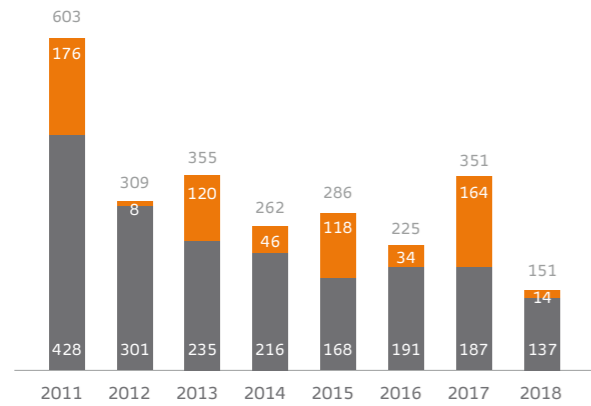


Definitions of indicators included in section 41 subsection 3 of the Regulation of the Minister of Economy in the matter of detailed conditions concerning the operation of the power system, dated 4 May 2007 (Journal of Laws no. 93, item 623, as amended), applied by Energa Operator SA when calculating SAIDI and SAIFI indicators:

- * Index of the system average long and very long interruption frequency (SAIFI), calculated as the number of customers exposed to the consequences of all these interruptions over the course of a year divided by the total number of customers served (EU 28 Frequency of interruptions in power supply)
- * Index of the system average long and very long interruption duration (SAIFI), expressed in minutes per customer per year, calculated as the sum of products of the duration of interruptions and the number of customers exposed to the consequences of all these interruptions over the course of a year divided by the total number of customers served (EU 29 Average duration of interruptions in power supply)

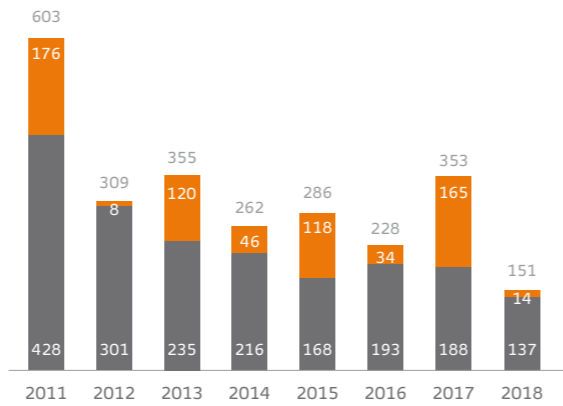
G4-EU29

Visualisation of the updated SAIDI calculated for the purposes of the system regulation, calculated based on the position of the Chief of the Energy Regulatory Office (in respect of 2016 and 2017)



● SAIDI for planned and unplanned interruptions, including catastrophic interruptions (except mass failures)

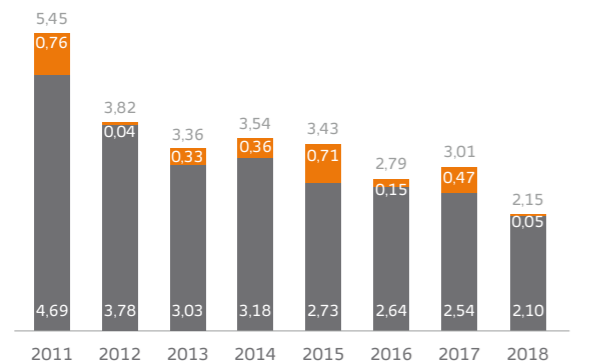
Visualisation of the updated SAIDI calculated for the purposes of the system regulation, calculated based on the assumptions of the quality regulations (in respect of 2016 and 2017)



● SAIDI for mass failures

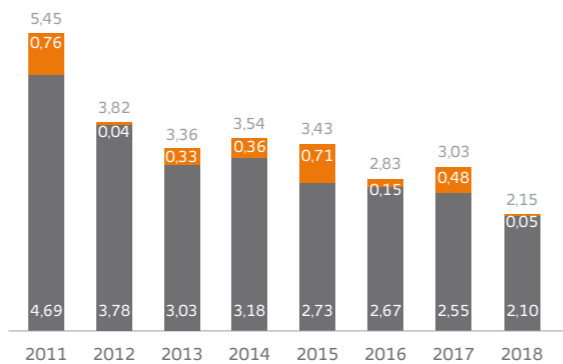
G4-EU28

Visualisation of the updated SAIFI calculated for the purposes of the system regulation, calculated based on the position of the Chief of the Energy Regulatory Office (in respect of 2016 and 2017)



● SAIFI for planned and unplanned interruptions, including catastrophic interruptions (except mass failures)

Visualisation of the updated SAIFI calculated for the purposes of the system regulation, calculated based on the assumptions of the quality regulations (in respect of 2016 and 2017)



● SAIFI for mass failures

Since 2018 (in connection with the letter of the Chief of the Energy Regulatory Office of 2018 in the matter of verifying the number of customers taken when calculating indexes for the year 2017 and preceding years), the organisation has returned to calculating SAIDI and SAIFI indexes for the purposes of the system regulation using the method applicable until 2015, i.e. based on the number of end customers (fraction in the index formula) as at the end of the calendar year for which the indexes are calculated (as per the above-mentioned opinion of the Chief of the Energy Regulatory Office – 'Information of the Chief of the Energy Regulatory Office no. 16/2012'); SAIFI and SAIDI indices also had to be standardised for each year, i.e. SAIDI and SAIFI indices for the years 2016 and 2017 had to be recalculated (as originally they had been calculated based on a different model).

In 2011, 2013, 2015 and 2017, the SAIDI index was mostly affected by unplanned interruptions caused by strong hurricane-force winds (cyclones Yoda, Xavier (twice), Felix, and the violent storm in August 2017), which resulted in mass failures of power grids in the area of operation of Energa Operator SA. It's worth noting that the weather anomalies which manifested as the violent storms that took place in August 2017 constituted phenomena on an unprecedented scale. The force of the wind was such

that it caused significant damage to the grid, which in some locations required comprehensive repairs. A total of over 180 km of medium-voltage and low-voltage lines were damaged, as well as 2.1k medium-voltage and low-voltage transmission towers. 1092 employees (241 teams) of the Distribution Business Line were involved in the work on remedying the effects of the storm. This unprecedented scale of weather conditions resulted in an increase of SAIDI in 2017 by as many as 114 minutes.

Activities related to the development of electromobility

A sample dedicated application for determining the conditions for the connection of infrastructure for the charging of public road transport and charging stations available to the general public to the power grid (group III, IV, V, VI) was prepared and published on the organisation's website.

Changes were made to the SELEN system: 40 new operational indices related to electromobility in were implemented in three document groups – sales invoices, corrective sales invoices and reclassification invoices.

Changes were made to the SID PO system: the glossary was expanded with two statutory definitions of facilities related to electromobility – 'infrastructure for the charging of public road transport' and 'charging station available to the general public'.

The organisation and the General Roads and Motorways Authority were able to agree on a plan of locations of charging stations available to the general public and natural gas stations to be constructed along the roads forming part of the TEN-T base grid, administered by the above Authority.

The Connections Unit keeps a monthly report of matters related to the connection of electromobility infrastructure to the grid operated by Energa Operator SA and supervises these matters.

An internal instruction for the implementation of the number of charging points in the SID PO system was introduced.

Activity related to the implementation of requirements of so-called grid codes

In 2018, the Connections Unit at Energa Operator SA participated in the works of teams and commissions appointed by the Polish Power Transmission and Distribution Association and responsible for preparing procedures and documents required to implement so-called grid connection codes (i.e. regulations of the European Union relating to the requirements applicable to the connection of generating facilities, customers and high-voltage direct current systems to the grid). A procedure for the verification of the scope of modernisation of generating facilities was prepared. A procedure for issuing an energy permit for the use of type A, B, C and D generating modules was drawn up. Procedures and rules governing the testing of generating facilities and procedures related to the use of equipment certificates issued by authorised certification entities were also prepared.



Activity related to connection to the 110kV grid

In November 2017, design documentation in respect of a large factory manufacturing fibre boards, EGGER in Biskupiec (Local Office in Olsztyn) with a power of 17.5 MW, was approved. In 2018, Energa Operator completed the majority of works for that customer related to the construction of primary and backup power connections. In 2019, final works related to the connection of the above customer to the 110 kV grid are ongoing, including a handover certificate to be issued by the commission checking the Customer's installation, the issue of a declaration of completing the connection, entering into a distribution agreement and commencing the supply of electricity.

Activity related to the connection of wind farms to the grid

The auction held by the Chief of the Energy Regulatory Office on 5 November 2018 was won by 7 wind farms scheduled to be connected to the 110kV grid, with a total input power of 355.5 MW, and 5 wind farms scheduled to be connected to the 15kV grid, with a total input power of 33.5 MW. Winning the auction ensures that owners of the wind farms will receive a constant rate for every unit of generated electricity for a period of 15 years, which for many projects was an important factor determining the profitability of implementing large-scale wind farm construction projects.

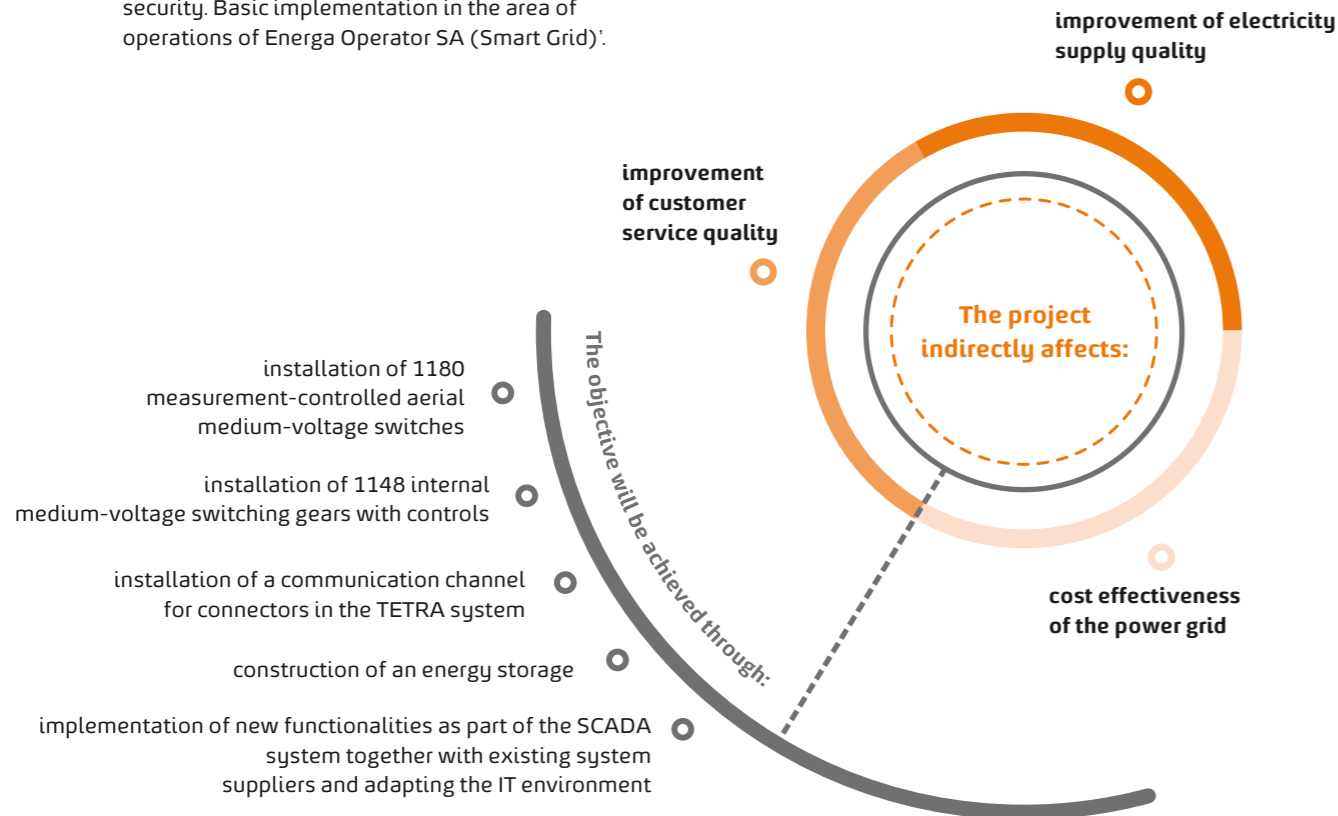
Results of the auction for the sale of electricity generated by wind farms, scheduled to be connected to the grid in the area of operations of Energa Operator SA, carried out by the Energy Regulatory Office on 05/11/2018.

Name of producer	Name of wind farm	Input power [MW]	EOP local office	Voltage
Energy Park 44 Sp. z o.o.	FW Kaczkowo-Wysokie	44	Gdańsk	110 kV
Korsze Wind Farm Sp. z o.o.	FW Gudzuki	37,5	Olsztyn	110 kV
Park Wiatrowy 1 Sp. z o.o.	FW Jarocin	48	Kalisz	110 kV
Park Wiatrowy 12 Sp. z o.o.	FW Słupca II	48	Kalisz	110 kV
Pomerania Invall Sp. z o.o.	FW Dzierżgoń – Stary Targ	88	Olsztyn	110 kV
Wind Park Alfa Sp. z o.o.	FW Ciepłe	48	Gdańsk	110 kV
Windfarm Polska II Sp. z o.o.	FW Barwice	42	Koszalin	110 kV
Total power		355.5		
PW Jarocin Wschód Sp. z o.o.	Zespół Elektrowni Wiatrowych Jarocin Wschód Pilot	5	Kalisz	15 kV
European Wind Farms Polska Sp. z o.o. Grzmiąca Sp.K.	FW Grzmiąca	6	Koszalin	15 kV
Hybro Energy Sp. z o.o.	FW Ciekocinko	12.5	Gdańsk	15 kV
Park Wiatrowy 3 Sp. z o.o.	Zespół Elektrowni Wiatrowych Krotoszyn Północ Pilot	5	Kalisz	15 kV
Park Wiatrowy 3 Sp. z o.o.	Zespół Elektrowni Wiatrowych Krotoszyn Południe Pilot	5	Kalisz	15 kV
Total power		33.5		

Smart Grid

The 'Modification of the grid to match Smart Grid standards through the installation of smart measurement and automatization of the grid in order to activate customers for the improvement of the efficiency of energy use and efficient management of the power system in order to improve supply security. Basic implementation in the area of operations of Energa Operator SA (Smart Grid)':

The purpose of the project is to ensure the stability and flexibility of the distribution system through the implementation of smart power grid solutions.



Implementations of smart power grid components have been done at Energa Operator for a few years now. The project is a continuation of works completed as part of other, smaller-scale projects, such as the implementation of the Smart Grid on the Hel Peninsula or Smart Toruń, the effects of which enabled the organisation to commence actions under the current project.

The project takes advantage of experience acquired during earlier projects, but its scope encompasses the entire area of operations of Energa Operator SA.

One of the main purposes of the project is to ensure a positive impact on the natural environment through reducing the consumption of energy from conventional sources and reducing CO2 emissions. Pollutions generated in connection with the use of conventional energy constitute a significant burden on the natural environment. As part of its planned activities, the company will implement all actions demonstrating its extraordinary care for the environment and energy security.

No adverse impact on the environment is projected as a result of the implementation of the project. The planned capital works will not negatively affect parts of the environment, such as water, soil or air, during any phase of construction, operation and liquidation of equipment.

Modification of the grid to meet Smart Grid standards through the installation of a smart measurement system and automatization of the grid will improve the efficiency of its use, translating into a lower demand for energy required to cover losses. This means a lower consumption of energy and reduction of CO2 emissions. As a result of the modernisation of the grid as part the project implemented by the company, the organisation plans to achieve positive environmental impact indicators.

Reducing the duration of interruptions in the supply of power thanks to the modernisation of the grid will directly impact the ability to generate energy during this period from renewable sources.

As concerns the following issues:

- protection of surface water and groundwater
- reducing noise emissions

the project will have a neutral impact.

Works completed in 2018

Sourcing procedures for the delivery of 600 medium voltage circuit breakers and internal switching gear that will cover demand in the years 2018 -2019 and sourcing procedure for the delivery of 2328 communications modems that will cover demand in the years 2018 – 2020 were concluded.

As a result of these procedures, implementation agreement were signed with the companies chosen as a result of the tendering procedures and the devices were delivered.

A procedure for the selection of companies that will install internal switching gears was announced in all Local Offices of Energa Operator SA.

An agreement for the installation of 400 medium-voltage circuit breakers with communication modems was made and the above equipment was installed.

A procedure for the delivery of SCADA servers and arrays was completed and the above equipment was delivered.

A procedure for the preparation of a concept for the construction of an energy storage was carried out, a supplier of the concept was selected, an agreement was signed and the concept was delivered. Based on the concept, corporate approvals were obtained and procedure concerning the construction of an energy storage was commenced.

Corporate approvals were obtained, a technical dialogue was carried out with suppliers of the SCADA system and a procedure was opened for the delivery of a central SCADA system at Energa Operator SA.

Guidelines for commencing a procedure in the matter of implementing mRID and ROiTS systems were prepared and market research was performed.

Works planned for 2019:

concluding the procedure for the delivery of 200 medium-voltage circuit breakers, entering into an agreement and delivery of the devices

installation of a further 400 medium-voltage circuit breakers with communication modems by Energa Operator SA's staff

choosing contractors as a result of a tendering procedure for the installation of 754 internal switching gears in all local offices of Energa Operator SA, entering into implementation agreements and installation of the equipment

choosing a contractor to construct an energy storage, entering into an agreement and commencing works related to the construction of the warehouse

concluding the procedure for the implementation of a central SCADA system, entering into an agreement and commencing implementation works

concluding the procedure for the implementation of mRID and ROiTS systems, entering into an agreement and commencing implementation works

2.10 Innovations in support of the Customer

Between 26 and 29 October 2018, the CC&B system was updated to a newer version. Although the upgrade wasn't a lengthy process, it was preceded by a number of painstaking preliminary tasks. The key part of the process was the performance of very detailed business tests by experienced specialists from all Group companies. Tests were performed in respect of processes related to the servicing of agreements, entering readings, billing and invoicing, debt recovery and reporting.

It must be noted that Energa Group is the first company in Europe who decided to upgrade its CC&B system to version 2.6. Thanks to moving to a newer version of the software, system efficiency increased by up to 30%. This enables the organisation to complete its business processes faster, which translates into an increased speed of processing customer queries.

Optimisation works were performed in respect of systems used to process failure reports, which involved:

- a) providing Customers with an effective method of sending electronic failure notifications – moving from a conversation over text messages to sending a text message with a link to an online form. The tool used to report failures over text messages was limited and forced Customers to adopt a specific text message format, and their failure to do so prevented the organisation from processing the report. Currently, in the event of a failure, a text message is sent to the Customer with a direct link to the failure reporting form. This reduced the number of ineffective reports.
- b) increasing the ergonomics of work in the system and improving its functionality, i.e.:
 1. automatic grouping of emergency reports on the report list – modification of the increase of efficiency of accepting reports and their correct registration in SID
 2. expansion of the report list with a preview of notifications of planned and emergency disconnections – the modification reduces the erroneous rejection of Customer reports and erroneous registration of events for processing by distribution and grid operation services who are aware of current failures
 3. changing the report cancelling mechanism – modification updates the process of accepting reports and limits errors causing their rejection even though they should be registered in SID
 4. servicing first reports from a given area ('first Customer syndrome') – modification will ensure the registration of reports in SID where reports are rejected by consultants even though they prove to be valid in practice.

Two large innovative projects, focusing primarily on the Customer, were completed in 2018 – the Upgrid project and the LOB project.

The first of these projects – Upgrid – was a demonstration international project deployed in the European Union as part of the Horizon 2020 program. The main objective of the project was to develop functionalities enabling the integration of low- and medium-voltage networks with demand side management and dispersed generation. New functions implemented as part of the project enabled to increase reliability of the supply of energy to recipients, faster detection and repair of failures in the low-voltage grid, ensured better power supply parameters thanks to optimising the grid operation system, improved the ability to identify interference in the grid thanks to new systems of monitoring voltage and THD and reduced grid losses. As part of the project, a new tool enabling an analysis and balancing of energy consumption in respect of Customers who install photovoltaic cells was developed. The tool was made available to nearly 14500 customers who were provided electricity from the grid covered by the Upgrid demonstration project.

The purpose of the LOB project was to develop a new range of system and power adjustment services for corporate customers as part of improving the flexibility of the system by building a Local Balancing Area, at the heart of which is an energy storage located near Władysławowo in pucki district.

These services can be provided thanks to building energy storage systems and implementing energy management systems at customers.

The Local Balancing Area enabled the implementation of several improvements and made it possible to reap their benefits, the most important of which include:

- improving energy supply security
- improving the flexibility of grid operation
- improving the quality and reliability of energy supply
- improving the efficiency of distribution of electricity from local sources to customers thanks to optimising grid operation
- reduce grid losses and reduce costs of purchasing energy to cover the losses.

A project deployed in cooperation with NEDO, a Japanese government agency, near the Bystra wind farm, was also continued. The solutions implemented as part of the project, compatible with wind farms located in a designated area of the National Power System, will enable a more efficient management of generating facilities in crisis situations that threaten the stability of the National Power System.

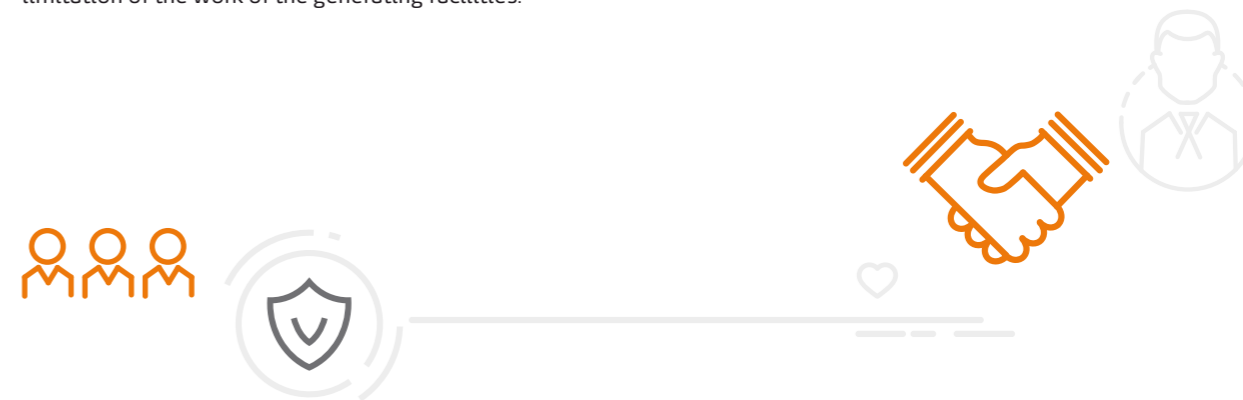
A new farm management system – Special Protection Scheme (SPS) – will ensure a more effective use of energy from renewable sources and will prevent discrimination of producers where limitations in power have to be introduced due to an overload in the high-voltage grid. Algorithms used in the SPS to prepare plans for the limitation of generating power will enable choosing those generating facilities who contribute the most to the overload in the grid. The value of limitations in power applied to the wind farms selected by the algorithm will enable the elimination of overloads without excessive limitation of the work of the generating facilities.

2.11 Fair market practices

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419-1

The Compliance Program, approved by the Chief of the Energy Regulatory Office, is a procedure aimed at ensuring equal and non-discriminatory treatment of users of the system at Energa Operator SA.

In 2018, a report for the Chief of the Energy Regulatory Office for the year 2017 was drawn up by the compliance inspector, where certain irregularities in communication between Energa Operator SA and a vendor from the group of companies were demonstrated. The group vendor declared that some of these irregularities would be remedied by the end of 2018.





3

Environmental protection and energy security



3.1 Fulfilment of environmental objectives for 2018 and challenges for 2019



In 2018, Energa continued its activities aimed at implementing the EMAS system in all Group companies and expanding it to include energy management based on the ISO 50001:2011 standard. Given the numerous organisational changes in companies related to their consolidation, the initiative posed a huge challenge, both with regards to its subject matter and the logistics behind it. Simultaneously, in accordance with the tenets of Energa Group's Strategy for 2016-2025, Energa Group implemented its Multi-Year Strategic Capital Works Plan for 2016-2025, which included such projects as tasks aimed at adapting the power-generating facilities operated by the Group to the requirements of emission standards that will come into force after 17 August 2021, as per the Commission Implementing Decision (EU) 2017/1442 of 31 July 2017, establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants. The text of the above Commission Implementing Decision is available at eur-lex.europa.eu.

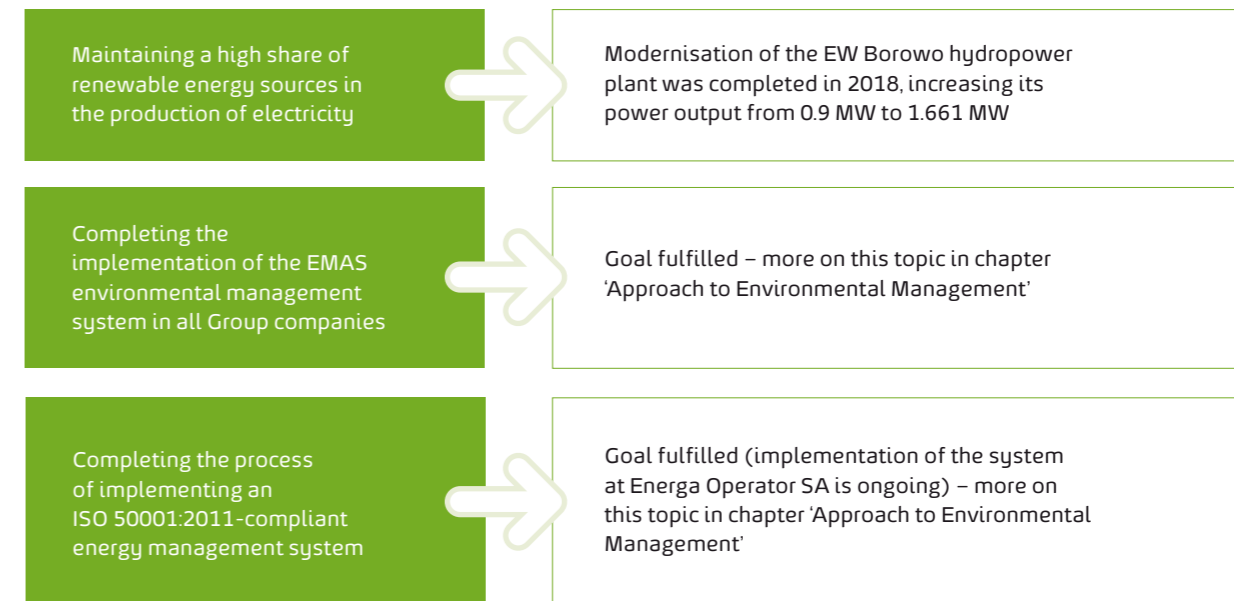
In October 2018, Energa SA announced its Strategic Research Agenda, determining the main directions of research, development and the implementation of innovations within the group for the next 10 years. 'Energa Group's Strategic Research Agenda for 2019-2028' includes pro-environmental technologies and eco-innovative solutions. All activities of the Group, both those taken in recent years and those planned for the near future, consistently seek the reinforcement of the concept of sustainable development as the dominant idea in all decision-making processes, combining the interests of the natural environment, business and expectations of the community. The priority goal of Energa Group's Strategy for Sustainable Development and Responsible Business (in the 'Natural Environment' section) is to 'continuously strive to improve the Group's energy efficiency, as well as to effectively care for environmental issues in all areas of operations, reduce emissions to the atmosphere, and care for the rational use of resources'.

Priorities for 2019

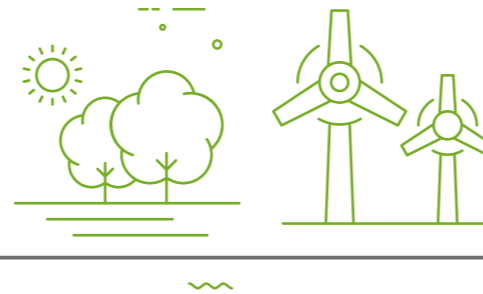
1. Maintaining a high share of renewable energy sources in the production of electricity
2. Completing the process of implementing an ISO 50001:2011-compliant energy management system at Energa Operator SA
3. Achieving environmental goals formulated as part of capital works (more information on this topic is available in chapters 'Projects that impact the natural environment' and 'Innovations for Sustainable Development')

Goals for 2018

Fulfilment



3.2 Current environmental footprint of conventional and renewable-energy industry



Approach to environmental management

Environmental policy

Energa Group's Environmental Policy (Rev. VI, adopted and implemented pursuant to the Resolution of Energa SA's Board of Directors no. 857/V/2017, dated 19 December 2017, as an attachment to the Energa Group's cooperation agreement) forms the basic tenet of our environmental management system, the purpose of which is to ensure environmental and energy effectiveness by means of best available management techniques and methods. The environmental policy drawn up by the Board of Directors of Energa SA applies in all Group companies and formally specifies the general intentions and desirable directions of Companies' operations in terms of the effects of their environmental activities in connection with the energy result

'Working to prevent pollution and reducing our environmental footprints are among our basic tools for maintaining our leading position among Polish energy companies. We aim to achieve this objective by means of organisational and investing activities, in particular:

with regards to our production operations:

- modernisation of equipment in order to improve generation efficiency and energy effectiveness
- rational use of renewable energy sources (wind farms, photovoltaics, biomass, hydropower) and low-emission sources (combined cycle power plants)
- rational use of energy resources, including as part of public initiatives aimed at ensuring energy safety and preventing natural disasters (e.g. the construction of a dam and a hydropower plant on the Vistula)
- reducing heat transfer losses

with regards to our distribution operations:

- modernisation and expansion of power infrastructure in order to improve the reliability of supply and reduce transfer losses, including by means of implementing initiatives that improve the distribution of energy in the grid and its effective use
- modernisation and expansion of power infrastructure in order to ensure the connection of new entities to the grid
- implementation of smart measurement equipment and other smart grid components

with regards to our trading and sales operations:

- in terms of managing Customer relations, the construction of IT infrastructure enabling remote contact, and the implementation of new customer service products
- development of dispersed sources of energy and providing support to Customers as energy producers (prosumers)
- providing support to entities managing public infrastructure, in terms of providing access to innovative energy solutions (lighting systems)
- managing demand in order to ensure the rational use of energy
- involvement in activities aimed at innovative methods of obtaining and storing energy'



The environmental policy is a declaration of intentions and principles related to the entirety of an organisation's operations, enabling the specification of environmental goals and tasks. It enables maintaining and improving the effects of environmental activities.

The environmental management and energy management program, described in an eponymous document, is a tool used to implement the environmental policy.



Environmental management and energy management system



103-1 (301) ■
103-2 (301)
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103-2 (304)
103-1 (305)
103-2 (305)
103-1 (306)
103-2 (306)

Energa Group meets the strictest requirements of environmental protection and has been entered into the prestigious register of organisations included in the EMAS (Eco-Management and Audit Scheme) system. EMAS is an elite and voluntary system used to ensure reliable environmental reporting, promoted by the European Commission.

