

Management Board's report on activities of the Capital Group of PGE Polska Grupa Energetyczna S.A. for the 3-month period

*ended March 31, 2017* 

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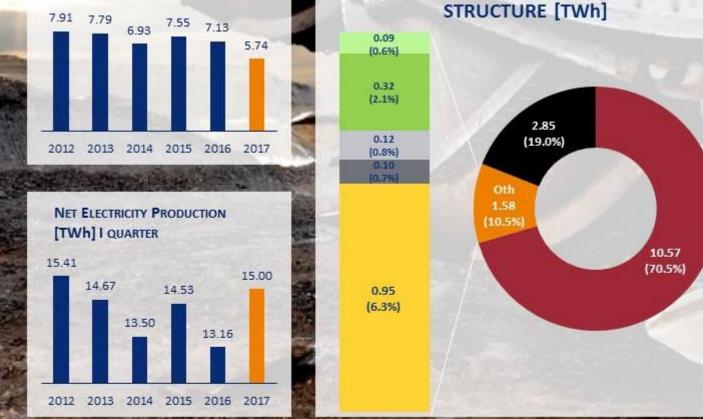


**ELECTRICITY GENERATION** 

Hydro

Wind

Biomass



Gas

Pumped-

storage

Hard coal

Lignite

REVENUES

[PLN BN ] I QUARTER

<sup>\*</sup> net profit adjusted by impairment of property, plant and equipment

<sup>\*\*</sup> including EXATEL S.A. and ENERGO-TEL S.A.

	CONVENTIONAL GENERATION	RENEWABLE ENERGY	SUPPLY	DISTRIBUTION	
Operations	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	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	
Key assets of the segment	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		286 075 kms. of distribution lines	
Energy volumes	Generation 14.46 TWh	Generation 0.54 TWh	Sales to end-users 10.05 TWh	Electricity distributed 8.96 TWh	
Market position	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)	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	
Revenues [PLNm]	3 164	192	3 953	1 643	
EBITDA [PLNm]	992	91	243	618	
Share of Group EBITDA	51%	5%	12%	32%	
CAPEX [PLNm]	788	12	3	263	
Assets [PLNm]	37 101	3 631	3 569	17 332	

## 1. Description of activity of the Capital Group

## 1.1. Description of organisation

The Capital Group of Polska Grupa Energetyczna S.A. ("PGE Capital Group", the "Group", "PGE Group", "PGE CG") is Poland's largest vertically integrated power utility by revenue, installed capacity and electricity production volume.

With a mix of own fuel sources, generation assets and distribution network, PGE provides a safe and reliable supply of electricity to more than five million households, businesses and institutions.

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 four main business segments:

Conventional Generation

Core business of the segment includes extraction of lignite, production of electricity and heat from conventional sources as well as transmission and distribution of heat.

Renewables

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

Supply

Core business of the segment includes trading of electricity across the country, wholesale trading of electricity on domestic and international market, provision of services to companies from the PGE Group related to commercial management of generation capacities of the Group and electricity produced, as well as trading of  $CO_2$  allowances and energy certificates and gas.

Distribution

Core business of the segment includes supply of electricity to final off-takers though the grid and HV, MV and LV infrastructure.

Since December 16, 2016 due to the lowering of the so called "power exchange obligation" (obligation to publicly sell electricity) most of the trading is executed bilaterally within the Capital Group. That change significantly attributed to the decrease of the electricity sale and purchase volumes (see p. 3.2.1 of this report) and consequently consolidated revenues (see p. 3.1.3 of this report) and costs. It had limited impact on the actual profitability of PGE Group.

## 1.2. Composition of organisation

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

## 1.2.1. 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, 2017 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	Share capital	Comment
			in National Court Register		
PGE Inwesty	Towarzystwo ycyjnych S.A.	Funduszy	January 27, 2017	PLN 750,000	On December 29, 2016, PGE S.A. formed a single-member company based in Warsaw in the form of a public limited company.
PGE Inv	west 19 sp. z o.o.		February 24, 2017	PLN 10,000	On February 1, 2017, PGE S.A. formed a single-member company based in Warsaw in the form of a limited 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 Inwest 13 sp. z o.o.	January 27, 2017	(1) PLN 20,000 (2) PLN 730 000 (3) PLN 750 000	On December 7, 2016, the Extraordinary Assembly of Partners of the company adopted a resolution on an increase of the company's share capital. The increased capital was acquired by PGE S.A. in exchange for a cash contribution. PGE S.A. holds 100% of share capital.
PGE Inwest 15 sp. z o.o. (currently the company nam eis: PGE Nowa Energia sp. z o.o.)	March 22, 2017	(1) PLN 20 000 (2) PLN 50 000 (3) PLN 70 000	On December 20, 2016, the Extraordinary Assembly of Partners of the company adopted a resolution on an increase of the company's share capital. The increased capital was acquired by PGE S.A. in exchange for a cash contribution. PGE S.A. holds 100% of share capital.
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 the company 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. PGE S.A. holds 70% in the share capital.
PGE Nowa Energia sp. z o.o. (formerly the company name was: PGE Inwest 15 sp. z o.o.)	April 18, 2017	(1) PLN 70 000 (2) PLN 5 150 000 (3) PLN 5 220 000	On March 28, 2017, the Extraordinary Assembly of Partners of the company adopted a resolution on an increase of the company's share capital. The increased capital was acquired by the company's sole shareholder, PGE S.A., in exchange for a cash contribution. PGE S.A. holds 100% of share capital.
PGE Inwest 6 sp. z o.o.	No registration at the time of publication.	(1) PLN 20 000 (2) PLN 1500 000 (3) PLN 1520 000	On April 7, 2017, the Extraordinary Assembly of Partners of the company adopted a resolution on an increase of the company's share capital. The increased capital was acquired by the company's sole shareholder, PGE S.A., in exchange for a cash contribution. PGE S.A. holds 100% of share capital.
PGE Inwest 16 sp. z o.o.	April 27, 2017	(1) PLN 200 000 (2) PLN 900 000 (3) PLN 1 100 000	On April 7, 2017, the Extraordinary Assembly of Partners of the company adopted a resolution on an increase of the company's share capital. The increased capital was acquired by the company's sole shareholder, PGE S.A., in exchange for a cash contribution. PGE S.A. holds 100% of share capital.

