



***Management Board's report on activities  
of PGE Polska Grupa Energetyczna S.A.  
and PGE Capital Group***

***for the year 2016***

***ended December 31, 2016***

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## INTERVIEW WITH THE CEO OF PGE POLSKA GRUPA ENERGETYCZNA S.A.

*"The energy industry all over the world is being reshaped, forcing electric utilities to seek out new growth paths. In this challenging environment, we have redefined the foundations upon which we want to build our future."*

Henryk Baranowski, CEO of PGE Polska Grupa Energetyczna, on challenges facing PGE Group, its new development path, results of 2016 and the energy industry's future.



***Study of global changes shows that the arrival of new technologies can upend traditional business models. The energy industry is facing the change. How does the management want to ensure PGE's market success in the long term?***

Searching for new solutions is becoming exceptionally important these days. The energy industry all over the world is being reshaped, forcing utilities to seek out new growth paths. This is the reason why in this challenging environment our Group has redefined the foundations upon which we want to build our future.

***How will the new strategy help PGE to meet the challenges of modern energy industry?***

We want to combine high efficiency in every area of our business activities with high flexibility, understood as readiness to quickly adapt to current market and regulatory conditions. We are focusing on modern technologies and effective management as well as the development of new business areas. We are searching for new growth vectors such as electromobility, integration of dispersed sources within a system or energy efficiency. We want to be closer to our clients, to better understand them and to provide them with increasingly comprehensive services, all the while guaranteeing safe energy supplies. In our updated strategy, we emphasise the obligation to do business in compliance with

the values and rules defined in PGE Group's Ethics Code and to develop in a conscious and sustainable manner.

***PGE Group is very heavily involved in energy investments in Poland. What about the progress at the most important construction sites and what are the Group's investment plans?***

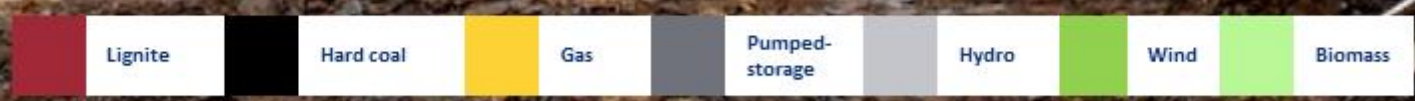
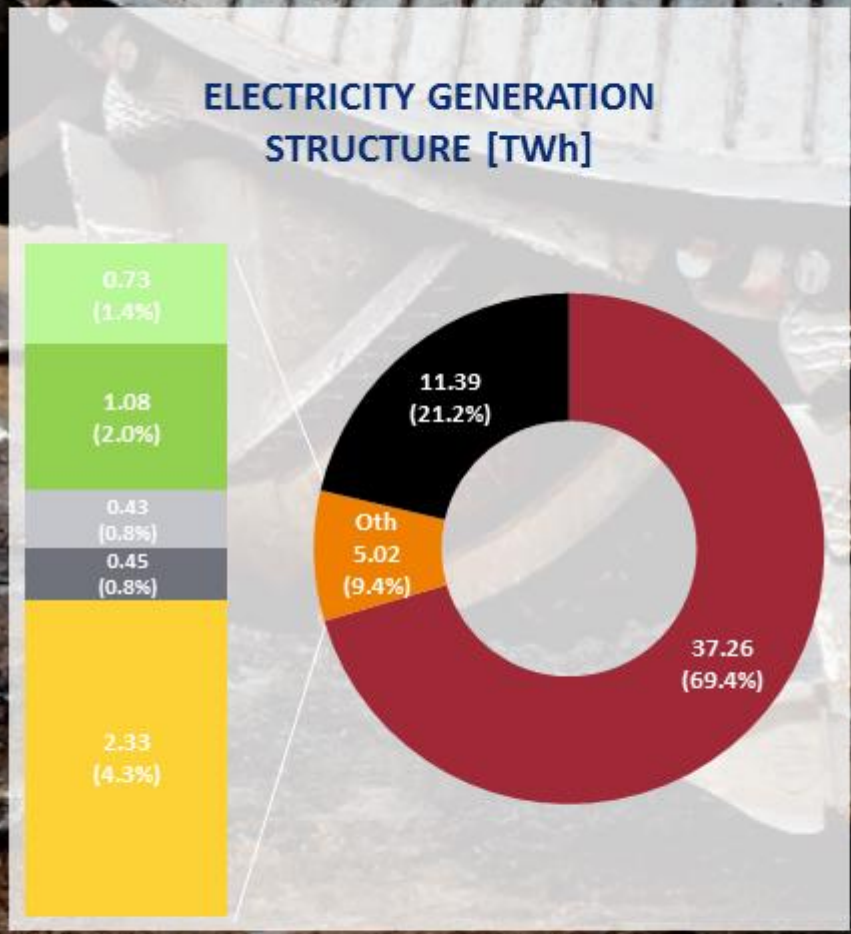
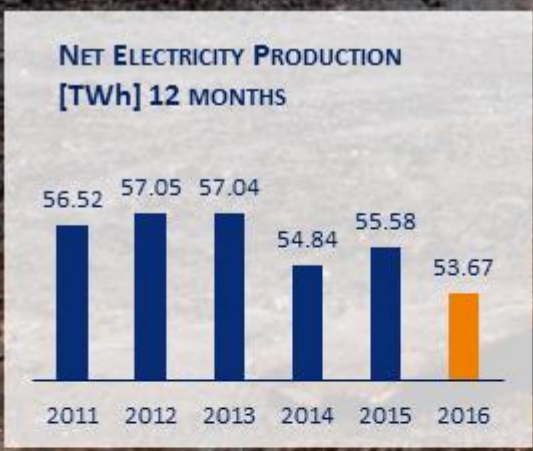
Investments in new capacities are progressing in line with the plan. Two units with total capacity of 1800MW and contract value of about PLN 11 billion are being built at Opole power plant. This project is approx. 70% complete. At Turów power plant, a 490MW unit worth PLN 4 billion is being constructed. We completed a project of 138MW gas-and-steam unit at Gorzów CHP, and we are yet to execute several modernisation projects that will improve the emission profiles of our units and extend our production assets' lifecycles. We are also pleased with investments in the distribution segment, launch in 2016 of the so called Czosnów hub and pilot AMI metering in Łódź and Białystok.

***Please go over the Company's results in 2016.***

2016 was a period of intense work for us, which yielded satisfactory results in both operating and financial terms. After the completion of a comprehensive modernisation at Bełchatów power plant, we substantially increased lignite-based electricity production as of the third quarter. We produced a total of 54 TWh in the entire year and despite a busy overhaul schedule for conventional units, only 3% less than in the preceding year. Group EBITDA significantly exceeded PLN 7 billion, which I consider a fair result in the context of falling electricity prices and the rising costs of CO<sub>2</sub> emission allowances.

***What can we expect in 2017?***

From an operating point of view, PGE Group's development in the cogeneration area looks most interesting. In line with the Group's strategy, we intend to carve out our combined heat-and-power plants into a separate company. Our two largest projects, Opole and Turów, will be continued in 2017. We are also expecting to see final arrangements regarding the capacity market.



\* net profit adjusted by impairment of property, plant and equipment

	CONVENTIONAL GENERATION	RENEWABLE ENERGY
<b>Operations</b>	Extraction of lignite and generation of electricity and heat from conventional sources and distribution of heat and supporting operations in this respect	Electricity generation from renewable sources and in pumped-storage power plants
<b>Key assets of the segment</b>	4 conventional power plants 8 CHPs 2 lignite mines	14 wind power plants 1 photovoltaic plant 29 run-of-river hydro power plants 4 pumped-storage power plants, including 2 with natural flow
<b>Energy volumes</b>	Generation 51.70 TWh	Generation 1.96 TWh
<b>Market position</b>	PGE is a leader in lignite mining in Poland (79%) and domestic leader in electricity generation	PGE is the leading producer of energy from renewable sources with market share of approx. 10% (incl. biomass)
<b>Revenues [PLNm]</b>	11,738	717
<b>EBITDA [PLNm]</b>	4,182	365
<b>Share of Group EBITDA</b>	57%	5%
<b>CAPEX [PLNm]</b>	6,179	144
<b>Assets [PLNm]</b>	36,343	3,671

	<b>SUPPLY</b>	<b>DISTRIBUTION</b>
<b>Operations</b>	Wholesale trading of electricity on domestic and international market and trading of related products, fuels and CO <sub>2</sub> emission allowances	Supply of electricity to final off-takers through the grid and HV, MV and LV power infrastructure
<b>Key assets of the segment</b>	-	285 701 kms. of distribution lines
<b>Energy volumes</b>	Sales to end-users 42.91 TWh	Electricity distributed 34.32 TWh
<b>Market position</b>	One of the leaders in wholesale trading and retail supply in Poland	Second energy distributor with regard to number of customers with approx. 26% share in Polish electricity distribution market
<b>Revenues [PLNm]</b>	16,014	5,918
<b>EBITDA [PLNm]</b>	500	2,230
<b>Share of Group EBITDA</b>	7%	30%
<b>CAPEX [PLNm]</b>	23	1,721
<b>Assets [PLNm]</b>	3,469	17,382

# 2016

**JANUARY**

Opole II project: overall progress exceeding 30%

**MARCH**

Completion of NO<sub>x</sub> reduction installation for units 1,2 and 4 in Opole power plant

**APRIL**

Signing of agreement on initiation of Polska Grupa Górnicza (Polish Mining Group)

Issue of the Notice to Proceed for installation of thermal processing with energy recovery in Rzeszów CHP

**JUNE**

Modernisation of unit 9 (390 MW) in Bełchatów completed

Commissioning of deSO<sub>x</sub> installation for units 4, 5 and 6 in Turów power plant

Foundation stone for the construction of unit in Turów (490 MW)

**JULY**

Opole II project: overall progress exceeding 50%

**SEPTEMBER**

Release of updated business strategy

Agreement with PGNiG for gas supply to CHP Rzeszów and CHP Lublin

Modernisation of unit 10 (390 MW) in Bełchatów completed

**OCTOBER**

Establishment of the company ElectroMobility Poland

**DECEMBER**

Beginning of trial run of gas and steam unit in Gorzów CHP

Letter of intent regarding the investment in Polimex-Mostostal S.A.

Opole II project: overall progress exceeding 70%

## 1. Description of activity of the Capital Group

Capital Group of PGE Polska Grupa Energetyczna S.A. ("PGE Capital Group", the "Capital Group", "PGE Group" the "Group") is the largest vertically integrated producer of electricity and leading electricity supplier in Poland.

The parent company of PGE Capital Group is PGE Polska Grupa Energetyczna S.A. ("PGE S.A.", "PGE", the "Company", the "Issuer").

PGE Group currently organizes its activities in the following four main business segments:

- Conventional Generation

Core business of the segment includes search and extraction of lignite and production of energy in conventional power plants and CHP plants as well as supporting operations in this respect.

- Renewables

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

- Distribution

Core business of the segment includes management of local distribution grids and distribution of electricity.

- Supply

Core business of the segment includes sale and purchase of electricity and gas on wholesale market, trading of CO<sub>2</sub> allowances and energy certificates and purchase and supply of fuels, as well as sale of electricity and provision of services to end users.

Other Operations include provision of services by the subsidiaries to the Capital Group, for example obtaining of financing, IT services, telecommunication services, accounting and HR services. Additionally, Other Operations include a subsidiary, whose main activities are preparation and execution of nuclear power plant construction project.



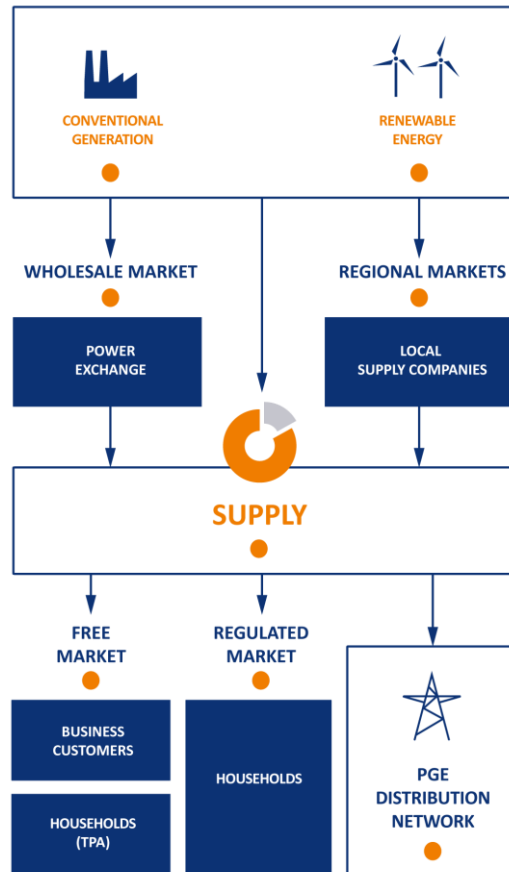
### 1.1. Business model

Thanks to the combination of its own lignite deposits, generation assets and distribution network, PGE guarantees safe and reliable supply of electricity to over 5 million customers.

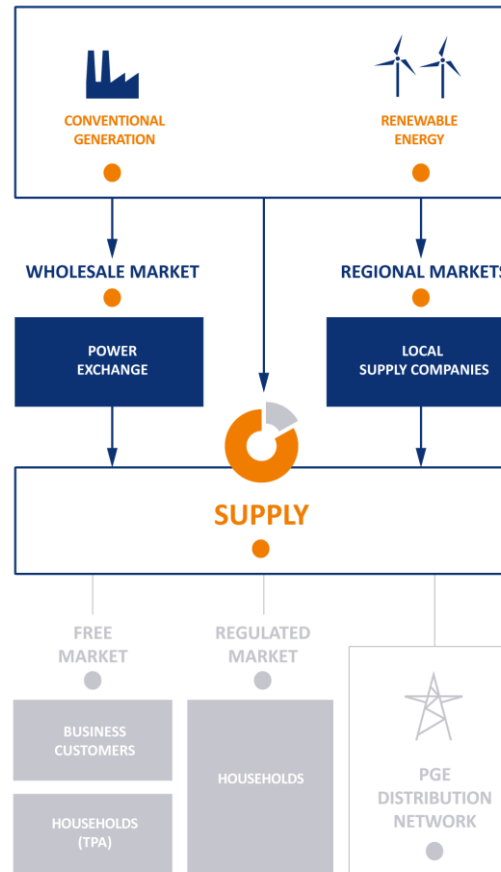


G4-4

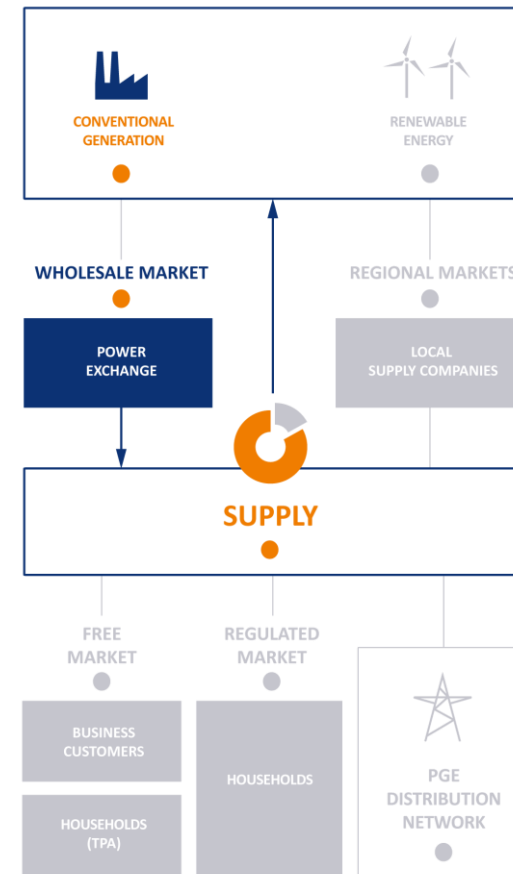
**Production, supply and sales of electricity to the market**



**Production, supply and sales of certificates to the market**



**Trading of CO<sub>2</sub> allowances**



### **1.1.1. Production, supply and sales of electricity to the market**

Electricity generated by so called Centrally dispatched generating units (power plants) and heat in Conventional Generation was traded under power exchange obligation through the Polish Power Exchange (TGE). Other wholesale trading (for example from CHPs) was realized by the Supply segment.

Electricity produced from renewable sources and in pumped-storage power plants is:

- purchased by Supply segment if located at area of operation of PGE Dystrybucja or
- purchased by the supplier acting at particular area of operation.

Supply segment is responsible for wholesale trading of electricity, trading of related products and fuels on domestic and international market as well as sale and supply of electricity and fuels to end-users:

- Business customers – enterprises and institutions, on free market rules (market not regulated)
  - Tariff A – large industry (high voltage) such as steelworks, mines, large factories
  - Tariff B – Large and medium enterprises (medium voltage) such as shopping malls, hospitals and industrial customers
  - Tariff C – Small and medium enterprises and institutions (low voltage) such as shops, service outlets, farms
- Households (TPA) Third-party access rule allows sale to households on a competitive market outside of historical distribution area
- Households and housing cooperatives (G tariff group) within regulated market.

In addition, Supply segment sells electricity to PGE Dystrybucja S.A. to cover network losses connected with the distribution of electricity.

Distribution segment manager by PGE Dystrybucja S.A. is responsible for supply of electricity to final off-takers on its operation area through the HV, MV and LV grid.

### **1.1.2. Production, supply and sales of certificates to the market**

Cogeneration energy certificates of origin (Red and Yellow in PGE Group's case) are generated in CHPs. Green certificates are generated in renewable units but also in conventional units from combustion and co-combustion of biomass in power plants and CHPs.

Trading of certificates pass mainly through TGE.

Some trading agreements with local suppliers include sale of green certificates together with the electricity sold.

Supply segments purchases certificates of origin in order to redeem them respectively to the obligation regarding sales of electricity to end-user (currently Green, Red, Yellow, Blue, Purple and White).

### **1.1.3. Trading of CO<sub>2</sub> allowances**

Internationally traded CO<sub>2</sub> allowances are purchased on power exchanges and trading platforms.

Supply segment purchase CO<sub>2</sub> allowances to cover emissions of Conventional Generation segment. It also manages trading of CO<sub>2</sub> allowances.

Conventional Generation segment redeems the allowances respectively to the actual CO<sub>2</sub> emission.

## 1.2. Ethical culture of the organisation

In June 2016, the Management Board of PGE S.A. and the management boards of the other PGE Group companies adopted a key document for the organisation's ethical culture – PGE Group's Ethics Code.

The Code constitutes a system of values and principles that guide everyday work at each job. The Code confirms PGE Group's commitment to operating in respect of the law as well as internal regulations and the highest standards. It contains practical guidelines for implementing our obligations.

The Code covers PGE Group's operations as well as relations with employees, clients, business partners and the wider market environment.

All employees at every PGE Group entity, including the management and all co-operators, are required to follow the Code. Employee training on PGE Group's Ethics Code was initiated in 2016.

Furthermore, intense educational and communication activities are on-going throughout the Group regarding compliance within the organisation and outside as substantial support for the Compliance Management System.

## 1.3. Employment in the Capital Group

Employees are PGE Group's most valuable asset. Thanks to their experience and involvement, we can build an organisation that is based on values, where social responsibility is combined with business objectives. PGE Group is a place for people with passion and the motivation to act. Our ambition is to be the most effective energy group in Poland. This means implementing best corporate governance practices as regards human capital management, business decision support and effectiveness management as well as standardisation of support processes.

### 1.3.1. Employment structure in PGE Capital Group

PGE Group is among of the five largest employers in Poland, providing stable employment to more than 38 000 people at over 200 locations throughout the country. PGE Group employees extract lignite in open-pit mines, operate power and power-and-heat plants, produce wind and water energy as well as apply economic knowledge to analyse investment feasibility or develop long-term operating strategies for PGE Group and each of its business lines.

Table: Employment level.

In FTEs			%		
	Dec. 31, 2016	Dec. 31, 2015	change	Dec. 31, 2014	change
<b>Total employment in PGE Group, including:</b>	<b>38,471.00</b>	<b>38,876.80</b>	<b>-1%</b>	<b>39,977.34</b>	<b>-3%</b>
Conventional Generation	22,787.61	23,197.78	-2%	23,903.16	-3%
Renewable Energy	509.10	518.95	-2%	576.83	-10%
Supply	2,066.10	2,001.85	3%	2,112.74	-5%
Distribution	10,238.91	10,298.40	-1%	10,648.25	-3%
Other operations	2,869.28	2,859.82	0%	2,736.36	+5%

### 1.3.2. Human Capital Management Strategy of the PGE Group

The key document supporting the management of workplace area is the Human Capital Management Strategy for the PGE Group ("HCM Strategy"), which was adopted in 2015. In 2016 PGE Group continued cooperation in implementation of the initiatives described in HCM Strategy.

Key activities in the last year were also focused on comprehensive transformation of HCM area, consisting of implementation of the Model HR as a Business Partner, what is strictly connected with the split of transactional functions of HR (e.g. staff) from strategic HR.

Workplace Architecture is the most important HR tool implemented in 2016, introducing a consistent Group-wide system for defining workplace requirements, which is essential for effectively managing human capital. Thanks to Workplace Architecture, HR solutions can be more harmonised. An IT tool (SAP HRM) was also developed and will support employee competence assessment processes from 2018.

### 1.3.3. New employees in PGE Group

PGE Group applies common standards for talent searching and recruitment, which are described in "PGE Group's corporate employment rules." In recruiting employees, PGE Group takes effort to ensure that the process is transparent, friendly for participants and effective for the company.

PGE Group actively operates internship programmes for students and graduates. By implementing such programmes, PGE Group strives to close age and competence gaps and to continuously build an organisational culture that promotes involvement, professionalism and innovativeness.

Programs included:

- In October 2016, PGE Group in cooperation with PKN Orlen S.A. and PGNiG S.A. began implementing the #Energy for the Future internship programme under the auspices of the Energy Ministry. The programme's participants include graduates and students who during a year-long internship will gain experience in their areas of interest and get to know the specifics of working in the energy industry.
- In 2016 PGE Group continued cooperation with the Lesław A. Paga Foundation within the Energy Academy – addressed to people fascinated by energy and wanting to develop their careers in this industry. The Academy participants gain the opportunity of attending paid internships at PGE Group.

### 1.3.4. "Turn The Power On" – an on-boarding programme for new employees at PGE S.A.

We foster the sense of belonging at PGE Group from day one. To this end, every new employee undergoes an adaptive programme at the company where they are hired and at Group-level.

### 1.3.5. Generational gap threat at PGE Group

In connection with a generational gap being an issue, some aspects of the Human Capital Management Strategy are becoming urgent. In the coming years, the Group plans to undertake initiatives intended to close this generational gap. One example is an educational programme prepared by PGE Dystrybucja S.A. in 2016 in connection with forecasts for a generational gap among electric technicians. Cooperation was established with first- and second-level vocational schools and universities concerning internships, provision of specialist equipment to school workshops and organisation of teaching sessions.

### 1.3.6. Employee training and development

PGE Group aims to appropriately use its employees' competences and effectively manage the transfer of their knowledge and skills. Continuous development is important, as is the improvement of competences, therefore every effort is made to ensure that employees have opportunities to raise their qualifications by participating in specialist training, soft and managerial skill workshops, IT training, postgraduate studies and foreign language lessons.

PGE Group substantially counts on the specially prepared Central Training and Development Programmes, which are the best investment in employees. Innovativeness has an important place in PGE Group's strategy. Because of this, in 2016 the Group commenced the programme Technology Commercialisation Academy, with participants including employees from the research and innovation area at PGE Group. The Academy's goal is to supply the knowledge, tools and skills essential to the process of effective commercialisation of innovative technologies and projects.

The first edition of the Architects of Innovation conference was also organised in 2016. Members of the management boards of PGE Group companies participated in workshops, as well as the key people responsible for the Group's research and innovation area.

### 1.3.7. Management competence development programmes and employee competence diagnostics

PGE Group strives to create comfortable conditions for its employees so that they can develop their competences and raise their qualifications. Employees are encouraged to actively undertake self-improvement and knowledge-sharing initiatives, which leads to the formation of a culture of a learning organisation. For example, the first edition of development programmes for PGE Systemy S.A. management was completed in 2016. Their objective was to raise the level of leadership and management skills and to create a culture of involvement and cooperation. Elsewhere, based on a report from the Effective Manager programme, which was carried out in 2015 at PGE Obrót S.A., a plan of further development action was formulated in 2016 as regards development of management competences. In 2017, PGE Obrót S.A. plans to continue this programme as a series of training and development workshops – “Master of Coaching”.

In the coming years, the Group intends to launch a process for diagnosing the competences of PGE Group employees. To this end, an IT tool (SAP HRM) was developed in 2016, which will support employee competence evaluation processes at all business lines from 2018.

### 1.3.8. Periodic employee evaluation system

Selected PGE Group companies operate a management by objectives system that supports and motivates employees in fulfilling their tasks. This solution is being applied to PGE S.A. and PGE Obrót S.A. employees, management staff at PGE EO S.A. as well as some of the management staff at PGE GiEK S.A.

### 1.3.9. Employee safety is always a priority

As a responsible employer, PGE Group strives to ensure that employees have safe working conditions. The Group's constant goal is the promotion of a safe-work culture among our employees. The initiatives being carried out are largely based on preventive activities as well as exchanging knowledge and experiences. Each Group company has its own workplace health and safety policy. This mainly results from the specific nature of the different business lines. Due to the nature of the work, employees of PGE GiEK S.A., PGE Dystrybucja S.A. and PGE Energia Odnawialna S.A. Promoting safety among employees has become one of objectives to be achieved as part of managing corporate social responsibility and sustainable development, which is part of PGE Group's updated strategy. More information about activities related to caring for the health and safety of PGE Group employees can be found in appendix 1 to this report.

### 1.3.10. Voluntary Leave Program

One of the strategic objectives in the Group's updated strategy is the introduction of changes that will make PGE Group the most effective energy group in Poland. This ambitious task requires transformations, also within the employment structure. The Voluntary Leave Programme is a consequence of the adopted Group-wide employment optimisation plan. The essence of the VLP is to encourage employees to voluntarily terminate employment relationship with the company, particularly in areas involving the standardisation and centralisation of business processes as well as in the areas covered by the work automation. VLP usually provides above-standard severance pay, which is an additional incentive for the employee.

Table: VLP realisation in particular companies of the PGE Group (in number of persons).

	PGE Dystrybucja S.A.	PGE EO S.A.	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.
VLP in 2016	134	-	451	-	-
VLP in 2015	200	49	802	114	2
VLP in 2014	-	-	1 154	-	-

### 1.3.11. Social dialogue and freedom of association

There are 112 trade union organisations at PGE Group. Their scale, number and dispersion make it a necessity to maintain an active social dialogue policy on all management levels. Dialogue is conducted at central level (meetings of CEOs with trade union teams from all business lines), at business line level (branch-specific trade union teams) and at employer level, i.e. at each branch. In addition, Councils / Commissions for Social Dialogue operate within the business lines, that form a negotiations and discussion forum for cases relating to more than one employer.

2016 ended with the signing of agreements putting an end to collective disputes at PGE GiEK S.A., therefore also paving way for two important undertakings planned for 2017: commencement of the rejuvenation of staff in certain industries and harmonisation of collective labour agreements. The signed agreements cover the period until the end of 2027 and regulate headcount issues for years 2017-2020, with the intention of maintaining headcount at a level essential for the safe and effective performance of tasks by respective employers. From 2020, the parties to these agreements will carry out periodic analyses and verification of the headcount. Moreover, employers have undertaken to not conduct any group or individual

layoffs for reasons not related to employees, without consultations and arrangements with trade unions. At PGE Obrót S.A., the "Agreement on cooperation in holding social dialogue" was initialled.

In 2016 – following the appointment of a Social Dialogue Council – the Tripartite Energy Industry Team was also reactivated. This institution constitutes a forum for dialogue and cooperation. The team's task is to develop joint positions in matters that are important from the viewpoint of state policy towards the energy industry as well as employee and employer interests. The team consists of representatives of the largest energy companies, including PGE S.A., as well as representatives of PGE Group's trade unions.

## 1.4. Description of organisation

Table: Companies comprising the main business segments of PGE Group as at December 31, 2016.

Segment	Company	Branch
<b>CONVENTIONAL GENERATION</b>	1. PGE Górnictwo i Energetyka Konwencjonalna S.A. with its registered office in Bełchatów	<ul style="list-style-type: none"> <li>● Branch Bełchatów power plant</li> <li>● Branch Opole power plant</li> <li>● Branch Turów power plant</li> <li>● Branch ZEDO</li> <li>● Branch Bełchatów lignite mine</li> <li>● Branch Turów lignite mine</li> <li>● Branch Gorzów CHP</li> <li>● Branch Bydgoszcz CHPs</li> <li>● Branch Rzeszów CHP</li> <li>● Branch Kielce CHP</li> <li>● Branch Lublin Wrotków CHP</li> <li>● Branch Zgierz CHP</li> </ul>
	2. Przedsiębiorstwo Energetyki Ciepłej sp. z o.o. in Zgierz	
	3. MegaSerwis sp. z o.o. in Bogatynia	
	4. ELBIS sp. z o.o. with its registered office in Rogowiec	● I Branch with seat in Warsaw
	5. PUP ELTUR SERWIS sp. z o.o. with its registered office in Bogatynia	● Branch in Brzezie*
	6. PUP TOP SERWIS sp. z o.o. in Bogatynia	
	7. ELMEN sp. z o.o. in Rogowiec	
	8. MEGAZEC sp. z o.o. in Bydgoszcz	
	9. EPORE sp. z o.o. with its registered office in Bogatynia	<ul style="list-style-type: none"> <li>● Branch Bogatynia</li> <li>● Branch Bełchatów</li> <li>● Branch in Brzezie*</li> <li>● Branch Żarska Wieś</li> </ul>
	10. RAMB sp. z o.o. in Piaski	
	11. PTS BETRANS sp. z o.o. with its registered office in Bełchatów	<ul style="list-style-type: none"> <li>● Branch ELTUR-TRANS with seat in Bogatynia</li> <li>● Branch Rogowiec with seat in Rogowiec</li> </ul>
	12. BESTGUM POLSKA sp. z o.o. in Rogowiec	
	13. Energoserwis Kleszczów sp. z o.o. in Rogowiec	
<b>RENEWABLES</b>	14. PGE Energia Odnawialna S.A. with its registered office in Warsaw	<ul style="list-style-type: none"> <li>● Branch ZEW Solina - Myczkowce in Solina</li> <li>● Branch ZEW Porąbka - Żar in Międzybrodzie Białskie</li> <li>● Branch ZEW Dychów in Dychów</li> <li>● Branch EW Żarnowiec in Czymanów</li> <li>● Branch „Galicja” with seat in Orzechowce</li> </ul>
	15. PGE Energia Natury sp. z o.o. with its registered office in Warsaw	
	16. PGE Energia Natury PEW sp. z o.o. with its registered office in Warsaw	
	17. Elektrownia Wiatrowa Baltica-1 sp. z o.o. in Warsaw	
	18. Elektrownia Wiatrowa Baltica-2 sp. z o.o. in Warsaw	
	19. Elektrownia Wiatrowa Baltica-3 sp. z o.o. in Warsaw	
<b>SUPPLY</b>	20. PGE Polska Grupa Energetyczna S.A. in Warsaw	
	21. PGE Dom Maklerski S.A. in Warsaw	
	22. PGE Trading GmbH with its registered office in Berlin	<ul style="list-style-type: none"> <li>● Branch in Prague</li> <li>● Branch in Warsaw</li> </ul>
	23. PGE Obrót S.A. with its registered office in Rzeszów	<ul style="list-style-type: none"> <li>● Branch with seat in Lublin</li> <li>● Branch with seat in Łódź</li> <li>● Branch with seat in Warsaw</li> <li>● Branch with seat in Białystok</li> <li>● Branch with seat in Zamość</li> <li>● Branch with seat in Skarżyska-Kamienna</li> </ul>
24. ENESTA sp. z o.o. in Stalowa Wola		
<b>DISTRIBUTION</b>	25. PGE Dystrybucja S.A. with its registered office in Lublin	<ul style="list-style-type: none"> <li>● Branch Lublin</li> <li>● Branch Łódź-Miasto</li> <li>● Branch Łódź-Teren</li> <li>● Branch Warszawa</li> </ul>

- Branch Rzeszów
- Branch Białystok
- Branch Zamość
- Branch Skarżysko-Kamienna

\* Branch in Brzezie since January 1, 2017 has been renamed to Branch Opole

Full composition of the PGE Capital group is presented in note 1.3 to the consolidated financial statements.



#### 1.4.1. The most significant changes in organisation of the Capital Group

Changes which occurred in the PGE Capital Group's structure in the period from January 1, 2016 until the publication date of this report, are presented in note 1.3 to consolidated financial statements and described below.

##### Setting up of new companies

Entity/entities	Date of registration in National Court Register	Share capital	Comment
PGE Inwest 17 sp. z o.o. PGE Inwest 18 sp. z o.o.	October 20, 2016 October 19, 2016	PLN 10,000 each company	On September 15, 2016 PGE S.A. set up two companies with seats in Warsaw in form of limited liability companies.
ElectroMobility Poland S.A.	December 7, 2016	PLN 10,000,00	On October 19, 2016 PGE S.A., ENERGA S.A., ENEA S.A. and Tauron Polska Energia S.A. set up a joint stock company with a seat in Warsaw. Each of the above companies took up 25% of the share capital.
PGE Towarzystwo Funduszy Inwestycyjnych S.A.	January 27, 2017	PLN 750,000	On December 29, 2016 PGE S.A. set up a company in form of a joint stock company.
PGE Inwest 19 sp. z o.o.	February 24, 2017	10.000 PLN	On February 1, 2017 PGE S.A. set up company with seat in Warsaw in form of limited liability company.

##### Increase of the share capital of companies

Entity	Date of registration National Court Register	(1) Share capital (2) Increase (3) Share capital after increase	Comment
PGE Trading GmbH with a seat in Berlin	March 7, 2016	(1) EUR 3,350,000 (2) EUR 2,000,000 (3) EUR 5,350,000	On February 2, 2016 the Extraordinary Assembly of Partners of PGE Trading GmbH with its seat in Berlin adopted a resolution on increase of the company's share capital. The increase of the share capital was acquired by PGE S.A. in exchange for a cash contribution.
PGE Inwest 5 sp. z o.o., PGE Inwest 6 sp. z o.o., PGE Inwest 7 sp. z o.o., PGE Inwest 8 sp. z o.o., PGE Inwest 9 sp. z o.o., PGE Inwest 10 sp. z o.o., PGE Inwest 11 sp. z o.o., PGE Inwest 12 sp. z o.o., PGE Inwest 13 sp. z o.o., PGE Inwest 14 sp. z o.o., PGE Inwest 15 sp. z o.o. (the "Companies")	July 19, 2016 July 20, 2016 July 25, 2016 July 18, 2016 August 12, 2016 August 12, 2016 July 19, 2016 September 13, 2016 July 21, 2016 July 19, 2016 July 26, 2016	(1) PLN 10,000 each company (2) by PLN 10,000 for each company (3) PLN 20,000 each company	The Ordinary Assemblies of Partners of June 22, 2016 adopted resolutions on the increase of the share capitals of those companies. The increase of the share capitals were acquired by the sole partner of the companies, i.e. by PGE S.A., in exchange for the cash contribution.
PGE Inwest 13 sp. z o.o.	January 27, 2017	(1) PLN 20,000 (2) PLN 730,000 (3) PLN 750,000	The Extraordinary Assembly of Partners of December 7, 2016 adopted resolution on the increase of the share capital of company. The increase of the share capital was acquired by PGE S.A. in exchange for a cash contribution.
PGE Inwest 15 sp. z o.o.	No registration at the	(1) PLN 20,000 (2) PLN 50,000	The Extraordinary Assembly of Partners of December 20, 2016 adopted resolution on the increase of the share capital of company. The increase of the share capital was acquired by PGE S.A. in exchange for a cash contribution.

	time of publication	(3) PLN 70,000	
PGE EJ 1 sp. z o.o.	February 15, 2017	(1) PLN 275,859,450 (2) PLN 34,999,020 (3) PLN 310,858,470	The Extraordinary Assembly of Partners of December 21, 2016 adopted resolution on the increase of the share capital of company. The increase of the share capital was acquired by all partners, i.e. PGE S.A., KGHM Polska Miedź S.A., TAURON Polska Energia S.A. and ENEA S.A. in exchange for a cash contribution, proportionally to their stakes.

## Mergers of companies

Entities	Date of transaction/ registration in the National Court Register	Comment
PGE Inwest 4 sp. z o.o. and RAMB sp. z o.o. – The merger of the companies through the transfer to the Acquiring Company (PGE Inwest 4 sp. z o.o.) of all of the assets of the Acquired Company (RAMB sp. z o.o.) and subsequent dissolution of the Acquired Company without liquidation	September 19, 2016 December 16, 2016	The Extraordinary Assembly of Partners of PGE Inwest 4 sp. z o.o. and RAMB sp. z o.o. adopted resolutions on merger. As a result of the merger, the share capital of the Acquiring Company was increased from PLN 10,000 to PLN 38,926,000, i.e. by PLN 38,916,000, through issue of 38,916 new shares with a nominal value of PLN 1,000 each. PGE S.A. as the sole shareholder of the Acquired Company took up all new shares in the increased share capital of the Acquiring Company in exchange for the shares in the share capital of the Acquired Company.
PGE Energia Natury PEW sp. z o.o. (the Acquiring Company) and PGE Energia Natury Omikron sp. z o.o. (the Acquired Company) merger of the companies through the transfer to the Acquiring Company of all of the assets of the Acquired Company and subsequent dissolution of the Acquired Company without liquidation	August 17, 2016 August 31, 2016	The Extraordinary Assembly of Partners of PGE Energia Natury PEW sp. z o.o. and PGE Energia Natury Omikron sp. z o.o. (subsidiaries of PGE Energia Odnawialna S.A.) adopted resolutions on merger. As a result of the merger, the share capital of the Acquiring Company increased from PLN 31,000,000 to PLN 146,000,000, i.e. by PLN 115,000,000, through issue of 115,000 new shares with a nominal value of PLN 1,000 each. PGE Energia Odnawialna S.A. as the sole shareholder of the Acquired Company took up all new shares in the increased share capital of the Acquiring Company in exchange for the shares in the share capital of the Acquired Company.

## Acquisition or disposal of shares by the companies

Shares of the entity	Date of transaction/ registration in the National Court Register	Number of acquired shares	Comment
RAMB sp. z o.o. – acquisition of shares by PGE S.A. (agreement for sale of shares)	March 10, 2016	6,812 shares	PGE GiEK S.A and PGE S.A signed an agreement for sale of 6,812 shares in RAMB sp. z o.o. with its registered office in Piaski (Kleszczów commune), owned by PGE GiEK S.A., constituting 100% of the share capital of that company. Ownership of the shares was transferred to PGE S.A. as of the agreement date. Currently PGE S.A. is the sole partner of the company.
Polska Grupa Górnicza sp. z o.o. („PGG”) – acquisition by PGE GiEK S.A. of shares in the increased share capital	April 26, 2016/ July 25, 2016	3,611,111 shares	PGE GiEK S.A. signed an agreement on commencement of operation by PGG. On April 29, 2016 the Extraordinary Assembly of Partners of PGG adopted resolution in the increase of the share capital by PLN 1,805,557,200 to PLN 2,305,607,200, through issue of new shares taken up by: PGE GiEK S.A., ENERGA Kogeneracja sp. z o.o., PGNiG TERMIKA S.A., Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych, Towarzystwo Finansowe Silesia sp. z o.o., WĘGLOKOKS S.A. PGE GiEK S.A. took up shares with a nominal value of PLN 361,111,100 representing 15.7% in the increased share capital of PGG.
Telewizja Familijna S.A. – acquisition of shares by PGE Inwest 2 sp. z o.o. (agreement for sale of shares)	June 13, 2016	220,000 inscribed shares	PGE S.A. and PGE Inwest 2 sp. z o.o. (100% subsidiary of PGE S.A.) signed an agreement for sale of shares of Telewizja Familijna S.A. in bankruptcy with its seat in Warsaw, held by PGE S.A., representing 11.96% of the share capital of the company. As at the agreement date, the ownership of shares was transferred to PGE Inwest 2 sp. z o.o.

Bank Ochrony Środowiska S.A. („BOŚ”) – acquisition by PGE Energia Odnawialna S.A. („PGE EO”) of shares in the increased share capital	June 22, 2016/ July 12, 2016	2,000,000 ordinary bearer shares	PGE EO signed an agreement for subscription of new shares in the increased share capital of BOŚ. Submission of subscription offer took place through private placement. PGE EO acquired 2,000,000 shares with a nominal value of PLN 20,000,000 on June 23, 2016. On August 5, 2016 the shares were registered on the securities account of PGE EO. As a result of the above transaction, PGE EO currently holds shares constituting 3.18% in the share capital of BOŚ.
Polska Grupa Górnicza sp. z o.o. („PGG”) – acquisition by PGE GiEK S.A. of shares in the increased share capital	November 3, 2016/ January 27, 2017	833,333 shares	The Extraordinary Assembly of Partners of PGG adopted resolution in the increase of the share capital by PLN 366,667,000 to PLN 2,672,274,200 through issue of new shares. PGE GiEK S.A. took up 833,333 shares with a nominal value of PLN 83,333,300, representing 3.1% in the increased share capital of PGG. In total PGE GiEK S.A. took up 4,444,444 shares representing 16.6% in the increased share capital of PGG.
Polimex-Mostostal S.A. („Polimex”) – acquisition by PGE S.A. of shares in the increased share capital	January 20, 2017 February 21, 2017 the share capital increase was registered	37,500,000 ordinary bearer shares	On January 18, 2017 PGE S.A., ENEA S.A., ENERGA S.A, PGNiG Technologie S.A. (the „Investors”) signed Investment Agreement with Polimex-Mostostal S.A. („Polimex”), on the ground of which, subject to the conditions precedent specified in the agreement, the Investors have committed to make investment in Polimex. The investment involves acquisition by the Investors jointly of 150,000,000 ordinary bearer shares with a nominal value of PLN 2 each and the issue price amounting to PLN 2 PLN for one share (“New Issue Shares”), issued by Polimex for the increase of the share capital of Polimex by the amount of up to PLN 300,000,000 (the “Investment Agreement”). In accordance with the resolution of the Extraordinary General Meeting of December 28, 2016 on the increase of the share capital, the New Issue Shares will be introduced to the trading on the regulated market of the Warsaw Stock Exchange and will be dematerialised. On the ground of the Investment Agreement, in connection with the fulfilment of the conditions precedent, on January 20, 2017 PGE S.A. accepted the offer for acquisition in private placement of 37,500,000 New Issue Shares for the total price of PLN 75,000,000. As a result of the share capital increase of Polimex and above transaction the Investors hold a total of 156,000,001 shares representing currently 65.93% in the share capital of Polimex
Polimex-Mostostal S.A. – acquisition of shares by PGE S.A. (agreement for sale of shares)	January 20, 2017	1,500,001 shares	On January 18, 2017 PGE S.A., ENEA S.A., ENERGA S.A, PGNiG Technologie S.A. (the „Investors”) signed an agreement with SPV Operator sp. z o.o. („SPV Operator”), obliging the parties, provided the conditions precedent are fulfilled, to conclude transaction in which SPV Operator sells to the Investors total of 6,000,001 shares of Polimex. On January 20, 2017, in connection with the fulfilment of the conditions precedent, PGE S.A. acquired 1,500,001 shares of Polimex from SPV Operator.
Polska Grupa Górnicza sp. z o.o. („PGG”) – acquisition by PGE GiEK S.A. of shares in the increased share capital	February 1, 2017 No registration at the time of publication	555,556 shares	The Extraordinary Assembly of Partners of PGG adopted resolution in the increase of the share capital by PLN 244,444,000 to PLN 2,916,718,200 through issue of new shares. PGE GiEK S.A. took up 555,556 shares with a nominal value of PLN 55,555,600, representing 1.9% in the increased share capital of PGG.

### Purchase of shares from minority shareholders

In the period from January 1, 2016 to December 31, 2016, PGE S.A. purchased from minority shareholders of PGE GiEK S.A., as a result of a mandatory buyback in accordance with art. 418 of the Polish Commercial Companies’ Code, a total of 162,775 shares in PGE GiEK S.A. (constituting 0.02% of PGE GiEK S.A.’s share capital). Currently PGE S.A. holds shares representing 99.98% of the share capital of PGE GiEK S.A.

### Deletion of the company from the National Court Register

On May 25, 2016 Pensjonat Dychów sp. z o.o. in liquidation, with its seat in Dychów, was deleted from the National Court Register as a result of the liquidation proceedings. PGE Energia Odnawialna S.A. held 100% shares in the share capital of the company.

In period January 1, 2016 – December 31, 2016 PGE Capital Group did not discontinue any of its substantial operations.

## 2. PGE Group's strategy and its implementation

### 2.1. Updated strategy of the Capital Group

On September 6, 2016 the Supervisory Board approved PGE Group's strategy update presented by the Management Board of PGE. The update is aimed at adapting the Group's activities to the changing environment. In the updated document, the Group also addresses threats and opportunities connected with, among others, volatility of fuel prices, climate policy directions, market model evolution and new technology development.

#### Mission, vision and overall objectives

In accordance with the updated strategy, PGE's mission is to ensure security and growth based on reliability of supply, technical excellence, modern services and partnership relationships. The overall objective of PGE Group's operations is to increase its shareholder value and the key role in ensuring Poland's energy security.

Diagram: Redefining PGE Group's mission



#### PGE Group's new mission

We provide security and growth based on reliability of supply, technical excellence, modern services and partnership relationships

Updated vision determines the target position of the PGE Group in four areas:



## 2.2. Implementation of key projects within the strategic objectives

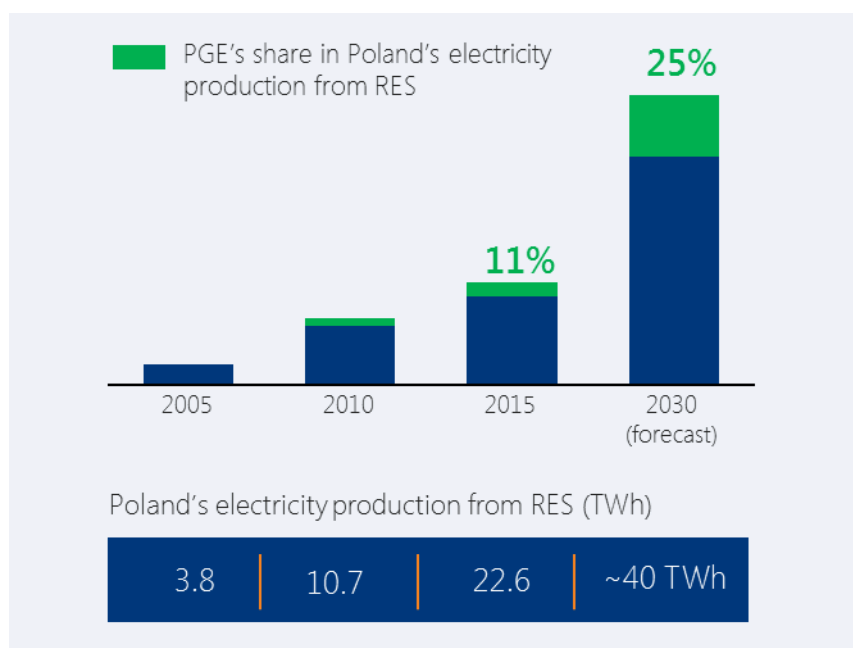
### 2.2.1. Leader in electricity generation, actively seeking development opportunities

To retain its leading position in the area of electricity generation, PGE Group must secure at least a 40% share of the electricity generation market in Poland by 2020. PGE Group is continuing its flagship investments in Opole and Turów and may invite partners to participate in these projects. At the same time, further investments in conventional energy based on a new market model will be analysed, e.g. construction of new capacities at Dolna Odra power plant. Potential for the co-firing of biomass in PGE Group's existing production assets will be analysed, based on a auction support system for renewables. The company will carry out modernisations of conventional plants and combined heat-and-power plants in an optimal scope so that they are adapted to new industrial emission standards BAT (Best Available Technology).

At the same time, within the generation area, PGE Group will seek innovative solutions that will cement its competitive advantage and allow it to reduce environmental impact, including through adapting production assets to a new energy market model, maintaining a competitive lignite extraction operation, reducing SO<sub>2</sub>, NO<sub>x</sub>, particulates and mercury emissions as well as increasing the efficiency of coal combustion by-product use.

PGE Group intends to retain its leadership in the renewables segment and account for approx. 25% of domestic renewables generation by 2030. To reach this ambitious target, PGE Group plans to complete those onshore wind farm projects that are at the most advanced stages, build an approx. 1,000 MW offshore wind farm and increase its presence in the distributed generation segment. These investments will depend on successes in the auction support system, development of an innovative financing model and implementation of new business models for the micro-installations segment.

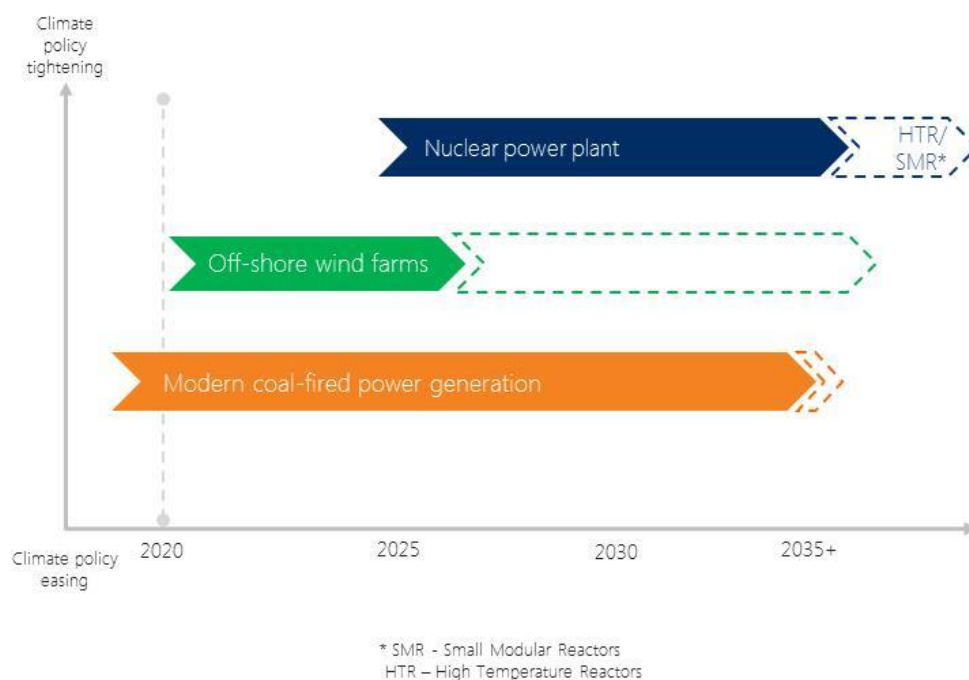
Diagram: PGE Group's aspirational share in Poland's electricity production from RES.



In order to maintain a leading position in generation, in the long term PGE Group has three strategic options, thereby can make the optimal choice in the context of future climate policy:

- Construction of Poland's first nuclear power plant, following the development of a model guaranteeing economic viability of the investment
- Construction of approx. 1,000 MW capacity in off-shore wind farms, based on an auction support system,
- Modern coal-fired power generation, including utilization of new lignite deposits in case there is a significant easing of the climate policy.

Diagram: Strategic options.



### 2.2.2. Reliable and active utility and service supplier

Currently on-going investments in the distribution segment are intended to increase the reliability of supply and reduce SAIDI and SAIFI by 56% compared to 2015 and the average connection time by 40%. The achievement of these quality targets is being supported by, among others, the development of electricity quality monitoring systems, intelligent grid metering and automation as well as the construction of a digital transmission system.

In the retail area, PGE Group is planning to focus on strengthening relations with clients through gaining more knowledge about their needs. In response to identified expectations, PGE Group will expand its offering by, for example, adding new product and services that are complementary to electricity as well as through the development of new sales and communication channels, what will have a positive impact on monitoring client satisfaction indicators. Attaining the status of a reliable, credible and modern supplier will allow PGE Group to maintain low client migration rates in the mass segment.

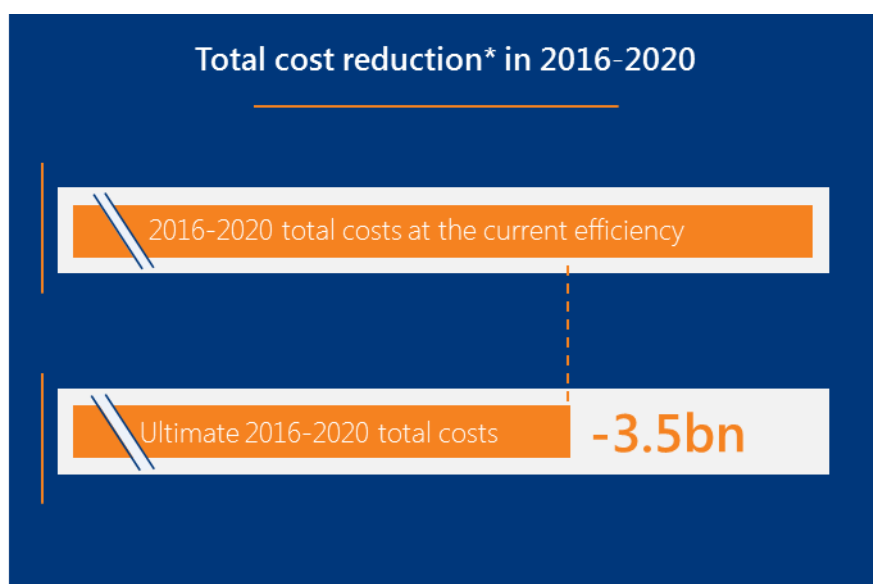
### 2.2.3. Poland's most efficient and flexible energy group

PGE Group's cost and operational efficiency is one of key preconditions for accomplishing the other strategic goals. On the other hand, flexibility is key to achieving the ability to respond quickly to opportunities arising in PGE Group's environment

Due to efficiency improvement, in 2020 PGE Group plans to achieve reduction of the forecasted controllable costs in the amount of PLN 500m versus year 2016. This will allow for the total cost reduction in 2016-2020 by approx. PLN 3.5bn versus the current efficiency scenario.

The goal of the cost reduction is to strengthen PGE Group's competitiveness and maintain potential of financing of the Group's development. Objectives and initiatives in scope of improving the operational and cost efficiency are assigned to each business line of the Group.

Diagram: Total reduction of controllable costs in 2016-2020.



\*Controllable costs

Reduction of controllable costs will concern both the modification of organisational structure and as well as optimisation of processes. Changes in the organisational structure are intended to prepare PGE Group for development in the most promising business areas as well as to eliminate redundant functions and simplify organisational structures. These changes will be introduced through, among others, standardisation and optimisation of support functions throughout PGE Group, implementation of mechanisms for effective formation of new business lines and formation of a new business line – “Co-generation”. Process optimisation will focus on improving operational efficiency measured by ratios relating to cost, time and quality of particular processes, both basic and supporting. Moreover, within next four years, planned expenditures on modernization and replacements will be reduced by approximately PLN 500m in relation to forecasts. It will be possible thanks to introduction of integrated asset management system, among others. Unified approach to planning of expenditures, that takes into account inter alia the class of the assets will allow for reducing asset maintenance costs and modernisation and replacement expenditures, while maintaining the proper availability and security of power supply.

Higher flexibility at PGE Group will be achieved mainly through mechanisms for monitoring the surrounding and rapidly responding to changes, cooperating with external partners, scientific and academic institutions, as well as streamlining decision-making, analytical and reporting processes.

#### 2.2.4. Leader in development of new business models and operating segments

The updated strategy places particular emphasis on the development of new business models and operating segments in order to diversify revenues structure and to increase EBITDA from new operations. This will be possible through PGE Group's involvement in cooperating in the area of development and commercialisation of new technologies with credible partners having competences allowing to obtain synergies and competitive advantages. PGE Group's involvement may come in the form of financing, technical or organisational support, depending on the type of venture and form of its implementation. New technological solutions that are of interest to PGE Group include energy warehouses, electromobility, power-to-gas technologies, LNG, diffuse energy sources, integrated intelligent solutions and the development of coal gasification installations.

Involvement in the development and commercialisation of new technologies will allow PGE Group to introduce to the market a modern and comprehensive offering for clients, covering, among other things, photovoltaics, electromobility, intelligent home solutions, natural gas and demand management.

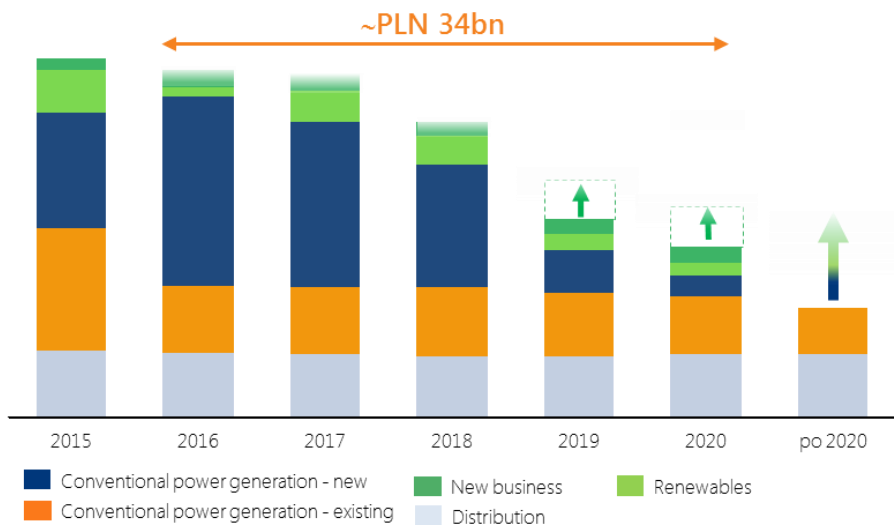
PGE Group intends to build up its brand of a leader on the energy efficiency market. New ESCO (Energy Saving Company) activities will provide clients with benefits such as reduced energy consumption costs, supply continuity and improved image. This will enable PGE Group to develop long-term beneficial client relationships with industry, local government and retail customers, among others. A wide scope of initiatives to improve the effectiveness of energy infrastructure and buildings belonging to the company will also be implemented.

To develop new solutions and technologies, PGE Group intends to build a research and development centre and a demo lab – PGE Lab.

### Investments

The Group assumes capital expenditures of approximately PLN 34 billion in 2016-2020, including more than PLN 10 billion for ongoing projects in Opole and Turów. In connection with modernisation programs that are to be completed soon, the expenditures for the existing capacities in Conventional Energy will drop as from 2016. After construction of two flagship projects, PGE Group will be ready to invest significantly in new business areas, also abroad. Beyond 2020 PGE will be implementing a new investment program, dependent on selected strategic options, the power system's needs and new market model.

Diagram: Planned capital expenditures of PGE Group.



### Values of PGE Group

PGE Group's strategy will be implemented in accordance with values Partnership, Growth, Responsibility and principles in everyday work included in the Code of Ethics of PGE Group. PGE Group is a responsible organization, aware of its impact on the environment, thus in its operations focuses on reducing impact on natural environment, operating based on ethical principles and involvement in activities for the benefit of local communities.