EMAS is a process of constant improvement and development of the management system, enabling companies to achieve business goals, which include the required environmental and energy goals. The system plays a key role in following the new economic direction adopted by the Polish government in 2017, i.e. circular economy. Implementation of EMAS enables our organisation to implement actions aimed at reducing the consumption of energy and resources, as well as to avoid any unnecessary environmental costs of business operations.

This translates into increased competitiveness and enables the improvement of financial results, while simultaneously reducing the negative effect of manufacturing processes (e.g. greenhouse gases, waste) on the environment.

Active environmental management is becoming more and more commonplace in Poland. In December 2018, the Polish Ministry of Environment promoted eco-management during the COP24 global UN climate summit that took place in Katowice. Energa Group began implementing an eco-management system and EMAS as early as in 2014, and by 2018 all of the Group's companies and facilities in 431 locations were included in the system.

Between June and September 2018, environmental auditor Bureau Veritas Sp. z o.o. carried out independent recertification/ certification audits in Group companies in respect of compliance with the EMAS Regulation and the ISO 14001:2015 standard, as well certification audits in respect of compliance with the ISO 50001:2011 standard.



The directions of implementing and developing EMAS are specified in the aforementioned Energa Group's Environmental Policy. Environmental goals and tasks and effects of environmental activities are specified in the environmental declaration, which constitutes one of the major documents of the EMAS system. '**Energa Group's Environmental Declaration**' is available online at:



https://grupa.energa.pl/Polityka_Srodowiskowa.xml

Energa Group's EMAS system accounts for internal and external factors that might potentially significantly impact the organisation's ability to achieve its goals and effectively complete environmental and energy goals.



The most important factors include:

- a) environmental conditions related to climate (draughts, extreme weather phenomena) and air quality
- b) availability of resources (water, land)
- c) biodiversity
- d) regulatory and financial circumstances
- e) economic and political context

These factors were subjected to a risk analysis and the hazards and opportunities they might imply, both in terms of individual companies and the entire group, were assessed.



The **environmental footprint** (i.e. the impact on environment) of our organisation is identified using the EMAS system by means of so-called environmental aspects. The approach to the process of identification and assessment of these aspects has been harmonised across the Group. Companies use a matrix prepared by Energa SA to identify all potential aspects of an energy company and specify those which apply to their operations.

Environmental aspects, divided into three areas (**emissions, use of resources, interactions with the environment**) are identified both with regards to processes of Group companies and activities of the Group's suppliers and cooperants, which the Group is able to control or at least partially affect.

This analysis, from the perspective of the life cycle of a product or service, in particular includes the purchase of energy raw materials (coal, biomass), their transport (in particular in relation to the Generation Business Line), sourcing, as well as design activities concerning newly-constructed and modernised generating and distribution infrastructure.



103-1 (301)
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An **environmental coordinator** functions in each Energa Group company and is responsible for cooperating with departments, offices or employees in independent position responsible for meeting requirements resulting from the scope of 'standard environmental duties', such as obtaining and monitoring permits, emission balancing, regulatory reporting, calculating fees, etc. **Energy committees** created in each company ensure coordination and improvement of the energy result.

More information about the process of implementing the environmental management system in Energa Group can be found in other Energa Group's CSR reports, '**Our Responsibility 2015**', '**Our Responsibility 2016**' and '**Our Responsibility 2017**'.



Further information about environmental policy and the environmental management program can be found in 'Energa Group's Environmental Declaration', available on our website.

Energa constantly strives to increase the power of modern conventional power plants and focuses on the development of heat and CHP installations, while maintaining its strong position as a leader in the area of the share of renewable energy sources in the total amount of generated energy.

Use of raw materials

In 2018, the following amounts of raw materials were used to generate power and heat:



1 349 271 Mg

of raw materials



9 569 Mg

less than in the preceding year

Consumption of natural gas was also lower by 255 141 m³.



Rationalisation of the use of raw materials was carried out in each company, in accordance with the environmental and energy management system described above.

The largest share of responsibility in this regard lay, as is the case every year, with generating companies. These companies, equipped with installations used to generate energy from conventional sources, continued their constant analysis and selection of coal with optimal economic, physical and chemical parameters, enabling a reduction in the mass of consumed coal, the amount of generated combustion waste and the use of sorbent in the process of desulphurisation of exhaust gases and electrical energy for their own use.

Energa Elektrownie Ostrołęka SA carried out renovation and modernisation works in its generating units, keeping them at a high level of efficiency and availability, resulting in an improvement of the coefficient of unit consumption of fuel per unit of energy produced and contributed to reducing the level of pollution emission.

The high-performance water-tube boiler utilised by the District Thermal Power Station operated by Energa Ciepło Kaliskie Sp. z o.o. was equipped with a dust blower (shockwave generator) in order to improve its availability and reduce the number of shutdowns needed to clean the device (and conversely to reduce the number of restarts resulting in additional fuel consumption). Thanks to this, no shutdowns of the boiler had to be made in 2018.

For comparison, between October and December in 2016 and 2017, the boiler had to be shut down twice in order to clean it.

Activities aimed at improving the technical efficiency of devices were also carried out in order to reduce the use of raw materials, e.g. devices improving the energy-generating capabilities of hydropower plants underwent renovation and modernisation works. One example of such installations is the Łyna hydropower plant, where works completed included the replacement of the transformer.

As a result of works aimed at optimising the BB20p biomass power unit at the Elbląg Thermal Power Plant in 2018, the capabilities of the unit were not used to their full extent, which resulted in a significantly reduced consumption of biomass.



Environmental parameters presented in the CSR report are consistent with the data collected as part of the EMAS Regulation-, ISO 14001 and ISO 50001-compliant environmental and energy management system functioning within the Group. Energa Group identifies and analyses on an ongoing basis information concerning the use of resources, fulfilment of objectives and legal compliance, both in respect of business lines and individual companies. Data is gathered as part of the CSR Management Information System and registers kept as part of the Group's Environmental Management and Energy Management System. The Group's environmental parameters are available to stakeholders in the Group's CSR report and environmental declaration.

301-1 ■ Use of raw materials/resources by weight and volume
301-2

Raw materials/resources	2017	2018
NON-RENEWABLE		
coal [Mg]	1 280 209	1 298 660
natural gas [m ³]	1 371 458	1 116 317
heating oil [Mg]	3 064	3 362
Diesel oil [Mg]	*	3 901
petrol [Mg]	*	872
other non-renewable [Mg]	756	135
use of other non-renewable raw materials and resources [Mg]	28 298	29 085
TOTAL USE OF NON-RENEWABLE RAW MATERIALS [m³]	1 371 458	1 116 317
TOTAL USE OF NON-RENEWABLE RAW MATERIALS [Mg]	1 312 326	1 336 015
RENEWABLE		
Biomass [Mg]	46 132	13 082
TOTAL USE OF RENEWABLE RAW MATERIALS [Mg]	46 132	13 082
use of direct materials (e.g. steel)[Mg]	382	173
TOTAL USE OF RAW MATERIALS [m³]	1 371 458	1 116 317
TOTAL USE OF RAW MATERIALS [Mg]	1 358 840	1 349 271

* in 2017, petrol and Diesel oil were partially included in other non-renewable raw materials. In 2018, as a result of completing the implementation of standard ISO 50001, a decision was made to include these materials as individual components of the parameter.

Use of water



Water management in each company was carried out in accordance with the adopted environmental management system.

The total amount of abstracted water was approx. 32 131 160 754 m³, i.e. 6 058 707 918 less than in the preceding year; of the above amount, 419 937 887 m³ of water was collected directly for cooling purposes. The highest amount of water (although much lower than in the preceding year) was collected, as is the case each year, by company Energa Wytwarzanie SA, even though no losses of water occur in the process of generating electrical energy in hydropower plants. The variability in the amount of water abstracted per each 24-hour period (i.e. the amount of water flowing through the turbines) in individual hydropower plants depends primarily on local hydrological conditions. The amount of water flowing through the river is affected mostly by natural factors, such as precipitation, groundwater level, snow melt, plant vegetation. The effects of human economic operations can also be a factor in the variability of water flow, e.g. the liquidation of natural rainwater retention reservoirs, construction of large-area yards and hardened lots, irrigation works. Natural and anthropogenic changes mutually affect each other, which makes it difficult, or even impossible, to determine their share in the entirety of changes, particularly given the intensification of extreme weather phenomena, primarily torrential rains.

In 2018, major activities with regards to limiting the use of water were implemented within company Energa Elektrownie Ostrołęka SA, where some of the abstracted and used water was re-used for other purposes within the installation, i.e. to cover for losses in the closed hydro-deslagging loop.

Limiting the amount of abstracted groundwater was achieved through the reuse of surface water, following its treatment during the technological process. Some of the steam was also used in the water production process to cover for losses in water and steam circuits (to heat raw water for use in the reactor, to heat rooms, etc.).

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Water intake in 2018



32 131 160 754 m³

total water intake



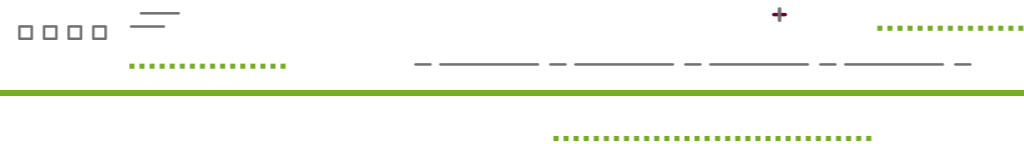
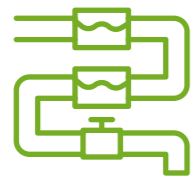
6 058 707 918 m³

less than
in the preceding year

Furthermore, the water treatment system at the District Thermal Power Plant operated by company Energa Ciepło Kaliskie Sp. z o.o. was in 2018 equipped with a water meter used to meter makeup water, connected to a telemetry system that enables online control of any loss of medium in the network.

Total water intake by source

Company/ business line	Total volume of water sourced from all included sources [m ³ /year]		Rivers (for cooling purposes) [m ³ /year]		Rivers (for purposes other than cooling) [m ³ /year]		Lakes (for cooling purposes) [m ³ /year]		Lakes (for purposes other than cooling) [m ³ /year]		Underground waters (for purposes other than cooling) [m ³ /year]		Water from municipal networks [m ³ /year]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	3 789	5 760	0	0	0	0	0	0	0	0	0	0	0	0
Distribution business line	61 221	73 233	0	0	0	0	0	0	0	0	434	246	60 787	72 987
Sales business line	4 074	4 163	0	0	0	0	0	0	0	0	0	0	4 074	4 163
Generation business line	38 189 799 589	32 131 077 598	412 017 401	418 119 257	37 775 845 074	31 530 417 052	1 692 050	1 818 630	0	180 179 160	204 764	501 243	40 300	42 257
Energa Wytwarzanie SA	37 785 326 820	31 718 845 409	12 501 481	10 100 642	37 771 127 541	31 526 740 544	1 692 050	1 818 630	0	180 179 160	2 254	2 231	3 494	4 202
Energa Elektrownie Ostrołęka SA	38 6314 510	394 545 708	381 614 235	390 567 382	4 497 765	3 479 314	0	0	0	0	202 510	499 012	0	0
Energa Serwis Sp. z o.o.	571	668	0	0	0	0	0	0	0	0	0	0	571	668
Energa Ciepło Ostrołęka Sp. z o.o.	528	496	0	0	0	0	0	0	0	0	0	0	528	496
Energa Ciepło Kaliskie Sp. z o.o.	6 533	7 274	0	0	0	0	0	0	0	0	0	0	6 533	7 274
Energa Kogeneracja Sp. z o.o.	18 150 627	17 678 043	17 901 685	17 451 233	219 768	197 194	0	0	0	0	0	0	29 174	29 616
Energa Group	38 189 868 672	32 131 160 754	412 017 401	418 119 257	37 775 845 074	31 530 417 052	1 692 050	1 818 630	0	180 179 160	205 198	501 489	108 949	125 166



Energy efficiency

As part of the integrated environmental management and energy management system, in 2017 and 2018 Group companies carried out ISO 50001:2011-compliant energy reviews that accounted for the scope of the organisation's energy audit referred to in the energy efficiency act of 20 May 2016 and directive 2012/27/EU.

Activities carried out by companies were coordinated by energy committees, while the methodology of data collection, model forms of reports and summaries, supervision and verification of complete materials within the Group were ensured by the Program Coordinator (Energa Centrum Usług Wspólnych Sp. z o.o.).

Parameters identified during the reviews included: types and amounts of energy used, key uses of energy, methods and indicators of monitoring and assessment of energy result and energy effectiveness, as well as opportunities for improvement of energy result. In 2018, Group companies updated their energy reviews, accounting for data for 2017. Energy reviews were carried out by almost all Group companies included in the environmental management and energy management system except Energa Operator SA (the company is currently in the process of implementing the system).



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Manager of the Certification
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Veritas Polska Sp. z o.o.

The ISO 50001 standard, first issued in 2011, completes the series of international standards applicable to management systems, and covers the important area of the efficient use of energy. The standard is a reaction to challenges related to protecting the climate and reducing the emission of greenhouse gases, but also, importantly, assists in limiting the costs of energy consumption. In accordance with general principles of constant improvement, ISO 50001 encourages the systematic identification and monitoring of sources and methods of using energy and formulating the most effective objectives and programs of action. Mechanisms suggested by the standard enable the systemic involvement of management and rank-and-file employees in activities related to improving the organisation's energy efficiency and achieving tangible savings while simultaneously limiting its negative impact on the natural environment.

Similarly to other components of the management system, energy reviews were subjected to an independent verification process in 2018, during the recertification/certification audits in respect of the system's compliance with the EMAS Regulation and the ISO 14001:2015 standard, as well certification audits in respect of compliance with the ISO 50001:2011 standard.

Apart from organisational actions, Group companies completed many modernisation and renovation projects in 2018 in order to reduce their energy consumptions, including:

- Modernisation works at the Ostrołęka B Power Plant, resulting in:
 - an improvement in the efficiency of the transformation of fuel into electricity and heating (modernisation of the boiler and turbine unit in power unit no. 1)
 - a reduction in the consumption of heat for own heating purposes (modernisation of heating substations in the internal plant network)
 - a reduction in the consumption of electricity for own electrical purposes (modernisation of exhaust fans in power unit no. 1, modernisation of streetlights, including a replacement of light fixtures with new LED lamps)
 - a reduction in the frequency of interruptions of the operation of power units the level of water and water flow in the Narew river are low and a reduction in the consumption of mazut (completion of the construction of a weir in the river channel)
- Modernisation of the boiler in the BB20p power unit in the Energa Kogeneracja Sp. z o.o. CHP plant, partially aimed at improving the unit's reliability by extending the operating time of the boiler, improving the quantitative parameters of energy use efficiency.
- Replacement of step-up transformers no. 1 and 3 in the Żydowo Pumped-Storage Power Station – the project is scheduled to be completed in 2019, and the estimated average annual energy savings will amount to 1809.284 GJ/year, which translates into 43.214 Toe.
- Replacement of 34 pump aggregates with electronically-controlled energy-efficient devices at the District Heat Plant operated by Energa Ciepło Kaliskie Sp. z o.o.
- Reduction in energy transfer losses and indirect emission of pollution through a modification of high-performance district heating networks through implementing pre-insulated pipe technology at company Energa Ciepło Ostrołęka Sp. z o.o.
- Modernisation of road lighting infrastructure carried out by Energa Oświetlenie Sp. z o.o. (selected significant capital works, lighting assets owned by the Company and external assets). Nearly 13 000 old-type (mercury, sodium) light fixtures were replaced with energy efficient ones. It is estimated that the operation will result in approx. 3,663.551 MWh of energy savings per year, i.e. 315 Toe/year, and a reduction in CO₂ emission by 2850 Mg/year.
- Thermo-modernisation of buildings used by employees of Energa Operator SA and modernisation of boiler rooms located in these buildings.





For several years now, Energa Operator has been implementing components of Smart Grid technology, including in order to reduce the use of energy from conventional sources and CO₂ emissions.

Installation of smart measurement equipment and grid automatization will enable a more efficient management of the power generation system across the entire area of operations of company Energa Operator SA. The customer grid, where energy flows in one way only (to the customer), will be replaced by a prosumer grid, opening new possibilities for the energy and grid services market. Apart from customers, other energy sources are also connected to the power grid, contributing to the growing potential of dispersed generation.



GOOD PRACTICE

An energy cluster is a form of a civil law agreement, aimed at thoroughly improving energy security and efficiency and the condition of the natural environment in the area of a given local district or municipalities forming part of the partnership. The idea of energy clusters is based on the development of dispersed power generation and the generation of energy as close to the customer as possible.

In July 2018, Energa Obrót SA and the municipality of Żerków created the 'Żerków Energy Cluster', aimed at improving the municipality's energy security and efficiency through such means as the local use of available energy resources, including renewable energy sources.

In the same month of July 2018, Energa Obrót signed an agreement to act as a technical partner in the 'Clean Energy' Turek Energy Cluster, currently under development. The cluster will comprise 22 entities, including local government units and private businesses, with the purpose of increasing the share of renewable energy sources in the general energy mix in the turecki district, reducing emissions and striving to become self-sufficient in terms of energy.



As part of their energy reviews, companies calculate their energy result indicators.

The Group's energy result indicators are calculated in respect of total energy use as the total amounts of specific types of energy used (e.g. electricity, heat, cooling, fuel):

- the quotient of the use of energy and the number of persons employed by the company
- the quotient of the use of energy and the Group's net profit expressed in PLN.

Energa Group's base energy in 2016:

Energy result indicator: Toe in relation to:

- average employment during the year (8792 persons)
- turnover (PLN 147 million)

Total energy in 2016	Energy result indicator in 2016	
835 031.9834 Toe	Toe/person	94.97
	Toe/PLN	0.00568

Energa Group's base energy in 2017

Energy result indicator: Toe in relation to:

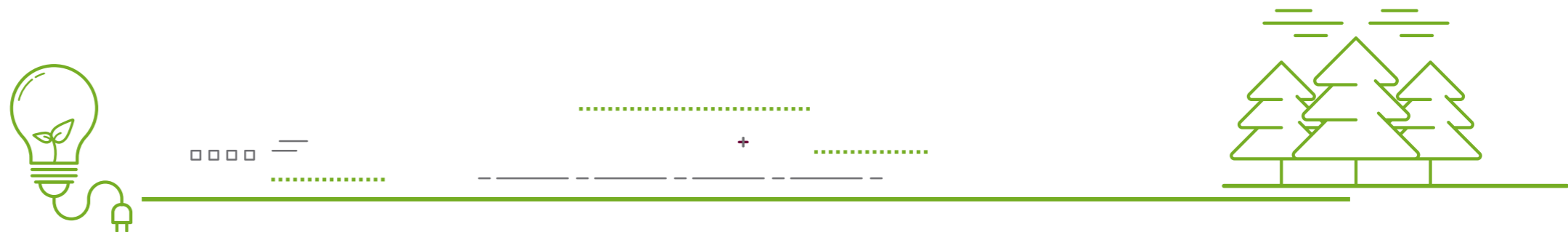
- average employment during the year (9049 persons)
- turnover (PLN 789 million)

Total energy in 2017	Energy result indicator in 2017	
852 154.0701 Toe	Toe/person	94.17
	Toe/PLN	0.00108

Total energy from fuels made from non-renewable raw materials by type of raw material

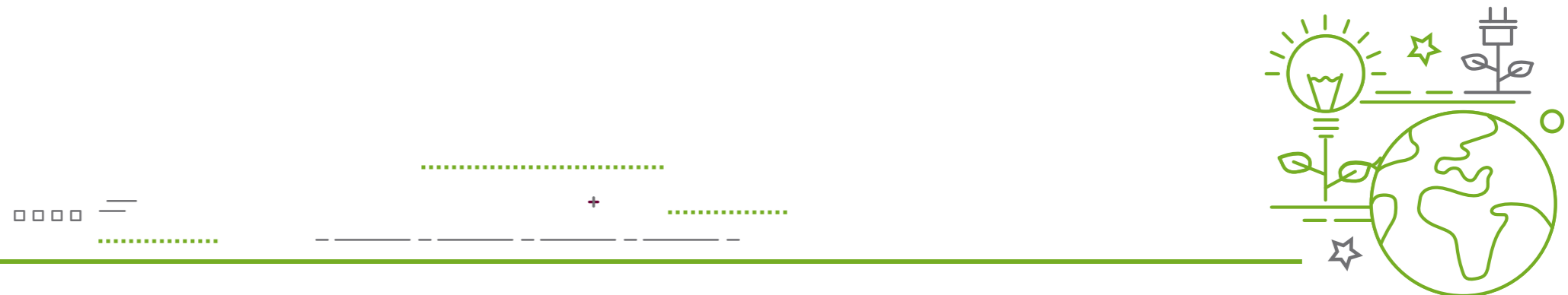
Company/ business line	Total energy from raw materials consumed [GJ]		Total energy from fuels made from non-renewable raw materials (own or purchased) consumed/used, by type of raw material [GJ]		Coal [GJ]		Natural gas [GJ]		Heating oil [GJ]		Diesel oil [GJ]		Petrol [GJ]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
	Services and other	190 609	15 559	384	15 559	0	0	363	1 482	0	919	21	6 906	0
Distribution business line	49 127	168 783	49 127	168 783	240	240	21 661	18 705	3 472	3 872	23 753	116 857	0	29 108
Sales business line	439	19 881	399	19 834	0	0	399	769	0	0	0	11 279	0	7 786
Generation business line	34 867 389	34 532 221	28 922 870	28 721 650	28 770 944	28 546 197	31 860	20 291	120 037	132 305	30	18 815	0	4 042
Energa Wytwarzanie SA	5 218 020	5 608 083	907	5 185	0	0	839	690	43	0	26	2 499	0	1 995
Energa Elektrownie Ostrołęka SA	25 363 413	24 747 065	25 363 413	24 747 065	25 250 913	24 612 241	0	0	112 500	123 029	0	11 492	0	303
Energa Serwis Sp. z o.o.	0	4 070	0	4 070	0	0	0	0	0	0	0	3 479	0	592
Energa Ciepło Ostrołęka Sp. z o.o.	0	510	0	510	0	0	0	0	0	0	0	53	0	457
Energa Ciepło Kaliskie Sp. z o.o.	385 301	358 117	385 301	358 117	356 039	337 328	29 258	19 601	0	0	4	1 019	0	169
Energa Kogeneracja Sp. z o.o.	3 900 655	3 814 376	3 173 249	3 606 703	3 163 992	3 596 628	1 763	0	7 494	9 276	0	273	0	526
Energa Group	35 107 563	34 736 444	28 972 780	28 925 826	28 771 184	28 546 437	54 283	41 247	123 509	137 096	23 805	153 856	0*	47 190

* In 2017, petrol was partially included in the 'Diesel oil' item. In 2018, as a result of completing the implementation of standard ISO 50001, a decision was made to include these materials as individual components of the parameter.



Consumption of energy from fuels made from renewable raw materials by type of raw material

Company/ business line	Total energy from raw materials consumed [GJ]		Total energy from fuels made from renewable raw materials (own or purchased) consumed/used, by type of raw material [GJ]		Biomass [GJ]		Wind energy [GJ]		Solar energy [GJ]		Hydropower [GJ]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	190 609	15 559	190 225	0	0	0	190 225	0	0	0	0	0
Distribution business line	49 127	168 783	0	0	0	0	0	0	0	0	0	0
Sales business line	439	19 881	40	47	0	0	0	0	40	47	0	0
Generation business line	34 867 389	34 532 221	5 944 518	5 810 571	727 406	207 673	1 505 165	1 383 102	16 504	19 837	3 695 443	4 199 959
Energa Wytwarzanie SA	5 218 020	5 608 083	5 217 112	5 602 898	0	0	1 505 165	1 383 102	16 504	19 837	3 695 443	4 199 959
Energa Elektrownie Ostrołęka SA	25 363 413	24 747 065	0	0	0	0	0	0	0	0	0	0
Energa Serwis Sp. z o.o.	0	4 070	0	0	0	0	0	0	0	0	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	0	510	0	0	0	0	0	0	0	0	0	0
Energa Ciepło Kaliskie Sp. z o.o.	385 301	358 117	0	0	0	0	0	0	0	0	0	0
Energa Kogeneracja Sp. z o.o.	3 900 655	3 814 376	727 406	207 673	727 406	207 673	0	0	0	0	0	0
Energa Group	35 107 563	34 736 444	6 134 783	5 810 618	727 406	207 673	1 695 390	1 383 102	16 544	19 884	3 695 443	4 199 959



Total energy purchased, broken down by electricity, heat, cooling and steam

Company/ business line	Total used/purchased energy consumed [GJ]		Electricity [GJ]		Heat [GJ]		Cooling [GJ]		Steam [GJ]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	1 274 391	28 567	1 271 286	17 384	1 719	9 646	1 387	1 537	0	0
Distribution business line	4 642 727	4 905 755	4 575 352	4 847 884	67 375	57 871	0	0	0	0
Sales business line	469 113	414 983	465 451	412 076	3 662	2 276	0	632	0	0
Generation business line	1 530 467	1 522 100	19 409	23 150	1 294 685	1 268 778	0	0	216 373	230 172
Energa Wytwarzanie SA	7 295	10 330	5 625	7 627	1 671	2 704	0	0	0	0
Energa Elektrownie Ostrołęka SA	0	0	0	0	0	0	0	0	0	0
Energa Serwis Sp. z o.o.	1 489	15 367	352	2 035	1 136	13 332	0	0	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	1 008 134	996 077	3 082	2 859	788 679	763 046	0	0	216 373	230 172
Energa Ciepło Kaliskie Sp. z o.o.	508 927	494 632	5 728	4 936	503 199	489 696	0	0	0	0
Energa Kogeneracja Sp. z o.o.	4 622	5 694	4 622	5 694	0	0	0	0	0	0
Energa Group	7 916 699	6 871 405	6 331 498	5 300 494	1 367 441	1 338 571	1 387	2 168	216 373	230 172



302-1 ■ Total energy sold, broken down by electricity, heat, and steam

Company/ business line	Energy sold by the organisation [GJ]		Electricity [GJ]		Heat [GJ]		Steam [GJ]	
	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	190 496	0	190 225	0	271	0	0	0
Distribution business line	5	0	5	0	0	0	0	0
Sales business line	1 235	1 037	1 235	1 037	0	0	0	0
Generation business line	32 465 796	30 732 446	27 231 014	25 722 843	4 467 904	4 216 876	766 878	792 727
Energa Wytwarzanie SA	5 100 889	4 119 270	5 100 889	4 119 270	0	0	0	0
Energa Elektrownie Ostrołęka SA	23 078 999	22 463 041	21 708 318	21 233 710	931 767	759 855	438 914	469 476
Energa Serwis Sp. z o.o.	0	0	0	0	0	0	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	882 191	871 701	0	0	671 071	651 749	211 120	219 952
Energa Ciepło Kaliskie Sp. z o.o.	719 200	682 107	0	0	719 200	682 107	0	0
Energa Kogeneracja Sp. z o.o.	2 684 517	2 596 327	421 807	369 863	2 145 866	2 123 165	116 844	103 299
Energa Group	32 657 533	30 733 483	27 422 480	25 723 880	4 468 176	4 216 876	766 878	792 727

In 2018, energy sales dropped by 1 924 050 GJ in comparison to the preceding year. This was primarily caused by a reduction in the production output at Energa Elektrownie Ostrołęka SA and Energa Wytwarzanie SA. The electricity production and sales output at Energa Elektrownie Ostrołęka SA, which constitutes a Centrally-Controlled Generating Unit, was primarily determined by the level of grid limitations in the energy substation (transfer instructions issued by the Transfer System Operator – Polish Power Grids) and the duration of renovation works in the power units (in 2018, one of the power units was deactivated for over

4 months in order to undergo major renovations, whereas in 2017, the unit underwent a medium renovation and was offline for over two months less).

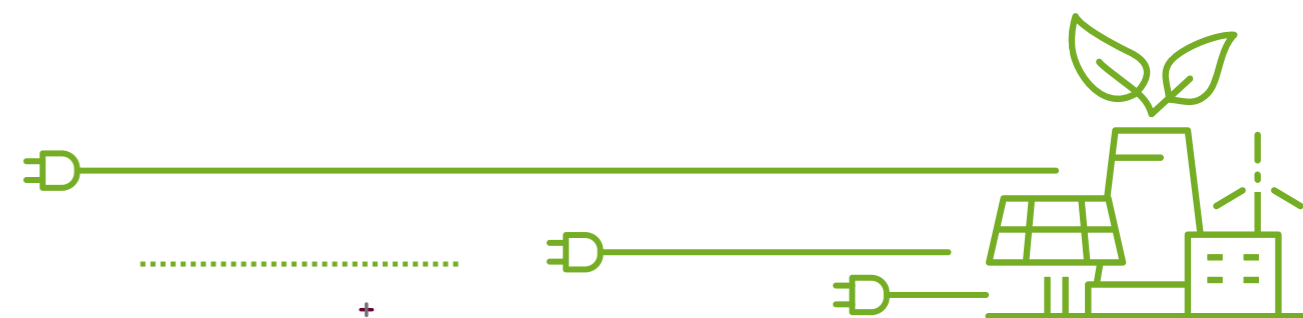
As concerns Energa Wytwarzanie SA, the drop in production and sales output in comparison to 2017 was primarily caused by poor wind and hydrological conditions. This resulted in the company reaching only 89% of its planned production with regards to wind farms and 84% of planned production with regards to the Włocławek Hydropower Plant.



Total energy consumption within the organisation

302-1

Company/ business line	Total energy consumption within the organisation [GJ]	
	2017	2018
Services and other	1 274 504	44 126
Distribution business line	4 691 849	5 074 538
Sales business line	468 317	433 827
Generation business line	3 932 059	5 321 875
Energa Wytwarzanie SA	124 426	1 499 143
Energa Elektrownie Ostrołęka SA	2 284 414	2 284 024
Energa Serwis Sp. z o.o.	1 489	19 437
Energa Ciepło Ostrołęka Sp. z o.o.	125 943	124 886
Energa Ciepło Kaliskie Sp. z o.o.	175 028	170 642
Energa Kogeneracja Sp. z o.o.	1 220 760	1 223 743
Energa Group	10 366 729	10 874 366

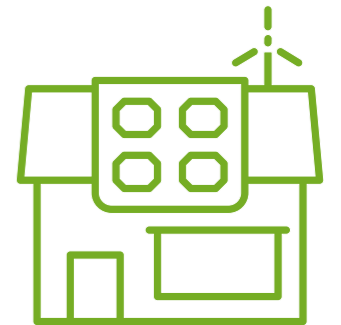
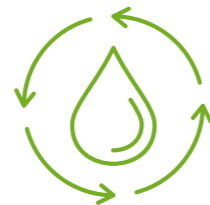


Maximum generating power achieved, broken down by main types of raw materials

Company	Energy source	Electricity [MW]	Heat [MW]	Electricity [MW]	Heat [MW]
		2017		2018	
Ciepło Kaliskie Sp. z o.o.	coal	0.00	58.00	0.00	58.00
Energa Elektrownie Ostrołęka SA	coal	624.00	200.90	624.00	201.40
	biomass	57.00	18.10	57.00	18.10
Energa Wytwarzanie SA	water	364.84	0.00	365.59	0.00
	wind	211.00	0.00	211.00	0.00
	fotowoltaika	5.41	0.00	5.41	0.00
Energa Kogeneracja Sp. z o.o.	coal	47.00	331.66	47.00	325.66
	biomass	25.00	47.00	25.26	48.24
TOTAL		1 334.25	655.66	1 335.26	651.40

Net amount of produced energy, broken down by main energy sources

Energy source	Electricity [MWh]	Heat [MWh]	Electricity [MWh]	Heat [MWh]
	2017		2018	
coal	2 461 139	983 220	2 427 135	987 430
biomass	40 333	69 676	15 150	13 278
water	1 029 854	0	804 509	
wind	461 782	0	376 024	
gas	0	6 656		4 565
photovoltaics	5 729	0	5 330	
TOTAL	3 998 837	1 059 552	3 628 148	1 005 273



Air emissions



Greenhouse gas emissions

2018 marked the sixth time that Energa Group submitted its report on greenhouse gas emissions resulting from its operations to the independent Carbon Disclosure Project organisation. Reporting greenhouse gas emissions enables the comparison of the results of operations of various energy sector companies with regards to the reduction of greenhouse gases.