## 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
Polska Grupa Górnicza sp. z o.o. ("PGG") – acquisition by PGE Górnictwo i Energetyka Konwencjonalna S.A. ("PGE GiEK S.A.", "PGE GiEK"). of shares in the increased share capital of PGG	November 3, 2016/ January 27, 2017 PGG's share capital increase registered	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.
Polska Grupa Górnicza sp. z o.o. – acquisition by PGE GiEK S.A. of shares in the increased share capital	February 1, 2017/ March 10, 2017 PGG's share capital increase registered	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.
PGG – acquisition by PGE GiEK S.A. of shares in the increased share capital	April 3, 2017  No registration at the time of publication	500,000 shares	On March 31, 2017 the investment agreement was signed between PGE GiEK, Enea S.A., ENERGA Kogeneracja sp. z o.o., PGNiG TERMIKA S.A., Weglokoks S.A., Towarzystwo Finansowe Silesia sp. z o.o., Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych and PGG sp. z o.o. The investment agreement determines the conditions of the financial investment in PGG. assumes recapitalisation of PGG in three stages by PGE GiEK, Enea S.A., ENERGA Kogeneracja sp. z o.o., PGNiG TERMIKA S.A. and Towarzystwo Finansowe Silesia sp. z o.o. with total amount of PLN 1 billion. Within the recapitalisation of PGG, PGE GiEK committed itself to acquire new shares of PGG with a total nominal value of PLN 100 million in exchange for the cash contribution in amount of PLN 100 million. On the base of that agreement, the Extraordinary Assembly of Partners of PGG adopted resolution on the increase of the share capital by PLN 500,000,000 to PLN 3,416,718,200, through issue of new shares. PGE GiEK S.A. took up 500,000 shares with a nominal value of PLN 50,000,000, representing 1.5% in the increased share capital of PGG. On the ground of the above and earlier transactions PGE GiEK S.A. took up total of 5,500,000 shares representing 16.1% in the 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 Polimex's share capital increase 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, 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.
Polimex – 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 a 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. 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, including PGE S.A. holding 39,000,001 shares representing 16.48% in the share capital.

EXATEL S.A. — sale of shares by PGE S.A.	March 29, 2017		PGE S.A. and the State Treasury of the Republic of Poland ("State Treasury") executed an agreement for the sale of 100% of shares in EXATEL S.A. to the State Treasury. As a result of the sale transaction, EXATEL S.A. and its subsidiary ENERGO-TEL S.A. are no longer part of PGE Group.
PGE GIEK S.A. – mandatory buyback of shares	April 10, 2017	67,052 shares	CDM Pekao S.A., which maintains PGE GiEK S.A.'s share register, made entries in the share register regarding transfer to PGE S.A. of the ownership of 67,052 shares of PGE GiEK S.A. covered by a mandatory squeeze-out procedure but not yet transferred to PGE S.A. In connection with the above, PGE S.A. currently holds a 100% stake in the share capital of PGE GiEK S.A.

## **Transformation of companies**

Transformed company	Date of transaction/ registration in the National	Comment
	Court Register	
PGE Inwest 13 sp. z o.o.	April 25, 2017	On April 25, 2017, the Extraordinary Assembly of Partners of the company adopted a resolution on the change of this company's legal form into a single-member public limited company under the name PGE Inwest 13 S.A. PGE S.A. holds 100% shares in the share capital of
After transformation (Transformed company)	April 26, 2017	PGE Inwest 13 sp. z o.o. On April 26, 2017, PGE S.A. signed the Articles of Association of PGE Inwest 13 S.A. and appointed its governing bodies.
PGE Inwest 13 S.A.	No registration of transformation at the time of publication	

## 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:

Leader in generation, actively taking advantage of growth opportunities

Reliable and active utility and service supplier

Poland's most efficient and flexible energy group

Leader in developing new business models and lines of business

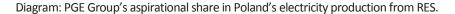
## 2.2. Implementation of key projects within the strategic objectives

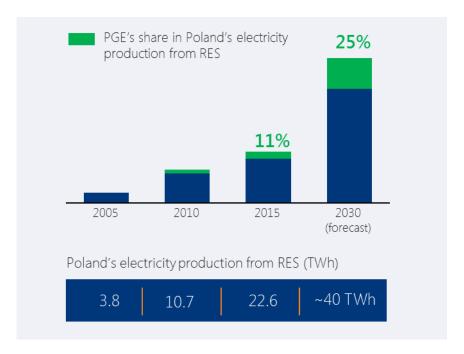
#### 2.2.1. Leader in electricity generation, actively seeking development opportunities

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 an 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.

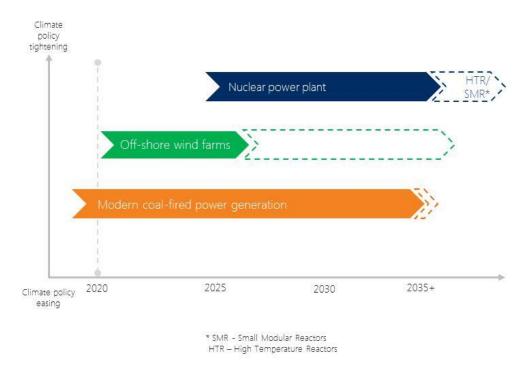




In order to maintain a leading position in generation, in the long term PGE Group has three strategic options, thereby can make the optimal choice in the context of future climate policy:

- 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.

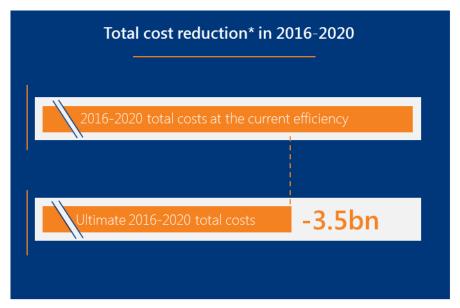
#### 2.2.3. Poland's most efficient and flexible energy group

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 500 million versus year 2016. This will allow for the total cost reduction in 2016-2020 by approx. PLN 3.5 billion 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 – "Cogeneration". 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 500 million 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.