## Key projects in 2016

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Construction of new units in Opole power plant	<ul style="list-style-type: none"><li>● construction of two power units of 900 MW each</li><li>● budget: approx. PLN 11 billion (net, without costs of financing)</li><li>● capital expenditures incurred so far: approx. PLN 6.7 billion</li><li>● <b>fuel:</b> hard coal</li><li>● <b>net efficiency:</b> 45.5%</li><li>● <b>contractor:</b> syndicate of companies: Rafako, Polimex-Mostostal and Mostostal Warszawa with co-operation of GE as Project manager on behalf of the syndicate</li><li>● commissioning: unit 5 – H2 2018; unit 6 – H1 2019</li><li>● January 31, 2014 – issue of Notice to Proceed</li><li>● status: advanced installation works on unit no. 5, ongoing preparation for leak test of the boiler; on unit no. 6 construction of pressure parts of the boiler and supporting installations of turbine hall is progressing; overall progress of the works as of the end of December 2016 reached approximately 70%</li></ul>
Construction of new unit in Turów power plant	<ul style="list-style-type: none"><li>● construction of power unit with a capacity of 490 MW</li><li>● budget: approx. PLN 4 billion (net, without costs of financing)</li><li>● capital expenditures incurred so far: approx. PLN 0.6 billion</li><li>● <b>fuel:</b> lignite</li><li>● <b>net efficiency:</b> 43.1%</li><li>● <b>contractor:</b> syndicate of companies: MHPSE, Budimex and Tecnicas Reunidas</li><li>● commissioning: H1 2020</li><li>● December 1, 2014 - issue of Notice to Proceed</li><li>● status: foundations of main unit installations are in the final phase, communication pylon construction completed, assembly of the steel construction of the turbine hall building has been commenced</li></ul>
Construction of new unit in Gorzów CHP	<ul style="list-style-type: none"><li>● construction of cogeneration CCGT unit with a capacity of 138 MWe and 88 MWt</li><li>● budget: approx. PLN 550 million (net, without costs of financing)</li><li>● capital expenditures incurred so far: approx. PLN 491 million</li><li>● <b>fuel:</b> local nitrogen-rich gas or methane-rich gas (Group E)</li><li>● <b>overall net efficiency:</b> 84%</li><li>● <b>contractor:</b> syndicate of companies from Siemens group</li><li>● October 3, 2013 - issue of Notice to Proceed</li><li>● status: unit commissioned on January 31, 2017</li></ul>
Construction of a Thermal Processing Installation with Energy Recovery at Rzeszów CHP	<ul style="list-style-type: none"><li>● construction of a thermal processing installation with energy recovery at Rzeszów CHP with capacity of approx. 8 MWe in condensation (approx. 4.6 MWe + 16.5 MWt in co-generation)</li><li>● budget: approx. PLN 293 million (net, without costs of financing)</li><li>● capital expenditures incurred so far: approx. PLN 15 million</li><li>● <b>fuel:</b> municipal waste</li><li>● <b>boiler's efficiency:</b> 86%</li><li>● <b>contractor:</b> syndicate of TM.E. S.p.A. Termomeccanica Ecologia and Astaldi S.p.A spółka cywilna</li><li>● commissioning: H1 2018</li><li>● Agreement with the Contractor signed on December 22, 2015, Notice to Proceed issued on April 8, 2016</li><li>● status: reinforce and concrete works are held connected with the construction of the administration and main building, construction of supporting structure of the boiler has commenced</li></ul>

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Investments in renewable energy sources	<b>Gniewino Lotnisko wind farm</b> <ul style="list-style-type: none"><li>● budget: approx. PLN 516 million (net, without costs of financing)</li><li>● capacity: 90 MW (30 turbines with a capacity of 3 MW)</li><li>● June 2014 – contract for supply of wind turbines (Alstom)</li><li>● August 2014 – contract for construction works (CJR)</li><li>● status: investment completed, occupancy permit obtained in December 2015, concession for electricity generation obtained in January 2016</li></ul>
	<b>Kisielice II wind farm</b> <ul style="list-style-type: none"><li>● budget: approx. PLN 79 million (net, without costs of financing)</li><li>● capacity: 12 MW (6 turbines with a capacity of 2 MW)</li><li>● January 2015 – turnkey contract for construction of the wind farm (Mega)</li><li>● status: investment completed, occupancy permit obtained in December 2015, concession for electricity generation obtained in February 2016</li></ul>

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Total installed capacity in PGE Group's wind farms currently amounts to **529 MW**.

Modernisation and replacement projects	<b>Comprehensive modernization of units 7-12 - Bełchatów power plant</b> <ul style="list-style-type: none"><li>● <b>Project's objective:</b> to extend the life-time of the units up to 320 ths. hours which enables utilization of existing lignite resources and boosting the efficiency of the units by approx. 2 p.p.</li><li>● work progress: in 2013-2015 units no. 7, 8, 11 and 12 commissioned. On June 21, 2016 unit no. 9 was commissioned, while unit no. 10 was commissioned on September 28, 2016.</li><li>● budget: approx. PLN 4.6 billion (net, without costs of financing)</li><li>● fuel: lignite</li><li>● completion: 2017</li></ul>
	<b>Modernization of desulphurization installations for units 3-12 - Bełchatów power plant</b> <ul style="list-style-type: none"><li>● <b>project's objective:</b> to decrease the SO<sub>2</sub> emission level to the level required in IED (&lt;=200 mg/Nm<sup>3</sup>)</li><li>● budget: ca. PLN 156 million (net, without costs of financing)</li><li>● fuel: lignite</li><li>● completion: July 2016</li></ul>
	<b>Change in technology of furnace waste storage for units 1-12 – Bełchatów power plant and construction of installation to transport ash; production and transport of sludge from unit 14 in Bełchatów power plant</b> <ul style="list-style-type: none"><li>● <b>project's objective:</b> to provide the capability for storage of furnace waste produced during the operation of units 1-12 of Bełchatów power plant until exhaustion of lignite resources. In the course of the project, the requirement to fit out unit 14 with new technology for the transport and storage of combustion waste was identified.</li><li>● work progress: the works related to protection and fulfilment of the landfill are still to be finished. Tenders and initial work on the installation for the unit no. 14 are underway.</li><li>● budget for units 1-12: ca. PLN 450 million (net, without costs of financing)</li><li>● budget for unit 14: ca. PLN 91 million (net, without costs of financing)</li><li>● completion: 2018</li></ul>
	<b>Reduction of NO<sub>x</sub> emission - units 1, 2 and 4 Opole power plant</b> <ul style="list-style-type: none"><li>● <b>project's objective:</b> to decrease the NO<sub>x</sub> emission level from boilers of units no. 1, 2 and 4 to standard required in IED (&lt;=200 mg/Nm<sup>3</sup>)</li><li>● budget: ca. PLN 148 million (net, without costs of financing)</li><li>● fuel: hard coal</li><li>● completion: October 2016</li></ul>

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**Construction of desulphurization installations for units 4-6 – Turów power plant**

- **project's objective:** to decrease the SO<sub>2</sub> emission level to standard required in IED (<=200 mg/Nm<sup>3</sup>).
- work progress: commissioning of FGD installation in June 2016
- budget: ca. PLN 530 million (net, without costs of financing)
- fuel: lignite
- completion: Q1 2017

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**Construction of overburden line GD.1 in Bełchatów Lignite Mine (Szczerców Field)**

- **project's objective:** to increase the mine extraction capacity enabling to cover lignite needs of Bełchatów power plant
- budget: ca. PLN 100 million (net, without costs of financing)
- fuel: lignite
- completion: October 2016

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**Construction of flue gas denitrification installation and flue-gas desulphurisation for OP-230 boilers no. 3 and 4 in Bydgoszcz CHPs**

- **Aim of the project:** Reduction of NO<sub>x</sub> and SO<sub>x</sub> emissions from boilers no. 3 and 4 to a level allowing for further use after 2017
- work progress: announcement of the proceeding
- budget: ca. PLN 52 million (net, without costs of financing) for denitrification installation, ca. PLN 50 million (net, without costs of financing) for desulphurisation installation
- fuel: hard coal
- completion: 2018

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**Modernisation of the Pomorzany power plant**

- **Aim of the project:** Reduction of NO<sub>x</sub> and SO<sub>x</sub> emissions from Benson OP-206 boilers to a level allowing to meet the requirements of future BAT conclusions as well as to ensure that the plant remains in operation until about 2040
- work progress: agreements signed with main contractors (on construction of desulphurisation and deNO<sub>x</sub> installations and selected non-contractual tasks). Main contractors are currently preparing documentation of main projects and documents for the permission for construction
- budget: ca. PLN 364 million (net, without costs of financing)
- fuel: hard coal
- completion: in terms of NO<sub>x</sub> – 2017/2018 (unit A/B), in terms of FGD - 2019

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**Comprehensive reconstruction and modernisation of units no. 1-3 at Turów power plant**

- **Aim of the project:** Adaptation to future BAT conclusions requirements regarding permissible emissions of sulphur, NO<sub>x</sub> and particulate, increase of availability and efficiency, as well as expansion of each turboset's nominal capacity by approx. 15 MWe
- work progress: receipt of main project for particular islands and project executive project with regard to boiler, turbine, generator, electrofilter
- budget: PLN 759 million (net, without costs of financing)
- fuel: lignite
- completion: 2020

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**Construction of flue gas desulphurisation and denitrification installations for WP-70 boilers at Lublin-Wrotków CHP**

- **Aim of the project:** Adaptation of WP-70 water boilers to emission standards as per future BAT conclusions requirements
- work progress: proceeding for General Contractor and Contract Engineer are being finalised
- budget: PLN 95 million (net, without costs of financing)
- **fuel: hard coal**
- completion: 2018

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Project of network losses reduction

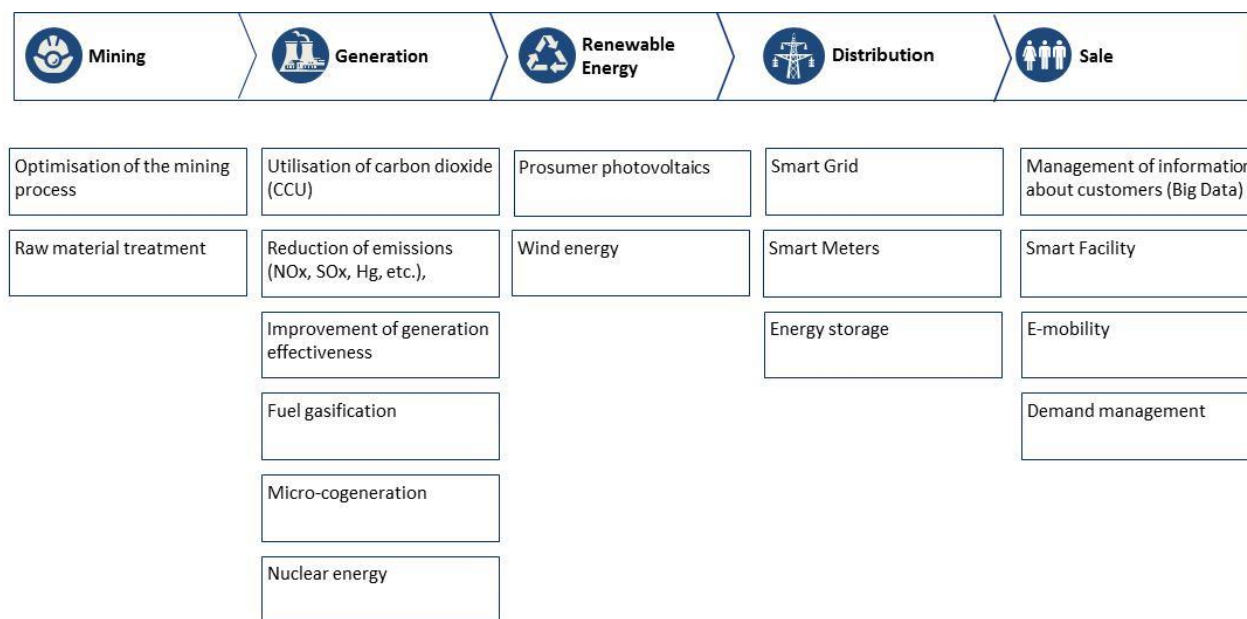
- **the project is intended to** reduce electricity procurement costs for balancing differences
- activities undertaken:
  - replacement of HV/MV, MV/LV transformers with low-loss units
  - grid conversion and modernisation: construction of HV/MV and MV/LV stations, increase of cable cross-sections for HV, MV and LV lines, reduction of MV and LV lines,
  - maintenance of optimal grid workload, elimination of adverse energy transit in HV lines, optimisation of MV line partitions,

Trading strategy update	<ul style="list-style-type: none"> <li>▪ reduction of load asymmetries in LV lines.</li> <li>● <b>the results of the project:</b> lowering of the balancing difference in 2016 to 5.77% (in 2015 it amounted to 5.91%); volume of balancing difference in 2016 amounted to 2.41 TWh with the simultaneous increase of volumes of energy delivered to off-takers by 2.85% in comparison to 2015.</li> <li>● <b>activities initiated in 2016:</b> project assumptions for 2016-2020 were updated in March 2016. Pursuant to the revision, activities aimed at reducing balancing differences at PGE Dystrybucja S.A. were to be continued. (asides from above – actions intended to increase the sale of electricity to final off-takers through, inter alia, lowering of SAIDI, SAIFI ratios)</li> <li>● <b>the aim of the project:</b> achieving maximum margin on sale of electricity simultaneously minimising risk associated with trading activities</li> <li>● <b>activities initiated in 2016:</b> <ul style="list-style-type: none"> <li>▪ sale of electricity was realised pursuant to conditions resulting from optimisation of use of particular generating units in connection with the level of variable costs, level of market prices, market liquidity, regulations and laws, with the simultaneous assessment of risk associated with so called “open position”. Due to so called „power exchange obligation” binding in 2016 TGE (Polish Power Exchange) was the main electricity sales market. Sales were executed on forward market and spot market, where balancing of contractual position was made. Available capacities that were not sold, were offered on the balancing market. In addition, sales channel directed to transmission and distribution grid operators was also in use. Implementation of the plan of contracting was taking into account trading directions, hedging methods, risk and open trading positions limits as well as product optimisation.</li> </ul> <p>Implementation of the wholesale trading strategy included also introduction of solutions improving processes and introduction of IT tools supporting the activities in that area.</p> </li> </ul>
CRM Billing	<ul style="list-style-type: none"> <li>● <b>the aim of the project:</b> is deployment of support systems for settlements and customer service in PGE Obrót S.A. and PGE Dystrybucja S.A. in order to improve operational performance and support tools for processes dealing with settlements and customer service, to improve competitive position on the back of an expanded product offering and to improve customer service quality through deployment of supporting IT tools</li> <li>● <b>activities initiated in 2016:</b> <ul style="list-style-type: none"> <li>▪ A procurement proceeding under public procurement law was initiated to deliver and implement a system for customer service and settlements at PGE Obrót S.A. and PGE Dystrybucja S.A. In December 2016 a shortlist of contractors was formally accepted and the invitations to submit offers will be sent to those contractors</li> <li>▪ Completed implementation of new, centralized portal „eBOK” for customers of PGE Obrót S.A. along with the mobile application „mBOK”, available for Android platform and iOS. „eBOK/mBOK” solution received an award PayU Lab Award in „eCustomer Experience – Energy” category</li> <li>▪ Central measurement base for remote reading in PGE Dystrybucja S.A. was prepared along with the construction of layer of transmission and monitoring of data transfer from metering system</li> </ul> </li> </ul>
Human Capital Management Strategy (“HCM Strategy”)	<ul style="list-style-type: none"> <li>● <b>the aim of the project:</b> supporting the business strategy goals through securing strategic and effective human resources management and optimization and standardisation of HR processes</li> <li>● <b>activities initiated in 2016:</b> <ul style="list-style-type: none"> <li>▪ In 2016 PGE Group continues works on implementation of initiatives described in HCM Strategy. The first editions of HR Business Partner Academy and HR and Payroll Process</li> </ul> </li> </ul>

Management Academy were completed. Architecture of Positions was approved and IT tools were designed (SAP HRM module). Currently, implementation process of those solutions in particular business lines is ongoing.

- Program SAP
- **the aim of the project:** improving operational efficiency through, inter alia, standardisation of processes within the Group, improving transparency through creation of uniform records of economic events and building base for creation of Shared Services Centre within PGE Group and integration of systems
  - **activities initiated in 2016:**
    - Standard Audit File project completed in: PGE S.A., PGE GiEK S.A., PGE Dystrybucja S.A., PGE Energia Odnawialna S.A., PGE Obrót S.A., PGE Systemy S.A., PTS Betrans sp. z o.o., Bestgum Polska sp. z o.o., Eltur-Serwis sp. z o.o., MegaSerwis sp. z o.o., Ramb sp. z o.o., PGE Dom Maklerski S.A., Exatel S.A.
    - SAP system encompassed more than 50 companies in the PGE Group along with branches. Implementation of SAP system encompassed more than 20 thousand users in all companies of the Capital Group. It is one of the largest implementation of SAP system in Europe.

Strategic Research and Development and New Business Areas ("SOBiR+NB"), within which the Group intends to carry out R&D and innovation projects concerning, among others, the supply of new products or services. The SOBiR+NB areas are aligned with the Group's most important challenges and are identified for each element of the value chain (see the graph below).



In connection with an Update of the Group's Strategy until 2020 being introduced in the third quarter of 2016, works have commenced on updating the Development and Innovation Strategy. The updated Development and Innovation Strategy will place emphasis on challenges that most affect the Group, where R&D and innovation are essential to the achievement of business objectives. In connection with this, particular attention will be paid to both dynamically developing segments such as electromobility or energy warehousing as well as ways of acquiring and developing initiatives such as new models of management and implementation of innovations like acceleration and investing in an equity fund model in small businesses that develop technologies and products. A strategic option for PGE will be the design and development of specific technologies – which constitutes a large quality change in contrast to the previous model – an operator of technologies from other businesses, providers.

## 2.2.5. Innovation

PGE focuses on initiating and executing R&D projects that fall within the SOBiR+NB areas. In 2016, several dozen projects were continued within these areas.

### Key projects in 2016

"Power-to-Gas" concept	<ul style="list-style-type: none"> <li>● <b>Aim of the project:</b> development of energy storage technology in a "Power-to-Gas" installation, consisting of the conversion of electricity surpluses, produced mainly by wind farms, into hydrogen via an electrolysis process, with potential for further use in different technological configurations.</li> <li>● <b>main activities:</b> <ul style="list-style-type: none"> <li>The feasibility study of construction of Power to Gas installation was developed on joint request of PGE S.A. and gas transmission operator Gaz-System S.A. Currently a plan of the Power to Gas project is being developed for a selected location and in a hydrogen use scenario.</li> </ul> </li> </ul>
Cooperation with the National Centre for Research and Development ("NCBR")	<ul style="list-style-type: none"> <li>● <b>Aim of the project:</b> use by PGE Group of public funds available in the Intelligent Development Operational Programme (POIR), where NCBR is the implementing authority</li> <li>● <b>main activities:</b> <ul style="list-style-type: none"> <li>▪ As part of works intended to sign the Joint Venture Agreement, a version of the PGE – NCBR Agreement was further adjusted to the new guidelines of POIR, which is a financing source for part of the Joint Venture's budget (public funds). PGE – Contractor Agreement, which secures the interests of both of the Parties as regards intellectual property rights concerning R&amp;D project results and establishes rules for the commercialisation of these projects' results, has been reviewed and modified. Moreover, with Sectoral Program for the power sector taken into account, the proposed research agenda had to be modified. The agenda is ready for presentation in order to be verified in operating mode by NCBR. The aim of the joint undertaking is to address the challenges facing PGE Group as the sector's largest entity, thus increasing the level of innovativeness in PGE Group and the Polish energy sector.</li> <li>▪ In September 2016, the National Centre for Research and Development in Poland announced the launch of a Feasibility Study for a Sector Programme for Electricity. This is a consistent plan for a research agenda concerning the electricity value chain, which is to constitute a response to the key challenges facing the entire industry.</li> </ul> </li> </ul>
Involvement in equity structures that support the development of new technologies and solutions as well as small businesses	<ul style="list-style-type: none"> <li>● <b>Aim of the project:</b> Introduction of a new model for developing and implementing new solutions, allowing to manage higher-risk undertakings whilst reducing time-to-market for new solutions (for own purposes or to sell to other entities)</li> <li>● <b>main activities:</b> <ul style="list-style-type: none"> <li>▪ As part of PGE Group's involvement in equity mechanisms, a plan has been prepared to come up with a fund (corporate venture capital). Within this plan, applications for public funding are being prepared and own funds have been allocated</li> <li>▪ A dedicated company for implementing innovations has been set up, which will start with accelerating small businesses. This way, PGE will build up its network of contact and partnerships ensuring access to deal flow for fund investments.</li> </ul> </li> </ul>
Electromobility	<ul style="list-style-type: none"> <li>● <b>Aim of the project:</b> promoting and developing electric transport in Poland.</li> <li>● <b>main activities:</b> <ul style="list-style-type: none"> <li>▪ concern two areas: - individual transport – cars used for private and business purposes, and buses – public transport in urban areas, as well as individual transport – passenger cars used for professional and private purposes, and bus transport – public transport in urban areas.</li> <li>▪ PGE launched a project in which a pilot run is being implemented that consists of the construction of infrastructure for an electromobility system in Łódź. The aim of the pilot run in Łódź is to verify a business model based on fleet cars and the capacity to replicate it at other locations. PGE will manage the recharging infrastructure, provide quick-charging services and successively grow the business scale and improve the client offering. Within the project, six fast public charging stations will be available as well as the option to manage free-standing charging stations for fleet clients. As part of the project, PGE signed on December 1, 2016 a letter of intent with the governor of the Łódź Voivodship. The parties thus initiated talks regarding determining opportunities and conditions for cooperation within the "e-Mobility" project</li> <li>▪ In October 2016 company ElectromobilityPoland S.A. was set up (in cooperation with the other three major energy groups in Poland), intended to rapidly develop individual</li> </ul> </li> </ul>

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electromobility in Poland

- PGE has commenced cooperation with bus manufacturers in order to develop, test and prepare for commercial implementation of a public transport model based on electric buses, with batteries being further used once they are no longer used in buses. This is an issue of particular importance in terms of improving the economic results of the entire use model for electric vehicles, with batteries being the main cost item.

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Recycling

- **Aim of the project:** PGE Group is preparing to execute a project allowing to develop and implement a new technology for the recycling of lithium batteries, particularly those used in energy warehouse systems and to charge electric cars. This technology is intended to obtain strategic materials from used lithium batteries – cobalt, nickel and copper. The project is important because of the forecast dynamic growth of the above markets and Polish legislative requirements specifying the necessity to collect and utilise used batteries
  - **main activities:**  
PGE S.A. has set up a consortium with RDLS sp. z o.o., a spin-off of the Warsaw University operating in the area of environmental research and biotechnology. The goal of the consortium is to produce a pilot recycling installation for lithium batteries and implement this technology in Poland. The consortium jointly prepared and submitted an application for funding from the NCBR.
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### 3. Risks and opportunities

#### 3.1. Risk management

PGE S.A., as the Corporate Centre managing the Group, creates and implements risk management architecture at PGE Group. In particular, it shapes PGE Group's risk management policies, standards and practices, designs and develops internal IT tools to support these processes, specifies global risk appetite and adequate limits as well as monitors these.

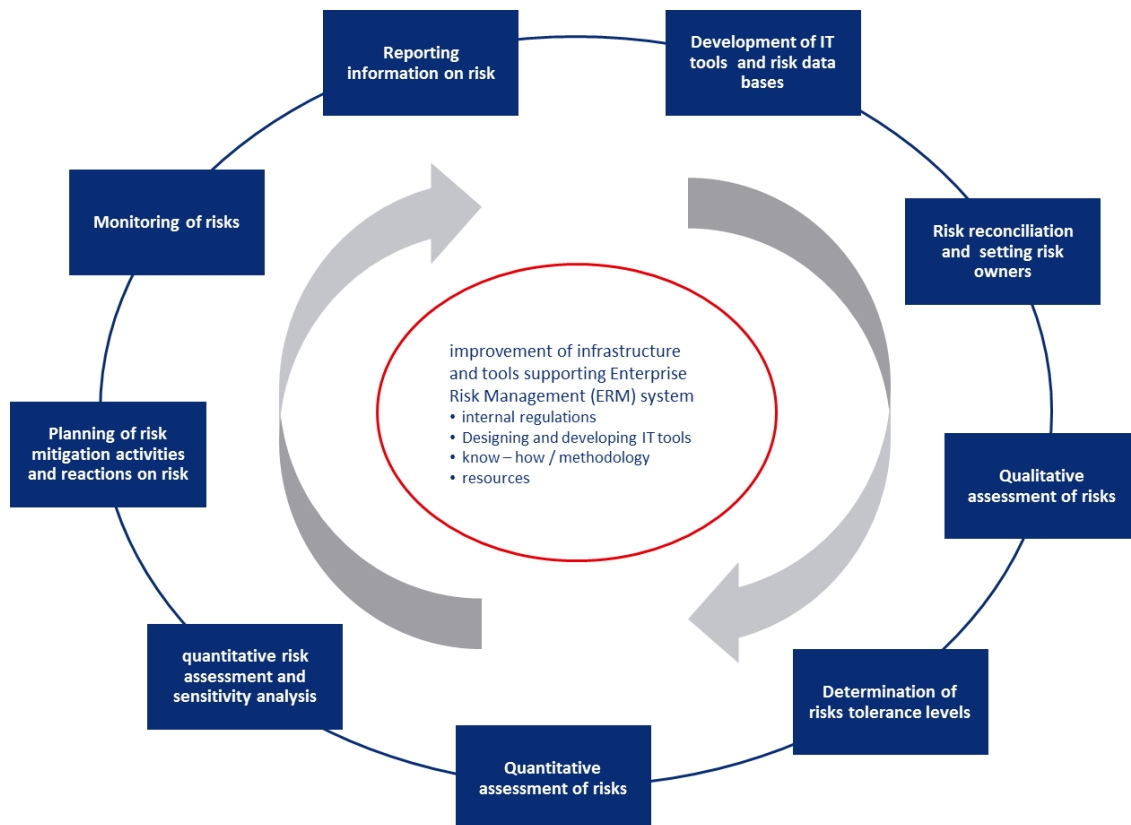
PGE Capital Group companies, as well as other entities from the electrical and power sector, are exposed to a number of risks and threats resulting from the specific operating activities and operating in specific market and regulatory environment.

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



Source: own work



























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





### 3.1.1. Risk factors and mitigating actions

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

Risk level	Risk outlook					
	low	medium	high	decrease	growth	stable
<div style="display: flex; justify-content: space-between;"> <div style="width: 30px; height: 10px; background-color: #28a745;"></div> <div style="width: 30px; height: 10px; background-color: #ffc107;"></div> <div style="width: 30px; height: 10px; background-color: #dc3545;"></div> </div> <p>low level medium level high level</p>	<p>Risk does not pose a threat and may be tolerated, Risk which needs preparation of the proper reaction based on analysis of costs and benefits, Intolerable risk, which needs immediate and active reaction, leading simultaneously to limitation of possible consequences and of probability of occurrence thereof</p>					
<p><b>Market (product) risks</b></p> <p>Related to prices and volumes of offered products and services</p>	<p><b>Prices of electricity and related products</b> – resulting from a lack of certainty with regard to the future levels and volatility of commodity prices relative to open contract positions - this particularly concerns electricity and associated products (property rights, CO2 emission allowances).</p> <p><b>Electricity sales volumes</b> – this risk derives from a lack of certainty with regard to the conditions determining the demand and supply of electricity, directly affecting the volume of market sales by PGE Group.</p> <p><b>Tariffs (regulated prices)</b> – resulting from the requirement to approve rates for distribution services and electricity and heat prices for particular groups of entities.</p>					
<p><b>Property risks</b></p> <p>Related to development and maintenance of the assets</p>	<p><b>Failures</b> – connected with the operation and degradation over time of energy equipment and facilities (maintenance and repair work, diagnostics)</p> <p><b>Damage to property</b> – connected with the physical protection of energy equipment and facilities against destructive external factors (including fire, weather phenomena and intentional damage).</p> <p><b>Investment and development</b> – connected with strategic plans for expanding the generation, distribution and sales potential as well as on-going investments.</p>			  	  	
<p><b>Operational risks</b></p> <p>Related to pursuing of ongoing economic processes</p>	<p><b>Production costs</b> – connected with the growing costs of fuel procurement, operational works, wage factors, etc.</p> <p><b>Electricity and heat production</b> – connected with production planning and impact of the factors that determine production capacities.</p> <p><b>Fuel management</b> – connected with uncertainty regarding the quality, timeliness and volumes of fuel supply (mainly coal) and the effectiveness of inventory management processes.</p> <p><b>Human Resources</b> – pertaining to provision of employees with the relevant experience and competences, who are capable of performing specific tasks.</p> <p><b>Social dialogue</b> – connected with a failure in achieving agreement between the Group's management and employees, what could lead to strikes/collective labour disputes.</p>			    	    	
<p><b>Regulatory and legal risks</b></p> <p>Related to compliance with external and internal legal provisions</p>	<p><b>Legal changes in support systems</b> – connected with uncertainty as to the future shape of the support system for production of certified energy.</p> <p><b>Costs of purchase of certificates and CO<sub>2</sub> allowances</b> - resulting from the possible changes to the statutory requirement for electricity sellers to purchase a specified quantity of property rights and to uncertainty with regard to volume of CO<sub>2</sub> emission rights granted free of charge in future.</p> <p><b>Compensation for the termination of long-term contracts (LTCs)</b> – there is a possibility that the level of adjustments to advances collected for stranded costs, as calculated by the Group, will be questioned by the President of the Energy Regulatory Office (URE), as a result of which the Group will be obligated to return advances received for terminating the LTCs.</p> <p><b>Environmental protection</b> – resulting from industry regulations specifying which "environmental" requirements energy installations should meet and what the principles for using the natural environment are. The future</p>			   	   	

environmental regulations and uncertainty concerning their final shape (in particular with regard to the revision of BAT / BREF) may translate into a change in the level of capital expenditures of the PGE Group.

**Unresolved legal status** – connected with difficulties in respect of land acquisition or access to land in the course of new investments (particularly in the Distribution segment).



**Concessions** – resulting from the statutory requirement to hold concessions with regard to conducted operations.



**Discriminatory activities** – connected with application by the Group of practices that limit or eliminate competition and infringe on legal regulations or consumer interests.



## Financial risks

### Related to finance management

**Credit risk** – connected with the counterparty default, partial and/or late payment of receivables or a different type of breach of contractual conditions (for example failure to deliver/collect goods or failure to pay for any associated damages or contractual penalties).



**Liquidity risk** – connected with the possibility of losing the ability to meet current liabilities and obtaining financing sources for business operations.



**Interest rate risk** – resulting in particular from the negative impact of changes in market interest rates on PGE Group's cash flows generated by floating-rate financial assets and liabilities.



**Foreign exchange risk** – understood in particular as risk that PGE Group's cash flows denominated in currencies other than the functional currency are exposed to due to negative exchange rate movements.



The main risk mitigation actions for the PGE Group are presented below along with the description of the main tools used for the management of the given risk.

## Market (product) risks

**Impact:** revenues and product and service offerings

**Measures:** PGE Group has rules for managing market risk (price- and volume-related), which include a global risk appetite measure, VaR-based position limits and management of consolidated exposure to commodity pricing risk through mechanisms for protection against risk exceeding acceptable levels. Those rules provide consistent guidance in respect of process organisation in the context of commercial strategy and mid-term planning. PGE Group follows rules pertaining to a strategy for hedging key exposures in the area of electricity and related product trading that correspond to the adopted risk appetite in the mid-term. Position hedging levels are established with consideration given to the results of analysing pricing risk in respect of electricity and related products. Target hedging levels are specified taking into consideration the Group's financial standing, including in particular its strategic objectives.

PGE Group researches, monitors and analyses the electricity and related products markets in order to optimally use its generation and selling capacities.

New products are introduced on the retail market and actively promoted through nationwide marketing campaigns. Maintaining a diverse product portfolio and focusing efforts on tailoring its offering to the market, the Group diversifies channels used to reach the end-customers and diversifies target groups with account take to client's volume potential. Efforts aimed at current clients retention are based on a model consisting of a diversified portfolio of customer loyalty schemes and client-acquisition activities. Portfolio includes also special offers dedicated to former clients who moved over to the competitors, as well as industry offerings dedicated to specific types of economic activity. PGE Group also introduces bundled offers. Particular attention is paid to ensuring a high level of customer service by developing employees' competences and building relations with business and retail clients. Having implemented tools to support these processes, the Group effectively manages information flows, which directly translates into comfortable client relations as well as better sales planning and organisation.

### Operational risks

**Impact:** costs

**Measures:** PGE Group's results are to a large extent dependent on the costs incurred in the course of operations. The Group optimises costs inter alia through monitoring of fuel prices and reserves and securing supply through long-term contracts with suppliers and through price fixing formulas. Inspections, repairs and modernisation of the existing assets optimise equipment lifecycles and required availability of key components of those assets. Level of costs is affected by securing CO<sub>2</sub> emission allowances partly free of charge and purchase of lacking allowance with the assumption of securing the margin on sales.

An intensive and effective dialogue is also carried out in order to avoid escalation of potential disputes with the social partners and to work out the most favourable solutions with regard to employment and employment costs within PGE Capital Group connected therewith.

### Property risks

**Impact:** assets

**Measures:** PGE Group effectively pursues a strategy for building up and modernization of its production capacities. The Group diversifies current structure of the production sources due to energy generation technology. Currently PGE Group is running two key investments (Opole, Turów) alongside a number of grid investments, RES investments as well as modernisation and development projects. We are continuously carrying out maintenance and repair work. Our main generation assets were insured against failure and damage to property. The reliability of the power supply to the end users has been systematically improved.

### Regulatory and legal risks

**Impact:**  
compliance area

**Measures:** PGE Group's operations are subject to a host of national and international laws and regulations. Monitoring of the changes being introduced or proposed allows for minimization of their negative impact on our operations in key business segments. PGE S.A. is one of the members of the Polish Electricity Committee that opened its office in Brussels. Through the Committee's operations, PGE S.A. actively influences proceeding and shaping of EU law and engages a dialogue with the EU institutions.

The Group adapts its internal regulations and practices to make sure that the activities are in compliance with the power sector regulations and binding law.

The extraction of fossil fuels as well as the production and distribution of electricity and heat have impact on the environment therefore the Group continuously improves its activities aimed at protecting and improving the state of the environment by implementing technological and organisational solutions ensuring efficient and effective management in this area.

### Financial risks

**Impact:** Finance  
management

**Measures:** PGE Group manages credit risk stemming from commercial transactions. Prior to executing a transaction, a counterparty assessment is carried out and forms a base for applying credit limits, that are regularly updated and monitored. Exposures that exceed established limits are hedged in accordance with the Group's credit risk management policy.

PGE Group applies a central financing model, which is generally used by PGE S.A. when raising external capital. PGE Group subsidiaries use a variety of intra-group financing sources such as: loans, bonds, bank account consolidation agreements (cash pooling). Liquidity risk is monitored using periodic liquidity planning, i.e. cash flow moving forecasts for operating, investing and financing activities. As regards currency risk and interest rate risk, PGE Group has implemented internal management procedures. PGE Group companies execute derivative transactions involving interest rate- and/or currency-based instruments (IRS, CCIRS) only in order to hedge identified risk exposures.

## 4. PGE Capital Group in 2016

### 4.1. Key financial results of the PGE Capital Group

Key financial data	Unit	Year ended December 31, 2016	Year ended December 31, 2015	% change	Year ended December 31, 2014	% change
Sales revenues	PLN million	28,092	28,542	-2%	28,143	1%
<b>EBIT</b>	<b>PLN million</b>	<b>3,512</b>	<b>-3,589</b>	<b>-</b>	<b>5,096</b>	<b>-</b>
<b>EBITDA</b>	<b>PLN million</b>	<b>7,376</b>	<b>8,228</b>	<b>-10%</b>	<b>8,129</b>	<b>1%</b>
Adjusted net profit attributable to equity holders of the parent company*	PLN million	3,363	4,290	-22%	3,761	14%
LTC compensations	PLN million	668	546	22%	1,785	-69%
<i>LTC revenues</i>	<i>PLN million</i>	<i>520</i>	<i>546</i>	<i>-5%</i>	<i>1,539</i>	<i>-65%</i>
<i>Reversal of the LTC write-offs (other operating revenues)</i>	<i>PLN million</i>	<i>148</i>	<i>0</i>	<i>-</i>	<i>246</i>	<i>-</i>
<b>Capital expenditures</b>	<b>PLN million</b>	<b>8,152</b>	<b>9,450</b>	<b>-14%</b>	<b>6,349</b>	<b>49%</b>
Net cash from operating activities	PLN million	6,391	6,777	-6%	6,333	7%
Net cash from investing activities	PLN million	-10,656	-8,594	-24%	-6,382	-35%
Net cash from financial activities	PLN million	3,830	-1,265	-	284	-
Adjusted net earnings per share*	PLN	1.80	2.29	-21%	2.01	14%
<b>EBITDA margin</b>	<b>%</b>	<b>26%</b>	<b>29%</b>		<b>29%</b>	
Working capital	PLN million	5,702	4,126	38%	6,721	-39%
<b>Net debt/LTM EBITDA **</b>	<b>x</b>	<b>0.70</b>	<b>0.32</b>		<b>-0.13</b>	

\* Net profit adjusted by impairment loss

\*\* LTM EBITDA - Last Twelve Months EBITDA

One-offs	Unit	Year ended December 31, 2016	Year ended December 31, 2015	% change	Year ended December 31, 2014	% change
LTC compensations	PLN million	668	546	22%	1,785	-69%
Provision for CO <sub>2</sub>	PLN million	0	0	-	751	-
Change in reclamation provision	PLN million	643	93	591%	-213	-
Change in actuarial provision	PLN million	48	58	-17%	-130	-
Revaluation of balance sheet value of property rights	PLN million	-118	0	-	0	-
Voluntary Leave Program	PLN million	-16	20	-	-404	-
<b>Total</b>	<b>PLN million</b>	<b>1,225</b>	<b>717</b>	<b>71%</b>	<b>1,789</b>	<b>-60%</b>

#### 4.1.1. Consolidated statement of comprehensive income

Chart: Key changes of recurring EBITDA in PGE Capital Group [in PLN million].

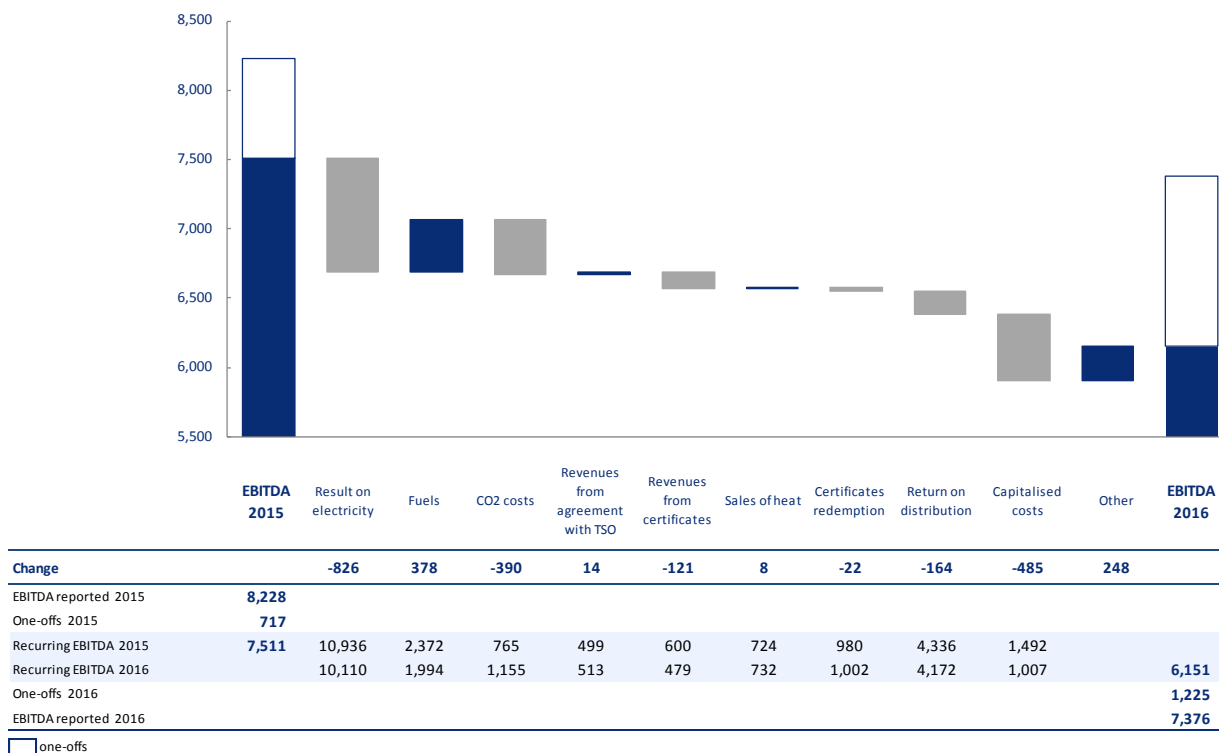
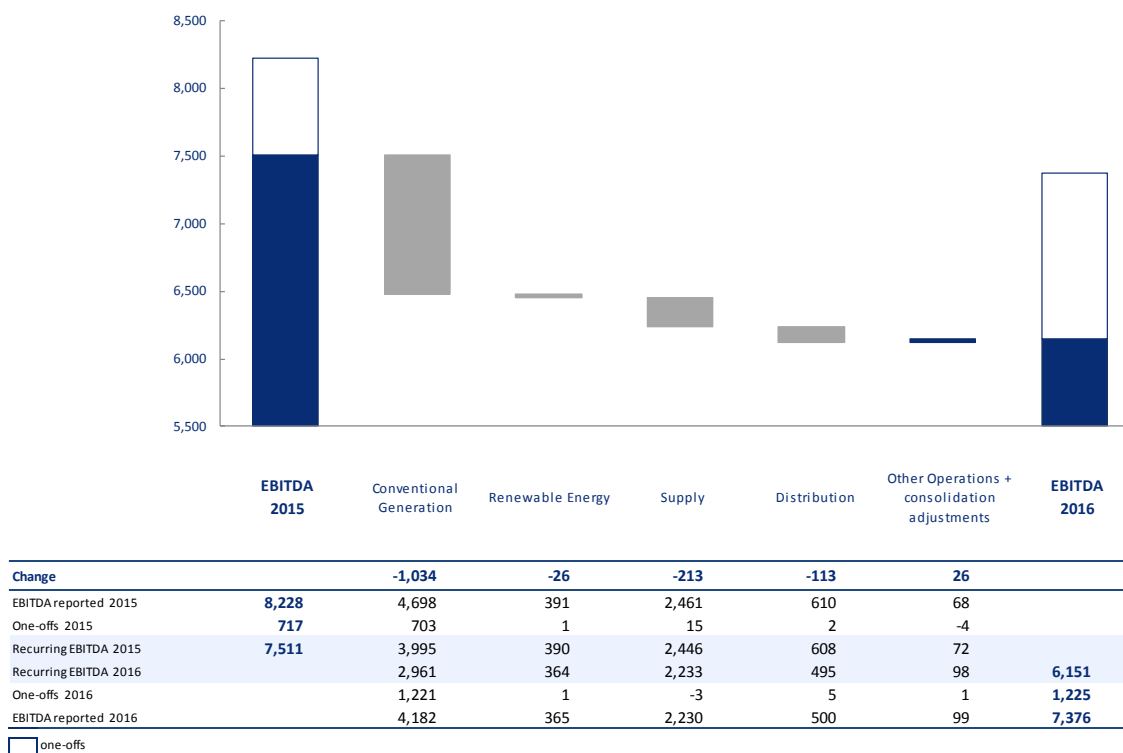
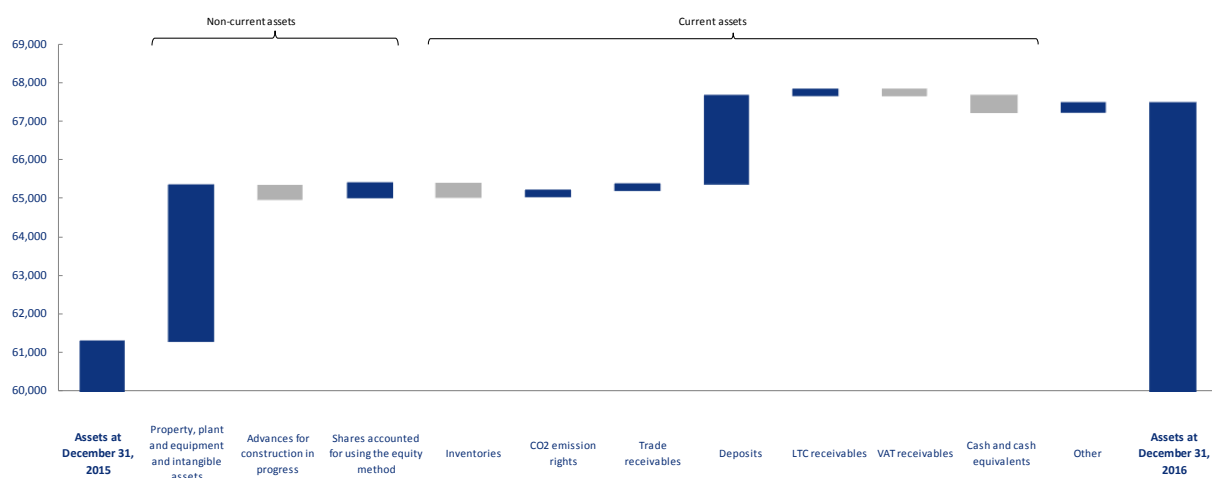


Chart: Key changes of recurring EBITDA by segments [in PLN million].



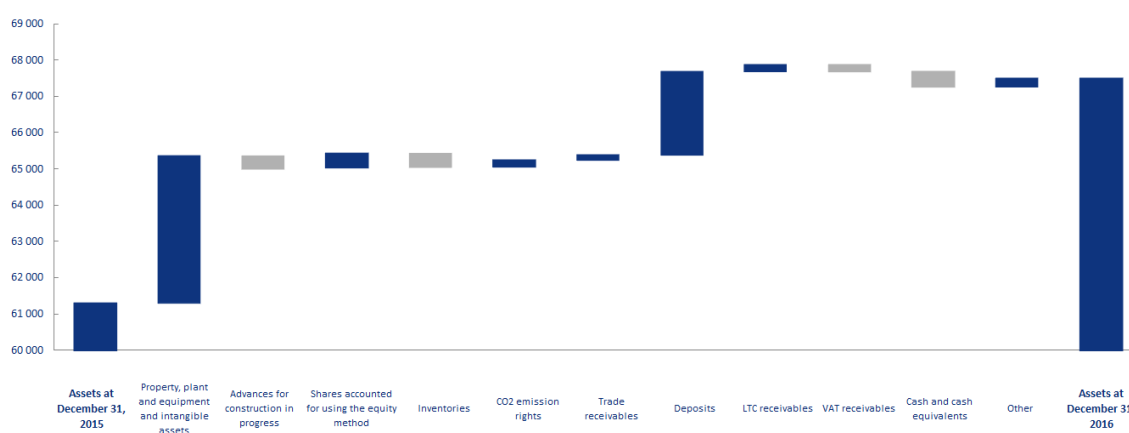
#### 4.1.2. Consolidated statement of financial position

Chart: Key changes in Assets [in PLN million].



Change	4,046	-329	394	-363	177	157	2,299	166	-166	-435	232	
Assets at December 31, 2015	61,296	47,972	1,042	8	1,959	2,172	2,548	1	1,075	388	3,104	1,027
Assets at December 31, 2016	52,018	713	402	1,596	2,349	2,705	2,300	1,241	222	2,669	1,259	67,474

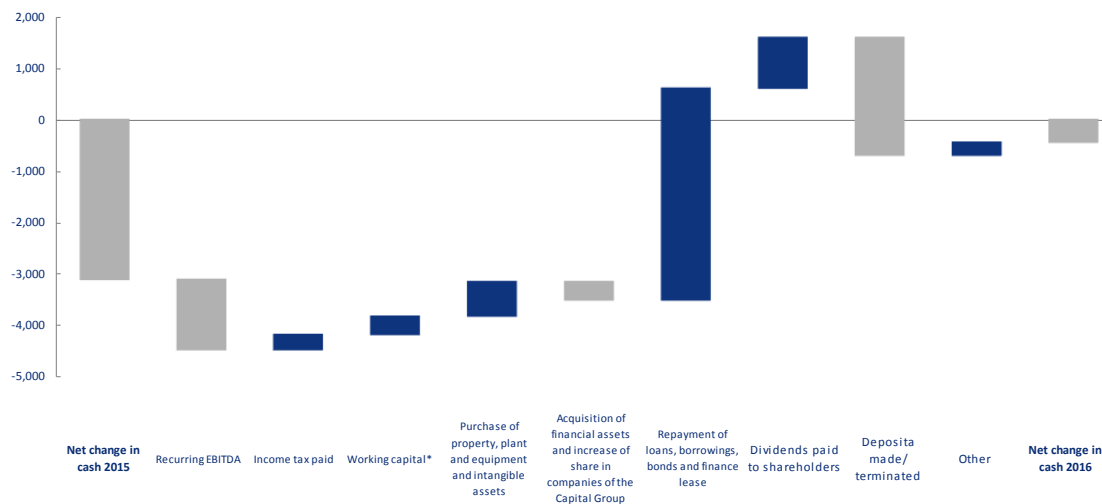
Chart: Key changes in Equity and Liabilities [in PLN million].



Change	4,046	-329	394	-363	177	157	2,311	166	-166	-435	220	
Assets at December 31, 2015	61,296	47,972	1,042	8	1,959	2,172	2,548	125	1,075	388	3,104	903
Assets at December 31, 2016	52,018	713	402	1,596	2,349	2,705	2,436	1,241	222	2,669	1,123	67,474

#### 4.1.3. Consolidated statement of cash flows

Chart: Net change in cash [in PLN million].



	Net change in cash 2015	Recurring EBITDA	Income tax paid	Working capital*	Purchase of property, plant and equipment and intangible assets	Acquisition of financial assets and increase of share in companies of the Capital Group	Repayment of loans, borrowings, bonds and finance lease	Dividends paid to shareholders	Deposits made/terminated	Other	Net change in cash 2016
Change		-1,360	289	356	671	-370	4,112	991	-2,291	249	
Net change in cash 2015	-3,082	7,511	-616	-554	-8,606	-97	337	-1,462	-10	415	
Net change in cash 2016		6,151	-327	-198	-7,935	-467	4,449	-471	-2,301	664	-435

\*Part of the working capital adjusting the cash flows from operating activities

#### 4.1.4. Geographical areas

Table: Breakdown of the Group's income from continuing operations, by geographic area, in 2016, 2015 and 2014.

in PLN million	Total revenues							
	2016	% share	2015	% share	% change	2014	% share	% change
Domestic market	27,975	100%	28,421	100%	-2%	27,974	99%	2%
EU member states	106	0%	110	0%	-4%	154	1%	-29%
Other countries	11	0%	11	0%	0%	15	0%	-27%
<b>TOTAL</b>	<b>28,092</b>	<b>100%</b>	<b>28,542</b>	<b>100%</b>	<b>-2%</b>	<b>28,143</b>	<b>100%</b>	<b>1%</b>

In the years 2016, 2015 and 2014, the Group earned income mainly in the domestic market.

The decrease of revenues on the domestic market resulted mainly from lower electricity generation volume and lower sale price.

The decrease of revenues from sales to the EU member states is connected with lower value of sales by PGE Trading GmbH.

#### 4.1.5. Key financial results in the business segments

Table: Breakdown of the Group's revenues by business segments for years 2016, 2015 and 2014.

in PLN million	Total revenues				
	2016	2015	% change	2014	% change
Conventional Generation	11,738	12,715	-8%	12,906	-1%
Renewables	717	761	-6%	767	-1%
Supply	16,014	15,783	1%	14,431	9%
Distribution	5,918	6,083	-3%	5,781	5%
Other operations	688	682	1%	1,854	-63%
<b>TOTAL</b>	<b>35,075</b>	<b>36,024</b>	<b>-3%</b>	<b>35,739</b>	<b>1%</b>
<b>Consolidation adjustments</b>	<b>-6,983</b>	<b>-7,482</b>	<b>-7%</b>	<b>-7,596</b>	<b>-2%</b>
<b>TOTAL AFTER ADJUSTMENTS</b>	<b>28,092</b>	<b>28,542</b>	<b>-2%</b>	<b>28,143</b>	<b>1%</b>

Table: Key financial figures for each business segment for 2016 (after intrasegmental eliminations).

in PLN million	EBITDA	EBIT	Capital expenditures	Assets of the segment*
	2016			
Conventional Generation	4,182	2,691	6,179	36,343
Renewables	365	-770	144	3,671
Supply	500	473	23	3,469
Distribution	2,230	1,104	1,721	17,382
Other operations	67	-64	170	1,067
<b>TOTAL</b>	<b>7,344</b>	<b>3,434</b>	<b>8,237</b>	<b>61,932</b>
<b>Consolidation adjustments</b>	<b>32</b>	<b>78</b>	<b>-85</b>	<b>-2,091</b>
<b>TOTAL AFTER ADJUSTMENTS</b>	<b>7,376</b>	<b>3,512</b>	<b>8,152</b>	<b>59,841</b>

\* see note 6.1 to the consolidated financial statements



Table: Key financial figures for each business segment for 2015 (after intrasegmental eliminations).

in PLN million	EBITDA	EBIT	Capital expenditures	Assets of the segment*
			2015	
Conventional Generation	4,698	-5,732	6,495	32,419
Renewables	391	107	931	4,767
Supply	610	585	31	3,762
Distribution	2,461	1,387	1,841	16,710
Other operations	66	-51	216	1,033
<b>TOTAL</b>	<b>8,226</b>	<b>-3,704</b>	<b>9,514</b>	<b>58,691</b>
<b>Consolidation adjustments</b>	<b>2</b>	<b>115</b>	<b>-64</b>	<b>-2,348</b>
<b>TOTAL AFTER ADJUSTMENTS</b>	<b>8,228</b>	<b>-3,589</b>	<b>9,450</b>	<b>56,343</b>

Table: Key financial figures for each business segment for 2014 (after intrasegmental eliminations).

in PLN million	EBITDA	EBIT	Capital expenditures	Assets of the segment*
			2014	
Conventional Generation	4,983	3,296	4,362	35,358
Renewables	391	174	374	4,110
Supply	246	228	17	3,601
Distribution	2,329	1,306	1,508	15,726
Other operations	161	31	158	1,400
<b>TOTAL</b>	<b>8,110</b>	<b>5,035</b>	<b>6,419</b>	<b>60,195</b>
<b>Consolidation adjustments</b>	<b>19</b>	<b>61</b>	<b>-70</b>	<b>-1,965</b>
<b>TOTAL AFTER ADJUSTMENTS</b>	<b>8,129</b>	<b>5,096</b>	<b>6,349</b>	<b>58,230</b>

## 4.2. Key operational figures of PGE Capital Group

Table: Key operational figures.

Key figures	Unit	2016	2015	% change	2014	% change
Lignite extraction	Tons m	47.68	49.40	-3%	49.97	-1%
Net electricity production	TWh	53.67	55.58	-3%	54.84	1%
Heat sales	GJ m	18.06	18.19	-1%	17.94	1%
Sales to final customers*	TWh	42.91	39.00	10%	39.64	-2%
Distribution of electricity**	TWh	34.32	33.38	3%	32.54	3%

\* sales by PGE Obrót S.A. with additional estimation and with taking into account the sales within PGE Group

\*\* with additional estimation

Key figures	Unit	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Lignite extraction	Tons m	11.10	10.58	13.07	12.93	11.84
Net electricity production	TWh	13.16	12.26	13.62	14.63	13.84
Heat sales	GJ m	7.80	2.38	1.12	6.76	6.15
Sales to final customers*	TWh	10.70	10.73	10.47	11.01	9.97
Distribution of electricity**	TWh	8.64	8.27	8.52	8.89	8.58

\* sales by PGE Obrót S.A. with additional estimation and with taking into account the sales within PGE Group

\*\* with additional estimation

### 4.2.1. Balance of energy of PGE Capital Group

#### Sales of electricity

Table: Sales of electricity outside the PGE Capital Group (in TWh).

Sales volume	2016	2015	% change	2014	% change
<b>SALES IN TWh, including:</b>	<b>104.35</b>	<b>101.70</b>	<b>3%</b>	<b>103.14</b>	<b>-1%</b>
Sales to end-users*	42.96	39.05	10%	39.60	-1%
Sales on the wholesale market, including:	59.13	60.89	-3%	62.44	-2%
<i>Sales on the domestic wholesale market - power exchange</i>	53.15	57.71	-8%	56.54	2%
<i>Other sales on the domestic wholesale market</i>	5.83	3.07	90%	3.10	-1%
<i>Sales to foreign customers</i>	0.15	0.11	36%	2.80	-96%
Sales on the Balancing Market	2.26	1.76	28%	1.10	60%

\* after elimination of internal sales within PGE Group

Table: Sales of electricity outside the PGE Capital Group (in TWh).

Sales volume	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
<b>SALES IN TWh, including:</b>	<b>25.46</b>	<b>25.17</b>	<b>26.29</b>	<b>27.43</b>	<b>25.82</b>
Sales to end-users*	10.71	10.75	10.48	11.02	9.99
Sales on the wholesale market, including:	14.27	13.85	15.27	15.74	15.31
<i>Sales on the domestic wholesale market - power exchange</i>	<i>12.75</i>	<i>12.47</i>	<i>13.82</i>	<i>14.11</i>	<i>14.44</i>
<i>Other sales on the domestic wholesale market</i>	<i>1.49</i>	<i>1.36</i>	<i>1.43</i>	<i>1.55</i>	<i>0.84</i>
<i>Sales to foreign customers</i>	<i>0.03</i>	<i>0.02</i>	<i>0.02</i>	<i>0.08</i>	<i>0.03</i>
Sales on the Balancing Market	0.48	0.57	0.54	0.67	0.52

\* after elimination of internal sales within PGE Group

The growth in sales volumes to end customers in comparison to 2015 resulted mainly from having contracted additional volumes in the corporate client segment in A and C2x tariff groups. The decline in volumes sold via the power exchange is connected with decreased generation due to lower availability of the Bełchatów power plant. A higher sales volume on other wholesale markets was driven by performance of contracts for PSE S.A. and Enea Operator S.A. in the Conventional Generation segment. Higher sales volumes on the balancing market were connected with sales under the Cold Intervention Reserve Service („IRZ”).

#### Purchases of electricity

Table: Purchases of electricity from outside of the PGE Capital Group (in TWh).

Purchases volume	2016	2015	% change	2014	% change
<b>PURCHASES IN TWh, including:</b>	<b>55.43</b>	<b>50.92</b>	<b>9%</b>	<b>53.18</b>	<b>-4%</b>
Purchases on the domestic wholesale market – power exchange	42.84	40.54	6%	37.82	7%
Purchases on the domestic wholesale market, other	5.23	3.99	31%	5.20	-23%
Purchases from abroad	0.06	0.03	100%	2.75	-99%
Purchases from Balancing Market	7.30	6.36	15%	7.41	-14%

Purchases volume	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
<b>PURCHASES IN TWh, including:</b>	<b>14.02</b>	<b>13.67</b>	<b>13.71</b>	<b>14.03</b>	<b>13.37</b>
Purchases on the domestic wholesale market – power exchange	10.57	10.64	10.80	10.83	10.33
Purchases on the domestic wholesale market, other	1.24	1.15	1.24	1.60	1.37
Purchases from abroad	0.02	0.02	0.01	0.01	0.00
Purchases from Balancing Market	2.19	1.86	1.66	1.59	1.67

Increased purchases on the domestic wholesale market – power exchange in comparison to 2015 was caused by higher demand for electricity in Supply segment due to higher volume of sales to final customers. Higher purchase volume was also recorded on other wholesale market what is a result of increased purchase on local market from Połaniec power plant executed by PGE Obrót S.A. Higher purchase volume on the balancing market is a consequence of necessity to balance the contracted sale, purchase and generation.

## Production of electricity

Table: Production of electricity (in TWh).

Generation volume	2016	2015	% change	2014	% change
<b>ENERGY GENERATION IN TWh, including:</b>	<b>53.67</b>	<b>55.58</b>	<b>-3%</b>	<b>54.84</b>	<b>1%</b>
Lignite-fired power plants	37.26	38.98	-4%	39.22	-1%
<i>including co-combustion of biomass</i>	0.00	0.34	-	0.39	-13%
Coal-fired power plants	10.71	11.04	-3%	11.35	-3%
<i>including co-combustion of biomass</i>	0.30	0.43	-30%	0.44	-2%
Coal-fired CHP plants	0.98	1.30	-25%	1.10	18%
Gas-fired CHP plants	2.33	2.05	14%	1.16	77%
Biomass-fired CHP plants	0.43	0.46	-7%	0.43	7%
Pumped-storage power plants	0.45	0.57	-21%	0.52	10%
Hydroelectric plants	0.43	0.36	19%	0.42	-14%
Wind power plants	1.08	0.82	32%	0.64	28%

Generation volume	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
<b>ENERGY GENERATION IN TWh, including:</b>	<b>13.16</b>	<b>12.26</b>	<b>13.62</b>	<b>14.63</b>	<b>13.84</b>
Lignite-fired power plants	8.50	8.35	10.30	10.11	9.34
<i>including co-combustion of biomass</i>	0.00	0.00	0.00	0.00	0.09
Coal-fired power plants	2.74	2.73	2.60	2.64	2.72
<i>including co-combustion of biomass</i>	0.09	0.09	0.10	0.02	0.09
Coal-fired CHP plants	0.39	0.14	0.09	0.36	0.38
Gas-fired CHP plants	0.80	0.51	0.19	0.83	0.75
Biomass-fired CHP plants	0.12	0.12	0.13	0.06	0.12
Pumped-storage power plants	0.18	0.08	0.06	0.13	0.20
Hydroelectric plants	0.13	0.11	0.07	0.12	0.05
Wind power plants	0.30	0.22	0.18	0.38	0.28

Generation level in 2016 in comparison to 2015 was mainly affected by lower generation in lignite-fired power plants. It is a result of decline in production in Bełchatów power plant resulting from working time of unit no. 1 limited to 1,500 h in 2016 according to particular requirements for peak units within IED.