We continued our previous activities aimed at reducing greenhouse gas emissions. For example, in 2018 Energa Group completed a comprehensive modernisation of a hydropower plant on the Drawa river in the village of Borowo (province of zachodniopomorskie), increasing the volume of electricity produced from renewable energy sources and the share of renewable energy in the Group's generation mix. Furthermore, company Energa Operator SA systematically replaced transformers with new ones and modernised its grid infrastructure, reducing grid losses and lowering indirect CO₂ emission.

Direct emissions of greenhouse gases

Company/ business line	Greenhouse gas emissions											
	Sum of direct emissions of greenhouse gases		Emissions related to the production of electricity		Emissions related to the production of heat		Emissions from gas leaks, including as a result of a malfunction		Emissions related to the transport of materials, products and waste		Biogenic emissions	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	1 455	1 156	2	3	23	144	628	39	802	971	0	0
Distribution business line	11 557	11 662	0	0	1 051	1 371	0	0	10 500	10 291	0	0
Sales business line	1 308	1 422	0	0	11	47	0	0	1 297	1 375	0	0
Generation business line	2 662 840	2 651 910	2 250 215	2 234 005	411 342	416 361	3	165	1 280	1 380	72 334	20 770
Energa Wytwarzanie SA	366	359	2	4	46	35	3	4	315	317	0	0
Energa Elektrownie Ostrołęka SA	2 331 081	2 281 868	2 184 996	2 148 605	145 673	132 652	0	161	412	450	0	0
Energa Serwis Sp. z o.o.	249	297	0	0	0	0	0	0	249	297	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	741	964	0	0	715	938	0	0	26	26	0	0
Energa Ciepło Kaliskie Sp. z o.o.	33 720	31 154	0	0	33 627	31 067	0	0	93	87	0	0
Energa Kogeneracja Sp. z o.o.	296 682	337 268	65 217	85 396	231 281	251 669	0	0	184	203	72 334	20 770
Energa Group	2 677 160	2 666 151	2 250 217	2 234 007	412 428	417 924	631	203	13 879	14 017	72 334	20 770

In 2018, approximately 84% of direct greenhouse gas emissions accompanied the production of electricity, while around 16% of emissions resulted from the production of heat energy. In total, approximately 2 666 151 tons of CO₂ equivalent was emitted in 2018, i.e. about 11 009 tons fewer.

As part of efforts to reduce indirect CO₂ emissions, 19 high-voltage/ medium-voltage transformers and 797 medium-voltage / low-voltage transformers were replaced with new ones, contributing to a reduction in CO₂ emissions by over 1055 Mg*

* The emission indicator in respect of electrical energy generated in combustion installations for 2017, published by The National Centre for Emissions Management in December 2018, was used to calculate the amount of CO₂.



In October 2018, Energa SA purchased 2 thousand carbon dioxide emission certificates on the first auction of these certificates, organised by State Forests. Carbon dioxide emission certificates are part of the Carbon Forest Holding program implemented by State Forests. The program covers over 12 thousand hectares of forested areas that will naturally absorb carbon dioxide. Each of the participants in the certificate auction was able to specify one of the eighteen projects implemented by Polish regional forest authorities that will receive funds obtained through the sale of carbon dioxide certificates.

Indirect emissions of greenhouse gases

Company/ business line	Indirect emissions of greenhouse gases [MgCO ₂]	
	2017	2018
Services and other	2 341	5 136
Distribution business line	1 046 938	1 107 405
Sales business line	327	1 600
Generation business line	125 945	122 215
Energa Wytwarzanie SA	1 645	1 935
Energa Elektrownie Ostrołęka SA	0	0
Energa Serwis Sp. z o.o.	197	1 856
Energa Ciepło Ostrołęka Sp. z o.o.	122 072	116 533
Energa Ciepło Kaliskie Sp. z o.o.	1 283	1 066
Energa Kogeneracja Sp. z o.o.	748	824
Energa Group	1 175 551	1 236 355

Emission of pollutants, including NO_x and SO_x compounds

In 2018, Group companies emitted 755 Mg fewer of pollutants than in the previous year, primarily thanks to ongoing capital works projects. Group companies complied with all applicable regulations regulating the use of the environment and met all requirements of emission standards specified in decisions and permits, as confirmed by an independent auditor as part of EMAS certification. The Group's installations take advantage of derogations resulting from the IED Directive (Transitional National Plan, heating derogation).

After the derogation period expires, the Ostrołęka B Power Plant and the Elbląg CHP Plant will have to meet stricter requirements of the directive with regards to emissions, and starting from 17 August 2021, requirements of the BAT conclusions as well. The Kalisz CHP Plant will be required to meet requirements of the BAT conclusions starting from 1 January 2023.

Due to the above, Energa Group has been carrying out a number of actions aimed at ensuring that emissions from its installations meet legal requirements:

- Between 2015 and 2018, Energa Elektrownie Ostrołęka SA completed a full modernisation of electrofilters in black coal-fired power units no. 1, 2 and 3, aimed at reducing the level of exhaust fume dusting to below <20 mg/Nm³. As part of the task, the installation used to remove and transport ash from electrofilters was also modernised,



exhaust fume fans and exhaust fume ducts together with measurement equipment, control devices, security and power systems were replaced with new ones, and the existing structural part of the facility, constituting a uniform part together with electrofilters, underwent adaptation works. An exhaust fume denoxation installation was also implemented in respect of all the above-mentioned boilers, ensuring the reduction of nitric oxides from 400-500 mg/m³ to <100 mg/m³ NO_x. The exhaust fume denoxation installation was implemented based on the catalytic method of nitric oxide reduction using the 'High Dust' system, i.e. with the use of reagent injection into undusted exhaust fumes.

- In 2018, Energa Elektrownie Ostrołęka SA commenced the construction of a second exhaust fume desulphurisation installation, using the wet limestone method with limestone rock meal used as the sorbent.
- Energa Kogeneracja Sp. z o.o. intends to construct an exhaust fume treatment installation at the Elbląg CHP Plant. The selective catalytic reduction of nitric oxides technology was selected in order to reduce NO_x nitric oxides, simultaneously limiting the amount of burned biomass to 20% of mass share in the coal co-firing process. Semi-dry exhaust fume desulphurisation technology was chosen to ensure the reduction of sulphur oxides, with a maximum efficiency of OP-130 boilers at 220 Mg of steam/h.

305-7 Emissions of NO_x and SO_x compounds and other air emissions

Company/ business line	Total air emissions [Mg]		NO _x [Mg]		SO _x [Mg]		Volatile organic compounds (VOC) [Mg]		HCL [Mg]		Dust (PM) [Mg]		Other emissions of compounds into the air [Mg]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distribution business line	193	27	12	7	0	0	9	13	0	0	0	0	171	6
Sales business line	2	2	0	0	0	0	2	2	0	0	0	0	0	0
Generation business line	7 704	7 095	2 753	2 163	3 864	3 678	6	4	163	302	285	287	633	661
Energa Wytwarzanie SA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energa Elektrownie Ostrołęka SA	5 547	4 650	2 217	1 534	2 433	2 227	0	0	117	103	189	160	591	625
Energa Serwis Sp. z o.o.	7	5	0	0	0	0	6	4	0	0	0	0	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Energa Ciepło Kaliskie Sp. z o.o.	248	213	33	42	174	134	0	0	9	9	3	7	28	22
Energa Kogeneracja Sp. z o.o.	1 902	2 227	502	587	1 257	1 316	0	0	37	190	93	120	13	14
Energa Group	7 899	7 124	2 765	2 170	3 864	3 678	17	19	163	302	286	287	804	668

- Energa Kogeneracja Sp. z o.o. intends to construct a biomass-fired power unit at the Kalisz CHP Plant, with an electrical power output of approx. 11.3 MWe gross and a heat power output of approx. 21.3 MWt; the company also plans to decommission a KP-3 boiler and reduce the operating time of coal-fired boilers. The expected environmental impact of these actions is the reduction of the average annual dust concentration to 20 mg/Nm³ in accordance with the MCP directive.
- In 2018, Energa Ciepło Kaliskie Sp. z o.o. expanded its district heating system, enabling the connection of existing structures heated using their own low-emission heat sources to the system. As part of this campaign, two tenement houses located in the city centre, housing 29 abodes previously heated by coal-fired furnaces, were connected to the district heating system, 4 low-performance gas-fired

boiler rooms in the city centre were decommissioned and replaced by individual heating substations, and mains connections to the district heating system were installed in 6 structures, which will enable the decommissioning of a further 4 low-performance gas-fired boiler rooms located in the inner centre of the city after the conclusion of the 2018/19 heating period.

CO₂ emission allowances

Those among the Group companies that generate electrical energy receive CO₂ emission allowances free of charge, by means of derogation, as per the EU ETS Directive. A prerequisite for obtaining emission allowances free of charge is to complete the capital work projects entered into the National Capital Works Plan. Furthermore, companies that produce heat receive free CO₂ emission allowances for their installations as part of the National Allowances Distribution Plan.

Number of free CO₂ emission allowances received*

Company	Number of free CO ₂ emission allowances received	
	2017	2018
Energa Elektrownie Ostrołęka SA Elektrociepłownia Ostrołęka A	78 397	64 680
Energa Elektrownie Ostrołęka SA Elektrownia Ostrołęka B	624 419	497 542
Energa Kogeneracja Sp. z o.o. Elektrociepłownia Elbląg	85 647	71 140
Energa Kogeneracja Sp. z o.o. Elektrociepłownia Żychlin	6 108	5 034
Energa Kogeneracja Sp. z o.o. Elektrociepłownia Kalisz	23 441	18 880
Ciepło Kaliskie Sp. z o.o.	12 516	9 266

* Entitlements listed according to the pool of free CO₂ emission allowances received (with regards to the production of electricity and heat) under the National Allowance Distribution Plan.



Other emissions

Although renewable energy sources do not cause direct emissions, they may result in localised nuisances for the neighbouring area, such as noise or vibrations (wind farms). They also alter the landscape, may contribute to the fragmentation of ecosystems, and with regards to fauna may interfere with the natural migration routes of animals (avifauna in the case of wind farms and aquafauna in the case of hydropower plants). Each wind farm operated by Energa Wytwarzanie SA must each year undergo a mandatory monitoring process with regards to migration routes of birds and bats, enabling the estimation of potential risk related to their migrations. Wind farms are also subject to post-completion monitoring, used to determine their actual environmental impact.

In 2018, the Generation Business Line completed the modernisation of the Borowo power plant, modernisation works included the replacement of oil immersed transformers with dry transformers. This helped reduce the risk of a leak of hazardous substances into the soil.

Due to the wide network of power lines, the Distribution Business Line primarily affects the continuity of ecosystems, traverses protected areas and may cause changes in and interfere with such areas. Local power lines may create noise and electromagnetic radiation (in their close vicinity), as well as be the source of an oil leak (from transformers) in case of a malfunction of power

substations, or emit refrigerants (from insulation systems) impacting the ozone layer. All capital works related to the construction of power lines carried out by Energa Operator SA in the vicinity of or inside protected areas are subject to an environmental impact assessment procedure so as to ensure that their effect on the natural environment is reduced to a minimum.

Replacement of low-voltage wires with insulated ones, including wire terminals, and the modification of low-voltage substations carried out by Energa Operator SA not only reduces the danger to plant and animal species living in the area, resulting from the existence and operation of power lines in forests and forested areas, but also lowers noise and electromagnetic field emission.

Energa Operator SA also protects the groundwater environment from being polluted with oil-based substances by modernising yards used to store transformers. The actions prevent any leakage of hazardous liquids into the soil which might result in a contamination of the natural environment.

Resources used by the Sales Business Line include mostly paper and energy. The Business Line affects its Customers in a positive manner by promoting balanced consumption and changing Customer habits so that they start reducing their consumption of matter and energy.

103-1 (306)
103-2 (306)

Waste and wastewater management



383 875 Mg

total amount of waste produced by the Group in 2018



15 439 Mg

more than in the preceding year

306-2

The total amount of waste produced by the Group in 2018 amounted to 383 875 Mg, i.e. approximately 15 439 Mg more than in the preceding year, which resulted from the intensification of renovation works carried out in companies from the Distribution Business Line.

All waste was segregated, stored or recycled in accordance with applicable regulations and handed over to companies authorised to collect them.

Group companies systematically seek to transform their processes towards circular economy, as specified by the European Commission in December 2015. This new economic development model will contribute to the creation of a low-emission, resource-frugal, innovative and competitive Polish economy. Based on this concept, products, resources and raw materials should remain in the economy for as long as possible, and production of waste should be reduced to a minimum.

The road towards a circular economy requires taking action at every stage of a product's lifecycle, starting from the design process, moving on to obtaining raw materials, processing, production, consumption, waste collection, and ending with the recycling of waste.

Advanced actions are underway in several Group companies, aimed at reducing the amount of waste:

- As early as in 2015, Energa Elektrownie Ostrołęka SA commenced actions aimed at increasing the amount of recycled waste produced directly in the installation, including fly-ash, slag and gypsum, while minimising the amount of waste stockpiled

in landfills. The company also digs up and sells waste that had been deposited in the landfill in the past, contributing to the reduction of its potential negative impact on the environment. As part of the ongoing operation of the landfill, selected types of waste produced in connection with the generation of energy are recycled and used to construct a revegetation layer preventing the emission of dust from the landfill; waste is also used to maintain access roads to the landfill.

- Thanks to reducing its coal consumption by 1186.1 tonnes in the 11 months of 2018 in comparison to the year 2017 (13 250.7 Mg in 2017, compared to 12 064.6 Mg in 2018), Energa Ciepło Kaliskie Sp. z o.o. was able to significantly reduce the amount of generated combustion waste.
- Energa Kogeneracja Sp. z o.o. reuses 100% of combustion waste generated during the coal-firing process in the plant.

Thanks to the reduced consumption of water, Energa Group companies produced 608 130 m³ less wastewater in comparison to the preceding year.

Total weight of waste by type of waste and method of treatment

Company/ business line	Total weight of waste [Mg]		Recycling		Recovery (including recovery of energy)		Waste stored in landfills		Waste stored on plant premises		Other waste treatment methods	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	115	130	0	0	0	0	104	0	0	0	11	130
Distribution business line	3 772	6 808	0	0	0	0	73	0	2	0	3 696	6 808
Sales business line	141	255	0	0	0	0	0	0	0	0	141	255
Generation business line	364 409	376 682	5 187	4 065	30 089	39 727	1 383	1 610	1 709	654	326 041	330 625
Energa Wytwarzanie SA	414	497	0	0	0	0	0	0	0	8	414	489
Energa Elektrownie Ostrołęka SA	326 279	330 766	0	0	85	0	1 331	1 477	6	41	324 857	329 248
Energa Serwis Sp. z o.o.	944	830	363	0	0	0	0	0	0	0	581	830
Energa Ciepło Ostrołęka Sp. z o.o.	1	1	0	0	0	0	0	0	0	0	1	1
Energa Ciepło Kaliskie Sp. z o.o.	4 927	4 148	4 824	4 065	98	80	0	0	2	3	4	0
Energa Kogeneracja Sp. z o.o.	31 844	40 439	0	0	29 906	39 648	52	133	1 701	601	184	57
Energa Group	368 436	383 875	5 187	4 065	30 089	39 728	1 559	1 610	1 711	654	329 890	337 818

Total weight of waste by type of waste and disposal method

Company/ business line	Total weight of waste [Mg]		Weight of hazardous waste [Mg]		Weight of waste other than hazardous [Mg]		Weight of bottom ash slags [Mg]	
	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	115	130	0	0	114	130	0	0
Distribution business line	3 772	6 808	1 161	1 725	2 611	5 083	0	0
Sales business line	141	255	8	12	133	243	0	0
Generation business line	364 409	376 682	76	159	42 809	41 580	321 523	334 943
Energa Wytwarzanie SA	414	497	12	74	402	424	0	0
Energa Elektrownie Ostrołęka SA	326 279	330 766	39	60	40 606	39 528	285 634	291 178
Energa Serwis Sp. z o.o.	944	830	8	13	936	817	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	1	1	0	0	1	1	0	0
Energa Ciepło Kaliskie Sp. z o.o.	4 927	4 148	12	3	19	22	4 897	4 123
Energa Kogeneracja Sp. z o.o.	31 844	40 439	5	9	846	789	30 993	39 642
Energa Group	368 436	383 875	1 245	1 896	45 668	47 037	321 523	334 943



Total volume of wastewater by quality and destination

Company/ business line	Total volume of wastewater [m ³]		Wastewater drained into the sewer system		Wastewater transported to sewage treatment facilities using means of transport		Wastewater drained into surface waters (lakes, rivers, etc.)		Wastewater drained through the ground	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Services and other	3 762	5 569	3 745	3 580	17	0	0	1 989	0	0
Distribution business line	82 259	65 779	80 505	65 200	1 754	579	0	0	0	0
Sales business line	11 515	11 604	6 781	6 870	0	0	0	0	4 734	4 734
Generation business line	19 776 436	19 182 890	60 623	62 975	1 985	1 400	19 713 829	19 118 515	0	0
Energa Wytwarzanie SA	99 300	101 832	1 619	1 758	1 975	1 383	95 706	98 691	0	0
Energa Elektrownie Ostrołęka SA	1 563 166	1 458 775	37 364	41 702	0	0	1 525 802	1 417 073	0	0
Energa Serwis Sp. z o.o.	571	668	571	668	0	0	0	0	0	0
Energa Ciepło Ostrołęka Sp. z o.o.	488	442	488	442	0	0	0	0	0	0
Energa Ciepło Kaliskie Sp. z o.o.	851	694	841	677	10	17	0	0	0	0
Energa Kogeneracja Sp. z o.o.	18 112 061	17 620 479	19 740	17 728	0	0	18 092 321	17 602 751	0	0
Energa Group	19 873 973	19 265 843	151 654	138 626	3 756	1 979	19 713 829	19 120 504	4 734	4 734





103-1 (304)
103-2 (304)
304-1
304-2

Valuable natural areas

Although some of the facilities operated by Group companies are located in protected areas, they do not significantly impact wildlife habitats or protected species.

Protected areas where installations operated by Energa Wytwarzanie SA are located include:



- 10 Natura 2000 Special Areas of Conservation
- 5 avian Natura 2000 Special Protection Areas
- 13 protected landscape areas
- 1 landscape park – Stupia River Valley
- buffer zone of the Słowiński National Park
- 2 wildlife reservations
- 2 ecological sites
- 1 nature and landscape complex

As in the previous year, Energa Wytwarzanie SA carried out actions in order to ensure the conservation of biological diversity in watercourses on which the company's hydropower plants are located. It made efforts to limit losses in the ichthyofauna to a minimum, e.g. by continuing to equip its hydropower plants with fish passes and restocking fish in rivers.



PLN 108 998.81

costs of fish restocking operations in 2018

As part of the fish restocking campaign carried out by Energa Wytwarzanie SA in collaboration with the Polish Fishing Association, five thousand young eels were introduced into the Radew river in May 2018.

Energa Elektrownia Ostrołęka SA is carrying out the following actions in order to minimise the environmental impact of the landfill located in the Lower Narew River Valley, a Special Protection Area (PLB 140014) forming part of the Natura 2000 network:

- The landfill is regularly seeded with grass mixes, the areas of the landfill in use at a given time are sprayed with water, and supernatant water is kept at an appropriate level in order to prevent dust emission.
- Groundwater, surface water and air quality is constantly monitored from the very start of operations in the landfill. Analyses and comparison of data indicate that the landfill does not negatively affect the above-mentioned components of the natural environment.

- Since 2009, the company monitors the avian fauna present in the furnace waste stockpile, which has become a gathering location for birds in the post-breeding period. Nest boxes are successively installed in the area in order to protect bird nesting locations. According to the 'Annual Report from the Environmental Supervision of the Expansion of the Łęg Furnace Waste Landfill', in 2017 the company carried out 16 inspections, during which birds nesting in the area were counted, with particular focus on wetland birds.

10 683
birds
in the landfill area



representing
56
species

Nest boxes are successively installed in the area in order to protect bird nesting locations.



In order to reduce the environmental impact of the furnace waste landfill in Jagodno (Elbląg municipality), located within the area of the Natura 2000 network, i.e. the Special Area of Conservation named 'Vistula Lagoon and Vistula Spit' and the Special Protection Area named 'Vistula Lagoon', Energa Kogeneracja Sp. z o.o. included guidelines relating to limiting the performance of works requiring heavy equipment in its instructions for the operation of the landfill.

These guidelines will prevent any damage to the several millimetre-thick solidified layer on the surface of the ash, which formed naturally in the humid microclimate of the Vistula Lagoon and which prevents the emission of dust from the waste. A buffer zone of vegetation of at least 10 metres is also maintained at all times around the landfill, and regular monitoring of the quality of groundwater and surface water in the vicinity of this installation has been carried out since 1992.

Protected areas intersected by high-voltage power lines operated by Energa Operator SA

Protected areas	Number of areas	Length of power lines
Landscape parks	17	181 km
Natural reserves	12	5 km
Buffer zones around natural reserves	5	5 km
Natura 2000 network zones	66	479 km

Reports on the environmental impact of capital works related to the construction of power lines located in the vicinity of or inside protected areas can be found online at:

<http://www.Energa-operator.pl/25231.xml>



Development of the 'Energa for Nature' program

For over 20 years, Energa Operator SA has been looking after white stork nests by repairing existing platforms located on transmission towers and installing new ones, enabling young storks to grow in safe nests while helping maintain power lines in good technical condition. Over 11000 stork platforms are currently installed across the entire area of operations of Energa Operator SA. In 2018, 453 new platforms were installed, and 149 existing platforms were modernised. All works related to white stork nests are carried out between October and the end of February. When spring comes and the birds return from their wintering locations, the breeding season begins, during which all activities in the vicinity of nests are prohibited. Apart from caring for stork nests built on power lines on an ongoing basis, for several years now employees of the company have been assisting ornithologists with ringing young storks and clearing nests from plastic ropes and other waste which might constitute a danger to hatchlings.

The cooperation between Energa Group and nature experts from the 'proNatura' association on the project named 'Energetic Ringers from Energa Group', the only initiative of its kind in Europe, resulted in the creation of the 'bociany.pl' project. Nature experts educate and assist in protecting the stork across Poland, including by providing guidelines via the national 801 BOCIAN helpline (telephone number: 801 26 24 26)

The purpose of the helpline is to provide free consultations in the matter of actions related to the protection of the white stork and its habitats, and as such the helpline:

- provides assistance to persons from all over Poland who want to make sure they behave correctly in respect of storks, e.g. on the premises of their house or in close neighbourhood, or who want to help storks, e.g. by renovating nests or looking after injured birds.
- if required, the helpline acts as the consultation point for services of Energa Operator SA and Energa Oświecenie Sp. z o.o. in matters related to the construction of nest platforms or emergency reports (e.g. following storms or gale-force winds) requiring the assistance of ornithologists
- around 8000 questions and reports have been submitted since the helpline was set up.

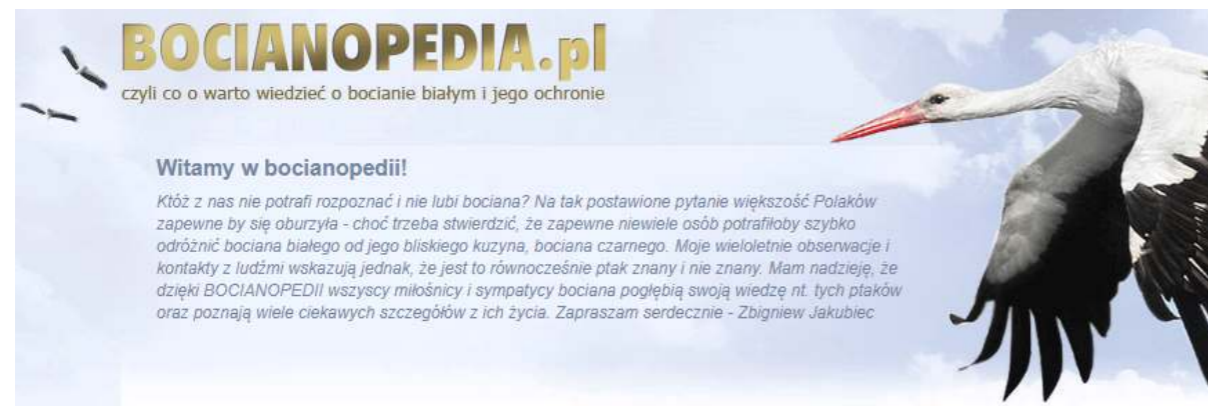


Furthermore, various educational and information activities and annual campaigns addressed at individuals, schools and institutions have been implemented thanks to the 'bociany.pl' project, including::

- 'Gather strings, protect storks' (involving children in gathering discarded pieces of string, deadly do stork hatchlings)
- 'Looking for wintering storks' (monitoring of and assistance for storks that winter in Poland – around 120 birds in 2018)
- annual photo competition.



Thanks to Energa Group, for almost 10 years now stork lovers have been able to access the website at **Bocianopedia.pl**. This online database of knowledge about storks was set up by **Zbigniew Jakubiec** and **Przemysław Szymoński**, authors of the 'Storks and Waddlers' album. They made their study of the life and habits of these well-liked birds available to all users of the Internet. Thanks to Bocianopedia, all lovers and admirers of storks will be able to expand their knowledge about these birds and learn many interesting details about their lives, find out about environmental protection or read tips about most frequently encountered problems relating to storks. The webpage also contains many interesting tidbits, including about the place of storks in Polish culture.



The page at bocianopedia.pl

3.3 Projects that impact the environment

Projects implemented by Energa Group are based on the Multi-Year Strategic Capital Works Plan for 2016-2025 and the Development Plan agreed upon with the Energy Regulatory Office.

In 2018, the largest financial outlay on capital works was made in the Distribution Business Line. Some of the key projects involved:

- connection of new energy consumers and new sources of electricity to the grid
- expansion and modification of the grid in order to ensure the ability to satisfy the increased demand for power
- modifications of the distribution grid at all voltage levels in order to improve the continuity of supply to energy consumers and meet requirements with regards to the quality parameters of supplied electricity (voltage and frequency) and reduce grid losses
- implementation of SMART GRID and smart measurement solutions.

The capital works plan of the Distribution Business Line in 2018 involved the expenditure of **PLN 1352m**. The above outlay enabled the completion of projects including the construction and modernisation of over **5.3k** km of high, medium and low-voltage lines and connections. Over **56.3k** new Customers were connected to the grid, as well as **59.2 MW** of new renewable energy sources, including microinstallations with a total power output of **33.2 MW**. In 2018, Energa Operator SA expended PLN 662m on the modernisation of the power grid, including nearly **PLN 346m** on initiatives aimed at improving the SAIDI and SAIFI energy supply reliability parameters.

In 2018, investment outlay on the replacement of medium-voltage power lines with cable lines and partially insulated overhead lines in forests and forested areas amounted to **PLN 113m**. Improving the grid's resistance to adverse weather conditions enabled a significant reduction in bird deaths caused by collisions with power lines. Additionally, the project resulted in a reduction of short circuits caused by tree branches contacting the power lines.



Nearly **PLN 15m** was spent on capital works (modifications and simplifications of medium/low-voltage pole-mounted transformers) aimed at reducing wildlife deaths through limiting their contact with power infrastructure.

In order to reduce indirect emissions into the air, the Distribution Business Line replaced high/medium-voltage transformers in 2018, at the cost of **PLN 14m**.

Major pro-environmental projects completed by Energa Group in 2018 were described in chapter 3.2, depending on the type of their impact on the environment.

Energa Group plans to complete the following projects in 2019:

In the Generation Business Line:

- continued construction of an installation used to reduce nitric oxides in the Ostrołęka B Power Plant, which is expected to reduce the concentration of emitted nitric oxides downstream of the emitter from 500 mg/Nm³ to 100 mg/Nm³ – the project is ongoing in power unit no. 1.
- continued construction of the exhaust fume desulphurisation installation no. 2 at the Ostrołęka B Power Plant – scheduled completion in 2020.
- continued modernisation of the BB20 biomass power unit in Elbląg. The ongoing optimisation of the steam boiler is aimed at enabling the power unit to permanently reach its planned performance parameters and ensuring continuous supply of heat and electricity – scheduled completion in 2020.
- continued adaptation of two OP-130 boilers at the Elbląg Power Plant to meet environmental protection requirements resulting from the IED Directive and the BAT conclusions – construction of an exhaust fume treatment installation used by two

OP-130 boilers in order to reduce the emission of substances into the air.

- continued construction a biomass power unit (BB10) at the Kalisz Power Plant, decommissioning of the WR-3 boiler, reduction of the operating time of coal-fired boilers. The biomass power unit is expected to reach an electrical power output of up to 10 MWe gross and a heat power output of 18 MWt as a thermal and condensation power unit with a pellet-fed stoker-fired boiler (BB10), operating at the base of the heating system.
- continued implementation of tasks aimed at reducing heat transfer losses at the Ostrołęka facilities by modifying further municipal duct and overhead heating networks to use pre-insulated pipe technologies.
- continued construction of a dam and hydropower plant with a power output of 80MW on the Vistula river in the village of Siarzewo, in order to minimise the risk of any environmental damage related to flooding and to increase the production of energy from renewable sources.
- modernisation of the Gałąźnia Mała hydropower plant, involving the replacement of externally-installed oil-immersed transformers with dry transformers.

In the Distribution Business Line:

- expansion of the grid due to the connection of additional consumers
- expansion and modernisation of Main Power Supply Points, aimed at improving the resilience of the high-voltage grid
- modernisation of the distribution grid, improving the reliability of supply
- modification of the grid to meet Smart Grid requirements
- completion of the TETRA system implementation process.

In the Sales Business Line:

Company Energa Oświetlenie Sp. z o.o. plans to continue its capital works plans with regards to modernising road lighting infrastructure. Due to the increasing popularity of intelligent pedestrian crossings with variable light intensity, power consumption in towns and municipalities can be reduced by even up to 70%.

Furthermore, Energa Obrót SA plans to continue its special anti-smog rate structure for households, which helps modify the way households manage electricity. This special rate structure introduces reduced energy prices between 10PM and 6AM. Another associated offer involves the sale of storage heaters and heat pumps, enabling the optimisation of energy consumption and reduction of CO₂ emissions.



The **construction of the modern, low-emission Ostrołęka C power plant** – a condensation power unit with an electrical power output of 1000 MWe and an efficiency of 46% – is a joint project of Energa Group and Enea Group, implemented by a special purpose vehicle under the name Elektrownie Ostrołęka Sp. z o.o.