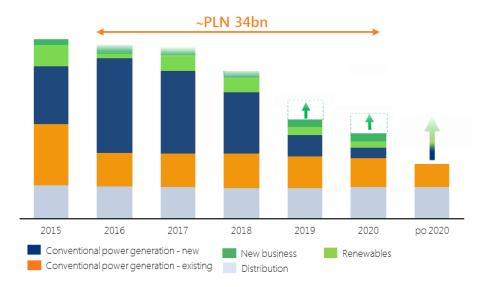
PGE Group intends to build up its brand of a leader on the energy efficiency market. New ESCO (Energy Saving Company) activities will provide clients with benefits such as reduced energy consumption costs, supply continuity and improved image. This will enable PGE Group to develop long-term beneficial 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 be gradually decreasing. 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 the first quarter of 2017

## Development investments

#### Construction of new units in Opole power plant

- construction of two power units of 900 MW each
- budget: approx. PLN 11 billion (net, without costs of financing)
- capital expenditures incurred so far: approx. PLN 7.1 billion
- fuel: hard coal
- net efficiency: 45.5%
- **contractor**: syndicate of companies: Rafako, Polimex-Mostostal and Mostostal Warszawa with co-operation of GE as Project manager on behalf of the syndicate
- commissioning: unit 5 H2 2018; unit 6 H1 2019
- January 31, 2014 issue of Notice to Proceed
- status: assembly operations at unit 5 are at an advanced stage, leak tests were conducted on the boiler's pressure systems, with positive results; as regards unit 6, assembly of the boiler's pressure part continues, assembly of the turboset has commenced; the Project's overall progress at the end of March 2017 was approx. 75%

#### Construction of new unit in Turów power plant

- aim of the project: construction of power unit with a capacity of 490 MW
- budget: approx. PLN 4 billion (net, without costs of financing)
- capital expenditures incurred so far: approx. PLN 0.7 billion
- fuel: lignite
- net efficiency: 43.1%
- contractor: syndicate of companies: MHPSE, Budimex and Tecnicas Reunidas
- commissioning: H1 2020
- December 1, 2014 issue of Notice to Proceed
- status: foundation work for the unit's main equipment is finished; assembly of the boiler's steel
  construction and assembly of absorber tank for the flue gas desulphurisation system have begun;
  preparatory works were conducted for the erection of the cooling tower shell

### Construction of a Thermal Processing Installation with Energy Recovery at Rzeszów CHP

- aim of the project: 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 cogeneration)
- budget: approx. PLN 293 million (net, without costs of financing)
- capital expenditures incurred so far: approx. PLN 26 million
- fuel: municipal waste
- boiler's efficiency: 86%
- contractor: syndicate of TM.E. S.p.A. Termomeccanica Ecologia and Astaldi S.p.A spółka cywilna
- commissioning: H1 2018
- Agreement with the Contractor signed on December 22, 2015, Notice to Proceed issued on April 8, 2016
- status: concrete and reinforcement works related to the construction of the main structures continue, assembly of the boiler grate is completed

# Modernisation and replacement projects

## 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
- status: unit 2 was shut down for modernisation and the area was handed over to contractors. Dismantling works have started on specific objects, installations and equipment covered by modernisation works
- budget: PLN 0.8 billion (net, without costs of financing)
- fuel: lignite
- ocompletion: 2020

# 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

• aim of the project: 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
- status: works related to filling in and securing the storage site continue, as do works related
  to installations for unit 14 construction of a suspension production and pumping system,
  assembly of pipelines for the Lubień storage site, construction and modernisation of
  electrical switching stations
- budget for units 1-12: ca. PLN 450 million (net, without costs of financing)
- budget for unit 14: ca. PLN 85 million (net, without costs of financing)
- completion: 2018

## Modernisation of the Pomorzany power plant

- $\bullet$  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
- status: agreements signed with main contractors (on construction of flue-gas desulphurisation FGD and deNO<sub>x</sub> installations and selected non-contractual tasks). Permits to build FGD and SCR (selective catalytic reduction of NO<sub>x</sub>) secured. Main contractors are currently preparing documentation of main projects. Construction site handed over to SCR contractor.
- budget: ca. PLN 213 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

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

- ullet 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
- status: on-going tender procedures to select general contractor for deNO<sub>x</sub> installation and expand FGD. Five bids from contractors submitted (for denitrification installation). Commission is working on evaluations thereof.
- 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

# Project of network losses reduction

- aim of the project: reduction of electricity procurement costs for balancing differences
- activities undertaken (multi-year project):
  - replacement of HV/MV, MV/LV transformers with low-loss units, adaptation of transformers' output to power consumption
  - 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,
  - reduction of load asymmetries in LV lines.
- the results of the project: 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 2.8% in comparison to 2015.
- activities initiated in Q1 2017: project assumptions for 2017-2021 were updated in March 2017; activities aimed at reducing balancing differences at PGE Dystrybucja S.A. are to be continued.

# Trading strategy update

- aim of the project: achieving maximum margin on sale of electricity simultaneously minimising risk associated with trading activities
- activities initiated in Q1 2017:

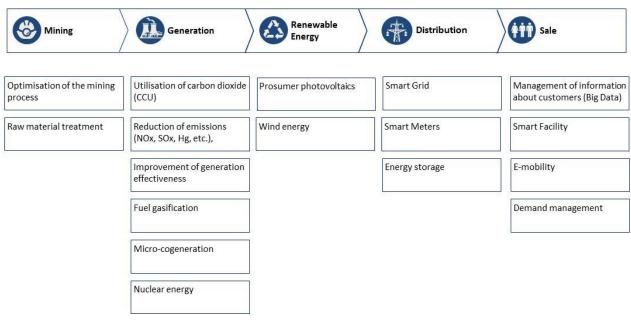
Sale of electricity was realised pursuant to conditions resulting from optimisation of use of particular generating units in connection with the level of variable costs, level of market prices, market liquidity, regulations and laws, with the simultaneous assessment of risk associated with so called "open position". Electricity trading methods were adapted to a reduced "power exchange obligation" (to 15% from December 16, 2016). Sales were conducted bilaterally within the Group, 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. Moreover, activities were undertaken to improve wholesale trade operations and adapt wholesale trade to regulatory changes, including the MIFID II directive. Works included the identification of wholesale trade areas with operations requiring verification and possible modification. Currently, works are underway to develop and implement target solutions in these areas.

Human Capital Management Strategy ("HCM Strategy")

- aim of the project: supporting the business strategy goals through securing strategic and effective human resources management and optimization and standardisation of HR processes.
- activities initiated in Q1 2017: works were underway to clarify the definitions of specialisations in Workplace Architecture. Furthermore, during meetings with PGE Group management, specialist competences were selected to be included in the Competence Model next to firm-wide and management competences. The Competence Model will eventually be used in the process of evaluating PGE Group's employees. The 3rd Conference of PGE Group Employers took place at the end of March, during which the management team discussed on changes in the work style of managers with regard to issues surrounding human capital management and adaptation of the organisation in order to meet PGE Group's ambitious goals.

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 progressed 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. An SPV named PGE Nowa Energia was formed to work with small businesses (start-ups) in the acceleration and project commercialisation (implementation of innovation solutions) formula. By working with start-up market stakeholders (small businesses, accelerators, other investors, government agencies, etc.), the company is intended to be a competence centre, allowing PGE to effectively identify and develop technologies and products being part of and related to the power value chain.