A decline in production at coal - fired power plants was caused by lower generation in Dolna Odra power plant what is a consequence of lower utilisation of units by PSE S.A. Moreover, unit no. 6 in Dolna Odra power plant was in overhaul from September 24, 2016 till December 20, 2016.

Decrease of production coal-fired CHP plants is a result of lower production of electricity in Pomorzany CHP what is a consequence of limitation of working time to 17,500 h in years 2016-2023 according to requirements for natural derogation within IED. Additionally, lower electricity produced in co-generation in Bydgoszcz CHP is a consequence of taking over of part of the heat market by the Thermal Processing Installation in Bydgoszcz.

Increased production in gas-fired CHP plants results mainly from continuation of electricity production in co-generation with heat after the heating season in Lublin Wrotków CHP due to favourable prices of gas fuel.

Higher production in wind farms results mainly from increased installed capacity by 218 MW in wind farms commissioned in the fourth quarter of 2015 and first quarter of 2016 i.e.:

- FW Lotnisko – 90 MW;
- FW Resko II – 76 MW;
- FW Karwice – 40 MW;
- FW Kisielice II – 12 MW;

with the lower generation from other wind farms due to unfavourable wind conditions.

An increase of production in hydroelectric power plants is a consequence of more favourable hydrological conditions, mainly in the fourth quarter of 2016.

Lower production in pumped storage power plants results from the nature of these generation units, which in the three quarters of 2016 were used to a lower extent by PSE S.A.

#### **4.2.2. Sales of heat**

In 2016 the heat sales in PGE Capital Group totalled 18.06 GJ million and were lower by 1% compared to 2015. Lower sales of heat resulted mainly from limitation of working time of Pomorzany CHP to 17,500 h in years 2016-2023 according to requirements for natural derogation within IED.

### 4.3. Conventional Generation segment

#### 4.3.1. Assets

Conventional Generation in PGE Capital Group includes PGE GiEK S.A. based in Bełchatów. The company comprises 12 branches which are located in nine voivodships of our country. Branches include 2 lignite mines, 4 conventional power plants and 8 CHP plants.

The Group is the leader of lignite mining, with a share in the extraction market of this raw material accounting for 79% of domestic extraction; it is also the largest generator of electricity as it generates approx. 35% of domestic gross electricity production (including approx. 34% by Conventional Generation segment – own calculation based on data from ARE for 2016).

The generation is based on lignite extracted from mines owned by the company as well as hard coal, gas and biomass.

Diagram: Main assets of the Conventional Generation segment.

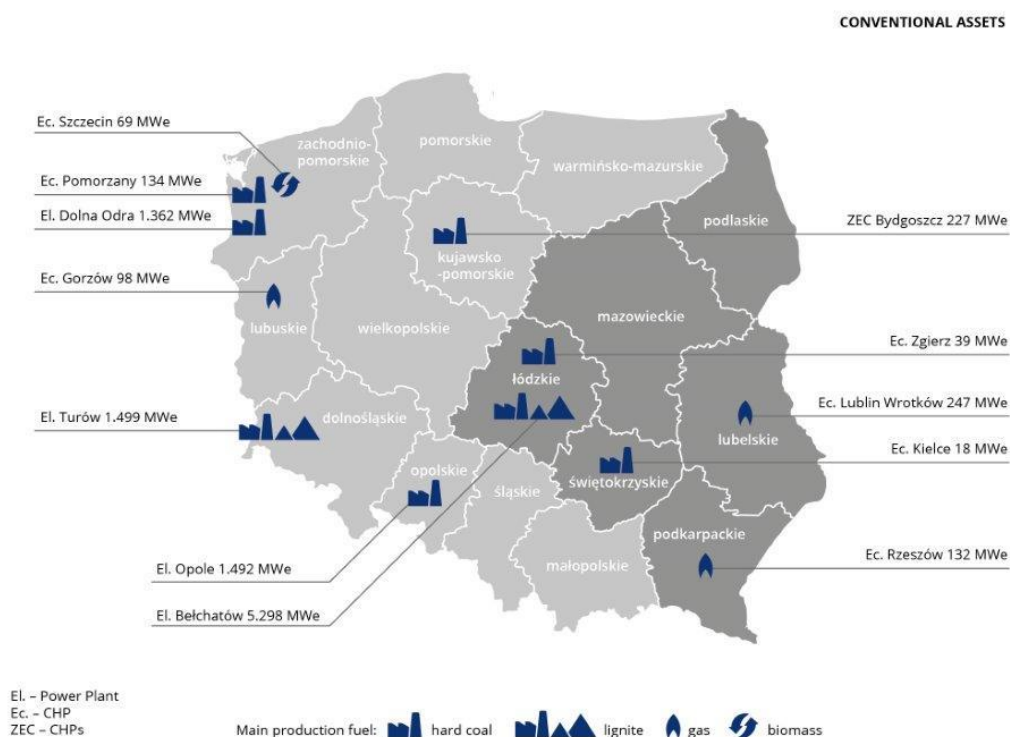
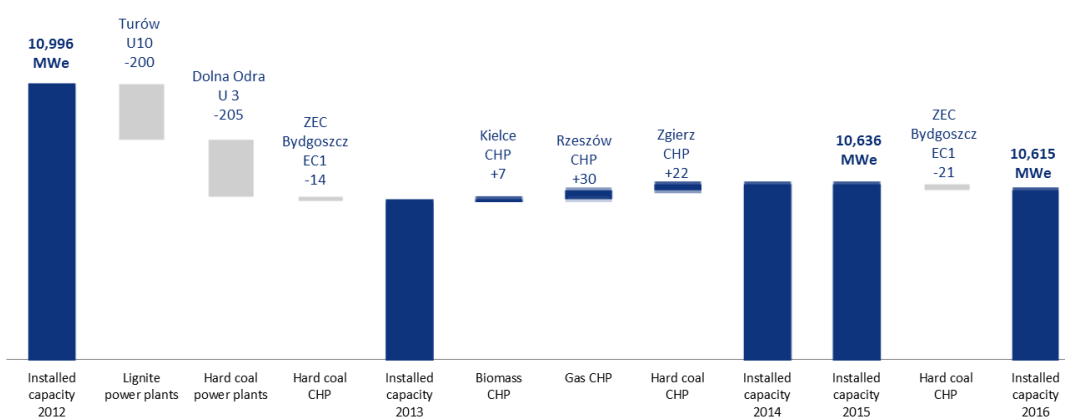


Table: Installed capacity and production in branches of Conventional Generation segment.

Branches	Main fuel types	Annual energy generation [GWh]			Annual heat generation [GJ ths.]			Installed capacity [MWe]
		2016	2015	2014	2016	2015	2014	2016
Bełchatów power plant	lignite	29,983	31,698	31,515	2,004	1,924	1,904	5,298
Turów power plant	lignite, biomass	7,271	7,278	7,711	675	666	492	1,499
Opole power plant	hard coal, biomass	6,324	6,240	6,816	121	116	119	1,492
Dolna Odra power plant	hard coal, biomass	4,385	4,802	4,536	347	314	311	1,362
Lublin Wrotków CHP	methane-rich gas, hard coal	1,167	972	417	3,049	2,861	2,845	247
Rzeszów CHP	methane-rich gas, hard coal	652	611	264	1,784	1,728	1,637	132
Pomorzany CHP	hard coal	338	597	510	2,204	2,766	2,739	134
Gorzów CHP	gas, hard coal	617	580	586	1,516	1,389	1,390	98
Bydgoszcz CHP	hard coal, heavy oil	410	455	424	4,285	4,343	4,519	227
Szczecin CHP	biomass	394	423	400	562	680	624	69
Zgierz CHP	lignite, hard coal, gas	85	102	20	429	387	363	39
Kielce CHP	hard coal, biomass	74	75	61	1,596	1,509	1,485	18
<b>TOTAL</b>		<b>51,700</b>	<b>53,833</b>	<b>53,260</b>	<b>18,572</b>	<b>18,683</b>	<b>18,428</b>	<b>10,615</b>

Diagram: Change of installed capacity in Conventional Generation.



In 2016 due to liquidation of CHP III in ZEC Bydgoszcz, the installed capacity in Conventional Generation decreased by 21 MWe.

#### 4.3.2. Lignite mining

##### Review of main issues with regard to resources

##### Lignite resources

Lignite deposit reserves are determined based on a reserves inventory maintained in the reserves register (art. 101 p. 3 of the Geological and Mining Act).

Table: Lignite resources data as at the end of 2016 and lignite output in 2016.

Złoże	Resources - as at the end of 2016		Output in 2016
		[Mg million]	[Mg million]
Bełchatów – Field Bełchatów	Industrial	47.47	16.24
Bełchatów – Field Szczerców	Industrial	616.11	23.94
Turów	industrial	309.85	7.50

##### Long-term projects

In order to ensure business continuity and protect PGE Group's value based on modern and efficient lignite-based production units, work is underway to obtain a concession for lignite mining at the Złoczew and Gubin deposits.

##### Project „Złoczew”

Executing the project in 2016 mainly consisted of a procedure to obtain a decision on environmental conditions for the investment and changes in planning documentation for municipalities where the planned investment is to be implemented. According to the adopted schedule, obtaining a concession for the mining of lignite at the Złoczew deposit is expected to take place in October 2017.

##### Project „Gubin”

Project connected with the obtaining a concession for the mining of lignite at the Gubin 2 deposit, until the end of 2014 the project had been implemented by a dedicated subsidiary of PGE S.A. – PGE Gubin Sp. z o.o. As of the beginning of 2015 PGE Gubin Sp. z o.o. was liquidated and its legal liabilities were taken over by PGE GIEK S.A., while organizationally the project has been implemented by the dedicated project team.

Project work in 2016 mainly consisted of a procedure to obtain a decision on environmental conditions for the investment and changes in planning documentation for municipalities where the planned investment is to be implemented. According to the adopted schedule, a concession for coal mining at the Gubin 2 deposit is expected to be obtained by December 2018.

##### Current rehabilitation operations

The law in force (Act on Protection of Agricultural and Forest Land, the Geological and Mining Act) provides for the obligation to rehabilitate post-mining land. Therefore, mines conduct rehabilitation work on post-mining land, where mining activities are discontinued.

Rehabilitation works are carried out successively with the developing mining operations, based on the technical and conceptual documentation pursuant to administrative decisions regarding the rehabilitation. Reclamation targets assume that after mining has been finished, Bełchatów field, Szczerców field and Turów internal heaps will involve forests, while mining excavations will involve water reservoirs (with shores intended for forests). Additionally, rehabilitation of external heap in Field Szczerców will involve forested area, sporting and leisure area, farming and commercial.

##### Mine Liquidation Fund and provision for rehabilitation of land

Pursuant to the provisions the Geological and Mining Act, business operators extracting minerals in open-pit mines must contribute to the Mine Liquidation Fund an amount equivalent to 10% of the charged exploitation fee; raised funds must be deposited on a separate bank account. The Fund is charged to the costs of open-pit mining operations. The transfer of funds takes place on a monthly basis and the amount contributed depends on the extraction output achieved in the reporting period. Interest earned on the Mine Liquidation Funds increase the value of the Fund.

Mines belonging to the Group estimate future expenses to be incurred for the rehabilitation of land where mining operations ended. The amount of the costs is determined based on projected costs of rehabilitation operations and the final pit improvement. In 2016 the technical plan of rehabilitation was updated. In accordance with the new plan, part of rehabilitation operations in Field Bełchatów will be postponed until the reclamation of Field Szczerców is finished.

The reclamation provision is also created in power plants and CHP plants of the company and is related to ash storages and liquidation of tangible fixed assets (see note 21.1 to the consolidated financial statements).

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#### 4.3.3. Key financial figures

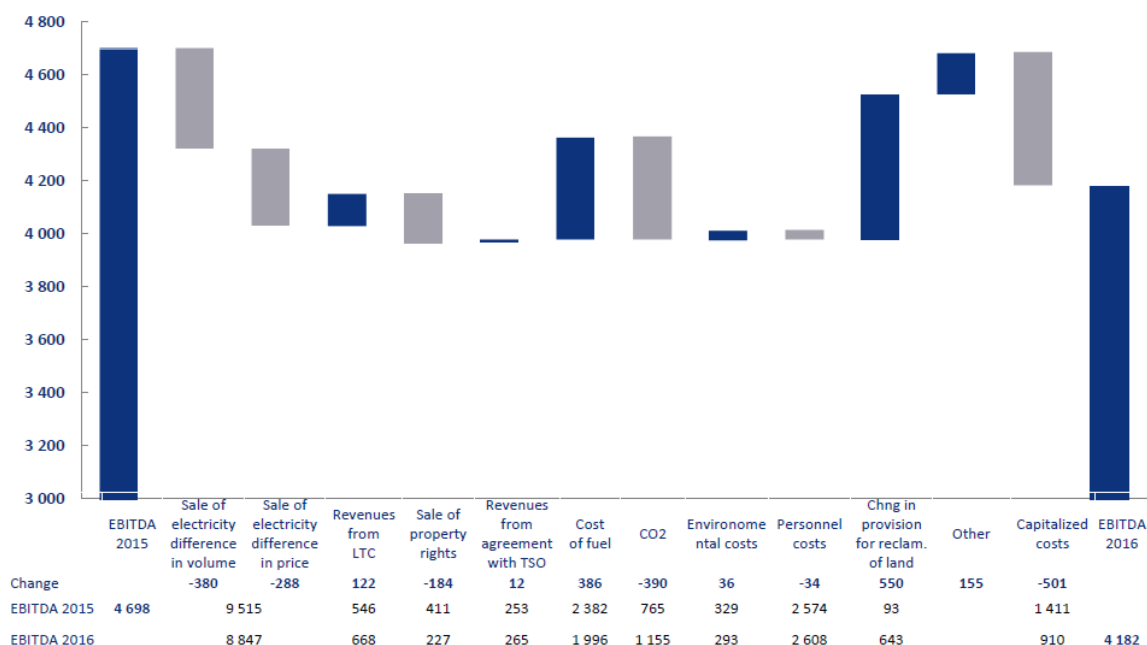
Table: Key figures for Conventional Generation.

in PLN million	2016	2015	% change	2014	% change
Sales revenues	11,738	12,715	-8%	12,906	-1%
EBIT	2,691	-5,732	-	3,296	-
EBITDA	4,182	4,698	-11%	4,983	-6%
Capital expenditures	6,179	6,495	-5%	4,362	49%

PLN million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sales revenues	3,073	2,579	2,879	3,207	3,237
EBIT	680	235	500	1,276	739
EBITDA	1,000	568	878	1,736	1,112
Capital expenditures	1,471	1,384	1,454	1,870	2,481

#### 4.3.4. Key factors for the results of the segment

Chart: Key changes of EBITDA in Conventional Generation [in PLN million].



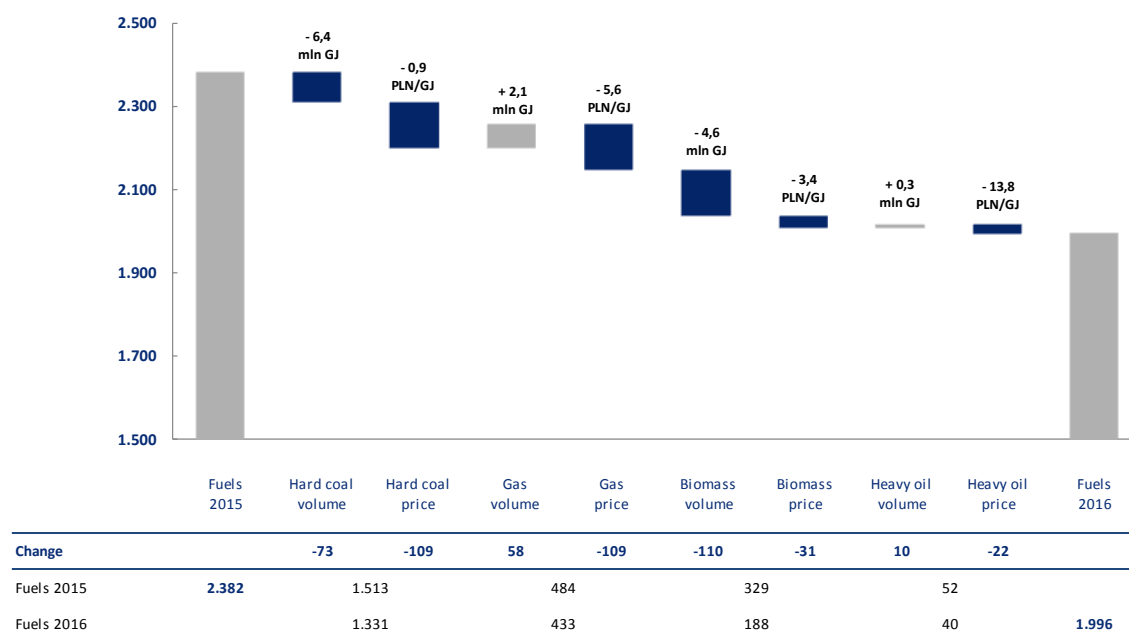
Key factors affecting the results of Conventional Generation segment in 2016 compared to the results of the previous year included:

- **Decreased sales volume of electricity** mainly as a result of lower production at Bełchatów power plant resulting from working time of unit no. 1 limited to 1,500 h in 2016 according to particular requirements for peak units within IED.
- **Decrease of electricity prices**, what attributed to the relevant decrease of revenues from sales. Average sale price of electricity realised by the Conventional generation segment in 2016 amounted to PLN 168/MWh, while it amounted to PLN 173/MWh in 2015.
- **Higher revenues from LTC compensations** as a result of recognition in 2016 of LTC adjustment in amount of PLN 148 million in connection with the verdicts in court disputes: (i) favourable verdict of the Court of Appeal

relating to adjustment of stranded costs for 2010 due to Opole power plant (PLN +173 million); (ii) unfavourable verdict of the Supreme Court in scope of gas adjustment for 2009 for Lublin Wrotków CHP and rejection of cassation appeal in case of gas adjustment for 2010 for Lublin Wrotków CHP and Rzeszów CHP (PLN -25 million).

- **Lower revenues from certificates** mainly due to revaluation of certificates in Szczecin CHP (PLN -118 million).
- **Higher revenues from ancillary control services**, mainly resulting from cold reserve mechanism services provided by Dolna Odra power plant (units no. 1 and 2) to PSE S.A.
- **Lower costs of fuels used**, including mainly hard coal, biomass and gas. It is effect of decreased generation of electricity from hard coal and lower hard coal prices as well as lower generation of electricity from co-combustion of biomass due to decreased profitability of electricity production in that technology (the impact of provisions of RES law and low prices of green certificates). Decrease of costs of gas used – despite the increased volume used – is a result of lower prices of gas on the commodity exchanges. Main changes on different types of fuel are presented on the chart below
- **Higher CO<sub>2</sub> costs** as a result of higher cost per unit of CO<sub>2</sub> emission and lower amount of allowances granted free of charge.
- **Lower fees for use of environment** mainly resulting from lower electricity generation and as a consequence lower emissions (SO<sub>2</sub>, NO<sub>x</sub>) and higher efficiency of denitrification and desulphurisation installations due to more strict emissions limits.
- **Higher personnel expenses** mainly as a result of higher costs of Voluntary Leave Program.
- **Change of reclamation provision** as a result of change in technical assumptions with regard to the reclamation and excavation pit management and due to the change of the discount rate.
- **Lower capitalised costs**, among other, as a result of lower volume of overburden removal in mines and recognition of lower removal costs as asset.

Chart: Costs of fuels consumption (including transport) in Conventional Generation [in PLN million].



#### 4.3.5. Capital expenditures

Table: Capital expenditures incurred in Conventional Generation segment in 2016, 2015 and 2014.

PLN million	Capital expenditures				
	2016	2015	% change	2014	% change
Investments in generating capacities, including:	5,585	5,504	1%	3,646	51%
▪ Development	4,248	3,049	39%	914	234%
▪ Modernisation and replacement	1,337	2,455	-46%	2,732	-10%
Purchase of finished capital goods	85	64	33%	65	-2%
Vehicles	6	27	-78%	9	200%
Other	56	122	-54%	64	91%
<b>TOTAL</b>	<b>5,732</b>	<b>5,717</b>	<b>0%</b>	<b>3,784</b>	<b>51%</b>
Capitalized costs of overburden removal in mines	447	778	-43%	578	35%
<b>TOTAL with capitalized costs of overburden removal</b>	<b>6,179</b>	<b>6,495</b>	<b>-5%</b>	<b>4,362</b>	<b>49%</b>

PLN million	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
Investments in generating capacities, including:	1,320	1,221	1,304	1,740	2,188
▪ Development	920	878	1,041	1,409	1,183
▪ Modernisation and replacement	400	343	263	331	1,005
Purchase of finished capital goods	10	19	12	44	19
Vehicles	4	0	0	2	10
Other	4	8	13	31	66
<b>TOTAL</b>	<b>1,338</b>	<b>1,248</b>	<b>1,329</b>	<b>1,817</b>	<b>2,283</b>
Capitalized costs of overburden removal in mines	133	136	125	53	198
<b>TOTAL with capitalized costs of overburden removal</b>	<b>1,471</b>	<b>1,384</b>	<b>1,454</b>	<b>1,870</b>	<b>2,481</b>

Highest capital expenditures in 2015 were incurred for the following projects:

- construction of units 5 and 6 in Opole power plant PLN 3,467 million;
- comprehensive modernization of units 7-12 - Bełchatów power plant PLN 518 million;
- construction of unit no. 11 in Turów power plant PLN 498 million;
- construction of CCGT unit in Gorzów CHP PLN 215 million;
- comprehensive modernization of units 1-3 in Turów power plant PLN 37 million;
- construction of overburden line GD 1 in Bełchatów lignite mine PLN 32 million;
- construction of desulphurization installations of units 4 - 6 in Turów power plant PLN 26 million.

Key developments in 2016 in Conventional Generation:

- A contract to modernise generators 1-3 at Turów power plant was signed in January, and a contract to modernise electrostatic precipitators at Turów's units 1-3 was signed in March; as these contracts were signed, contractors for the specific modernisation "islands" at units 1-3 were issued declarations on the contracts' entry into force as of March 14, 2016;
- In March works connected with the construction of NOx reduction installation on units no. 1, 2 and 4 in Opole power plant were completed, the last installation on unit no. 2 was commissioned on March 18, 2016;
- In April, a notice to proceed was issued for the contractor in the task "Construction of a Thermal Processing Installation with Energy Recovery at Rzeszów CHP";
- In June modernised unit no. 9 in Bełchatów power plant was commissioned;

- In June FGD installations on units no. 4, 5 and 6 in Turów power plant were commissioned;
- In September unit no. 10 in Bełchatów power plant was commissioned following the completion of its modernisation;
- In September set of conveyors for transport of overburden to the dumping ground was commissioned in the Bełchatów lignite mine (so called GD.1 line);
- In September an agreement was signed with regard to construction of installation of semi-dry flue gas desulfurization, and in October with regard to construction of installation of catalytic flue gas denitrification for two Benson OP-206 boilers in Pomorzany power plant;
- In December a trial run of the gas unit in Gorzów CHP has commenced and occupancy permit was obtained. The unit was commissioned on January 31, 2017.

#### 4.3.6. Responsible approach to natural environment

##### The environmental management system

PGE GiEK S.A. applies PGE Group's Environmental Protection Policy and Integrated Management System Model, which covers among other things an Environment Management System in accordance with PN-EN ISO 14001. The environment management system is deployed at all of the company's locations, including its headquarters. The main objective of the ISO 14001 standard is contributing to protecting the environment and preventing pollution in a manner that takes into consideration both social and economic needs in line with the idea of sustainable development.

The concept of a unified Environment Management System is intended to harmonise documentation and improve effectiveness of managing the environmental protection area. This includes, among other things, central management of environmental aspects across all of the company's locations. This documentation is subject to updating during annual reviews. Furthermore, in Branch ZEDO and Branch Elektrownia Opole an environment management and audit system (EMAS PI:2999) is in place, which together with an environmental declaration is subject to annual audit by an independent accredited auditor.

##### Energy from biomass

Generation of green energy from renewable sources has a positive impact on the environment by contributing to the reduction of CO<sub>2</sub> and SO<sub>2</sub>, it allows to reduce combustion waste (ash, slag, etc.). It also stimulates local biomass producers (including farmers) and enables to reuse fallow land and dry residues from forest production.

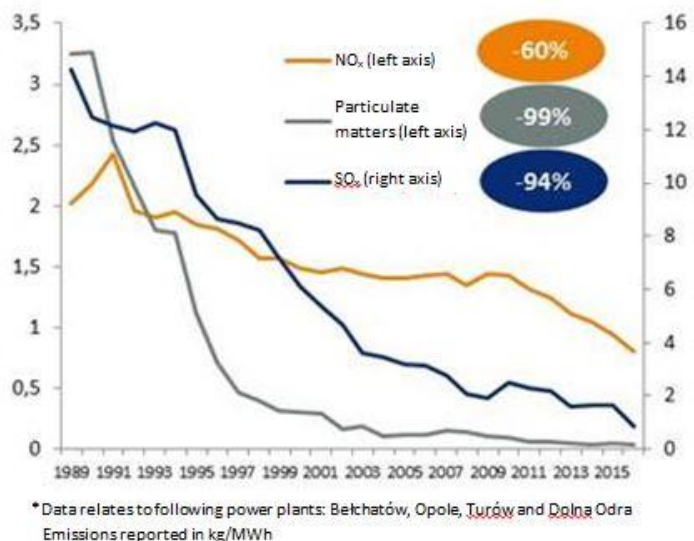
Currently PGE Group does not use biomass for combustion only in Bydgoszcz CHPs, Bełchatów power plant and Turów power plant. In 2016 generating units in PGE GiEK S.A. used nearly 1 million tons of biomass.

##### Air protection

From January 1, 2016, PGE GiEK S.A. installations/sources operate in line with emission standards set out in the IED Directive or use the derogation mechanisms provided therein. Derogation is intended to give existing installations additional time to technically adapt to the more rigorous emission requirements specified in the IED or exempt them from the requirement to observe these if modernising such a facility would be unjustified due to a limited expected lifecycle.

In 2016, PGE GiEK S.A. significantly reduced emissions, compared with the previous year:

- **SO<sub>2</sub> by 48%** - mainly due to the operation of Bełchatów power plant units with the SO<sub>2</sub> emission standard of 200 mg/m<sup>3</sup> from January 1, 2016 as well as the operation of ELB unit 1 as a "peak-reserve" source for 1 500 hours (shorter operational time) and the launch of IOS on units 3-4 at EC Bydgoszcz II;
- **NO<sub>x</sub> by 17%** - the largest NO<sub>x</sub> emission reductions occurred at Bełchatów, Opole and Turów power plants, resulting from the adaptation of these installations to the 200 mg/m<sup>3</sup> standard;
- **particulate matter by 29%** - the largest reduction in particulate matter emissions occurred at Bełchatów and Opole power plants, resulting from the adaptation of the 20 mg/m<sup>3</sup> standard.



In years 1989- 2016 PGE GiEK (power plants: Bełchatów, Opole, Turów i Dolna Odra) reduced emissions: SO<sub>2</sub> by 94%, NO<sub>x</sub> by 60 %, particulate matter by 99%.

A detailed list of NO<sub>x</sub>, SO<sub>x</sub> and particulate matter emissions by PGE GiEK S.A. is presented in appendix 1 to this report.

The following emission limit values were exceeded at ZEC Bydgoszcz in 2016:

- at EC Bydgoszcz I – the monthly average limit of SO<sub>2</sub> emissions was exceeded in one month,
- at EC Bydgoszcz II – 16 cases in which the daily average limit of SO<sub>2</sub> emissions was exceeded. These cases resulted from technical faults at the new IOS installation as well as regulation work and installation warranty measurements.

## **CO<sub>2</sub> emissions**

The third settlement period, covering years 2013-2020, began in 2013. During this period, rules for allocating free allowances for CO<sub>2</sub> emissions to all EU ETS participants changed, in particular for producers of electricity and heat. As a rule, starting from 2013, each subsequent year of the third settlement period is a line decline of the number of free CO<sub>2</sub> emission allowances allocated to installations.

CO<sub>2</sub> emission allowances for heat production were allocated unconditionally.

Conditionally allocated are CO<sub>2</sub> emission allowances for electricity production. The condition for allocating CO<sub>2</sub> emission allowances for electricity producers is the completion of investment tasks that limit CO<sub>2</sub> emissions, as listed in the National Investment Plan.

The volume of emission allowances for electricity production was specified for each PGE GiEK S.A. installation for each year of the period 2013-2020 in the Ordinance of the Council of Ministers dated April 8, 2014.

It is assumed that PGE GiEK S.A. installations will receive a total of 145,267,186 allowances during the 2013-2020 period, including:

- 7,271,832 allowances for heat production;
- 137,995,354 allowances for electricity production (without allowances for new capacities).

The volume of free allowances will constitute approx. 30% of PGE GiEK S.A.'s emission needs, which are estimated at more than 480 million tons of CO<sub>2</sub>.

The volume of CO<sub>2</sub> emissions for 2016 was 55,936,776 tons. Based on the balance of allowances and actual CO<sub>2</sub> emissions, a shortage of 36.065.830 allowances exists. This shortage will be compensated through the purchase of allowances on the external market with the intermediation of PGE S.A.

A detailed balance of CO<sub>2</sub> emission allowances together with CO<sub>2</sub> emission levels for PGE Group installations for 2016 is discussed in chapter 5.3.4 of this report.

## **Management of waste and by-products**

The generation of waste is an unavoidable consequence of producing electricity and heat in conventional plants using fossil fuels and biomass. Waste is mainly produced directly in combustion processes or in support processes.

In the waste gas combustion and purification process, several types of waste are produced: ash and slag mixtures from the wet discharge of combustion waste, fly ash and solid waste from lime desulphurisation methods, fly ash from coal, slag, ash from biomass firing and co-firing, sand from fluidised beds, microspheres.

Waste from lignite combustion account for more than 91% of all combustion waste. The specific properties of ashes from lignite combustion and the high variability of their parameters limit the potential for the commercial use of these substances. This results in the necessity to deposit them at storage sites, which generates costs (production and environmental fees) or their management through filling unused transformed land.

Ashes and slags from lignite combustion have various commercial applications. Their widespread use is connected with their properties, which allow them to be widely used in the cement, construction or road industries.

Synthetic gypsum produced in waste gas purification processes is characterised by very good physical and chemical parameters thanks to which its properties are comparable to the properties of natural gypsum. In 2016, over two million tonnes of post-reaction gypsum was produced at PGE GiEK S.A. installations, including nearly 60% as a by-product that is used in the construction industry to produce cardboard-gypsum boards and construction mixtures. This product is also used in the cement industry.

A breakdown of the total weight of waste created at PGE GiEK S.A. installations is presented in appendix 1 to this report.

The Company consistently improves and expands the scale of usage for combustion waste, conducts research and seeks new applications in line with sustainable development rules. These actions are aligned with EU policies directed at re-using waste, protecting natural resources and minimising adverse impact on the environment, including through limiting the quantities of waste deposited at storage sites.

#### **Management of waste water**

Conditions for managing waste water are specified in relevant permits, including in particular integrated permits and water-law permits. Monitoring is conducted at PGE GiEK S.A. branches on an on-going basis as regards the quantity and quality of water collected and waste discharged.

For technological purposes, water is collected from groundwater outlets, which is subsequently subject to purification processes. In order to limit the quantity of raw water consumption, closed-circuits are used, and old technological water and waste water are used in other processes. Waste water created as a result of power plant and heat-and-power plant production activities is subject to a purification process, including multi-stage cleansing, and subsequently discharged to groundwater or transferred to municipal companies. Modern waste treatment systems are an element of protecting the cleanliness of water. At its branches, the company also applies passive protections, which are used to safeguard groundwater, e.g. from contamination by leaks from oil and chemicals containers or discharges from coal storage sites.

Mining of lignite in an open-pit mine, which takes place at two PGE GiEK S.A. lignite mines – Bełchatów and Turów, requires the rockmass to be initially dewatered, which has substantial impact on hydrogeological conditions and results in changed hydrodynamic relations. Water management at lignite plants is related to dewatering both inside the rockmass and at the surface of the pit. Water from the pit is taken out to field reservoirs, the task of which is final purification of water through natural sedimentation of suspensions, assisted by plant filters. Once the water is purified, it is at least class II water in purity terms.

Total volume of waste water by quality and final destination in PGE GiEK S.A. is presented in Appendix 1 to this report.

#### **Reclamation of adversely transformed land**

Mining lignite in open-pit mines causes large-scale transformation of land surface, which in turn is a factor causing changes in the natural environment, especially as regards landscape. The scope and size of these changes are dependent on both the applied mining technology and the sensitivity of specific components of the environment.

Post-mining areas that are no longer necessary for deposit mining and storing overburden are subject to on-going reclamation during the entire period of mining activity in accordance with conditions specified in administrative decisions. Reclamation performed at the Company's branches consists of returning useful and natural values of land (as close to natural as possible). Land reclamation is performed through technical reclamation (land shaping and construction of essential technical infrastructure) and biological reclamation (ground preparations, introduction and maintenance of plants). Large-scale reclamations are mainly being conducted within the following open-pit lignite mines: KWB Turów and KWB Bełchatów.

Existing lignite mining activity is the best proof that it does not always go along with the devastation of surface (earth) and water relations because these are of a temporary nature and do not significantly harm the basic processes of biological life. Large-scale production entails substantial obligations towards the natural environment. The Company's sustainable development strategy is based around efforts to minimise the environmental footprint. Years of experience and the implementation of innovative and effective eco-friendly technological solutions allows to significantly mitigate the effects of lignite mining. Reclamations conducted thus far have given rise to vast forest and water complexes where many animal and plant species are present.

#### **Mitigation of noise emissions**

Permissible noise emission levels for each installation are specified in relevant permits, mainly integrated permits.

Noise emission measurements are performed every two years or ad hoc upon request or complaint by external entities. Noise emission measurements taken in 2016 at power plants and heat-and-power plants did not show significant breaches of permissible noise emission levels. Slight breaches of noise emission limits (approx. 1.8 dB at night) were recorded in the fourth quarter of 2016 from the area of Bełchatów lignite mine.

## 4.4. Renewables segment

### 4.4.1. Assets

The PGE Capital Group's operations in renewable energy are managed by the PGE EO S.A. Assets in the segment include:

- 14 wind farms;
- 1 photovoltaic power plant;
- 29 run-of-river hydro power plants;
- 4 pumped-storage power plants, including 2 with natural flow.

Diagram: Main assets of the Renewables segment.

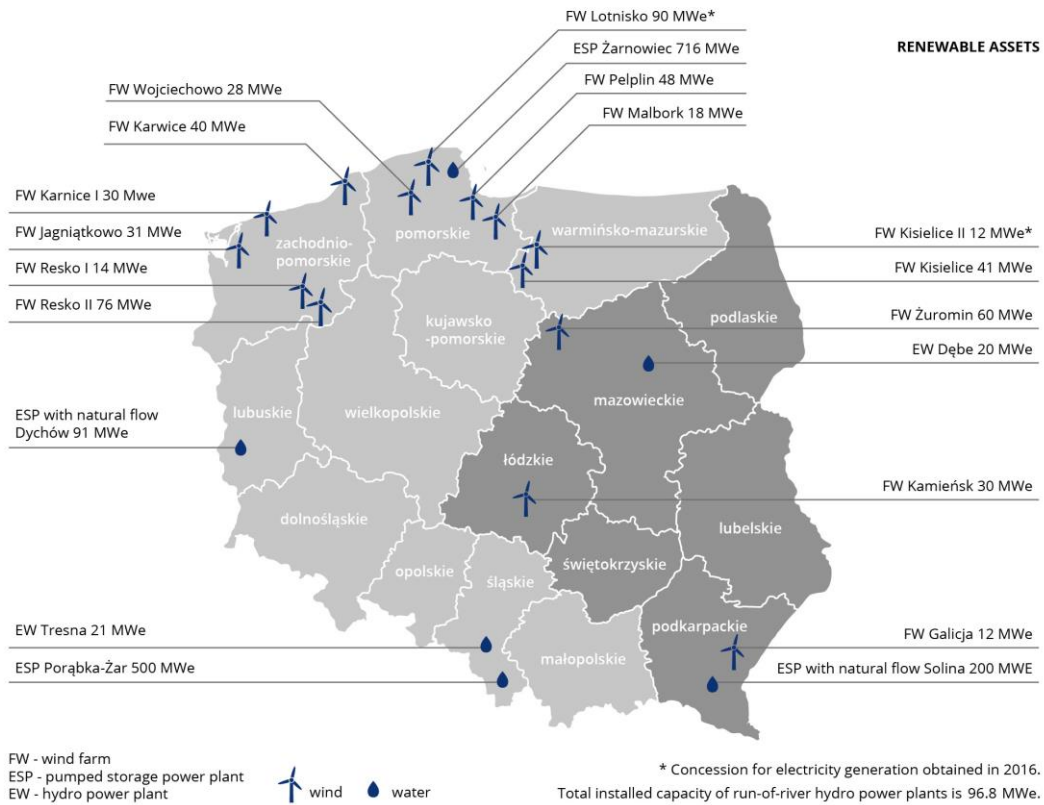


Table: Installed capacity and production in power plants of Renewables segment.

Power plant	Annual energy generation [GWh]			Installed capacity [MWe]
	2016	2015	2014	2016
<b>Run-of-river hydro power plant</b>	<b>303.1</b>	<b>243.7</b>	<b>298.9</b>	<b>96.8</b>
Elektrownia Wodna Dębe*	91.0	76.2	100.1	20.0
Elektrownia Wodna Tresna	31.7	20.2	25.7	21.0
Elektrownia Wodna Myczkowce	29.4	25.5	20.9	8.3
Elektrownia Wodna Porąbka	27.2	19.0	23.0	12.6
Elektrownia Wodna Smardzewice*	12.7	13.7	18.9	3.6
Elektrownia Wodna Oława	12.2	9.6	9.6	3.2
Elektrownia Wodna Raduszczyce	11.0	8.1	11.4	3.0
Elektrownia Wodna Grajówka	9.2	6.0	8.5	2.9
Elektrownia Wodna Gorzupia II	8.7	6.6	8.3	1.7
Elektrownia Wodna Dobrzeń	6.5	5.2	7.0	1.6
Elektrownia Wodna Krapkowice	6.2	5.3	6.4	1.3
Elektrownia Wodna Przysieka	5.6	4.3	4.7	1.4
Elektrownia Wodna Januszkowice	5.3	5.0	6.0	1.4
Elektrownia Wodna Krępna	5.2	5.0	6.2	1.3
Elektrownia Wodna Gubin	4.8	3.5	4.1	1.2
Elektrownia Wodna Żagań II	4.7	3.7	5.3	1.2
Elektrownia Wodna Rakowice	4.6	3.5	5.3	2.0
Elektrownia Wodna Bukówka	4.2	3.2	3.6	0.8
Elektrownia Wodna Zasieki	3.6	2.9	3.3	0.8
Elektrownia Wodna Żagań I	3.5	2.9	3.9	0.9
Elektrownia Wodna Sobolice	2.7	2.0	2.5	0.8
Elektrownia Wodna Zielisko	2.4	3.0	3.2	1.5
Elektrownia Wodna Kliczków	2.2	1.4	1.9	0.6
Elektrownia Wodna Żarki Wielkie	2.0	1.9	1.8	0.6
Elektrownia Wodna Małomice	1.9	1.4	2.1	0.8
Elektrownia Wodna Nielisz*	1.7	1.9	1.9	0.4
Elektrownia Wodna Szprotawa	1.6	1.5	2.3	0.8
Elektrownia Wodna MEW Myczkowce	1.3	1.2	0.9	0.2
Elektrownia Wodna Gorzupia I	0.0	0.0	0.1	0.9
<b>Pumped-storage power plants</b>	<b>446.9</b>	<b>561.2</b>	<b>512.9</b>	<b>1.216.0</b>
Elektrownia Wodna Żarnowiec	266.4	343.0	309.0	716.0
Elektrownia Wodna Porąbka-Żar	180.5	218.2	203.9	500.0
<b>Pumped-storage plants with natural flow **</b>	<b>130.3</b>	<b>120.8</b>	<b>123.4</b>	<b>291.5</b>
Elektrownia Wodna Solina	91.2	82.0	73.7	200.2
Elektrownia Wodna Dychów	39.1	38.8	49.7	91.3

\* hydro power plant managed in 2014 by Retail Sale segment (current name – Supply segment)

\*\* including generation from pump-storage cycle of 4.4 GWh and generation from natural flow of 125.8 GWh. Total generation from pump-storage cycle in 2016 amounted to 451.3 GWh and generation from water totalled 428.9 GWh



Table: Installed capacity and production in power plants of Renewables segment.

Power plant	Annual energy generation [GWh]			Installed capacity [MWe] 2016
	2016	2015	2014	
<b>Wind farms</b>	<b>1.083.3</b>	<b>822.1</b>	<b>643.0</b>	<b>529.0</b>
Farma Wiatrowa Lotnisko *	174.6	0.0	0.0	90.0
Farma Wiatrowa Resko II**	171.9	19.9	0.0	76.0
Farma Wiatrowa Żuromin	133.8	157.2	145.0	60.0
Farma Wiatrowa Pelplin	97.4	112.4	94.9	48.0
Farma Wiatrowa Karwice***	85.4	47.3	0.0	40.0
Farma Wiatrowa Jagniątkowo	70.1	88.5	74.7	30.6
Farma Wiatrowa Kisielice	70.0	82.8	76.1	40.5
Farma Wiatrowa Wojciechowo****	62.2	81.6	51.4	28.0
Farma Wiatrowa Karnice I	57.9	69.6	59.6	29.9
Farma Wiatrowa Kamieńsk	54.1	64.9	55.0	30.0
Farma Wiatrowa Malbork	36.8	41.5	37.3	18.0
Farma Wiatrowa Resko I	25.4	32.3	27.7	14.0
Farma Wiatrowa Galicja	23.8	24.1	21.3	12.0
Farma Wiatrowa Kisielice II*****	19.9	0.0	0.0	12.0
<b>Photovoltaic power plant Żar*****</b>	<b>0.5</b>	<b>0.02</b>	<b>0.0</b>	<b>0.6</b>
<b>TOTAL:</b>	<b>1.964,1</b>	<b>1.747,8</b>	<b>1.578,2</b>	<b>2.133,9</b>

\* data for 2016 relate to period March-December 2016

\*\* data for 2015 relate to December 2015

\*\*\* data for 2015 relate to period July – December 2015

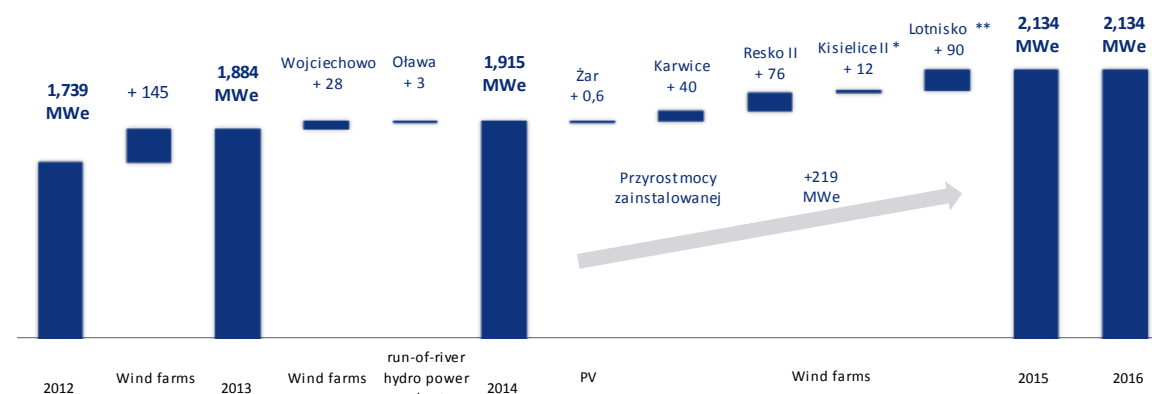
\*\*\*\* data for 2014 relate to period March – December

\*\*\*\*\* data for 2016 relate to period February – December 2016

\*\*\*\*\* data for 2015 relate to period November – December 2015

In December 2015 Lotnisko wind farm with installed capacity of 90 MWe and Kisielice II wind farm with installed capacity of 12 MWe were commissioned. Both farms obtained concession for electricity generation respectively in January and February 2016. Total installed capacity of the wind farms currently amounts to 529 MWe.

Chart: Change of installed capacity in Renewable energy.



\* Wind farm operational in 2015; concession for electricity generation granted in February 2016.

\*\* Wind farm operational in 2015; concession for electricity generation granted in January 2016.

#### 4.4.2. Key financial figures

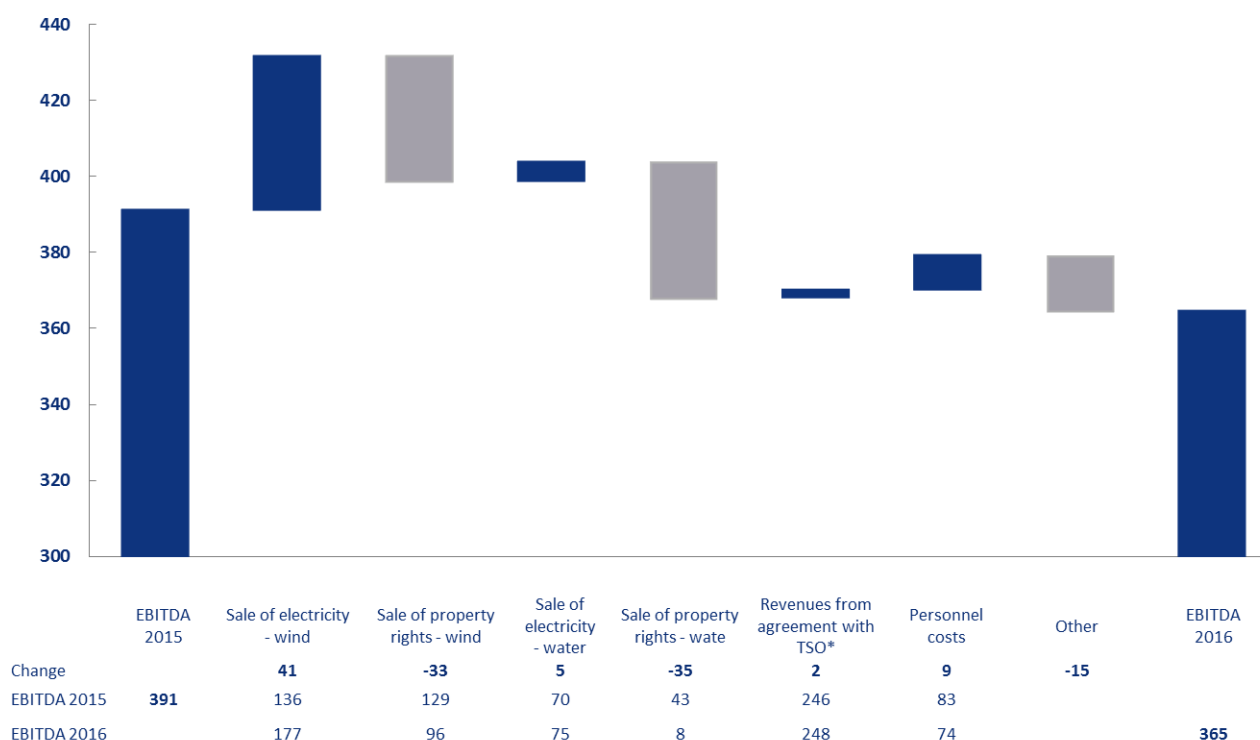
Table: Key figures for Renewables.

in PLN million	2016	2015	% change	2014	% change
Sales revenues	717	761	-6%	767	-1%
EBIT	-770	107	-	174	-39%
EBITDA	365	391	-7%	391	0%
Capital expenditures	144	931	-85%	374	149%

PLN million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sales revenues	213	157	126	221	215
EBIT	49	-769	-13	-37	2
EBITDA	114	91	51	109	113
Capital expenditures	76	19	18	31	366

#### 4.4.3. Key factors for the results of the segment

Chart: Key changes of EBITDA in Renewables [in PLN million].



\* excluding revenues and costs relating to balancing market not affecting EBITDA result

Key factors affecting the results of Renewables in 2016 compared to the results of the previous year included:

- **The increase of sales of electricity from wind power plants** was caused mainly by the increased volumes generated what is connected with increased installed capacity in wind farms by 218 MWe following the commissioning of the new wind farms.
- **The decline of revenues from sales of certificates** resulting from: (i) valuation of production of certificates at a price lower by approximately PLN 46/MWh in 2016 compared to 2015, what decreased the revenues by approximately PLN (-) 51 million; (ii) adjustment of valuation of certificates sold and in inventories what resulted in decline of revenues by approximately PLN (-) 17 million.

- **The increase of sales revenues of electricity from hydro power plants** resulting mainly from increased volume of electricity sales by 62 GWh in comparison to the previous year.
- **Higher sales revenues from ancillary control services** result mainly from indexation of revenues according to the agreement with PSE S.A.
- **Decline in personnel expenses** is mainly related to employment restructuring related to integration of companies in the Renewables segment in 2015.
- **Unfavourable change in item Other** results mainly from higher costs of repairs and maintenance and property tax by approximately PLN 19 million as a result of commissioning of new wind farms. Other operations positively affected the result – by approximately PLN 12 million, mainly due to settlement of grants resulting from recognised impairment loss.

Negative EBIT of Renewables segment in 2016 results from recognition of impairment loss in amount of PLN 865 million, including PLN 82 million the fourth quarter of 2016. The impairment loss was driven by changes in the market environment (projected prices of green certificates) and changes in the regulatory environment (increase of tax burden due to Act on investments in wind power plants).

#### Capital expenditures

Table: Capital expenditures incurred in Renewable Energy segment in 2016, 2015 and 2014.

PLN million	Capital expenditures				
	2016	2015	% change	2014	% change
Investments in generating capacities, including:	140	918	-85%	353	160%
▪ Development	79	867	-91%	301	188%
▪ Modernisation and replacement	61	51	20%	52	-2%
Other	4	13	-69%	21	-38%
<b>TOTAL</b>	<b>144</b>	<b>931</b>	<b>-85%</b>	<b>374</b>	<b>149%</b>

PLN million	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
Investments in generating capacities, including:	76	18	18	28	355
▪ Development	72	1	0	6	324
▪ Modernisation and replacement	4	17	18	22	31
Other	0	1	0	3	11
<b>TOTAL</b>	<b>76</b>	<b>19</b>	<b>18</b>	<b>31</b>	<b>366</b>

In 2016 the highest capital expenditures were incurred for the following projects:

- construction of Lotnisko wind farm with capacity of 90 MW (final settlement of the contract) PLN 69 million.

Key conclusions in Renewable Energy segment in 2016 included:

- concession for electricity generation in Lotnisko wind farm (90 MW) obtained in January 2016;
- concession for electricity generation in Kisielice II wind farm (12 MW) obtained in February 2016.

#### 4.4.4. Responsible approach to natural environment

Given the nature of its activities, PGE Energia Odnawialna S.A. is subject to the provisions of the Environmental Protection Law, Water Law and other acts and secondary legislation issued on the basis of such acts. These legal acts impose commitments on the Company as regards its mining and investment activities, including:

- maintenance of river beds,
- participation in costs incurred by river administrators,
- participation in fish introduction costs as compensation for making it more difficult for fish to migrate as a result of barrages being placed in water,
- assurance of safe conditions: storage, transport and utilisation of waste in order to meet requirements for the protection of the natural environment and waters.

PGE EO's activities require water-law permits and environmental decisions for new investments.

As regards its activities, the company carries out water and waste water management and holds all legally required permits, including for the following activities:

- specific use of water,
- return collection of water for the purposes of producing electricity,
- discharging water as well as leakage water, rainwater and meltwater,
- discharging treated municipal and technological waste water.

For this purpose, the company operates equipment and installations that protect water from pollution. The company's branches conduct laboratory sampling of water and waste water and submit reports to their respective Voivodship Inspectorates for Environmental Protection.

Hydro plants, including pumped-storage plants, operate pursuant to relevant decisions, water-law permits issued for a specified time, therefore if such a need arises the company applies for extensions or new ones.

As of the date at which this report was prepared, no significant breaches were noted with regard to environmental protection in hydro power and there are no issues or requirements related to environmental protection that might have an impact on the company's use of property, plant and equipment.

The company continuously monitors and actively participates in programmes for developing water management, covering the maintenance of river beds and retention reservoirs. The company cooperates with the Environment Ministry, Regional Directorates for Water Management, National Fund for Environmental Protection and other entities involved in water management, environmental protection and clean energy. These programmes make it possible to more effectively use the energy potential of waterways and mitigate the negative impact of water management facilities such as hydro plants on the natural environment. In accordance with environmental protection requirements, fish passes are installed at newly-built and existing facilities so that fish can migrate. These works have so far included:

- handover of a fish pass at the Żagań II barrage,
- commencement of construction of a fish pass at the Krzywaniec barrage (completion planned for June 2017).

As regards the operation of wind farms, in order to meet requirements imposed in decisions on environmental conditions, the following post-implementation monitoring was conducted at existing wind farms in 2016:

- ornithological monitoring (monitoring of local bird populations) and chiropterological monitoring (monitoring of local bat populations) were conducted at the Pelplin, Żuromin, Resko I, Kisielice I, Karnice and Malbork wind farms and furthermore ornithological and chiropterological monitoring was launched at the Resko II, Lotnisko and Wojciechowo wind farms,
- a procurement procedure was launched for noise measurements at wind farms Pelplin, Lotnisko, Wojciechowo, Resko II, Malbork and Kisielice I (planned award of contract – Q1 2017).

## 4.5. Distribution segment

### 4.5.1. Volumes, customers and operational data

PGE Dystrybucja S.A. operates in the area of 122,433 sq. km and delivers electricity to over 5.3 million customers.

Diagram: Area of PGE distribution grid.



Table: Volume of distributed energy and number of customers in 2016, 2015 and 2014.

Tariff	Volume of distributed energy [TWh]*			Number of customers according to power take-off points		
	2016	2015	2014	2016	2015	2014
A tariff group	5.16	5.21	5.08	106	98	86
B tariff group	13.02	12.30	11.76	11,209	10,977	10,626
C+R tariff groups	6.82	6.63	6.56	484,532	490,847	496,054
G tariff group	9.32	9.24	9.14	4,811,211	4,761,809	4,718,887
<b>TOTAL</b>	<b>34.32</b>	<b>33.38</b>	<b>32.54</b>	<b>5,307,058</b>	<b>5,263,731</b>	<b>5,225,653</b>

\* with additional estimation of sales

Table: Key operational data in 2016, 2015 and 2014.

Operational data	Unit	2016	2015	2014
Number of stations:	pieces	92,837	92,258	91,374
number of transformer stations	pieces	92,474	91,874	91,019
MVA power	MVA	29,903	29,500	28,714
Length of power lines	km	285,701	283,804	281,290
HV lines	km	10,197	10,143	10,096
MV lines	km	110,798	109,938	109,054
LV lines	km	164,706	163,723	162,140
Grid loss ratio	%	5.8	5.9	6.3
SAIDI ratio	minutes	401	442	474
SAIFI ratio	per customer	4.49	4.72	3.98
Connection time	days	248	291	307

#### 4.5.2. Key financial figures

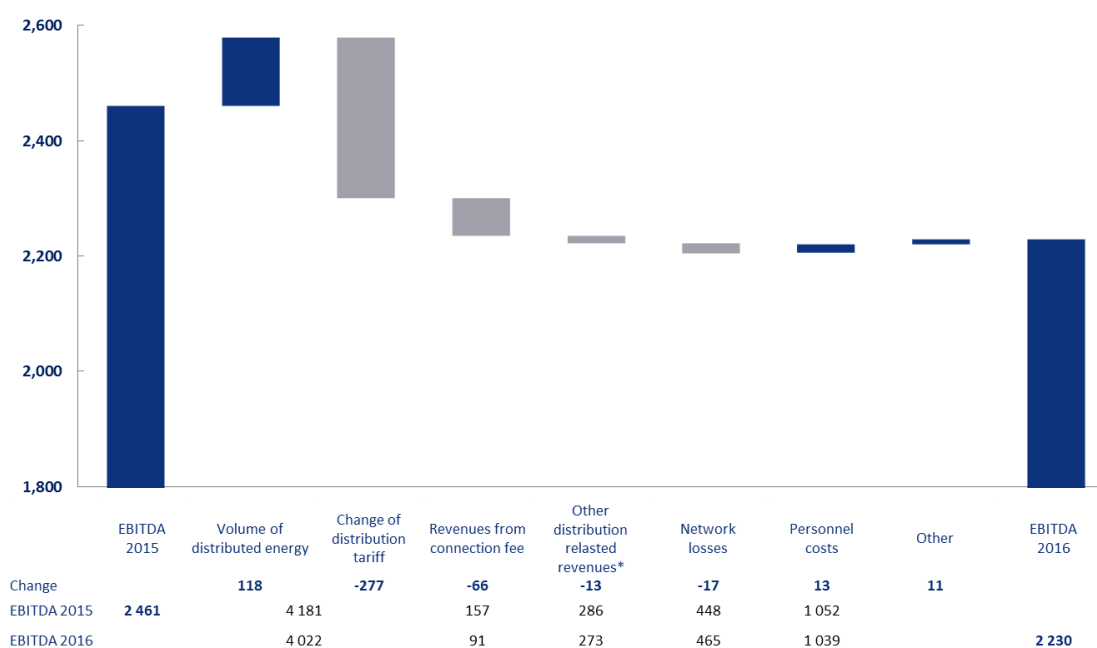
Table: Key figures for Distribution.

in PLN million	2016	2015	zmiana %	2014	zmiana %
Sales revenues	5,918	6,083	-3%	5,781	5%
EBIT	1,104	1,387	-20%	1,306	6%
EBITDA	2,230	2,461	-9%	2,329	6%
Capital expenditures	1,721	1,841	-7%	1,508	22%

PLN million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sales revenues	1,510	1,412	1,444	1,552	1,602
EBIT	273	284	289	258	318
EBITDA	555	562	568	545	596
Capital expenditures	287	426	422	586	703

#### 4.5.3. Key factors for the results of the segment

Chart: Key changes of EBITDA in Distribution [in PLN million].



\* Other revenues (reactive power, excess capacity, additional services), sale of transit services

Key factors affecting the results of Distribution in 2016 compared to the results of the previous year included:

- **Increased volume of distributed energy** by 944.3 GWh, resulting from – inter alia – higher number of customers measured by power take-off points (by approx. 43.3 thousand) in comparison to 2015 and growing dynamics of energy consumption particularly on medium and low voltage.
- **Decreased revenues from distribution services** results from lower distribution tariffs for 2016 in comparison to the approved tariffs for 2015 mainly due to lower return on capital resulting from WACC lower by approx. 1.5 p.p. (see p. 5.4.5.)
- **Lower revenues from connection fees** due to lower number of connections for large off-takers and producers. 7 wind farms, special economic zone and 2 substations for PKP were connected in 2015.

- **Decrease in other revenues** resulting mainly from revenues from lower reactive power, caused by decline of the average price of electricity on competitive market for 2014 announced by the ERO President, that was the base the calculation of fees for the reactive power in 2016.
- **Higher cost of electricity used to cover balancing difference** as a result of growth in balancing difference volume connected with the increased demand for energy and change of supplies structure.
- **Lower personnel costs** result mainly from change in actuarial reserves.
- **Positive change in other** results mainly from lower costs incurred for repairs and exploitation of the grid assets by PLN 11 million.

#### 4.5.4. Capital expenditures

Table: Capital expenditures incurred in Distribution segment in 2016, 2015 and 2014.