More information on capital works projects, objectives and environmental tasks can be found in '**Energa Group's environmental declaration**', available at:

www.grupa.energa.pl/Polityka_Srodowiskowa.xml



3.4 Innovations for a sustainable development

In 2018, Energa SA announced its Strategic Research Agenda, determining the main directions of research, development and the implementation of innovations within the group for the next 10 years.

According to the Agenda, Energa Group will spend PLN 30m on research and development activities by 2020, and PLN 50m in 2025. The Agenda includes three development pillars:

I. Business and technological improvements, i.e. issues related to key areas of operations – generation, distribution, Customer service.

II. Innovative business models – Smart City, electromobility and microgrids.

III. Future technologies – issues related to the development of new generation and storage technologies that can support the energy generation and distribution area.



GOOD PRACTICE



Projects from the area of Energa Group's innovative activities, implemented in 2018, of major significance in terms of environmental impact:

'NEDO' Project – construction of a battery-based energy storage at the Bystra Wind Farm, part of the 'Smart Grid Demonstration Project in Poland' implemented by NEDO, a Japanese government organisation. Company Energa Wytwarzanie SA is responsible for the construction of infrastructure to serve as foundation for the components of the storage, integration of the storage with the National Power System and the operation of the storage during the demonstration period. The storage will ultimately have a power output of 6 MW, a storage capacity of 27 MWh, and will comprise two sets of batteries: lithium-ion and lead-acid. The SPS IT system (Special Protection Scheme – a new system used to manage wind farms) is meant to optimise the operation of wind farms connected with high- and low-voltage grids in emergency conditions that threaten the stability of operation of the power system. The system will determine, and then automatically implement the most effective plan of limiting the generating sources to eliminate the hazards present within the grid while keeping the volume of power generated by wind farms as high as possible.

The planned project completion date is 31 December 2020.

The 'Upgrid – Urban Grid of the Future' project, partially funded by the European Union as part of the Horizon 2020 program.

The project was completed in 2018 and involved the development and testing of new solutions and functionalities that will assist in the integration of low-voltage and medium-voltage grids with demand side management and dispersed generation. Particular focus was placed on the use of data from the AMI smart measurement system for the purposes of improving the reliability of energy supply and optimising the operation of the grid, e.g. by reducing energy losses in low-voltage grids and medium/low-voltage transformers.



GOOD PRACTICE



The Energa Living Lab project – implemented by company Enspirion Sp. z o.o. and involving a demonstration of the effectiveness of demand management tools and their popularisation, in the form of tests carried out in a living laboratory comprising 300 households located in the town of Gdynia. The project, completed in 2018, resulted in the reduction of energy consumption that translated into a reduction of CO2 emissions (110Mg), forming a key part of the life cycle of energy sales services.

The 'Construction of a Local Balancing Area (LOB) as part of improving the level of security and energy efficiency of the operation of the distribution system' project

– the project involved the construction of a local balancing area in the vicinity of Władysławowo, based on an energy storage collaborating with a generating source – a wind turbine.

New strategies of operation and system services were developed and tested as part of the project, and may in the future be implemented and used to improve the efficiency of grid operation, e.g. local area balancing in order to reduce transfer losses, area separation and islanding in case of extensive system failures. The research part of the project was completed in 2018 and involved the construction of a research laboratory comprising separate areas researching technologies related to grids, customers, existing and newly-constructed generating sources, energy storage system, new components of grid automatics and the LOBster system overseeing the operation of the Local Balancing Area. The generating part of the LOB project will be launched in 2019.

The SORAL project

was launched in 2018 and involves the construction of a system used to evaluate the technical condition and the risk of failure of medium-voltage cable lines. The project is based on offline diagnostic tests. The purpose of the project is to obtain knowledge and tools that will enable an improvement of efficiency of medium-voltage grid management. Based on planned industrial research and development works, a specific methodology and the SORAL IT system will be developed, enabling a measurable assessment of the risk of failure of individual components of medium-voltage cable lines. The system will provide information that will enable the implementation of preventive action to reduce the number of failures and will support the cable grid modernisation process.

GOOD PRACTICE



TETRA network

In 2018, Energa Group made preparations to implement the **TETRA network – Poland's first dispatch communication system** facilitating the transmission of data in case of a failure, and hence improving the reliability of energy supply.

The **'Modification of the grid to meet Smart Grid requirements through the installation of smart measurement equipment and grid automatization** for the purposes of activation of energy consumers aimed at improving the efficiency of the use of energy and effective management of the power system with a view to improve the security of supply. Basic implementation in the area of operations of Energa Operator SA (Smart Grid)' project

The purpose of the project is to ensure stability and flexibility of the distribution system through implementing smart power grid solutions. The project will also result in a reduction in the consumption of energy from conventional sources and reducing CO2 emissions. The project is partially funded by the EU as part of Operational Programme Infrastructure and Environment and is scheduled to continue until 2021.



GOOD PRACTICE

Floating photovoltaics

In 2018, Energa Wytwarzanie SA commenced a pilot run of a project involving the construction of floating photovoltaic panels.

The panels were installed on a reservoir located near the hydropower plant in Łapino. The project is the first of its kind in Poland. Analysis of the use of similar technologies elsewhere in the world indicated that moving photovoltaic panels onto a body of water leads to a significant increase in the amount of generated electricity. Panels placed on a floating structure solve several important issues related to photovoltaics that reduce the efficiency of the entire installations, namely an increase in the temperature of the panels and the accumulation of dirt on their surfaces. Tests will be carried out over a period of twelve months, in changing weather conditions.



Alicja Barbara Klimiuk
acting CEO of Energa SA

The currently tested energy generation technology serves as further proof that we never rest in trying to optimise the operation of facilities generating power from renewable energy sources. If the results of the pilot run are satisfactory, we will commence implementing this solution on a larger scale. Investment in innovative technologies is one of the key directions of operation of our business lines.

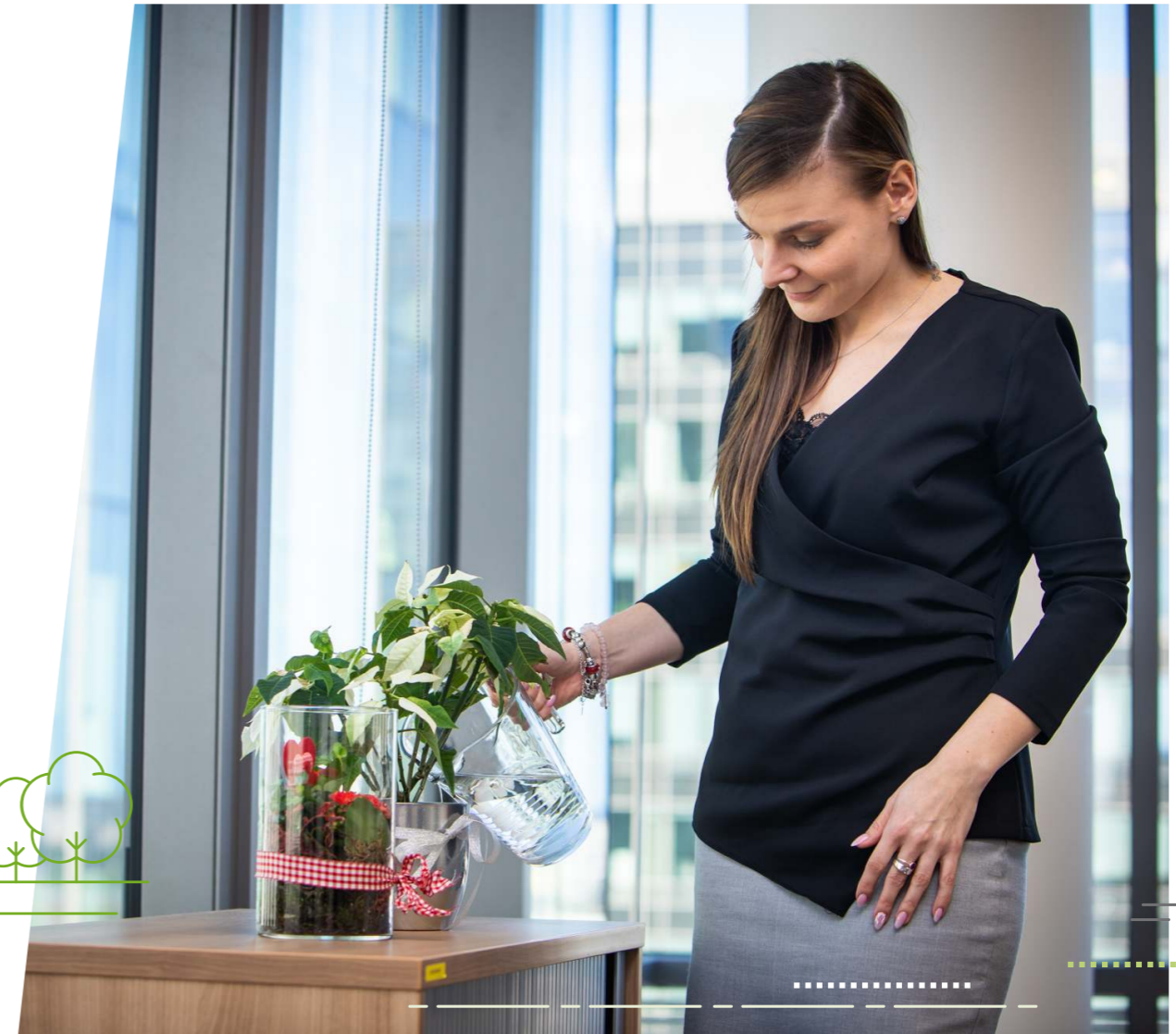
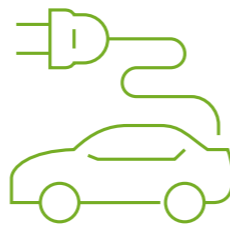


Completion of the implementation of an ISO 50001:2011 - compliant energy management system within Energa Group constituted an organisational innovation.

Apart from continuing the innovative projects described above, additional innovations fostering sustainable development are planned to be implemented in the coming year, including:

- Construction of own electrical vehicle charging infrastructure. Completion of the project will result in the creation of an electrical vehicle charging infrastructure, which will lead to an increase in the number of such vehicles. Direct benefits of the above will include a reduction in emissions of CO₂ into the air and in the level of noise in cities. 54 electrical vehicle charging points are planned to be installed by 2020.

- the Power Meter project – launch of an application used to constantly monitor the demand for energy of major consumers that consume over 5MW of electricity per hour and producers of electricity with an installed power of over 5MW. The system will enable making accurate forecasts of the Customer's energy consumption, and as a result will lead to a reduction in losses of energy generated within the domestic power system, directly translating into a reduction in CO₂ emissions.



4 A trustworthy employer



Fulfilment of objectives for 2018 and challenges for 2019

Energa Group consistently achieves its strategic objectives related to creating a friendly work environment where every employee is able to fully realise their potential. The Group consistently implements actions aimed at preventing the effects of the age gap while reinforcing the image of the Energa brand as an attractive employer. The organisation also alleviates the negative effects of economic and demographic transformations that result in a competence gap. Energa group also invests in efficient and effective

vocational education in order to guarantee itself a pool of qualified staff to choose from in the future.

Energa's organisational culture, built in a uniform manner across the entire Group, is based on key values that the company uses to guide its operations: sustainable development, trustworthiness and safety, boldness and innovation and lasting relations. By respecting these values, our employees contribute to the global development of Energa Group.

Priorities for 2019

1. Ensuring stability with regards to employment
2. Improving the effectiveness of tools used in communication with employees
3. Development of internship and job placement programmes



Goals for 2018

Supporting the natural bond between family and work, defined as an element that contributes to the quality of life, creating resources that enable employees to support their families, as well as a means for the family to achieve its own objectives, in particular those related to the upbringing of

Developing employee volunteer programs

Developing internship and job placement programs.

Fulfilment

In order to meet the expectations of its employees, Energa Group allows them to work according to a flexible time schedule, which enables them to maintain a healthy balance between time spent working and time spent with the family.

Energa Group also celebrates the International Day of Families. On this day, employees who have children receive additional time off that they can spend with their loved ones.

In 2018, employees of Energa Group initiated and participated in many charity campaigns, helping those most in need.

2018 was a record year in terms of scholarships granted by our organisation and funding provided to science laboratories in secondary schools. A class under the patronage of Energa Group was created at the Vocational School Complex in Ostrołęka, where pupils can study to obtain the title of an electrical technician and classes are taught by employees of Energa Group.

The Group has also commenced a cooperation with the Gdynia Maritime University; as part of the project, the best students from the University will be able to improve their knowledge and skills in Energa Group and in the M. Faraday Research and Development Centre.

In August 2018, the Group joined the first edition of the 'Bona Fide' program, as part of which state-owned companies provide support to young, ambitious people in the development of their scientific careers. The program enables students to study at top foreign universities.

[More information about volunteering programs on page 200](#)



4.1 Structure of employment



103-1 (401)
103-2 (401)

Employees with specialist skills and professional experience required to work in the energy sector are Energa Group's most valuable resource.

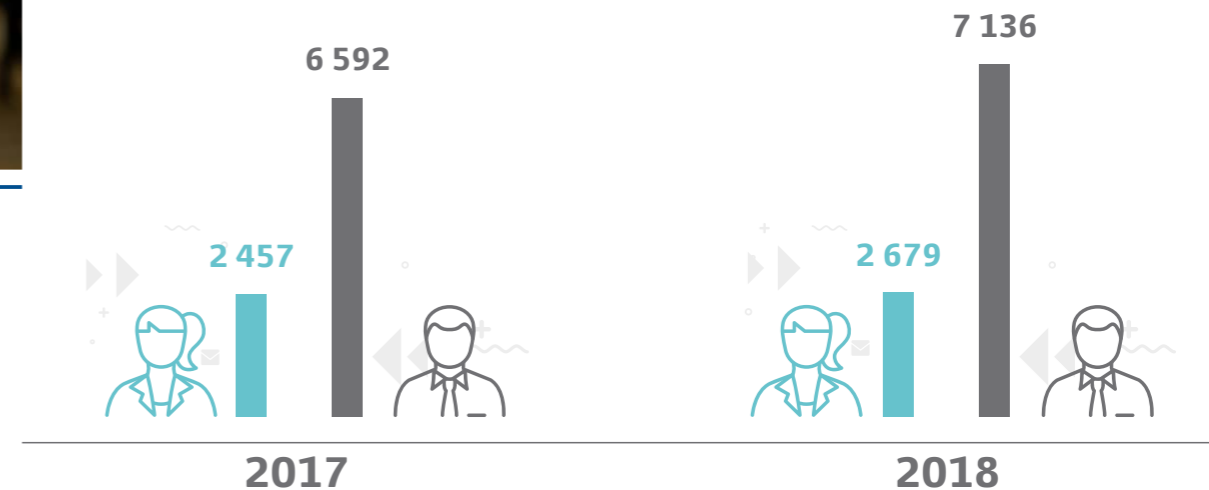
Implementation of 'Energa Group's Human Resources Policy', determining the most important directions of development of human resource functions and supporting the fulfilment of the Group's business strategy guarantees stable growth of the Group's value. We develop an optimal, consistent and effective model of human resource management.

In order to ensure equality in employment, we implement uniform regulations with regards to hiring, training, job placement and internship programmes, employer's image, as well as other regulations that adhere to the market standards.

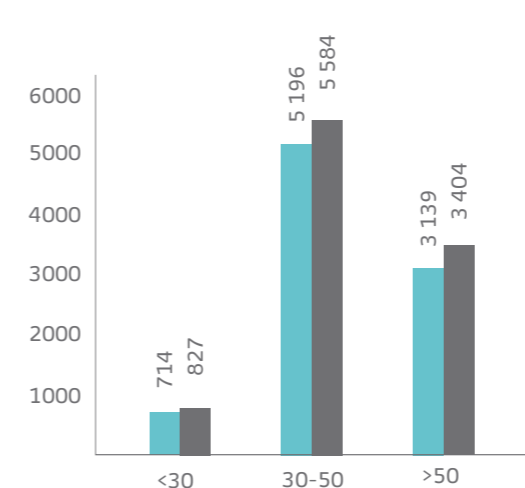
Energa Group supports the employment of disabled persons by providing them with adequate work conditions and guaranteeing that they receive the rights and privileges they are entitled to. Engineering and technical staff, including installers and lineworkers, play a particularly important role in Energa Group.

Number of employees by gender

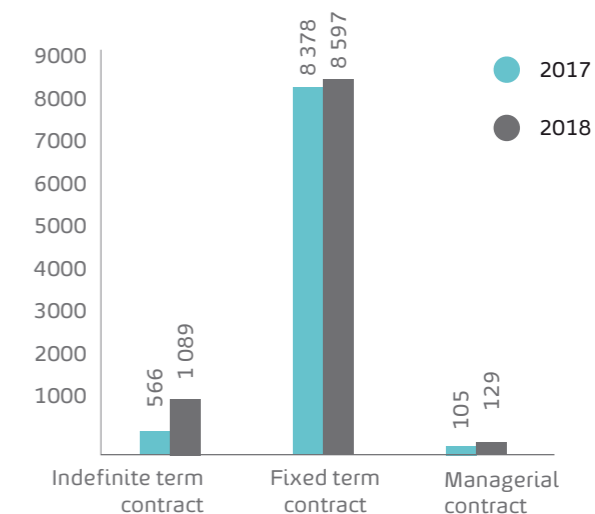
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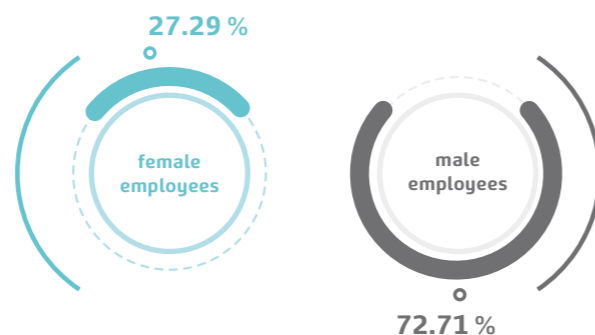
Number of employees by age group



Number of employees by contract type



Proportion of employees by gender in 2018



At the end of 2018, Energa Group – one of Poland's four largest power industry groups – employed a total of over 9.8k employees, including employed pursuant to civil law contracts, of which 27.29% constituted women and 72.71% constituted men.

The vast majority of our employees are people over 30 with previous professional experience.



4.2 Salary and employment conditions

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103-2 (401)
401-2

Various remuneration systems are in effect within Energa Group, resulting from the application of such regulations as the Sector-wide Collective Bargaining Agreement for Energy Industry Employees, remuneration regulations or the 'Agreement on safeguarding labour, social and union rights of Energa Group employees'. Individual companies ensure that the salary received by each employee is adequate to the type of their work, required skills and professional experience, as well as the level of responsibility. Most workers are employed pursuant to indefinite term contracts.

Benefits

Employees of Energa Group are entitled to a number of additional benefits, including private medical services, a Multisport card, participation in the Employee Retirement Program, special vouchers, life insurance on attractive terms and benefits paid out as part of the Employee Benefit Fund. To celebrate the Electrician's Day (14 August), employees of Energa Group are entitled to an additional day off.

The Energa Foundation provides assistance to employees who find themselves in a difficult situation.

GOOD PRACTICE

'Energa(y/a) for Health'

The main purpose of the program is to care for the physical and mental health of employees of Energa Operator SA. Research indicates that activity in this regard may improve staff efficiency, reduce absenteeism, increase their loyalty and promote the image of the employer, both among existing and potential staff.

The program is customised to meet the requirements of individual employees. It includes a number of varied activities, including:

- free eye examination
- International Depression Awareness Day
- 'World Cup 2018' competition
- Regular deliveries of fruit and juices to offices
- Workshops promoting health awareness – 'Healthy diet and efficiency at work'
- Workshops on ergonomics at work held by a physiotherapist



GOOD PRACTICE

The 'For Contribution to the Energy Industry' medal

The 'For Contribution to the Energy Industry' merit is conferred on employees of the energy industry with exceptional achievements in the field of new technical capabilities, research work, implementation of cutting-edge solutions of international technology and manufacturing of power equipment.

In 2018, medals were conferred in Warsaw, at the 'Polish Energy on the 100th Anniversary of Regaining Independence' event.

Three employees of the Distribution Business Line received ministerial awards, while another employee received a national award.

A family-friendly employer

Energa Group allows its employees to work a flexible time schedule, enabling them to choose the most comfortable working hours and helping them strike a healthy balance between work and time spent with the family. Energa celebrates the International Day of Families to help improve the family ties of its employees, letting them leave work earlier on that day and spend more time with their families.

Energa Group provides its employees with:

- individual working time schedule
- flexible working time schedule
- medical packages for the entire family
- Multisport card for the entire family
- partial funding of holiday trips (including summer and winter camps for children of our employees)
- refunding the costs of purchase of textbooks
- support in difficult situations and random events through the activities of Energa Foundation
- the ability for the families of employees to participate in sporting and cultural events

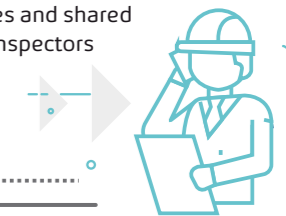
Occupational health and safety

Energa Group believes occupational health and safety to be one of its key areas of responsibility. We always care about the life and health of our employees by taking actions aimed at ensuring a safe working environment. Our priority is to reduce the number of workplace accidents, including through raising awareness among rank-and-file employees and management, as well as fostering a culture of occupational health and safety within the Group.

In connection with the implementation of the 'Energa Group's occupational health and safety policy', constituting an attachment to the cooperation agreement dated 20 December 2017, Group companies successively adapted their occupational health and safety activities to the provisions of the policy. The above document contains basic guidelines for Group entities with regards to taking action in order to ensure a high level of safety, both for employees and external contractors, and specifies roles and tasks in the occupational health and safety management process. It also includes guidelines concerning the achievement of objectives in the area of occupational health and safety, identification of legal requirement, providing training in occupational health and safety, monitoring and reacting to any accidents or failures, organisation of works, in particular dangerous works, communication, cooperation with business partners and social consultation.

A survey was carried out based on the Group's occupational health and safety policy among the management staff, concerning the functioning of the occupational health and safety area. Its objective was to examine the awareness of the role and responsibility of the management that plays a key role in the occupational health and safety management process, and the results of the process will be used as the basis for implementing relevant action in the areas specified by management staff.

Occupational health and safety was the theme of this year's Sixth Edition of the Conference of Social Labour Inspectors of Energa Group that took place between 11 and 12/12/2018. The conference was attended 50 participants, who discussed issues related to occupational health and safety, exchanged their experiences and shared problems encountered by inspectors in their everyday work.



103-1 (403) ■
103-2 (403)



GOOD PRACTICE

Defibrillators available to all employees

39 automatic external defibrillators (AED) were purchased by Energa Operator SA to improve the standard of first aid in the company.



39
automatic
external
defibrillators

As part of the initiative of purchasing AED's and installing them in the company's local offices, over 300 employees designated as responsible for administering first aid in each location underwent training in the practical use of these defibrillators.

Furthermore, as part of the 'Energa(y/a) for Health!' health awareness initiative, employees participated in first aid training courses. Company Energa Wytwarzanie SA purchased two defibrillators to be kept at its hydroelectric plants in Żydowo and Włocławek.



GOOD PRACTICE

OHSAS System

In 2018, Energa Operator SA continued implementation works aimed at ensuring that its internal processes and procedures in the area of occupational health and safety comply with the BS OHSAS 18001:2007 standard.

A detailed analysis and modification of process maps and procedures was carried out as per the requirements of the above standard and the assumptions of the process of consolidation of the Distribution Business Line. Newly-implemented components included e.g. mechanisms related to conduct in respect of near misses, modified evaluation tools used in the occupational health and safety inspection process in respect of own employees, uniform guidelines concerning the creation of occupational health and safety improvement plans, and completely new rules of performing occupational health and safety audits within the Distribution Business Line.

BS OHSAS 18001:2007



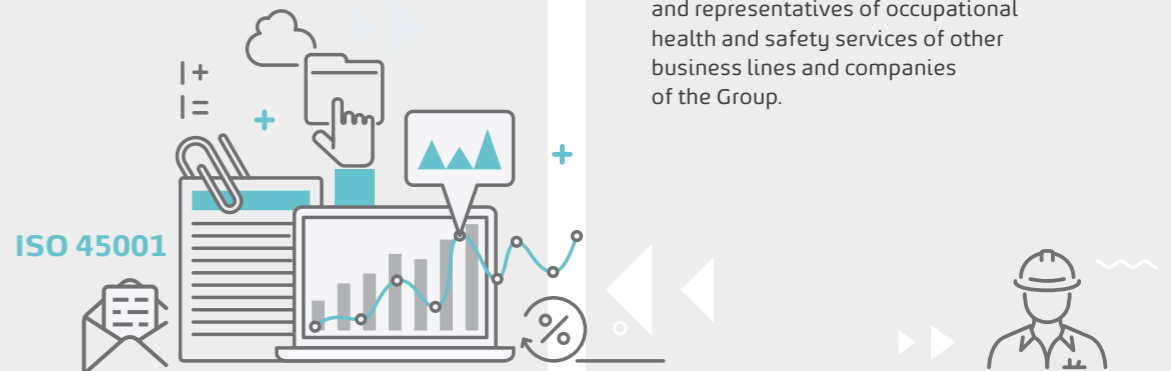
GOOD PRACTICE

Work on the translation of the ISO 45001 standard

In 2018, company Energa Operator SA became a member of the Polish ISO:45000 Forum Association and Technical Committee no. 276 at the Polish Committee for Standardisation.

As part of the cooperation, the company actively participated in works related to the translation and practical implementation of the new ISO 45001:2018 international standard, describing occupational health and safety management system standards for general application in Poland.

ISO 45001



GOOD PRACTICE

1st Conference of Distribution Business Line Occupational Health and Safety Services – 09 – 11/10/2018

The purpose of the conference was to improve the methods of work of occupational health and safety services, increase the level of their activities and exchange experiences and good practices. The conference took the form of lectures and panel discussions, with some elements of external training courses included.

Participants in the event also took part in a training session titled 'ABC – auditing observations and changes in behaviour'. Attendants at the conference included the Distribution Business Line occupational health and safety service and representatives of occupational health and safety services of other business lines and companies of the Group.

Occupational health and safety requirements in respect of employees and external contractors

G4-EU18 In order to safeguard the health and life of Group employees and external contractors performing works commissioned by the Group and comply with obligations resulting from applicable legal regulations, each Group employee and external contractor must complete a suitable induction training course in occupational health and safety, renewed at regular intervals. Employees must be familiarised with the rules and regulations in respect of occupational health and safety,

occupational risk and methods of protection against hazards, procedures in case of an accident, fire or malfunction, and a list of persons designated to provide first aid. In order to be permitted to perform their duties, employees and contractors must also obtain a medical certificate stating that there are no contraindications for working in a specific position, as well as specialist qualifications, if required.



Regulations applicable to this area

In accordance with the provisions of 'Energa Group's Occupational Safety and Health Policy', group Companies that outsource services must formulate requirements in the area of occupational health and safety applicable to external contractors and obligate the contractors to comply with these requirements.



Operations at the proving grounds in Bąkowo

Training courses for power industry experts employed by the Group and employees of external companies operating in the power sector continued at the proving grounds in Bąkowo owned by Energa Operator SA, used as a training and development location. Training courses in live electrical work constitute the marquee part of the unit's operations.

Number of persons trained in live electrical work in 2018

403
employees
of Energa Group



204
employees
of external
companies

Activities of the proving ground in 2017-2018 – all training courses

	2017	2018
Number of training courses	63	80
Numer of persons trained	799	1167
Of which Energa Group employees	617	939

Employees and associates represented in formal occupational health and safety commissions

403-1



76% of Energa Group employees are represented by occupational health and safety commissions created within the group



Tasks of the commission

- reviewing work conditions in the workplace
- performing regular assessments of the status of occupational health and safety
- opining measures implemented by the employer in order to prevent workplace accidents and occupational illnesses
- formulating conclusions relating to improving workplace conditions
- cooperating with the employer in the performance of its duties with regards to occupational health and safety

Individual companies within the Energa Group create occupational health and safety commissions that act as consulting and opining bodies with regards to occupational health and safety.

The commissions comprise representatives of both the employer and the employees. Representatives of the employer include the occupational health and safety service and a medical doctor providing preventing health care to employees, while the employees are represented by the social labour inspector. The commissions are chaired by employers or persons appointed by the company's board of directors, whereas the social labour inspector is appointed as the deputy chairman, and where no social labour inspector has been appointed, a representative of the workforce is elected by union organisations or by other means customary in a given Group company.

In 2018, the number of workplace accidents in the entire Energa Group was reduced from 61 to 51.

53 employees suffered injuries as a result of workplace accidents (63 in 2017). Out of all the 51 accidents, 50 were classified as minor and 1 was classified as fatal.

Actions in the area of occupational health and safety taken on the basis of 'Energa Group's Occupational Health and Safety Policy' are aimed at ensuring a high level of safety in the workplace for all employees. The Group's primary objective is to avoid any workplace accidents, near misses and exposure to factors harmful to health in the work environment, leading to occupational illnesses.

Procedures implemented by Energa Operator SA, 'Measurement of harmful factors in the workplace' and 'Procedures in respect of occupational diseases', describe the mechanisms used to monitor harmful factors in the workplace, react to any excess values of the factors and implement preventive action.