#### 2.2.5. Innovation

PGE focuses on initiating and executing R&D projects that fall within the SOBiR+NB areas. In the first quarter of 2017, several dozen projects were continued within these areas.

#### Key projects in the first quarter of 2017

Involvement in equity structures that support the development of new technologies and solutions as well as small businesses

- aim of the project: 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)
  - main activities:
    - As part of PGE Group's involvement in equity mechanisms, a plan has been prepared to come up with a fund (corporate venture capital). In line with the plan, work is underway on the CVC's market strategy, applications for public funding are being prepared and own funds have been allocated.
    - PGE Nowa Energia was launched, which will serve as accelerator for small firms, provide a
      network of contacts and will enable acquisition of projects for further development (deal
      flow) as a part fund investments.

#### Electromobility

- aim of the project: promoting and developing electric transport in Poland
- main activities:

concern two areas: (i) individual transport – cars used for private and business purposes, and (ii) bus transport – public transport in urban areas.

- PGE has been continuing a project launched in December 2016 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. 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 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.

#### Recykling

- 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 (National Centre for Research and Development).

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

Key financial data	Unit	Q1 2017	Q1 2016	% change
Sales revenues	PLN million	5 741	7 133	-20%
EBIT	PLN million	1 201	1 123	7%
EBITDA	PLN million	1 948	1 822	<b>7</b> %
Adjusted net profit attributable to equity holders of the parent company*	PLN million	970	877	11%
LTC compensations	PLN million	75	278	-73%
LTC revenues	PLN million	0	130	-
Adjustment of the LTC settlements (other operations)	PLN million	75	148	-49%
Capital expenditures	PLN million	1 088	1 841	-41%
Net cash from operating activities	PLN million	1 637	1 068	53%
Net cash from investing activities	PLN million	425	-2 522	-
Net cash from financial activities	PLN million	-80	-20	-300%
Adjusted net earnings per share*	PLN	0.52	0.47	11%
EBITDA margin	%	34%	26%	
Var financial data		As at	As at	%

Key financial data		As at March 31, 2017	As at December 31, 2016	% change
Working capital	PLN million	6 572	5 702	15%
Net debt/LTM EBITDA **	x	0.70	0.70	

<sup>\*</sup> Net profit adjusted by impairment loss

Table: Impact of one-offs on EBITDA [in PLN million].

One-offs	Q1	Q1	%
	2017	2016	change
LTC compensations	75	278	-73%
Voluntary Leave Program	-7	-19	-63%
Total	68	259	-74%

<sup>\*\*</sup> LTM EBITDA - Last Twelve Months EBITDA

## 3.1. Consolidated statement of comprehensive income

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

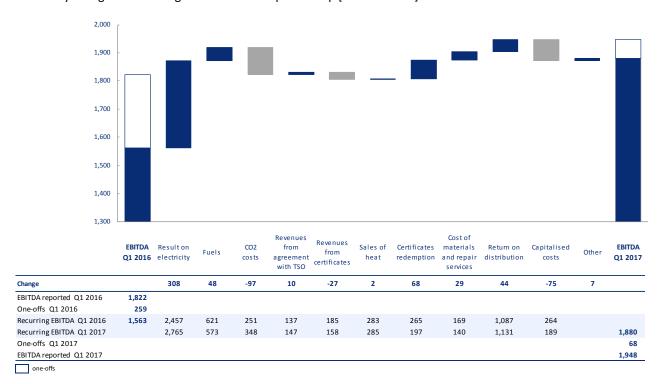
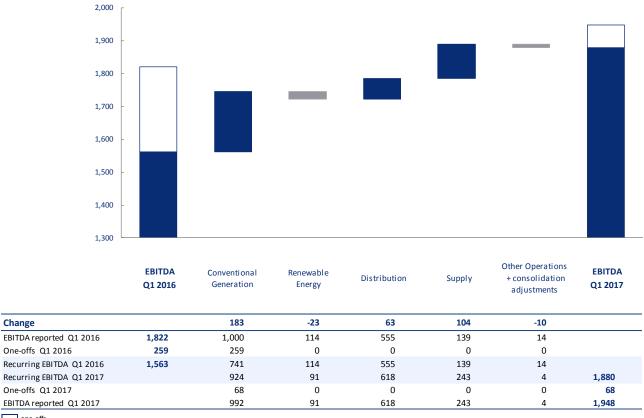


Chart: Key changes of recurring EBITDA by segments [in PLN million].



## 3.1.1. Consolidated statement of financial position

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

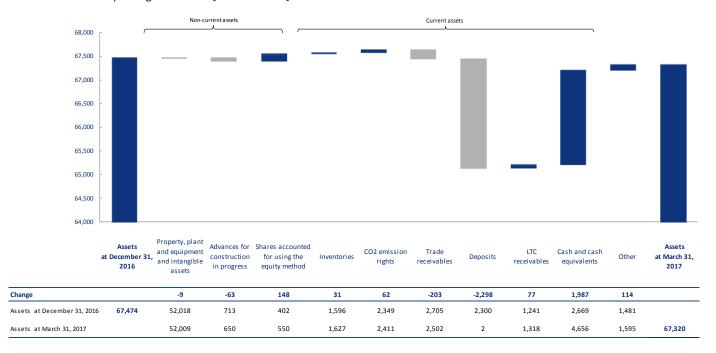
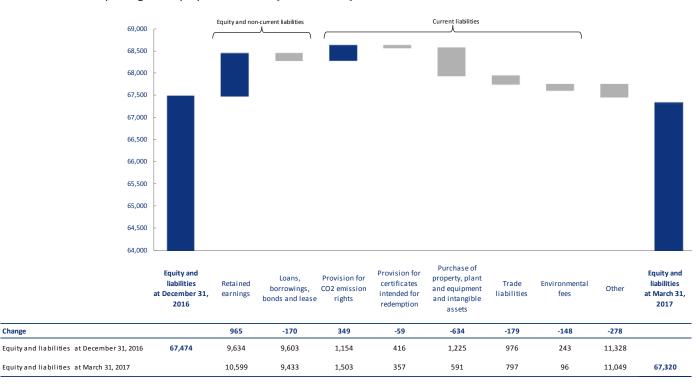
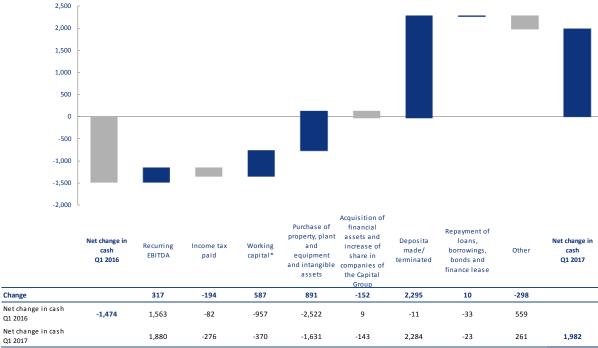


Chart: Key changes in Equity and Liabilities [in PLN million].