PLN million	Capital expenditures				
	2016	2015	% change	2014	% change
MV and LV power networks	546	553	-1%	414	34%
110/ MV and MV/MV	182	223	-18%	132	69%
110 kV power lines	60	52	15%	49	6%
Connection of new off-takers	572	585	-2%	499	17%
Purchase of transformers and energy counters	153	183	-16%	172	6%
IT, telemechanics and communication	140	157	-11%	135	16%
Other	68	88	-23%	107	-18%
<b>TOTAL</b>	<b>1,721</b>	<b>1,841</b>	<b>-7%</b>	<b>1,508</b>	<b>22%</b>

PLN million	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
MV and LV power networks	91	136	134	185	212
110/ MV and MV/MV	22	39	39	82	115
110 kV power lines	5	13	16	26	34
Connection of new off-takers	116	152	141	163	187
Purchase of transformers and energy counters	10	51	49	43	48
IT, telemechanics and communication	30	27	27	56	56
Other	13	8	16	31	51
<b>TOTAL</b>	<b>287</b>	<b>426</b>	<b>422</b>	<b>586</b>	<b>703</b>

In 2016 in Distribution segment the highest capital expenditures were incurred for implementation of tasks from group: „Connection of new off-takers” and „MV and LV power networks”.

#### 4.5.5. Responsible approach to natural environment

In 2016, as a result of its activities PGE Dystrybucja S.A. had impact on the natural environment through the following:

- emission of gases and particulate matter,
- collection of groundwater (wells) and discharge of wastewater to water or ground,
- production of waste,
- electromagnetic field and noise emissions.

The company's activities are conducted taking into consideration requirements stemming from environmental protection regulations. Organisational cells are designated within the company's structure, which are tasked with coordinating activities and meeting obligations with regard to environmental protection. In 2016, no breaches of permissible norms were recorded in terms of environmental protection such as would be the result of activities carried out by PGE Dystrybucja S.A. The company continued its tasks intended to obtain the required formal and legal regulations (administrative decisions) pertaining to the use of the environment.

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In its operations, PGE Dystrybcja S.A. implements and applies technical solutions and introduces formal and legal regulations the aim of which is maximum mitigation of negative impact on the environment and meeting requirements specified by law.

PGE Dystrybcja S.A. belongs to a group of facilities that have medium impact on the environment – its power grids and in particular high voltage grids are classified as installations that could potentially have significant impact on the environment.

Given the above, all investment activities are conducted in a way that ensures that their effects include a maximum possible level of mitigation of negative environmental impact by facilities owned by the company. The construction of new power facilities or modernisation of existing ones is preceded by obtaining a decision on environmental conditions for the undertaking, issued by an environmental protection authority.

In 2016, activities related to recording and registering quantities of emitted pollution, water collection, wastewater discharge and the quantity and type of waste produced were systematically conducted. These records are maintained in an IT system implemented in 2011 (Workplace Database of Environmental Pollution), which is used to manage environmental protection issues. As part of monitoring emissions, legally required measurements of electromagnetic fields and noise were also conducted.

In 2016, the company was implementing PGE Group's Environmental Protection Policy, which sets out general rules, authorisations and responsibilities as well as defines processes and activities of key importance to environmental protection.

PGE Dystrybcja S.A. makes use of the environment based on water-law permits it holds (collection of water and discharge of wastewater) and waste generation permits. The Company is not required to obtain permits for pollution emissions. In 2016, the company performed its obligations imposed by environmental protection regulations and administrative decisions on an on-going basis and also additionally implemented new requirements following changes in environmental protection regulations.

Permits to generate waste impose the obligation to properly handle waste, including rubbish sorting, proper storage of waste and observance of limits specified in decisions. The company's administrative decisions are updated on an on-going basis.

Water-law permits impose an obligation to maintain environment quality standards as regards water collection and discharge of pollution with wastewater and maintenance of all equipment for water collection and wastewater discharge in proper technical condition. The company holds water-law permits for facilities where groundwater is collected (wells) and treated municipal wastewater and rainwater are discharged into the environment.

The company is obligated to notify installations that emit electromagnetic fields. Such notifications are required in the case of power stations and overhead power lines with nominal voltage of at least 110kV as well as radio communication, radio navigation and radio location installations of which the equivalent isotope radiation output is at least 15W, which emit electromagnetic fields with frequencies between 30kHz and 30GHz. New or modernised installations operated by PGE Dystrybcja S.A. are notified on an on-going basis to environmental protection authorities competent for the place of such emissions.

Most of PGE Dystrybcja S.A.'s facilities are supplied water from water mains and waste is discharged to sewage systems pursuant to agreements with sewage system owners.

The collection of groundwater and discharge of wastewater are carried out based on water-law permits. The company also has water intakes that are operated without the need to obtain water-law permits. The company records the quantity of water collected and wastewater discharged.

In 2016, the company discharged wastewater into water and ground, maintaining quality standards specified in water-law permits.

Waste management is conducted in compliance with PGE Dystrybcja S.A.'s Waste Management Manual, which regulates procedures for handling waste from when it is created to when it is transferred to an authorised recipient, as well as rules for waste recording. PGE Dystrybcja S.A. creates waste based on permits obtained for its specific organisational units.

In 2016, the company also undertook a number of activities intended to maintain the natural character of the environment. The most important activities include:

- preparing environmental impact assessments when drafting technical designs for investment projects



- continuing activities intended to protect the natural environment from insulating oil pollution in the event of an emergency leak from transformers used on 110 kV substations, by constructing sealed containers (basins) under power transformers
- continuing activities within a programme to protect white stork nests, consisting of installing special structures on low-voltage lines facilitating the set up and protection of stork nests
- introduction of modern small-format power equipment and grid elements as well as replacement of bare aluminium wires on overhead lines with insulated wires in order to reduce used space on infrastructure and reduce electrocution risk, which is of particular importance in areas with protected landscape elements
- continuing to exchange transformers in order to limit power grid losses.

## 4.6. Supply segment

### 4.6.1. Volumes, customers, fees and operational data

Within the Supply segment, operations are conducted by PGE Obrót S.A., PGE S.A., PGE Dom Maklerski S.A., PGE Trading GmbH and Enesta sp. z o.o. The segment's operations involve trading in electricity in all the country, wholesale electricity trading on domestic and international market, providing services to the PGE Group companies with regard to management of generation capacities and electricity produced, as well as trading of CO<sub>2</sub> emission rights, certificates and gas.

Revenues are mainly generated from electricity sales to final customers and sales of distribution services under master agreements. The main costs of operation in the segment are costs of electricity purchase and expenses incurred in compliance with the obligation to buy units of ownership which are subject to remittance under the system of support for Renewable Energy Sources, co-generation and energy efficiency. As an alternative, in the case of limited supply or lack property rights a substitute fee may be contributed.

The volume of electricity sales to final customers amounted to 42.91 TWh, what means a 10% growth in comparison to the previous year.

Expenses borne by power undertakings involved in the sale of electricity and relating to the system of support for renewable and co-generation energy sources and resulting from introduction of certificates of energy efficiency is a substantial item in the retail price of electricity paid by the final customer.

Table: Substitution fees.

Substitution fee	Unit	2016	2015	2014
Renewable energy sources	PLN/MWh	300.03	300.03	300.03
Energy certificate - cogenerated energy (colliery methane)	PLN/MWh	63.00	63.26	63.26
Certificates of origin – energy generated in highly-efficient cogeneration	PLN/MWh	11.00	11.00	11.00
Certificates of origin – energy generated in highly-efficient cogeneration fuelled by gas or with a total installed capacity of the unit below 1 MWe	PLN/MWh	125.00	110.00	121.63
Certificates of energy efficiency	PLN/toe	1,000.00	1,000.00	1,000.00

Table: Obligation to redeem certificates.

Obligation to redeem the property rights	Unit	2016	2015	2014
Renewable energy sources*	%	15.0	14.0	13.0
Energy certificate - cogenerated energy (colliery methane)	%	1.5	1.3	1.1
Certificates of origin – energy generated in highly-efficient cogeneration	%	23.2	23.2	23.2
Certificates of origin – energy generated in highly-efficient cogeneration fuelled by gas or with a total installed capacity of the unit below 1 MWe	%	6.0	4.9	3.9
Certificates of energy efficiency	%	1.5	1.5	1.5

\* Including obligation arising from the purchase of certificates of origin for electricity generated from agricultural biogas ("blue" certificates) from July 1, 2016 (0.65%).

#### 4.6.2. Key financial figures

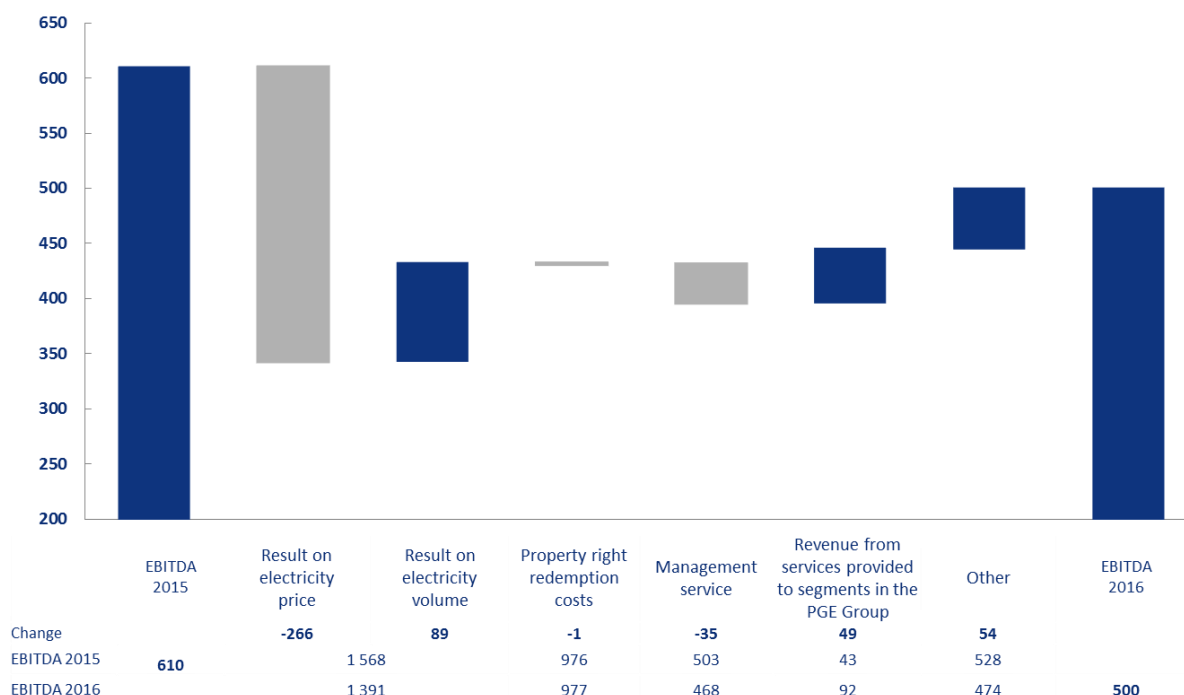
Table: Key figures for Supply.

in PLN million	2016	2015	% change	2014	% change
Sales revenues	16,014	15,783	1%	14,431	9%
EBIT	473	585	-19%	228	157%
EBITDA	500	610	-18%	246	148%
Capital expenditures	23	31	-26%	17	82%

PLN million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sales revenues	4,142	3,905	3,785	4,182	4,713
EBIT	132	63	105	173	180
EBITDA	139	69	112	180	187
Capital expenditures	4	3	7	9	9

#### 4.6.3. Key factors for the results of the segment

Chart: Key changes of EBITDA in Supply [in PLN million].



Key factors affecting the results of Supply in 2016 compared to the results of the previous year included:

- **Decrease of results from electricity** by PLN 177 million resulting from lower margin per unit on energy sale due to less favourable spread between the average price of sale (decrease by PLN 9/MWh) and average price of purchase of electricity (decrease by PLN 2/MWh). Increase in volume of electricity traded by 10% partly compensated negative impact of lower price on the segment's results.
- **Increased costs of certificates redemption** mainly resulting from higher demand for co-generation certificates and introduction of duty to redeem the certificates granted for electricity produced in biogas plants, what is a consequence of amended RES Law. That growth was partly compensated by lower prices of green certificates.
- **Decrease of revenues from the Agreement for Commercial Management of Generation Capacities ("ZHZZ")** due to lower trading volume by 3 TWh and lower sale prices of electricity under management.

Revenues of PGE S.A. from PGE GiEK S.A. decreased by PLN 40 million, while revenues from PGE EO increased by PLN 5 million.

- **Increased revenues from services provided to the other segments of the PGE Capital Group** by PLN 49 million resulting from the change in method of settlements between companies.
- **Change in other** results mainly from: (i) lower expenses for marketing and sponsorship by PLN 23 million and (ii) higher result on other operations by PLN 18 million.

#### 4.6.4. Responsible approach to natural environment

Water and wastewater management and waste management at PGE Obrót S.A. encompass the discharge of wastewater and transfer of waste created in the course of operations – purely office work. As an eco-friendly company, PGE Obrót S.A. sorts rubbish.

PGE Obrót's responsible approach to the environment is also manifested by its offering addressed to clients for whom the origin of electricity produced is of significance. In 2016, PGE Obrót introduced a form of eco-friendly offering. The sale of energy derived from renewable sources is confirmed by an Origin Guarantee – an official document from the register of Towarowa Giełda Energii S.A., confirming to the end user that the specified quantity of electricity was produced from renewable sources. For the major part of 2016 customers of PGE Obrót has the possibility to benefit from offer, prepared in cooperation with Bank Ochrony Środowiska S.A. with prosumers in mind. Its goal was to help in financing installation of photovoltaic panels.

## 4.7. Other operations

Table: Key figures for Other operations.

in PLN million	2016	2015	% change	2014	% change
Sales revenues	688	682	1%	1,854	-63%
EBIT	-64	-51	25%	31	-
EBITDA	67	66	2%	161	-59%
Capital expenditures	170	216	-21%	158	37%

PLN million	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sales revenues	163	170	178	177	170
EBIT	-17	-12	-10	-25	-27
EBITDA	15	18	23	11	8
Capital expenditures	24	44	34	68	75

EBITDA of Other Operations segment was similar to the result achieved in the previous year.

#### Capital expenditures

Capital expenditures in Other Operations in 2016 amounted to PLN 170 million compared to PLN 216 million in 2015.

Within the above amount, the highest capital expenditures in the first half of 2016 were incurred by the following companies:

- PGE Systemy S.A. – for IT infrastructure and software development PLN 88 million;
- Exatel S.A. – for telecommunication infrastructure development PLN 44 million;
- PGE EJ 1 sp. z o.o. ("PGE EJ") – for nuclear project development PLN 34 million.

#### 4.8. Entity authorised to audit of financial statements

An entity authorised to audit stand-alone financial statements of PGE S.A. and consolidated financial statements of PGE Capital Group for 2016 is KPMG Audyty Spółka z ograniczoną odpowiedzialnością Sp. k..

An entity authorised to of financial statements, which was responsible for audit of stand-alone financial statements of PGE S.A. and review of consolidated financial statements of the PGE Capital Group for the first half-year 2016 and for audit of annual stand-alone financial statements of PGE S.A. and consolidated financial statements of the PGE Capital Group for 2015 was KPMG Audyty Spółka z ograniczoną odpowiedzialnością Sp. k.

Table: Fee payable to an entity authorised to audit of financial statements with regard to PGE S.A. (PLN thousand).

Auditor's fee	2016	2015	2014
Audit and reviews of the financial statements	493	398	555
Other	32	118	709

In 2016 KPMG Audyty Spółka z ograniczoną odpowiedzialnością Sp. k. audited also financial statements of the following companies from the PGE Capital Group i.e.: PGE GiEK S.A., PGE EJ 1 sp. z o.o., PEC Zgierz sp. z o.o., PGE EO S.A, EW Baltica 1 sp. z o.o., EW Baltica 2 sp. z o.o., EW Baltica 3 sp. z o.o., Bio-Energia sp. z o.o., PGE Dom Maklerski S.A., PGE Energia Natury sp. z o.o., PGE Energia Natury PEW sp. z o.o., PGE Obsługa Księgowo-Kadrowa sp. z o.o. and ELBEST Security sp. z o.o.

In 2015 KPMG Audyty Spółka z ograniczoną odpowiedzialnością Sp. k. audited also financial statements of the following companies from the PGE Capital Group i.e.: PGE GiEK S.A., PGE EJ 1 sp. z o.o., PEC Zgierz sp. z o.o., PGE EO S.A, EW Baltica 1 sp. z o.o., EW Baltica 2 sp. z o.o., EW Baltica 3 sp. z o.o., Bio-Energia S.A., PGE Dom Maklerski S.A., PGE Energia Natury sp. z o.o., PGE Energia Natury Omikron sp. z o.o, PGE Energia Natury PEW sp. z o.o., PGE Obsługa Księgowo-Kadrowa sp. z o.o. and ELBEST Security sp. z o.o.

Table: Fee payable to an entity authorised to audit of financial statements with regard to the entities of the Capital Group (PLN thousand).

Auditor's fee	2016	2015	2014
Audit and reviews of the financial statements	847	846	771
Other	109	114	117

## 4.9. Significant events of the reporting period and subsequent events

### 4.9.1. Investment Agreement on the financial investment in Polska Grupa Górnicza sp. z o.o.

Investment Agreement on the financial investment in Polska Grupa Górnicza sp. z o.o. is described in note 33.2 to the consolidated financial statements.

### 4.9.2. Capital investment in Polimex-Mostostal S.A.

Capital investment in Polimex-Mostostal S.A. is described in note 33.5 to the consolidated financial statements.

### 4.9.3. Submission of initial offer with partners for acquisition of EDF assets in Poland

Submission of initial offer with partners for acquisition of EDF assets in Poland is described in note 33.3 to the consolidated financial statements.

### 4.9.4. Comprehensive agreement with PGNiG S.A. for natural gas supply

On September 1, 2016, PGE GiEK S.A. and Polskie Górnictwo Naftowe i Gazownictwo S.A. signed individual contracts for the sale of gas fuel, which will supply the heat-and-power plants in Rzeszów and Lublin.

The estimated value of the contracts may reach PLN 2 billion, and the supply volume may reach a total of approx. 2.2 billion m<sup>3</sup>. The contracts are in effect until October 1, 2019 and contain an extension option to January 1, 2023. The individual contracts were signed under a framework agreement of October 8, 2015, which provides for additional contracts to be executed for additional volumes.

### 4.9.5. Increase of the share capital from the Company's own funds

On September 5, 2016, the Extraordinary General Meeting of PGE („EGM”) adopted resolution on the increase of the share capital by PLN 467,440,207.25 from the Company's reserve capital by increasing the nominal value of shares from PLN 10.00 PLN to PLN 10.25 PLN.

The increase of the nominal value of shares causes the tax revenue for the shareholders. On September 5, 2016 EGM also adopted a resolution on the allocation of part of the supplementary capital for the financing of the flat-rate income tax related to the increase in the share capital to be financed from the Company's own funds, thus the tax burden was borne by the Company. PGE S.A. received tax interpretations regarding questions on appropriate application of tax regulations on income tax from legal persons and income tax from natural persons. The analysis of received tax interpretations led to the conclusion that the tax due which Company was supposed to pay to the Tax Office due to the increase of share capital amounts to PLN 110 million. As at the December 31, 2016 that amount decreased the equity of the Company and is recognised in non-financial liabilities. The tax was paid on January 9, 2017.

After the reporting date until the preparation date of this report, there have been no changes in the amount of the share capital of the Company.

### 4.9.6. Overburden slide at an internal heap in the Turów lignite mine

Overburden slide at an internal heap in the Turów lignite mine is described in note 33.4 to the consolidated financial statements.

### 4.9.7. Termination of long-term contracts for purchase of certificates by Enea S.A.

Termination of long-term contracts for purchase of certificates by Enea S.A. is described in note 28.4 to the consolidated financial statements.

### 4.9.8. Description of material agreements

In 2016 there were no agreements meeting the criteria of material agreement.

### 4.9.9. Impairment of the power generating assets of Renewables segment and Conventional Generation segment

Analysis of impairment of the power generating assets of Conventional Generation segment and Renewables segment is described in notes 3.1 and 3.2 to the consolidated financial statements.

### 4.9.10. Changes in the Management Board

Changes in the Management Board and Supervisory Board are described in p. 8.3 of this report.

### 4.9.11. Decisions of the President of the Energy Regulatory Office related to realisation of LTC Act

Decisions of the President of the Energy Regulatory Office related to realisation of LTC Act are described in note 33.1

to the consolidated financial statements.

#### 4.9.12. Legal aspects

##### Claims for annulment of the resolutions of the General Meetings of PGE S.A.

- On April 1, 2014 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolutions 1, 2 and 4 of the Extraordinary General Meeting of the Company held on February 6, 2014. The Company filed response to the claim. On June 22, 2015 the District Court in Warsaw dismissed in full the shareholder's claim. The shareholder appealed against that verdict and the Company filed reply to that appeal.
- On August 21, 2015 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 5 of the Ordinary General Meeting of the Company held on June 24, 2015. On September 21, 2015 the Company filed response to the claim. The District Court in Warsaw dismissed the shareholder's claim in the verdict published on April 26, 2016.
- On September 17, 2014 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 4 of the Ordinary General Meeting of the Company held on June 6, 2014. The Company filed response to the claim. On August 13, 2015 the District Court in Warsaw dismissed in full the shareholder's claim. The shareholder appealed against that verdict and the Company filed reply to that appeal. On March 2, 2017 the Court of Appeal in Warsaw dismissed the appeal.
- On October 23, 2015 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 1 of the Extraordinary General Meeting of the Company held on September 14, 2015. The Company filed response to the claim.
- On May 20, 2016 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 1 of the Extraordinary General Meeting of the Company held on March 1, 2016. The Company filed response to the claim.
- On September 12, 2016 PGE S.A. received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 1 of the Ordinary General Meeting of the Company held on June 28, 2016. The Company filed response to the claim.
- On December 30, 2016 received a copy of lawsuit filed to the District Court in Warsaw by one of the shareholders. In the lawsuit, the shareholder is seeking for annulment of the resolution 1 of the Extraordinary General Meeting of the Company held on September 5, 2016. The Company filed response to the claim.

##### The issue of compensation regarding the conversion of shares

Former shareholders of PGE Górnictwo i Energetyka S.A. filed petitions calling PGE S.A. for a pre-trial settlement with respect of the payment of damages for incorrectly set – as they claim – share exchange ratio of PGE Górnictwo i Energetyka S.A. shares for the shares of PGE S.A. in the consolidation process which took place in 2010. The total value of claims resulting from petitions for pre-trial settlements by former shareholders of PGE Górnictwo i Energetyka S.A. is over PLN 10 million.

Notwithstanding the foregoing, on November 12, 2014 Socrates Investment S.A. (the purchaser of the liabilities from former shareholders of PGE Górnictwo i Energetyka S.A.) filed a lawsuit for compensation in total amount exceeding PLN 493 million (plus interests) for the damage resulting from incorrectly (in opinion of the Socrates Investment S.A.) set share exchange ratio in the consolidation process of PGE Górnictwo i Energetyka S.A. with PGE S.A.

The Company filed response to the claim and currently the legal proceeding in the first instance is pending.

In addition, company Pozwy sp. z o.o. submitted a similar claim amounting to more than PLN 229 million in its letter dated October 31, 2016 which constituted a notification about the purchase of claims and demand for payment addressed to PGE Górnictwo i Energetyka Konwencyjna S.A., PGE S.A. and PwC Polska sp. z o.o. Pozwy sp. z o.o., indicated in its letter that the company bought claims of former shareholders of PGE Elektrownia Opole S.A. The claim concerns compensation for alleged incorrect determination of the share exchange ratio of PGE Elektrownia Opole S.A. for the shares of PGE Górnictwo i Energetyka Konwencyjna S.A. in the merger process of those companies. In January 2017 the Company received two

additional notifications about the purchase of claims and demands for payment of compensation due to above mentioned in total amount of PLN 27 million.

The companies from the Group do not accept the claims of Socrates Investment S.A., Pozwy sp. z o.o. and of the other shareholders filing for a pre-trial settlement. The claims are unfounded. In the opinion of PGE S.A. the whole consolidation process was executed in fair and proper manner. The value of the shares of companies subject to the mergers was assessed by the independent company - PwC Polska sp. z o.o. Additionally, plans of the above mentioned companies' merger, including the exchange ratios with respect to shares were examined for accuracy and reliability by an expert appointed by the registration court; no irregularities were found. Then, the court registered the mergers of the companies.

For the reported claims, the Group has not created a provision.

#### **4.9.13. Information concerning the dispute between Exatel S.A. and Taifun Real sp. z o.o.**

Since 2005 Exatel S.A. (Exatel) and Taifun Real sp. z o.o. (Taifun Real) have been in a dispute regarding lease agreement for the previous office of Exatel.

On June 23, 2016, the Court of Arbitration at the Polish Chamber of Commerce in Warsaw issued a verdict in a case claimed by Taifun Real sp. z o.o. against Exatel S.A. and ordered Exatel S.A. to pay PLN 51 million together with statutory interest from the date of July 2, 2013 to Taifun Real sp. z o.o. (total amount payable – PLN 67 million). On July 29, 2016, after the Court of Appeal ascertained enforceability of the arbitration award, the amount awarded by the Court of Arbitration was paid to Taifun Real, together with accrued interest and costs of the proceeding.

#### **4.9.14. Information concerning proceedings in front of court, body appropriate for arbitration proceedings or in front of public administration authorities**

As at December 31, 2016 PGE S.A. and its subsidiaries were not a party of any proceedings concerning payables or debts whose total value would constitute at least 10% of the Company's equity.

Significant proceedings pending in front of courts, competent arbitration authority or public administration authority are described in p. 4.9.12 regarding legal aspects in this report and in note 28.4 to the consolidated financial statements.

#### **4.9.15. Information concerning the guarantees for loans granted by the Company or a subsidiary**

Within the Group, as at December 31, 2016 PGE S.A. and subsidiaries did not grant guarantees to other entities or to a subsidiary, where a value of guarantees constitute at least 10% of the Company's equity.

#### **4.9.16. Change of accounting rules**

Change of accounting rules is described in note 5 to the consolidated financial statements.

#### **4.9.17. Information on issue, redemption and repayment of debt securities and other securities**

Information on issue, redemption and repayment of debt securities and other securities is described in p. 1.4.1 of the foregoing report and in note 1.3 to the consolidated financial statements.

#### **4.9.18. Activities related to nuclear energy**

##### **Business partnership**

As a result of the sale of shares on April 15, 2015 to the Business Partners (TAURON Polska Energia S.A., ENEA S.A. and KGHM Polska Miedź S.A.) by PGE S.A., PGE S.A. holds 70% in the share capital of PGE EJ 1 sp. z o.o., and each of the Business Partners holds 10% in the share capital of PGE EJ 1 sp. z o.o.

According to the Partners' Agreement, concluded on September 3, 2014, the Parties jointly undertook to finance operations under the initial phase of the Program (the "Development Stage"), proportionally to their shareholdings. The funds for the Program are paid to PGE EJ 1 sp. z o.o. in form of the increase of the share capital. Next increase of the share capital was carried out in the fourth quarter of 2016. PGE's financial commitment in the Development Stage will not exceed amount of approx. PLN 700 million.

##### **Financing**

In 2016, the works were continued on financing structure of the Program based on updated assumptions regarding capital expenditures and operating costs for the nuclear power plant and revised financing model for the investment.



## Support schemes

In 2016, dialogue with the Polish government continued in the area of laying down the conditions for the Polish nuclear power project, taking into consideration the potential support mechanisms dedicated to nuclear power, including the contract for difference, among others.

## Integrated proceeding

The preparation of the invitation to the integrated proceeding, i.e. selection, within a single procedure, all of the key contractors, was completed In 2016.

Further proceeding with regard to delivery of technology is dependent on the final arrangements with the Ministry of Energy related to formula of technology selection, working out economic, organisational and legal solutions, including the risk distribution and estimated costs of implementation of those solutions.

## Selection of nuclear plant location, including site and environmental decisions

In 2016 the activities with regard to obtaining site and environmental decision were continued, inter alia:

- decision was taken on selection of two locations, i.e. Lubiatowo-Kopalino and Żarnowiec, for the needs of environmental and site surveys for the purposes of preparing an environmental impact assessment and site report;
- the General Director for Environment Protection issued a decision regarding the scope of the environmental impact assessment, taking into consideration the two potential sites;
- PGE EJ 1 signed an agreement with Elbis sp. z o.o. regarding site characterisation and environmental surveys at two locations – the aim of these surveys is to obtain results necessary to prepare a site characterisation report and an environmental impact assessment for a nuclear power plant with capacity of up to 3,750 MWe;

In August 2016, dialogue was commenced with the National Atomic Energy Agency (PAA) regarding detailed survey areas for the purposes of an environmental impact assessment report and site report, as well as interpretation of the provisions of the Scoping Decision and Site Ordinance.

The planned date for commencing site characterisation and environmental surveys is March 2017. The expected date for finishing the contracted surveys is the first half of 2020.

## Planning and preparing related infrastructure

In 2016:

- studies were being carried out regarding preparations for potential access routes to construction sites at the locations being considered;
- PGE EJ 1 sp. z o.o. participated in public consultations for the “Pomeranian voivodship development plan” and the “Gdańsk-Gdynia-Sopot metropolitan area plan”;
- works related to planning and preparation of auxiliary infrastructure were continued;
- meetings were held with representatives of the Energy Ministry and Development Ministry in order to determine further activities aimed at drafting a Territorial Contract.

## Decision in principle from the Minister of Energy (including general opinion from the President of the National Atomic Energy Agency)

In 2016 arrangements were made with the President of the National Atomic Energy Agency (PAA) regarding the processing of applications and schedule for issuing decisions by the PAA's President for nuclear technologies that are to be qualified for participating in the integrated procedure as well as the scope of application for issue of a general opinion and the type of documents required and the scope of information in the application expected by the PAA President.

## Social acceptance

The main objective of activities in this area is garnering and maintaining a high level of social support at the potential nuclear plant locations (eventually, at the selected location), allowing to implement the programme to build Poland's first nuclear plant and provide knowledge about nuclear power and the programme to specific stakeholder groups at national and local level. In 2016 applications under the Programme to Support the Development of Site Municipalities („PWRGL”) were being accepted and adequate agreements were signed. Program's aim is to strengthen partnership-based relations between PGE EJ 1 sp. z o.o. and the local communities and authorities of the three municipalities by providing support to initiatives that are of significance to the residents and development of the region. Contracts with qualified applicants under the PWRGL

programme were signed in the second and third quarter of 2016.

### **Compensations from WorleyParsons**

In 2013, PGE EJ 1 sp. z o.o. signed an agreement for environmental studies, site characterisation and services related to obtaining permits and permissions necessary in the investment process associated with the construction of a nuclear power plant with a consortium of WorleyParsons Nuclear Services JSC, WorleyParsons International Inc. and WorleyParsons Group Inc. ("WorleyParsons", the "Contractor"), in the amount of PLN 253 million net (including basic range of PLN 167 million). Due to delays in the implementation of the agreement, in 2013 the company accrued to WorleyParsons a contractual penalty in the amount of PLN 7 million. In addition, in connection with a further improper execution of services in 2014, the company accrued contractual penalties in the total amount of PLN 43 million. On December 23, 2014, PGE EJ 1 terminated the contract for reasons attributable to the Contractor.

Contractual penalties of 2013 were deducted from the remuneration payable to WorleyParsons in 2014. Penalties for 2014 in the total amount of PLN 30 million were deducted from the remuneration payable to WorleyParsons and the bank guarantee. After all deductions and amounts received by the company from the bank guarantee, the company is entitled to claim towards WorleyParsons for payment of PLN 14 million as a penalty by way of delay.

On August 7, 2015 PGE EJ 1 filed with the District Court in Warsaw a claim against WorleyParsons for the payment of nearly PLN 15 million plus statutory interest for late payment of the amount due.

WorleyParsons questioned the claims of PGE EJ 1 and in November 2015 filed its own claim for payment of PLN 59 million for due - in the plaintiff's opinion - remuneration and return of the amount unduly - according to the plaintiff - collected by the company from the bank guarantee. In view of those activities, PGE EJ 1 and WorleyParsons have been in dispute with regard to the legitimacy of contractual penalties.

In 2016 the case was referred to mediation. Until the preparation date of this report the settlement has not been reached and the next date of the mediation meeting is not fixed.

Furthermore, on May 20, 2016, PGE EJ 1 filed a motion with the Regional Court for the Capital City of Warsaw in Warsaw to commit WorleyParsons to attempt reaching a settlement concerning the company's claims for compensation, i.e. payment to the company of approx. PLN 40 million together with statutory interest for delays from the due date for payment of the above amount until the payment date for compensation for undue performance by of obligations. Until the preparation date of this report, a conciliation meeting has not taken place yet.

#### **4.10. Transactions with related entities**

Information about transactions with related entities is presented in note 32 to the consolidated financial statements.

#### **4.11. Publication of financial forecasts**

PGE S.A. did not publish financial forecasts.

On February 10, 2017 PGE S.A. published current report no. 7/2017, disclosing the estimated consolidated financial and operating results for 2016.

## 4.12. Management of financial resources and financial liquidity

### 4.12.1. Net debt of the Group and main financial ratios

Table: Group's net debt as at December 31, 2016, December 31, 2015 and December 31, 2014.

in PLN million	As at December 31, 2016	As at December 31, 2015	As at December 31, 2014
Cash on hand and cash at bank	808	1,304	1,615
Overnight deposits	42	57	164
Short-term deposits	1,819	1,743	4,417
<b>Cash and cash equivalents</b>	<b>2,669</b>	<b>3,104</b>	<b>6,196</b>
Adjustment for restricted cash*	-107	-333	-136
Investments held until maturity date (short-term deposits)	2,300	1	3
<b>Cash at PGE Group's disposal</b>	<b>4,862</b>	<b>2,772</b>	<b>6,063</b>
Current loans and borrowings	332	214	304
Bonds issued - current	78	76	52
Current lease	1	1	1
Non-current loans and borrowings	5,839	1,459	1,008
Bonds issued – non-current	3,764	3,658	3,679
Non-current lease	0	1	1
<b>Gross financial debt (short and long-term)</b>	<b>10,014</b>	<b>5,409</b>	<b>5,045</b>
<b>Net financial debt</b>	<b>5,152</b>	<b>2,637</b>	<b>-1,018</b>

\* Restricted cash includes collaterals for settlements with Izba Rozliczeniowa Giełd Towarowych S.A. (Warsaw Commodity Clearing House), security deposits and performance bonds.

Table: Key financial ratios.

Ratios	Year ended December 31, 2016	Year ended December 31, 2015	Year ended December 31, 2014
<b>Return on sales ROS [in %]</b>			
Net result x 100% / Net revenues	9.13%	-10.64%	12.99%
<b>Return on sales ROS [in %]- adjusted*</b>			
Net result x 100% / Net revenues	11.96%	15.02%	13.44%
<b>Return on equity ROE [in %]</b>			
Net financial result x 100% / (equity – net financial result)	6.38%	-6.99%	8.87%
<b>Return on equity ROE [in %] – adjusted*</b>			
Net financial result x 100% / (equity - net financial result)	8.53%	11.87%	9.18%
<b>Debtor's days</b>			
Average trade receivables (gross) x 365 days / net revenues	37	34	33
<b>Debt ratio [in %]</b>			
Liabilities x 100% / total equity and liabilities	36.61%	34.06%	32.20%
<b>Current ratio</b>			
Current assets / short-term liabilities	1.7	1.5	1.9

\* financial results were adjusted by the value of impairment losses

Financial results achieved by PGE S.A. as well as PGE Group companies and unused credit limits ensure funds sufficient for financing of current operating activities of the PGE Group companies.

In order to optimise the cash flows of the Group companies, improve the liquidity management efficiency and secure short-term financing of the entities from the Group, PGE Capital Group introduced one-way real cash-pooling. The cash pooling agreements were signed on December 22, 2014.

#### **4.12.2. Bonds issued**

As the parent company of the PGE Capital Group, PGE S.A. provides individual companies of the Group with funds for investments and current activities. The funds are transferred by purchase of both zero-coupon and coupon bonds. To this end, the companies of the Capital Group have concluded agency agreements with banks with regard to bond issue services.

As at December 31, 2016 PGE GiEK S.A. had bonds issued for a total nominal value of PLN 7,430 million that were purchased by PGE S.A. under two bond programs concluded with ING Bank Śląski S.A. and with Powszechna Kasa Oszczędności Bank Polski S.A.

As at December 31, 2016 PGE EO S.A. had bonds issued and purchased by PGE S.A. amounting to PLN 1,085 million.

As at December 31, 2016 other companies from the Group had bonds issued and purchased by PGE S.A. amounting to PLN 381.5 million, including:

- PGE Energia Naturity PEW sp. z o.o. with nominal value of PLN 351,5 million,
- PGE Energia Naturity sp. z o.o. with nominal value of PLN 30 million.

PGE EO S.A. was issuing bonds under the Bond Issue program signed with ING Bank Śląski S.A. on June 22, 2011 allowing for issue of bonds of up to PLN 1,200 million. The maturity date falls on December 31, 2016. Companies from former PGE Energia Naturity group issued bonds under the Bond Issue program signed with ING Bank Śląski S.A. on September 20, 2013 allowing for issue of bonds of up to PLN 400 million. The agreement was signed for an indefinite period. On January 24, 2014 annex was signed, that increased the value of the program to PLN 700 million. On January 27, 2014 PGE Energia Naturity PEW Sp. z o.o. and PGE Energia Naturity sp. z o.o. entered into the agreement.

In 2015 - within of the merger process of PGE Energia Naturity S.A. and PGE EO S.A., as a result of which PGE EO S.A. entered into the rights and assumed the obligations of PGE Energia Naturity S.A. (general succession) – those companies signed appropriate agreements with ING Bank Śląski S.A. allowing to terminate Agency Agreement initially executed between PGE EO S.A. and the bank. Servicing the bonds issued by the Issuer – PGE EO S.A., but not yet bought back, will be continued under the Agency Agreement initially executed between PGE Energia Naturity S.A. and the bank. In addition, new entities from the PGE EO S.A. group, i.e. Elektrownia Wiatrowa Baltica-2 sp. z o.o. oraz Elektrownia Wiatrowa Baltica-3 sp. z o.o., were included in the bond issue program

#### **PGE S.A. Bond Issue programme of up to PLN 5,000 million, for PGE Group companies**

During 2016, PGE S.A. had a binding Agency Agreement with ING Bank Śląski S.A. regarding the establishment of the bond issue made to companies of the PGE Group PGE S.A. concluded on May 11, 2009. The maximum amount of the programme for the Group is PLN 5 billion. Under the Program for the Group, PGE S.A. may issue coupon or zero coupon bonds.

As at December 31, 2016 the Company did not have any bonds issued under the programme.

#### **PGE S.A. market bond issue program of up to PLN 5,000 million**

On August 29, 2011 PGE S.A. concluded an agreement for indefinite period with Bank Polska Kasa Opieki S.A. and ING Bank Śląski S.A. The bond issue program was established on the ground of the above agreement ("Program I").

The maximum indebtedness amount from the bonds issued (representing a maximum aggregate nominal value of bonds issued and outstanding) under the program cannot exceed PLN 5,000 million.

On June 27, 2013 PGE S.A. issued non-public coupon bonds with maturity of 5 years and based on floating interest rate. Maturity date falls on June 27, 2018. On June 29, 2013 bonds in amount of PLN 1,000 million were introduced to trading in alternative trading systems managed by BondSpot S.A. and GPW S.A. (Warsaw Stock Exchange).

As at December 31, 2016 the indebtedness of the Company resulting from the bonds issued under the Program I amounted to PLN 1,000 million.

### PGE Sweden AB market bond issue program of up to EUR 2,000 million

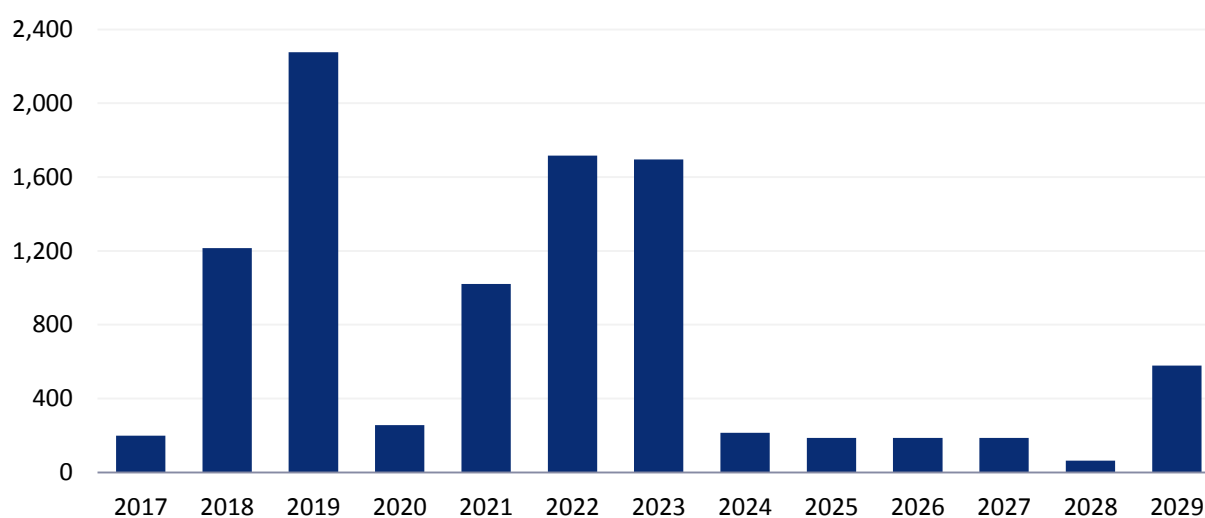
On May 22, 2014 PGE Sweden AB established bond issue program ("Program II"). The agreement was signed for indefinite period with BNP Paribas, CITIGROUP Global Markets Ltd., ING Bank N.V., London Branch, Nordea Bank Danmark A/S, Powszechna Kasa Oszczędności Bank Polski S.A. and Societe Generale.

The maximum indebtedness amount from the bonds issued (representing a maximum aggregate nominal value of bonds issued and outstanding) under the Program II cannot exceed EUR 2,000 million.

A public issue of 5-year coupon bearer bonds with fixed rate took place on June 9, 2014. Maturity date of bonds with a nominal value of EUR 500 million is June 9, 2019. A private placement of 15-year bonds with a nominal value of EUR 138 million took place on August 1, 2014. Maturity date of those bonds is August 1, 2029.

As at December 31, 2016 the indebtedness of the company resulting from the bonds issued under the Program II amounted to EUR 638 million. PGE Sweden AB granted loans to PGE S.A. from the proceeds received under the financing.

Diagram: Debt maturity as at December 31, 2016 [in PLN million].



#### 4.12.3. Loans and advances

Table: Information about loans and advances agreements signed in 2016.

Company (Lender)	Party of an agreement	Type of financing	Signing date (yyyy-mm-dd)	Maturity date (yyyy-mm-dd)	Amount (million)	Currency	Fixed/ floating rate
PGE Sweden AB	PGE S.A.	Loan	2016-06-23	2017-06-05	4.0	EUR	Fixed
PGE S.A.	PGE Trading GmbH	Loan	2016-02-10	2019-02-11	2.9	EUR	Fixed
PGE S.A.	Bestgum Polska sp. z o.o.	Loan	2016-01-13	2021-01-11	2.9	PLN	Fixed
PGE S.A.	Bestgum Polska sp. z o.o.	Loan	2016-09-09	2021-09-09	2.0	PLN	Fixed

Table: Information about the bank loans and advances agreements amended in 2016.

Company (Borrower)	Party of an agreement	Type of financing	Signing date (yyyy-mm-dd)	Maturity date (yyyy-mm-dd)	Annex signing date (yyyy-mm-dd)	Amount (million)	Currency	Fixed/ floating rate
PGE Trading GmbH	PGE S.A.	Loan	2015-10-30	2016-07-29	2016-01-18	0.2	EUR	Fixed
PGE GiEK S.A.	NFOŚiGW	Loan	2014-06-26	2028-12-20	2016-11-15	214.0	PLN	Fixed
PGE GiEK S.A.	WFOŚiGW	Loan	2013-12-13	2019-12-16	2016-03-31 2016-05-13 2016-05-19	104.3	PLN	Fixed
PGE GiEK S.A.	NFOŚiGW	Loan	2013-12-13	2024-09-30	2016-12-20	50.0	PLN	Floating
PGE GiEK S.A.	NFOŚiGW	Loan	2013-12-13	2024-09-30	2016-11-23 2016-12-20	50.0	PLN	Floating
PGE GiEK S.A.	WFOŚiGW	Loan	2014-06-30	2021-09-30	2016-02-22	19.8	PLN	Floating
PGE GiEK S.A.	WFOŚiGW	Loan	2013-06-20	2020-09-15	2016-08-11	13.7	PLN	Floating
PGE GiEK S.A.	WFOŚiGW	Loan	2008-07-30	2017-12-31	2016-09-01	5.0	PLN	Fixed

#### 4.12.4. Information about the loans terminated / repaid ahead of schedule / amortised by the PGE Group companies in 2016.

In 2016 PGE S.A. and the companies from the Capital Group did not terminate, repay ahead of schedule, amortise any loans.

#### 4.12.5. Loans granted

In 2016, PGE S.A. and Group companies granted advances as in p. 4.12.3 of this report.



#### 4.12.6. Guarantees

In connection with the establishment of the EMTN Programme, on May 22, 2014 Deed of guarantee was issued by PGE for the liabilities of PGE Sweden AB (publ). Guarantee amounts to EUR 2,500 million and refers to liabilities of PGE Sweden AB (publ) arising from the issue of the Eurobonds under the Programme up to EUR 2,000 million. Guarantee will be valid until December 31, 2041. Financial terms of the guarantee will depend on the terms of Eurobonds issued by PGE Sweden AB (publ) and the remuneration for the guarantee will be reflected in the interest rates applied to loans granted to PGE S.A.

Pursuing the cash management project, on December 22, 2014 PGE S.A. concluded an agreement for the guarantee line in amount of PLN 250 million with Bank Polska Kasa Opieki S.A. Under the agreement PGE S.A. may request issuance of bank guarantees for the liabilities of PGE S.A. and selected companies from the PGE Group.

Table: Main guarantees granted by the PGE Group companies as at December 31, 2016.

Company	Entity entitled to guarantee (Beneficiary)	Entity whose liabilities are subject to guarantee (Debtor)	Form of security	Validity of guarantee yyyy-mm-dd		Value of guarantee (million)	Currency
				Beginning	End		
PGE S.A.	Bondholders	PGE Sweden AB	Guarantee of financial instrument; Guarantee issued for liabilities of PGE Sweden AB resulting from issue of Eurobonds under the Program of up to EUR 2,000 million	2014-05-22	2041-12-31	2,500.0	EUR
PGE S.A.	Bank Polska Kasa Opieki S.A.	PGE GIEK S.A.	Guarantee of Bank Guarantee issued in order to secure payments under the contract for construction of power units no. 5 and 6 in Opole power plant.	2014-01-29	2020-03-31	473.8	PLN
PGE S.A.	Powszechna Kasa Oszczędności Bank Polski S.A.	PGE GIEK S.A.	Guarantee of Bank Guarantee issued in order to secure payments under the contract for construction of power units no. 5 and 6 in Opole power plant.	2014-01-29	2020-03-31	78.9	PLN
PGE S.A.	BNP Paribas Bank Polska S.A.	PGE GIEK S.A.	Guarantee of Bank Guarantee issued in order to secure payments under the contract for construction of power units no. 5 and 6 in Opole power plant.	2014-01-29	2020-03-31	78.9	PLN

The total amount of guarantees granted by the companies of the PGE Capital Group and mandatory on December 31, 2016 amounted to more than EUR 2,500 million and more than PLN 700 million.

Table: Main guarantees in PLN received by the PGE Group companies and valid as at December 31, 2016.

Company	Guarantee issuer	Entity for whose liabilities a guarantee was issued (Debtor)	Form of security	Validity of guarantee yyyy-mm-dd		Value of guarantee (million)	Currency
PGE GiEK S.A.	Societe Generale S.A.	ALSTOM Power sp. z o.o.	Performance bond related to construction of power units no. 5 and 6 in Opole power plant	2014-01-29	2018-08-30	317.2	PLN
PGE GiEK S.A.	Mizuho Bank Ltd	Mitsubishi Hitachi Power Systems Europe GmbH	Performance bond related to construction of new power unit in Turów power plant	2014-07-10	2020-06-30	238.4	PLN
PGE GiEK S.A.	Bank of Tokyo-Mitsubishi UFJ Ltd	Mitsubishi Hitachi Power Systems Europe GmbH	Advance payments guarantee for construction of power unit in Turów power plant	2015-01-09	2021-06-01	234.5	PLN
PGE GiEK S.A.	PKO BP S.A.	Polimex Projekt Opole sp. z o.o.	Performance bond related to construction of power units no. 5 and 6 in Opole power plant	2014-01-29	2018-08-30	199.2	PLN
PGE GiEK S.A.	Millennium Insurance Company Ltd	Mostostal Power Development sp. z o.o.	Performance bond related to construction of power units no. 5 and 6 in Opole power plant	2014-01-29	2018-08-30	192.6	PLN
PGE GiEK S.A.	Societe Generale S.A.	ALSTOM Power sp. z o.o.	Performance bond related to construction of power units no. 5 and 6 in Opole power plant	2015-10-29	2018-08-30	187.0	PLN
PGE GiEK S.A.	Lloyds Bank Plc	ALSTOM Power sp. z o.o.	Guarantee for return of unsettled advance related to construction of power units no. 5 and 6 in Opole power plant	2014-01-29	2019-05-15	187.0	PLN

The total amount of guarantees received by the companies of the PGE Capital Group and mandatory on December 31, 2016 amounted to more than PLN 2,800 million and more than EUR 7 million. Guarantees were received in connection with investments being pursued and day-to-day operations and include mainly: advance payments guarantees and performance bonds.

#### 4.12.7. Significant off-balance sheet items

Significant off-balance sheet items are described in note 28 to the consolidated financial statements.

#### 4.12.8. Evaluation of investment capacities

On-going and future investments are and will be financed from funds generated by the core activity of the PGE Group, funds obtained from the issue of bonds, both on domestic and international markets, and from other types of external financing, e.g. bank loans. Financial results achieved by the PGE Group and available credit limits secure sufficient resources to achieve its mid-term investment goals, including capital investments. Scale of development of the group's efficiency, particularly lowering the operating expenses, will be significant for the ability to finance the investment program in the long term.

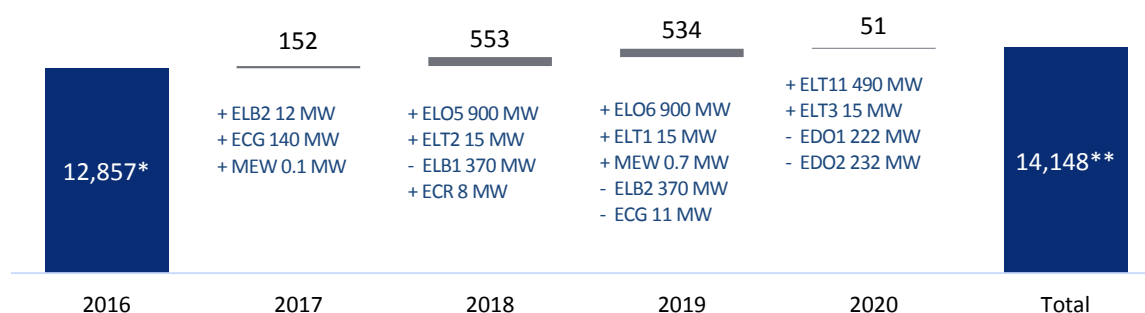
### 4.13. Prospects for the Capital Group's development

#### 4.13.1. EBITDA outlook for 2017

Outlook 2017	vs. 2016	Main factors
<b>Conventional Generation</b>	Decline	<ul style="list-style-type: none"> <li>■ Average wholesale realised price at PLN 163-165/MWh.</li> <li>■ Trading model update.</li> <li>■ Termination of LTC settlements. No revenues in 2017.</li> <li>■ Volume of lignite-fired generation normalized after completion of overhauls in Bełchatów power plant.</li> <li>■ Hard coal prices in 2017 flat resulting from price paths in agreements and contracted volumes.</li> <li>■ Allocation of free CO<sub>2</sub> allowances at the level of 15 m tonnes vs approx. 20 m tonnes in 2016 implies decreased total costs due to lower prices of allowance.</li> <li>■ Efficiency programs to be continued.</li> </ul>
<b>Renewables</b>	Decline	<ul style="list-style-type: none"> <li>■ Lack of planned changes in installed capacities implies comparable generation volume, dependant of weather conditions.</li> <li>■ Increased property tax.</li> </ul>
<b>Supply*</b>	Growth	<ul style="list-style-type: none"> <li>■ Market stabilisation to positively impact the result.</li> <li>■ Volatility of green certificates prices increases risk but temporarily improves margins.</li> </ul>
<b>Distribution</b>	Stable	<ul style="list-style-type: none"> <li>■ Regulatory Assets Base (RAB) at approx. PLN 15.6 billion in tariff for 2017.</li> <li>■ WACC for 2017 set at 5.63% (pre-tax).</li> <li>■ Efficiency programs to be continued.</li> </ul>

\* Outlook for development of Supply segment relates to growth perspective for the parent company - PGE S.A., which operates within Supply segment of PGE Group.

#### 4.13.2. Prospects for growth of achievable capacities in years 2017-2020 [MW gross]



\* including 10,725 MW gross achievable capacities in conventional units

\*\* including 12,021 MW gross achievable capacities in conventional units

Explanation:

ELB – Bełchatów power plant

ECG – Gorzów CHP

MEW – Small hydro power plant

ELO – Opole power plant

ECR – Rzeszów CHP

ELT – Turów power plant

EDO – Dolna Odra power plant

## 5. Electricity market in 2016 and regulatory and business environment

### 5.1. Macroeconomic environment

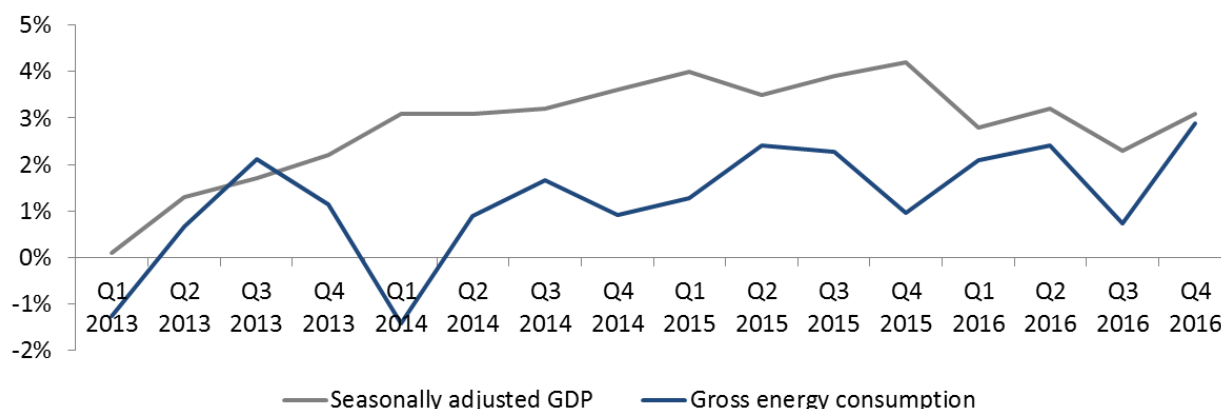
PGE Group's main operating area is Poland, and the domestic macroeconomic backdrop has a substantial impact on Group's results. At the same time, the condition of Poland's economy remains largely tied to the situation across the European Union and in global markets. The Group's financial results are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

As a rule of thumb, there is a historical correlation between rising electricity demand and economic growth in Poland. Historical data over the long term shows that this link is weakened because of the economy becoming less energy-intensive. In the past ten years, Poland's gross domestic product grew by about four times faster than gross electricity demand. Considering PGE Group's position on the Polish power generation market, as well as its substantial share in the electricity sales and distribution market, changes in power and heat demand may have a significant impact on the Group's results.

In 2016, gross electricity consumption went up 2.0% compared to 2015. The increase was higher than in the previous year, when consumption went up 1.7% from 2014.

Economic trends in 2016 largely remained positive although the pace of GDP growth remains lower than expected at the beginning of the year. According to the GDP Initial Estimate, GDP growth in 2016 amounted to 2.8%.

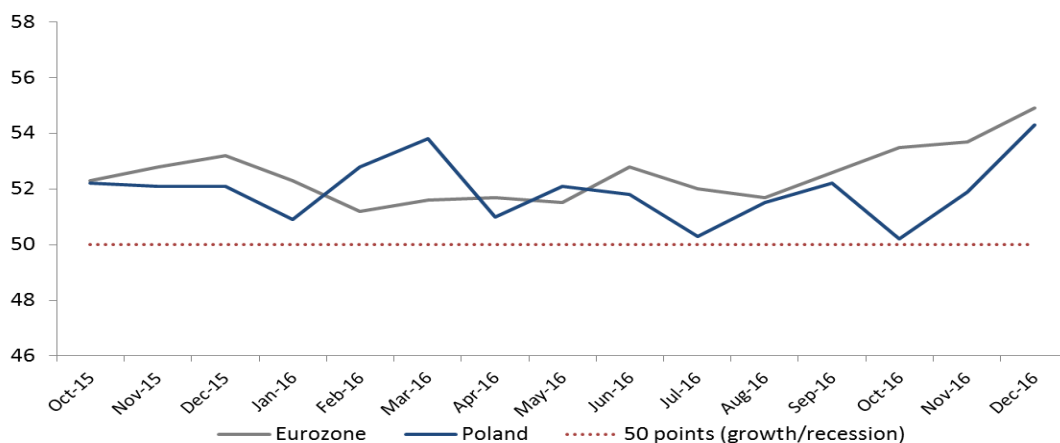
Diagram: Seasonally adjusted GDP change vs. change in gross electricity consumption.



Source: Central Statistical Office of Poland, PSE S.A.

Economic growth and rising electricity consumption were accompanied by moderately optimistic condition of Polish industry, which is responsible for approx. 45% of domestic electricity consumption. The Purchasing Managers' Index (PMI) for industry reached 52.2 points in 2015, and 51.9 points in 2016. This is above the 50-point threshold, which means the respondents expect the sector's situation to improve. The positive result stems mainly from growing production, employment and consumption. The results of the Polish industrial sector should be further strengthened by the Eurozone, whose PMI for 2015 reached an average level of 52.2 points, and 52.5 points in 2016.

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



Source: Markit Economics

From PGE Group's perspective, another positive development is the stronger growth in overall industrial production. In 2016, it went up moderately by 1.5% y-o-y, compared to 6.0% in the previous year. The change resulted from decline in industrial production dynamics (2.3% y-o-y in 2016 versus 6.8% in 2015). Production in the whole energy sector decreased again (-2.5% y-o-y in 2016 vs -0.3% in 2015). The value of industrial manufacturing depends on volumes of goods produced and prices. PPI in 2016 amounted to -0.2% in relation to the preceding year. CPI reading amounted to 0.8% y-o-y at the end of December.

Table: Key economic indicators for Poland.

Key economic indicators (% change y-o-y)	2016	2015
GDP <sup>1</sup>	2.8	3.9
CPI <sup>2</sup>	0.8	-0.5
PPI <sup>3</sup>	-0.2	-2.2
Sold industrial production <sup>3</sup>	1.5	6.0
Sold production – manufacturing <sup>3</sup>	2.3	6.8
Sold production – energy <sup>3</sup>	-2.5	-0.3
Dynamics of domestic electricity consumption <sup>4</sup>	2.0	1.7
Gross domestic electricity consumption (TWh) <sup>4</sup>	164.6	161.4
EUR/PLN <sup>5</sup>	4.36	4.18

Source: <sup>1</sup> Central Statistical Office of Poland, <sup>2</sup> National Bank of Poland, <sup>3</sup> Central Statistical Office of Poland, <sup>4</sup> PSE S.A., <sup>5</sup> National Bank of Poland

## 5.2. Market environment

The electricity sector in Poland comprises four operating segments:

- generation of electricity;
- transmission, for which the transmission system operator – Polskie Sieci Elektroenergetyczne S.A. ("PSE S.A.") is responsible;
- distribution;
- retail sales.