403-2

Number of workplace accidents across Energa Group



	2017	2018
Total number of days missed from work due to workplace accidents and injuries	3615	2 392
Total number of work-related accidents	61	51
of which fatal work-related accidents	0	1
Number of work-related occupational illnesses	0	2



Incidence of accident frequency by gender

2017		2018	
3.3	2.6	8.4	6.5

$$\text{incidence of accident frequency} = \frac{\text{total number of persons injured in workplace accidents}}{\text{total number of employees at the end of the reporting period}} \times 1000$$

Accident severity rate by gender

2017		2018	
48.6	8.9	58.7	50.4

$$\text{accident severity rate} = \frac{\text{total number of calendar days missed from work by employees injured in workplace accidents}}{\text{total number of persons injured in workplace accidents (except fatal accidents)}}$$

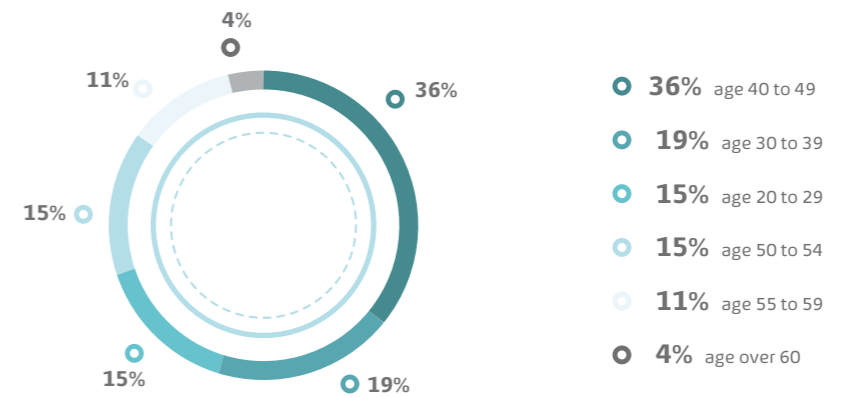
Wskaźnik wystąpienia chorób zawodowych

2017		2018	
0	0	0	0.000075

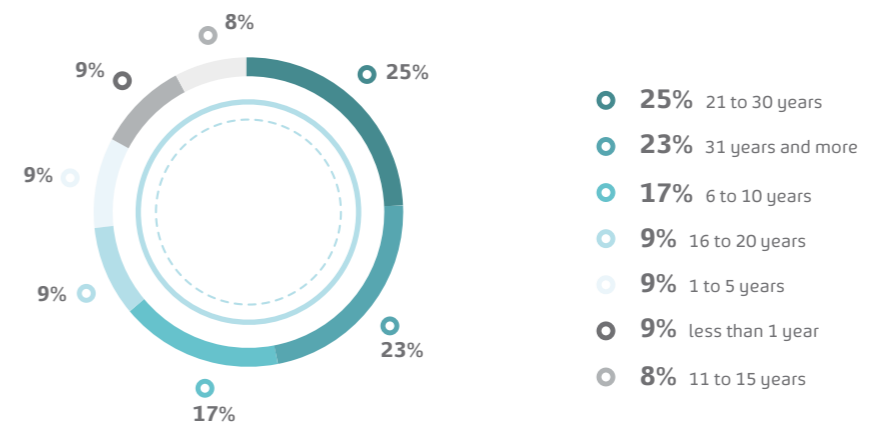
$$\text{incidence of occupational illnesses} = \frac{\text{total number of occupational illnesses}}{\text{total number of hours worked by employees}} \times 200\,000$$

Analysis of workplace accidents in Energa Group

Persons injured in workplace accidents by age

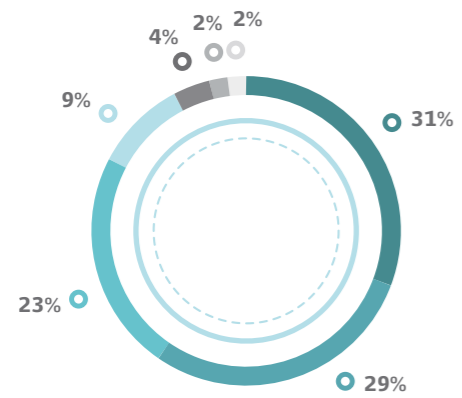


Persons injured in workplace accidents by years worked



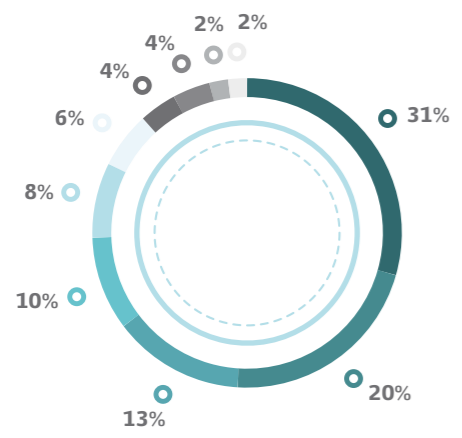
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Types of injuries



- 31% Displacements, sprains, twists, tears
- 29% Superficial wounds and injuries
- 23% Bone fractures
- 9% Internal injuries
- 4% Fire or chemical burns, boiling water or steam burns, frostbite
- 2% Multiple injuries
- 2% Shocks (acute reactions to stress, post-traumatic shock)

Types of accidents



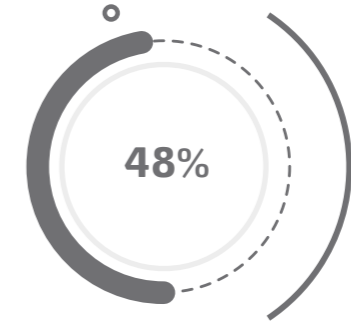
- 31% Same-level fall (slip and fall, trip)
- 20% Impact (running, hitting an obstacle, collision, fall, crash)
- 13% Impact by a moving object
- 10% Traffic collision
- 8% Contact with a sharp implement
- 6% Being caught in/on/between/under
- 4% Contact with electricity
- 4% Fall from a height
- 2% Contact with an electric arc
- 2% Animal bite

Occupational health and safety aspects in collective bargaining agreements in the Distribution Business Line

Agreements that include occupational health and safety-related aspects



Agreements that do not include occupational health and safety-related aspects



Due to the specific nature of its operations, the vast majority of collective bargaining agreements were made in the Distribution Business Line, and over half those included aspects related to occupational health and safety.

Internal legal instruments also include Work Regulations that contain provisions with regards to the safety and health of employees.

In 2018, agreements were made on the local level in the form of understandings and additional bargaining agreements applicable in specific plants. Aspects related to occupational health and safety included:

- provision of personal protection equipment
- training in occupational health and safety
- list of works performed in harmful and hazardous conditions
- occupational risk
- organisation of the workplace and work conditions
- protection of women and young workers in the workplace
- supportive meals
- equipment, tools and devices ensuring safety at work
- fire safety
- activities of accident investigation teams

Causes of an accident are defined as any irregularities or shortcomings that directly or indirectly contributed to the accident, related to material factors and organisation of work.

It would be an easy conclusion that accidents related to electrical shocks are the leading type of accident in the power industry. In reality, however, contact with electrical power is the cause of only 4% of all workplace accidents.

Improper behaviour constituted the cause in more than half of all recorded accidents. Such behaviours included errors in identifying hazards, improper employee conduct and unexpected external acts outside the employee's control.



4.3 Development and training

103-1 (404)
103-2 (404)
404-2

Energa Group operates many training programmes aimed at developing the competencies of its employees and preparing them for work aimed at achieving the company's strategic goals. Employees improve their specialist and language skills, receive funding for studies at secondary schools and upper educational institutions, as well as postgraduate courses and MBAs. Thanks to this, employees can develop during every stage of their professional career.

An important part of Energa Group's training policy is to ensure that employees can take advantage of their newly-acquired skills in the course of their duties and share their knowledge with other members of their team.

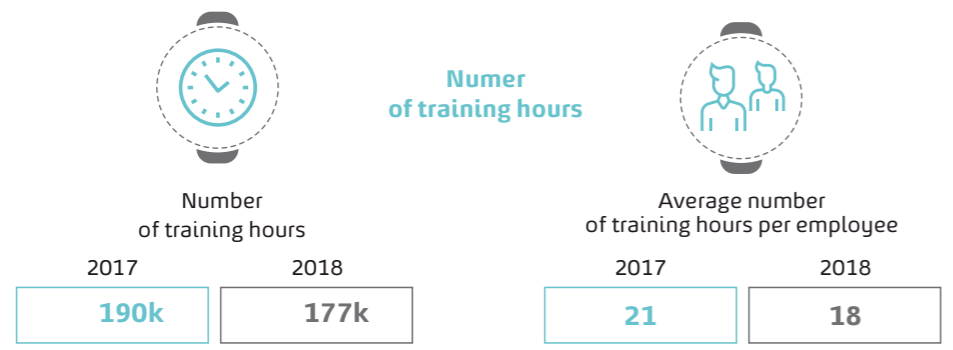
Proper management of the professional competence improvement area within Energa Group results in the increase in quality of tasks completed by employees and is aimed at achieving

measurable effects. Energa SA recommends solutions in this regards to Group companies, so that access to well-organised education can become a professional standard and generate the expected business value.

In order to duly comply with the requirements resulting from Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (GDPR), a GDPR-related training project that included every employee was implemented within Energa Group. Training sessions took the form of lectures and e-learning activities.

In 2018, employees of Energa Group completed a total of approx. 177k hours of training, 18 hours per employee on average

404-1



GOOD PRACTICE

Technical Academy

Technical Academy is a project primarily aimed at developing the Distribution Business Line's engineering and technical staff. Its purpose is to provide employees of the most important divisions in the organisation with competences

that are unique on the market, integrate them and create an environment that fosters the exchange of knowledge and experience.

Approx. 1500 people are enrolled in the Academy project. 69 training courses were held as part of the project in 2018.

404-2



GOOD PRACTICE

Expert Program

2018 was the fourth edition of the Expert Program in the Distribution Business Line. Training courses were held by experts chosen from among the employees of the organisation, who were happy to pass on their knowledge

and share their professional experience. Expert knowledge was of key importance in the context of organisational changes to the Distribution Business Line.

A total of 25 training courses were held for approx. 300 employees.

404-2



404-2

GOOD PRACTICE

Coach Development Program

Since 2013, Energa Operator SA has been operating an Internal Coach Development Program, the purpose of which is to discover persons with coaching potential, mainly in the human resources area, among employees of the company.

After receiving the required developmental support, these persons provide internal training courses in soft skills, based on demand reported by the company's organisational unit.

Training courses in 'stress management' were the most popular among Group employees in 2018.

Additional training was also provided in the following areas:

- public speaking
- efficiency and time- and self-management
- creative thinking
- feedback
- interpersonal communication with elements of assertive communication
- Customer service
- teamwork.



GOOD PRACTICE

Skill improvement program at Energa Group

October of 2018 saw the official inauguration of a pilot job placement program at Energa Group. Energa Operator SA and Energa Invest Sp. z o.o. entered into an understanding on cooperation in the organisation of job placement programs.

The job placement program is a reaction to Energa Operator SA's demand for employees with construction qualifications, required to perform works related to grid and power equipment operation, performance of capital works and verifying design documentation.

The job placement program is ran by Energa Invest Sp. z o.o., who possesses the requisite technical facilities and engineering and technical staff capable of designing overhead and cable medium-voltage and high-voltage power lines and power stations.

In accordance with the implementation of 'Energa Group's Human Resources Policy', the program is intended to cover all Energa Group companies whose needs can be met thanks to the program.



GOOD PRACTICE

Age Management Concept

Implementation of the Age Management Concept in the Distribution Business Line has been planned for 2017-2020. Its main purpose is to counteract the negative consequences of the aging of the staff, including the perspective of retirement of experienced employees.

As part of the concept, areas of the organisation threatened by numerous retirements are identified. Interns (graduates of secondary technical schools associated with the power industry or university graduates) are employed based on the so-called overlapping principle, meaning that young adepts learn the ins and outs of the profession under the eye of experienced employees so that they will be ready to step in when their older colleagues finally retire. Interns are selected primarily from pupils and students from secondary schools and universities under the Group's patronage.



404-2

Series of training courses in espionage and terrorist-related hazards

On 17 December 2018, representatives of Energa SA's Human Resources Department and Security Office, acting in cooperation with state security services, organised a training course in the area of security, concerning espionage and terrorist-related hazards.

The purpose of these training courses is to improve awareness among employees and associates of Energa group with regards to the hazards that they might encounter in connection with the strategic nature of the power industry. Additional training courses are planned for 2019.

4.4

102-41 ■

Dialogue with employees and trade unions

103-1 (402) ■
103-2 (402)

Social dialogue within Energa Group is a continuous and systematic process of cooperation between employers and representatives of the community, primarily taking the form of informational meetings, consultations, negotiations and arrangements. Representatives of labour unions are free to present their opinions, which are taken into account when taking decisions in matters relating to employees. The role of the dialog is to search for constructive and permanent solutions in the field of collective labour law, where shared values and mutual trust constitute a social capital.

Energa respects and observes all labour union freedoms, including freedom of setting up and joining labour unions.

At the end of 2018, intercompany and intracompany labour unions were active within the Group, mostly associated within 3 labour unions representing employees on the national level – Independent and Self-Governing Labour Union 'Solidarność', Labour Union of Engineers and Technicians and Association of Labour Unions of Energy Sector Employees.

As at 31 December 2017, 31 labour unions were active within the Group, and unionisation amounted to 55.9%. 5 412 employees of the Group were members of a labour union.

Employees subject to collective bargaining agreements

Energa Group	2017	2018
	98.70%	94.96%

Union membership percentage within Energa Group*



55.9%



approx. 5.4 k
Employees

Collective agreements – binding collective agreements include those signed by the organisation itself or employer associations that the organisation is a member of. These agreements may apply at the industry, national, regional, organisational or workplace level. The percentage also accounts for the 'Agreement on the safeguarding of employee, social and union rights for employees of Energa Group' made on 18 September 2017.

In 2018, the social dialog concerned such issues as the safeguarding of employee rights in connection with restructuring processes, remunerations and benefits for employees and retirees, social assets, organisational changes and sources of labour law.

Internal dialogue within Energa Group was carried out in accordance with applicable laws, in particular the labour code, trade unions act of 23 May 1991 and the Agreement on the safeguarding of employee, social and union rights for employees of Energa Group' made on 18 September 2017 in Gdańsk.

* only employees employed by Energa Group pursuant to an employment agreement

Ongoing collective disputes

2017

1. a multi-company dispute concerning 27 employers within **Energa Group**, including **Energa SA**, commenced further to a notice issued by labour unions on 12 July 2017, concluded by signing an agreement on 7 December 2017 – **dispute concluded**.

2. A collective labour dispute at employer **Energa Serwis Sp. z o.o.** in connection with a notice issued by labour unions on 28 July 2017. The dispute was concluded by signing an agreement on 16 August 2017 – **dispute concluded**.

3. A collective labour dispute at employer **Energa Elektrownie Ostrołęka SA** in connection with a notice issued by labour unions on 8 September 2017 – **dispute ongoing**.

2018

1. Continuation of the collective labour dispute at employer **Energa Elektrownie Ostrołęka SA** in connection with a notice issued by labour unions on 22 August and 8 September 2017. The dispute is currently in the mediation stage – **dispute ongoing**.

2. A collective labour dispute at employer **Energa Kogeneracja Sp. z o.o.**, commenced further to an announcement made by labour unions on 22 May 2018. The collective dispute was concluded by signing an agreement on concluding the collective dispute dated 29 November 2018 – **dispute concluded**.

3. A collective labour dispute at employer **Energa Serwis Sp. z o.o.**, commenced further to an announcement made by the Inter-Enterprise Branch of the Independent and Self-Governing Labour Union 'Solidarność' for the Mazowsze Region at Energa Elektrownia Ostrołęka SA, operating in Energa Serwis Sp. z o.o., relating to the terms of the memorandum of agreement made on 21 November 2017 on determining the increase of salaries of employees of Energa Group in 2018. The dispute was concluded on 10 December 2018 due to the labour unions withdrawing their demands that served as the subject matter of the dispute – **dispute concluded**.

Employers within Energa Group comply with statutory deadlines on reporting significant events taking place within their companies and take into consideration and apply the provisions of the above-mentioned Agreement of September 2017 and individual provisions of collective bargaining agreements (e.g. in respect of company Energa Wytwarzanie SA) concerning the rules of cooperation between parties in conditions of restructuring, consolidation, etc.

■ 402-1

4.5 Support for employee volunteering programmes

413-1 ■ Many employees of Energa Group are happy to become involved in charitable drives, organised both on the central and local level:

- they donate blood
- they collect funds by participating in aid programmes or fundraising drives
- they gather bottle caps and other items that are in demand at a given time
- they donate 1% of their income tax to those in need



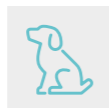
Volunteering programmes in Energa Group

Many employees of Energa Group are socially aware and are ready to voluntarily participate in charitable campaigns or set up campaigns of their own.



'Get involved, collect bottle caps'

Throughout 2018, employees of Energa Wytwarzanie SA participated in a bottle cap and used paper collection drive in support of the Gdańsk Hospice Foundation.



'Share the warmth'

In November 2018, employees of Energa Obrót SA organised a fundraising drive in support of the 'Promyk' Animal Shelter in Gdańsk. The campaign was also aimed at promoting the adoption of older dogs.



'Noble package'

As part of the campaign, employees of Energa Group purchased a large amount of necessary products and ran a fundraising drive to purchase appliances for families in need during the pre-Christmas period.



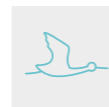
Aid for children from the Pomeranian Hospice

Employees of Energa Group participated in a campaign in support of children from the Pomeranian Children's Hospice, running a childcare product, food, toy, game and candy collection drive.



Aid for the Municipal Hospice in Płock

Employees of Energa Obrót SA in Płock organised a fundraising drive in support of the Municipal Hospice. 61 donators from 8 departments raised a total of PLN 1315. The employees used the raised funds to purchase products such as cotton sheets, incontinence pads, ointments used to treat inflammatory rashes. They also prepared a package for the hospice's staff.



'Energetic Bird Ringers'

'Energetic Bird Ringers' is the only project of its kind in Europe. Employees of Energa Group collaborate with environmental specialists on ringing white storks. The project will provide additional information about the life of this bird species, their customs and migration routes, as well as hazards that they are exposed to, thus contributing to their protection.



'Package from you'

Employees of Energa Elektrownia Ostrołęka SA organised a charitable drive in order to gift presents to around 30 children from the 'Korczakówka' Foster Care Unit in Ostrołęka. This year marked the fourth edition of the campaign.



GOOD PRACTICE

'Active and Charitable'

'Active and Charitable' is an initiative that brings together the employees of Energa Group, their families and friends around living a healthy lifestyle and the common idea of helping others.

2018 marked the fifth edition of the 'Active and Charitable' program. Over a period of 6 months, participants in the campaign had to cover a distance of 700k kilometres by walking, jogging or cycling. Reaching the above milestone would result in the donation of the sum of PLN 350k to children from foster care institutions and, for the first time in the program's history, senior citizens in care homes. In total, employees of the Group were able to cover 728k kilometres.

The campaign is becoming more and more popular each year, as evidenced by the growing number of participants.

Over the five editions of the 'Active and Charitable' program, our employees travelled a total of over 2.4 million kilometres and donated more than one million Polish złoty to various institutions.

Edition/year	2014	2015	2016	2017	2018
Number of participants	204	443	477	561	611
Number of kilometres travelled	242k	350k	515k	602k	728k
Amount donated [PLN]	240k	140k	150k	150k	350k



KROPELKA ENERGII



339.3
litres of blood donated
during the Droplet
of Energy campaign in 2018

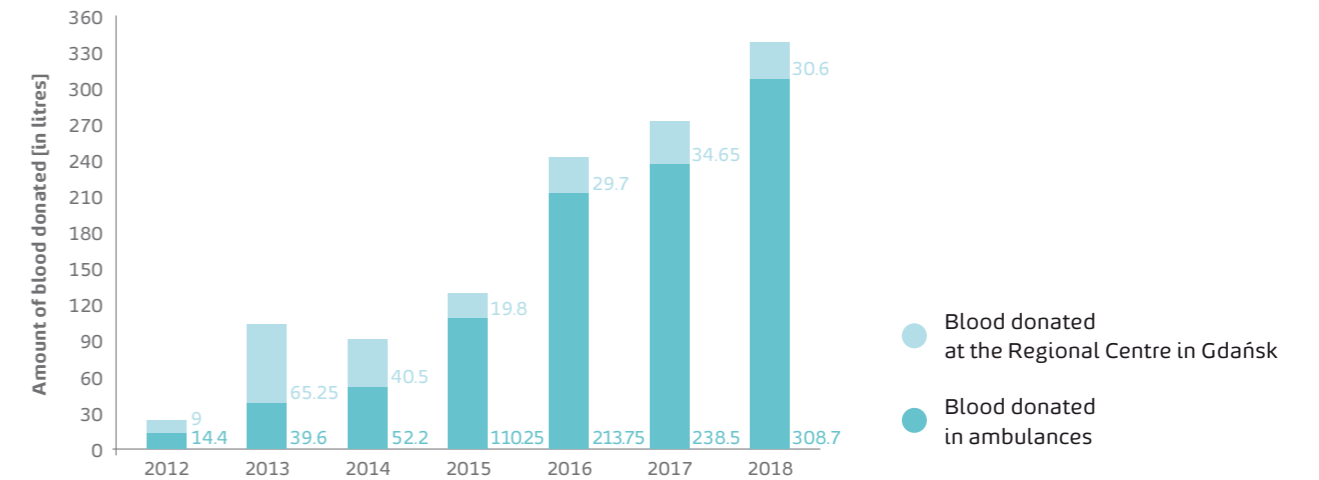
'Droplet of Energy' Foundation

Employees of Energa Group and their friends have donated over 1200 litres of blood over the six years of the 'Droplet of Energy' Informal Blood Donor Club, set up by Piotr Krysiński and Tomasz Rubanowicz, employees of Energa Group. Members of the club made more than 2600 donations of 450 ml each during a donation drive organised on the premises of the Olivia Business Centre in Gdańsk. The number of donors participating in the program is steadily increasing.

In 2018, 147 more donors donated blood than in 2017. Total donations amounted to 339.3 litres of blood (66.15 litres more than in the previous year). The donated blood was given to hospitals for use in surgeries and transfusions for cancer patients.

The 'Droplet of Energy' Foundation promotes the idea of and active participation in blood donation drives and carries out educational campaigns in order to combat false myths related to blood donation. The Regional Centre of Blood Donation and Blood Treatment in Gdańsk is a regular partner of the campaigns organised by the foundation and provides specialised ambulances operated by professional staff.

Amount of blood donated over the past years as part of the 'Droplet of Energy' campaign [in litres]



Other blood donation drives in Energa Group

Apart from the above campaign, an Honorary Blood Donors Club operates as part of company **Energa Serwis sp. z o.o.**; the club is made up of employees of the company, and the employer rewards them each year for participating in this noble project.

Another Honorary Blood Donors Club, **ENERGA-KREW**, operates as part of company **Energa Operator SA** and has 100 registered members. In spring and autumn 2018, around 40 employees donated blood at a mobile blood donation point set up on the premises of the company.

403-2 ■ Number and type of workplace accidents

	Number of fatal workplace accidents				Number of minor workplace accidents				Number of serious workplace accidents			
	2017		2018		2017		2018		2017		2018	
	W	M	W	M	W	M	W	M	W	M	W	M
Services and Other	0	0	0	0	1	0	4	1	0	0	0	0
Distribution Business Line	0	0	0	1	7	37	2	34	0	0	0	0
Sales Business Line	0	0	0	0	0	2	1	2	0	0	0	0
Generation business line	0	0	0	0	0	14	0	6	0	0	0	0
Energa Group	0	0	0	1	8	53	7	43	0	0	0	0

403-2 ■ Number of accidents and work-related occupational-illnesses

	Total number of all accidents				Number of work-related occupational illnesses			
	2017		2018		2017		2018	
	W	M	W	M	W	M	W	M
Services and Other	1	0	4	1	0	0	0	0
Distribution Business Line	7	37	2	35	0	0	0	1
Sales Business Line	0	2	1	2	0	0	0	0
Generation business line	0	14	0	6	0	0	0	1
Energa Group	8	53	7	44	0	0	0	2

W – women M – men

* Data for 2017 was recalculated according to the organisational structure of Energa Group in 2018. There were 2 multi-casualty incident in 2018, one in the Distribution Line and one in Sales line.

Injury and accident seriousness rates

	Injury rate – IR				Accident seriousness rate			
	2017		2018		2017		2018	
	W	M	W	M	W	M	W	M
Services and Other	2.1	0.0	6.3	1.1	3.0	0.0	3.5	30.0
Distribution Business Line	6.8	9.1	1.8	8.3	55.1	60.0	8.5	54.4
Sales Business Line	0.0	4.0	1.5	6.1	0.0	124.0	31.0	4.3
Generation business line	0.0	11.1	0.0	4.7	0.0	45.5	0.0	53.3
Energa Group	3.3	8.4	2.6	6.5	48.6	58.7	8.9	50.4

Due to the introduction of a new indicator concerning persons working for and under the supervision of the organisation, the injury rate does not account for managerial contracts.

W – women M – men

403-1 Percentage of employees represented in formal occupational health and safety commissions

	total number of employees represented by the specified commissions (cumulatively)	percentage of employees represented by commissions vs. the total number of employees
	2018	
Energa SA	0	0%
Energa Operator SA	5047	100%
Energa Obrót SA	0	0%
Energa Elektrownie Ostrołęka SA	556	99%
Energa Kogeneracja Sp. z o.o.	173	99%
Energa Ciepło Kaliskie Sp. z o.o.	138	99%
Energa Wytwarzanie SA	250	98%
Energa Oświetlenie Sp. z o.o.	0	0%
Energa Ciepło Ostrołęka Sp. z o.o.	0	0%
Energa Centrum Usług Wspólnych Sp. z o.o.	310	99%
Energa Serwis Sp. z o.o.	326	99%
Energa Invest Sp. z o.o.	0	0%
Enspirion Sp. z o.o.	0	0%
Energa Informatyka i Technologie Sp. z o.o.	0	0%
Energa Operator Wykonawstwo Elektroenergetyczne Sp. z o.o.	0	0%

Percentage of employees represented in formal occupational health and safety commissions

	total number of employees represented by the specified commissions (cumulatively)	percentage of employees represented by commissions vs. the total number of employees
	2018	
Energa Logistyka Sp. z o. o.	324	98%
Energa Slovakia s.r.o.	0	0%
EOB PGK1 Sp. z o.o.	0	0%
ENSA PGK8 Sp. z o.o.	0	0%
Energa Finance AB (publ)	0	0%
Centrum Badawczo-Rozwojowe im. M. Faradaya Sp. z o.o.	0	0%
Energa Ochrona Sp. z o.o.	313	98%
RGK Sp. z o.o.	0	0%
Energa Group	7437	76%

403-2 ■ **Number and type of accidents and accident incidence rate among persons working for and under the supervision of the organisation**

	Number of fatal workplace accidents		Number of minor workplace accidents		2018 Number of serious workplace accidents		Total number of all accidents		Injury rate	
	K	M	K	M	K	M	K	M	K	M
	Services and Other	0	0	0	0	0	0	0	0	0
Distribution Business Line	0	0	0	0	0	0	0	0	0	0
Sales Business Line	0	0	0	0	0	0	0	0	0	0
Generation business line	0	0	0	0	0	0	0	0	0	0
Energa Group	0	0	0	0	0	0	0	0	0	0

W – women M – men

102-8 ■ **Number of employees by gender**

	2017		2018	
	Women	Men	Women	Men
Services and Other	496	487	654	981
Distribution Business Line	1 037	4 323	1 105	4 359
Sales Business Line	683	507	692	512
Generation business line	241	1 275	228	1 284
Energa Group	2 457	6 592	2 679	7 136

Number of employees by gender and type of employment agreement

102-8

	Fixed term		2017 Indefinite term contracts				Fixed term		2018 Indefinite term contracts			
	W	M	W	M	W	M	W	M	W	M	W	M
	Services and Other	48	77	431	375	17	35	116	407	522	523	16
Distribution Business Line	72	189	964	4 109	1	25	98	212	1 006	4 131	1	16
Sales Business Line	97	45	584	454	2	8	106	65	581	424	5	23
Production Business Line	11	27	226	1 235	4	13	7	78	218	1 192	3	14
Energa Group	228	338	2 205	6 173	24	81	327	762	2 327	6 270	25	104

W – women M – men

Number of employees employed pursuant to indefinite term agreements, by gender and work time

102-8

	Full time		2017 Part time		Full time		2018 Part time	
	W	M	W	M	W	M	W	M
Services and Other	423	368	8	7	513	513	9	10
Distribution Business Line	961	4 106	3	3	1 003	4 129	3	2
Sales Business Line	576	451	8	3	574	423	7	1
Production Business Line	225	1 232	1	3	217	1 189	1	3
Energa Group	2 185	6 157	20	16	2 307	6 254	20	16

W – women M – men

102-8 ■ Number of employees employed based on employment agreements, by region and agreement type

	2018					
	Services and Other		Services and Other		Sales Business Line	
	Fixed term	Indefinite term	Fixed term	Indefinite term	Fixed term	Indefinite term
dolnośląskie	0	0	0	0	0	0
kujawsko-pomorskie	51	95	28	726	7	57
lubelskie	0	0	0	0	0	0
lubuskie	0	0	0	0	0	0
łódzkie	0	4	8	65	0	0
małopolskie	0	0	0	0	0	0
mazowieckie	96	173	68	637	7	107
opolskie	0	0	0	0	0	0
podkarpackie	0	0	0	0	0	0
podlaskie	0	0	0	0	0	0
pomorskie	253	588	104	1565	116	587
śląskie	0	0	0	0	0	0
świętokrzyskie	0	0	0	0	0	0
warmińsko-mazurskie	36	54	43	762	31	111
wielkopolskie	51	101	33	902	6	88
zachodniopomorskie	36	30	26	480	4	52

Number of employees employed based on employment agreements, by region and agreement type

102-8

	2018			
	Generation Business Line		Energa Group*	
	Fixed term	Indefinite term	Fixed term	Indefinite term
dolnośląskie	0	0	0	0
kujawsko-pomorskie	3	27	89	905
lubelskie	0	0	0	0
lubuskie	0	0	0	0
łódzkie	3	22	11	91
małopolskie	0	0	0	0
mazowieckie	53	825	224	1742
opolskie	0	0	0	0
podkarpackie	0	0	0	0
podlaskie	0	0	0	0
pomorskie	17	144	490	2884
śląskie	0	0	0	0
świętokrzyskie	0	0	0	0
warmińsko-mazurskie	1	210	111	1137
wielkopolskie	4	138	94	1229
zachodniopomorskie	4	44	70	606

* Additionally, 3 employees were employed in 2018 by company Energia Slovakia and worked outside the borders of Poland (in Slovakia).

401-1 Number of newly-employed employees by gender and age

	2018					
	women			men		
	aged <30	aged 30-50	aged >50	aged <30	aged 30-50	aged >50
Services and Other	67	89	16	79	249	193
Distribution Business Line	64	103	18	111	120	34
Sales Business Line	15	19	0	12	30	2
Production Business Line	4	7	1	40	60	18
Energa Group	150	218	35	242	459	247

401-1 Percentage of newly employed employees by gender and age

	2018					
	women			men		
	aged <30	aged 30-50	aged >50	aged <30	aged 30-50	aged >50
Services and Other	4.1%	5.4%	1.0%	4.8%	15.2%	11.8%
Distribution Business Line	1.2%	1.9%	0.3%	2.0%	2.2%	0.6%
Sales Business Line	1.2%	1.6%	0.0%	1.0%	2.5%	0.2%
Production Business Line	0.3%	0.5%	0.1%	2.6%	4.0%	1.2%
Energa Group	1.5%	2.2%	0.4%	2.5%	4.7%	2.5%

Indicators in business lines are compared against the employment level in a given line.

Number of departing employees by gender and age

	2018					
	women			men		
	aged <30	aged 30-50	aged >50	aged <30	aged 30-50	aged >50
Services and Other	13	59	7	26	54	36
Distribution Business Line	8	23	28	16	48	99
Sales Business Line	12	31	2	6	39	4
Production Business Line	2	7	10	16	32	52
Energa Group	35	120	47	64	173	191

Percentage of departing employees by gender and age

	2018					
	women			men		
	aged <30	aged 30-50	aged >50	aged <30	aged 30-50	aged >50
Services and Other	0.8%	3.6%	0.4%	1.6%	3.3%	2.2%
Distribution Business Line	0.1%	0.4%	0.5%	0.3%	0.9%	1.8%
Sales Business Line	1.0%	2.6%	0.2%	0.5%	3.2%	0.3%
Production Business Line	0.1%	0.5%	0.7%	1.1%	2.1%	3.4%
Energa Group	0.4%	1.2%	0.5%	0.7%	1.8%	1.9%

Indicators in business lines are compared against the employment level in a given line.