## 3.1.2. Consolidated statement of cash flows

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



 $<sup>\</sup>hbox{*Part of the working capital adjusting the cash flows from operating activities}$ 

## 3.1.3. Key financial results in the business segments

Table: Breakdown of the Group's revenues by business segments for the first quarter of 2017 and 2016.

in PLN million	Q1 2017	Q1 2016	% change
Conventional Generation	3 164	3 073	3%
Renewables	192	213	-10%
Supply	3 953	4 142	-5%
Distribution	1 643	1 510	9%
Other operations	172	163	6%
TOTAL	9 124	9 101	0%
Consolidation adjustments	-3 383	-1 968	<b>72</b> %
TOTAL AFTER ADJUSTMENTS	5 741	7 133	-20%

Table: Key financial figures for each business segment for the first quarter of 2017 (after intrasegmental eliminations).

in PLN million	EBITDA	EBIT	Capital expenditures	Assets of the segment*
		Q1 2017		
Conventional Generation	992	630	788	37 101
Renewables	91	25	12	3 631
Supply	243	237	3	3 569
Distribution	618	326	263	17 332
Other operations	12	-21	33	591
TOTAL	1 956	1 197	1 099	62 224
Consolidation adjustments	-8	4	-11	-2 613
TOTAL AFTER ADJUSTMENTS	1 948	1 201	1 088	59 611

<sup>\*</sup> see note 4.1 to the consolidated financial statements

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

in PLN million	EBITDA	EBIT	Capital expenditures	Assets of the segment*
		Q1 2016		
Conventional Generation	1 000	680	1 471	33 467
Renewables	114	49	76	4 717
Supply	139	132	4	3 615
Distribution	555	273	287	16 719
Other operations	15	-17	24	1 034
TOTAL	1 823	1 117	1 862	59 552
Consolidation adjustments	-1	6	-21	-2 228
TOTAL AFTER ADJUSTMENTS	1 822	1 123	1 841	57 324

<sup>\*</sup> see note 4.1 to the consolidated financial statements

## 3.2. Key operational figures of PGE Capital Group

Table: Key operational figures.

Key figures	Unit	Q1 2017	Q1 2016	% change	2016
Lignite extraction	Tons m	13.34	11.10	20%	47.68
Net electricity production	TWh	15.00	13.16	14%	53.67
Heat sales	GJ m	7.88	7.80	1%	18.06
Sales to final customers*	TWh	10.05	10.70	-6%	42.91
Distribution of electricity**	TWh	8.96	8.64	4%	34.32

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

## 3.2.1. Balance of energy of PGE Capital Group

#### Sales of electricity

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

Sales volume	Q1 2017	Q1 2016	% change	2016
SALES IN TWh, including:	17.07	25.46	-33%	104.35
Sales to end-users*	10.06	10.71	-6%	42.96
Sales on the wholesale market, including:	6.29	14.27	-56%	59.13
Sales on the domestic wholesale market - power exchange	4.16	12.75	-67%	53.15
Other sales on the domestic wholesale market	2.03	1.49	36%	5.83
Sales to foreign customers	0.10	0.03	233%	0.15
Sales on the Balancing Market	0.72	0.48	50%	2.26

<sup>\*</sup> after elimination of internal sales within PGE Group

The decline in sales volume to end customers compared to the same period of 2016 mainly results from lower contracted volume in the corporate client segment in tariff group A (Large companies) and C2x (Small and Medium Enterprises). The lower sales volume on the power exchange results from a reduction of the so called "power exchange obligation". The increase in sales volume on the other wholesale market results from optimising the sales of produced electricity through executing larger bilateral contracts. The growth in sales to foreign clients results from intensified activity in neighbouring markets, as a result of favourable price relation between foreign and Polish market. The growth in sales volume on the balancing market is related largely to the start-up run of a new unit at Gorzów CHP.

<sup>\*\*</sup> with additional estimation

## **Purchases of electricity**

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

Purchases volume	Q1 2017	Q1 2016	% change	2016
PURCHASES IN TWh, including:	3.36	14.02	-76%	55.43
Purchases on the domestic wholesale market – power exchange	0.75	10.57	-93%	42.84
Purchases on the domestic wholesale market, other	1.02	1.24	-18%	5.23
Purchases from abroad	0.01	0.02	-50%	0.06
Purchases from Balancing Market	1.58	2.19	-28%	7.30

In connection with the reduction of the "power exchange obligation," a large part of PGE Group's sales in the first quarter of 2017 was directly hedged by the Group's own production assets, which translated into a decrease in buying volumes both on the domestic market – exchange, as well as in the other markets. The buying volume decline on the balancing market is the result of a lower number of reductions at the generation units that are part of the Conventional Generation segment.

#### **Production of electricity**

Table: Production of electricity (in TWh).

Generation volume	Q1 2017	Q1 2016	% change	2016
ENERGY GENERATION IN TWh, including:	15.00	13.16	14%	53.67
Lignite-fired power plants	10.57	8.50	24%	37.26
including co-combustion of biomass	0.00	0.00	0%	0.00
Coal-fired power plants	2.51	2.74	-8%	10.71
including co-combustion of biomass	0.04	0.09	-56%	0.30
Coal-fired CHP plants	0.38	0.39	-3%	0.98
Gas-fired CHP plants	0.95	0.80	19%	2.33
Biomass-fired CHP plants	0.05	0.12	-58%	0.43
Pumped-storage power plants	0.10	0.18	-44%	0.45
Hydroelectric plants	0.12	0.13	-8%	0.43
Wind power plants	0.32	0.30	7%	1.08

The main impact on the level of electricity production in the first quarter of 2017, as compared to the first quarter of 2016, was higher production in lignite-based power plants as a result of shorter downtime for repairs and modernisations. In the first quarter of 2016, unit 3 at Bełchatów power plant was undergoing medium repairs, while units 9 and 10 were being modernised. Unit 1 at Turów power plant was undergoing medium overhaul in the first quarter of 2016. Furthermore, the average load for Elektrownia Bełchatów units was higher by 20.5 MW.

The growth in production at gas-fired combined heat-and-power plants results from higher generation at Gorzów CHP, what is the result of a new gas-and-steam unit being commissioned from January 31, 2017.

The decline in production at hard coal-based plants results mainly from lower production at Opole power plant due to downtime at unit 3, undergoing medium overhaul since March 3, 2017. Additionally, lower production at Dolna Odra power plant was caused by a lower average load at this plant's units by 18.7 MW.