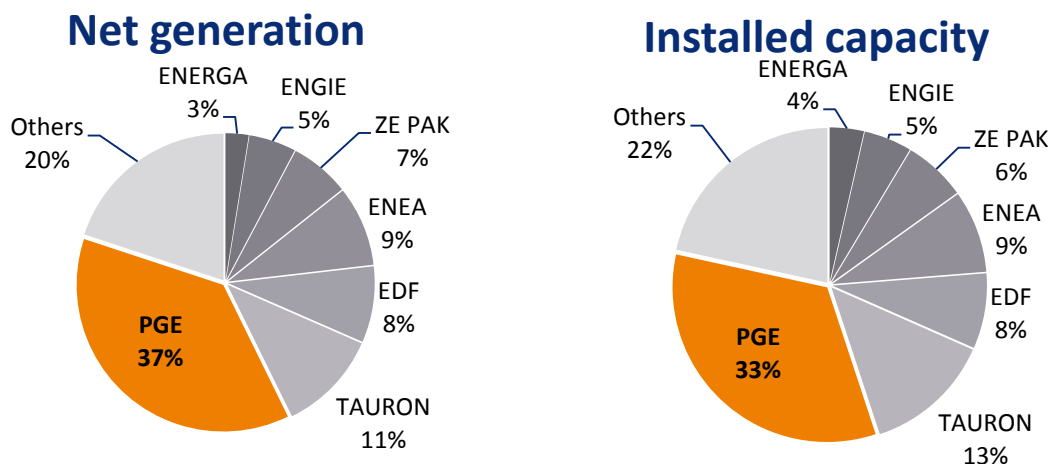
District heating sector may be also distinguished, within which PGE is active in heat generation.

The key participants of the electricity market in Poland are four nationwide, vertically integrated energy groups: PGE Group, capital group of TAURON Polska Energia S.A. ("TAURON"), capital group of ENEA S.A. ("ENEA") and capital group of ENERGA S.A. ("ENERGA").

The generation segment includes the four major producers and, though on a smaller scale involved in other energy activities, the following entities: Zespół Elektrowni Pątnów Adamów Konin S.A. ("ZE PAK") and the French companies EDF and ENGIE, through their Polish units EDF Polska S.A. and ENGIE Energia Polska S.A. (formerly GdF SUEZ Polska S.A.). PGE Group, which produces about 54 TWh of electricity, or 37% of national production, is the undisputed market leader. The group produces more energy than the next four competitors combined, whilst having the largest

maximum capacities, both conventional and renewable. ZE PAK is another entity aside from PGE Group that bases its electricity production on lignite. Fuels used by the other major competitors are dominated by hard coal, which continues to be the main energy source in Poland – nearly half of the electricity produced in the country is sourced from it – and is the key energy source for PGE Group's competitors (TAURON, EDF, ENEA, ENGIE, ENERGA). One-third of electricity production in Poland is lignite-based. The use of other fuels is of relatively low significance from the viewpoint of the national power system.

Chart: Share of largest Polish electricity generators in installed capacity and net generation in 2015.



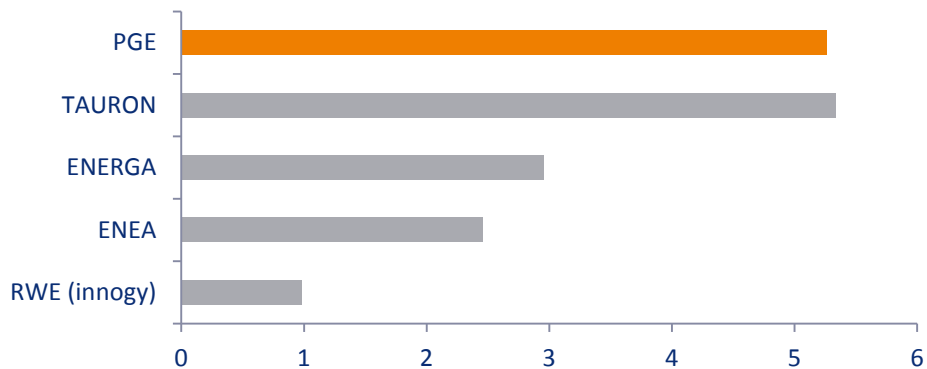
Source: own work based on information published by the companies and Agencja Rynku Energii S.A. („ARE”)

The heat production market in Poland is highly dispersed, with the five leading producers accounting for less than 40% of production countrywide and each one of them having a production potential of less than 10% of heating capacities installed in the national system. At the same time, the market is of a local nature and bears the traits of a natural monopoly, with heating prices being set in an administrative procedure – tariffs approved by the President of the Energy Regulatory Office. The dominant producers focus their production activities in different urban areas therefore sector competition is limited. PGE remains one of the leaders of the heating market, with production exceeding 18 PJ, making it the leader amongst Polish power groups. The key producers of heating are PGNiG Termika S.A. (focused on production mainly in the Warsaw agglomeration), EDF (Wrocław agglomeration, Tri-City area, Kraków, Toruń, Zielona Góra) and Veolia Group (Poznań agglomeration, Łódź). At PGE Group, heating is produced in cogeneration, making PGE one of the entities with the highest installed heating capacities in industrial-scale cogeneration plants

Energy production from renewable sources is much more dispersed than the conventional generation market. Energy from biomass is produced at both dedicated installations and in a co-firing process with other energy sources across the country. PGE Group develops dynamically and gets more and more importance. Having delivered four new wind projects in 2015, PGE Group became an entity with the largest installed wind capacity – 529 MW (through PGE Energia Odnawialna S.A. – “PGE EO S.A.”). PGE Group has approximately 9% share of total wind capacity in Poland, which reached 5.7 GW in 2016. Other notable wind farm operators include: EDP Renováveis Polska sp. z o.o., innogy Renewables Polska sp. z o.o., Vortex Energy Polska sp. z o.o., Polenergia S.A., TAURON Ekoenergia sp. z o.o., ENERGA Wytwarzanie S.A. and E.ON Energie Odnawialne sp. z o.o. The competition between existing wind installations is related, in view of existing until the end of 2017 (for large producers) obligation to purchase energy from RES, to participation in green certificates scheme. They are subject of free market trade, however, due to significant oversupply this are administrative decisions with regard to the level of obligation to redeem that essentially influence the prices. The competition within new support scheme for RES takes place in auctions via lower offered amount of support.

In the distribution area, the country is divided into regions, with five large distribution system operators (“OSD”) on the market, who are required to carve out distribution activities from their other business. Aside from the above-mentioned energy groups, another significant entity is innogy Stoen Operator sp. z o.o. (formerly RWE Stoen Operator sp. z o.o.), an RWE Group company responsible for electricity distribution in Warsaw. A historical division of the distribution areas has substantial impact on the operating conditions of the business, and this specific situation is reflected in the distribution tariffs approved by the URE president. PGE Group operates in an area that is less urbanised and industrialised, meaning that it has 5.3 million clients throughout an area of 122 ths km<sup>2</sup>. For comparison, TAURON has a similar number of clients in an area nearly twice smaller and distributes a larger amount of energy.

Chart: Number of off-takers of energy distributed in 2015 (million)



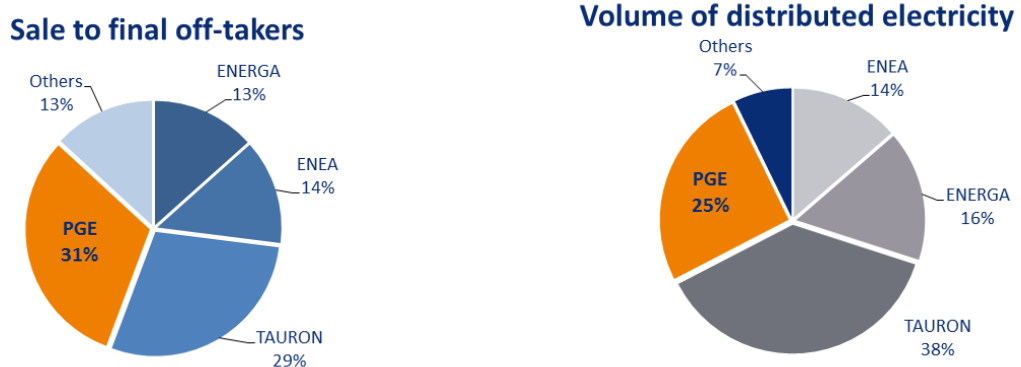
Source: own work based on information published by ARE

Chart: Areas of operation of Polish distribution system operators.



Source: own work based on information published by the companies and ARE

Chart: Share of particular energy groups in sales of electricity and volume of energy distributed to final off-takers in year 2015.



Source: own work based on information published by the companies and ARE

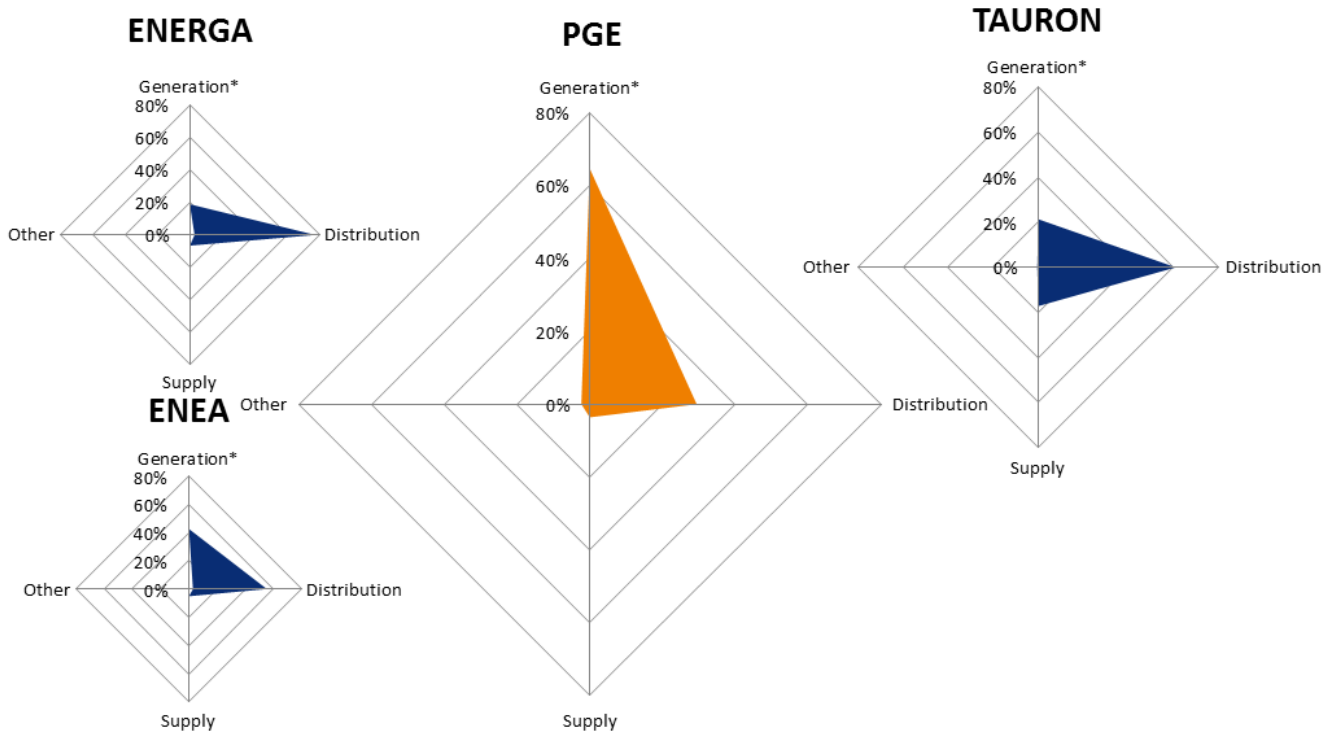
In the retail segment, which covers sales to end customers – individual, small and medium enterprises as well as large industrial customers – most of the sales are conducted by the four largest energy groups and innogy Polska S.A. (formerly RWE Polska S.A.), i.e. groups considered as incumbent sellers of electricity – historically operating in areas coinciding with distribution area and the default sellers for clients who have not decided to switch electricity suppliers. PGE Group and TAURON remain the leaders, having approximately 60% of the market. Both PGE and TAURON sell electricity to over five

million clients. Despite a growing number of competitors in the segment, including companies for which electricity is not a core product, companies from outside the four largest Polish groups continue to control little market share. The leaders control close to 90% of the market, while other significant players are: innogy, based on sales connected with serving as distributor for the Warsaw area, and EDF, which focuses on sales to businesses

**Energy group profiles**

The electricity sector is divided into segments, what is reflected in the operating segments of the respective energy groups. In contrast to the other energy groups in Poland, whose dominant EBITDA driver is the electricity distribution segment, PGE Group derives much of its operating profit from the generation segment, even though the group is the country's second-largest electricity distributor by volume. This allows to optimally deploy its competences and capitalise on opportunities arising in the generation area (both conventional and renewable) as well as in wholesale energy trade, whilst generating high and stable EBITDA on regulated activities. A key feature of all the groups is a relatively small contribution of retail sales to operating profit, which is a result of low sales margins, driven by strong competition in the segment.

Chart: Profiles of Polish energy group (size of the chart is proportionate to share in 2015 EBITDA of respective business segments and the amount of total EBITDA)



\* Generation – conventional generation, generation from renewables and heat generation

Source: own work based on information published by the companies



### 5.3. Regulatory environment

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#### Regulatory environment

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##### Domestic

- possible changes to the Poland's energy policy as a result of new Energy Policy of Poland until 2050 as well as general directional guidelines indicated in the Strategy Of Responsible Development
- changes in scope of services like:
  - modification of current Operational Reserve mechanism
  - implementation of cold reserve mechanism
  - implementation of further packages for demand reduction services
- implementation of capacity market
- further amendments to the Law on Renewable Energy Sources, defining support scheme for energy generation in renewables
- obligation to redeem RES certificates in next years
- parameters and auction schedule for RES installations and level of reference prices
- act on investments with regard to wind power plants – inability to build new power plants at a distance less than 10 times the height of the turbine
- change of the rules of obtaining energy efficiency certificates and the publication of the list of projects for energy efficiency improvement
- results of explanatory proceedings before the ERO President and court disputes in cases of issue of certificates of origin of energy produced from biomass for some of the branches of PGE GiEK S.A.
- matter of implementation of quality tariff in distribution, that will make regulated income dependant on SAIDI and SAIFI ratios and connection time, among others
- possible different decision in law disputes, from which most relevant were presented in note 21.4 to the consolidated financial statements
- draft Water Law Act introducing fees for water services, including the use of water for energy purposes
- A draft act on a change of the act on waste, introducing a change in the way in which hazardous waste properties are specified

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##### International

- regulations of climate and energy package determining reduction targets for years 2021-2030 – legal implementation of energy union concept based on framework targets set by the European Council in 2014, that in scope of the reduction of greenhouse gases emission also constitute a performance of obligations resulting from so called Paris agreement, particularly: at least 40% CO<sub>2</sub> emission reduction targets, 27% RES share target in total energy consumption and – in accordance with the request of the European Commission - 30% efficiency improvement target, including inter alia:
  - legislative proposal with regard to revision of the EU Emission Trading System (EU ETS) Directive – formula for compensation mechanisms – Modernisation Fund and free allocation of CO<sub>2</sub> emission allowances;
  - legislative proposal with regard to revision of the Renewable Energy (REDII) Directive, including setting out the means by which Poland is to contribute to the 27% share of renewable energy in the energy mix at EU level by 2030. The draft includes, inter alia, a proposal for legislation that significantly restricts the use and further support of biomass;
  - legislative proposal regarding the power ordinance and a legislative proposal regarding the power directive, the aim of which is the creation of a new structure for a single energy market, including through the introduction of numerous pro-consumer solutions and increasing market flexibility and intervention into the capacity mechanism structures (specifically, the proposal to introduce a CO<sub>2</sub> emission standard at a level of 550 g/kWh);
  - legislative proposal regarding legislation on energy union governance, which is to create a system for managing the implementation of energy union objectives that is based on cooperation with other member states and on arrangements made by the European Commission. As regards achieving the renewable energy objective, the draft includes the creation of a financial platform funded by contributions

- from member states;
  - legislative proposal with regard to revision of the Energy Efficiency Directive (EED), including setting out the means by which Poland is to contribute to the 27% improvement in energy efficiency at EU level by 2030.
- regulations connected with the reduction of emissions of pollutants implemented within the framework of environmental policy, including:
  - process of revising the Best Available Techniques (BAT) – uncertainty regarding the final date for publication of the BAT conclusions and, therefore, the date for adapting production assets to the new requirements. This date probably will fall not later than in the second half of 2021. A preferred date for adapting to the requirements stemming from the BAT conclusions is 2024, what means the extensive use of temporary derogations based on Article 15 section 4 of the Industrial Emissions Directive (“IED”).

### 5.3.1. Electricity prices

#### Domestic market - Prices

##### Day-ahead market

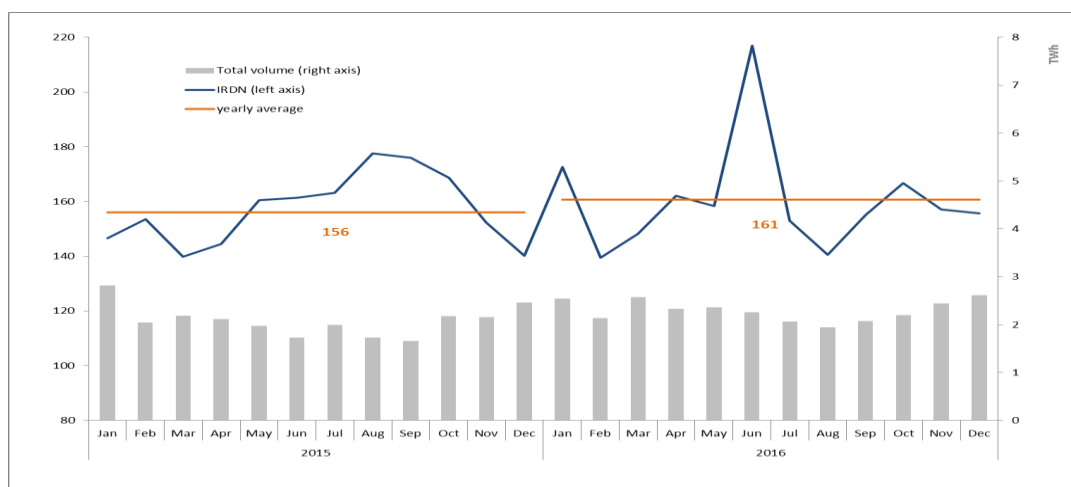
The average price in the fourth quarter of 2016 on the day-ahead market (“IRDN index”) was PLN 160/MWh, compared to PLN 154/MWh in the previous year – increase by 4%. The growth in electricity prices was driven by regional factors. A drought resulted in electricity production declines at Swedish hydro plants<sup>1</sup>, impacting the price equilibrium in the entire region. Energy prices in Western Europe also rose as a result of commodity market strength. In addition, problems at French nuclear plants led to France significantly increasing electricity imports from neighbouring countries, which led to a domino effect at cross-border connections and had an impact on prices in other states. Compared to neighbouring countries, the Polish day-ahead market showed moderate price growth. The reversal of commercial exchange balance was also offset by domestic factors:

- lower capacity shutdowns in National Power System resulting from lower overhaul load,
- Lower hard coal prices in Poland measured by PSCMI1 index (consequence of forward contracts concluded in previous years),
- Higher generation in wind farms (in the fourth quarter of 2016 generation in wind farms amounted to 4.1 TWh and was by 19% higher y-o-y).

An additional factor with significant impact on energy prices, common to Poland and the region, was lower prices of CO<sub>2</sub> emission allowances on a year-on-year basis.

In 2016, the average day-ahead price was PLN 161/MWh, which is 3% more than in the preceding year (PLN 156/MWh). Higher overhaul load in the second quarter, resulting in increased generation in units with a higher variable costs, mainly attributed to the increase of yearly average electricity price.

Chart: Monthly prices and price volatility at the day ahead market in 2015–2016 (TGE) \*.



\* average monthly price of IRDN index calculated on the base of hourly quotations, weighted by the trading volume.

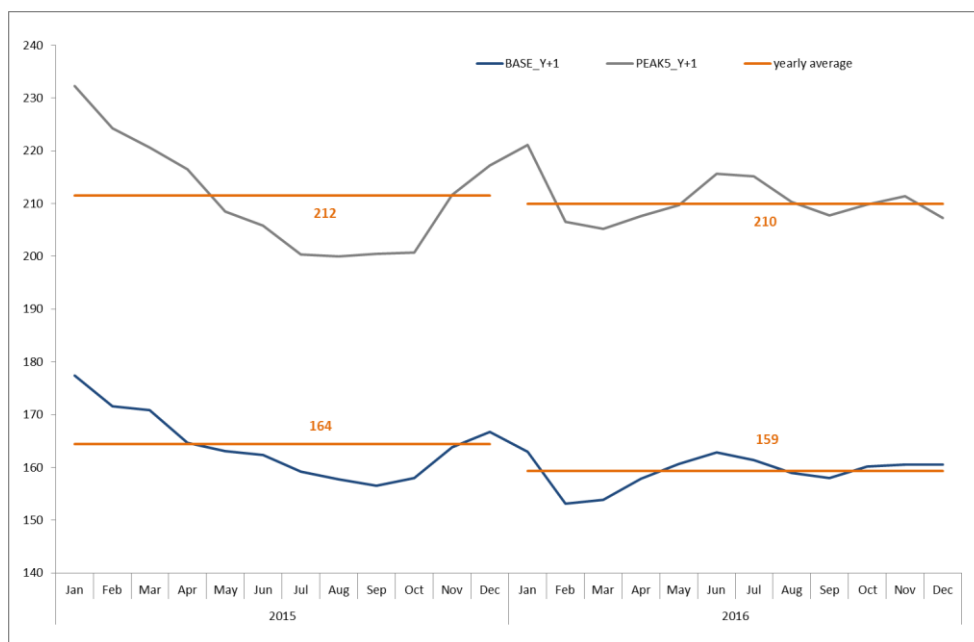
<sup>1</sup>In October, production volumes at Swedish hydro plants was 33% lower y/y (source: Bloomberg) – this value is strictly correlated with Sweden’s export balance.

## Forward market

In the fourth quarter of 2016, the average price of annual contracts BASE Y-17 was PLN 160/MWh, in analogical period of the previous year BASE\_Y-16 was priced at PLN 163/MWh on average (decline by 2% y-o-y). Average peak contract price (PEAK\_Y-17) amounted to PLN 209/MWh in the fourth quarter of 2016, in analogical period of the previous year PEAK\_Y-16 was priced at PLN 211/MWh on average (decline by 1% y-o-y).

During whole year 2016, the average price of annual contracts BASE Y-17 was PLN 159/MWh, by 3% lower than in 2015, when analogical BASE\_Y-16 contract was priced at PLN 164/MWh on average. Average peak contract price (PEAK5\_Y-17) amounted to PLN 210/MWh in 2016, while in 2015 analogical PEAK5\_Y-16 contracts were priced at PLN 212/MWh (decline by 1%).

Chart: Monthly prices and price volatility on the forward market in 2015-2016 (TGE)\*.



\*monthly average index level for forward contracts for the next year (Y+1), baseload and peak, calculation based on hourly quotations, weighted by the trading volume.

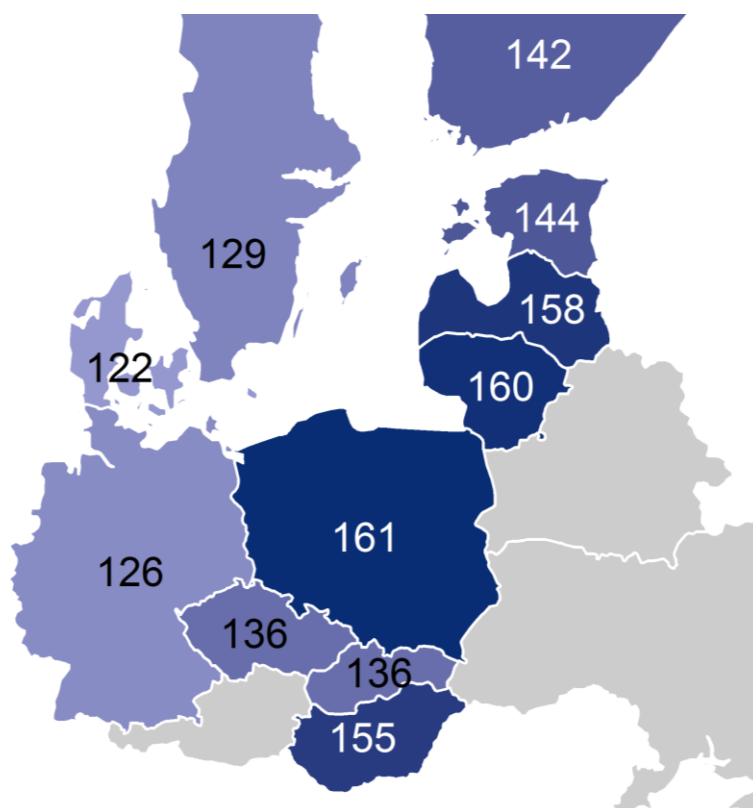
## International market

### Wholesale market

In the fourth quarter of 2016, spot prices on the domestic and neighbouring markets increased, however the growth dynamic in Poland was modest (+4% y-o-y) compared to the price hikes in Sweden (+63% y-o-y), Germany (+16% y/y) and the Czech Republic (+22% y-o-y). The price growth was driven by adverse hydrological conditions in Sweden, problems at French plants and commodity market trends. As a result, the Polish market's competitive position improved significantly, which had an impact on the cross-border exchange balance. Average prices in Poland and Sweden were at a comparable level – PLN 162/MWh and PLN 163/MWh, respectively, resulting in a decline in imports from the north. Electricity in Poland was cheaper than in Germany (PLN 165/MWh) and the Czech Republic (PLN 179/MWh), which made it possible to export to the south and west. The competitiveness of Polish exports was further strengthened by a weakening zloty (average EUR exchange rate in the fourth quarter of 2016 was 3% higher than in the same period last year).

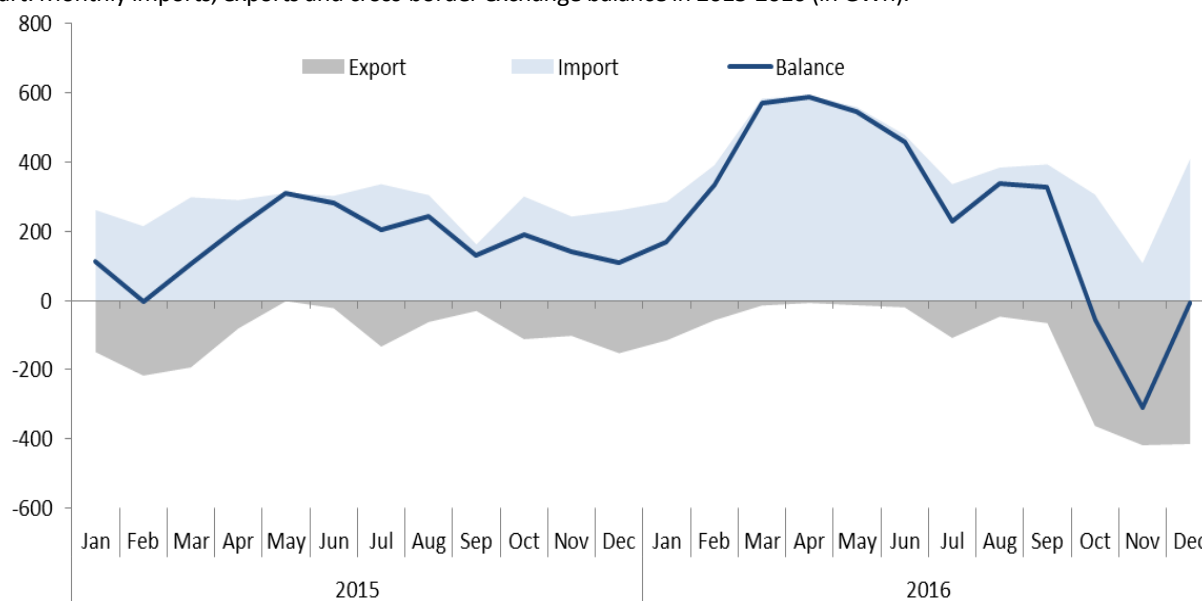
In annual terms, wholesale energy prices on the spot market in 2016 in Poland remained some of the highest in the region, with Denmark and Germany having the cheapest energy.

Chart: Comparison of average prices on Polish market and on selected European markets in 2016 (prices in PLN/MWh, average exchange rate EUR/PLN 4.36).



Source: TGE, EEX, EPEX, Nordpool, OTE a.s., PXE

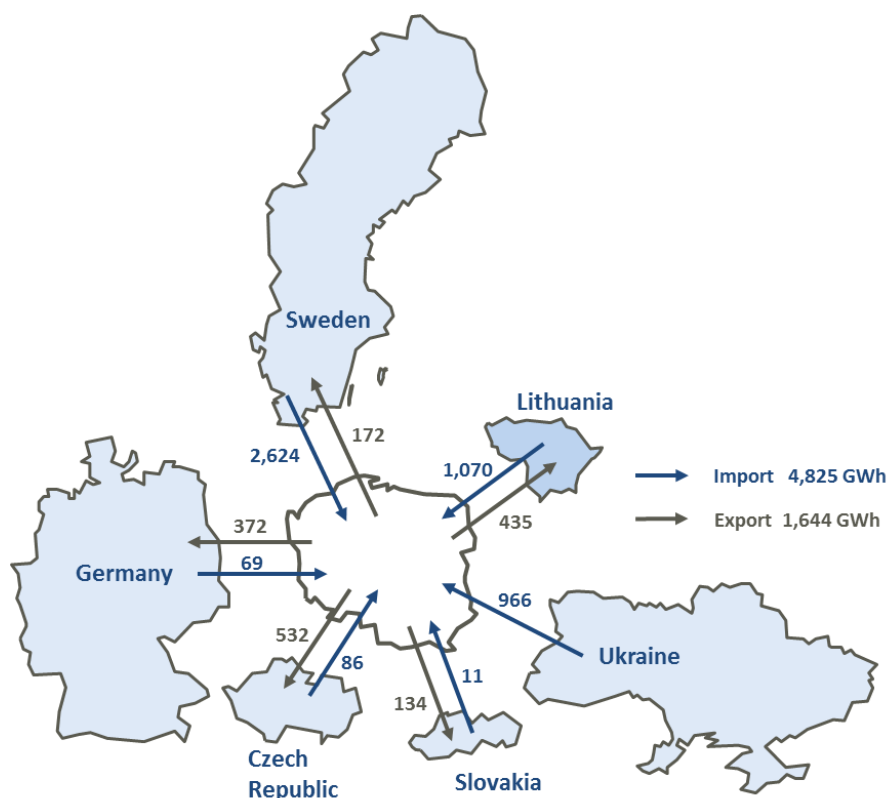
Chart: Monthly imports, exports and cross-border exchange balance in 2015-2016 (in GWh).



Source: own work based on PSE data.

The balance of international exchange in the fourth quarter of 2016 amounted to 0.38 TWh (export 1.20 TWh, import 0.82 TWh). Poland was a net exporter of electricity – such situation has taken place for the first time in three years (last time in the fourth quarter of 2013). The main export directions were: Czech Republic (balance 0.39 TWh) and Germany (balance 0.30 TWh). Sweden continues to be the main source of net imports, however the trading exchange balance with that country (0.23 TWh) decreased three times y-o-y (in November alone export from Poland to Sweden was higher than import). Ukraine remained an important import source – import in the fourth quarter of 2016 amounted to 0.21 TWh. From the perspective of whole year 2016, Poland was the importer of electricity and the balance of international exchange amounted to 3.18 TWh. The fourth quarter attributed to the improvement of the trade, but it was not enough for its balancing. Throughout the year, export was three times higher than import (its' worth mentioning that after 9 months of 2016 export was nine times higher than import).

Diagram: Geographical structure of commercial exchange in 2016 (GWh).

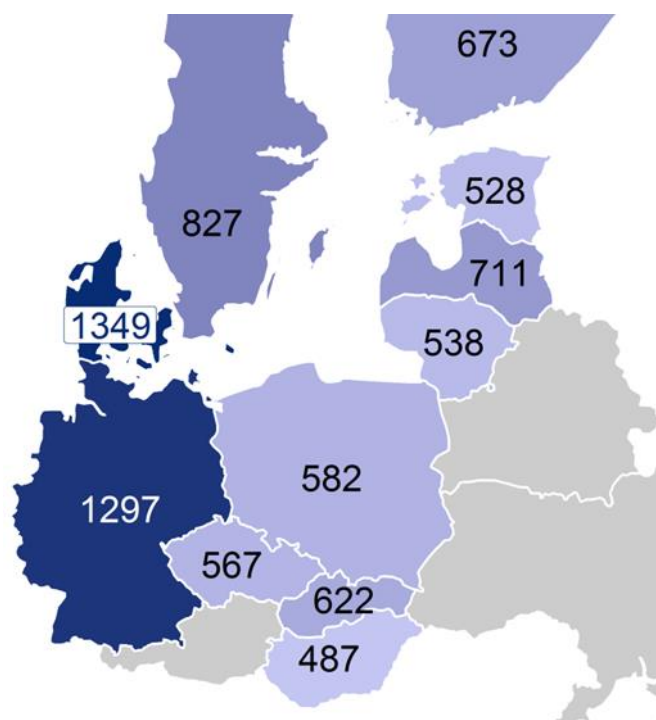


Source: own work based on PSE data.

### Retail market

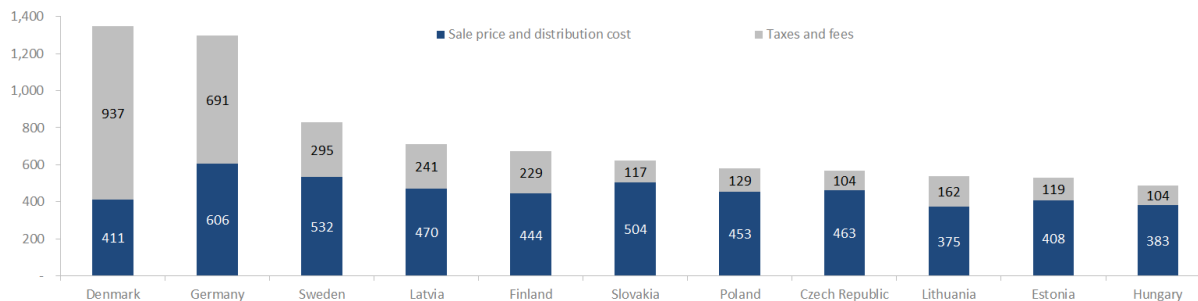
The diversity of electricity prices for retail customers in the European Union depends not only on the level of the wholesale prices of electricity. The fiscal system, regulation mechanisms and support schemes in particular countries all have significant impact on the final price of electricity. In Poland in the first half of 2016, an additional burden for individual customers accounted for 22% of the electricity price, compared to the EU average of 29%. In Denmark and Germany the proportion of additional charges in the price of electricity exceeded 50%.

Diagram: Comparison of average electricity prices for individual customers in selected EU countries in the first half of 2016 (prices in PLN/MWh). Prices include the costs of electricity distribution.



Source: own work based on Energy prices in the EU. Eurostat, the statistical office of the European Union. EUR/PLN 4.37

Diagram: The share of additional charges in electricity prices for the individual customers in selected EU countries in the first half of 2016 (prices in PLN/MWh, calculated with average exchange rate EUR/PLN 4.36).



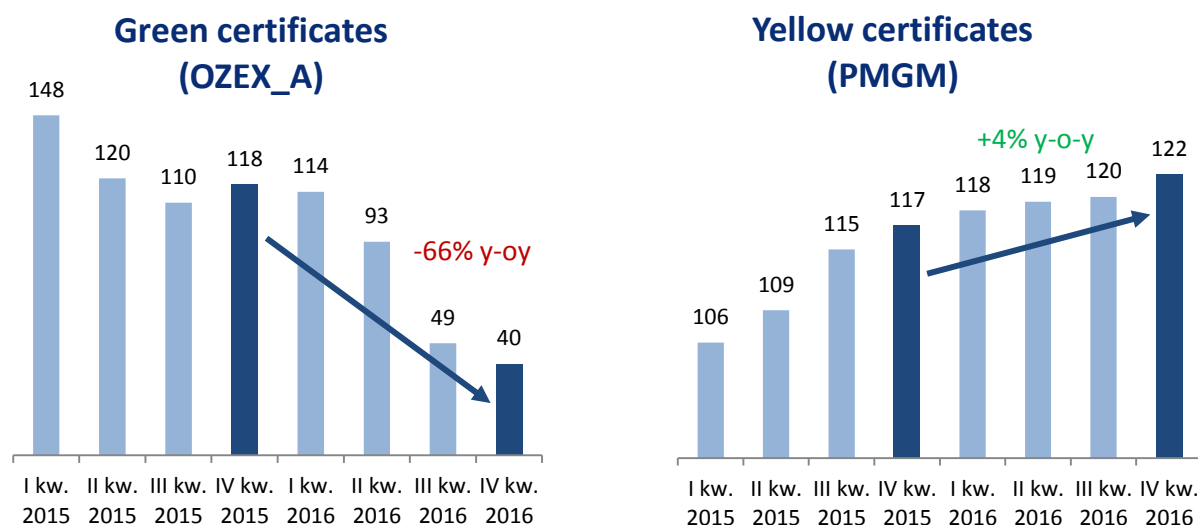
Source: own work based on Energy prices in the EU. Eurostat, the statistical office of the European Union. EUR/PLN 4.37

### 5.3.2. Prices of certificates

Among the certificates, green certificates from renewable energy sources (OZEX\_A) and yellow cogeneration certificates (PMGM) are of key significance to PGE Group's financial results. In the fourth quarter of 2016, the average price of green certificates reached PLN 40/MWh and was 66% lower y-o-y. The main reason of price pressure is oversupply of green certificates produced in previous years combined with the growing energy production from renewable sources. The obligation to redeem green certificates in the first half of 2016 was at level of 15%. In the second half of 2016, with the entry into force of RES Law, an obligation to redeem biogas certificates PMOZE-BIO was separated at level 0.65%, while obligation to redeem PMOZE certificates was set at 14.35%. Average price of PMOZE-BIO in the fourth quarter of 2016 amounted to PLN 296/MWh. For green certificates PMOZE and PMOZE-BIO one substitute fee is applied at PLN 300.03/MWh. The average (blended) price of yellow certificates in the fourth quarter of 2016 reached PLN 122/MWh and was by 4% higher compared to the average price in the fourth quarter of 2015. The growth resulted from regulatory changes (obligation of redemption<sup>2</sup> was raised from 4.9 % to 6%, while substitute fee increased from PLN 121.63/MWh to PLN 125.00/MWh).

<sup>2</sup> Obligation of redemption concerns energy sales to final customer. The seller is obliged to redeem the certain amount of colour certificates indicated by the regulator (in relations to the volume of energy sold).

Chart: Average quarterly prices of certificates.



"kw." = quarter

Source: Own work based on TGE quotations. The yellow certificates prices presented on the chart are weighted average blended price – for products PMGM-14, PMGM-15 and PMGM-16.

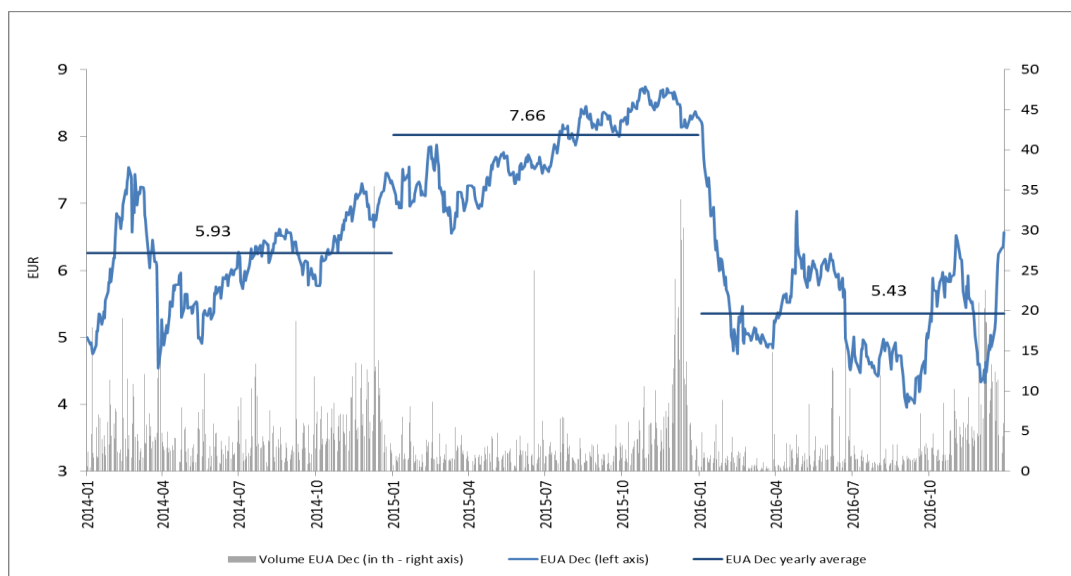
### 5.3.3. Prices of CO<sub>2</sub> emission rights

Two types of emission rights are available on the market – European Union Allowances (EUA) and Certified Emission Reductions (CER). CER-type rights may be redeemed by business operators only to a limited extent, in settlement period 2013-2020 up to 11% of the allocations granted under the National Allocation Plan for years 2008-2012.

In the three quarters of 2016, EUA\_DEC16 were priced at average of EUR 5.43/t<sup>3</sup>, including the substantial decline in the first quarter, mainly as a result of lower commodity prices on highly correlated markets, i.e. crude oil, gas, coal and electricity in Germany and increasing of volume intended for auctions in 2016. The first half of 2016 saw allocation of free-of-charge CO<sub>2</sub> emission allowances for 2015 and publication by the European Commission of data regarding levels of greenhouse gas emissions from installations covered by the EU ETS. In the second quarter, a trend reversal was observed along with a slight increase in prices as well as a rebound on commodity markets. At the end of June 2016, a record price decline took place. This was accompanied by turbulence in financial markets following the Brexit referendum in the U.K. In the third quarter the prices of allowances recorded low values despite EUA supply on the primary market cut by half. At the end of the third quarter, EUA prices recorded a slight increase due to the upcoming meeting of EU ministers in order to accelerate the process of ratification of the Paris Agreement. This growth continued until mid-November, which was aided by a breakdown at French nuclear plants. After initial price declines following Donald J. Trump's victory in U.S. presidential elections, a systematic growth in EUA prices ensued, particularly given that the European Parliament's environmental protection committee adopted higher reduction coefficients. On the last day of December, EUA price reached EUR 6.55, mainly as a result of high energy prices in Europe and fuel prices in global markets.

<sup>3</sup> Average weighted by volume

Chart: Prices of CO<sub>2</sub> emission rights in 2014-2016.



Source: Bloomberg, own work

In the three quarters of 2016, future EUA prices for December 2016 were priced in range EUR 3.93-8.11/tonne. In the same period, CERs in future contracts with delivery in December 2016 were priced in range EUR 0.35-0.47/tonne. Work on revision of the EU Emissions Trading System (EU ETS) directive is on-going. The new legal regulations concern the next settlement period, i.e. after 2020. The final version of the directive is to be published at the beginning of 2017.

#### 5.3.4. Emission rights granted free of charge for years 2013-2020

The Regulation of the Council of Ministers, that sets the allocation of allowances for particular units of electricity producers in period 2013-2020, was adopted on April 8, 2014. Analogically, allocations of allowances for heat producers were set by the Regulation of the Council of Ministers of March 31, 2014.

PGE's installations accounts were credited with free allowances for heat for 2016 and energy for 2015, while free allowances for electricity for 2016 will be received by the Group by the end of April 2017, after verification of reports from investments submitted to the National Investment Plan.

At the same time, redemption of emission rights resulting from CO<sub>2</sub> emissions in 2015 was completed in April 2016.

Table: Emission of CO<sub>2</sub> from major Group installations in 2016 and in 2016 in comparison to allocation of CO<sub>2</sub> emission rights for 2016 (in tonnes).

Operator	CO <sub>2</sub> emissions in 2016	Allocation of CO <sub>2</sub> emission rights for 2016*	% of the emissions covered by the free allowances
Bełchatów Power Plant	34,941,622	10,282,843	29%
Turów Power Plant	7,838,244	4,137,453	53%
Opole Power Plant	5,917,008	2,377,219	40%
ZEDO	4,806,958	1,949,023	41%
Bydgoszcz CHPs	770,355	442,383	57%
Lublin Wrotków CHP	554,078	257,020	46%
Gorzów CHP	437,569	201,665	46%
Rzeszów CHP	313,875	107,381	34%
Kielce CHP	183,701	83,196	45%
Zgierz CHP	173,366	32,763	19%
<b>TOTAL</b>	<b>55,936,776</b>	<b>19,870,946</b>	<b>36%</b>

\* amount of granted CO<sub>2</sub> emission rights will be confirmed in the Regulation of the Council of Ministers in the first quarter of 2017





### 5.3.5. Termination of long-term contracts (LTC)

Due to the termination of LTCs in accordance with the LTC Act, the producers being earlier the parties to such contracts obtained a right to receive compensations for the coverage of so called stranded costs. Stranded costs were capital expenditures resulting from investments in generating assets made by the generator before May 1, 2004 that a generator is not able to recoup from revenues obtained from sales of generated electricity, spare capacity and ancillary services in a competitive environment after early termination of LTC. The LTC Act limits the total amount of funds that may be paid to all generators to cover stranded costs, discounted as at January 1, 2007, to PLN 11.6 billion, including PLN 6.3 billion for PGE.

Table: Key data relating to PGE Group generators subject to the LTC Act.

Generator	LTC maturity	Maximum amount of stranded and additional costs (in PLN million)
Turów Power Plant	2016	2,571
Opole Power Plant	2012	1,966
ZEDO	2010	633
Lublin Wrotków CHP	2010	617
Rzeszów CHP	2012	422
Gorzów CHP	2009	108
<b>TOTAL</b>		<b>6,317</b>

In the period provided for by the LTC Act, i.e. till December 31, 2007, PGE S.A. signed LTC termination agreements with generators being parties to the then applicable LTCs. Therefore generators obtained a right to receive funds to cover their stranded costs.

The impact of LTC compensations on results achieved by the PGE Group is described in note 33.1 to the consolidated financial statements.

## 5.4. Supply markets

### 5.4.1. Provision of raw materials

Lignite, hard coal, natural gas and biomass are key fuels used to generate electricity and heat by power plants and heat and power plants belonging to the PGE Group. The cost of fuel procurement constitutes a major share in electricity generation costs. PGE S.A., on the ground of Agreement for Commercial Management of Generation Capacities, secures hard coal, gas and biomass supplies to the branches of the Conventional Generation segment.

Lignite supplies are carried out within a framework of regular cooperation between branches operating in the structure of Conventional Generation segment. The KWB Bełchatów mine supplies lignite to the Bełchatów power plant and the KWB Turów mine supplies it to the Turów power plant. The Group set up internal rules with respect to the performance and settlement of lignite supplies between individual branches of Conventional Generation segment.

The main supplier of the hard coal for the electricity and heat production needs in the branches of Conventional Generation segment was Polska Grupa Górnicza sp. z o.o. (from April 2016 the company took over the mines and contracts of the Kompania Węglowa S.A.), whose share in the yearly demand for this raw material amounted to 70%. Share of the other hard coal suppliers: Jastrzębska Spółka Węglowa S.A. and Katowicki Holding Węglowy S.A. amounted to over a dozen per cent.

Natural gas for electricity and heat production in CHPs of Conventional Generation segment, was mainly supplied on the ground of agreements with the domestic fuel suppliers and through purchases on the OTC market and the TGE exchange (Towarowa Giełda Energii S.A.). PGE S.A., PGE Obrót S.A. and Polskie Górnictwo Naftowe i Gazownictwo S.A. (PGNiG S.A.) were the major suppliers

Biomass was obtained via procurement procedures from suppliers operating on the Polish biomass market.

As regards fuel supplies at PGE Group in 2016, no threats were identified such as could have disrupted continuity of the production process.

#### 5.4.2. Purchases of transmission and distribution services

Under the existing legislation, power undertakings in Poland must have:

- a valid Agreement for the Provision of Electricity Transmission Services signed with PSE S.A.
- a valid Agreement for the Provision of Electricity Distribution Services, signed with a DSO.
- or valid agreements concluded both with PSE S.A. and a DSO – if required due to the scope of operations.

In view of the above obligations, companies dealing with generation, trade and distribution of electricity in Poland (including entities in the PGE Group) are, directly or indirectly, dependent on agreements for the provision of transmission services, which provide for rules with regard to the settlement of services rendered to a PSE S.A. or by PSE S.A. and methods for fixing and settling energy divergences of BM Units arising as a result of balancing the domestic electricity demand by the Operator. Agreements for the provision of transmission services are made with the company PSE S.A., which operations include use of National Power System ("NPS") and rendering electricity transmission while maintaining the operational security of the NPS. Pursuant to the provisions of the Energy Law, PSE S.A. as the TSO is responsible for grid flow in the transmission system, current and long-term security of the system, maintenance, repairs and necessary development of the transmission grid, including connection with other power systems.

Power undertakings, which operate under a license and whose active Generation Units are connected to the National Power Grid, must enter into a contract for transmission services ("Contract") with PSE S.A. This obligation also applies to the DSO, who as a Balancing Market Participant of the Balancing Company type (URB<sub>OSD</sub>) holds a passive Balancing Graphic Unit (JG<sub>Bi</sub>) through which it purchases electricity in order to cover distribution grid losses originating during the distribution of electricity through this grid.

Under the Agreement and the Transmission Network Code, a power undertaking is obliged to report on a daily basis any concluded Electricity Sale Contracts to PSE S.A. PSE S.A. as an operator in charge of the performance of the signed agreements and the trade balancing through the Balancing Market, carries out cyclical settlements of deviations of electricity supplied and received. The obligation referred to above creates dependency of a systemic nature which additionally affects companies within the PGE Group to the extent defined by law and determined by the scope and character of their operations.

Termination or expiry of the transmission agreement while the terms of a new transmission services agreement between a power undertaking and PSE S.A. are not agreed leads in practice to a request being filed by one party with the President of the Energy Regulatory Office to establish the terms of the agreement.

An integral part of a transmission Contract is an Agreement on the Terms and Conditions for the Provision of Ancillary Services ("Agreement") with PSE S.A. The Agreement remains in force for one calendar year. The generation units of the PGE Capital Group render selected services from the catalogue of ancillary services to PSE S.A. the extent which has been agreed and provided for in the Agreement.

#### 5.4.3. Provision of system services

In 2016, PGE GiEK S.A. extended provision of the following system services:

- Energy consumption reduction at the PSE S.A. request ("negawatts"). The Contract concluded in 2015 is still valid for the next two years (i.e. 2015 and 2016); the service consists of shutting down, specific volumes of electricity supply in 4-hour blocks at a request issued by PSE S.A. in order to ensure the continuous security of the NPS.
  - I. Generating unit availability (i.e. GWS – generation forced by grid considerations), new contract was concluded on June 24, 2016 with validity until December 31, 2016. Realisation of the contract includes generation in selected CHP plants on PSE S.A. request in order to ensure the continuous security of the NPS.
  - II. Cold reserve intervention service ("IRZ"), consisting of providing PGE GiEK S.A.'s generating units (Units 1 and 2 at Dolna Odra) to PSE S.A. for management and operation for the balancing of active power, in intervention mode, in order to ensure the continuous security of the NPS, including in particular:
    - maintaining the contractor's generating units on stand-by and, following receipt of a request from PSE S.A., load active power at a level specified in the request,
    - usage of the capacity of the contractor's generating units, which consists of turning the units on and feeding the electricity produced by these units into the grid, at a volume and time specified in PSE S.A. request.

The cold intervention reserve is intended only for the PSE S.A. statutory tasks. The agreement was executed in December 2013, and the IRZ service is provided in years 2016-2017, wherein PSE S.A. used the option to extend the agreement for an additional two years. As a result, IRZ service will be provided in years 2016-2019.

Use of the above services by PSE S.A. is intended to meet the binding continuity and reliability criteria for electricity supply and to maintain the required quality parameters in respect of the electricity being supplied.

- III. Operational Capacity Reserve (ORM). ORM is the JGwa production capacities constituting excess capacity over executed Energy Sale Agreements (USE), which:
  - constituted a capacity reserve in the course of conducting energy supplies at JGwa in operation or at standstill, available because of the plant's operating conditions,
  - were used to forced electricity production or to produce electricity under USE relocation to JGwa on the Balancing Market,
  - settlement for ORM is performed from January 1, 2014, for peak demand hours, i.e. between 8 and 22, only on business days.
  
- IV. Regulatory System Services within active Production Scheduling Units (JGwa):
  - start-up of JGwa (from hot, warm and cold state),
  - JGwa participation in primary control,
  - JGwa participation in secondary control,
  - JGwa overload operation,
  - JGwa participation in automatic load and passive capacity control – operation of blocks in Automatic Control of Plant Load (ARNE),

On December 30, 2014, **PGE EO S.A.** signed a new 4-year agreement with PSE S.A. for provision of intervention services. Under the agreement, which covers years 2015-2018, PGE EO S.A. carries out intervention work for PSE S.A. consisting of providing PSE S.A. with the capability to manage and operate the following pumped-storage plants: Żarnowiec, Porąbka Żar, Dychów and Solina, for management, in intervention mode, the balance of active and reactive power in the system and management of power flows in the transmission network.

The services cover:

- active cold intervention reserve service,
- self-start-up service,
- load and reactive power control service,
- power compensation service.

In 2016 purchase of services from PSE S.A. constituted approx. 9% of operating costs incurred by the Group. PSE S.A. is an entity related to PGE S.A. as a subsidiary of the State Treasury.

#### 5.4.4. Fuel purchase costs

Table: Volume and cost of purchase of fuels from third party suppliers in 2016 on a quarterly basis and in the fourth quarter of 2015.

Type of fuel	Q1 2016		Q2 2016		Q3 2016		Q4 2016		Q4 2015	
	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)
Hard coal	1,193	263	1,145	241	1,417	303	1,585	334	1,807	415
Gas (cubic metres)	211,842	181	142,045	75	68,688	35	236,967	163	199,304	176
Biomass	267	57	234	54	247	57	120	22	283	72
Fuel oil*	11	8	9	10	11	11	10	12	12	15
<b>TOTAL</b>		<b>509</b>		<b>380</b>		<b>406</b>		<b>531</b>		<b>678</b>

\* heavy and light

Table: Volume and cost of purchase of fuels from third party suppliers in 2016, 2015 and 2014.

Type of fuel	2016		2015		2014	
	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)
Hard coal	5,340	1,141	5,588	1,315	6,197	1,536
Gas (cubic metres ths)	659,542	454	575,198	484	378,949	258
Biomass	868	190	1,215	333	1,236	353
Fuel oil*	41	41	30	38	40	75
<b>TOTAL</b>		<b>1,826</b>		<b>2,170</b>		<b>2,222</b>

\* heavy and light

In 2016 the costs of purchasing primary fuels from providers outside the Group amounted to PLN 1,826 million and were lower by PLN 344 million than in 2015.

Costs of purchase of the main fuels in PGE Capital Group were mostly affected by:

Hard coal

- Lower purchase volume by 4% (PLN -58 million)  
Lower purchase volume of hard coal results from lower generation in branches of PGE GiEK S.A. In addition, lower purchase volume in Opole power plant results from decreased inventories as at the end of 2016, what is caused by lower storage capacities due to ongoing works related to the construction of new units.
- Lower average price by 9% (PLN -116 million)  
Lower hard coal price results chiefly from the situation on the mining market, both domestic and international. It allowed for negotiation of lower contractual prices of hard coal than in 2015.

Biomass

- Lower volume of biomass purchase by 29% (PLN -95 million)  
Lower volume of biomass purchase is a result of lower electricity production in co-combustion with biomass due to the decreased profitability of electricity production in that technology (the impact of new regulations of RES law and low prices of green certificates)).
- Average price lower by 20% (PLN -48 million)

Gas

- Higher purchase volume by 15% (PLN +71 million)  
Increased purchase volume resulted from higher demand for gas fuel at branches of PGE GiEK S.A.
- Lower average price by 18% (PLN -101 million)  
Lower average purchase price is connected with liberalisation of Polish gas market and decline of gas prices on the exchanges.

Fuel oil

- Purchase volume higher by 37% (PLN +14 million)  
Higher purchase volume results from higher use of fuel oil for the needs of trial run of units after overhauls and modernisations in Bełchatów power plant.

- Lower average price by 21% (PLN -11 million), Lower global prices of crude oil and refinery products attributed to the decrease of average purchase price of fuel oil.

In 2016 approximately 70% of the electricity was produced from internally sourced lignite, whose extraction price is fully controlled by PGE Capital Group.

#### 5.4.5. Tariffs

PGE Group companies earn part of their income based on tariffs approved by the President of the Energy Regulatory Office:

- tariffs for the sale of electricity to households (G tariff group);
- tariffs of the distribution companies;
- tariffs for heat.

#### Distribution of electricity

Methodology of and assumptions for tariffs determination were published in the document "Tariffs for the DSO for the year 2016", which was prepared and published by the President of the Energy Regulatory Office.

On December 17, 2015 the ERO President approved the Tariff of PGE Dystrybucja S.A. for electricity distribution services for the period until December 31, 2016.

Tariff came into force on January 1, 2016.

Distribution tariffs for 2016 approved by the President of the Energy Regulatory Office, contributed to changes in average tariff in particular tariff groups (calculated for revenues and volume in a given tariff year) in comparison to year 2015 (including RES fee):

- A tariff group – decrease by 1.31%;
- B tariff group – decrease by 1.96%;
- C+R tariff group – decrease by 5.90%;
- G tariff group – decrease by 1.96%.

Decrease of distribution tariffs takes into account 12% increase in quality fee transferred from the Transmission System Operator tariff that increases regulated revenue but does not affect the result of Distribution segment.

Changes in average tariff in particular tariff groups (not including RES fee) are as follows:

- A tariff group – decrease by 3.21%;
- B tariff group – decrease by 4.21%;
- C+R tariff group – decrease by 6.86%;
- G tariff group – decrease by 2.94%.

The most important change in tariff for 2016 and continued in tariff for 2017 is implementation of quality parameters. It has been settled that the ratios directly impacting the regulated revenue will be following key performance indicators:

- SAIDI – System Average Interruption Duration Index;
- SAIFI – System Average Interruption Frequency Index;
- Connection time;
- Transfer time of metering and billing data („CPD”), which will be included in the quality regulations as of 2018.

Not meeting the levels of ratios indicated by the ERO President will result in penalty of decreasing the regulated revenue through reduction of amount of return on capital in year t+2. In the initial period no rewards are anticipated for achieving better indicators than the required ones.

Impact of quality parameters realized in 2016 will be included in tariff for 2018, and realisation in 2017 will be included in tariff for 2019. In accordance with the assumptions adopted by the ERO, a penalty may not exceed 2% of regulated revenue and value of 15% of return on capital in a given year.

For the first time in line with the ERO guidelines, it has been possible to include in the tariff costs related to construction of energy infrastructure in the traffic lane, or costs related to the permanent exclusion of land from agricultural production and forestry.

In the tariff for 2016 of PGE Dystrybucja S.A. a RES fee was also introduced. That fee – due to the amendments to the RES Law – came into force as from July 1, 2016.

On December 15, 2016 the ERO President approved approved the Tariff of PGE Dystrybucja S.A. for electricity distribution services for the period from January 1, 2017 until December 31, 2017.

Tariff has been effective as of January 1, 2017.

### **Tariff for heat**

Pursuant to the Energy Law, Energy companies holding concessions set tariffs for heat and propose their duration.. Conduction of proceedings concerning heat tariffs approval lies within the competence of regional Branches of the Energy Regulatory Office. Average sale price of heat in PGE increased by approximately 2.3% in comparison to the prices in 2015.

## 6. Management of corporate social responsibility and sustainable development at PGE Group

PGE Group's approach to responsible business is set out in its existing business strategy. This means that PGE focuses on ensuring stable energy supplies to clients whilst minimising its environmental footprint, modernising existing infrastructure, increasing renewable energy share as well as protecting the environment and reclaiming post-mining areas. Activities in the area of responsible business are conducted throughout the entire value chain – from mining and production through to the end recipient of electricity. At each stage of electricity production, distribution and sale, it is important that activities are conducted with care for the surroundings and stakeholders.

PGE Group conducts its activities taking into consideration the surroundings' opinions and needs, which translates into stable development for the company, in line with its corporate values.

Ethical, transparent and fair actions are the basis for responsible business. PGE Group places strong emphasis on rules, standards and values that each employee should be guided by. Dialogue and cooperation with local communities are an important aspect of working towards sustainable development. PGE Group maintains on-going dialogue with partners. Amongst PGE Group's key stakeholder groups are employees, shareholders, public administration, local authorities, industry organisations and NGOs, suppliers, partners, clients and local communities connected with locations where we operate.