Average number of training hours per employee, by gender and employment category

	Employees in managerial and upper positions				Managerial in positions lower than managerial			
	2017		2018		2017		2018	
	W	M	W	M	W	M	W	M
Services and Other	8	15	18	20	7	16	12	16
Distribution Business Line	62	34	27	20	25	24	15	22
Sales Business Line	26	37	21	27	11	16	15	12
Production Business Line	37	38	44	40	15	12	17	9
Energa Group	39	32	25	23	16	20	15	18

W – women M – men

405-1 Number of employees by gender and age group

	2017						2018					
	women			men			women			men		
	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50
Services and Other	64	339	93	89	265	133	98	429	127	104	574	303
Distribution Business Line	57	655	325	229	2 406	1 688	94	675	336	266	2 344	1 749
Sales Business Line	133	488	62	65	364	78	115	506	71	61	365	86
Production Business Line	21	126	94	56	553	666	16	124	88	73	567	644
Energa Group	275	1 608	574	439	3 588	2 565	323	1 734	622	504	3 850	2 782

405-1 Number of employees by employment category, gender and age group

	2018											
	employees in management and upper positions						employees in positions lower than management					
	women			men			women			men		
	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50
Services and Other	0	48	17	4	103	24	98	381	110	100	471	279
Distribution Business Line	1	54	21	3	333	212	93	621	315	263	2 011	1 537
Sales Business Line	3	57	7	5	88	14	112	449	64	56	277	72
Production Business Line	0	18	9	1	59	44	16	106	79	72	508	600
Energa Group	4	177	54	13	583	294	319	1 557	568	491	3 267	2 488

Composition of supervisory bodies by gender and age. Number of members of the supervisory board.
405-1

	2018					
	women			men		
	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50
Services and Other	0	3	2	0	2	5
Distribution Business Line	0	2	0	0	4	3
Sales Business Line	0	3	0	0	1	3
Production Business Line	0	5	1	0	8	12
Energa Group	0	13	3	0	15	23
including foreigners	0	0	0	0	0	0

Composition of the board of directors by gender and age. Number of members of the board.
405-1

	2018					
	women			men		
	aged < 30	aged 30-50	aged > 50	aged < 30	aged 30-50	aged > 50
Services and Other	0	2	3	0	8	6
Distribution Business Line	0	0	0	0	4	1
Sales Business Line	0	0	0	0	7	0
Production Business Line	0	2	0	0	8	5
Energa Group	0	4	3	0	27	12
including foreigners	0	0	0	0	0	0

5

A trusted member of the community



5.1

413-1 ■ A trusted member of the community

The large scale of Energa Group's operations and the strategic importance of products that the corporation supplies to its Customers and consumers make Energa's role in the everyday life of local communities and the entire Polish society particularly important. Energa Group is aware of its responsibility and impact on the environment, and for many years now has been implementing the concept of sustainable development. Striving to continuously improve the quality of its products and their reliability,

Energa Group simultaneously makes every effort to limit its negative impact on the natural environment, develop its dialogue with stakeholders, cooperate with social partners and support cultural and sporting initiatives that are important to local communities. By doing so, Energa Group not only reinforces its image of a reliable partner and trusted neighbour, but also contributes to building a sense of security, mutual trust and freedom of action in the entire economic, institutional and social environment.



Achievement of goals in 2018 and challenges for 2019

Energa Group focused on continuing its pursuit of goals set in the previous year in the social area; the most important of these goals are as follows:

Goals for 2018

Taking action in support of local communities in response to their needs

Involvement in initiatives that rally the entire society around positive values

Achievement

Development of the 'Energa for You' program, which involved:

- a) supporting educational initiatives aimed at improving awareness of the power industry and developing educational programs, in particular the digitisation of the Planet of Energy program
- b) development of local youth sports
- c) activation of senior citizens by means of the Senior Energy program
- d) the 'Energa in your municipality' project, as part of which mobile consultants were available to answer queries from members of the public in municipalities where Energa Obrót does not operate brick-and-mortar sales outlets. An intelligent 'Smart Parking' system was installed in Gdańsk and Pelplin. The system helps drivers quickly find free parking spaces. The system reduces unnecessary vehicle traffic and contributes to reducing exhaust emissions.

Involvement in the celebrations of the 100th anniversary of Polish independence.

Cooperation with the 'Solidarność' Independent Self-Governing Trade Union in Gdańsk in supporting the celebration of the 38th anniversary of August '80 and the 30th anniversary of the May and August 1988 labour strikes.

Patronage of the World War II Museum.

Running the 10th edition of the 'Shine with Energa' project (started in 2018, winners will be selected in 2019).

Development of cooperation with social partners, creation and development of intersectoral partnerships



Energa supports students who study at universities abroad. The Energa Foundation joined the 'Bona Fide' initiative, organised by the 'Orlen – Dar Serca' Foundation, becoming part of a broad alliance of five corporate foundations set up by partially state-owned companies (J.K. Steczkowski BGK Foundation, Energa Foundation, Lotos Foundation, Lotto Foundation and 'Orlen – Dar Serca' Foundation).

The 'Clean Energy' Turek Energy Cluster – a public-private partnership with the goal of improving the energy security and efficiency of the municipality and its inhabitants, in particular using locally-available and renewable sources of energy.

A Computer Emergency Response Team (CERT) has been created. Its main role is to handle global computer security incidents, as well provide early warning, detect hazards, carry out security assessments and audits and consult on matters related to computer security.



+

Objectives for 2019

Increasing the number of stakeholders taking an active part in the dialogue

Improving the efficiency assessment process and introducing indicators measuring the level of accomplishment of goals in individual areas of the CSR strategy.

Developing initiatives as part of the Energy for You program

Being involved in the celebrations of the 100th anniversary of Polish independence

Supporting the development of industry schools



Nikodem Rachoń
CSR Department Manager at Energa SA

Activities in the field of CSR combine many diverse issues and directions. That's why every corporate social responsibility strategy must be implemented within a broad perspective that accounts for all stakeholders. Energa Group strives to be an example for other state-owned and private companies, and we therefore focus not only on such areas as supporting vocational education or building partnerships with social partners, but also other aspects that are sometimes overlooked by other companies – on the Polish people as a national community united by common history and tradition.



5.2 Impact of capital works on social and economic life

Social importance of capital works and the role of innovation

As one of the key players in the Polish energy market, Energa Group has a particular responsibility. On the one hand, the Group has made it its goal to ensure a stable supply of energy at affordable prices to consumers in areas where it operates, which in practice requires the Group to expand and modernise its distribution grid, as well as construct modern, efficient generating facilities. On the other, capital works must be carried out in a way that will take into account both the interests of neighbouring local communities and the natural environment, as well as the long-term horizon of sustainable development. In order to reconcile these goals, Energa Group not only invests in new solutions available on the market, but also develops its own innovative concepts and projects.

Without a stable supply of energy, it's difficult to imagine any household living a peaceful life or any business being successful. Today, transfer and distribution grids are fundamental components of infrastructure, indispensable for the development of all branches of the economy. Development of the power grid is therefore an area of strategic importance for social and economic development. It must be noted that any capital works within the power grid operated by Energa Operator SA, irrespective of their nature, are a source of concern among the local community. People are afraid of changes in their immediate surroundings, fearing that they might negatively impact their comfort of living. The company organises public consultations in order to provide the communities with solid knowledge on the company's operations and planned capital works. During the consultations, representatives of Energa Operator SA are able to provide local residents with information about their plans of capital works. The meetings are an opportunity for discussing various aspects of specific projects, such as the location, level of noise or the impact of capital works on the natural environment. These discussions contribute to alleviating the community's fears and improve the local resident's opinion of the project. Other initiatives that aid in the development of relations with local communities based on mutual trust and responsibility include: transparent and clear communication with local residents with regards to ongoing and planned outages, and providing information about any inconveniences caused by the production process or ongoing renovation works aimed at keeping the grid efficient and reducing grid losses¹.

Energa Group's strategic documents put particular focus on the effect of Energa Group's operations on the life of local communities and the natural environment. This applies to both 'Energa Group's Business Strategy for 2016-2020' and 'Energa Group's

Strategy for Sustainable Development and Corporate Responsibility', complementing the former and updated in 2018.

The guidelines found in the above documents are followed in all areas of Energa Group's operations, including capital works and innovations. According to the 'Business Strategy', the development of the Group's power infrastructure must balance the interests of all of its stakeholders – not only shareholders or investors, but also inhabitants of areas where the company operates and which it impacts.

To this end, Energa Group companies strive to:

- use energy resources and raw materials in a rational manner, counteract the threat of natural disasters and ensure Poland's energy security
- support research and projects aimed at ensuring sustainable development
- reduce emission of pollutants and waste stream
- systematically improve the reliability and safety of energy generation and distribution
- engage in a regular dialogue with representatives of local communities
- foster cooperation with social partners and build and develop intersectoral partnerships.

In an attempt to build a strong position as an innovator and obtain a competitive advantage, in 2018 Energa Group adopted and commenced the implementation of its Strategic Research Agenda (SAB) for 2019-2028. The document is a roadmap that specifies in detail the directions for the R+D+I (research, development, and innovation) area in Energa Group. While developing SAB, the Group took into account its strategy, structure and organisational culture, as well as the assets it holds. The Agenda helps the Group focus on the most appealing and priority activities in the field of R+D+I.



The documents points to three main pillars of development:

- business and technological improvements
- innovative business models
- future technologies.

All companies forming part of Energa Group are required to follow the guidelines of strategic documents. Supervision over the implementation of the business strategy, sustainable development and corporate responsibility, and the Strategic Research Agenda within the Group is ensured by competent units of the dominant entity, Energa SA, responsible for strategy, corporate governance, development and innovation and corporate social responsibility.

103-1 (EU)
103-2 (EU)



¹ According to calculations of the energy balance in the grid operated by Energa Operator SA, 4.65% of total energy introduced into the grid was written off.



Energa Group's innovative capital works and projects

103-1 (413) ■
103-2 (413)
413-1

In accordance with the above guidelines, Energa Group companies commenced, continued or completed a broad array of capital works projects or innovative activities during the reporting period.



Social environment

Many of the initiatives implemented by Energa Group during the reporting year involved the participation of local governments.



Łukasz Malinowski
deputy manager at the Corporate Governance Department, Energa SA

Our ambition at Energa Group is to boldly and innovatively step outside the core business of our main business lines: generation, distribution and sales of electricity. We want to expand our range of services, products and solutions to maintain our strong position in an increasingly competitive market. However, pursuing that ambition leads to a greater responsibility – all that we propose, we must implement in the immediate neighbourhood of larger or smaller local communities, and therefore their welfare must be our priority. That's why we make sure that all our capital works and innovative projects bring not only purely financial profits, but also benefits for the communities among whom we operate.



Energa Living Lab

In 2018, Energa Group completed the Energa Living Lab project. The purpose of the endeavour, implemented by company Enspirion Sp. z o.o., was to promote tools used to manage electricity demand, as well as spread awareness as to the importance of the rational use of energy among consumers. The project was implemented in the form of tests carried out in a living laboratory comprising 300 households from across Gdynia. For around two years, participants from seven districts of the town tested innovative solutions devised by company Enspirion Sp. z o.o. that help control energy consumption on an ongoing basis.

The basic purpose of the project was to test out tools in actual conditions. Families participating in the project checked how the tools and products meant to reduce energy consumption actually work in practice. The result? Electricity consumption was reduced by approx. 104 MWh, while CO2 emission was reduced by a total of 124 tonnes. The project received funding from the European Commission and the National Environmental Protection and Water Management Fund as part of the LIFE+ instrument.

Street lighting and smart parking

During the reporting period, company Energa Oświetlenie Sp. z o.o., working in tandem with company Comarch, implemented a smart parking project on Długie Ogrody street in Gdańsk. The Group had previously tested the project in Pelplin. It was implemented as part of SOLEZ – an EU program of smart solutions supporting low emission Zones and other low-carbon mobility policies in EU cities.

'Smart Parking' is a system meant to help drivers find free parking spaces in increasingly crowded city centres. It also reduces unnecessary vehicle traffic, minimising the risk of traffic jams and decreasing vehicle emissions. Thanks to a purpose-designed application (Comarch SmartParking), owners of Android devices can receive information about free parking spaces in the near vicinity, time of use of marked parking spaces, occupancy rates at given times of day and night, and general interest of drivers in parking spaces in this area of the city.

The system covered 200 out of 300 total parking spaces located on Długie Ogrody street. This location in Gdańsk was chosen for testing the smart parking system, as Długie Ogrody street is a particularly important place in Gdańsk's inner centre. It's located close to the Old Town, in a tourist area with many public institutions. Parking spaces in this area are used by local residents, employees of local businesses and institutions, as well as tourists.

Smart crosswalks

During the reporting period, company Energa Oświetlenie sp. z o.o. installed additional lighting on six pedestrian crosswalks, in the form of special lamps that improve the visibility of pedestrians on the crosswalks. The light fixtures help drivers correctly assess the situation on the crosswalk, while pedestrians can better see any oncoming vehicles. The lighting system was designed to include specialist LED light fixtures that focus a stream of white light directly on the crosswalk and the pavement. The Town Hall in Puck selected 6 crosswalks where the solution was to be implemented in order to reduce the risk of accidents involving children (access paths to schools and kindergartens) and senior citizens (access paths to medical care units). Crosswalks located on Szkolna, Hallera, Wejherowska and I Armii Wojska Polskiego streets were equipped with additional lighting.



Ericsson BTS tower

In 2018, Energa Oświetlenie Sp. z o.o. entered into an agreement with company Ericsson, concerning the construction of a cutting-edge ZeroSite lamp – a lighting tower with an inbuilt micro-BTS (base transceiver station) – in the town of Rumia, on Lech Kaczyński roundabout. The lighting tower will therefore simultaneously act as a mobile telecommunications base station, helping increase the coverage of mobile networks and improve the quality of 3G and 4G mobile services, with 5G services to be provided in the future. The project will ensure improved access to mobile internet and mobile networks in areas where it might have been poorer before due to their distance from transceiver stations. During the reporting period, works on the construction of the ZeroSite tower in Rumia were ongoing.



Experimental energy storage at the Bystra wind farm

Since 2017, companies Energa Wytwarzanie SA and Energa Operator SA have been implementing a joint research project together with other domestic and foreign partners. The purpose of the project is to obtain knowledge and experience with regards to the ability to take advantage of energy storage technology to improve the flexibility of operation of the National Power System.

For this purpose, a prototype energy storage will be constructed at the Bystra wind farm. After its construction is completed, the storage will undergo tests in order to verify its capability of stabilising the power system in case of overproduction or underproduction of power from renewable energy sources (in this case wind turbines). The storage will ultimately have a power output of 6 MW, a storage capacity of 27 MWh, and will comprise two sets of batteries: lithium-ion and lead-acid.

Construction of the storage is part of the 'Smart Grid Demonstration Project in Poland' project implemented by NEDO, a Japanese government organisation, companies from the HITACHI group, and Polish Power Grids. Energa Group is responsible for the construction of infrastructure to serve as foundation for the components of the storage, integration of the storage with the National Power System and the operation of the storage during the demonstration period. Construction of the facility commenced in 2018, the scheduled project completion date is 31 December 2020.

Upgrid

In 2018, company Energa Operator SA completed the Upgrid project, partially funded by the European Union as part of the Horizon 2020 program. The project involved the modernisation of medium- and low-voltage grids within a selected area. Its purpose was to test selected technologies for their capacity to improve the reliability and optimise the operation of medium- and low-voltage networks within a selected part of the grid, with particular focus on the development of new IT solutions and the use of data from IT systems, in particular the AMI system.

SORAL

The objective of the SORAL project, commenced by Energa Operator SA in 2018, is to obtain knowledge and tools that will improve the efficiency of low-voltage network management. As part of the project, a methodology for the assessment of the risk of failure of low-voltage cables will be created and the SORAL IT system will be devised, enabling a measurable evaluation of the risk of malfunction of individual components of low-voltage lines. The system will provide information that will enable preventive action to be taken in order to reduce the number of failures and will support the process of modernising the cable grid.

Energa Open Innovation 2018

The M. Faraday Research and Development Centre organised the second edition of the Energa Open Innovation competition during the reporting period. As part of the competition, awards were given to two innovative projects in the power industry area, devised by researchers from the Gdańsk University of Technology and Jarosław Moliński, a veteran of the power industry.

The competition was won by a project aimed at identifying the phases of consumers of electricity from low-voltage networks, involving the construction of an analytical tool compatible with smart energy meters that would have a broad application in the power industry. The project that came second is meant to make the installation of power infrastructure more efficient and less time-consuming. Using the proposed solution would bring such benefits as a reduction in the time needed to repair damaged lines and lower costs of operation of the power system.

The Ministry of Energy and the Ministry of Entrepreneurship and Technology acted as honorary patrons of the Energa Open Innovation 2018 competition.



DSR

103-1 (201)
103-2 (201)
103-1 (203)
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103-1 (204)
103-2 (204)
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203-2

As part of the DSR (Demand Side Response) service, businesses who enter into suitable agreements will receive remuneration both for being ready to reduce their power consumption, as well as to provide power at the request of the Distribution System Operator if the system is threatened with power shortages and power rationing has to be implemented. In a tender procedure organised by Polskie Sieci Elektroenergetyczne SA in 2018, company Enspirion Sp. z o.o., part of Energa Group, was awarded contracts for a total reduction of power in the amount of 340 MW in the summer, and 360 MW in the winter, amounting to 70% of the total power awarded in contracts as part of the tender procedure. Enspirion was also successful in the previous tender procedure in 2017, where the company was able to aggregate the largest amount of guaranteed power, 137 MW in the summer and 100 MW in the winter. The company was able to declare so much potential demand reductions during the reported period due to commencing cooperation with new partners, including all companies of Azoty Group.

The power demand reduction service improves the country's energy security, as it helps reduce the power usage of selected consumers when faced with the prospect of power shortages. Customers of Enspirion Sp. z o.o. include steel mills, chemical plants, cement factories, foundries, food industry companies or telecommunications businesses, who declared their readiness to move manufacturing processes to different hours or temporarily switch their own power sources.

Further planned capital works related to power grids will contribute to an increase in the comfort of living

of consumers, resulting from an improvement in the continuity and reliability of power supply, and will further improve access to energy generated from renewable sources (new renewable energy sources connected to the grid).

Value for the economy

Capital works related to the modernisation of generating assets and construction of new power reserves help improve the quality and potential of Energa Group's generating infrastructure, thus contributing to the improvement of the energy security of consumers. Main areas of capital works include the expansion and modernisation of distribution grids, construction of the Ostrołęka C Power Plant with a gross output power of 1000 MWe, modernisation of the Ostrołęka B Power Plant, construction of new renewable power sources, development of projects related to low-emission CCGT units powered with natural gas, adaptation of CHP facilities to standards resulting from the IED Directive and BAT conclusions, as well modernisation of generating and district heating assets (heat distribution).

Energa Group will continue to support and stimulate the development of electromobility in its area of operations. Electromobility is a new sector in the power industry, with a potential for dynamic growth, which due to its nature requires the creation of independent power distribution capabilities. In order to ensure the stable development of the new market segment, the Distribution Business Line will commence actions in two areas: cooperation with local governments and capital works related to medium- and low-voltage grids in order to enable the connection of charging stations.

The Sales Business Line intends to invest heavily in the development of IT systems, with a view to enabling remote contact and implementing new, innovative service products. Plans also include

supporting the administrators of public infrastructure by providing them with access to modern lighting technologies.

Meanwhile, individual capital works or research projects involve the participation of both businesses and academic entities from outside the company, providing them with an impetus for development.

As one of the largest businesses in the Pomeranian region, Energa Group seeks to adopt a responsible approach to spending and support local providers.

Below we provide information on the amounts paid to local providers in each province – prepared for the two sourcing centres operating within the Group:

- 1) Energa Informatyka i Technologie sp. z o.o. (IT-related purchases)
- 2) Energa Logistyka sp. z o.o. (other purchases)

Share of expenditure of company Energa Logistyka Sp. z o.o. on services provided by local suppliers

204-1

Business line/ company	Total expenditures on external services (in k PLN)	Expenditures on external services from local providers	Percentage of expenditure that went to local providers
DOLNOŚLĄSKIE	5 499	n/a	n/a
KUJAWSKO-POMORSKIE	6 048	2 585	42.74%
LUBELSKIE	368	n/a	n/a
LUBUSKIE	696	n/a	n/a
ŁÓDZKIE	5 406	n/a	n/a
MAŁOPOLSKIE	97 980	n/a	n/a
MAZOWIECKIE	33 298	1 675	5.03%
OPOLSKIE	21 065	n/a	n/a
PODKARPACKIE	2 021	n/a	n/a
PODLASKIE	1 282	n/a	n/a
POMORSKIE	29 794	15 150	50.85%
ŚLĄSKIE	36 369	n/a	n/a
ŚWIĘTOKRZYSKIE	11 310	n/a	n/a
WARMIŃSKO-MAZURSKIE	16 384	1 321	8.06%
WIELKOPOLSKIE	25 058	7 006	27.96%
ZACHODNIOPOMORSKIE	2 494	1 612	64.66%
Provinces IN TOTAL	295 071	29 349.00	10.00%



204-1 Share of expenditure of company Energa Informatyka i Technologie Sp. z o.o. on services provided by local suppliers

Business line/ company	Total expenditures on external services (in k PLN)	Expenditures on external services from local providers	Percentage of expenditure that went to local providers
DOLNOŚLĄSKIE	n/a	0.48	n/a
KUJAWSKO-POMORSKIE	n/a	1 377.46	n/a
LUBELSKIE	n/a	462.00	n/a
LUBUSKIE	n/a	19.28	n/a
ŁÓDZKIE	n/a	99.49	n/a
MAŁOPOLSKIE	n/a	1 591.72	n/a
MAZOWIECKIE	n/a	26 915.00	n/a
OPOLSKIE	n/a	n/a	n/a
PODKARPACKIE	n/a	5 117.16	n/a
PODLASKIE	n/a	36.19	n/a
POMORSKIE	87 414.65	29 450.26	34%
ŚLĄSKIE	n/a	21 332.95	n/a
ŚWIĘTOKRZYSKIE	n/a	n/a	n/a
WARMIŃSKO-MAZURSKIE	n/a	10.41	n/a
WIELKOPOLSKIE	n/a	877.00	n/a
ZACHODNIOPOMORSKIE	n/a	125.23	n/a
Provinces IN TOTAL	87 414.65	87 414.63	100%

Consolidated financial data of Energa Group (in millions of PLN)

201-1
102-7

	2017	2018
REVENUES, including: net revenues from the sale of products, goods and services (including excise), other operational revenues, financial revenues, share in profits of subsidiaries using the equity methods	11 042	10 936
OPERATING COSTS, including: consumption of materials and energy, purchase of external services, depreciation and write offs of the current value of non-financial fixed assets, other overhead costs and other operating costs, financial costs with the exception of costs of interest charged on debts, share in losses of subsidiaries using the equity methods	8 141	7 723
EMPLOYEE SALARIES AND BENEFITS, including: wages and salaries, costs of social security and other costs of employee benefits	907	1 063
PAYMENTS TO INVESTORS, including: costs of interest charged on debts, dividend paid out for the preceding year	366	321
PAYMENTS TO THE STATE, including: taxes and fees	817	1 095
INVESTMENTS IN COMMUNITIES IN THE FORM OF DONATIONS	13	11
RETAINED ECONOMIC VALUE	798	723

* The amount paid out in dividend for the preceding year was PLN 79m in 2017, while no dividend was paid out in 2018.

The above data is taken from the consolidated financial statement of the ENERGA SA Group of Companies, drawn up in accordance with the International Financial Reporting Standards approved by the European Union, for the year ended on 31 December 2018 (data includes all Energa Group companies).



Financial implications of climate changes



103-1 (201)
103-2 (201)
201-2

Climate policy strongly affects financial results in the power industry, in particular those of conventional generating sources. With each passing year, their results within Energa Group are becoming increasingly dependent on the cost of purchasing the required emission allowances, for two reasons: first, the pool of free emission allowances granted to the Group is becoming lower and lower with each passing year (see the table below).

With regards to the above it must be noted that the entire pool will be fully used up by 2020. The decrease in the free pool must be compensated by purchasing allowances in the market.

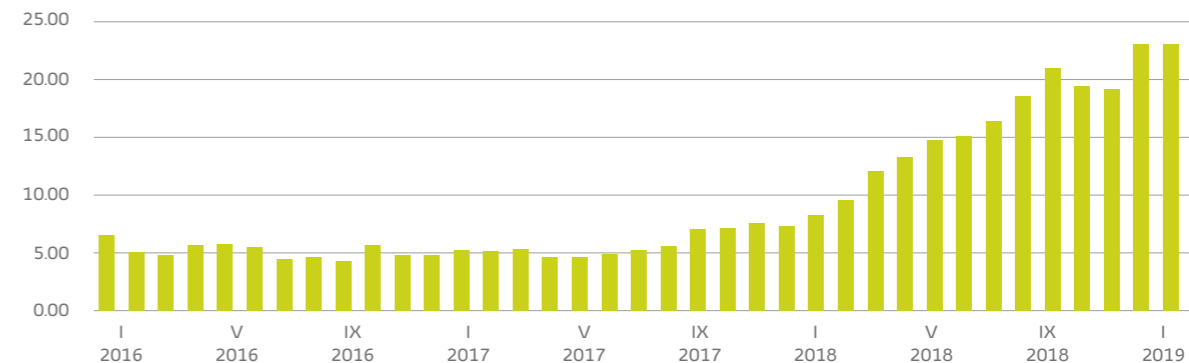
G4-EU5

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Pool of free allowance emissions allocated (in tonnes of CO ₂)	1 795 321	1 632 708	1 407 888	1 083 756	830 528	666 542	505 734	79 359	0

The second cause is the market price of allowances. Energa Group is obligated to purchase such allowances. It must be noted that the market price of emission allowances has been trending upwards (see graph on the right), due to reasons that include EU policy, who recently decreased the pool of available emission allowances as part of its support for low-emission economy.

Prices rose from €5/tonne to over €20/tonne, which significantly increased the cost of purchasing emission allowances by the Group.

Price of allowance to emit 1 tonne of CO₂ (in €)



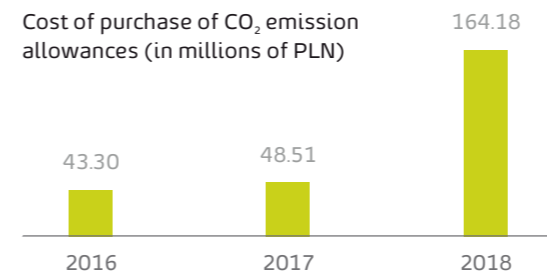
Limiting the negative impacts

The two factors described above caused the cost of purchasing allowance emission to become much higher than a few years ago (in particular in 2018).

Despite strict adherence to legal limits, individual projects or facilities operated by Energa Group companies may negatively affect their social surroundings, particularly as in some areas aspects comparable to environmental impact can be observed; for example, aerial power lines, transformer stations or wind farms interfere with the landscape. Operation of windfarms may constitute a nuisance to local residents, e.g. due to the flickering of shadow cast by an active wind turbine on buildings. Various installations, in particular large facilities, generate noise and electromagnetic fields.

103-1 (413)
103-2 (413)
413-2

Cost of purchase of CO₂ emission allowances (in millions of PLN)



The transport of raw materials and ash to their storage sites may also constitute an additional nuisance. However, Energa Group is aware that despite utmost care and compliance with legal regulations, all such nuisances cannot be completely eliminated. That's why the Group tries to compensate local communities for these nuisances by providing them with a whole range of CSR activities, as it feels an integral part of these communities and wants to be a good neighbour to them.

5.3 Transparent rules of involvement in the community

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103-2 (413)
103-3 (413)
413-1

Foundation of community involvement

'Energa Group's strategy for sustainable development and corporate responsibility', implemented in August 2017, specifies the Group's strategic areas of sustainable development: Customer, Natural Environment, Employees, Fair Market Practices, Local Community and Entire Society, and Corporate Governance.



With regards to the 'Local Community and Entire Society' area, the Strategy specifies the following priority of action:



Supporting communities in which companies forming part of Energa Group operate and building social partnerships, performing charitable work, in particular through supporting initiatives within local and national communities, aimed at promoting durable values unifying the community and building a common awareness with regards to national heritage and culture, patriotism, religion, health care, security and education, with particular attention paid to historical education, as well as supporting pro-environmental activities and activities connected with amateur sport, using competition as a tool for bringing up children and young adults.

In accordance with these values, Energa Group engages in cooperation with local communities, develops intersectoral partnerships in collaboration with social partners, and becomes involved in initiatives that rally the entire society around positive values and supports the development and advancement of patriotism. These values apply to all entities of Energa Group.

In December 2018, the 'Principles of implementing the strategy for sustainable development and corporate responsibility' were adopted for use; these principles regulate in detail the forms of providing support to initiatives important to local communities and stakeholder groups and specify uniform rules of selecting applications for assistance which will receive backing.

Entities related to the power sector inevitably affect their environment, both natural and social. Initiatives aimed at reducing their negative impact are therefore not only limited to campaigns intended to improve power efficiency and create new, environmentally-friendly technologies. They also include the strengthening of social ties and support good human relations.

In 2018, Energa Group was involved in many initiatives supporting these values:

Energa Sport

- Amp Football
- Hope for the World Cup
- Sponsoring the national basketball team
- Energa Basket Camp
- Stomil Olsztyn Sport Academy
- Energy Team
- Dynamic senior citizens with Energa

Energa Patronage

- World War II Museum in Gdańsk
- support for 'Solidarność' Independent Self-Governing Trade Union in Gdańsk in supporting the celebration of the 38th anniversary of August '80 and the 30th anniversary of the May and August 1988 labour strikes
- 10th edition of the 'Shine with Energa' competition. The town of Sędziszów Małopolski is chosen as the "Polish Capital of Light" from among 159 competitors.

Energa Edukacja

- 'Planet of Energy'
- 'Breathe with Energy'
- 'Energa(y/a) for Science'
- 'Young Electric Summit – YES! Gdańsk 2018'
- support for scholarship programs, including at the Gdańsk University of Technology and the 'Bona Fide' program

Energa for the Environment

- Bociany.pl
- 801 BOCIAN helpline
- Nature Fund

Energa Foundation

- 'Vivat Niepodległa'
- Energa Foundation's assistance for senior citizens
- Energa Foundation's assistance for Energa's employees, their families, and ex-employees
- Energa Foundation's assistance for institutions and organisations providing health care and emergency services
- Energa Foundation's contribution to the protection of cultural properties
- Financial contribution to the purchase of playgrounds in Łeba and Smętowo Graniczne
- Financial contribution to the remodelling of stairs in the scout camp in Wola Michowa
- Support for institutions and organisations working for the community



Energa Sport

Promoting a healthy, active lifestyle among children and young adults, shaping correct social attitudes through sporting competition and making it possible for children to develop their sporting passions and interests are the main objectives of original projects developed by Energa Group: 'Energa Basket Cup' and 'Energy Team', implemented as part of the Energa Sport program. The Group places particular importance on these programs. Support is also provided to initiatives that meet the expectations and needs of senior citizens, including activation and health-promotion activities. Such initiatives are aimed not only at improving fitness or health, but also integrating the local community and improving the cultural offer addressed to senior citizens.

Amp futbol

For the three coming years, Energa will be the main partner of Poland's official national team in amp football, one of the fastest growing sports disciplines for disabled athletes. Amp football is present today in over 60 countries.