Production at coal-fired combined heat-and-power plants remained at a level comparable to the first quarter of 2016.

Production at wind power plants is at a level similar to the first quarter of 2016.

Production at hydro power plants is lower than in the first quarter of 2016, resulting mainly from adverse hydrological conditions.

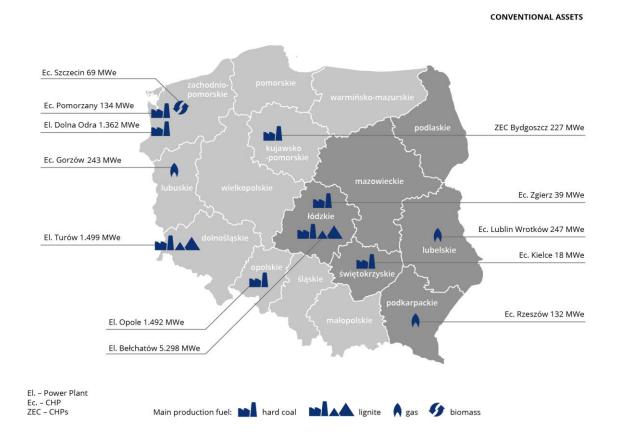
Lower production in pumped storage power plants results from the nature of these generation units, which in the first quarter of 2017, were used to a lower extent by PSE S.A.

## 3.2.2. Sales of heat

In the first quarter of 2017 the heat sales in PGE Capital Group totaled 7.88 GJ million and were at similar level as in the first quarter of 2016.

## 3.3. Conventional Generation segment

Diagram: Main assets of the Conventional Generation segment.

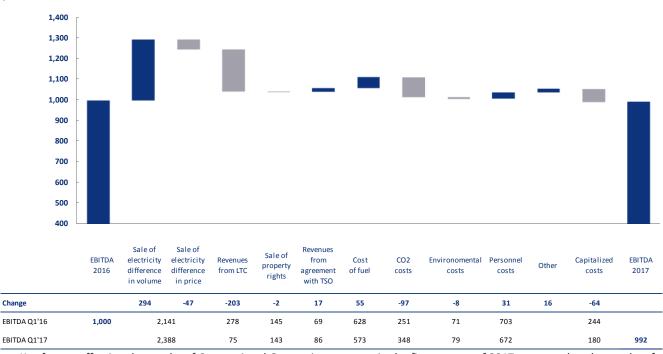


## 3.3.1. Key financial figures

Table: Key figures for Conventional Generation.

in PLN million	Q1 2017	Q1 2016	% change
Sales revenues	3 164	3 073	3%
EBIT	630	680	-7%
EBITDA	992	1 000	-1%
Capital expenditures	788	1 471	-46%

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

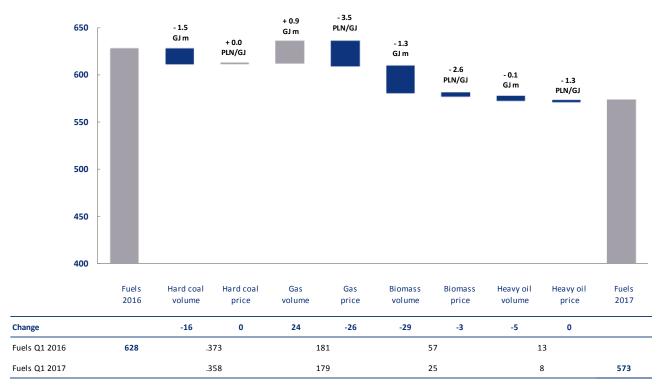


Key factors affecting the results of Conventional Generation segment in the first quarter of 2017 compared to the results of the first quarter of 2016 included:

- Higher electricity sales volume, mainly due to stronger production at Elektrownia Bełchatów due to shorter downtime of units for repairs and modernisations as well as higher production at Gorzów CHP owing to the handover of a new gasand-steam unit from January 31, 2017.
- Decline in electricity sales prices, which caused a decrease in revenue from sales. The average realised sales price for electricity at the Conventional Generation segment excluding the sales to final off-takers in the first quarter of 2017 was PLN 163.5/MWh, compared to PLN 164.8/MWh in the first quarter of 2016. In addition, margin on the re-sale of electricity was lower by PLN 15.4/MWh.
- Lower proceeds from long-term contracts (LTCs). PLN 75 million was recognised in the first quarter of 2017, which is the result of a ruling by the Court of Appeal regarding the amount of annual adjustment for 2009 for Lublin Wrotków CHP. During the comparative period, proceeds from LTC compensation presented in operating activities amounted to PLN 130 million. Furthermore, other operating activities included recognition 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).
- **Higher revenue from Regulatory System Services**, mainly higher revenue from the Operational Capacity Reserve resulting from higher rates and higher volume at Opole power plant due to lower sales activity at this plant.
- Lower fuel consumption costs, mainly hard coal and biomass. This is mainly the effect of lower power production at power plants and combined heat-and-power plants based on hard coal as well as biomass-based combined heat-and-power plants (see p. 3.2.1 of this report). Main changes on different types of fuel are presented on the chart below.

- Higher CO<sub>2</sub> costs as a result of higher production volume and lower amount of allowances granted free of charge.
- Higher fees for use of environment mainly resulting from higher electricity generation and as a consequence higher emissions (SO<sub>2</sub>, NO<sub>x</sub>).
- Lower personnel expenses mainly as a result of lower costs of Voluntary Leave Program and lower employment.
- 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].



## 3.3.2. Capital expenditures

Table: Capital expenditures incurred in Conventional Generation segment in the first quarter of 2017 and 2016.

in PLN million	Q1 2017	Q1 2016	% change
Investments in generating capacities, including:	684	1 320	-48%
<ul><li>Development</li></ul>	538	920	-42%
<ul> <li>Modernisation and replacement</li> </ul>	146	400	-64%
Purchase of finished capital goods	2	10	-80%
Vehicles	-	4	-
Other	3	4	-25%
TOTAL	689	1 338	-49%
Capitalized costs of overburden removal in mines	99	133	-26%
TOTAL with capitalized costs of overburden removal	788	1 471	-46%

Highest capital expenditures in the first quarter of 2017 were incurred for the following projects:

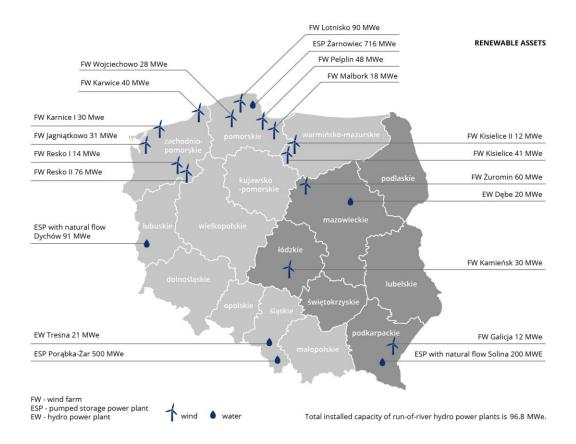
•	construction of units 5 and 6 in Opole power plant	PLN 440 million;
•	construction of unit no. 11 in Turów power plant	PLN 43 million;
•	construction of CCGT unit in Gorzów CHP	PLN 42 million;
•	comprehensive modernization of units 7-12 - Bełchatów power plant	PLN 31 million;
•	construction of a Thermal Processing Installation with Energy Recovery at Rzeszów CHP	PLN 11 million;
•	change in technology of furnace waste storage in Bełchatów power plant	PLN 9 million;
•	construction of installation to transport ash and suspension from unit 14 in Belchatów power plant	PLN 7 million;
•	adaptation of unit no. 3 in Opole power plant to BAT conclusions – modernization of SNCR installation	PLN 5 million;
	modernisation of units 1-3 in Turów power plant	PLN 4 million.

Key decisions for the Conventional Generation segment in the first quarter of 2017:

- On January 24, 2017, the Minister of the Environment issued a decision upholding a decision by the Marshall of the Opole Voivodeship dated October 10, 2016 on the grant of an integrated permit for units 1-6 at Opole power plant. This decision is final in the administrative course of instances.
- A gas-and-steam unit at Gorzów CHP was commissioned on January 31, 2017.
- On March 13, 2017, the President of Szczecin issued a decision regarding a permit for the construction of a flue gas deNo<sub>x</sub> system for two Benson OP-206 boilers, together with the modernisation of water heater, flue gas ventilators and rotating air warmers at Pomorzany power plant. The decision became final on March 29, 2017.

## 3.4. Renewables segment

Diagram: Main assets of the Renewables segment.



## 3.4.1. Key financial figures

Table: Key figures for Renewables.

PLN million	Q1 2017	Q1 2016	% change
Sales revenues	192	213	-10%
EBIT	25	49	-49%
EBITDA	91	114	-20%
Capital expenditures	12	76	-84%

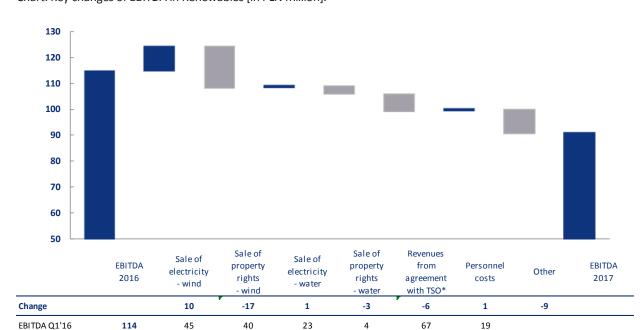


Chart: Key changes of EBITDA in Renewables [in PLN million].

Key factors affecting the results of Renewables segment in the first quarter of 2017 compared to the results of the first quarter of 2016 included:

1

61

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91

24

- Growth in revenue from electricity sales from wind farms results mainly from a higher electricity sales volume compared to the first quarter of 2016.
- Slight increase in revenue from sale of electricity from hydro power plants, caused mainly by electricity sales volume increasing by 1 GWh and a price by PLN 4/MWh higher than in the previous year.
- **Decline in revenue from the sale of certificates,** resulting from: (i) valuation of certificates at a price lower by approx. PLN 68/MWh in the first quarter of 2017, compared to the first quarter of 2016, which resulted in a decline in revenue by about PLN (-)17 million from the previous year; (ii) correction of valuation for sold certificates and update of inventory valuation, which resulted in a PLN (-)3 million decline in revenue.
- Lower revenue from sale of regulatory system services (contract with PSE S.A.), resulting mainly from a lower volume of intervention reserve and lower rates for the active interventional capacity reserve service.
- Decline in personnel costs is mainly connected with a lower headcount at PGE EO S.A.

23

Unfavourable deviation in the 'other' item, results mainly from an increase in property tax costs by about PLN 10 million following the commissioning of new wind farms and a change in legal environment.

## 3.4.2. Capital expenditures

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Table: Capital expenditures incurred in Renewables segment in the first quarter of 2017 and 2016.

in PLN million	Q1 2017	Q1 2016	% change
Investments in generating capacities, including:	11	76	-86%
<ul><li>Development</li></ul>	5	72	-93%
<ul> <li>Modernisation and replacement</li> </ul>	6	4	50%
Other	1	0	-
TOTAL	12	76	-84%

<sup>55</sup> \* excluding revenues and costs relating to balancing market not affecting EBITDA result

## 3.5. Distribution segment

Diagram: Area of PGE distribution grid.

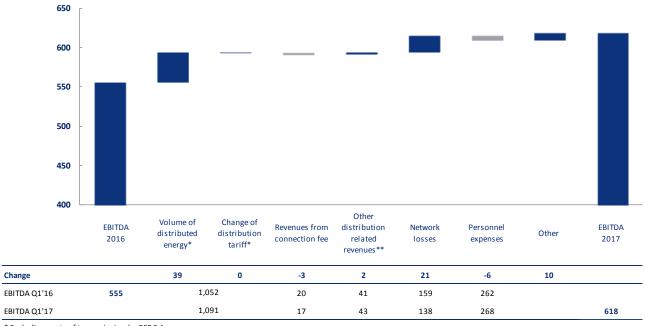


## 3.5.1. Key financial figures

Table: Key figures for Distribution.

in PLN million	Q1 2017	Q1 2016	% change
Sales revenues	1 643	1 510	9%
EBIT	326	273	19%
EBITDA	618	555	11%
Capital expenditures	263	287	-8%

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



<sup>\*</sup> Excluding costs of transmission by PSE S.A.

\*\* Other revenues (reactive power, excess capacity, additional services), resumption of deliveries

Key factors affecting the results of Distribution segment in the first quarter of 2017 compared to the results of the first quarter of 2016 included:

- Increased volume of distributed energy by 316.2 GWh, resulting from inter alia higher number of customers measured by power take-off points (by approx. 41.7 thousand) in comparison to the first quarter of 2016 and growing dynamics of energy consumption particularly on medium voltage.
- Decrease of revenue from connection fees as a result of lower investment activity and lower demand from potential clients.
- Decrease in other revenue resulting largely from lower revenues from the sale of transmission services as a result of a
  decline in the average variable tariff.
- Lower costs of energy to cover balancing difference as a result of a decline in the volume of balancing difference by 16 GWh and a decline in the average price.
- Increase in personnel costs, resulting largely from an on-going process to optimise salaries.
- Positive deviation in the 'other' item, resulting mainly from: (i) decrease in costs related to purchasing transit services by PLN 5 million and (ii) decrease in costs related to grid asset repairs and operation by PLN 4 million. In addition, this item includes a PLN 8 million growth in result on other operating activities.