For each identified group of stakeholders, PGE Group has a dedicated way of conducting the communications and the dialogue. Along with our every investment project we hold a dialogue with local governments and communities. In 2016 PGE Group began the works on internal principles of co-operation and communication with the local communities.

### 6.1. Involvement in CSR initiatives

- Since 2008, PGE S.A. has taken part in the initiative of the Secretary-General of the United Nations called "Global Compact". Participation in the Global Compact initiative is one of the manifestations of our support for respecting human rights.
- Since 2011, PGE S.A. has belonged to the group of socially responsible companies which are listed on the Warsaw Stock Exchange and form the RESPECT Index portfolio.
- Since 2015 PGE has been the Strategic Partner of Responsible Business Forum.
- PGE S.A. is one of 99 Polish companies that have so far signed the „Commitment by Polish business to sustainable development.” Rules adopted in the Declaration are an expression of engagement in sustainable development and PGE's drive towards achieving objectives set out in the Sustainable Development Vision for Polish Business 2050.
- In 2016, PGE Group participated in work on developing a minimum standard for companies in the area of ethics as part of the Working Group at the Coalition of Ethics Spokespersons at Global Compact Poland Network.
- PGE Group takes part in the proceedings of numerous international organisations and associations. As a member of the Polish Electricity Association (PKEE) PGE belongs to inter alia Central Europe Energy Partners and EURELECTRIC. Being part of the Polish Member Committee of the World Energy Council (WEC) PGE S.A. plays the leading role in shaping policies and indicating directions of activities of this organisation.

PGE S.A. belongs to such Polish energy industry organisations as: the Polish Chamber of Power Industry and Environment Protection, the Polish Association of Energy Trading and the Association of Polish Electrical Engineers. We participate in the proceedings of business organisations, including the Employers of Poland, OECD or Polish Association of Listed Companies. In addition, the companies from the Group participate in industry organisation connected directly with their area of operations (for example in organisations related with renewable energy or nuclear energy). The Group companies are active on local, nationwide, as well as on foreign markets.

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G4

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GC-2

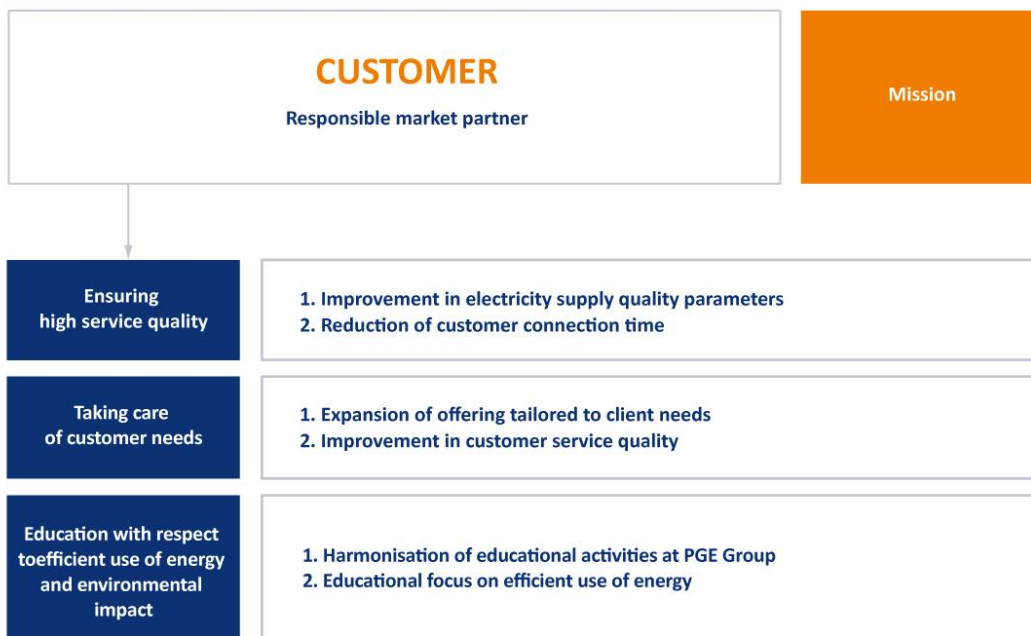
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## CSR Strategy and our commitments



## 6.2. Customer





## Activities in 2016:

### We provide high quality services

PGE Group is continuously working on ensuring the reliability of supplies, including through operating and investing activities in the area of energy distribution. Introducing more and more effective mechanisms reducing electricity supply interruptions is one of the Distribution segment's main goals since it was formed. From January 1, 2016, so called Quality Regulation has become a new regulatory element. According to its assumptions, the DSO's revenue will depend on the quality of service provided and therefore on supply reliability and customer connection time.

EU28 indicator – SAIFI – p. 4.5.1 of this report

EU29 indicator – SAIDI – p. 4.5.1 of this report

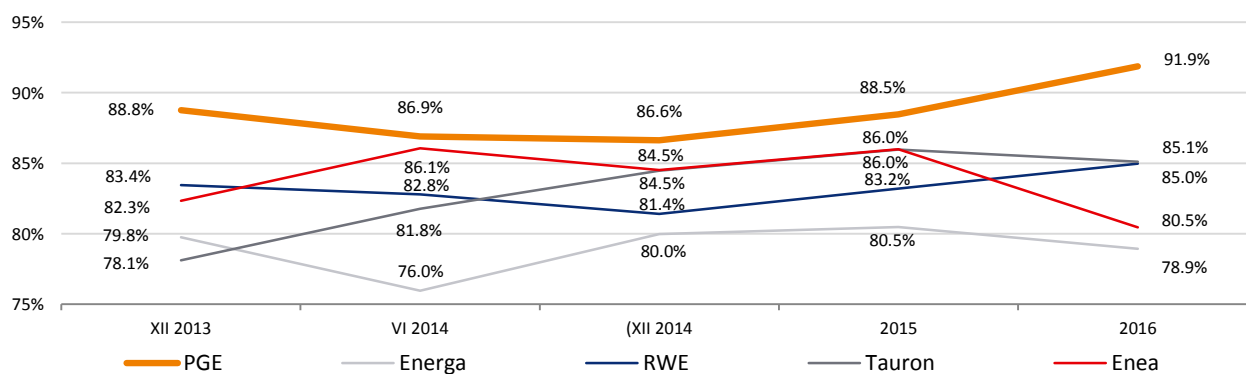
This is the fourth time that PGE Obrót S.A. was awarded the title "Client-Friendly Company." This recognition is a certificate confirming a high quality of service and good relations with clients based on an independent satisfaction survey. The overall score achieved by PGE Obrót S.A. in this year's edition was 92%. This is PGE's best result yet.

In the cyclical surveys, which are carried out via independent research institutes, we asks clients about their level of satisfaction with service. PGE Group enjoys the highest level of customer satisfaction among the major participants of the electricity market in Poland, both in G tariff (households) and C tariff (small and medium enterprises and institutions). PGE Obrót S.A. is a leaders in quick and efficient settlement of customers' issues (Client satisfaction survey after contact with customer service point and Contact Center 2016, iAnswer).

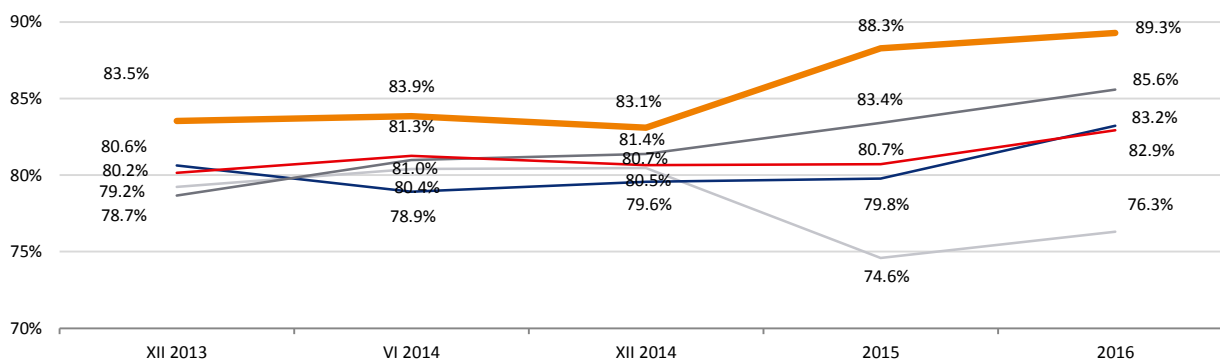
These very good results in G tariff customers service in customer service point are earned for involvement, courtesy and personal culture of the consultants, simple and understandable language and service effectiveness. C-tariff customers also particularly value personal culture of the consultants, simple and understandable language and consultants' involvement. Client-focused approach is also highly rated.

Chart: CSI (Customer Satisfaction Index) – "Customer satisfaction survey" 2016, iAnswer

### G TARIFF CUSTOMERS



## C1 TARIFF CUSTOMERS



### We care for the customers' needs

PGE Group is undertaking initiatives aimed at ensuring high service standards. It spares no effort at providing information about its offering in a transparent and comprehensive manner. The priority is to develop modern solutions enabling communication between the company and its clients. To this end, Supply segment has created programmes for specific client groups:

- Quality Ambassador - in 2016 program was continued. Its aim is to maximally shorten the time that the client waits for service, to provide basic information and assist in completing documents. Since 2016 in selected customer service points of PGE Obrót S.A. clients are welcomed by holohostess – modern holograms who – through the interaction with the customer – help to find a quick answer to the question about our company.
- Contact with customers – phone contact with PGE Contact Center and internet access to services through PGE eBOK makes it possible for clients to deal with a variety of issues at their convenience. A mobile version of application is also available.
- Dedicated e-mail [serwis@gkpgge.pl](mailto:serwis@gkpgge.pl) also facilitates contact with the employees of the customer service point.

Providing services for disabled persons is a customer service priority at PGE Obrót S.A. The Quality Manual, which contains customer service standards, includes a chapter dedicated to the needs of persons requiring special care and a unique approach in handling issues. In 2016 employees at 12 largest customer service points of PGE Obrót S.A. were trained in specialized sign language course thanks to which they learned the basics of the sign language focused on the power sector vocabulary. On the ground of their own experience, they prepared the case studies of most frequent customers' issues.

The confirmation of our high customer service standards are not only the results of customer satisfaction with the cooperation with us, but above all, care about the security of data entrusted to us. In 2016, both in PGE Dystrybucja and PGE Obrót there were no records of a case of loss of customer data.

### We educate in the field of efficient energy use and environmental impact

Together with major electricity suppliers PGE Group supports the "Check your electricity supplier's credentials!" campaign organised by the Polish Association of Energy Trading under the patronage of the President of the Polish Energy Regulatory Office.

Link: <http://www.toe.pl/pl/kampania-edukacyjna>

The customers are encouraged to read a Guidebook of Conscious Customer. The information campaign, carried out jointly with Association of Energy Trading, was supported by media campaign of PGE Obrót warning about unfair market practices of electricity retail sale companies. Via radio, press and internet we educated and informed our clients „how not to be deceived”.

Link: <http://www.pge-obrot.pl/aktualnosci/wszystkie/pge-po-raz-kolejny-przestrzega-przed-nieuczciwymi-sprzedawcami-energii>

In 2016 another campaign was conducted "Let be enlightened – read the agreements carefully”.

Link: <http://www.pge-obrot.pl/aktualnosci/wszystkie/daj-sie-oswiecic-akcja-pge-uswiadamia-klientom-jak-wazne-jest-czytanie-umow>

The project's aim was to aware the customers about the techniques, which are used by the unfair retail sellers of electricity and to make the customers read the agreements before signing. Campaign "Let be enlightened" was awarded with Brown Paperclip in prestigious competition of public relations sector, in social event category.

Link: <http://www.pge-obrot.pl/aktualnosci/wszystkie/kampania-pge-obrot-nagrodzona-brazowym-spinaczem>

PGE Obrót runs educational programmes directed at clients that deal with cost-effective and safe use of electricity at home. Practical tips from the "Education with PGE" series are available on YouTube.

Link: <https://www.youtube.com/playlist?list=PLtvNqGuPyryaku0u8x4tKQp9R6E4ii5gO>

PGE Dystrybucja S.A. organises lessons for pupils from the primary schools on safe use of electricity. The lessons are conducted at schools in cooperation with the police.

### 6.3. Security of supplies



#### Activities in 2016:

##### We reduce our impact on environment

PGE Group undertakes many activities to responsibly and consciously shape the relationship between economic growth and environmental impact. Examples of such activities is the modernization of currently operating power units, as well as the construction of new generating capacities, meeting the highest environmental standards.

Thanks to the modernization work carried out, the company has reduced energy consumption of production processes, both for electricity and heat. In order to reduce CO<sub>2</sub> emissions and other substances into the air, in power plants and CHPs of PGE Group the best possible currently available technology and specialized equipment are applied.

In December 2016, the Management Board of PGE S.A. signed an Environmental Policy Declaration. This is PGE Group's commitment to continuous improvement of activities aimed at protecting and improving the state of the environment, minimising environmental footprint and preventing pollution. This declaration refers to PGE Group's Environmental Policy adopted in 2014.

Detailed description of our approach to the management of environmental activities along with the achieved results is presented in chapters related to activities of the Group and in the Statement on disclosure of non-financial data (appendix 1 to this report), in part dedicated to environmental issues.

### We use diversified energy sources

PGE Group is constantly looking for innovative projects raising the value of the Company. In order to use the full potential of the core business the Group implemented an ambitious investment plan. It is an answer to the current changes in the energy sector. Improved efficiency and Company's value increase is achieved, among others, by the development of conventional energy based on modern technologies. New investments in this area include: construction of units 5 and 6 in Opole Power Plant, Unit 11 in Turów Power Plant and new cogeneration unit in Gorzow CHP.

Thanks to the substantial contribution of wind farms belonging to the PGE Energia Odnawialna S.A. on December 26, 2016, Polish record for wind energy production was beaten. At peak times they delivered to the system almost 500 MWe which represents nearly 10% of all of the installed wind power capacity.

Diversified energy sources includes also seeking solutions to energy storage. One of the key projects in 2016 were the works on application of energy storage technologies involving the conversion of electricity into another energy carrier, i.e. gas fuel ("Power-to-Gas").

### We search innovation inside and outside of our organisation

To effectively manage R&D activities at group-level, PGE has developed the principles for a harmonised approach to identifying, selecting and carrying out projects in PGE Group. In addition, the relevant internal structures responsible for R&D management at the Group and across specific business lines have been established. In 2016 PGE S.A. started a program "Innovation in PGE Capital Group" which aim is to promote innovative initiatives with regard to energy sector in the society and economy.

The "Architects of Innovation" programme, implemented in 2016, is intended to support the creation of a work environment conducive for PGE Group staff to become involved in key innovative activities. The programme's effects include mainly a change in the Group's culture by building knowledge among employees regarding innovation and opportunities to use innovation within the company.

One of the key innovation projects launched in 2016 is E-mobility for cities. The project is intended to design and implement a model of electromobility that is feasible for all stakeholders, in Łódź and Rzeszów. The know-how obtained at these locations will allow implementations in other cities to go forward (see p. 2.2.5).

## 6.4. Building value



## Activities in 2016:

### We operate on the basis of ethical rules

From June 2016, PGE Group's Ethics Code is in effect Group-wide. The Code specifies the values of the organisation and its employees as well as standards of conduct. The Code also outlines the attitudes and behaviours that are expected of all employees and managers. The Code streamlines and gathers in one place rules that should guide employees inside and outside the organisation in contacts with business partners and co-workers.

Link: [http://www.gkpge.pl/media/pdf/Compliance/kodeks\\_etyki\\_final.pdf](http://www.gkpge.pl/media/pdf/Compliance/kodeks_etyki_final.pdf)

In July 2016, a separate organisational structure was set up for compliance – the Compliance Office at PGE S.A., which coordinates activities group-wide. Internal regulations were also drafted that describe the Group's Compliance Management System.

In 2016, PGE Group launched its Academy of Compliance – a series of workshops on PGE Group's Ethics Code for all PGE S.A. employees. The goal of the Academy is to familiarise employees with the values and rules defined in the Code and facilitate the application of the principles contained in the Code on a daily basis. Training on the Ethics Code is also supplemented with workshops on good procurement practices. By the end of 2016, approx. 50% of PGE S.A. employees took part in this training. The Academy will be continued in 2017 across all of the Group's business lines.

In October 2016, PGE Group adopted Good Procurement Practices. This is a collection of the best procurement practices, specifying rules for conducting procurement procedures. All business partners of PGE Group are obligated to abide by these practices. From 2016, all contracts executed by PGE Group contain a mandatory provision obligating business partners, and suppliers in particular, to read and observe PGE Group's Ethics Code.

### We promote employee safety and we care for their satisfaction and involvement

PGE Dystrybucja S.A. invests in the safety of its employees, particularly those operating the power grid. Several years of work led to the implementation and continuation in 2016 of the "Programme for improvement of workplace safety standards and culture," with the main objective being development of a perception of safety at work, raising employee awareness of their decisive impact on maintaining appropriate safety levels and increasing employee involvement in the development of safe working conditions.

At hydro plants belonging to PGE EO S.A. instructions for organising safe work at power equipment and installations are in place. In the area of wind energy, in order to improve and standardise workplace health and safety conditions, all employees involved in operating wind turbines are sent to specialist training according to Global Wind Organisation standards, conducted by accredited training providers.

Meetings for employees were organised at PGE S.A. intended to provide pro-health and cancer prevention education.

"PGE Kwadrans" ("PGE quarter of an hour") – direct leadership communication – is an internal communication system between PGE's employees and management, based on the information cascade concept. It covers the following PGE Group companies: PGE GiEK S.A., PGE Dystrybucja S.A., PGE Obrót S.A., PGE EJ1 sp. z o.o., PGE EO S.A. and PGE Systemy S.A.

PGE Group offer its employees not only interesting professional challenges and extensive trainings package but also comprehensive fringe benefits package. Due to the specifics of the activities of individual business lines, each of the companies separately determines the fringe benefits offered to its employees. The numerous benefits include, private medical care, additional retirement benefits, electricity allowance or additional life insurances.



## 6.5. Economy



### Activities in 2016:

#### We build local partnerships for development and cooperation

Each of the PGE Group companies is actively engaged in a dialogue with local communities. The process of communication and public consultation related to the implementation of key investment projects of PGE GiEK is conducted on a regular basis. It aims to support investment activities by minimizing speculation about the tasks. The Company is also implementing measures to protect the environment, among others, by attaching to the district heating heat consumers in the program KAWKA, which contributes to the improvement of air quality in Gorzów Wielkopolski. At the same time, the company actively supports local initiatives in the areas where it leads strategic projects related to the deposits Złoczew and Gubin.

PGE Dystrybucja S.A. looks after good partnership relations with local authorities, the owners of land where the company is conducting its numerous investments and modernisation work. The company's branches organise "Energy Forums" which are cyclical meetings with local government representatives that are intended to provide the most important information about the development directions for the company and for its branches implementing significant investments and modernisations, as well as their about their presence on the energy market.

PGE Energia Odnawialna S.A. is working closely with local communities and local governments of areas where its production assets are located - both in the area of wind energy and hydropower. Dialogue with the authorities of individual municipalities and support of initiatives of relevance to the local community allow the company to effectively develop local partnership. In 2016, the company has supported the repair of road infrastructure in Commune Czernichów, in an area that runs the first photovoltaic power plant of PGE Group and pumped-storage plant Porąbka - Żar, which was important for the residents of the municipality.

PGE EJ 1 sp. z o.o. is conducting Support Programme for Development of Site Municipalities. Its objective is to strengthen partner relations between the company and the local communities and municipal authorities in the municipalities of Choczewo, Gniewino and Krokowa by supporting initiatives that are of importance to citizens and the development of lands covered by investment activities. In 2016, PGE EJ 1 sp. z o.o. spent PLN 2 million on implementing projects within the Programme. These funds were spent on financing a nuclear energy workshop at the vocational school Zespół Szkół Ponadgimnazjalnych nr 2 in Wejherowo, among other things.

PGE Group's employee volunteering programme "Pomagamy" ("We help") is being implemented since 2014. During this time, nearly 330 employees – PGE volunteers – spent 30 000 hours on social work to support local communities. The volunteers' activities include 110 projects in 55 towns within 12 voivodships. Thanks to PGE's volunteers, 83 rooms were renovated, 23 events integrating local communities were hosted, as well as 16 workshop series developing the passions of kids and youth were conducted, alongside 14 educational programmes dealing with energy, and 9 playgrounds were renovated.

G4

G4-26

G4

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Link: <http://www.gkpge.pl/fundacja-pge/jak-pomagamy/wolontariat-pracowniczy>

### **We support organisations and people in need**

The PGE Foundation has been supporting local communities where PGE Group does business for the past five years. This is one of the pillars of the Group's social engagement.

Link: <http://www.gkpge.pl/fundacja-pge>

Its objective is to ensure the transparency of actions and stimulate involvement among all stakeholder groups. The Foundation pursues philanthropic activities and conducts its own social programmes, including:

- Energy of Innovation – a competition for young scientists, who get an opportunity to develop a business relationship with PGE Group. Innovative solutions from areas in which PGE Group operates, can be submitted for the competition. The first edition attracted about 40 projects, which were analysed and evaluated by internal experts. The winning projects get an opportunity to be implemented.

Link: <http://www.gkpge.pl/fundacja-pge/jak-pomagamy/energia-innowacji>

- Energetic School Backpack – a campaign initiated over ten years ago by energy professionals in Łódź. Since 2015 following companies been participated: PGE Foundation, PGE Dystrybucja S.A., PGE EJ1 sp. z o.o., PGE GiEK S.A. and PGE Systemy S.A. First-grade pupils from families in hardship, picked by local social assistance offices, receive backpacks filled with school supplies. In 2015-2016, the Foundation and PGE Group companies handed out approx. 6 ths backpacks to children in nine voivodships.

Link: <http://www.gkpge.pl/fundacja-pge/jak-pomagamy/energetyczny-tornister>

## 7. Report on activities of the Issuer

Pursuant to art. 55 section 2a of the Accounting Act and § 83 section 7 Regulation of the Minister of Finance on current and periodic information, the Company has prepared the report on activities of PGE Polska Grupa Energetyczna S.A. and of the Capital Group in form of one document. Other required elements of the report on activities of the Companies which are not included in chapter 7, are identical with the ones in the report on activities of PGE Capital Group.

### 7.1. Key financial results of PGE S.A.

Key financial data	Unit	Year ended	Year ended	% change	Year ended	% change
		December 31, 2016	December 31, 2015		December 31, 2014	
Sales revenues	PLN million	10,847	10,929	-1%	9,671	13%
<b>EBIT</b>	<b>PLN million</b>	<b>495</b>	<b>715</b>	<b>-31%</b>	<b>476</b>	<b>50%</b>
<b>EBITDA</b>	<b>PLN million</b>	<b>510</b>	<b>730</b>	<b>-30%</b>	<b>489</b>	<b>49%</b>
Net cash from operating activities	PLN million	874	797	10%	530	50%
Net cash from investing activities	PLN million	-4,931	-1,448	-241%	-320	-353%
Net cash from financial activities	PLN million	3,977	-318	-	581	-
Net earnings per share	PLN	0.85	0.95	-11%	2.92	-67%
<b>EBITDA margin</b>	<b>%</b>	<b>5%</b>	<b>7%</b>		<b>5%</b>	
Shares in subsidiaries	PLN million	29,678	29,469	1%	29,046	1%
Working capital	PLN million	4,491	1,946	131%	3,841	-49%
<b>Net debt/LTM EBITDA*</b>	<b>x</b>	<b>9.17</b>	<b>4.26</b>		<b>1.54</b>	

\*LTM EBITDA – Last Twelve Months EBITDA

Key financial data	Unit	Q1	Q2	Q3	Q4	Q4
		2016	2016	2016	2016	2015
Sales revenues	PLN million	2,821	2,805	2,540	2,681	3,308
<b>EBIT</b>	<b>PLN million</b>	<b>189</b>	<b>149</b>	<b>74</b>	<b>83</b>	<b>186</b>
<b>EBITDA</b>	<b>PLN million</b>	<b>193</b>	<b>153</b>	<b>77</b>	<b>87</b>	<b>189</b>
Net cash from operating activities	PLN million	384	288	99	103	621
Net cash from investing activities	PLN million	-1,743	-525	195	-2,858	-1,405
Net cash from financial activities	PLN million	-19	446	3,601	-51	-1,264
Net earnings per share	PLN	<b>0.63</b>	<b>0.09</b>	<b>0.05</b>	<b>0.08</b>	<b>0.14</b>
<b>EBITDA margin</b>	<b>%</b>	<b>7%</b>	<b>5%</b>	<b>3%</b>	<b>3%</b>	<b>6%</b>



Key financial data	Unit	Q1	Q2	Q3	Q4	Q4
		2016	2016	2016	2016	2015
Shares in subsidiaries	PLN million	29,581	29,637	29,655	29,678	29,469
Working capital	PLN million	2,034	1,251	6,637	4,491	1,946
<b>Net debt/LTM EBITDA*</b>	<b>x</b>	<b>5.45</b>	<b>6.65</b>	<b>2.46</b>	<b>9.17</b>	<b>4.26</b>

\* LTM EBITDA – Last Twelve Months EBITDA

In 2016 **sales revenues** of the Company amounted to PLN 10,847 million compared to PLN 10,929 million in 2015, what means decrease by 1%.

### Sales revenues – decrease by PLN 82 million

Positive impact	<ul style="list-style-type: none"> <li>increased revenues from sale of electricity PLN 538 million, including due to higher volume of sales by PLN (+) 884 million and lower average sale price by PLN (-) 345 million</li> <li>increased revenues from sale of gas and gas transport services PLN (+) 130 million mainly due to increased trading volumes of gas</li> <li>increased revenues from support services PLN (+) 92 million</li> </ul>
Negative impact	<ul style="list-style-type: none"> <li>decreased revenues from sale of certificates PLN (-) 588 million, mainly resulting from lower volume of sale of green certificates and ceasing sale of red, yellow and purple certificates</li> <li>decreased revenues from sale of CO<sub>2</sub> emission rights PLN (-) 219 million, mainly due to lower prices</li> <li>decreased revenues from the services under the agreement for Commercial Management of Generation Capacities PLN („ZHZW”) and Trading and Technical Operator („OHT”) service and Balancing Group service PLN (-) 35 million</li> </ul>

#### 7.1.1. Revenues by geographical areas

Table: Breakdown of the Company's income from continuing operations, by geographic area, in 2014-2016.

in PLN million	Total revenues							
	2016	% share	2015	% share	% change	2014	% share	% change
Domestic market	10,821	100%	10,910	100%	-1%	9,660	100%	13%
EU member states	25	0%	19	0%	32%	11	0%	73%
Other countries	0	0%	0	0%	0%	0	0%	0%
<b>Total</b>	<b>10,847</b>	<b>100%</b>	<b>10,929</b>	<b>100%</b>	<b>-1%</b>	<b>9,671</b>	<b>100%</b>	<b>13%</b>

In 2014-2016 the Company generated revenues mainly on the domestic market. Increase in revenues realised in EU member states in 2016 compared to 2015 resulted mainly from revenues from sales of natural gas.

**Cost of goods sold** in 2016 amounted to PLN 10,157 million, what means increase by approx. 1.4 in comparison to PLN 10,012 million in 2015. Increase resulted from higher volume of sales, mainly related to electricity trading.

**Gross profit on sales** in 2016 amounted to PLN 690 million compared to PLN 917 million in 2015, what means decrease by approx. 25%. Decline is mainly a result of lower result on electricity sales by PLN 287 million, i.e. PLN 124 million in 2016 vs PLN 411 million in 2015. Decrease resulted mainly from decline of price of electricity sold to PGE Obrót in July 2016 by PLN 9/MWh, in order to improve the financial standing of the company. At the same time, the purchase prices of electricity we rat a level slightly lower than in 2015.

In 2016 **distribution and selling expenses** of PGE S.A. amounted to PLN 46 million and were higher by approx. 24 % in comparison to 2015. Increased distribution and selling expenses resulted mainly from higher fees for transmission of natural gas and higher commissions to PGE Dom Maklerski S.A. which was used as broker for sales of energy and natural gas. Higher fees for transmission of natural gas result from increased trading volume and costs of obtaining transmission capacities in import.

In 2016 **general and administrative expenses** amounted to PLN 142 million, i.e. decrease by 13 % in comparison to 2015. The decline is connected with the reversal of provision for Voluntary Leave Program, lower costs of marketing activities and lower costs of external service.

**Result on other operating activities** in 2016 amounted to PLN (-) 7 million, and is lower by PLN (-) 6 million in comparison to 2015. Main reason of the lower result was donation granted to the Polish National Foundation in amount of PLN 7 million that was recognised in other operating expenses.

Table: other operating activities

in PLN million	2016	2015	% change	2014	% change
Other operating revenues	1	8	-88%	10	-20%
Other operating expenses	8	9	-11%	11	-18%
<b>Result on other operating activities</b>	<b>-7</b>	<b>-1</b>	<b>-600%</b>	<b>-1</b>	<b>0%</b>

Chart: Key changes of EBITDA in PGE S.A.



The Group's **financial revenues** in 2016 amounted to PLN 1,179 million and was by PLN 16 million higher than in 2015.

Table: Financial operations

in PLN million	2016	2015	% change	2014	% change
Financial revenues	1.439	1.285	12%	5.543	-77%
including:					
Dividends from PGE Capital Group companies	1.063	1.050	1%	5.273	-80%
Interest from bonds, cash, deposits and loans granted	252	208	21%	235	-11%
Other, including: profit from valuation of derivatives, forward transactions for CO2 natural gas	124	27	359%	35	-23%
Financial expenses	260	210	24%	542	-61%
including:					
Interest from bank loans and advances and bonds issues	226	186	22%	99	88%
Impairment loss	23	0	-	386	-
Other, including: loss from valuation of derivatives and loss on sale of shares of PGE EJ	11	24	-54%	57	-5%
<b>Result on financial operations</b>	<b>1.179</b>	<b>1.075</b>	<b>10%</b>	<b>5.001</b>	<b>-79%</b>

Interest from bonds, cash, deposits and loans granted in amount of PLN 252 million are higher than in the previous year by PLN 44 million mainly as a result of higher level of purchased bonds issued by the Group companies and increased value of loans granted to PGE Group companies.

Other financial revenues amounted to PLN 124 million and are higher by PLN 97 million than in the previous year. It results mainly from partial reversal in 2016 of the impairment loss on bonds of Autostrada Wielkopolska S.A. in amount of PLN 89 million and higher foreign exchange gains by PLN 13 million.

Interests from bank loans and advances in amount of PLN 226 million are higher by PLN 40 million than in 2015 as a result of higher indebtedness of the Company than in 2015.

Impairment loss in amount of PLN 23 million includes write-off of shares in PUP Eltur Serwis Sp z o.o.

Other financial expenses amounted to PLN 11 million and are lower by PLN 13 million than in 2015. It results mainly from the loss on sale of PGE EJ1 in amount of PLN 14 million recognized in 2015.

As a result of the factors discussed above, the **gross profit** of PGE S.A. in 2016 amounted to PLN 1,674 million compared to PLN 1,790 million in 2015.

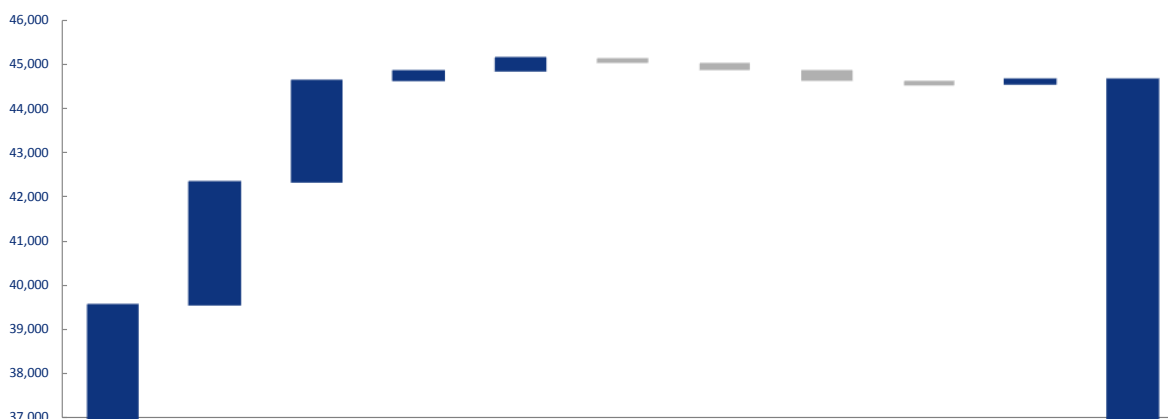
In 2016 **gross profit margin** of the Company (gross profit to total sales revenues) amounted to 15% compared to 16% in 2015.

**Net profit** of PGE S.A. in 2016 amounted to PLN 1,598 million compared to PLN 1,768 million in 2015.

**Total comprehensive income** of the Company amounted to PLN 1,764 million in 2016 compared to PLN 1,810 million in 2015.

## 7.1.2. Statement of financial position

Chart: Key changes in assets [in PLN million]



Assets at December 31, 2015	Bonds and loans	Deposits	Shares in subsidiaries	Derivatives	Inventories	Trade receivables	Advances for supplies	Cash and cash equivalents	Other	Assets at December 31, 2016
<b>Change</b>	<b>2,787</b>	<b>2,299</b>	<b>209</b>	<b>315</b>	<b>-115</b>	<b>-143</b>	<b>-266</b>	<b>-81</b>	<b>106</b>	
Assets at December 31, 2015	39,540	6,083	0	29,469	50	191	666	305	2,013	763
Assets at December 31, 2016	8,870	2,299	29,678	365	76	523	39	1,932	869	<b>44,651</b>

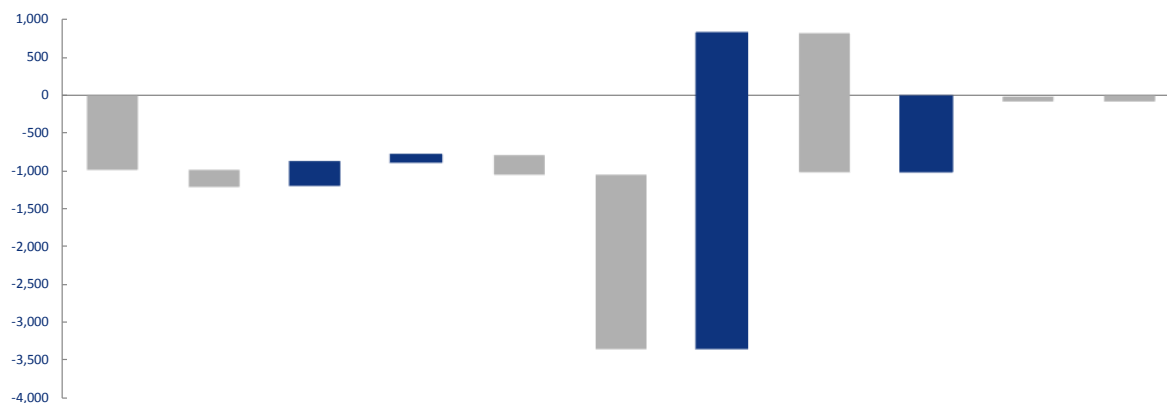
Chart: Key changes in equity and liabilities [in PLN million]



Equity and liabilities at December 31, 2015	Share capital	Loans and borrowings, bonds, cash pooling	Derivatives	Trade liabilities	Provision for employee benefits and similar	Other	Equity and liabilities at December 31, 2016
<b>Change</b>	<b>1,184</b>	<b>4,087</b>	<b>-54</b>	<b>-119</b>	<b>-3</b>	<b>16</b>	
Equity and liabilities at December 31, 2015	39,540	33,454	5,471	77	303	55	180
Equity and liabilities at December 31, 2016	34,638	9,558	23	184	52	196	<b>44,651</b>

### 7.1.3. Statement of cash flows

Chart: Net change in cash [in PLN million]



	Net change in cash 2015	EBITDA	Change in working capital*	Income tax paid	Purchase/buyout of bonds from PGE Group companies	Deposits over 3 months	Loan drawings, bonds issue	Cash pooling-related revenues and expenses	Dividends paid to shareholders	Other	Net change in cash 2016
<b>Change</b>		-220	302	100	-255	-2,290	4,148	-1,826	991	-61	
Net change in cash 2015	-969	730	84	-104	-2,396	0	500	835	-1,458	840	
Net change in cash 2016		510	386	-4	-2,651	-2,290	4,648	-991	-467	779	-80

\*Part of working capital adjusting cash flows from operating activities

#### 7.1.4. Net debt of PGE S.A. and main financial ratios

Table: Company's net debt as at December 31, 2016, December 31, 2015 and December 31, 2014.

in PLN million	As at December 31, 2016	As at December 31, 2015	As at December 31, 2014
Cash on hand and cash at bank	331	611	830
Overnight deposits	1	2	7
Short-term deposits	1,600	1,400	2,151
<b>Cash and cash equivalents</b>	<b>1,932</b>	<b>2,013</b>	<b>2,988</b>
Investments held until maturity date (short-term deposits)	2,299	0	0
Short-term loans and debt securities (PGE Group)	21	30	69
Loans and receivables - cash pooling	628	320	-
<b>Cash at the Company's disposal</b>	<b>4,880</b>	<b>2,363</b>	<b>3,057</b>
Current loans and borrowings	207	74	58
Bonds issued - current	24	24	-
Short-term liabilities - cash pooling	473	1,157	0
Non-current loans and borrowings	7,878	3,240	2,754
Bonds issued – non-current	976	976	1,000
<b>Gross financial debt (short and long-term)</b>	<b>9,558</b>	<b>5,471</b>	<b>3,812</b>
<b>Net financial debt</b>	<b>4,678</b>	<b>3,108</b>	<b>755</b>

Table: Key financial ratios

Ratios	Year ended December 31, 2016	Year ended December 31, 2015	Year ended December 31, 2014
<b>Return on sales ROS (in %)</b> Net financial result x 100% / Net revenues	15%	16%	56%
<b>Return on equity ROE (in %)</b> Net financial result x 100% / equity	5%	5%	16%
<b>Debtor's days</b> Average trade receivables (gross) x 365 days / net revenues	20	21	26
<b>Debt ratio (in %)</b> Liabilities x 100% / total equity and liabilities	22%	15%	11%
<b>Current ratio</b> Current assets / short-term liabilities	5	2	9

Financial results achieved by PGE S.A. and unused credit limits ensure funds sufficient for financing of current operating activities of the Company.

In order to optimise the cash flows of the Group companies, improve the liquidity management efficiency and secure short-term financing of the entities from the Group, PGE Capital Group introduced one-way real cash-pooling, where PGE S.A. acts as a pool leader i.e. entity responsible for coordination of cash pooling in the Group. The cash pooling agreements were signed on December 22, 2014.

## 7.2. Key operational figures of PGE S.A.

Table: Volume of electricity sales (in TWh).

Sales volume	2016	2015	% change	2014	% change
Sale of electricity to the Group companies	42.0	39.4	7%	38.5	2%
Sale of electricity on the power exchange and in bilateral transactions outside the Group	3.5	2.7	30%	1.0	170%
Sale within the balancing group and on the balancing market	3.4	2.0	70%	1.2	67%
<b>Total electricity sales</b>	<b>48.9</b>	<b>44.1</b>	<b>11%</b>	<b>40.7</b>	<b>8%</b>

Sales volume	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
Sale of electricity to the Group companies	10.8	10.2	10.3	10.7	10.0
Sale of electricity on the power exchange and in bilateral transactions outside the Group	0.9	0.8	0.9	0.9	0.9
Sale within the balancing group and on the balancing market	0.6	1.1	1.0	0.7	0.5
<b>Total electricity sales</b>	<b>12.3</b>	<b>12.1</b>	<b>12.2</b>	<b>12.3</b>	<b>11.4</b>

In comparison to the previous period, in 2016 a growth was observed in volumes of electricity sold to PGE Capital Group – mainly to PGE Obrót S.A., what was connected with the higher demand of that company for electricity.

Volume of electricity sale within the balancing group and sales outside the Group also increased. Increased sale outside the Group resulted from higher contracting on OTC market and increase in resale on the Polish Power Exchange in order to balance the portfolio.

Table: Volume of certificates sales.

[TWh]	2016	2015	% change	2014	% change
Green certificates	0.3	2.6	-88%	5.3	-51%
Yellow certificates	0.0	1.8	-	0.0	-
Red certificates	0.0	5.5	-	0.4	1.275%
Purple certificates	0.0	0.0	-	0.1	-

[TWh]	Q1	Q2	Q3	Q4	Q4
	2016	2016	2016	2016	2015
Green certificates	0.1	0.1	0.1	0.0	0.1
Yellow certificates	0.0	0.0	0.0	0.0	0.4
Red certificates	0.0	0.0	0.0	0.0	0.5
Purple certificates	0.0	0.0	0.0	0.0	0.0

2016 brought the decline in sales volume of green certificates by 88% and the ceasing of trade of yellow, red and Purple certificates. It resulted from change of the certificates trading model in PGE Group in half of 2015 that assumes that purchase of certificates in order to fulfil redemption obligation is realised directly by PGE Obrót S.A. Prior to the introduction of the change, part of bilateral contracts was realized through PGE S.A. Certificates purchase agreements in bilateral transaction for the needs of PGE Obrót S.A. were successively modified and currently only one agreement for purchase of green certificates is still valid and the certificates will be sold to PGE Obrót S.A. during year 2017.

Table: Volume of CO<sub>2</sub> emission rights sales

[t million]	2016	2015	% change	2014	% change
Sale of EUA to the Group	41.8	35.3	18%	33.0	7%
Sale of CER to the Group	0.0	0.0	-	2.7	-
<b>Total CO<sub>2</sub> emission rights sales to the Group</b>	<b>41.8</b>	<b>35.3</b>	<b>18%</b>	<b>35.7</b>	<b>-1%</b>
<b>CO<sub>2</sub> emission rights sales outside PGE Group*</b>	<b>3.5</b>	<b>19.4</b>	<b>-82%</b>	<b>14.6</b>	<b>33%</b>

\* The Company is also engaged in trading of CO<sub>2</sub> emission rights within so called trading portfolio on the exchange market and in bilateral transactions outside the PGE Capital Group. Result on those transactions is recognised by the Company in financial revenues and expenses.

[t million]	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sale of EUA to the Group	7.7	13.5	10.1	10.5	22.0
Sale of CER to the Group	0.0	0.0	0.0	0.0	0.0
<b>Total CO<sub>2</sub> emission rights sales to the Group</b>	<b>7.7</b>	<b>13.5</b>	<b>10.1</b>	<b>10.5</b>	<b>22.0</b>

CO<sub>2</sub> emission rights trading for the Group's redemption needs is pursued by PGE S.A. under the agreement for Commercial Management of Generation Capacities. Deliveries of the allowances for PGE GiEK S.A. were matched with the realized electricity sales volume within current contracting for 2016 and subsequent years – in accordance with the adopted trading strategy.

In 2016 volume of sales of CO<sub>2</sub> emission rights increased by 18%. It results from the fact that in the last year amount of free allowances for the PGE Group declined, what forced increased purchase of CO<sub>2</sub> emission rights.

Table: Volume of natural gas sales

[TWh]	2016	2015	% change	2014	% change
Sale of natural gas to the Group	4.6	2.7	70%	0.0	-
Sale of natural gas outside the Group	1.7	1.3	31%	0.6	117%
<b>Total natural gas sales</b>	<b>6.3</b>	<b>4.0</b>	<b>58%</b>	<b>0.6</b>	<b>567%</b>

[TWh]	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q4 2015
Sale of natural gas to the Group	2.1	1.3	0.5	0.7	1.9
Sale of natural gas outside the Group	0.3	0.2	0.3	0.9	0.3
<b>Total natural gas sales</b>	<b>2.4</b>	<b>1.5</b>	<b>0.8</b>	<b>1.6</b>	<b>2.2</b>

In 2016 sale of natural gas to companies of PGE Capital Group increased by 70% and sales to external contractors outside PGE Group by 31%. This is a result of growth in the number of off-takers of gas in portfolios of PGE S.A. and PGE Obrót and higher volume of sales to the Group, mainly for the needs of generating units at Lublin Wrotków CHP, Rzeszów CHP and Gorzów CHP. A Balancing Group operated by PGE S.A. has been also set up - and involves gas trading.

### 7.3. Ownership structure

State Treasury is a main shareholder of PGE S.A. State Treasury holds 1,072,984,098 Company's ordinary shares with nominal value of PLN 10.25 each, representing 57.39% of company's share capital and entitling to perform 1,072,984,098 votes at the general meeting of the Company. State Treasury stake represents 57.39% of the total number of votes.

State Treasury is the only shareholder holding at least 5% of the Company's shares (more information on the ownership structure in p. 8.4.2 of this report).



## 7.4. Dividend policy

The dividend policy to be followed by the Company's Management Board will comprise of paying dividends consistent with the level of the Company's development and to allow for the maintenance of a reasonable level of financial liquidity.

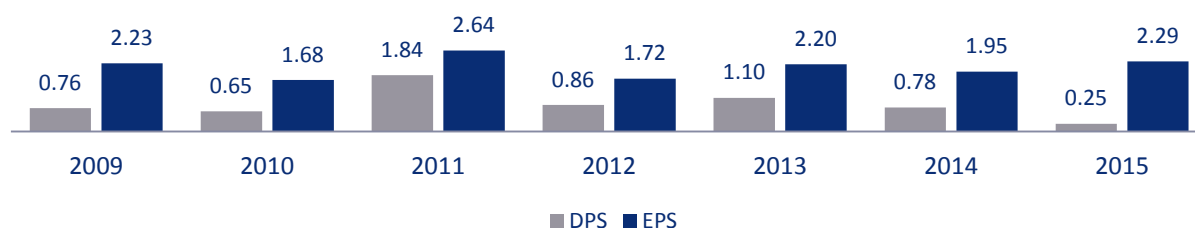
Current dividend policy assumes a dividend for shareholders at the level of 40-50% of the consolidated net profit adjusted by the value of impairment loss. The Management Board of PGE S.A. reserves that the amount for each individual dividend distribution will depend, in particular, on the Company's overall indebtedness, expected capital expenditures and prospective acquisitions. The dividend policy will be verified periodically by the Management Board of PGE.

The above dividend policy was adopted in August 2015.

Management Board's proposal with regard to the distribution of profit for 2015 amounted to PLN 0.92 per share. The Ordinary General Meeting of the Company ("OGM") of June 28, 2016, on request of shareholder the State Treasury, adopted a resolution to allocate part of the net profit of the Company for 2015 for dividend in amount of PLN 0.25 per share. The request was submitted during the OGM and was motivated by implementation by the Company of strategic development investments and modernisation and replacement investments of material value.

As at the date of the OGM, the dividend applied to 1,869,760,829 shares and the total value of the dividend amounted to PLN 467,440,207.25. The OGM determined September 23, 2016 as the dividend date. Dividend was paid on October 14, 2016.

Chart: Amounts of per share data - dividends and earnings.



## 7.5. Rating

PGE S.A. holds ratings assigned by two rating agencies: Fitch Ratings Ltd. ("Fitch") and Moody's Investors Service Limited ("Moody's").

	Moody's	Fitch Ratings
Long-term company rating	Baa1	BBB+
Rating outlook	stable	stable
Date of rating assignment	September 2, 2009	September 2, 2009
Date of the latest rating confirmation	November 2, 2016.	August 5, 2016
Poland long-term rating	A2	A-
Rating outlook	negative	stable

In 2016 both rating agencies: Moody's and Fitch affirmed long-term rating of PGE S.A. at investment grade respectively at Baa1 and BBB+, both with stable outlook. Both agencies underline affirmation results from strong market position of PGE in the Polish electricity sector. Fitch in its latest release indicates that PGE S.A. is one of the least leveraged companies in Europe, but growing capital expenditures will increase funds from operations adjusted net leverage to approximately 2x by 2017 and close to 3x by 2020 from 0.3x net leverage at the end of December 2015. Moody's in its latest release also mentioned the implementation of the large-scale investment program of the Company that may worsen the financial profile of PGE S.A.

Ratings assigned by both agencies confirm PGE's long-term credibility on the capital and credit markets.

## 7.6. Shares of PGE S.A. and its quotations

PGE shares are listed in the continuous trading system on the Main Market of Warsaw Stock Exchange ("WSE"). PGE has the largest market capitalization among Polish companies from power sector listed on WSE. PGE shares are included in the most important WSE indexes: WIG20 – the index of the largest and most liquid companies, WIG – the index of all companies from the Main Market, and WIG Energia – the index of power sector companies, as well as the foreign index MSCI Poland. PGE shares since 2011 have been also included in the index of socially responsible companies – RESPECT Index.

Chart: Key events on the background of stock quotes of PGE in 2016 (PLN).



Chart: Quotes of PGE share price in relation to the WIG, WIG - ENERGY and RESPECT Index.



All Company shares are bearer shares. Shares are not privileged, however the Company's Statute provides for special rights for the State Treasury, e.g. with respect to the appointment of members of the Supervisory Board. (more information on special powers for the State Treasury in section 8.4.1 of this report).

Table: Key data on PGE shares

Specification	2016	2015	2014
Turnover (PLN)	8,612,913,380	10,214,951,620	13,695,334,430
Average number of transactions per session (pcs)	3,061	2,731	2,784
Maximum price during the year (PLN) <sup>1</sup>	14.39	21.43	22.85
Minimum price during the year (PLN) <sup>1</sup>	9.06	12.06	15.60

<sup>1</sup> Stock prices relate to closing  
Source: InfoStrefa and Bloomberg

## 7.7. Investor relations of PGE S.A.

Year 2016 was an important time, full of significant developments for the Company's current activity and its future. PGE S.A. has made every effort to provide investors with the access to relevant information on the scope and on time enabling the proper assessment of their impact on its future.

In 2016, the Company has taken a number of actions aimed at good communication with the capital markets and investors.

The Company filled with information obligations with regard to periodic reporting and release of information being price-setting. In addition, information policy of the Company included:

- release of estimated financial results of the Group. During the reporting process at the moment of reaching a low risk level of changes in the reported financial results, the Company was taking decision to publish estimates of financial data covering the most important for the investor financial data, including Group and segments' EBITDA and information about one-off events which occurred in the Company.
- monthly release of basic operational data of the Group.

In 2017 the information policy of the Company will include release of estimated financial and operating results in the periods prior to quarterly reporting and according to the schedule available on the website.

The Company within its transparent communication with investors operates a website and publishes additional educational or historical documents. For the first time in 2016 the Company published the presentation "PGE BIG BOOK" being a comprehensive "equity story" presentation addressing the key issues raised by investors in the current communication and relating to the market environment, sector regulations and finally the Company itself. On the website it has also been published a file with detailed financial and operational data of the Group in a format allowing edition and independent analysis. At the time of publication it contains quarterly historical data for recent years and takes into account the most important data from the reports of the Company. Time series of publications is consistently refilled after successive periodic results.

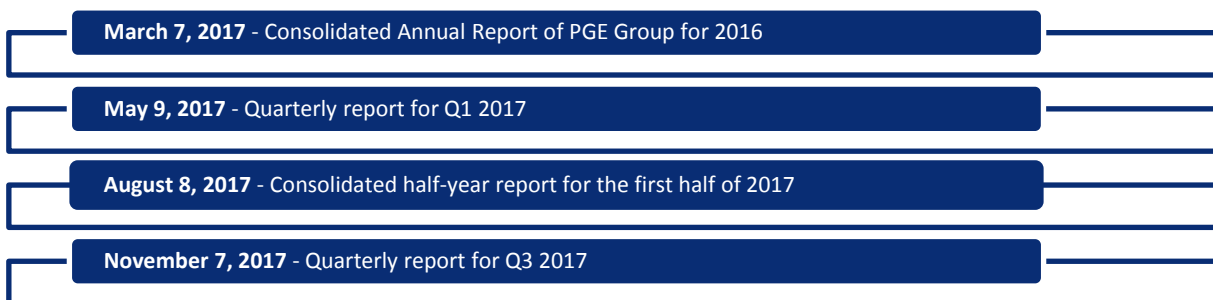
Underlining the Company's commitment to sustainable development, the Company for the first time has published an Integrated Report prepared based on the Reporting Guidelines of the Global Reporting Initiative ("GRI") version G4 level Core based on data for the year 2015.

Transparent information policy of the Company has been recognized by the investors. PGE was ranked first in this year's ranking of the best investor relations in Central and Eastern Europe by Extel - the most representative sector ranking in Europe.

G4

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## 7.8. Reporting calendar of PGE Capital Group and PGE S.A.



## 8. Statement on implementation of Corporate Governance

This Statement on implementation of corporate governance in PGE S.A. in 2016 was prepared on the basis of § 91 section 5 point 4 of the Regulation of the Minister of Finance dated February 19, 2009 on current and periodic information published by issuers of securities and on conditions under which such information may be recognized as being equivalent to information required by the regulations of law of a state which is not a member state (Dziennik Ustaw of 2014, item 133 as amended).

### 8.1. Corporate governance principles which the Company was obliged to follow in 2016

In 2016 PGE S.A. was obliged to follow the corporate governance principles described in "Best Practices of WSE Listed Companies" (further: Best Practices). Best Practices were adopted with the Resolution of the Board of the Warsaw Stock Exchange ("WSE") no. 26/1413/2015 on October 13, 2015, which came into force on January 1, 2016 and should be obliged by PGE starting from that date.

Management Board of PGE S.A. approved Best Practices for application in the Company by the resolution no. 19/03/2016 of January 19, 2016. The Management Board of the Company acts with due diligence to obey the principles of Best Practices.

For the full text of the Best Practices, see the official corporate governance website of the Warsaw Stock Exchange: [www.corp-gov.gpw.pl](http://www.corp-gov.gpw.pl).

#### 8.1.1. Information on exceptions in application of the corporate governance principles

In 2016 the Company applied the Best Practices with the exception of 2 recommendations IV.R.2, VI.R.1. and 2 detailed principles: I.Z.1.15, III.Z.2

- I. Recommendation IV.R.2 in Chapter IV „General Meeting, Shareholder Relations” on enabling its shareholders to participate in a General Meeting using electronic communication means.

The Management Board of PGE twice proposed to shareholders introduction to the Statute and to the Regulations of the General Meeting provisions enabling organization of general meetings in the way prescribed in Code of Best Practices. Such proposal was not approved by shareholders during Ordinary General Meeting of May 30, 2012 and during Extraordinary General Meeting of June 27, 2013. The Management Board of PGE does not exclude adoption of the above-mentioned rule in future.

In opinion of PGE's Management Board, non-compliance with the above rule will not affect the reliability of the information policy and does not cause a risk of limitations or difficulties for shareholders to participate in general meetings. The Company provides real-life broadcast of the general meeting.

- II. Recommendation VI.R.1 in Chapter VI „Remuneration” on having remuneration policy and principles of determining remuneration for company's governing bodies and key managers.

In 2016 the Company did not have an uniform remuneration policy and principles determining the remuneration. The Company and its subsidiaries are bound to apply the provisions of various collective agreements, which significantly restricts the freedom of designing the remuneration policy.

Until December 14, 2016 the remuneration of the members of the Supervisory Board was paid in amount of one average salary in the enterprises sector, without payments from the profit in the fourth quarter, in accordance with the Act on remuneration of managers of certain legal entities. On December 14, 2016, the Extraordinary General Meeting of the Company, convened on request of the Minister of Energy representing the State Treasury, on the ground of provisions of the Act of June 9, 2016 on the principles of determining the amount of remuneration for persons managing certain companies (Dziennik Ustaw of 2016, item 1202 as amended) adopted resolution concerning the principles of determining the amount of remuneration for members of the Supervisory Board, in which the monthly remuneration of members of the Supervisory Board was set as a product of the average remuneration in the business sector exclusive of profit-based bonuses in the fourth quarter of the previous year as announced by the President of the Central Statistical Office of Poland and the following factor: 1.7 (for the chairperson of the Supervisory Board), 1.5 (for the other members of the Supervisory Board) (resolution no. 5 of the Extraordinary General Meeting of PGE). Above mentioned General Meeting of the Company adopted resolution concerning the principles of determining the amount of remuneration for members of the Management Board (resolution no. 4 of the Extraordinary General Meeting of PGE).

- III. Detailed principle I.Z.1.15 in Chapter I „Disclosure policy, Investor Communicationsi” concerning the diversity policy applied by the Company applicable to the company's governing bodies and key managers.

On January 25, 2016 PGE published on its website, in Corporate Governance section, a explanation on lack of diversity policy. Therefore it is considered that, the principle is applied through publishing the information of lack of diversity policy and PGE is not obliged to publish report required by § 29 section 3 of the Regulations of Warsaw Stock Exchange.

- IV. Detailed principle III.Z.2. in Chapter III „Systems and internal functions” concerning subordination of persons responsible for risk management, internal audit and compliance directly to the president of other member of the Management Board.

According to current organisational structure, persons responsible for risk management, internal audit and compliance report directly to the member of the Management Board. This principle in the first half of 2016 i.e. until July 1, 2016 was not applied in case of person responsible for compliance.

#### **8.1.2. Description of the basic characteristics of internal control systems and risk management systems used in the Company during preparation of the financial statements and consolidated financial statements**

The Company applies the following mechanisms of internal control and risk management during preparation of the financial statements: internal procedures which regulate the process, management mechanisms for information system used for financial recording and reporting with protection mechanisms, principles of supervision over preparation of financial statements, principles of verification and evaluation of reports, internal audit, corporate risk management and other elements of control.

EU IFRS-compliant accounting policy of the PGE Capital Group is binding for the companies using IFRS for preparation of their statutory financial statements and at preparation of the IFRS-compliant reporting packages for the consolidation. Before every reporting period the companies subject to consolidation receive detailed guidelines from PGE S.A. with regard to method and closing date of the accounting books, preparation and submitting the reporting packages and template updated for a given period.

The Company keeps accounting books in the integrated information system. The system ensures division of competencies, coherent entries in the books and control between the general ledger and subsidiary ledgers. The system can be modified to ensure adequacy of the technical solutions to the changing accounting principles and legal standards.

Director of the Reporting and Tax Department of the Company is responsible for the preparation of stand-alone and consolidated financial statements. The management of the particular companies are responsible for preparation of the reporting packages under consolidation.

Statutory auditors perform an independent assessment of reliability and correct preparation of the financial statements of PGE S.A. and financial statements of companies subject to consolidation.

The PGE Group has implemented a multi-stage process of approving financial statements with the participation of Supervisory Boards. Stand-alone and consolidated financial statements of PGE S.A. are evaluated by the Supervisory Board. The Audit Committee operates within the Supervisory Board and is responsible, among others, for reviewing annual financial statements of the Company. Stand-alone financial statements of the companies subject to consolidation are evaluated by the Supervisory Boards of such companies. The financial statements are approved by the General Meetings of the companies.

The Company has implemented internal audit to perform an independent and objective evaluation of the risk management and internal control systems. The internal audit operates on the basis of the internal audit regulations based on the international standards of professional internal audit practices. The audit performs scheduled and ad hoc auditing tasks both in the parent companies and companies within the Group. Audit results are reported to the Management Board of PGE S.A. and to the Audit Committee.

As part of the controlling activities, periodical management reporting is evaluated for reasonable information, in particular in the context of analysis of deviations from assumptions in the financial plans.

#### **8.1.3. Shareholders with a significant stake**

Shareholders holding directly or indirectly by subsidiaries at least 5% of the total votes at Company's General Meeting are presented in p. 8.4.2 of the foregoing report.

#### **8.1.4. Shareholders with special control powers**

Company shares are ordinary, bearer shares listed at the regulated market of the Warsaw Stock Exchange. Company shares are not privileged.

Despite the fact that the Company shares are not privileged, the Statutes provides for special powers for the State Treasury as long as it is the shareholder of the Company. In accordance with statutory provisions, the State Treasury may demand in writing that the Management Board convene the General Meeting, demand that certain matters be placed on the agenda, submit draft resolutions pertaining to matters placed on the agenda of the General Meeting or matters which may be placed on the agenda.

The State Treasury is authorised to appoint one member of the Supervisory Board by means of a written statement submitted to the Management Board of the Company. Such nomination or dismissal takes effect from the date on which the relevant notification is delivered to the Management Board and does not require a General Meeting resolution. The State Treasury may exercise this power regardless of the voting right when appointing other members of the Supervisory Board.

On the ground of the Statutes, the State Treasury holds special right with regard to selection of the Supervisory Board members. Selection of half of members of the Supervisory Board, appointed by the General Meeting, shall be elected from among persons indicated by the State Treasury. The Supervisory Board selects the Chairperson of the Supervisory Board from among its members wherein the Chairperson of the Supervisory Board shall be elected from among persons indicated by the State Treasury. This State Treasury's right is valid until its stake in the Company falls below 20%.