The last European Championship in Istanbul was watched live by over

41 thousand

fans, with the Polish team taking an excellent third place.



Since 2012, the Polish team has played

68

international games in total.

By supporting the Amp Football Association, Energa Group contributes to promoting a healthy and active lifestyle among disabled persons. The main partner's role is to assist in preparations for prestigious tournaments at home and abroad. The most important of these events include the 2018 World Cup in Mexico and the 2020 European Championship in Kraków. The former is already behind our team; our footballers, who played with Energa's logo on their shirts, finished in 7th.

Hope for the World Cup

Energa Group assumed patronage of the **Orphaned Children's Football World Cup**. The mission of the 'Hope for the World Cup' project is to integrate children living in orphanages, help them adapt to life in society and become open to other cultures, and to provide them with a head-start into adult life.



Nearly **270**

young people from 27 countries participated in the tournament held in July 2018 at the Municipal Stadium in Warsaw.

Sponsoring the national basketball team

Energa has commenced cooperation with the **Polish Basketball Association** and became the strategic sponsor of the Polish men's and women's national teams. During the ongoing domestic league season, Energa is also the naming rights sponsor of the men's (Energa Basket League) and women's (Energa Basket Woman's League) top domestic divisions.

The naming rights agreement will remain in force for the two coming seasons.

Stomil Olsztyn Academy Foundation

Energa became the strategic sponsor of the Stomil Olsztyn Sports Academy foundation. Sports Academy is a project designed for children and young adults who want to pursue their footballing dreams. Its aim is to provide comprehensive training for footballers who will go on to play for the main team of Stomil Olsztyn SA, currently playing in the Polish second tier. Stomil's squad currently features as many as ten players who came through the club's youth teams.



Stomil Olsztyn's Academy currently trains over **470** footballers. The youngest of them are 4, the eldest – 19.



Support for Polish athletes

Energa Group became the sponsor of four leading athletes – Joanna Łochowska (weightlifting), Paulina Guba (shot put), Joanna Fiodorow (hammer throw), and Michał Haratyk (shot put). At the European Athletics Championship in Berlin, Guba and Haratyk won gold medals, while Fiodorow won a bronze medal.

More support for Lechia Gdańsk's Academy

In season 2017/2018, Energa Group increased its support for the development of young footballers by becoming the sponsor of Lechia Gdańsk's Academy. As part of an initiative devised by the Lechia Gdańsk Foundation, training was provided to young players in U9 to U19 categories. As part of the agreement, young football trainees also acted as player escorts for footballers of Lechia Gdańsk during the Polish top tier team's home matches.

Energy Team

In 2018, the first edition of **Energy Team**, Energa Group's program aimed at children from primary schools, took place. The objective of the program is to promote physical activity among children by means of new technologies which today constitute their natural environment.



Between December 2017 and May 2018, children from **100 schools** across Poland,



selected from among **600** candidates, competed each month to win the title of the champion of the month,

with the reward being a visit by members of the Energy Team, whose popular ambassadors included Krzysztof Golonka, Krzysztof Ignaczak, Marek Citko and Bartek Ignacik, to an event organised at their school.

The campaign concluded with a grand final held at Energa Stadium in June, with the participation of all the schools who had previously won monthly competitions, with the winner receiving the sum of PLN 10,000 to pay for PE equipment. **The main prize was won by Primary School no. 6 in Gdynia.**

Dynamic Seniors with Energy



The **'Dynamic Seniors with Energy'** program took place in 15 towns and cities across the Pomeranian region in 2018. The program was addressed to persons aged 55+; Energa and Lotos Group jointly prepared various sports activities and health consultations for the participants.

A special training program for senior citizens from the Pomeranian region was devised by lecturers at the University of Physical Education and Sport in Gdańsk, specialising in the activation of senior citizens and preventive healthcare. The program included Nordic walking, various forms of gymnastics and exercises with some dancing moves. In total, over 450 hours of sports classes were taught to participants. Apart from series of exercises, Municipal Senior Citizens' Days were organised in each municipality participating in the program. During these events, senior citizens were able to have basic examinations done: sugar level tests, body composition analysis or ECG, and consult their results with a consultant geriatrician and a dietitian. The 2nd edition of the 'Dynamic Seniors with Energy' program was also expanded by the addition of the Senior Citizens' Olympics, which took place on 19 October 2018 at the University of Physical Education and Sport in Gdańsk. Teams from most of the municipalities participating in the program, a total of 250 competitors, took part in the event. After a series of specially-designed disciplines, the team from the municipality of Pszczółki took first place, with teams from Skarszewy and Przywidz coming second and third. In total, close to fifteen hundred people participated in the second edition of 'Dynamic Seniors with Energy'.

Energa Patronage

Energa Group places important focus on the development of national culture and heritage and their promotion among a wide range of people. As part of the **'Energa Patronage'** program, the Group supports organisations, associations, cultural centres and cultural projects of various scales that are important to the country, the region or local communities and foster their unification and strengthening. The events chosen as part of the program enable building a common awareness with regards to national heritage and culture, patriotism, religion, health care, security and education, with particular attention paid to historical education.

Patronage of World War II Museum

Energa was given the exclusive title of **'Patron of World War II Museum in Gdańsk'**. In 2018, the Group supported the reconstruction of the 'Lost Heritage' exhibit, events commemorating the 100th anniversary of Polish independence, a live performance of **Złe Psy**, a music band, on the anniversary of martial law in Poland, and an educational and theatre project.

100 Years of Independence

In cooperation with the World War II Museum, employees of Energa Group commemorated the anniversary of the Warsaw Uprising. Volunteer workers appeared in the company's head office, handing out commemorative pins, resistance fighters' armbands and pages from the calendar marking the day of 1 August 1944.

During the meeting of the Polish Scout Association in Sobieszewo, 14 thousand scouts dressed in white and red shirts with a special design, supplied by Energa, created a living flag. This record-breaking event was entered into the Polish Guinness book of records.

In autumn, Energa Group supported the 10th edition of the Steadfast, Unbroken, Outcast Festival. Gadgets and roll-ups prepared for this event could be seen around Gdynia throughout this incredible festival, which brings out our greatest heroes back from the depths of oblivion.

A poster- and billboard-based campaign was launched across Poland, thanking our ancestors who fought for independent Poland. Based on a poster drawn up for the purposes of the program, an animated short was created and shown on LED screens during the Lechia vs. Cracovia football game, won by Lechia, and in the gardens on the grounds of the Office of the Prime Minister in Warsaw on 11 November.

Cooperation with Polish Baltic Philharmonic

Cooperation is mainly related with the Philharmonic's cultural activities. The Philharmonic, headquartered at the Gdańsk Music and Congress Centre, is the largest musical institution in northern Poland, visited by music-lovers not only from the region, but from across Poland and the entire world. The Polish Baltic Philharmonic organises symphonic concerts, recitals and chamber evenings, with Poland's and world's most notable artists performing.



Energa Education

Energa Group consistently works to promote awareness of issues related to the power industry. The Group is active particularly among young people, hoping to instil them with curiosity about the world and make them look for answers to questions that preoccupy them. In 2018, the Group implemented initiatives aimed at educating young people about electrical energy, in particular broadly-defined security and conscious management of energy engendered by care for the natural environment. The Group's activities in this area were focused on improving awareness of safe use of electrical devices and correct behaviour near electrical infrastructure, as well as

on shaping responsible, environmentally-friendly attitudes. Energa also encouraged young people to acquire and share knowledge of the modern power industry, discuss the opportunities and problems facing it, develop their research and study interest and to search for innovative solutions. Supporting education at all levels is one of the most consistently developed goals of Energa Group's activities in the field of CSR. It is also a way of supporting local communities, as well as own human researches, as well as an investment in intellectual capital for the benefit of the entire society.

During the reported period, Energa Group engaged in the following educational programs:

Planet of Energy

Since 2010, we've been actively supporting the education of young children by organising 'Planet of Energy', an educational program for children from across Poland. In 2018, the program was launched in a modified form – not only as a competition for schools, but as a generally-available family educational platform supporting modern education. As part of the program, teachers provided their students knowledge of such matters as how electricity is generated, how we can limit its consumption, and about the potential of renewable energy sources. Classes were held with the use of animations and multimedia exercises. Materials aiding in holding similar classes were made available at <https://planetaenergii.pl/>.

Every child can now acquire knowledge about electricity by learning through fun using interactive educational resources.

Each month 'Planet of Energy' attracts new users and their parents, providing them with knowledge about issues important to Energa Group. A well-known promoter of science among children and young adults, dr Tomasz Rożek, has for many years now acted as the ambassador of 'Planet of Energy'. The competition for schools was concluded by the ambassador's visit to three winning schools in Susz, Klucza and Gliwice, who received cheques for PLN 10 000 to be used for educational purposes. A further 10 schools received special merits and cheques for PLN 2000.

Breathe with energy

Energa Group organised workshops covering issues related to preventing smog. Participants were able to learn how important clean air is to human health and how to care about the quality of health in their environment. These educational classes were taught by experienced animators from the MAMYWENE collective. The youngest participants created models and mock-ups using recycled materials. Older students created florariums, 'forests in a jar', and set up flower meadows. Teachers from 100 schools in the pomorskie province received educational materials that can be used to hold more workshops covering issues related to preventing smog in the future. Similar extraordinary lessons can be taught by teachers from across Poland. Scenarios of such lessons were published on the website of the 'Breathe with Energy' program and can be downloaded and used free of charge.

<p>Energ(y/a) for Science</p>	<p>The main purpose of the program is to promote education in areas related to electricity generation among students of secondary schools and higher education institutions. These young adults constitute the potential future engineering and technical staff of Energa Operator SA, who is becoming harder and harder to find in the labour market.</p> <p>In 2018, 18 secondary schools and 4 higher education institutions participated in the program.</p> <p>The program comprises various forms of cooperation:</p> <ul style="list-style-type: none"> • scholarships for students of secondary schools and higher education institutions • funding for electrical engineering laboratories • organisation of job placements and internships • field trips • interpersonal workshops. <p>2018 was a record year with regards to the number of scholarships granted. The best students from classes participating in the program received a total of 152 scholarships during the spring edition.</p> <p>In 2018, the scholarship competition was for the first time organised in 3 higher education institutions:</p> <ol style="list-style-type: none"> 1. Gdańsk University of Technology 2. Koszalin University of Technology 3. University of Warmia and Mazury in Olsztyn. <p>Scholarships were granted to a total of 14 students.</p> <p>In addition, as part of activities related to the program, every year, employees of the Staff Development Department at Energa Operator SA visit students of the Faculty of Electrotechnics and Automatics at the Gdańsk University of Technology. During these meetings, the Group's employees organise workshops to explain how to create a good CV and how to prepare for a job interview to make a good impression on the potential employer.</p> <p>2018 was a record year in terms of laboratories which received funding, with as many as 7 laboratories in secondary schools receiving financial support.</p>	<p>School patronage</p>	<p>Under the letter of intent signed in 2017 by company Energa Elektrownie Ostrołęka SA and the town of Ostrołęka in the matter of cooperation in the field of developing vocational education, a school form providing education for students specialising as power engineering technicians was created under the patronage of Energa Elektrownie Ostrołęka SA at the Cardinal Stefan Wyszyński Vocational School Complex no. 3 in Ostrołęka.</p> <p>As a result of the recruitment process and promotional activities, a school form providing education for students specialising as power engineering technicians was created with 22 students attending. The students began their education in school year 2018/2019.</p> <p>Four employees of company Energa Elektrownie Ostrołęka SA were hired as teachers of vocational subjects, such as electrotechnics and power engineering, mechanical technologies and structures, generation technologies and mechanical structures.</p>
<p>Development of vocational education</p>	<p>In 2018, a vocational education task force was created in Energa Group. Representatives of 10 Energa Group companies work on creating effective programs enabling the hiring of well-prepared and competent employees during the period of increased retirements and demographic slump.</p> <p>In order to counteract a generation gap that constitutes a danger not only to the Polish energy sector, but the Polish economy as a whole, Energa Group supports initiatives related to the development of the job market as part of its strategy.</p> <p>Effects of the team's work will be presented in 2019 and will constitute the basis for the implementation of special purpose programs implemented by Energa Group companies, which will enable the Group's development and ensure continuity of employment, as well as technical knowledge within group companies.</p>	<p>Cooperation with higher education institutions</p>	<p>Cooperation with the Maritime University in Gdynia</p> <p>On 6 December 2018, a cooperation agreement was made in Gdynia between the Maritime University in Gdynia and Energa SA, Energa Operator SA and Energa Invest Sp. z o.o. Thanks to the cooperation, graduates of the university will be able to obtain additional knowledge in the field of power engineering, go on profiled job placements in power industry companies, participate in joint research and development activities and provide consulting services.</p> <p>The main objective of the agreement is to create a knowledge and skill base at a reputable university in the Tricity area, in particular at its faculty of electrical engineering, which will enable interested students to find onshore work in the power industry.</p> <p>For Energa Group, the agreement is both a didactical challenge (some of the courses constituting part of the profiled programs will be taught by employees of Energa Invest and Energa Operator) and an opportunity to train and employ engineering staff in areas of operations important to the Group, i.e. design and implementation of power and hydropower projects.</p> <p>The best students will be able to acquire knowledge and skills in all companies of Energa Group. As part of the agreement, workshops and training courses taught by Energa employees will be organised. Internships will be available in various companies of the group, while the best students will be able to develop their projects and write their thesis works under the watchful eye of professionals. The most ambitious students will receive job offers from Energa Group companies. Young people will also have the chance to develop in the laboratories of the M. Faraday Research and Development Centre.</p>
		<p>Scholarship program</p>	<p>In academic year 2018/2019, the Energa Foundation is providing financial support to outstanding students and postgraduates at the Faculty of Electrotechnics and Automatics at the Technical University of Gdańsk, recognising their exceptional scientific achievements and cooperation as part of Energa SA's Innovation Strategy.</p> <p>The 'Technical University of Gdańsk's Own Scholarship Fund' is a program created with young talents from the world of science in mind. Each year, two second-degree students and one post-graduate may receive financial support. In order to qualify for the scholarship, students must have outstanding scientific achievements, scientific publications, scientific output in the field of research and development or a high average grade. Students should also carry out research and development work in areas specified in Energa SA's Innovation Strategy, in cooperation with the M. Faraday Research and Development Centre or LINTE² Laboratory.</p>

Young Electric Summit – YES! Gdańsk 2018

Energa Group supported the organisation of the **Young Electric Summit – YES! Gdańsk 2018** conference, aimed at students who wish to pursue future careers in various areas of electrical engineering.

Approximately 250 persons participated in the two-day event and the accompanying Employer's Panel: students, members of the Student's Organisation of the Association of Polish Electrical Engineers at the Gdańsk University of Technology, members of the university's authorities, academic lecturers, representatives of businesses and invited guests. During the lectures, participants were able to participate in a quiz. The best students received offers of profiled job practices and internships.

Financial support for the 'Reading Bench' project

The design of the bench references motifs that appear in well-known Polish works of literature, fables and myths. The bench design is a reference to an open book. Benches are decorated with quotes and pictures by artists, encouraging readers to read the entire original work.

Energa for the environment

Energa Group continues its successful activities from previous years. In 2018, individual Group companies continued their activities aimed at helping white storks that inhabits the area of operations of Energa Operator SA in large numbers. For this purpose, the Group continued its existing partnerships with environmental organisations to support initiatives such as the 801 Bocian helpline or www.bociany.pl. Energa was also involved in numerous initiatives aimed at designing innovative solutions helping to reduce smog, such as 'Smart Parking' or 'Energa Living Lab'.

Construction of a water-raising weir on the Narew river will ensure the correct level of water in the river, irrespective of weather conditions. Water is taken in from the river and used to cool the power units that generate electricity using conventional technologies.

The project is aimed at protecting the power plant from the effects of low level of water in the Narew river.

In contrast to traditional solutions, the structure was built without any pillars. One and a half meter of free space was left between each section of the rubber dam. Openings created in this way will be used to ensure the minimum acceptable flow irrespective of raising the water level, as required by legal regulations, in particular environmental protection laws. This will ensure the creation of a good location for the migration of organisms and river load movement. The solution is safe for the fish living and migrating in the river, which means that constructing special fish passages was not required.

Energa Foundation

When implementing its strategy for sustainable development and corporate responsibility, the Group engages in dialogue with the local community, listens to its voice and reacts to its needs. The Foundation participates in many charitable initiatives, the majority of which constitute campaigns aimed at helping the sick, the disabled, and those in difficult life circumstances. The Foundation also assisted employees of the Group, their families and ex-associates. This year, the Foundation provided particular assistance to institutions working for the community and in the field of health and emergency care, as well as initiatives aimed at protecting cultural properties.

Energa Foundation's assistance to senior citizens

Below is a list of some of the entities that received assistance as part of the program:

- **Hospice of blessed father Michał Sopoćko in Wilno** – financial assistance for the purchase of medicines, care products, dressings
- **Saint Lawrence's Hospice Association in Gdynia** – financial assistance for the purchase of 27 hospital and rehabilitation beds
- **'Packages for Heroes' Association in Szczecin** – financial assistance for paying for the stay and medical care for 70 war veterans and their carers in a holiday resort

In 2018, Energa Foundation provided assistance to over **740 entities**, contributing almost **PLN 7.8 million** in funds.



Number of all assistance agreements in 2018:

746

worth a total of **PLN 7 778 173.77***

Merger of the CSR Foundation and Energa Foundation

With the consent of the founder – Energa SA, the merger of the CSR Foundation (acquired foundation) with the Energa Foundation (acquiring foundation) commenced on 16 January 2018, following earlier consent by the councils of the CSR Foundation and Energa Foundation. The merger was completed on 22 March 2018.

Activities of the Energa Foundation

Energa Foundation carried out its activities based on a budget assigned by the founder and in accordance with the adopted plan of action. The following pages of the report describe its priority programs planned by the Foundation's Board for 2018 and the method of their implementation.



* The amount does not include payouts made in 2018 under agreements signed in previous years. Information about the total amount of all payouts made in 2018 can be found on page 231.

'Vivat Niepodległa!'

Below we present some of the entities who received support under the program:

- **The Home Army Remembrance Foundation** – financial assistance to implement the 'We Learn, We Remember, We Follow – intergenerational patriotic activities Poland – Kresy 2018' project
- **Jan Pietrzak Foundation Patriotic Association** – financial assistance for the organisation of 15 patriotic concerts
- **5th Vilnius Home Army Brigade Historical Association in Sopot** – financial assistance for the creation of a plaque commemorating rotmistrz Witold Pilecki in Malbork

Energa Foundation's assistance to employees, their families, and ex-employees

In 2018, support provided to employees of the Group amounted to a total of PLN 951 678.12. Assistance was given to such charitable initiatives as reconstruction of a house following a fire, education of children, as well as treatment and rehabilitation. The Foundation also seeks to assist Group employees in their most difficult moments when they lose their loved ones – it helped in the repatriation from abroad of the body of the fiancée of an employee of one of the Group's companies.

During regular meetings with trade unions, the board of directors attempted to show the areas in which help and support are provided, and as a result was able to reach a much larger number of employees of the Energa Group of Companies. The then-deputy chairman of the Board of Energa Foundation, who also acted as the manager of the Staff Policy Department, working to achieve a common goal of the Board and the Council of the Energa Foundation, provided information to trade unions about potential areas of assistance and that Energa Foundation is ready to provide help to employees and their families if they find themselves in a difficult situation.



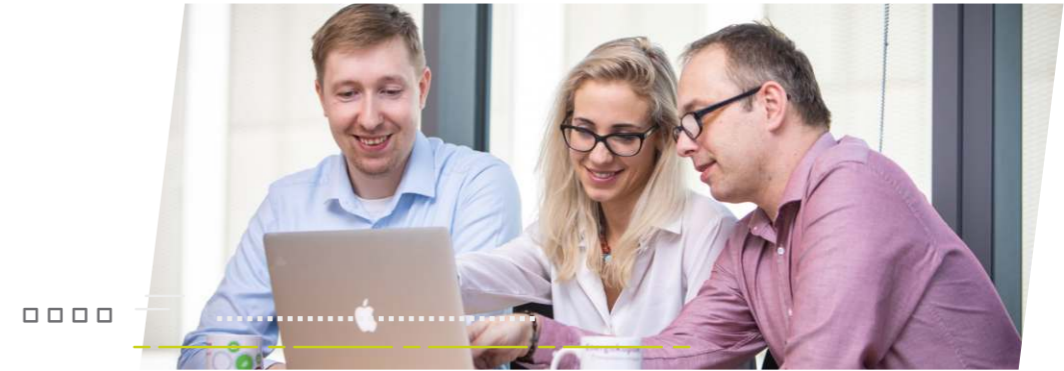
Number of assistance agreements made with employees in 2018:

100

Energa Foundation's assistance to institutions and organisations providing health and emergency care:

Below we present some of the entities who received support under the program:

- **Urology Ward at the Hospital in Giżycko** – financial assistance for the purchase of a specialised laser



- **Volunteer Fire Brigade in Łeba** – financial assistance for the purchase of a quad motorbike with an emergency response trailer
- **Municipal Headquarters of the State Fire Brigade in Gdańsk** – financial assistance for the purchase of uniforms, special-purpose clothes and protective and personal fireman's equipment
- **Specialist Hospital in Wejherowo** – financial assistance for the purchase of three heart monitors



Energa Foundation's assistance for the protection of cultural properties

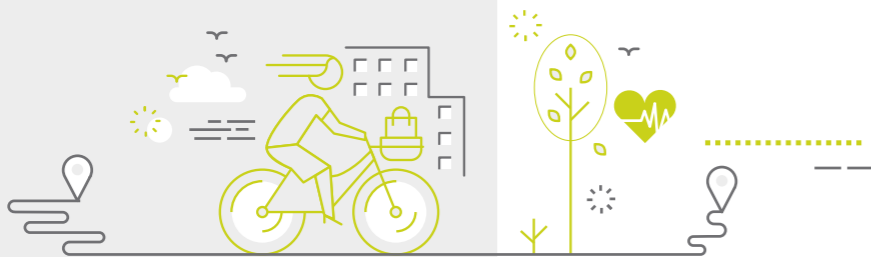
Below we present some of the entities who received support under the program:

- **Metropolitan Curia of the Warmia Archdiocese** – financial assistance for conservation and restoration works on the Cathedral Hill in Frombork
- **Assumption of Mary Roman Catholic Parish in Łeba** – financial assistance for the restoration of a historic organ
- **Polish Association of Fine Artists** – financial assistance for the renovation of terraces in the Artists' Retreat in Ustka
- **Saint Catherine of Alexandria Catholic Parish in Rzeszyca** – financial assistance for securing, reinforcement and conservation works

Activity of Energa Group employees

In 2018, the Foundation continued two programs aimed at involving Group employees in charitable initiatives:

- **'We Collect Caps'** – the seventh edition of the initiative organised by employees of the Foundation. As part of the campaign, employees of Group companies headquartered in Gdańsk collected plastic bottle caps, which they then donated to the carers of a sick child.
- **'Active and Charitable'** – fifth edition. As part of the program, Group employees, their families and friends can 'collect' kilometres by engaging in sports, such as jogging, riding a bicycle or rollerblading, which were then converted into money and donated to selected orphanages. In collaboration with the Marketing and Communications Department, the Board of the Foundation implemented a program aimed at fostering the activation of Group Employees and their families and friends. As part of the program, assistance was given in 2018 to organisations and institutions caring for and treating senior citizens (four locations) and orphanages (nine locations).



Scholarships

Gdańsk University of Technology

An agreement on cooperation with regards to scholarship will positively affect the collaboration between Energa Group and the Gdańsk University of Technology – providing support in the form of research and post-graduate scholarships will improve the Group's opinion at the Gdańsk University of Technology and among future scientists and students who may potentially pursue careers with Energa Group in the future.

Bona Fide Scholarship Program

Energa Group, acting together with other partially state-owned companies, pursues the social mission specified by its founders by implementing educational activities and contributes to supporting the sustainable economic development of Poland. In cooperation with the Orlen – Dar Serca Foundation, Energa Foundation provided assistance to students who study at one of the 50 foreign higher education institutions from the so-called Shanghai Ranking.



In 2018, the Board and the Council of the Foundation allocated the amount of

PLN 100 000

for this purpose.

Building the image of Energa Foundation – website, Facebook, YouTube

Since 2018, model forms of applications for donations can be found on the Foundation's website, divided into applications for natural persons and legal persons.

Over the previous year, employees regularly made posts to Facebook with information on support provided to individuals, institutions and organisations. Energa Foundation now also has a YouTube channel, where a short film titled **'One Family – a story of friendship'**, the story of an employee injured in a traffic accident, was published. The Board also commenced long-term cooperation with Energa Group's corporate magazine – 'Emission', publishing messages about ongoing initiatives, existing programs and completed goals. As part of its internal communications, the Board of the Foundation wishes to reach as many

employees of the Energa Group of Companies as possible, in order to show them that they can count on real support from the Foundation, both when they require help due to the poor health of a loved one and when they wish to receive assistance to pursue their passions or scientific goals.

Representatives of the Board participate in numerous events organised by beneficiaries – they take part in galas, visit entities that received assistance and individual beneficiaries – employees of the Group.

Key indicators related to Energa Foundation's statutory activities in 2018

Consolidated financial data:

- funds donated for charitable purposes: PLN 8 262 853.13
- revenues from unpaid work for public benefit: PLN 7 044 802.50
- of which:
 - revenues from donations of 1% of personal income tax – PLN 44 752.00
 - revenues from donations of 1% of corporate income tax – PLN 7 000 000.00 (Energa SA)
 - revenues from other sources – PLN 50.00 (donation by a natural person)
 - financial revenues – PLN 32 520.29





Szymon Gajda
Corporate Management Department manager at Energa SA

Well-educated staff, particularly in specialised position, are the pillar of the economy, and consequently the development of the entire country. In the perspective of the looming generation and competence gap, any initiatives aimed at obtaining and developing professional competences are of key importance to building a strong economic position, and in our context, to ensuring Poland's energy security in the coming years. That's why Energa Group places such importance on supporting the education of young Polish people, both in universities and in vocational schools, which had been left neglected for far too long.



6 About this report



6 Stakeholder involvement as a process



Stakeholders

102-42 ■ Key stakeholders of Energa Group were identified from the perspective of the business strategy. Both the basic categories of stakeholders and the nature of their forms of involvement or type of dialogue are not subject to significant changes in time. Due to this, the method and nature of communication with individual stakeholder groups did not change significantly over the past year.

102-43 ■ The frequency and form of contacts depends on the nature of relations with a given group. Selected business units a responsible for relations with each

group. Knowledge of the needs and expectations of stakeholders is analysed and taken into account during the business decision making process on various levels of management, depending on the nature of the decision itself and the matter under consideration. Knowledge of the expectations of individual groups, which are often far from uniform and can be mutually contradictory, is aggregated and analysed in the context of the most important decisions by boards of individual group companies, including the board of Energa SA.

Basic categories of Energa Group's stakeholders

Method and frequency of involvement

102-40

Shareholders	Direct communication, webpage at www.ir.energa.pl , current and periodical reports, other events (including '1+1' meetings and conferences, broadcasts, chats, roadshows)
Customers, consumers	Individual meetings, correspondence, communication via electronic channels, communication through marketing campaigns, interventions, providing clarifications, helplines
Banks, financial institutions	Correspondence, regular reporting, individual meetings
Local governments	Consultations, direct meetings, correspondence
Public administration	Correspondence, lobbying, reporting in emergency situations, meetings, reporting on environmental hazards
Suppliers and business partners	Exchange of information, contacts via email and telephone, correspondence

Basic categories of Energa Group's stakeholders

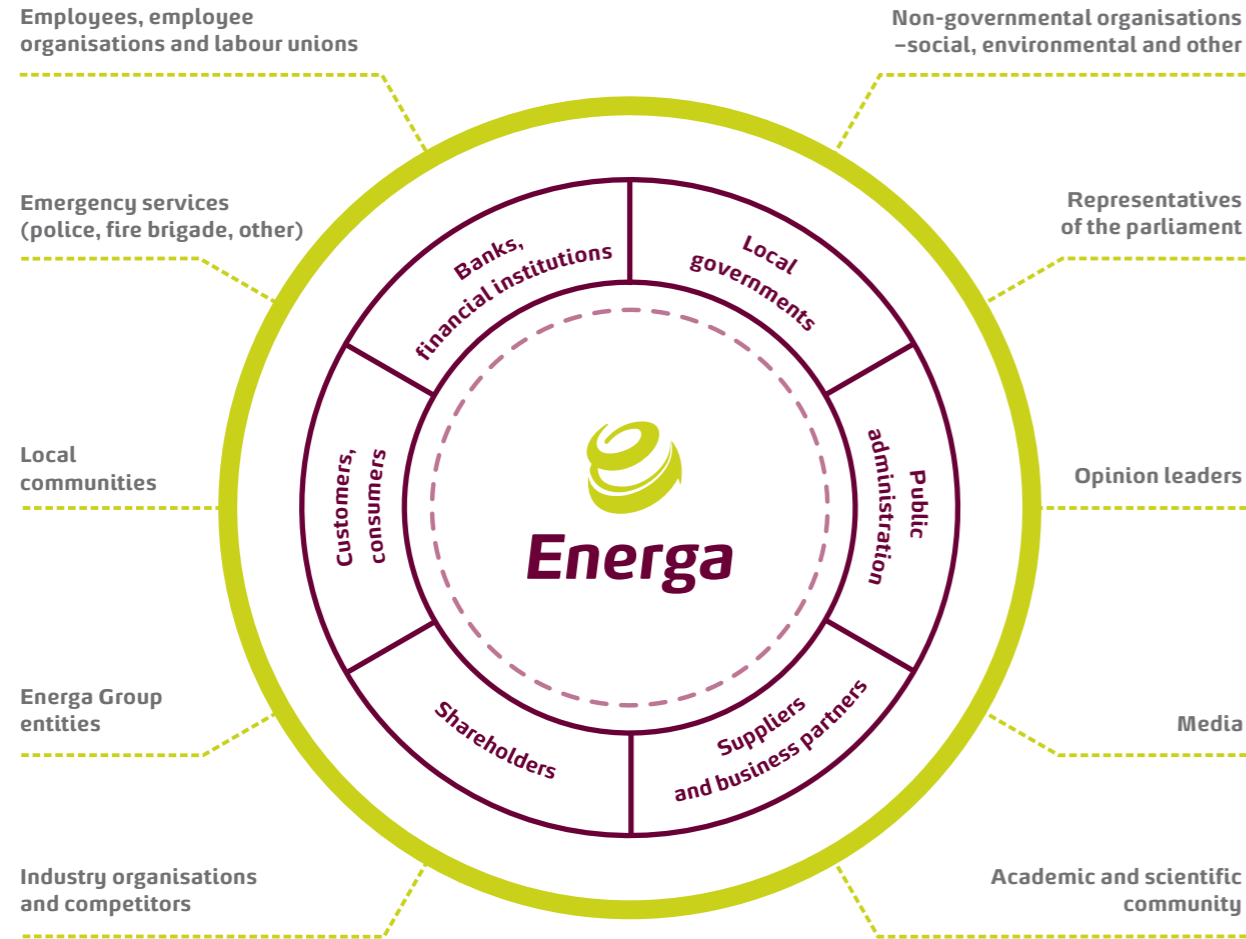
Method and frequency of involvement



Basic categories of Energa Group's stakeholders

Method and frequency of involvement





Participation of stakeholders in shaping the report

Apart from the ongoing dialogue concerning the operations of Energa Group companies and their impact on their environment, or the environment's impact on the Group, both from the strategic and operational perspective, an individualised dialogue dedicated exclusively to non-financial reporting takes place each year. As in the previous year, both external stakeholders and Group employees participated in the dialogue in 2018. The dialogue is part of a process related to corporate social responsibility reporting and management, i.e. a report from a given year is subjected to a stakeholder assessment, in terms of both the importance of individual issues discussed in the report from the perspective of Energa Group's impact on its environment, as well as the form in which they are presented, their reliability, etc.