#### **8.1.5. Limitations regarding exercise of the voting rights from the existing shares**

As from June 29, 2011 the Statutes of the Company roku provide the limitations regarding exercise of the voting rights in shares. The voting right of shareholders shall be limited in such manner that at the General Meeting, none of them may exercise more than 10% of the total number of votes existing in the Company as at the date of holding the General Meeting, subject to the provision that for the purposes of determining the obligations of entities acquiring considerable blocks of shares as provided for in the Act on public offerings, conditions for introducing financial instruments to an organised trading system and public companies of July 29, 2005, such limitation of the voting right shall be regarded as non-existent.

The above limitation does not apply to the State Treasury and shareholders acting with the State Treasury on the basis of agreements concerning the joint exercise of the voting right related to shares.

In addition, for the purposes of limiting the voting right, votes belonging to shareholders between whom there exists a relationship of domination or dependence (Shareholders Group) shall be cumulated; in the event that the cumulated number of votes exceeds 10% (ten per cent) of the total number of votes in the Company, it shall be subject to reduction.

The accumulation of votes shall consist in the summing of the number of votes remaining at the disposal of shareholders belonging to a Shareholders Group.

The reduction of votes shall consist in decreasing the total number of votes in the Company to which shareholders belonging to a Shareholders Group are entitled at the General Meeting to the threshold of 10% (ten per cent) of the total number of votes in the Company.

The accumulation and reduction of votes together with the detailed description of the shareholders between whom there exists a relationship of domination or dependence are governed by the principles included in the Company's Statutes.

Moreover, each shareholder who intends to participate in the General Meeting, directly or by proxy, shall be obliged, without a separate call, to notify the Management Board or the Chairperson of the General Meeting of the fact that he holds, directly or indirectly more than 10% (ten per cent) of the total number of votes in the Company. A person who has failed to comply or has complied improperly with that obligation to provide information may exercise the voting right exclusively from one share until the remedy of such failure to. The exercise of the voting right from the other shares by such person shall be ineffective.

Irrespective of the above provision, in order to establish a basis for the accumulation and reduction of votes, a shareholder, the Management Board, the Supervisory Board and the particular members of these bodies may demand that a shareholder provide information whether he is a person having the status of a dominant or dependent entity with respect to another shareholder. The right referred to in the preceding sentence shall also cover the right to demand that a shareholder disclose the number of votes that such shareholder holds independently or together with other shareholders.

At the time when the share of the Company's share capital held by the State Treasury falls below 5%, the limitation of the above voting right shall expire.

### 8.1.6. Limitations regarding the transfer of ownership of the Company's securities

There are no limitations regarding the transfer of ownership of the Company's securities, that the Company is aware of, apart from the limitations regarding the shares of the Company that belong to the State Treasury, resulting from the Act of December 16, 2016 on rules of management of the state assets (Dziennik Ustaw of 2016, item 2259). Disposal of shares in violation of this prohibition is invalid.

## 8.2. Rules for amendments to the Company's Statutes

In accordance with provisions of the Code of Commercial Companies, any amendments to the Company's Statutes require a resolution to be passed by the General Meeting and an entry to the register of entrepreneurs. A resolution on amendments to the Company's Statutes is made with a majority of three fourth votes. The General Meeting of the Company may authorise the Supervisory Board to agree on the uniform text of the amended Company's Statutes or introduce other editing changes as specified in the resolution of the General Meeting. Amendments to the Company's Statutes shall be valid from the day an entry is made to the register of entrepreneurs.

### 8.2.1. Mode of operation of the General Meeting of the Company, its key powers and the rights of shareholders and the manner of their execution

Rules of the General Meeting are determined in the Code of Commercial Companies and the Company's Statutes. The additional issues related to the activities of the General Meeting are regulated by the Rules of the General Meeting approved on March 30, 2010 by the Extraordinary General Meeting.

The Company's Statutes and the Rules of the General Meeting are available on the PGE's website at [www.gkpge.pl](http://www.gkpge.pl).

#### I. Convening and cancelling the General Meeting.

The General Meeting is convened in the manner and in circumstances described in the Code of Commercial Companies and the Company's Statutes. The detailed method of convening and cancelling the General Meeting is defined in the Rules of the General Meeting.

Pursuant to the Statutes of the Company, the Management Board shall convene the General Meeting on its own initiative, at the written demand of the Supervisory Board or demand of the shareholder or shareholders representing at least one twentieth of the share capital or at the written demand of the State Treasury as long as the State Treasury remains a shareholder of the Company.

The General Meeting should be convened within two weeks of the demand, by the Supervisory Board, shareholder or the State Treasury. If the General Meeting is not convened within two weeks of the demand, the registry court may authorise the shareholder or shareholders making such a demand to convene the Extraordinary General Meeting. Announcement about the convening of the general Meeting of the Company and Materials issued to shareholders in connection with the General Meeting, in particular draft resolutions proposed for voting by the General Meeting and other essential materials are provided by the Company at least 26 days before the date of the General Meeting on the corporate website [www.gkpge.pl](http://www.gkpge.pl), in the manner specified for submitting current information pursuant to regulations on public offering and conditions governing the introduction of financial instruments to organised trading, and public companies.

Cancelling of the General Meeting or changing the date of the Meeting supervenes through announcement on the company's website. The Company makes efforts to ensure that cancelling of the General Meeting or changing the date of the Meeting creates the least negative results for the Company and the shareholders.

Cancelling of the General Meeting is possible only on the petitioners' permission or when holding of the meeting faces extraordinary obstacles or is nonrepresentational.

Cancelling of the General Meeting and changing the date of the Meeting shall occur promptly after occurrence of rationale justifying the cancelling or change of date, but not later than seven days before the date of the General Meeting, except when it is not possible or excessively difficult under the given circumstances, then the cancelling or change of date may occur at any time before the General Meeting date.

#### II. Competencies of the General Meeting of the Company.

According to the provisions of the Code of Commercial Companies and Company's Statutes the General Meeting's main competences include adoption of resolutions on the following matters:

- review and approval of the report of the Management Board on the activities of the Company, financial statements and the consolidated financial statements for the past financial year;



- granting approval of fulfilment of duties by the Members of the Supervisory Board and Members of the Management Board,
- decision on the distribution of profit or covering the loss,
- appointment and recall of Members of the Supervisory Board and determination of rules of remuneration for the Members of the Supervisory Board,
- acquisition and lease of the undertaking or its organised part and placing a limited material right thereon,
- concluding credit, loan, suretyship or similar agreement with a member of the Management Board, Supervisory Board, proxy, liquidator or in the name of any of such persons,
- increase and reduction of the share capital of the Company,
- issue of convertible bonds or preferential bonds, issue of subscription warrants,
- decisions regarding claims for repair of damage caused during founding of the company and management or supervision over the company,
- merger, transformation and division of the Company,
- redemption of shares,
- amendment to the Statutes and change of the subject of activities of the Company,
- dissolution and liquidation of the Company.

The sale and purchase of real property, perpetual usufruct or share in real properties does not require a resolution of the General Meeting.

The General Meeting of Shareholders may vote on resolutions pertaining only to matters included on the detailed agenda, with reservation to art. 404 of the Code of Commercial Companies.

### III. Participation in the General Meeting of the Company

The right to participate in the General Meeting is available only to persons who are shareholders of the Company sixteen days before the date of the General Meeting (date of registration of participation in the General Meeting). Lienors and users, who have the voting right, may participate in the General Meeting, if they are registered in the stockholders' ledger as at the date of registration of participation in the General Meeting.

A shareholder may participate in the General Meeting provided that the shareholder presents a personal certificate confirming the right to participate in the General Meeting issued by the entity which keeps the securities account.

A shareholder participates in the General Meeting and exercises the right to vote in person or through the Proxy. Proxy to participate in the General Meeting and exercise the right to vote must be granted in writing or in electronic form. Proxy granted in electronic form should be sent to the e-mail address of the Company stated in the announcement on the General Meeting. From the date the General Meeting is convened, the Company provides a form with a specimen of proxy in electronic form on its website. The Proxy of a shareholder exercises all the rights of the shareholder unless proxy provides otherwise. If the shareholder has shares recorded in more than one securities account, the shareholder may appoint a Proxy to exercise rights in shares recorded in each account.

### IV. Voting at the General Meeting of the Company

Resolutions of the General Meeting are passed with the absolute majority of votes, subject to other provisions of the Code of Commercial Companies and the Company's Statutes.

One Company share carries the right to one vote at the General Meeting of Shareholders.

Subject to governing provisions of the law and of the Statutes, the voting shall be open. A secret voting is administered during appointments and motions for recalling or prosecuting members of Company's authorities or liquidators, and during voting on personal matters. A secret voting should be also administered when requested by at least one of the shareholders present or represented at the General Meeting. The General Meeting may pass a resolution to override secret voting for matters pertaining to founding of a commission appointed by the General Meeting.

### 8.3. Composition and the description of operations of the management and supervisory bodies of the Company and committees of the supervisory body

#### 8.3.1. Management Board

- I. Management Board members
- II. Until January 29, 2016 the Management Board consisted of:

Name and surname of the Management Board member	Position
Marek Woszczyk	President of the Management Board
Jacek Drozd	Vice-President of the Management Board for Corporate Affairs
Dariusz Marzec	Vice-President of the Management Board for Development
Grzegorz Krystek	Vice-President of the Management Board for Operations and Trading

On January 29, 2016 the Supervisory Board dismissed Mr. Jacek Drozd and Mr. Dariusz Marzec from the Management Board and delegated Mr. Marek Pastuszko, appointed to the Supervisory Board by the statement of the Minister of the State Treasury on January 28, 2016, to temporarily perform the duties of the Vice-President of the Management Board for the 3-month period.

On February 25, 2016 the Supervisory Board cancelled delegation of Mr. Marek Pastuszko to temporarily perform the duties of the Member of the Management Board and the Supervisory Board appointed him as a member of the PGE's Management Board entrusting him the position of the Vice-President for Corporate Affairs.

On February 26, 2016 the Supervisory Board appointed Mr. Emil Wojtowicz to the Management Board as from March 15, 2016 entrusting him the position of the Vice-President for Finance and appointed Mr. Ryszard Wasilek to the Management Board of office as from March 7, 2016 entrusting him the position of the Vice-President for Development.

On March 2, 2016 Mr. Marek Woszczyk and Mr. Grzegorz Krystek submitted resignations from their positions in the Management Board as from March 30, 2016.

On March 22, 2016 Mr. Paweł Śliwa submitted his resignation from the Supervisory Board and the Supervisory Board appointed four members of the Management Board as from March 31, 2016:

- Mr. Henryk Baranowski, entrusting him the position of the President of the Management Board;
- Ms. Marta Gajęcka, entrusting her the position of the Vice-President for Market Development and International Relations;
- Mr. Bolesław Jankowski, entrusting him the position of the Vice-President for Trading;
- Mr. Paweł Śliwa, entrusting him the position of the Vice-President for Innovations.

As at December 31, 2016 the Management Board consisted of:

Name and surname of the Management Board	Position
Henryk Baranowski	President of the Management Board since March 31, 2016
Marta Gajęcka	Vice-President for Market Development and International Relations since March 31, 2016
Bolesław Jankowski	Vice-President for Trading since March 31, 2016
Marek Pastuszko	Vice-President for Corporate Affairs since February 25, 2016
Paweł Śliwa	Vice-President for Innovations since March 31, 2016
Ryszard Wasilek	Vice-President for Development since March 7, 2016
Emil Wojtowicz	Vice-President for Finance since March 15, 2016

On February 13, 2017 the Supervisory Board adopted resolutions on dismissal of following persons from the Management Board of the 9<sup>th</sup> term of office, effective February 13, 2017:

- Mr. Henryk Baranowski, President of the Management Board;
- Ms. Marta Gajęcka, Vice-President for Market Development and International Relations;
- Mr. Bolesław Jankowski, Vice-President for Trading;
- Mr. Marek Pastuszko, Vice-President for Corporate Affairs;
- Mr. Paweł Śliwa; Vice-President for Innovations;
- Mr. Ryszard Wasilek, Vice-President for Development;
- Mr. Emil Wojtowicz, Vice-President for Finance.

At the same time, the Management Board of PGE discloses that the Supervisory Board adopted resolutions on appointing the following person to the Management Board of the 10<sup>th</sup> term of office, effective February 14, 2017:

- appointment of Mr. Henryk Baranowski entrusting him the position of the President of the Management Board;
- appointment of Mr. Marek Pastuszko entrusting him the position of the Vice-President for Corporate Affairs;
- appointment of Mr. Bolesław Jankowski entrusting him the position of the Vice-President for International Affairs;
- appointment of Mr. Wojciech Kowalczyk entrusting him the position of the Vice-President for Capital Investments;
- appointment of Mr. Paweł Śliwa entrusting him the position of the Vice-President for Innovations;
- appointment of Mr. Emil Wojtowicz entrusting him the position of the Vice-President for Finance;
- appointment of Mr. Ryszard Wasilek entrusting him the position of the Vice-President for Operations.

As at the publication date of this report, the Management Board of the Company consists of:

Name and surname of the Management Board	Position
Henryk Baranowski	President of the Management Board
Bolesław Jankowski	Vice-President for International Affairs
Wojciech Kowalczyk	Vice-President for Capital Investments
Marek Pastuszko	Vice-President for Corporate Affairs
Paweł Śliwa	Vice-President for Innovations
Ryszard Wasilek	Vice-President for Operations
Emil Wojtowicz	Vice-President for Finance



**Henryk Baranowski – President of the Management Board**

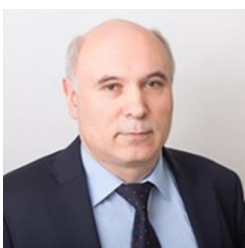
Appointed to the position on March 31, 2016.

Mr. Henryk Baranowski is a graduate of Faculty of Electrical Engineering at the Warsaw University of Technology with specialty of power engineering. He also completed postgraduate studies in business management of power utilities on the energy market at the Warsaw University of Technology and postgraduate studies in financial management of companies at the Warsaw School of Economics. He also completed Executive MBA program at Business School of the Warsaw University of Technology, HEC School of Management, London Business School and Norwegian School of Economics and Business Administration.

Since March 2016, Mr. Henryk Baranowski has held the position of the President of the Management Board of PGE. He is also a President of the Managing Committee at the Polish Electricity Association and Member of Central Europe Energy Partners.

From November 2015 till March 2016 he held a position of the Undersecretary of the State in the Ministry of State Treasury supervising works of Key Companies Department and Corporate Governance Department. In years 2013-2015 employed as the Director for Business Development, and later as the Director for Sales and Marketing of Energy Sector at Alstom Power Polska.

From 2006 to 2008 held a position of the Vice-President of the Management Board in PGE, and in years 2001-2006 the President of the Management Board in PSE-Info Sp. z o.o. In period 1990-2001 associated with PSES.A., where he held a position of, among others, ICT Director.



**Bolesław Jankowski – Vice-President for International Affairs**

Appointed to the position from February 14, 2017.

graduated from the Faculty of Mechatronics at the Warsaw University of Technology, and obtained doctoral degree at the Faculty of Environmental Engineering at the Silesian University of Technology.

Since March 2016, Mr. Bolesław Jankowski held the position of the Vice-President for Trading in PGE. Until March 2016 he held positions of the Vice-President and the Head of Development Strategy Team in the research company Badania Systemowe „EnergySys” L.L.C., where he designed and implemented development strategies for utilities and industrial companies (inter alia: STOEN, SPEC, PERN, KGHM), so as the innovatory management solutions and business models for large private companies and State-controlled companies. Mr. Bolesław Jankowski participated in several domestic and international projects in the power sector and transformation of the energy market. Mr. Bolesław Jankowski represented Poland among international expert teams. He directed team works on the long-term emissions reduction strategies, national energy development scenarios, energy projections (price and demand forecast) and the comprehensive evaluation of the impact of EU climate policy on Poland (e.g. Report 2030, Report 2050). As an invited expert for the EU energy policy he spoke at the European Parliament. Ordinary member of Association of Energy Trading.

In years 1991-1997 he worked at the Power Engineering Problems Department of Polish Academy of Science, where he was involved in outlining the first national energy policy after the political transformation (years 1991-1993).



**Wojciech Kowalczyk - Vice-President for Capital Investments**

Appointed to the position from February 14, 2017.

Mr. Wojciech Kowalczyk graduated from the Foreign Trade Faculty of the Main School of Planning and Statistics (currently named Warsaw School of Economics)).

Since March 2016 Mr. Wojciech Kowalczyk was the Undersecretary of the State in the Ministry of Energy. Between November 2014 and March 2016 he was the Secretary of the State and the Government Plenipotentiary for the restructuring of coal mining within structures of the Ministry of Economy, subsequently the Ministry of State Treasury and the Ministry of Energy.

In years 2012-2014 Mr. Wojciech Kowalczyk was the Undersecretary of the State in the Ministry of Finance, where he supervised the development of financial market, banking, insurance and capital sector and public debt. In years 2011-2012 he worked at Bank Gospodarstwa Krajowego, inter alia, as a Vice-President of the Management Board, responsible for financial markets, bank products and investment projects.

In years 1995-2001 and 2004-2010 Mr. Wojciech Kowalczyk was employed in Bank Handlowy, where he was responsible for bank's activities at the debt securities market. In years 2001-2004 he worked as a Director of Debt Securities Market at Merrill Lynch International in London.



**Marek Pastuszko - Vice-President for Corporate Affairs**

Appointed to the position from February 25, 2016.

a legal counsel, graduated from Law and Administration Faculty at the University of Warsaw and from postgraduate studies on European Substantive Law at the University of Finance and Management in Warsaw.

Since March 2016, Mr. Marek Pastuszko has held the position of the Vice-President of the Management Board of PGE. Between October 2006 and July 2008 he was the President of the Management Board at PGE Energia S.A. As a Director of Law Section at the Organisation Department and as a Task Manager of the PGE's IPO Project he participated in the preparations of the Company for the IPO on the Warsaw Stock Exchange. For two years he worked as a legal counsel at the international law firm Bird & Bird. Since May 2010 Mr. Marek Pastuszko held a position of Deputy Director of Legal Department at the Gas Transmission Operator GAZ-SYSTEM. Earlier he was associated with the finance and insurance market. He was employed at Towarzystwo Ubezpieczeń i Reasekuracji Polisa and Towarzystwo Ubezpieczeń na Życie Polisa (insurance companies) inter alia as a Director of Law and Organization Department. He acted as a legal counsel at PTE Kredyt Banku S.A. (General Pension Society) and at the law firm Hunton & Williams, T. Kacymirow, J. Michalski, Z. Mrowiec. He was also employed in Telekomunikacja Polska as Director of the Department of Agreements Verification.

He was also a Supervisory Board member in companies from power market (PSE-Operator, Agencja Rynku Energii, BOT Górnictwo i Energetyka and PGE RZE Dystrybucja).



**Paweł Śliwa - Vice-President for Innovations**

Appointed to the positions from March 31, 2016.

Mr. Paweł Śliwa graduated from Law and Administration Faculty at the Maria Curie-Skłodowska University in Lublin, branch in Rzeszów. He completed PhD studies on the Cardinal Stefan Wyszyński University in Warsaw. Completed attorney apprenticeship in Regional Bar Council in Rzeszów.

Since March 2016, Mr. Paweł Śliwa has held the position of the Vice-President of the Management Board of PGE. From March 1, 2016 till March 22, 2016 he held a position of the Supervisory Board member of PGE. From 2002 till March 2016 Mr. Paweł Śliwa ran a Law Firm in Gorlice. Since October 2010 a councilor in the legislative assembly of Małopolskie voivodship. In years 2005-2012 ran a Solicitor's Partnership in Gorlice. In years 2006-2007 he held the position of the Vice-Chairman of the Supervisory Board of Ruch S.A.



**Ryszard Wasilek - Vice-President for Operations**

Appointed to the position from February 14, 2017.

Mr. Ryszard Wasilek graduated from the Faculty of Mechanical Engineering at the Szczecin University of Technology, and completed postgraduate studies District Heating and Heating of the Warsaw University of Technology, Faculty of Environmental Engineering.

Since March 2016, Mr. Ryszard Wasilek held the position of the Vice-President of the Management Board of PGE for Development, earlier he had been the President of the Management Board of a district heating company Przedsiębiorstwo Energetyki Ciepłej Sp. z o.o. in Stargard (2003-2016). In years 1994-2003 worked at KielArt Sp. z o.o. in Szczecin as CEO – Chairman and in years 1990-1994 Mr. Ryszard Wasilek served as the Deputy President of Stargard, responsible for economic policy.

Since 2016 Mr. Ryszard Wasilek has been sitting on the Board of Chamber of Commerce of Energy and Environmental Protection. Earlier he used to be a Member of the Council of the Stargard Chamber of Commerce (2004-2016), a Member of the Regional Council of the Polish Chamber of District Heating – North-Western Region (2010-2016), a Member of the National Council of the Polish Chamber of District Heating (2014-2016). In years 1993-1994 Ryszard Wasilek was also the President of the Western Pomerania Municipal Community "Euroregion Pomerania".



**Emil Wojtowicz - Vice-President for Finance**

Appointed to the position from March 7, 2016.

Mr. Emil Wojtowicz is a graduate of Warsaw School of Economics (Finances and Banking).

Since March 2016, Mr. Emil Wojtowicz has held the position of the Vice-President of the Management Board of PGE for Finance, supervising finance department, including areas of accounting, controlling, treasury and risk management.

In years 2009-2016 Partner and Vice-President of the Management Board in SmartCon Sp. z o.o. – independent IT advisory company, specializing in implementation of Enterprise Performance Management (EPM) systems offered by Oracle and SAP. In years 2007-2008 he held the position of Vice-President of the Management Board in PGE, supervising finance department, including accounting, controlling and treasury areas. Mr. Emil Wojtowicz was also responsible for the preparatory process for the IPO of PGE.

In years 2001-2007 he was employed in Deloitte and was responsible for valuations, due diligence and economic fraud investigation. In years 2006-2007 he was responsible for financial advisory to the power sector companies, including among others PGE, PKN Orlen and Grupa Lotos. In years 1998-2001 employed at Ernst & Young Management Consulting Services (later Cap Gemini Ernst & Young) and was responsible for due diligence, valuations, business plans and advisory projects.

### III. Rules of appointing and recalling the management personnel

The Management Board of the Company consists of from one to seven members, including President. The remaining members fulfil the functions of Vice-Presidents. Members of the Management Board are appointed for a joint three-year term of office.

The Management Board or individual members of the Management Board are appointed and recalled by the Supervisory Board. In addition, each member of the Management Board may be recalled or suspended by the General Meeting or, for major reasons, suspended by the Supervisory Board. A resolution of the Supervisory Board on the suspension of a member of the Management Board must include a justification. The Supervisory Board may delegate members of the Supervisory Board to perform activities of the members of the Management Board on a temporary basis. A member of the Management Board submits his/her resignation in writing to the Supervisory Board at the address of the registered office of the Company.

### IV. Competencies of the Management Board

The Management Board administers affairs of the Company and represents the Company in all court and out-of-court affairs. The Management Board deals with all the matters related to managing the affairs of the Company, not reserved by the law or Statutes for the General Meeting or the Supervisory Board.

Co-operation of two Members of the Management Board or one member of the Management Board with a proxy is required to make statements on behalf of the Company. In the event that the Management Board comprises one member, declarations of intent on behalf of the Company may be made by the sole Management Board member.

The modus operandi of the Management Board and internal division of competence among Management Board members as regards managing the Company's affairs are specified in regulations of the Management Board.

Pursuant to the Statutes of the Company, resolutions of the Management Board are required for all matters that go beyond the scope of ordinary acts of the Company. The vote of the President of the Management Board is deciding in the case of the equality of votes.

In accordance with the resolution no. 32 of the Ordinary General Meeting of June 24, 2015, resolutions of the Management Board are required particularly for the following:

- the Company's acquisition or disposal of the following components of assets: real property, perpetual usufruct, interest in real property or perpetual usufruct, shares, interests or other participation rights.
- incurring credits and loans,
- granting sureties and guarantees by the Company and issuance of promissory notes,
- making donations and releasing from debts,
- concluding agreements not related to the Company's business activities specified in § 3 clause 1 of the Statutes,
- appointing commercial proxies,
- appointing Company proxies authorised to incur liabilities with a value exceeding EUR100,000, excluding (i) the powers of attorney to conclude agreements or incur liabilities related to trade in electricity and gas, related products and rights related thereto, and related to the purchase and sale of fuels and raw materials (ii) powers of attorney ad litem,
- adopting the Regulations of the Management Board,
- approving the Company's Organisational Regulations,
- establishing and closing branches,
- establishing of another company,
- adopting the Company's yearly and long-term financial plans, including investment, marketing and sponsorship plans,
- approving the rules of conducting sponsorship activity,
- adopting the Company's development strategy,
- determining the method of exercising the voting right at general meetings or general meetings of the companies in which the Company holds shares or interests,
- making advanced payments towards planned dividends,
- approving the materials submitted by the Management Board to the Supervisory Board.

Regardless of the above mentioned matters, resolutions of the Management Board are required for any matter referred by the Management Board to the Supervisory Board or the General Meeting.

The Statutes does not provide for detailed regulations which authorise Members of the Management Board to decide on the issue or buy-out of shares.

#### V. Activities and organisation of work of the Management Board

The Management Board manages Company's affairs in a transparent and effective manner based on and within the limits of the governing provisions of the law, including the Code of Commercial Companies, provisions of the Company's Statutes, Rules of the Management Board and other internal regulations governing in the Company.

The works of the Management Board are headed by the President of the Management Board. Meetings of the Management Board are convened by the President of the Management Board on his/her own initiative or on the motion of a member of the Management Board. Management Board meetings may take place without having been formally called, provided that all Management Board members were effectively notified about the meeting and none of the Management Board members object to the meeting taking place and to the proposed meeting agenda.

Minutes are taken for each meeting of the Management Board and signed by the members of the Management Board, not excluding persons who filed a dissenting opinion or were temporarily absent when adopting any of the resolutions. The minutes are stored in the Book of Minutes. Resolutions of the Management Board are passed with an absolute majority of votes in an open voting. In case of voting parity, the President of the Management Board has the decisive vote. A secret voting is administered by a member of the Management Board. All members of the Management Board must be properly notified of the scheduled meeting for the resolutions to be valid. A member of the Management Board may present an opposing opinion with a justification to be included in the minutes.

Resolutions may be made in writing or using means of direct remote communications.

Competencies of members of the Management Board regarding the ordinary management to operating areas in which individual members of the Management Board perform the leading role. For the functions performed, each member of the Management Board is assigned appropriate scope of responsibilities for the Company's affairs.

#### 8.3.2. Supervisory Board

##### I. Management Board members

Until January 28, 2016 the Supervisory Board consisted of:

Name and surname	Position
Anna Kowalik	Chairman of the Supervisory Board
Jacek Barylski	Vice-Chairman of the Supervisory Board – independent
Małgorzata Molas	Secretary of the Supervisory Board
Małgorzata Mika – Bryska	Supervisory Board Member
Jarosław Gołębiowski	Supervisory Board Member - independent
Piotr Machnikowski	Supervisory Board Member - independent
Marek Ściążko	Supervisory Board Member - independent
Jacek Fotek	Supervisory Board Member - independent

On January 28, 2016 the State Treasury appointed Mr. Marek Pastuszko as a member of the Supervisory Board of the Company by way of a written declaration submitted to the Management Board of the Company. On January 29, 2016 Mr. Marek Pastuszko was delegated by the Supervisory Board to temporarily perform the duties of the Member of the Management Board - Vice-President for Corporate Affairs. Then, on February 25, 2016 Mr. Marek Pastuszko submitted his resignation from the Supervisory Board and the Supervisory Board appointed Mr. Marek Pastuszko for the position of the Vice-President of the Management Board for Corporate Affairs.

On February 5, 2016 the Company received a resignation from Mr. Piotr Machnikowski from the Supervisory Board.

On March 1, 2016 the Extraordinary General Meeting of the Company adopted resolutions on:

- dismissal of Mr. Jacek Barylski, Ms. Małgorzata Molas, Mr. Jarosław Gołębiowski, Mr. Jacek Fotek and Mr. Marek Ściążko from the Supervisory Board;
- appointment of Mr. Jarosław Głowacki, Ms. Janina Goss, Mr. Mateusz Gramza, Mr. Mieczysław Sawaryn, Mr. Artur Składanek and Mr. Grzegorz Kuczyński to the Supervisory Board.

Moreover, on March 1, 2016 the State Treasury appointed Mr. Paweł Śliwa as a member of the Supervisory Board of the Company by way of a written declaration submitted to the Management Board of the Company. On March 22, 2016 Mr. Paweł Śliwa submitted his resignation from the Supervisory Board and the Supervisory Board appointed Mr. Paweł Śliwa for the position of the Vice-President of the Management Board for Innovations as from March 31, 2016.



On September 5, 2016 the Extraordinary General Meeting of the Company appointed Mr. Witold Kozłowski to the Supervisory Board and recalled Ms. Małgorzata Mika-Bryśka from the Supervisory Board. At the same time, On September 5, 2016 Mr. Radosław Osiński was appointed to the Supervisory Board by the Minister of Energy, pursuant to § 20 sec. 5 of the Company's Statutes.

As at the publication date of this report, the Supervisory Board of the Company consists of:

Name and surname	Position
Anna Kowalik	Chairman of the Supervisory Board
Radosław Osiński	Vice-Chairman of the Supervisory Board
Grzegorz Kuczyński	Secretary of the Supervisory Board - independent
Jarosław Głowacki	Supervisory Board Member - independent
Janina Goss	Supervisory Board Member - independent
Mateusz Gramza	Supervisory Board Member - independent
Witold Kozłowski	Supervisory Board Member - independent
Mieczysław Sawaryn	Supervisory Board Member - independent
Artur Składanek	Supervisory Board Member - independent

CVs of the Supervisory Board member are available at the corporate website of PGE S.A. [www.gkpgge.pl](http://www.gkpgge.pl).

## II. Rules of appointing and recalling of the supervisory personnel

According to the valid Statutes, Members of the Supervisory Board are appointed for a joint term of office of three years. The Supervisory Board consists of five to nine members appointed and recalled by the General Meeting. The Supervisory Board elected by way of group voting shall consist of five members. Member of the Supervisory Board may be appointed and dismissed by the General Meeting at all times, with the exception of the Supervisory Board member appointed by the State Treasury by way of a written declaration submitted to the Management Board (State Treasury's entitlement is valid until it remains a shareholder). Moreover, a half of members of the Supervisory Board (except the Supervisory Board member mentioned in the previous sentence), shall be elected from among persons identified by the State Treasury, until its stake in the share capital falls below 20%. At the time when this right of the State Treasury expires, another shareholder with the highest stake in the Company's share capital acquires that right, provided that he holds at least 20% in the Company's share capital.

On June 24, 2015 the Ordinary General Meeting adopted resolution no. 32 which changes the Statutes of PGE S.A. and changes were registered in the National Court Register on August 11, 2015. Changes relate to inter alia competencies of the Supervisory Board and holding Supervisory Board meetings without formal calling. According to the provisions of the Statutes, the Supervisory Board shall include at least one person appointed by the General Meeting from among persons meeting the criteria of independence specified in the principles of corporate governance adopted by the Board of the WSE. Proposing a candidate for this position a shareholder nominating such candidate shall be obliged to submit to the minutes of the General Meeting such candidate's written declaration confirming his/her independency.

The State Treasury's failure to appoint one member of the Supervisory Board or the General Meeting's failure to elect members of the Management Board meeting the criteria of independence or the absence of such persons in the composition of the Supervisory Board shall not prevent the Supervisory Board from adopting valid resolutions.

## III. Activities and organisation of the Supervisory Board

The operating procedure of the Supervisory Board is described in the Statutes of the Company and in the Rules of the Supervisory Board. The Supervisory Board performs its obligations collectively, however, it may delegate individual members for temporary and independent performance of certain supervisory activities. The Supervisory Board meets as required, not less often than once every two months.

Meetings of the Supervisory Board are convened by the Chairman of the Supervisory Board or the Vice-Chairman in the absence of the Chairman. The meeting of the Supervisory Board is convened by sending out a written invitation to all members of the Supervisory Board at least seven days before the schedule date of the meeting. This period of seven days may be shortened to two days for major reasons. The Meeting of the Supervisory Board may be also convened on demand of each member of the Supervisory Board or the motion of the Management Board (the person filing the motion proposes the agenda). Then the meeting should be convened within two weeks. If the

Chairman of the Supervisory Board fails to convene the meeting within that period, the person filing the motion may convene the meeting on his/her own, stating the date, place and proposed agenda. The agenda may be changed if all members of the Supervisory Board are present at the meeting and no one objects to the change.

Supervisory Board meetings may take place without having been formally called, provided that all Supervisory Board members are present at the meeting and none of the Supervisory Board members object to the meeting taking place and to the proposed meeting agenda.

The Supervisory Board passes resolutions if at least half of the members of the Supervisory Board are present at the meeting and all the members have been invited. The Supervisory Board passes resolutions in an open voting. A secret voting is administered when requested by a member of the Supervisory Board, and during voting on personal matters. Resolutions of the Supervisory Board may be made in writing or using means of direct remote communications. The latter cannot be used for resolutions on the appointment or recalling of the Chairman, Vice-Chairman and Secretary of the Supervisory Board, and appointment, recalling or suspending a member of the Management Board.

#### IV. Competencies of the Supervisory Board

The Supervisory Board maintains a continuous supervision over activities of the Company in all areas of the Company's activities pursuant to the provisions of the Statutes.

The Statutes of the Company and the Rules of the Supervisory Board are available on the corporate website at [www.gkpge.pl](http://www.gkpge.pl).

#### V. Committees

In accordance with the Company's Statutes, the Rules of the Supervisory Board or a resolution of the General Meeting may provide for establishment of committees within the Supervisory Board, in particular the audit committee and the appointment and remuneration committee. The current Rules of the Supervisory Board provide that the Supervisory Board may appoint standing or ad hoc committees, acting as collective advisory and opinion-making bodies of the Supervisory Board. The particular goal of the committees is to provide the Supervisory Board with opinions and recommendations on matters within the competencies of the committees. The committees are established by the Supervisory Board out of its members. The committee consists of 2 to 5 persons. The committee appoints a chairman out of its members. The chairman convenes meetings of the committee, manages works of the committee and represents the committee in relations with the authorities and employees of the Company. The mandate of a committee member expires with the expiry of the mandate of the member of the Supervisory Board, resignation from membership in the committee or recalling from the committee by the Supervisory Board. Each Member of the Supervisory Board may participate in committee meetings. The committee chairman may invite to the meetings members of the Management Board, Company employees and other persons whose participation is advisable. Decisions of the committee are made on a consensus basis. The following standing committees are currently part of the Supervisory Board: the Audit Committee, the Strategy and Development Committee, the Appointment and Remuneration Committee, and the Corporate Governance Committee.

Range of competencies of particular Committees of the Supervisory Board is presented in details in the Rules of the Supervisory Board that is available on the corporate website at [www.gkpge.pl](http://www.gkpge.pl)

##### ■ The Audit Committee

The Audit Committee is responsible for auditing whether internal financial controls are performed in a correct and effective manner in the Company and the PGE Capital Group. The Audit Committee also co-operates with statutory auditors of the Company.

##### ■ The Corporate Governance Committee

The Corporate Governance Committee evaluates the implementation of the corporate governance principles in the Company and presents the Supervisory Board with initiatives in this area, provides opinions on normative acts and other documents of the Company presented to the Supervisory Board, which considerably affect the corporate governance, initiates and prepares proposals of changes for normative acts of the Supervisory Board.

##### ■ Strategy and Development Committee

The Strategy and Development Committee provides opinions and recommendations to the Supervisory Board regarding planned investments which considerably affect the Company's assets.

■ Appointment and Remuneration Committee

The Appointment and Remuneration Committee is responsible for facilitating achievement of strategic goals of the Company by presenting the Supervisory Board with opinions and motions on the development of the management structure, including remuneration system and selection of properly qualified personnel.

Table: Composition of the committees in 2016.

Name and surname of the member of the Supervisory Board	Audit Committee	Corporate Governance Committee	Strategy and Development Committee	Appointment and Remuneration Committee
Janina Goss	Member from March 2, 2016			Member from March 2, 2016
Jacek Barylski		Member until March 1, 2016		Chairman until March 1, 2016
Jacek Fotek	Member until March 1, 2016			
Jarosław Głowacki		Member from March 2, 2016	Member from March 2, 2016	
Jarosław Gołębiowski	Chairman until March 1, 2016		Member until March 1, 2016	
Mateusz Gramza	Member from March 7, 2016	Member from March 2, 2016 until March 7, 2016		Member from March 2, 2016
Anna Kowalik	Member			Member
Piotr Machnikowski		Chairman until February 5, 2016		Member until February 5, 2016
Małgorzata Mika-Bryska		Member until Sep- tember 5, 2016	Member until Sep- tember 5, 2016	
Małgorzata Molas			Member until March 1, 2016	Member until March 1, 2016
Grzegorz Kuczyński	Member from March 2, 2016 Chairman from March 18, 2016	Member from March 2, 2016		
Witold Kozłowski		Member from Sep. 13, 2016 Chairman from October 25, 2016		Member from September 13, 2016
Radosław Osiński			Member from Sep. 13, 2016 Chairman from October 25, 2016	Member from September 13, 2016
Mieczysław Sawaryn			Member from March 2, 2016	Member from March 2, 2016
Artur Składanek		Member from March 7, 2016	Member from March 2, 2016	
Paweł Śliwa		Member from March 2, 2016 until March 22, 2016		Member from March 2, 2016 until March 22, 2016
Marek Ściążko			Member until March 1, 2016	

### 8.3.3. Remuneration of the management of PGE S.A.

Rules with respect to the determination of remuneration for the Management Board Members of PGE S.A.

In 2016 the members of the Management Board of PGE S.A. were remunerated based on Management Services Contracts signed with the Company.

Remuneration of the Board consists of a fixed part and a bonus contingent upon achieving goals set by the Supervisory Board of PGE S.A.

Management Services Contracts contain non-competition clauses which are binding during the term of the contract and following termination thereof. The Management Board Members purchased, at their own expense, a liability insurance with regard to their managing duties for the Company.

The Act of June 9, 2016 on the principles of determining the amount of remuneration for persons managing certain companies (Dziennik Ustaw of 2016, item 1202 as amended) - so called new Public Sector Salary Cap Act – came into force on September 9, 2016. The new Public Sector Salary Cap Act determines, inter alia, principles for determining remuneration in companies with a stake of the State Treasury (for example PGE), in particular determines the way in which the remuneration of the members of the Management Board and Supervisory Board is set (rules for determining remuneration of the Management Board and Supervisory Board are adopted by the General Meeting and the Supervisory Board adopts resolutions on specific conditions of the management board remuneration), determines obligatory elements of the management services contract signed with the Management Board member as well as rules and conditions for severance pay or the conclusion of a non-competition clause. On December 14, 2016, the Extraordinary General Meeting of the Company, convened on request of the Minister of Energy representing the State Treasury, adopted resolution concerning the principles of determining the amount of remuneration for members of the Management Board of PGE S.A.

Table: Remuneration and benefits received in 2016 by the Members of the Management Board of PGE S.A. from PGE S.A.

Name and surname of the Management Board member	Remuneration and benefits achieved by the Management Board members in PGE S.A. in 2015 (in PLN)
Henryk Baranowski	640,800.00 <sup>1</sup>
Jacek Drozd	896,709.64 <sup>1,2</sup>
Marta Gajęcka	571,093.55 <sup>1</sup>
Bolesław Jankowski	571,093.55 <sup>1</sup>
Grzegorz Krystek	948,000.00 <sup>1,2</sup>
Dariusz Marzec	863,903.31 <sup>1,2</sup>
Marek Pastuszko	663,639.78 <sup>1</sup>
Paweł Śliwa	571,093.55 <sup>1</sup>
Ryszard Wasilek	626,138.75 <sup>1</sup>
Emil Wojtowicz	607,790.35 <sup>1</sup>
Marek Woszczyk	1,068,000.00 <sup>1,2</sup>

<sup>1</sup> item including remuneration for the period of service at the Management Board (fixed part),

<sup>2</sup> item including remuneration paid for 3 months after termination of Management Services Contracts (dismissal/resignation) or/and due to non-competition clause.

The total remuneration achieved by the Management Board members and post-employment benefits in 2016 amounted to PLN 8 million. In cost perspective (including provisions), in 2016 the remuneration of all persons who acted as Management Board members, jointly with the post-employment benefits, amounted to PLN 11.7 million.

Rules with respect to the determination of remuneration for the Supervisory Board Members of PGE S.A.

The amounts of remuneration of the Supervisory Board Members of PGE S.A. are determined based the Public Sector Salary Cap Act, pursuant to which the remuneration may not exceed the amount of one average monthly salary in the enterprise sector without payments of profit bonuses in the 4th quarter of the year, as specified in the Public Sector Salary Cap Act. In connection with the new Public Sector Salary Cap Act, the rules of remuneration for the Supervisory Board Members were changed. On December 14, 2016, the Extraordinary General Meeting of the Company, adopted resolution concerning the principles of determining the amount of remuneration for members of the Supervisory Board of PGE S.A., in which the monthly remuneration of members of the Supervisory Board was set as a product of the average remuneration in the business sector exclusive of profit-based bonuses in the fourth quarter of the previous year as announced by the President of the Central Statistical Office of Poland and the following factor: 1.7 (for the chairperson of the Supervisory Board), 1.5 (for the other members of the Supervisory Board).

Table: Remuneration received by the Supervisory Board Members of PGE S.A. who in 2016 performed their functions in PGE S.A.

Name and surname of the Supervisory Board member	Remuneration achieved by the Supervisory Board members in PGE S.A. in 2016 (in PLN)
Jacek Barylski	8,698.86
Jacek Fotek	8,698.86
Jarosław Głowacki	44,046.59
Jarosław Gołębiowski	8,698.86
Janina Goss	44,046.59
Mateusz Gramza	44,046.59
Anna Kowalik	53,104.45
Witold Kozłowski	17,793.54
Grzegorz Kuczyński	44,046.59
Piotr Machnikowski	5,018.39
Małgorzata Mika – Bryska	34,956.52
Małgorzata Molas	8,698.86
Radosław Osipiński	17,793.54
Marek Pastuszko	138.08
Mieczysław Sawaryn	44,046.59
Artur Składanek	44,046.59
Marek Ściążko	8,698.86
Paweł Śliwa	3,037.70

The members of the Supervisory Board did not receive remuneration in the Group companies other than PGE S.A. Total remuneration earned in 2016 by the members of the Supervisory Board in PGE S.A. amounted to PLN 440 thousand. In cost perspective (including taxes and social security and/or other contributions paid by the employer), in 2016 the remuneration of all persons who acted as Supervisory Board members amounted to PLN 510 thousand.

## 8.4. Information about shares and other securities

### 8.4.1. Share capital and ownership structure

As at December 31, 2015 the share capital of PGE S.A. amounted to PLN 18,697,608,290 and split into 1,869,760,829 shares with a nominal value of PLN 10 each.

On September 5, 2016, the Extraordinary General Meeting of PGE („EGM”), convened on request of the State Treasury – majority shareholder of PGE, adopted resolution on the increase of the share capital from the Company’s own funds (resolution no. 4 of the EGM) and resolution on the change to the Statutes of the Company and authorising the Supervisory Board to determine the consolidated text of the Company Statutes, including the change in amount of the share capital (resolution no. 5 of the EGM).

On November 25, 2016 the District Court of the City of Warsaw, XII Commercial Division of the National Court Register (the “Register Court”) registered the change in share capital amount and the changes to the Company’s Statutes, made on the ground of resolutions no. 4 and 5 of the EGM of September 5, 2016.

The Register Court registered the increase of share capital of the Company from the amount of PLN 18,697,608,290 to PLN 19,165,048,497.25 i.e. by PLN 467,440,207.25 by increasing the nominal value of the shares in series A, B, C and D from PLN 10 to PLN 10.25. The total number of shares and votes resulting from all issued shares, after the registration of the changes in the amount of the share capital of PGE, amounts to 1,869,760,829

As at December 31, 2016 the share capital of PGE S.A. amounted to PLN 19,165,048,497.25 PLN and split into 1,869,760,829 shares with a nominal value of PLN 10.25 each.

Table: Share capital of the Company.

Series/ issue	Type of shares	Type of privilege	Number of shares	Value of series/issue at nominal value	Capital payment method
"A"	ordinary	n/a	1,470,576,500	15,073,409,125.00	contribution in kind/cash
"B"	ordinary	n/a	259,513,500	2,660,013,375.00	cash
"C"	ordinary	n/a	73,228,888	750,596,102.00	merger with PGE GiE S.A.
"D"	ordinary	n/a	66,441,941	681,029,895.25	merger with PGE Energia S.A.
Total			<b>1,869,760,829</b>	<b>19,165,048,497.25</b>	

Table: Ownership structure of the Company’s share capital as at December 31, 2015\*.

	State Treasury		Other shareholders *		Total	
	nominal val- ue of shares (PLN)	% share in the share capital and votes	nominal value of shares (PLN)	% share in the share capital and votes	nominal value of shares (PLN)	% share in the share capital and votes
Shares at Dec 31, 2015	10,998,087,004.50	57.39	8,166,961,492.75	42.61	19,165,048,497.25	100.00

\* Ownership structure presented on the basis of information available to the Company

All of the Company shares have been paid.

Although the Company’s shares are not privileged, the Statutes of the Company provide for special rights of the State Treasury until it remains a shareholder of the Company.

### 8.4.2. Shareholders with a significant stake

According to the best knowledge, on the ground of the letter from the Ministry of the State Treasury of April 27, 2016, the State Treasury holds 1,072,984,098 ordinary shares of the Company, representing 57.39% of the Company’s share capital and entitling to 1,072,984,098 votes on the General Meeting of the Company, constituting 57.39% of total votes.

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

Shareholder	Number of shares	Number of votes	% in total votes on General Meeting (%)
State Treasury	1,072,984,098	1,072,984,098	57.39%
Others	796,776,731	796,776,731	42.61%
<b>Total</b>	<b>1,869,760,829</b>	<b>1,869,760,829</b>	<b>100.00%</b>

### Treasury shares

As at December 31, 2016 PGE S.A. and subsidiaries did not hold any treasury shares.

#### 8.4.3. Shares of the parent company owned by the members of management and supervisory authorities

According to the best knowledge of the Management Board of the Company, members of management and supervisory authorities of the Company as of the date of submission of this report and as of the date of publishing of the consolidated report for the third quarter of 2016 held following number of shares:

Table: PGE S.A. shares held and managed directly by the members of management and supervisory authorities of the Company.

Shareholder	Number of shares as of date of publishing of the consolidated report for Q3 2016 (i.e. November 8, 2016)	Change in number of owned shares	Number of shares as of submission date of the annual report	Nominal value of shares as of submission date of the annual report (PLN)
<b>Management Board</b>	-	-	-	-
<b>Supervisory Board</b>	<b>7</b>	-	<b>7</b>	<b>71.75</b>
Jarosław Głowacki	7	-	7	71.75

Table: PGE S.A. shares held by the persons acting on behalf of material direct subsidiaries of PGE S.A.

Shareholder	Position	Number of shares as of submission date of the annual report	Nominal value of shares as of submission date of the annual report [PLN]
<b>Management Board of PGE GiEK S.A.</b>		<b>12,771</b>	<b>130,903</b>
Krzysztof Domagała	Vice-President of the Management Board	7,869	80,657
Marek Włóka	Vice-President of the Management Board	3,003	30,781
Andrzej Kopertowski	Vice-President of the Management Board	1,211	12,413
Stanisław Żuk	Vice-President of the Management Board	688	7,052
<b>Management Board of PGE Obrót S.A.</b>		<b>3,416</b>	<b>35,014</b>
Jan Mądrzak	Vice-President of the Management Board	3,416	35,014

#### 8.4.4. Control system of employees share scheme

In 2016, PGE S.A. did not maintain any employees share schemes.

#### **8.4.5. Use of proceeds from issues**

In 2015 PGE S.A. did not issue any shares. Proceeds from the issue of bonds were used for financing of the on-going activities as well as for financing of the investments conducted by PGE Group companies (see p. 4.12.2).

## **9. Statements of the Management Board**

### **Statement on the reliable preparation of the financial statements**

To the best knowledge of the Management Board of PGE S.A., the annual separate financial statements and consolidated financial statements and comparable data were prepared in accordance with the governing accounting principles, present a fair, true and reliable view of the material and financial situation as well as financial result of the parent company and of PGE Capital Group.

The report of the Management Board on the activities of PGE Polska Grupa Energetyczna S.A. and PGE Capital Group presents a true view of the development, achievements and situation of PGE Polska Grupa Energetyczna S.A. and the Capital Group, and provides a description of the basic risks and threats.

### **Statement on the entity authorised to audit the financial statements**

The Management Board of PGE S.A. declares that the entity authorised to audit the separate and consolidated financial statements, which audits the annual financial statements: separate and consolidate, has been appointed in accordance with provisions of the law. The entity and the statutory auditors fulfilled all the requirements for issuing an unbiased and independent opinion on the audit, in accordance with the governing provisions and professional standards.



## **10. Approval of the Management Board's Report**

The foregoing Management Board's Report on activities of PGE Polska Grupa Energetyczna S.A. and PGE Capital Group was approved for publication by the Management Board of the parent company on March 7, 2017.

Warsaw, March 7, 2017

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

**President  
of the Management Board    Henryk Baranowski**

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**Vice-President  
of the Management Board    Bolesław Jankowski**

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**Vice-President  
of the Management Board    Wojciech Kowalczyk**

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**Vice-President  
of the Management Board    Marek Pastuszko**

---

**Vice-President  
of the Management Board    Paweł Śliwa**

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**Vice-President  
of the Management Board    Ryszard Wasilek**

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**Vice-President  
of the Management Board    Emil Wojtowicz**

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OVERVIEW OF GRI G4 AND Global Compact INDICATORS

Profile indicators

Indicator		Global Compact Rules	Page
<b>Strategy and analysis</b>			
<b>G4-1</b>	A statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.		3
<b>Organizational Profile</b>			
<b>G4-3</b>	Name of the organization		8
<b>G4-4</b>	Primary products/services		9
<b>G4-5</b>	Location of the organization's headquarters		Poland, Warsaw
<b>G4-6</b>	Number of countries where the organization operates		PGE Group operates mainly in Poland.
<b>G4-7</b>	Nature of ownership and legal form		137-138
<b>G4-9</b>	Scale of the organization		4
<b>G4-10</b>	Number of employees by business region, age, gender and type of contract	<b>GC-6</b>	Appendix 1: 10
<b>G4-11</b>	Number of employees covered by collective bargaining agreements	<b>GC-3</b>	Appendix 1: 15
<b>G4-12</b>	Description of supply chain		5-6
<b>G4-13</b>	Significant changes during the reporting period regarding the organization's size, structure or ownership		16-18
<b>G4-14</b>	Risk management in the organization	<b>GC-10</b>	30-33
<b>G4-15</b>	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	<b>GC-1</b> <b>GC-2</b>	100
<b>G4-16</b>	List of sectoral national and international associations		123-124
<b>G4-17</b>	Information on all entities included in the organization's consolidated financial statements or equivalent documents.		15; Appendix 1: 3
<b>G4-24</b>	List of stakeholder groups engaged by the organization		100
<b>G4-26</b>	Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group		100
<b>G4-28</b>	Reporting period		1.01.2016 – 31.12.2016
<b>G4-30</b>	Reporting cycle		annual
<b>G4-32</b>	GRI content index		141-144
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<b>G4-56</b>	Values, principles, standards and norms of behaviour like codes of conduct and codes of ethics	<b>GC-10</b>	11; 105
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<b>G4-EU2</b>	Net energy output broken down by primary energy source and by regulatory regime		42
<b>G4-EU3</b>	Number of residential, industrial, institutional and commercial customer accounts		59
<b>G4-EU4</b>	Length of above and underground transmission and distribution lines by regulatory regime		59
<b>G4-EU5</b>	Allocation of CO2 emissions allowances or equivalent, broken down by carbon trading framework		93
<b>Economic indicators</b>			
<b>Material Aspect: Economic Performance</b>			
<b>G4-DMA</b>	DMA Economic Performance		19-22; 34-39
<b>G4-EC1</b>	Direct economic value generated and distributed		34
<b>Material Aspect: Indirect Economic Impacts</b>			
<b>G4-DMA</b>	DMA Indirect Economical Impacts		106-107
<b>G4-EC7</b>	Development of significant infrastructure investments and services supported for communities through commercial, in-kind, or pro bono engagements.		107
<b>Environmental Indicator</b>			
<b>Material Aspect: Biodiversity</b>			
<b>G4-DMA</b>	DMA Biodiversity	<b>GC-7</b>	50-52; 57-58; 61-63
<b>G4-EN12</b>	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	<b>GC-8</b>	50-52; 57-58; 61-63
<b>Material Aspect: Emissions</b>			
<b>G4-DMA</b>	DMA Emissions	<b>GC-7</b>	50-51
<b>G4-EN15</b>	Direct greenhouse gas (GHG) emissions	<b>GC-7</b>	93
<b>G4-EN21</b>	NOx, SOx, and other significant air emissions	<b>GC-7</b>	Appendix 1: 17
<b>Material Aspect: Effluents and Waste</b>			
<b>G4-DMA</b>	DMA Effluents and Waste		51-52; 57-58
<b>G4-EN22</b>	Total water discharge by quality and destination	<b>GC-8</b>	Appendix 1: 18
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<b>Material Aspect: Compliance</b>			
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<b>G4-EN29</b>	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	<b>GC-8</b>		Appendix 1: 20
	Development and diffusion of environmentally friendly technologies	<b>GC-9</b>		27-29; 57
<b>Social indicators: Labor Practices and Decent Work</b>				
<b>DMA Employment</b>				
<b>G4-DMA</b>	DMA Employment	<b>GC-4</b> <b>GC-5</b>	12-14; Appendix 1:8; PGE Group complies with all rules and laws on the prohibition of forced labor and child labor.	
<b>G4-LA1</b>	Total number and rates of new employee hires and employee turnover by age group, gender and company.	<b>GC-6</b>		Appendix 1: 11-12
<b>G4-LA2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation			106
<b>Material Aspect: Occupational Health and Safety</b>				
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<b>G4-LA6</b>	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.			Appendix 1: 13-14
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<b>G4-DMA</b>	DMA Training and Education			12-13
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<b>Material aspect: Diversity and Equal Opportunity</b>				
<b>G4-DMA</b>	DMA Diversity and Equal Opportunity			12; Appendix 1: 8
<b>G4-LA12</b>	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	<b>GC-6</b>		Appendix 1: 10, 14-15
<b>Social indicators – human rights</b>				
<b>Material aspect: Investment</b>				
<b>G4-DMA</b>	DMA Investments			Appendix 1: 21
<b>G4-HR2</b>	Total number of training hours of employees on human rights respect and total number of employees trained			Appendix 1: 22
<b>Social indicators: society</b>				
<b>DMA Anti-corruption</b>				

<b>G4-DMA</b>	DMA Anti-corruption	<b>GC-10</b>	Appendix 1: 23
<b>G4-SO3</b>	Total number and percentage of operations assessed for risks related to corruption	<b>GC-10</b>	Appendix 1: 24
<b>G4-SO4</b>	Communication and trainings on anti-corruption policies and procedures	<b>GC-10</b>	Appendix 1: 25-26
<b>Social indicators: Product Responsibility</b>			
<b>Material Aspect: Product and Service Labelling</b>			
<b>G4-DMA</b>	DMA Product and Service Labelling		102
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## Glossary

Ancillary control services (ACS)	services provided to the transmission system operator, which are indispensable for the proper functioning of the national power system and ensure the keeping of required reliability and quality standards.
Achievable capacity	the maximum sustained capacity of a generating unit or generator, maintained continuously by a thermal generator for at least 15 hours or by a hydroelectric generator for at least five hours, at standardized operating conditions, as confirmed by tests.
Balancing market	a technical platform for balancing electricity supply and demand on the market. The differences between the planned (announced supply schedules) and the actually delivered/off-taken volumes of electricity are settled here. The purpose of the balancing market is to balance transactions concluded between individual market participants and actual electricity demand. The participants of the balancing market can be the generators, customers for electricity understood as entities connected to a network located in the balancing market area (including off-takers and network customers), trading companies, electricity exchanges and the TSO as the balancing company.
Base, baseload	standard product on the electricity market: a constant hourly power supply per day in a given period, for example week, month, quarter or year.
Best Practices	Document „Best Practice for GPW Listed Companies 2016” adopted by the resolution of the GPW Supervisory Board of October 13, 2015 and effective from January 1, 2016.
Biomass	solid or liquid substances of plant or animal origin, subject to biodegradation, obtained from agricultural or forestry products, waste and remains or industries processing their products as well as certain other biodegradable waste in particular agricultural raw materials.
Black energy	popular name for energy generated as a result of combustion of black coal or lignite.
CCS	Carbon Capture and Storage Technology used to capture CO <sub>2</sub> from the emissions of fossil fuel power plants followed by its underground storage.
CDM	Clean Development Mechanisms, one of the flexible mechanisms introduced under Article 12 of the Kyoto Protocol.
CER	Certified Emission Reduction.
Co-combustion	the generation of electricity or heat based on a process of combined, simultaneous combustion in one device of biomass or biogas together with other fuels; part of the energy thus generated can be deemed to be energy generated with the use of renewable sources.
Co-generation	the simultaneous generation of heat and electricity or mechanical energy in the course of one and the same technological process.
Constrained generation	the generation of electricity to ensure the quality and reliability of the national power system; this applies to generating units in which generation must continue due to the technical limitations of the operation of the power system and the necessity of ensuring its adequate reliability.
Distribution	transport of energy through distribution grid of high (110 kV), medium (15kV) and low (400V) voltage in order to supply the customers.
Distribution System Operator (DSO)	a power company engaging in the distribution of gaseous fuels or electricity, responsible for traffic in the gas or electricity distribution systems, current and long-term security of operation of the system, the operation, maintenance, repairs and indispensable expansion of the distribution network, including connections to other gas or power systems.
ERO	Energy Regulatory Office (pol. URE).
ERU	Emission Reduction Units.
EUA	European Union Allowances: transferable CO <sub>2</sub> emission allowances; one EUA allows an operator to release one tonne of CO <sub>2</sub> .
EU ETS	European Union Greenhouse Gas Emission Trading Scheme) EU emission trading scheme. Its operating rules are set out in the ETS Directive, amended by the Directive 2009/29/EC of the European Parliament and of the Council of April 23, 2009 (OJ EU L. of 2009, No. 140, p. 63–87).
Generating unit	a technically and commercially defined set of equipment belonging to a power company and used to generate electricity or heat and to transmit power.
GJ	Gigajoule, a unit of work/heat in the SI system, 1 GJ = 1000/3.6 kWh = approximately 278 kWh.
GPZ	main power supply point, a type of transformer station used for the processing or distribution of electricity or solely for the distribution of electricity.
Green certificate	popular name for energy generated from renewable energy sources.
GW	gigawatt, a unit of capacity in the SI system, 1 GW = 109 W.
Gwe	one gigawatt of electric capacity.
GWt	one gigawatt of heat capacity.
HICP	Harmonised Index of Consumer Prices
High Voltage Network (HV)	a network with a nominal voltage of 110 kV.

Highly efficient co-generation	the generation of electric or mechanical power and useful heat through co-generation, in such a way as to ensure savings of primary energy used in: (i) a co-generation unit in the amount not lower than 10 per cent. as compared to generation of electric power and heat in separated systems with reference efficiency for separated generation; or (ii) co-generation unit with an installed capacity under 1 MW as compared to generation of electric power and heat in separated systems with reference efficiency for separated generation.
IGCC	Integrated Gasification Combined Cycle.
Installed capacity	the formal value of active power recorded in the design documentation of a generating system as being the maximum achievable capacity of that system, confirmed by the acceptance protocols of that system (a historical value, it does not change over time).
IRIESP	the Transmission Network Operation and Maintenance Manual required to be prepared by a transmission system operator pursuant to the Energy Law; instructions prepared for power networks that specify in detail the terms and conditions of using these networks by system users as well as terms and conditions for traffic handling, operation and planning the development of these networks; sections on transmission system balancing and system limitation management, including information on comments received from system users and their consideration, are submitted to the ERO President for approval by way of a decision.
IRZ	Cold Intervention Reserve Service – service consisting of maintaining power units ready for energy production. Energy is produced on request of PSE S.A.
JI	Joint Implementation: one of the flexibility mechanisms introduced under Article 6 of the Kyoto Protocol.
Kyoto Protocol	the Kyoto Protocol to the United Nations Framework Convention on Climate Change of December 11, 1997 (Dz.U. of 2005, No. 203, Item 1684), in force since February 16, 2005.
KSE	the National Power System, a set of equipment for the distribution, transmission and generation of electricity, forming a system to allow the supply of electricity in the territory of Poland.
KSP	the National Transmission System, a set of equipment for the transmission of electricity in the territory of Poland.
kV	kilo volt, an SI unit of electric potential difference, current and electromotive force; 1kV= 103 V.
kWh	kilowatt-hour, a unit of electric energy in the SI system defined as the volume of electricity used by the 1 kW equipment over one hour. 1 kWh = 3,600,000 J = 3.6 MJ.
Low Voltage Network (LV)	a network with a nominal voltage not exceeding 1 kV.
LTC	Long-term contracts on the purchase of capacity and electricity entered into between Polskie Sieci Elektroenergetyczne S.A. and electricity generators in the years 1994-2001.
Medium-voltage network (MV)	an energy network with a nominal voltage higher than 1 kV but lower than 110 kV.
MEV	Minimum Energy Volumes.
MSR	Market Stability Reserve (relating to CO <sub>2</sub> )
MW	a unit of capacity in the SI system, 1 MW = 106 W.
Mwe	one megawatt of electric power.
MWt	one megawatt of heat power.
NAP	National emissions Allocation Plan, prepared separately for the national emission trading system and for the EU emission trading system by the National Administrator of the Emission Trading System.
NAP II	National CO <sub>2</sub> emissions Allocation Plan for the years 2008-2012 prepared for the EU emission trading system adopted by the Ordinance of the Council of Ministers of July 1, 2008 (Dz. U. of 2008, No. 202, item 1248).
Nm <sup>3</sup>	normal cubic meter; a unit of volume from outside the SI system signifying the quantity of dry gas in 1 m <sup>3</sup> of space at a pressure of 101.325 Pa and a temperature of 0°C.
NO <sub>x</sub>	nitrogen oxides.
Peak, peakload	a standard product on the electricity market; a constant power supply from Monday to Friday, each hour between 7:00 a.m. and 10:00 p.m. (15-hour standard for the Polish market) or between 8:00 a.m. and 8:00 p.m. (12-hour standard for the German market) in a given period, for example week, month, quarter or year.
Peak power pumped storage plants	a special kind of hydroelectric power plants. In addition to river flow and the difference in the water table levels they need two bodies of water connected with a channel or a pipeline. The power station is situated next to the lower lake or at the dam of the upper lake. The pumped storage facilities provide ancillary control services for the national power system. Their functions are to secure stability, provide passive energy, store excessive power in the system and supply power to the system in peak time. The pumped storage plants that have a natural inflow of water to the upper lake also generate electricity from renewable sources. The main off-taker of electricity produced by the peak power pumped storage power stations and their services is TSO
Property rights	negotiable exchange-traded rights under green and co-generation certificates
RAB	Regulatory Asset Base.
Red certificate	a certificate confirming generation of electricity in co-generation with heat.
Red energy	popular name for electricity co-generated with heat.

Regulator	the President of ERO, fulfilling the tasks assigned to him in the energy law. The regulator is responsible for, among others, giving out licenses for energy companies, approval of energy tariffs, appointing Transmission System Operators and Distribution System Operators.
Renewable Energy Source (RES)	a source of generation using wind power, solar radiation, geothermal energy, waves, sea currents and tides, flow of rivers and energy obtained from biomass, landfill biogas as well as biogas generated in sewage collection or treatment processes or the disintegration of stored plant or animal remains.
SAIDI	System Average Interruption Duration Index - index of average system interruption time (long, very long and disastrous), expressed in minutes per customer per year, which is the sum of the interruption duration multiplied by the number of consumers exposed to the effects of this interruption during the year, divided by the total number of off-takers. SAIDI does not include interruptions lasting less than three minutes and is determined separately for planned and unplanned interruptions. It applies only to breakdowns in the medium (MV) and high voltage (HV).
SAIFI	System Average Interruption Frequency Index - index of average system amount of interruptions ( long, very long and disastrous ), determined as number of off-takers exposed to the effects of all such interruptions during the year divided by the total number of off-takers. SAIFI does not include interruptions lasting less than three minutes and is determined separately for planned and unplanned interruptions. It applies only to breakdowns in the medium (MV) and high voltage (HV).
Tariff	the list of prices and rates and terms of application of the same, devised by an energy enterprise and introduced as binding on the customers specified therein in the manner defined by an act of parliament.
Tariff group	a group of customers off-taking electricity or heat or using services related to electricity or heat supply to whom a single set of prices or charges and terms are applied.
TFS	Tradition Financial Services, an electricity trading platform used for concluding various transactions, purchase and sale of conventional energy, property rights, renewable energy and CO <sub>2</sub> emission allowances.
TGE	Towarowa Giełda Energii S.A. (Polish Power Exchange), a commodity exchange on which trading can take place in electricity, liquid or gas fuels, extraction gas, emission allowances and property rights whose price depends directly or indirectly on electric energy, liquid or gas fuels and emission allowances, admitted to commodity exchange trading.
TPA, TPA rule	Third Party Access, the owner or operator of the network infrastructure to third parties in order to supply goods/services to third party customers.
Transmission	transport of electricity through high voltage (220 and 400 kV) transmission network from generators to distributors.
Transmission System Operator (TSO)	a power company engaging in the transmission of gaseous fuels or electric energy, responsible for traffic in a gas or power transmission system, current and long-term security of operation of that system, the operation, maintenance, repair and indispensable expansion of the transmission system, including connections with other gas or power systems. In Poland, for the period from July 2, 2014 till December 31, 2030 Polskie Sieci Elektroenergetyczne S.A. was chosen as a TSO in the field of energy transmission.
TWh	terawatt hour, a multiple unit for measuring of electricity unit in the system SI. 1 TWh is 109 kWh.
Ultra-high-voltage network (UHV)	an energy network with a voltage equal to 220 kV or higher.
V (volt)	electrical potential unit, electric voltage and electromotive force in the International System of Units (SI), $1 V = 1J/1C = (1 kg \times m^2) / (A \times s^3)$ .
W (watt)	a unit of power in the International Systems of Units (SI), $1 W = 1J/1s = 1 kg \times m^2 \times s^{-3}$ .
Yellow certificate	a certificate confirming generation of energy in gas-fired power plants and CCGT power plants.
Yellow energy	popular name for energy generated in gas-fired power plants and CCGT power plants.



## **Appendix 1 Statement on disclosure of non-financial data by PGE Group**

This statement was prepared pursuant to requirements of the Accounting Act, which obligates entities of public interest to disclose non-financial data starting from 2017. In order to meet our surroundings' expectations and taking into account our experience so far in reporting non-financial data, we decided to publish this document already for 2016.

The scope of the statement for 2016 covers the entire PGE Group, i.e. PGE Polska Grupa Energetyczna S.A. ("PGE S.A") and its subsidiaries. A diagram depicting PGE S.A.'s direct and indirect equity stakes is shown on p. 2 of this statement.

For the transparency of this statement, we decided to specify the degree of materiality for each company as regards the transparency of this document. Based on internal analysis, disclosure of non-financial data for key PGE Group companies of the most importance to the Group's activities was agreed i.e. for: PGE S.A., PGE Górnictwo i Energetyka Konwencjonalna S.A. („PGE GiEK S.A.”), PGE Dystrybucja S.A., PGE Obrót S.A., PGE Energia Odnawialna S.A. („PGE EO S.A.”), PGE EJ 1 sp. z o.o. („PGE EJ1”), PGE Systemy S.A., PGE Dom Maklerski S.A. and Exatel S.A.

This statement covers selected indicators from the G4 version of the Global Reporting Initiative (GRI) as well as PGE Group's internal indicators.

### **Business model of PGE Group**

PGE Capital Group is the largest vertically integrated producer of electricity and leading electricity supplier in Poland.

The parent company of PGE Capital Group is PGE S.A. (later also referred to as the “Company”).

PGE Group currently organizes its activities in the following four main business segments:

- Conventional Generation

Core business of the segment includes search and extraction of lignite and production of energy in conventional power plants and CHP plants as well as supporting operations in this respect.

- Renewables

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

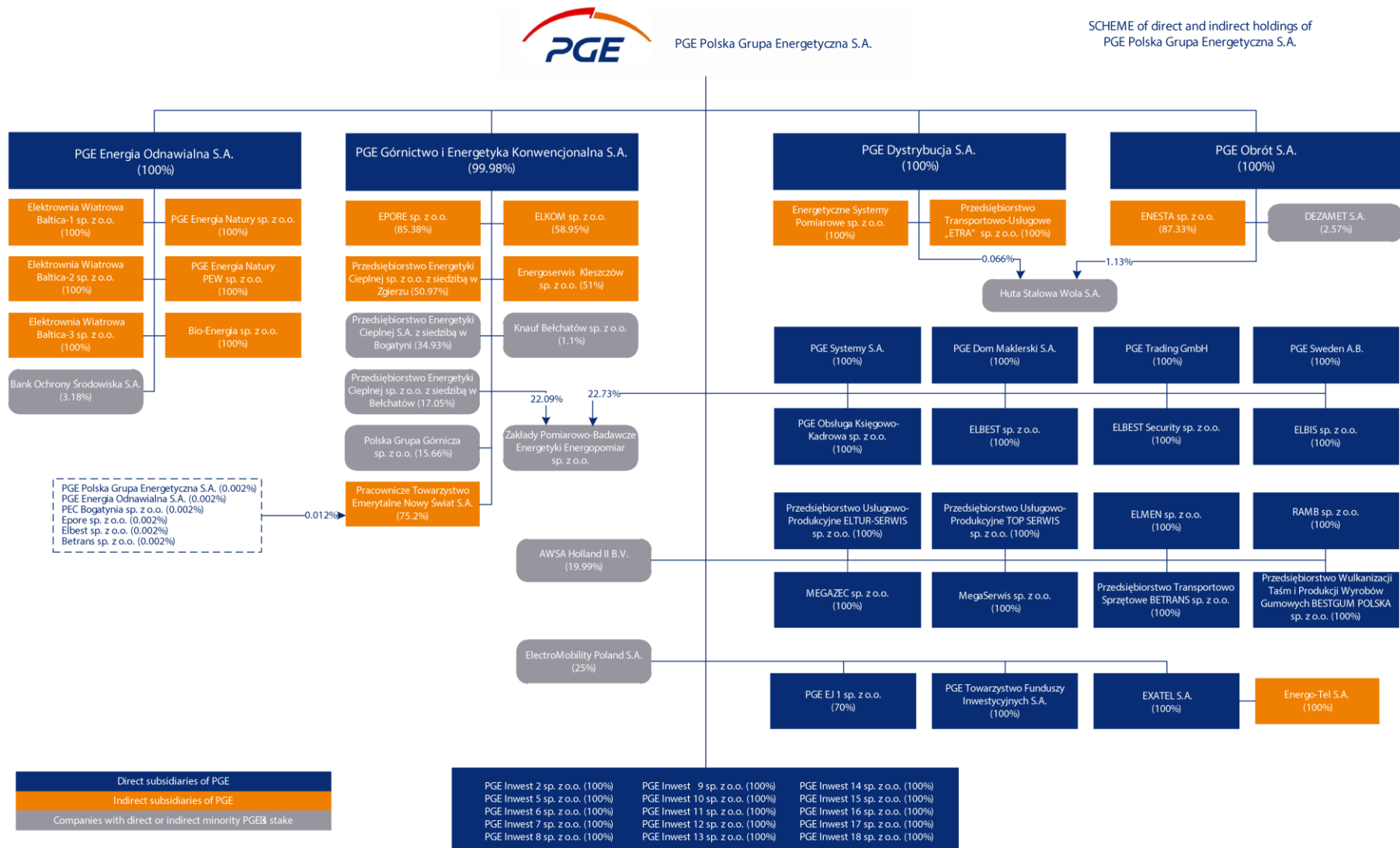
- Distribution

Core business of the segment includes management of local distribution grids and distribution of electricity.

- Supply

Core business of the segment includes sale and purchase of electricity and gas on wholesale market, trading of CO<sub>2</sub> allowances and energy certificates and purchase and supply of fuels, as well as sale of electricity and provision of services to end users.

Other Operations include provision of services by the subsidiaries to the Capital Group, for example obtaining of financing, IT services, telecommunication services, accounting and HR services. Additionally, Other Operations include a subsidiary, whose main activities are preparation and execution of nuclear power plant construction project.



## BUSINESS MODEL OF PGE GROUP

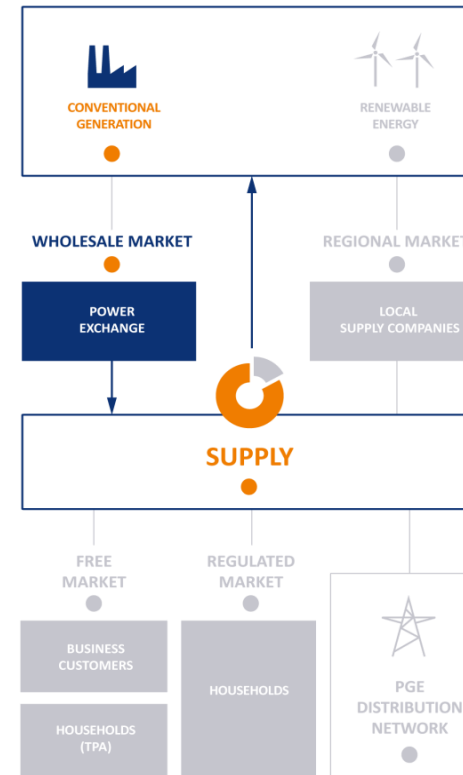
Production, supply and sales of electricity to the market



Production, supply and sales of certificates to the market



Trading of CO<sub>2</sub> allowances



## Description of the business model of PGE Group

### Production, supply and sales of electricity to the market

Electricity generated by so called centrally dispatched generating units (power plants) and heat in Conventional Generation was traded under power exchange obligation through the Polish Power Exchange (TGE). Other wholesale trading (for example from CHPs) was realized by the Supply segment.

Electricity produced from renewable sources and in pumped-storage power plants is:

- purchased by Supply segment if located at area of operation of PGE Dystrybucja or
- purchased by the supplier acting at particular area of operation.

Supply segment is responsible for wholesale trading of electricity, trading of related products and fuels on domestic and international market as well as sale and supply of electricity and fuels to end-users:

- Business customers – enterprises and institutions, on free market rules (market not regulated)
  - Tariff A – large industry (high voltage) such as steelworks, mines, large factories
  - Tariff B – Large and medium enterprises (medium voltage) such as shopping malls, hospitals and industrial customers
  - Tariff C – Small and medium enterprises and institutions (low voltage) such as shops, service outlets, farms
- Households (TPA) Third-party access rule allows sale to households on a competitive market outside of historical distribution area
- Households and housing cooperatives (G tariff group) within regulated market.

In addition, Supply segment sells electricity to PGE Dystrybucja S.A. to cover network losses connected with the distribution of electricity.

Distribution segment manager by PGE Dystrybucja S.A. is responsible for supply of electricity to final off-takers on its operation area through the HV, MV and LV grid.

### Production, supply and sales of certificates to the market

Cogeneration energy certificates of origin (red and yellow in PGE case) are generated in CHPs. Green certificates are generated in renewable units but also in conventional units from combustion and co-combustion of biomass in power plants and CHPs.

Trading of certificates pass mainly through TGE.

Some trading agreements with local suppliers include sale of green certificates together with the electricity sold.

Supply segments purchases certificates of origin in order to redeem them respectively to the obligation regarding sales of electricity to end-user (currently green, red, yellow, blue, purple and white).

### Trading of CO<sub>2</sub> allowances

Internationally traded CO<sub>2</sub> allowances are purchased on power exchanges and trading platforms.

Supply segment purchase CO<sub>2</sub> allowances to cover emissions of Conventional Generation segment. It also manages trading of CO<sub>2</sub> allowances.

Conventional Generation segment redeems the allowances respectively to the actual CO<sub>2</sub> emission.

## **Social issues**

### **1. Our policy and approach to management in the area of social issues**

PGE Group undertakes multi-dimensional social activities directed at various stakeholder groups, including local communities, clients and employees. We care about developing the areas where we do business, we raise the life quality in local communities, we support local events, and primarily we create stable jobs. We know that our activities affect the life of local communities and we strive to be a partner to them. PGE Group's social activities are an important element of thinking about CSR – they are deliberate activities of a long-term nature intended to deliver both social and business benefits.

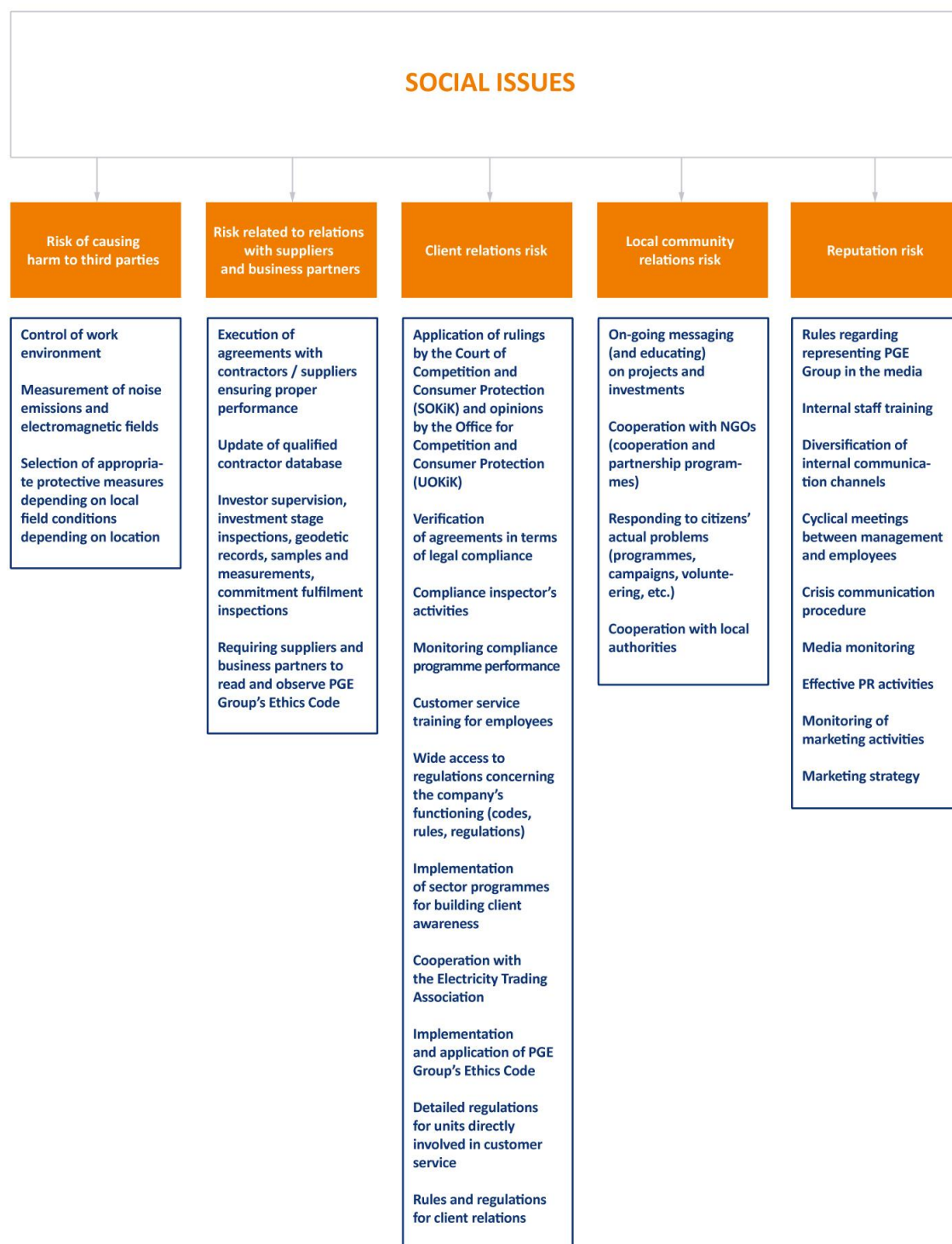
In 2014, PGE Group introduced a procedure for managing its social involvement, which aims to ensure consistency, transparency and effectiveness of activities in this area. Social issues are also addressed in the Group's updated business strategy, where our approach to social responsibility and social involvement is laid out. Within its social section, the strategy lists activities such as: educating clients, working for local communities (building local partnerships for growth and collaboration) as well as supporting organisations and people in need.

PGE Group's Ethics Code is an important document setting out social standards, including the following principle: "We care for relations with local communities".

One of the pillars of the social engagement in PGE is PGE Foundation, which has been operating since 2011. Its objective is to provide transparency of activities connected with creation of involvement among all PGE stakeholders groups through supporting the development of local communities, funding activities and implementing proprietary social programs. We support local communities in areas such as: science and education, healthcare, social aid, eco-friendly activities and environmental protection, as well as sports, including for kids, youth and people with disabilities. Social activities are also conducted as part of PGE's employee volunteering program "Pomagamy" ("We help"), which is responsible for a variety of projects of local significance.

Educating on the safe and efficient use of electricity is an element of PGE's business. PGE Group companies initiate their own educational programs. Thanks to those projects PGE wants to shape good behaviours amongst electricity consumers - children, youth and adults. Programs of this type constitute an important area of the Group's social activities.

## 2. Identified risks and management methods in the area of social issues at PGE Group



## 3. Selected social indicators at PGE Group

- Number of employees involved in PGE's "Pomagamy" ("We help") volunteering programme in 2016: **180**
- Number of volunteering hours in 2016: **13,000**
- Number of projects implemented in 2014-2016: **110**

## Employee issues

### 1. PGE Group's policies and our approach to managing employee issues

Human Capital Management Strategy for 2015-2020 (HCM) plays the most important role in defining the attitude to managing the employees issues in PGE Capital Group. Corporate Rules for Managing Human Capital at PGE Group is a policy supplementing the existing HR strategy. This is a set of common standards for the Group describing working conditions, supporting employee development and assisting employees in achieving their business objectives.

- Corporate regulations for HR area cooperation
- Corporate regulations for training and development
- Corporate regulations for the systemic management of Key Personnel
- Corporate regulations for mobility
- Corporate regulations for employment
- Corporate regulations for social relations
- Corporate regulations for HR controlling
- Corporate regulations for workplace architecture

Our approach to employee issues is also set out in the "People at our company" section of PGE Group's Ethics Code adopted in 2016. The standards and rules laid out there apply to, among other things, ensuring friendly working conditions, self-improvement and development as well as the promotion of employee safety and health.

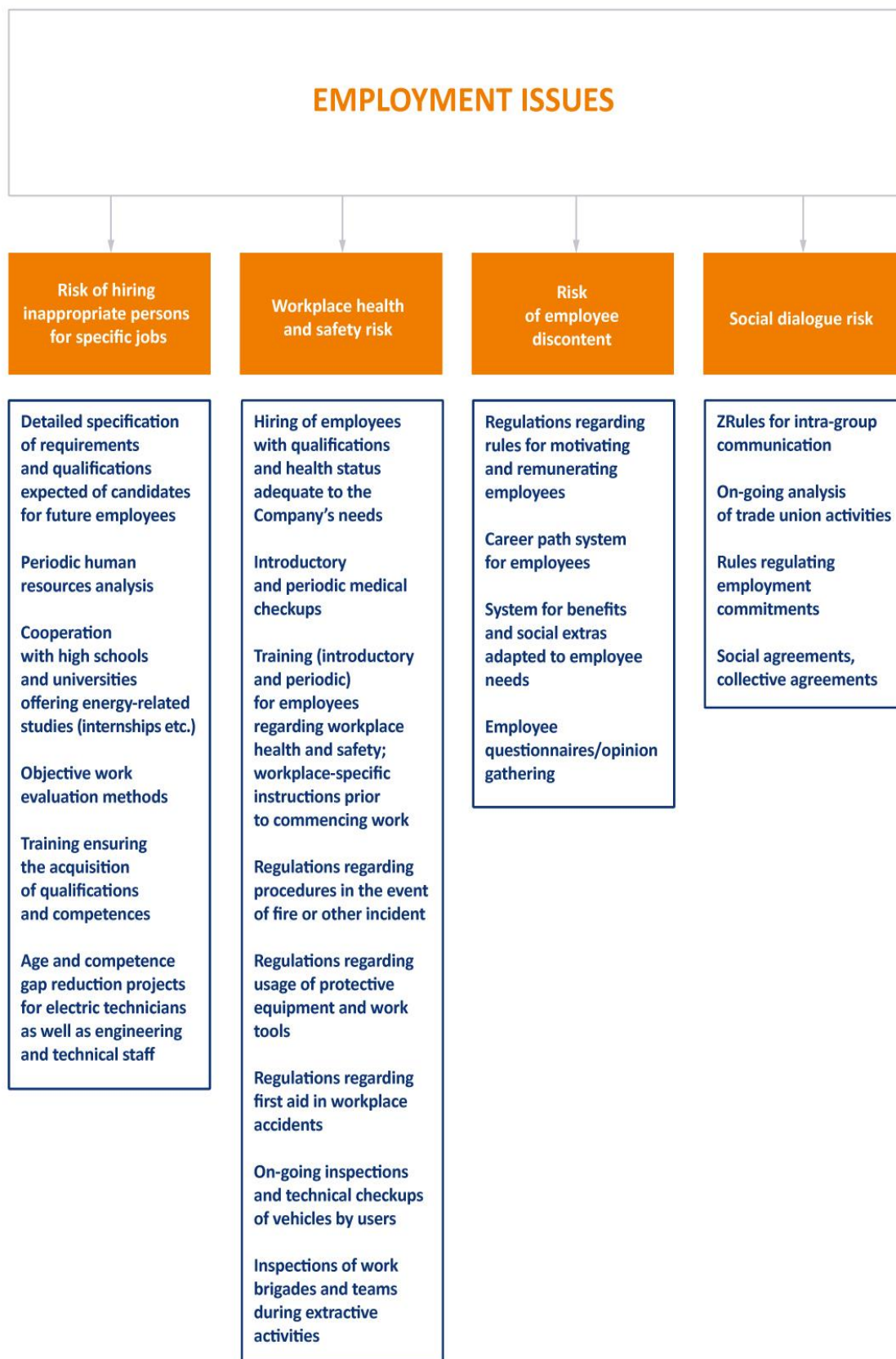
At PGE Group, we create an environment that is conducive to developing competences, raising professional qualifications and fostering individual responsibility. It is important to us that all of our employees have the opportunity to achieve success thanks to their skills and effective work.

Employment-related decisions are made in line with PGE Group's corporate hiring rules. We apply objective and non-discriminatory hiring and promoting criteria, with observance of all existing formal regulations and arrangements with our social partners.

With regard to all new hires, we apply the highest standards in organising a safe workplace environment, and the basic form of employment is a permanent employment contract.

We foster the sense of belonging at PGE Group from day one. To this end, every new employee undergoes an adaptive programme. We spare no effort at making sure that our employees have a friendly workplace environment. We create stable jobs in which employees can successfully and effectively complete their tasks, with their successes bringing satisfaction and motivation for further professional and personal development.

## 2. Identified risks and management methods in the area of employee issues at PGE Group





### 3. Selected ratios in area of employee issues in PGE Capital Group

Table: Total number of employees by employment contract and gender (headcount)\*.

	Exatel S.A.		PGE Dystrybucja S.A.		PGE Dom Maklerski S.A.		PGE EJ 1 sp. z o. o.		PGE EO S.A.	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
<b>Total number of employees</b>	<b>362</b>		<b>10,307</b>		<b>30</b>		<b>119</b>		<b>519</b>	
Total number of employees by gender	115	247	1,499	8,808	12	18	53	66	116	403
Employment contract, full-time	110	246	1,478	8,790	12	17	43	52	111	391
Employment contract, part-time	5	1	21	18	0	1	10	14	5	12
Employment contract, indefinite period	105	228	1,476	8,610	12	16	43	59	112	396
Employment contract, definite period	10	19	23	198	0	2	10	7	4	7
Mandate contract	3		99		1		1		52	
Contract of specific work	0		3		0		0		3	

	PGE GiEK S.A.		PGE Obrót S.A.		PGE S.A.		PGE Systemy S.A.	
	Women	Men	Women	Men	Women	Men	Women	Men
<b>Total number of employees</b>	<b>16,678</b>		<b>1,421</b>		<b>517</b>		<b>495</b>	
Total number of employees by gender	2,498	14,180	1,026	395	251	266	108	387
Employment contract, full-time	2,488	14,167	1,020	392	241	260	107	386
Employment contract, part-time	10	13	6	3	10	6	1	1
Employment contract, indefinite period	2,419	13,682	928	350	224	248	95	347
Employment contract, definite period	79	498	98	45	27	18	13	40
Mandate contract	99		46		2		10	
Contract of specific work	2		1		0		1	

\* Number of employees in 9 key companies of PGE Group

Table: Composition of the Management Board and Supervisory Board of PGE S.A.

Number of persons in the Management Board	As at December 31, 2016	As at annual report publication date
women	1	0
men	6	7
age: under 30 years	0	0
age: 30–50 years	3	2
age: over 50 years	4	5
<b>TOTAL</b>	<b>7</b>	<b>7</b>
Number of persons in the Supervisory Board		
women	2	2
men	7	7
age: under 30 years	0	0
age: 30–50 years	3	3
age: over 50 years	6	6
<b>TOTAL</b>	<b>9</b>	<b>9</b>

Table: Total number and rates of new employee hires and employees who left, by gender and age (headcount).

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE EO S.A.
<b>Total number of new employee hires</b>	<b>78</b>	<b>334</b>	<b>4</b>	<b>17</b>	<b>35</b>
Women	27	39	0	4	5
Men	51	295	4	13	30
Persons under 30 years of age	24	174	1	4	7
Persons between 30 and 50 years old	49	128	3	10	21
Persons over 30 years of age	5	32	0	3	7
<b>Percentage of new employee hires</b>	<b>22%</b>	<b>3%</b>	<b>13%</b>	<b>14%</b>	<b>7%</b>
Women	7%	0%	0%	3%	1%
Men	14%	3%	13%	11%	6%
Persons under 30 years of age	7%	2%	3%	3%	1%
Persons between 30 and 50 years old	14%	1%	10%	8%	4%
Persons over 30 years of age	1%	0%	0%	3%	1%
<b>Total number of employees who left</b>	<b>60</b>	<b>392</b>	<b>3</b>	<b>61</b>	<b>40</b>
Women	23	58	1	21	12
Men	37	334	2	40	28
Persons under 30 years of age	10	13	1	13	2
Persons between 30 and 50 years old	42	76	2	40	18
Persons over 30 years of age	8	303	0	8	20
<b>Percentage of employees who left</b>	<b>17%</b>	<b>4%</b>	<b>10%</b>	<b>51%</b>	<b>8%</b>
Women	6%	1%	3%	18%	2%
Men	10%	3%	7%	34%	5%
Persons under 30 years of age	3%	0%	3%	11%	0%
Persons between 30 and 50 years old	12%	1%	7%	34%	3%
Persons over 30 years of age	2%	3%	0%	7%	4%

Table: Total number and rates of new employee hires and employees who left, by gender and age (headcount)\*.

	PGE GIEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
<b>Total number of new employee hires</b>	<b>463</b>	<b>89</b>	<b>91</b>	<b>65</b>
Women	56	56	37	14
Men	407	33	54	51
Persons under 30 years of age	212	55	30	22
Persons between 30 and 50 years old	220	31	47	40
Persons over 30 years of age	31	3	14	3
<b>Percentage of new employee hires</b>	<b>3%</b>	<b>6%</b>	<b>18%</b>	<b>13%</b>
Women	0%	4%	7%	3%
Men	2%	2%	10%	10%
Persons under 30 years of age	1%	4%	6%	4%
Persons between 30 and 50 years old	1%	2%	9%	8%
Persons over 30 years of age	0%	0%	3%	1%
<b>Total number of employees who left</b>	<b>705</b>	<b>72</b>	<b>47</b>	<b>33</b>
Women	85	50	19	7
Men	620	22	28	26
Persons under 30 years of age	10	9	9	8
Persons between 30 and 50 years old	124	28	28	19
Persons over 30 years of age	571	35	10	6
<b>Percentage of employees who left</b>	<b>4%</b>	<b>5%</b>	<b>9%</b>	<b>7%</b>
Women	1%	4%	4%	1%
Men	4%	2%	5%	5%
Persons under 30 years of age	0%	1%	2%	2%
Persons between 30 and 50 years old	1%	2%	5%	4%
Persons over 30 years of age	3%	2%	2%	1%

\* Number of employees in 9 key companies of PGE Group

Table: Average days of training per year per employee by gender, and by employee category (headcount).

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE EO S.A.
Total number of days of training per year	250.00	13,146.00	215.00	571.00	557.00
<b>Average number of days of training in the reported period per employee</b>	<b>0.69</b>	<b>1.28</b>	<b>7.17</b>	<b>4.80</b>	<b>1.07</b>
<b>Average number of days of training per employee by:</b>					
Women	0.75	0.67	7.00	2.25	0.72
Men	0.65	0.68	7.00	7.76	1.17
Senior management (Management Board and Directors)	1.80	1.78	8.00	6.44	1.50
Managerial posts	0.37	1.05	-	-	1.96
Other employees	2.00	1.29	7.00	3.97	1.21

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G4-LA9

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	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
Total number of days of training per year	16,251.00	304.00	2,296.25	3,575.33
<b>Average number of days of training in the reported period per employee</b>	<b>0.97</b>	<b>0.21</b>	<b>4.44</b>	<b>7.22</b>
<b>Average number of days of training per employee by:</b>				
Women	1.17	0.19	3.93	8.64
Men	0.94	0.28	4.92	6.84
Senior management (Management Board and Directors)	7.97	1.84	4.99	11.76
Managerial posts	3.79	0.37	5.01	13.39
Other employees	0.82	0.13	4.25	6.03

Table: Percentage of employees subject to regular assessment\*.

	PGE Dystrybucja S.A.	Exatel S.A.	PGE EO S.A.	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
Percentage of persons in companies	1.33%	100%	37.76%	25.74%	100%	100%	100%

\* in PGE EJ 1 sp. z o.o. and PGE Dom Maklerski S.A. employees are not subject to assessment scheme.

Table: Type of injury and rates of injury and absence rate, and total number of work-related accidents, by company and by gender.

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE EO S.A.
<b>Total number of accidents at work:</b>	0	46	0	1	8
Women	0	4	0	1	1
Men	0	42	0	0	7
<b>Fatal accidents</b>	0	1	0	0	0
Women	0	0	0	0	0
Men	0	1	0	0	0
<b>Group accidents</b>	0	2	0	0	0
Women	0	0	0	0	0
Men	0	2	0	0	0
<b>Severe accidents</b>	0	0	0	0	0
Women	0	0	0	0	0
Men	0	0	0	0	0
<b>Light accidents</b>	0	45	0	1	8
Women	0	4	0	1	1
Men	0	41	0	0	7
<b>Accident frequency rate</b>	0	4.48	0	0.01	15.47
<b>Accident severity rate</b>	0	59.40	0	14	65.13
<b>Absence rate</b>	0	2673	0	14	521
Women	0	163	0	14	30
Men	0	2510	0	0	491

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G4

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	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
<b>Total number of accidents at work:</b>	31	1	0	1
Women	4	1	0	1
Men	27	0	0	0
<b>Fatal accidents</b>	0	0	0	0
Women	0	0	0	0
Men	0	0	0	0
<b>Group accidents</b>	0	0	0	0
Women	0	0	0	0
Men	0	0	0	0
<b>Severe accidents</b>	0	0	0	0
Women	0	0	0	0
Men	0	0	0	0
<b>Light accidents</b>	31	1	0	1
Women	4	1	0	1
Men	27	0	0	0
<b>Accident frequency rate</b>	1.89	0.71	0	2.02
<b>Accident severity rate</b>	87.23	5	0	61
<b>Absence rate</b>	2704	5	0	61
Women	283	5	0	61
Men	2421	0	0	0

Table: Breakdown of employees according to gender and age group (headcount).

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE EO S.A.
<b>Total number of employees</b>	362	10.307	30	119	519
Women	115	1.499	12	53	116
Men	247	8.808	18	66	403
Persons under 30 years of age	32	351	2	11	42
Persons between 30 and 50 years old	270	5.180	27	95	248
Persons over 30 years of age	60	4.776	1	13	229
<b>Share of employees</b>					
Women	32%	15%	40%	45%	22%
Men	68%	85%	60%	55%	78%
Persons under 30 years of age	9%	3%	7%	9%	8%
Persons between 30 and 50 years old	75%	50%	90%	80%	48%
Persons over 30 years of age	17%	46%	3%	11%	44%

G4

G4-LA12

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GC-6

	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
<b>Total number of employees</b>	16,678	1,421	517	495
Women	2,498	1,026	251	108
Men	14,180	395	266	387
Persons under 30 years of age	490	130	91	63
Persons between 30 and 50 years old	8,548	778	338	349
Persons over 30 years of age	7,940	513	88	83
<b>Share of employees</b>				
Women	15%	72%	49%	22%
Men	85%	28%	51%	78%
Persons under 30 years of age	3%	9%	18%	13%
Persons between 30 and 50 years old	51%	55%	65%	71%
Persons over 30 years of age	48%	36%	17%	17%

Table: Number of employees covered by a collective bargaining agreement (headcount)\*.

	PGE Dystrybucja S.A.	PGE EO S.A.	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.
Number of employees covered by a collective bargaining agreement	10.184	519	16.678	1.421	378
Percentage of employees covered by a collective bargaining agreement	99%	100%	100%	100%	73%

\* In Exatel S.A., PGE Dom Maklerski S.A., PGE EJ 1 sp. z o.o. and PGE Systemy S.A. employees are not covered by collective bargaining agreements

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Other ratios relating to employee issues are contained in p. 1.3 of this report.

## Environmental issues

### 1. PGE Group's policies and approach to managing environmental issues

It is our ambition to operate in a sustainable manner, maintaining high ecological standards and abiding by social business responsibility rules. In order to meet modern-world challenges such as climate protection, we undertake multilateral activities intended to responsibly and consciously shape relations between economic growth and care for the natural environment. As PGE Group, we initiate research and development activities, analyse our operations' environmental footprint and undertake environmental protection measures.

PGE Group's Environmental Protection Policy is a Group-level document defining our approach to safeguarding the environment.

The objectives of this policy are as follows:

- Establishing general rules, authorisations and responsibilities with regard to environmental protection at PGE Group,
- Establishing processes and activities conducted at PGE Group that are of key importance to environmental protection,
- Assigning key roles defined in the environmental protection management process to specific levels within PGE Group's organisational management structure,
- Identifying environmental processes in business lines, taking into account the specific nature of each of them,
- Continuously raising the awareness of PGE Group employees regarding environmental protection.

An Environmental Policy Declaration by PGE S.A. Management Board was adopted in 2016, in which the company's management commits to continuously improving activities in the area of protecting and improving the state of the environment and to preventing pollution – implementing new economically justified technological standards.

Next to the Environmental Protection Policy, all branches and headquarters at PGE GiEK S.A. apply Integrated Management System Model, which covers among other things an Environment Management System in accordance with PN-EN ISO 14001. The main objective of the Environment Management System is contributing to protecting the environment and preventing pollution in a manner that takes into consideration both social and economic needs.

Other documents describing activities centred on protecting the environment in the conventional energy area include:

- "Environmental management manual at PGE Górnictwo i Energetyka Konwencjonalna S.A.", which is a document specifying operating rules for this company's environmental protection area,
- The Environmental Protection Declaration by PGE GiEK S.A. Management Board, interlinked with the company's Environmental Management System, is a document committing to continuous improvement in activities intended to safeguard and improve the state of the environment and to prevent pollution – implementing new economically justified technological standards.

PGE Group is undertaking a variety of projects and investments, which aim to minimise impact on the environment and protect natural ecosystems in its surroundings. The Group invests in developing entirely new energy sources, based on renewable sources and modernises its conventional installations to make them as eco-friendly as possible.

PGE Group's Ethics Code, which has been in place since 2016, also addresses impact on the natural environment. The rule "We care for the natural environment" describes the company's attitude towards respecting existing environmental regulations in all aspects, including air, water and earth pollution emission norms. The declaration in the Ethics Code confirms our commitment to minimising the impact of the Group's activities on the environment. All of our employees are also obligated to use natural resources in a rational manner.

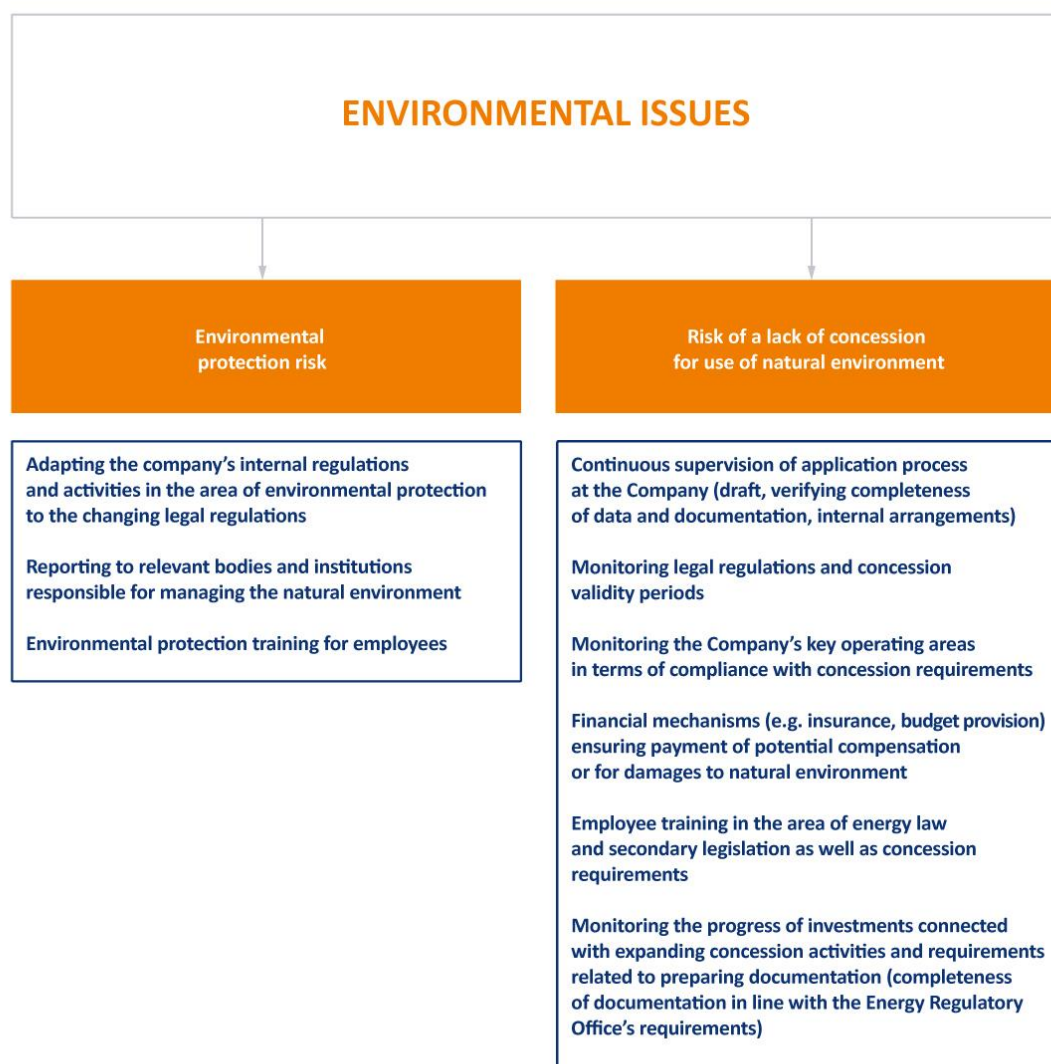
In order to abide by the rules specified in the Ethics Code, we undertake activities such as:

- We regularly monitor and reduce any negative impact of our activities on the environment. We are continually trying to reduce our environmental impact in the area of technologies applied in our operations and during our everyday work.
- We use natural resources effectively. We reduce our environmental footprint and promote the sustainable use of essential natural resources. We set environmental objectives for our supply chain. Our initiatives cover activities aimed at the sustainable development of electricity generation and transmission technologies, afforestation, reducing water and energy consumption and recycling. Every year, we publish information on our progress in this domain.
- We are championing innovations. We support innovative solutions that contribute to reducing the environmental impact of our products and services.

We assess the impact of our activities on the natural environment. In making decisions regarding modernisations and new investments, environmental footprint is always an important criterion. We know that being sustainable brings

benefits to both our shareholders and the society.

## 2. Identified risks and management methods in the area of environmental issues at PGE Group



## 3. Selected ratios in environmental issues area in PGE Capital Group

Table: NO<sub>x</sub>, SO<sub>x</sub> and other significant air emissions by PGE GIEK S.A.

Weight of significant air emissions [tons]	2016	2015	2014
NO <sub>x</sub>	47,466	57,008	62,996
SO <sub>x</sub>	51,504	99,409	99,701
Particulate matter	2,072	2,921	2,973
<b>Emission for net generation for all production capacities [kg/MWh]:</b>			
NO <sub>x</sub>	0.92	1.06	1.18
SO <sub>x</sub>	1.00	1.85	1.87
Particulate matter	0.04	0.05	0.06

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Table: Total water discharge by quality and destination [m<sup>3</sup>].

	PGE GiEK S.A.					
	2016	2015	2014			
<b>Actual total wastewater:</b>	<b>17,489,119</b>	<b>16,214,313</b>	<b>18,236,614</b>			
<b>Total wastewater by:</b>						
Rivers	17,213,189	16,014,247	18,002,263			
Lakes	-	-	-			
Municipal water supplies	275,906	200,066	234,351			
<b>Main drainage waters /mine waters</b>	<b>227,958,668</b>	<b>246,778,569</b>	<b>258,222,689</b>			
<b>Cooling waters from open cooling system which do not require purification</b>	<b>1,105,809,092</b>	<b>1,202,150,301</b>	<b>1,146,205,883</b>			
	PGE Energia Odnawialna S.A.			PGE Dystrybucja S.A.		
	2016	2015	2014	2016	2015	2014
<b>Actual total wastewater:</b>	<b>77,360</b>	<b>70,295</b>	<b>59,657</b>	<b>117</b>	<b>234</b>	<b>295</b>
<b>Total wastewater by:</b>						
Rivers	71,938	63,661	52,423	117	234	295
Lakes	-	-	-	-	-	-
Municipal water supplies	5,422	6,634	7,234	-	-	-
<b>Main drainage waters /mine waters</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Cooling waters from open cooling system which do not require purification</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Total weight of waste at PGE GiEK S.A., by type and method of dealing with waste [t].

	2016	2015	2014
<b>Amount of hazardous waste by the utilization method:</b>	<b>825.27</b>	<b>1203.69</b>	<b>1.184.00</b>
<b>Recovery (including energy recovery)</b>	470.18	524.96	545.00
Recycling	68.64	269.31	172.00
Mass burn	0.00	10.10	0.00
Neutralization	215.69	180.06	337.00
Storage in landfills	0.11	61.46	47.00
On-site storage and warehousing	70.65	157.80	83.00
<b>Amount of waste other than hazardous by the utilization method:</b>	<b>7,966,743.27</b>	<b>7,784,916.41</b>	<b>8,642,064</b>
Recovery (including energy recovery)	2,165,396.96	2,342,603.68	3,453,655.00
Recycling	319.06	46.07	464.00
Mass burn	0.00	0.00	0.00
Neutralization	4,409.63	25,828.4	10,762.00
Storage in landfills	4,974,720.38	5,339,595.29	4,915,648.00
Warehousing	821,897.24	76,842.97	261,535.00

Total weight of waste at PGE EO S.A., by type and method of dealing with waste [t].

	2016	2015	2014
<b>Amount of hazardous waste by the utilization method:</b>	<b>67.23</b>	<b>47.61</b>	<b>61.41</b>
Neutralization	3.50	3.50	0.00
On-site storage and warehousing	46.79	14.65	2.00
Other	16.94	29.45	59.41
<b>Amount of waste other than hazardous by the utilization method:</b>	<b>559.15</b>	<b>704.00</b>	<b>282.73</b>
On-site storage and warehousing	44.86	67.74	1.00
Other	514.29	636.26	281.73

Total weight of waste at PGE Dystrybucja S.A., by type and method of dealing with waste [t].

	2016	2015	2014
<b>Amount of hazardous waste by the utilization method:</b>			
Passed on to authorised waste management utilities	2,875	3,604	3,158
<b>Amount of waste other than hazardous by the utilization method:</b>			
Passed on to authorised waste management utilities	7,318	8,615	7,624

Information on CO<sub>2</sub> emissions is presented in p. 4.3.6 of this report.

Table: Monetary value of fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations in PGE GiEK S.A.

	2016	Additional information
Value of fines for non-compliance with environmental laws and regulations imposed in a given year	PLN 5,115	<ol style="list-style-type: none"> <li>1) PLN 500 - penalty for failure to submit to the Marshal's Office by the due date of a data list regarding waste for 2012, imposed through a decision of the Kujawsko-Pomorskie Voivodship Inspectorate for Environmental Protection</li> <li>2) PLN 300 - penalty for failure to submit by the due date and for submission of an incorrect waste register, imposed through a fine after audit by the Zachodniopomorskie Voivodship Inspectorate for Environmental Protection</li> <li>3) PLN 4,315 - penalty for exceeding the air pollution limit value in 2015, imposed by the Lubelskie Voivodship Inspectorate for Environmental Protection.</li> </ol>
Value of fines for non-compliance with environmental laws and regulations paid in a given year	PLN 4,615	<ol style="list-style-type: none"> <li>1) PLN 300 - penalty for failure to submit by the due date and for submission of an incorrect waste register, imposed through a fine after audit by the Zachodniopomorskie Voivodship Inspectorate for Environmental Protection</li> <li>2) PLN 4,315 - penalty for exceeding the air pollution limit value in 2015, imposed by the Lubelskie Voivodship Inspectorate for Environmental Protection</li> </ol>
Value of fines for non-compliance with environmental laws and regulations remitted in a given year	PLN 5,922,146	<ol style="list-style-type: none"> <li>1) PLN 5,900,863 - decrease to zero of administrative penalties imposed for breaching the terms for waste discharge at Elektrociepłownia Bydgoszcz II in 2006-2009</li> <li>2) PLN 21,283 - decrease to zero of a penalty for exceeding noise limits in 2013 in Bełchatów lignite mine</li> </ol>

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## Human rights issues

### 1. PGE Group's policies and approach to managing human right issues

Human rights are at the foundation of PGE Group's activities and are a key aspect of our values. We observe Polish and international law and we operate in compliance with the highest existing human rights standards and norms, such as Global Compact.

Human rights issues are included in our internal documents and procedures, the most important of which is PGE Group's Ethics Code, setting out fundamental ethical values and standards that the organisation expects from all employees, including management.

The Ethics Code includes the "We respect human rights" declaration, which is confirmed by our compliance with fundamental principles such as: Universal Declaration of Human Rights, International Labour Organisation standards, United Nations Global Compact principles. We emphasise our commitment to rights such as dignity, right to organise, freedom of opinion, freedom of speech and right to privacy.

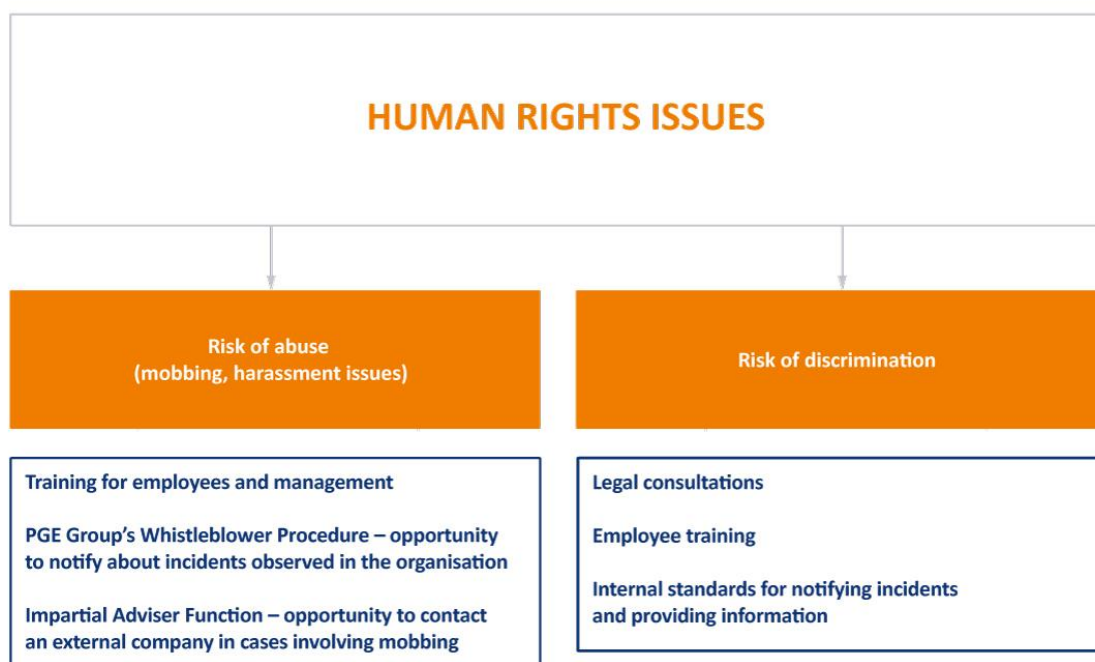
Another important aspect for us is respect for diversity, understood in the categories of race, sex, sexual orientation, age, culture, marital status as well as religious beliefs and political views or the membership, or a lack thereof, in social and professional organisations.

In the Ethics Code, PGE Group declares that it consistently strives to ensure a working environment that is free of any form of mobbing, discrimination, molestation and other reprehensible behaviour. We underline the prohibition of discrimination as well as the company's obligations related to workplace health and safety.

Conducted and planned training sessions are a manifestation of our commitment to promoting such attitudes. We place emphasis on building knowledge and supporting the development of appropriate attitudes amongst employees.

Furthermore, training planned for next year for PGE Group's employees and management addresses issues such as knowledge of the values and principles specified in the Ethics Code and the associated attitudes and behaviours. Expanded training in developing respectful attitudes towards co-workers and employees is planned for higher-level management.

### 2. Identified risks and management methods in the area of human rights at PGE Group



### 3. Selected ratios in the area of human rights issue in PGE Capital Group

Table: Employee training in the human rights policy and procedures involving aspects of human rights.

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE Energia Odnawialna S.A.
<b>Total number of training hours</b>	9.5	9.5	9	3.5	4
Number of employees trained	362	11	31	3	26
Percentage of employees trained	100.00%	0.11%	100.00%	1.58%	5.03%

	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
<b>Total number of training hours</b>	6	6.5	32.5	0
Number of employees trained	39	13	273	0
Percentage of employees trained	0.24%	1.00%	52.80%	0.00%

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## Anti-corruption issues

### 1. PGE Group's policies and our approach to management in the area of combating corruption

The key document outlining activities in this area is PGE Group's Ethics Code. It describes activities concerning the combating of corruption and bribery.

The principle "We do not tolerate corruption or unfair practices" includes provisions such as:

- At PGE Group, we have a zero tolerance policy with respect to bribes and any other forms of corruption. We do not give or accept improper financial, personal or other gains that could be construed as improper consideration. An improper benefit is a benefit that can be construed as a bribe for the recipient, given in order for him to perform his professional duties in a manner expected by the person giving the improper benefit.
- We treat gifts and invitations with caution. Gifts or invitations the value of which is above a threshold accepted at our company may be accepted from third parties only with the explicit consent from a superior. The same applies to gifts or invitations being given by PGE Group employees.
- We avoid conflicts of interest. Employees should avoid getting involved in or being additionally employed by companies that are PGE Group's clients, suppliers or other business partners, especially competitors, so as to avoid a conflict of interest.

In addition, the opportunity to notify incidents involving corruption and bribery is specified in the Group-wide internal Procedure for Compliance Management.

Another direction of our activities will be the introduction of appropriate mechanisms for preventing, monitoring and notifying suspicions or incidents of corruption or bribery as well as creating clear and transparent norms for employees, management, clients and external partners regarding mutual cooperation.

Preventing corruption most importantly requires PGE employees and management's awareness to be strengthened.

Therefore, currently we conduct further intensive activities throughout the Group connected with prevention of corruption, bribery and money laundering. Nowadays the employees of the Capital Group companies are trained on the Ethics Code of the PGE Capital Group, in which we declare the principle "Zero tolerance for corruption and abuse". We also manage corruption risk and train employees who are particularly exposed to that risk. Works are continues on adoption of detailed Anti-corruption Policy of the PGE Capital Group. An information campaign has also been launched in the Group, reminding the employees about the principle "Zero tolerance for corruption and abuse", which is binding for all Group companies and its branches.

In case of suspicion of committing a crime of corruption, we closely co-operate with relevant public institutions. This happened, among others, in the case of suspected corruption offenses against employees of one of the company of PGE Capital Group, where he worked closely with the relevant authorities and we act against employees in the role of subsidiary prosecutor.

## 2. Identified risks and management methods in the area of anti-corruption at PGE Group



## 3. Selected ratios in area of anti-corruption issues in the PGE Capital Group

Table: Total number and percentage of companies evaluated in terms of corruption occurrence\*.

	2016
Number of companies evaluated in terms of corruption occurrence risk	7
Percentage of companies evaluated in terms of corruption occurrence risk	78%

\*Out of 9 companies 2 do not evaluate the risk of corruption : PGE Systemy S.A., PGE EJ 1 sp. z o.o., the evaluation of the risk is planned to be introduced in each of the Group company.

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Table: Communication on anti-corruption policies and procedures.

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE Energia Odnawialna S.A.
Percentage of Management Board and Supervisory Board members informed about the anti-corruption policies and procedures of the organisation	0.00%	78.57%	100.00%	25.00%	88.89%
Percentage of employees informed about the anti-corruption policies and procedures of the organisation	0.00%	100.00%	100.00%	100.00%	100.00%
Percentage of employees in managerial positions informed about the anti-corruption policies and procedures of the organisation	0.00%	100.00%	100.00%	100.00%	100.00%
Percentage of other employees informed about the anti-corruption policies and procedures of the organisation	0.00%	100.00%	100.00%	100.00%	100.00%
Total number of business partner informed about the anti-corruption policies and procedures of the organisation	Company will inform contractors by the end of March 2017	All contractors since Dec. 2016	All contractors since Nov. 2016	All contractors since Nov. 2016	All contractors since Nov. 2016

	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
Percentage of Management Board and Supervisory Board members informed about the anti-corruption policies and procedures of the organisation	100.00%	60.00%	43.75%	100.00%
Percentage of employees informed about the anti-corruption policies and procedures of the organisation	100.00%	100.00%	100.00%	100.00%
Percentage of employees in managerial positions informed about the anti-corruption policies and procedures of the organisation	100.00%	100.00%	100.00%	100.00%
Percentage of other employees informed about the anti-corruption policies and procedures of the organisation	100.00%	100.00%	100.00%	100.00%
Total number of business partner informed about the anti-corruption policies and procedures of the organisation	All contractors since Nov. 2016	All contractors since Dec. 2016	All contractors since Nov. 2016	All contractors since Nov. 2016



Table: Training on anti-corruption policies and procedures.

	Exatel S.A.	PGE Dystrybucja S.A.	PGE Dom Maklerski S.A.	PGE EJ 1 sp. z o. o.	PGE Energia Odnawialna S.A.
Percentage of Management Board and Supervisory Board members trained on anti-corruption	0.00%	64.29%	50.00%	25.00%	66.67%
Percentage of employees trained on anti-corruption	0.00%	0.04%	100%	1.56%	3.86%
Percentage of employees in managerial positions trained on anti-corruption	0.00%	0.09%	100%	5.88%	51.30%
Percentage of other employees trained on anti-corruption	0.00%	0.03%	100%	0.90%	0.20%

	PGE GiEK S.A.	PGE Obrót S.A.	PGE S.A.	PGE Systemy S.A.
Percentage of Management Board and Supervisory Board members trained on anti-corruption	100%	60.00%	37.50%	62.00%
Percentage of employees trained on anti-corruption	0.24%	0.00%	51.64%	2.00%
Percentage of employees in managerial positions trained on anti-corruption	5.00%	0.00%	56.06%	0.00%
Percentage of other employees trained on anti-corruption	0.00%	0.00%	50.13%	2.00%

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