In the survey, stakeholders can also provide free-form opinions, which are extremely valuable to those responsible for reporting. Information from the survey are used as the entry point for planning the scope, structure and form of the following year's report. The survey also constitutes an annual refresher of knowledge with regards to the importance allocated to each issue from the perspective of stakeholders. However, the part of the survey enabling stakeholders to provide a qualitative assessment of the report, i.e. the free-form opinion, seems to be particularly valuable, as even if the list of important issues and corresponding indicators is not significantly modified as a result of an analysis of the survey with regards to the importance placed by respondents on specific issues, a qualitative analysis helps better distribute accents or better

address current issues. This was the case in 2018, as one of the significant stakeholders noted that in their opinion, the report did not sufficiently address issues related to providing assistance to sensitive consumers and preventing energy deprivation. As a result, one of the sub-chapters in the 2018 report was dedicated solely to this issue. Such dialogues helps not only to make Energa Group's non-financial reports even more trustworthy and exhaustive, but also helps detect first, often faint signals about new or shifting expectations among market participants of key importance to Energa Group.

As previously noted, the first stage of the assessment of importance involves asking stakeholders for their subjective opinion of the significance of Energa Group's impact on the environment in the context of individual aspects of its operations, which in practice, however, is more useful for determining the importance of each issue for the stakeholders themselves, including the impact of each issue on the stakeholder's opinions and decisions. During the next stage, as part of an internal expert analysis of the results of the survey, each issue is assessed again, this time from the perspective of their impact on the company's business operations and image (their economic, social and environmental importance). They are therefore now assessed from the perspective of the business itself. This two-stage approach, which additionally shifts the accent towards qualitative and expert assessments, appears to be more effective, in particular since surveys reduced solely to assigning importance are treated in a rather cursory manner by respondents and aren't always filled in diligently.

To sum up, the starting point for the assessment in 2018 was the evaluation expressed by external stakeholders in the survey, with the accent strongly shifted towards a qualitative assessment, on which an internal, expert assessment made from the perspective of the company itself was then imposed, supplemented with conclusions derived from the survey conducted among the group's employees, instead of a quantitative survey. In effect, this mechanism means that the report may contain an issue that was considered to be significant by only one of the parties. In practice, this can result in a situation where the report contains an aspect of the company's operations that was considered to be important only by the company itself, but not deemed to be significant or not mentioned at all by external stakeholders, but this practice prevents any situations where an issue is deemed to be very important by stakeholders but is not included in the report due to the company finding it to be insignificant. In practice, in 2018 stakeholders assigned a relatively low importance to the significance of social involvement, some issues relating to employment and certain aspects concerning planned capital works. Despite these results, the company itself believed these issues to be of importance to its results (in terms of economic, social and environmental results), and therefore a decision was made to include them in the report. Similarly, issues subject to reporting requirements under the accounting act were also deemed to be important irrespective of the stakeholders' assessment.

In effect, the importance analysis took into account both its external dimension, i.e. issues indicated by stakeholders (described as significant, that is in consequence having a potentially significant effect on the assessments and decisions of interested parties), as well as its internal dimension, reflecting the perspective of the company on the same issues from the point of view of its economic, social and environmental impact. In the businesses' opinion, this approach meets the requirements of a two-dimensional assessment process, but is not limited to a simple survey, which appears to improve its reliability by limiting the impact of those surveys that were filled out without sufficient reflection on the final results. Qualitative elements and expert assessment contribute to a better understanding of mutual expectations and an optimal balance of content and focus put on individual topics.

It's worth noting here that the report itself is becoming a platform which we can use to comment on expectations, questions and concerns submitted as part of the dialogue process and provided using other means. In this way, a new report is created, and its publication commences a new cycle of reporting and dialogue: stakeholders receive the report and can comment on the information included therein, some of the stakeholders are then asked about the information, provide feedback, etc.

Stakeholders pointed to the following areas of operation of Energa Group as particularly significant in the last year:

● **market**

- building good relations with Customers (e.g. by observing laws, ethical principles and fair practices in communication with Customers, providing Customer service on a high level, ensuring short lead times, operating a consumer helpline)
- transparency of products and services on offer and a responsible sales process, access to knowledge about the products and services offered by the company
- security of data of Energa Group Customers
- security and reliability of the supply of electricity, activities aimed at ensuring the stability of supply

● **workplace**

caring about the health and safety (OH&S) of employees of the company

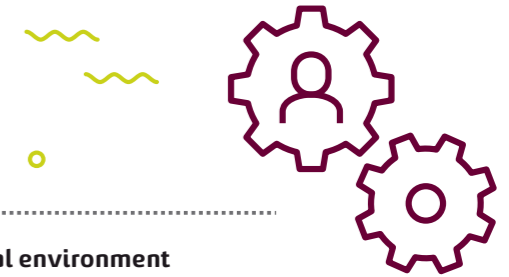
● **natural environment**

reducing the negative impact on the environment (consumption of raw materials and energy, improving energy efficiency, waste management, reducing emission of harmful substances to the atmosphere, managing water resources and wastewater)

● **responsible management of the organisation**

engaging in dialogue and involving stakeholders in the process of building a strategy of sustainable development and corporate responsibility, as well as an assessment of the company's operations.

These areas were reflected in the report, but as a result of the expert analysis were also supplemented with other aspects that were assigned a slightly lower (medium, low) significance, or which were additionally specified in qualitative assessments (open-ended questions in the survey), but were deemed to be significant from the perspective of providing a complete image of Energa Group and its economic, social or environmental impact.



Dialogue concerning the reporting process in 2018

Over 30 entities took the survey, including representatives of the Energy Regulatory Office, provincial and local authorities, capital market, media, non-government organisations and cultural institutions. They were asked to reply to 35 questions that assessed the importance of the impact of each aspect of Energa Group's operations on the environment in the context of the workplace, market, natural environment, social environment or social responsibility management.

Stakeholders were also able to answer open-ended questions, which related to such topics as:

- completeness of the report
- content that met the expectations of a given stakeholder
- information that would have been worth including in the report, but was not, elements both improving and reducing the trustworthiness of the report
- intelligibility and simplicity of the language used in the report
- transparency and attractive graphic design and potential modifications thereto
- proposed changes to the next report

Furthermore, over 140 employees who were asked to participate in the survey were able to reply to questions that were more significantly profiled to match their interests, i.e. a greater focus was placed on such issues as caring for employees, work safety, ensuring equal opportunity and a non-discriminatory environment, observing ethical rules, being family-friendly, ensuring a freedom of association, etc. There were also questions concerning the wider perspective, i.e. relations with Customers, responsible sales, reliability of provided services and promoting a balanced consumption of energy, approach to the natural environment or social responsibility.

People involved in the creation of the report

The process of creating the report requires teamwork and dialogue, and involves some clashes of opinions or expectations. It's also painstaking work, often under time pressure. Energa Group would like to express its appreciation of all the people who are involved in the reporting process each year. The final product is the result of the involvement of

persons responsible for the dialogue process and analysis, of the results of the survey, representatives of many business units responsible for collecting and aggregating a very diverse set of qualitative and quantitative data, the editing work put in by authors of individual parts of the report, the efforts of graphic designers and coordinators.

In particular, we would like to thank the following persons, without whom this report would not have been possible:

Hanna Adamska
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Anna Własiuk
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We would also like to extend our sincere thanks to the representatives of all stakeholder groups who accepted our invitation to dialogue and selflessly devoted their time to help us not only become better at reporting and be more transparent, but simply improve our day-to-day operations.



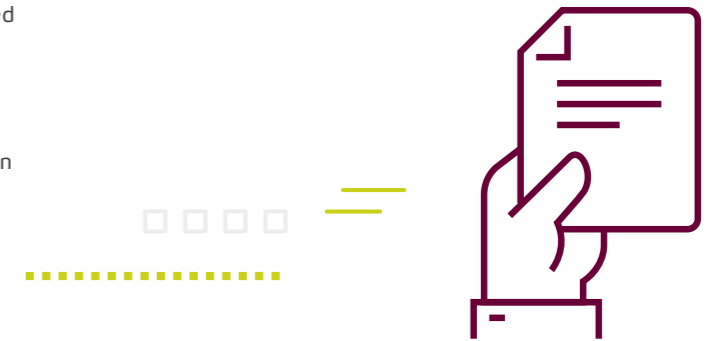
Parameters of the report

This eighth edition of the report was prepared based on the core version of GRI standards. It includes all Energa Group entities that are consolidated in the Group's financial reporting. The report covers the 2018 fiscal year, i.e. the period between 1 January and 31 December 2018, however, by analogy to the general principles of financial reporting, it may include events that occurred after 31 December 2018 and prior to the publication of the report, provided that they were of significance to Energa Group from the perspective of its image in terms of non-financial results.

Energa Group publishes its reports in a yearly cycle. The previous report for 2017, prepared based on GRI G4 guidelines, was published together with the Group's financial statement in March 2018. No significant changes with regards to the most important issues (defined as the mapping of significant areas and GRI indicators) occurred in comparison to the previous report as concerns its scope or measurement methods. Due to the changes taking place in the market and feedback given

by selected stakeholders, a slightly larger focus was placed on aspects related to such issues as the Group's approach to sensitive customers or the expansion of the power plant in Ostrołęka. No instances that would require adjusting the non-financial results presented in the previous report were identified.

102-45
102-48
102-49
102-50
102-51
102-52
102-54



After taking the perspectives of stakeholders (external dimension) into consideration, overlaying them with the company's perspective (i.e. significance for economic, social and environmental results) and translating them into issues consistent with the GRI nomenclature, the following issues were included in the report as significant:

102-47
103-1

Issues determined to be significant from the perspective of the GRI taxonomy

Issue as per GRI	GRI disclosure
Economic	
Economic performance	201-1, 201-2
Indirect economic impacts	203-1, 203-2, G4-EU12
Procurement practices	204-1
Anti-corruption	205-1, 205-2, 205-3
Environmental	
Materials (fuels)	301-1, 301-2
Energy	302-1
Water	303-1
Biodiversity	304-1, 304-2
Emissions	305-1, 305-4, 305-5, 305-7, G4-EU5
Effluents and waste	306-1, 306-2
Social	
Employment	401-1, 401-2
Labour-management relations	402-1
Occupational health and safety	403-1, 403-2, 403-4, G4-EU18
Training and education	404-1, 404-2

Diversity and equal opportunity	405-1
Local communities	413-1, 413-2
Supplier social assessment	414-1
Marketing and labelling	417-2, 417-3
Customer privacy	418-1
Socioeconomic compliance	419-1
Other industry-specific aspects	
Friendly Customer service and sales, reliable offer	-
Caring for sensitive consumers	-
Innovations for sustainable development and capital works projects (in areas of generation, distribution and sales)	-
Efficiency	G4-EU1, G4-EU2
Availability of services	G4-EU4
Security and stability of supply	G4-EU27, G4-EU28, G4-EU29

The report also includes information concerning the disclosure of non-financial data as required under the accounting act of 29 September 1994 (Journal of Laws of 2017, item 2342, as amended), and reflects Energa Group's compliance with its disclosure duties in this regard.

This report was externally verified by an independent auditor, Deloitte Advisory Sp. z o.o. Selected GRI disclosures (marked with a ✓ in the last column of the GRI Table) were subject

to verification. We draw the readers' attention to the fact that the quality of a number of the numerical parameters presented in the report is directly or indirectly tied to processes that are subject to restrictive control measures and periodical audits related to specific management systems (e.g. ISO 14001:2015, ISO 50001:2012, EMAS, BS OHSAS 18001:2007). The reliability, consistency and completeness of the information included in the report was additionally ensured by the CSR team, supported by an external expert.

¹The issues were formulated differently in the surveys provided to stakeholders, in a more descriptive and easier to understand manner.

Contact data and feedback

We will be grateful for any remarks and opinions concerning the report, methods used to present data and activities of Energa Group. Please send any information, questions or concerns to the following address:

Agnieszka Kminikowska
 tel.: +48 58771 85 92
 agnieszka.kminikowska@energa.pl
 csr@energa.pl

or

Energa SA
 Departament Zarządzania Korporacyjnego Wydział CSR
 al. Grunwaldzka 472
 80-309 Gdańsk

(The above address should be used to provide feedback in respect of all areas described in the report, unless otherwise specified with regards to a specific area)



Grzegorz Ksepko
 VP, Corporate Affairs at Energa SA



Our new report, this time prepared in accordance with GRI standards that superseded earlier GRI G4 guidelines, is more than a simple fulfilment of our statutory duty of non-financial reporting. We don't want to treat non-financial reporting as a duty, but as an opportunity, an opportunity to build a platform for dialogue with our stakeholders, an opportunity to make the capital market interested in our Group, an opportunity that to some degree has transformed into tangible achievement, such as our presence on the RESPECT Index and FTSE4Good Emerging. We hope that in today's age that poses considerable challenges to the power industry, we will be able to convince our environment and investors, including in particular ethical investors who care about sustainable development and managing social and environmental risk, to embrace our vision and our activities.

Mapping declarations regarding non-financial information as per the requirements of the accounting act

Issue	Reference in the report
Description of the business model	'Business Model'
Description of non-financial risk management	'Non-financial risk management'

Issue	Reference in the report		
	Management approach (policies, due diligence procedures)	Related risk aspects	Indicators
Social	'Caring for sensitive consumers' 'Geographical availability' 'Innovations in support of the Customer' 'Security and stability of supply' 'Fair market practices' 'A trusted member of the community' 'Impact of capital works on social and economic life' 'Transparent rules of social involvement'	'Caring for sensitive consumers' 'Geographical availability' 'Innovations in support of the Customer' 'Security and stability of supply' 'Fair market practices' 'A trusted member of the community' 'Impact of capital works on social and economic life' 'Transparent rules of social involvement'	'Caring for sensitive consumers' 'Geographical availability' 'Innovations in support of the Customer' 'Security and stability of supply' 'Fair market practices' 'A trusted member of the community' 'Impact of capital works on social and economic life' 'Transparent rules of social involvement'
labour	'A trustworthy employer'	'A trustworthy employer'	'A trustworthy employer'
environmental	'Current footprint of conventional and renewable energy source-based power industry' 'Projects that impact the environment'	'Current footprint of conventional and renewable energy source-based power industry' 'Projects that impact the environment'	'Current footprint of conventional and renewable energy source-based power industry' 'Projects that impact the environment'
respect for human rights	'Values and ethics management' 'Respect for everyone and diversity in management bodies' 'Secure personal data'	'Values and ethics management' 'Respect for everyone and diversity in management bodies' 'Secure personal data'	'Values and ethics management' 'Respect for everyone and diversity in management bodies' 'Secure personal data'
anti-corruption	'Values and ethics management' 'Preventing corruption'	'Values and ethics management' 'Preventing corruption'	'Values and ethics management' 'Preventing corruption'

GRI table (GRI index)

Disclosure	Description of disclosure	Value/location in the report/ comments	Page	External verification by an auditor
GRI 102: General Disclosures 2016				
102-1	Name of the organization	Operational profile and business model	8, 10	✓
102-2	Activities, brands, products, and services	Operational profile and business model Values and ethics management Trustworthy products and innovations	8, 10, 18, 20 36 58	✓
102-3	Location of headquarters	Operational profile and business model	9, 10	✓
102-4	Location of operations	Operational profile and business model	9	✓
102-5	Ownership and legal form	Operational profile and business model	10	✓
102-6	Markets served	Operational profile and business model	9, 18, 20	✓
102-7	Scale of the organization	Operational profile and business model Scale of cooperation	8, 37 56, 211	✓
102-8	Information on employees and other workers	Structure of employment Indicators	161 188-191	✓
102-9	Supply chain	Values and ethics management	35	✓
102-10	Significant changes to the organization and its supply chain	On 16 October 2018, a change in the ownership structure of company Elekrownia Ostrołęka Sp. z o.o. was registered in the company's entry into the National Court Register; the change resulted from an agreement concerning the transfer of shares by Energa SA to ENEA SA. Energa SA is not a majority shareholder and the company itself is under joint supervision of both shareholders.	11 20	✓
102-11	Precautionary Principle or approach	Non-financial risk management Values and ethics management	24 33	✓
102-12	External initiatives	Declarations, principles and other external initiatives supported by the organisation: Polish Strategy of Corporate Responsibility, UN Agenda 2030, Laborem Exxercens (Pope John Paul II's encyclical), Laudato Si' (Pope Francis' encyclical), Quadragesimo Anno (Pope Pius XI encyclical)	-	✓

Disclosure	Description of disclosure	Value/location in the report/ comments	Page	External verification by an auditor
GRI 102: General Disclosures 2016				
102-13	CMembership of associations	Membership of associations	38-39	✓
102-14	Statement from senior decision-maker	Message from the Board of Directors of Energa SA	6-7	✓
102-15	Key impacts, risks, and opportunities	Operational profile and business model Non-financial risk management	22, 24	✓
102-16	Values, principles, standards, and norms of behaviour	Values and ethics management	30, 32	✓
102-17	Mechanisms for advice and concerns about ethics	Values and ethics management	32	✓
102-18	Governance structure	Operational profile and business model	12-13	✓
102-40	List of stakeholder groups	Stakeholder involvement as a process	237, 240	✓
102-41	Collective bargaining agreements	Salary and employment conditions	178	✓
102-42	Identifying and selecting stakeholders	Stakeholder involvement as a process	236, 241-242	✓
102-43	Approach to stakeholder engagement	Impact of capital works on social and economic life Stakeholder involvement as a process	202, 236 241, 242 244	✓
102-44	Key topics and concerns raised	Impact of capital works on social and economic life Stakeholder involvement as a process	202	✓
102-45	Entities included in the consolidated financial statements	Stakeholder involvement as a process	243	✓
102-46	Defining report content and topic Boundaries	Stakeholder involvement as a process	247	✓
102-47	List of material topics	Stakeholder involvement as a process	241, 244	✓
102-48	Restatements of information	Stakeholder involvement as a process	248-249	✓
102-49	Changes in reporting	Stakeholder involvement as a process	247	✓
102-50	Reporting period	Stakeholder involvement as a process	247	✓
102-51	Date of most recent report	Stakeholder involvement as a process	247	✓



Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 102: General Disclosures 2016				
102-52	Reporting cycle	Stakeholder involvement as a process	247	✓
102-53	Contact point for questions regarding the report	Stakeholder involvement as a process	250	✓
102-54	Claims of reporting in accordance with the GRI Standards	Stakeholder involvement as a process	247	✓
102-55	GRI content index	Stakeholder involvement as a process	252-257	✓
102-56	External assurance	Stakeholder involvement as a process	249	✓
GRI 103: Management Approach 2016				
103-1	Explanation of the material topic and its Boundary		248	
103-2	The management approach and its components		24, 30	
GRI 103: Management Approach 2016				
103-1 (201) 103-2 (201)	Management approach	Impact of capital works on social and economic life	208 212	
GRI 201: Economic Performance 2016				
201-1	Direct economic value generated and distributed	Impact of capital works on social and economic life	211	
201-2	Financial implications and other risks and opportunities due to climate change	Impact of capital works on social and economic life	212	
GRI 103: Management Approach 2016				
103-1 (203) 103-2 (203)	Management approach	Impact of capital works on social and economic life	202 208	
GRI 203: Indirect Economic Impacts 2016				
203-1	Infrastructure investments and services supported	Impact of capital works on social and economic life	202 208	
203-2	Significant indirect economic impacts	Impact of capital works on social and economic life	202 208	
GRI 103: Management Approach 2016				
103-1 (204) 103-2 (204)	Management approach	Impact of capital works on social and economic life	208	
GRI 204: Procurement Practices 2016				
204-1	Proportion of spending on local suppliers	Impact of capital works on social and economic life	209 210	

Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 103: Management Approach 2016				
103-1 (205) 103-2 (205) 103-3 (205)	Management approach	Values and ethics management	33	
GRI 205: Anti-corruption 2016				
205-1	Operations assessed for risks related to corruption	Values and ethics management	33	
205-2	Communication and training about anti-corruption policies and procedures	Values and ethics management	33	
205-3	Confirmed incidents of corruption and actions taken	Values and ethics management	33	
GRI 103: Management Approach 2016				
103-1 (301) 103-2 (301)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 110	
GRI 301: Materials 2016				
301-1	Materials used by weight or volume	Current footprint of conventional and renewable energy source-based power industry	19, 110 112	
301-2	Recycled input materials used	Current footprint of conventional and renewable energy source-based power industry	112	
GRI 103: Management Approach 2016				
103-1 (302) 103-2 (302) 103-3 (302)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 116	
GRI 302: Energy 2016				
302-1	Energy consumption within the organization	Current footprint of conventional and renewable energy source-based power industry	120-127	✓
GRI 103: Management Approach 2016				
103-1 (303) 103-2 (303)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 113	
GRI 303: Water 2016				
303-1	Total water withdrawal by source	Current footprint of conventional and renewable energy source-based power industry	113, 114 115	



Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 103: Management Approach 2016				
103-1 (304) 103-2 (304)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 142	
GRI 304: Biodiversity 2016				
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Current footprint of conventional and renewable energy source-based power industry	142	
304-2	Significant impacts of activities, products, and services on biodiversity	Current footprint of conventional and renewable energy source-based power industry	142	
GRI 103: Management Approach 2016				
103-1 (305) 103-2 (305)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 130	
GRI 305: Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	Current footprint of conventional and renewable energy source-based power industry	130-131	✓
305-2	Energy indirect (Scope 2) GHG emissions	Current footprint of conventional and renewable energy source-based power industry	131	
305-5	Reduction of GHG emissions	Current footprint of conventional and renewable energy source-based power industry	130	✓
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air Emissions	Current footprint of conventional and renewable energy source-based power industry	132-133	✓
GRI 103: Management Approach 2016				
103-1 (306) 103-2 (306)	Management approach	Current footprint of conventional and renewable energy source-based power industry	106, 108 136	
GRI 306: Effluents and Waste 2016				
306-1	Water discharge by quality and destination	Current footprint of conventional and renewable energy source-based power industry	140-141	
306-2	Waste by type and disposal method	Current footprint of conventional and renewable energy source-based power industry	136-139	

Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 103: Management Approach 2016				
103-1 (401) 103-2 (401)	Management approach	Structure of employment Salary and employment conditions	160 162	
GRI 401: Employment 2016				
401-1	New employee hires and employee turnover	Indicators	192, 193	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employee	Salary and employment conditions (note: the benefits listed apply to all employees – both full-time and part-time)	162	✓
GRI 103: Management Approach 2016				
103-1 (402) 103-2 (402)	Management approach	Salary and employment conditions	178	
GRI 402: Labor/Management Relations 2016				
402-1	Minimum notice periods regarding operational changes	Salary and employment conditions	179	
GRI 103: Management Approach 2016				
103-1 (403) 103-2 (403)	Management approach	Salary and employment conditions	163	
GRI 403: Occupational Health and Safety 2016				
403-1	Worker representation in joint formal occupational health and safety commissions	Salary and employment conditions Indicators	168 186	
403-2	Type of injuries and rate of injuries, occupational illnesses, lost time and absences and fatalities related to work	Salary and employment conditions Indicators The indicator is partially reported	168, 170, 171 172, 184 185, 188	✓
403-4	Matters related to occupational health and safety included in formal agreements made with trade unions	Salary and employment conditions	173	



Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 103: Management Approach 2016				
103-1 (404) 103-2 (404)	Management approach	Salary and employment conditions	174	
GRI 404: Training and Education 2016				
404-1	Average hours of training per year per employee	Salary and employment conditions	174	
404-2	Programs for upgrading employee skills and transition assistance programs	Salary and employment conditions	174, 175 176, 177	
GRI 103: Management Approach 2016				
103-1 (405) 103-2 (405)	Management approach	Values and ethics management	34	
GRI 405: Diversity and Equal Opportunity 2016				
405-1	Diversity of governance bodies and employees	Indicators	194 195	
GRI 103: Management Approach 2016				
103-1 (413) 103-2 (413) 103-3 (413)	Management approach	Impact of capital works on social and economic life	202, 204 213, 214	
GRI 413: Local Communities 2016				
413-1	Operations with local community engagement, impact assessments, and development programs	Support for employee volunteering programmes Impact of capital works on social and economic life	180, 198 204 214	✓
413-2	Operations with significant actual and potential negative impacts on local communities	Impact of capital works on social and economic life	213	
GRI 103: Management Approach 2016				
103-1 (414) 103-2 (414)	Management approach	Values and ethics management	35	
GRI 414: Supplier Social Assessment 2016				
414-1	New suppliers that were screened using social criteria	Values and ethics management	35	

Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
GRI 103: Management Approach 2016				
103-1 (417) 103-2 (417)	Management approach	Honest communication	62	
GRI 417: Marketing and Labeling 2016				
417-2	Incidents of non-compliance concerning product and service information and labeling	Friendly customer service	70	
417-3	Incidents of non-compliance concerning marketing communications	Friendly customer service	71	✓
GRI 103: Management Approach 2016				
103-1 (418) 103-2 (418) 103-3 (418)	Management approach	Secure personal data	84	
GRI 418: Customer Privacy 2016				
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Secure personal data	85	✓
GRI 103: Management Approach 2016				
103-1 (419) 103-2 (419)	Management approach	Fair market practice	101	
GRI 419: Socioeconomic Compliance 2016				
419-1	Non-compliance with laws and regulations in the social and economic area	Friendly customer service Fair market practice	71 101	
GRI 103: Management Approach 2016				
103-1 (EU) 103-2 (EU)	Management approach	Care for sensitive consumers Geographical availability Security and stability of supply Impact of capital works on social and economic life	82 86 88 203	
GRI G4 Electric Utilities Sector Disclosures 2013				
G4-EU1	Maximum attainable generating power by main types of raw materials and regulatory requirements	Current footprint of conventional and renewable energy source-based power industry Business Model	19 128	✓
G4-EU2	Net amount of energy produced by main sources of energy	Current footprint of conventional and renewable energy source-based power industry Business model	19 129	✓

Disclosure	Description of disclosure	Value/location in the report/comments	Page	External verification by an auditor
G4-EU3	Number of registered individual, industrial, institutional and commercial consumers	Scale of cooperation	56	✓
G4-EU4	Length of surface and underground transmission and distribution lines according to the regulatory system (km)	Business model Geographical availability	8 86	✓
G4-EU5	Allocation of free carbon dioxide emission allowances	Current footprint of conventional and renewable energy source-based power industry Impact of capital works on social and economic life	134 212	
G4-EU12	Transmission and distribution losses as a percentage of total/distributed energy	Impact of capital works on social and economic life	202	
G4-EU18	Percentage of contractor's and subcontractors' employees who passed the relevant health and safety training	Employment and salary conditions	166	
G4-EU27	Number of household disconnections for non-payment, broken down by duration of disconnection	Friendly customer service	70	
G4-EU28	Power outage frequency (SAIFI)	Security and stability of supply	91-92	✓
G4-EU29	System Average Interruption Duration Index (SAIDI)	Security and stability of supply	91-92	✓





Independent Limited Assurance Report on Indicators Presented in the Sustainability Report of Energa Group ("Our responsibility 2018") for the year ended 31 December 2018.

To the Management Board of Energa S.A.

Al. Grunwaldzka 472
80-309 Gdańsk

Scope of work performed

We have undertaken a limited assurance engagement on the indicators presented in the **Sustainability Report of Energa Group ("Our responsibility 2018") for the year from 1st January 2018 – 31st December 2018** (the "Sustainability Report"), developed by Energa S.A. (the "Company") and marked with "√" symbol in a column "External verification" in a table "GRI Table" that is profile disclosures and selected, material specific indicators: 302-1, 305-1, 305-5, 305-7, 401-2, 403-2, 413-1, 417-3, 418-1 oraz EU1, EU2, EU3, EU4, EU28, EU29 („Selected indicators"). The indicators have been reported on the basis of Sustainability Reporting Guidelines GRI Standards for "Core" option, issued by Global Reporting Initiative (GRI).

Responsibility of the Management Board of the Company

The Management Board of the Company is responsible for the preparation and presentation of the indicators presented in the Sustainability Report in accordance with Sustainability Reporting Guidelines GRI Standards for "Core" option, issued by Global Reporting Initiative (GRI). This responsibility includes establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived. The Management Board of the Company is also responsible for reliable, correct and fair information and for correct preparation of the documentation provided to us.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In compliance with International Standard on Quality Control No 1, issued by International Federation of Accountants Deloitte maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the indicators as marked in the GRI index presented in the Sustainability Report based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standards on Assurance Engagements 3000 (Revised), *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board. This standard requires that we plan and perform this engagement to obtain limited assurance about whether the selected indicators presented in the Sustainability Report are free from material misstatement.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

In order to form our conclusion on the indicators as marked in the GRI index presented in the Sustainability Report, we undertook in the period 8 February 2019 – 8 March 2019 the following procedures:

- ⊙ Through inquiries, obtained an understanding of Energa S.A. control environment and information systems relevant to reporting the indicators under review, but did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness.

- ⊙ Obtained an understanding through inquiries, analytical procedures, observation and other applicable evidence gathering procedures on a sample basis on the key structures, systems, processes, procedures and internal controls relating to collation, aggregation, validation and reporting of data for the indicators under review.
- ⊙ Evaluated whether Energa S.A. methods for developing estimates are appropriate and had been consistently applied. However our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate Energa S.A. estimates.
- ⊙ Compared the information included in the Sustainability Report to internal documentation of the Company.
- ⊙ Undertook site visits to assess the completeness of the indicators under review, data collection methods, source data and relevant assumptions applicable to the indicators.

Limitations

The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Our limited assurance engagement has been limited to the indicators as marked in the GRI index presented in the Sustainability Report and does not extend to the rest of the information included in the report nor the report as a whole. Accordingly, our conclusion below covers only these indicators and not all data presented or any other information included in the Sustainability Report.

The process the organization adopts to define, gather and report data on its non-financial performance is not subject to the formal processes adopted for financial reporting. Therefore, data of this nature is subject to variations in definitions, collection and reporting methodology with no consistent, accepted standard. This may result in non-comparable information between organizations and from year to year within the organization as methodologies develop. The accuracy and completeness of the information disclosed in the Sustainability Report are subject to inherent limitations given their nature and the methods for determining, calculating or estimating such information.

Conclusion

Based on our work we have obtained limited assurance that the information concerning the indicators as marked in the GRI index included in the Sustainability Report developed by the Energa S.A. are not non-compliant with Sustainability Reporting Guidelines GRI Standards for 'Core' level issued by Global Reporting Initiative and no matters has come to our attention to cause us to believe that the reviewed indicators presented in the Sustainability Report are materially misstated.

Deloitte Advisory sp. z o.o. sp.k. (former: Deloitte sp. z o.o.)
Warsaw, 8th March 2019