## 3.5.2. Capital expenditures

Table: Capital expenditures incurred in Distribution segment in the first quarter of 2017 and 2016.

in PLN million	Q1 2017	Q1 2016	% change
MV and LV power networks	80	91	-12%
110/ MV and MV/MV	33	22	50%
110 kV power lines	7	5	40%
Connection of new off-takers	91	116	-22%
Purchase of transformers and energy counters	31	10	210%
IT, telemechanics and communication	15	30	-50%
Other	6	13	-54%
TOTAL	263	287	-8%

In the first quarter of 2017 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".

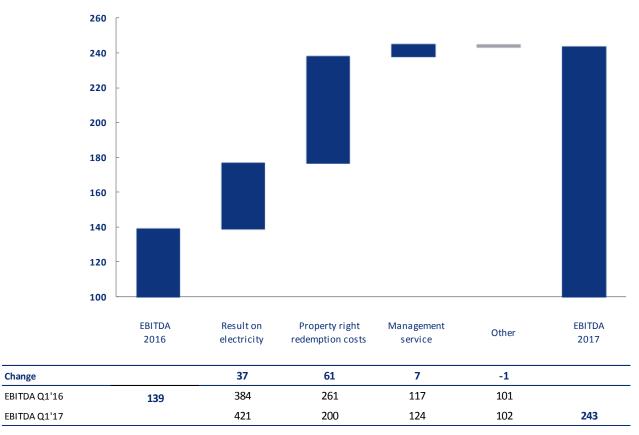
## 3.6. Supply segment

## 3.6.1. Key financial figures

Table: Key figures for Supply.

PLN million	Q1 2017	Q1 2016	% change
Sales revenues	3 953	4 142	-5%
EBIT	237	132	80%
EBITDA	243	139	75%
Capital revenues	3	4	-25%

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



Key factors affecting the results of Supply segment in the first quarter of 2017 compared to the results of the first quarter of 2016 included:

- Increase of results from electricity by PLN 37 million resulting from higher margin per unit on energy sale due to more favourable spread between the average price of sale and average price of purchase of electricity.
- Decrease in costs to redeem certificates, mainly as a result of lower market prices for green certificates, partially offset by the introduction of an obligation to redeem certificates for electricity produced in biogas plants, which followed the amendment of the RES Act.

## 3.7. Other operations

## 3.7.1. Key financial figures

Table: Key figures for Other operations.

in PLN million	Q1 2017	Q1 2016	% change
Sales revenues	172	163	6%
EBIT	-21	-17	-24%
EBITDA	12	15	-20%
Capital expenditures	33	24	38%

**Decrease in Other Operations segment's EBITDA by PLN 3 million**, largely resulting from a decline in EXATEL S.A.'s result by about PLN 7 million, caused by lower margins on lease of lines services. In addition, in the first quarter of 2016, EXATEL S.A. received a refund of property tax. On March 29, 2017, an agreement to sell 100% of shares of EXATEL S.A. to the State Treasury was executed (see p. 1.2.1. of this report)

The segment's result was positively impacted by EBITDA growth at PGE Systemy S.A. by approx. PLN 5 million, resulting from a wider scope of services.

## 3.7.2. Capital expenditures

Capital expenditures in Other Operations in the first quarter of 2017 amounted to PLN 33 million compared to PLN 24 million in the first quarter of 2016.

Within the above amount, the highest capital expenditures in the first quarter of 2017 were incurred by the following companies:

EXATEL S.A. – for telecommunication infrastructure development

PLN 15 million;

■ PGE EJ 1 sp. z o.o. ("PGE EJ1") – for nuclear project development

PLN 10 million;

PGE Systemy S.A. – for IT infrastructure and software development

PLN 8 million.

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

#### 3.8.1. 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 22.2 to the consolidated financial statements.

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

Capital investment in Polimex-Mostostal S.A. is described in note 22.4 to the consolidated financial statements.

#### 3.8.3. Submission of offer for acquisition of EDF assets in Poland

Submission of offer for acquisition of EDF assets in Poland is described in note 22.3 to the consolidated financial statements.

#### 3.8.4. Description of material agreements

In the first quarter of 2017 there were no agreements meeting the criteria of material agreement.

#### 3.8.5. Changes in the Management Board and Supervisory Board

On February 13, 2017 the Supervisory Board adopted resolutions on dismissal of following persons from the Management Board effective February 13, 2017:

- Mr. Henryk Baranowski, President of the Management Board;
- Ms. Marta Gajecka, 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 Wasiłek, Vice-President for Development;
- Mr. Emil Wojtowicz, Vice-President for Finance.

At the same time the Supervisory Board adopted resolutions on appointment of following persons to the Management Board of the tenth term of office as from February 14, 2017:

- Mr. Henryk Baranowski and entrusting him the position of the President of the Management Board;
- Mr. Bolesław Jankowski and entrusting him the position of the Vice-President for International Affairs;
- Mr. Wojciech Kowalczyk and entrusting him the position of the Vice-President for Capital Investments;
- Mr. Marek Pastuszko and entrusting him the position of the Vice-President for Corporate Affairs;
- Mr. Paweł Śliwa and entrusting him the position of the Vice-President for Innovations;
- Mr. Ryszard Wasiłek and entrusting him the position of the Vice-President for Operations;
- Mr. Emil Wojtowicz and entrusting him the position of the Vice-President for Finance.

# **Changes in Supervisory Board**

Until March 31, 2017 the Supervisory Board of the Company consisted of:

Name and surname	
of the Supervisory Board member	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

On April 6, 2017 the Company received a resignation from Mr. Mateusz Gramza from the Company's Supervisory Board with immediate effect.

As at the publication date of this report, the Supervisory Board of the Company consists of:

Name and surname of the Supervisory Board member	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
Witold Kozłowski	Supervisory Board Member - independent
Mieczysław Sawaryn	Supervisory Board Member - independent
Artur Składanek	Supervisory Board Member - independent

In the first quarter of 2017 the standing committees of the Supervisory Board consisted of:

Name and surname of the member of the Supervisory Board	Audit Committee	Corporate Gov- ernance Commit- tee	Strategy and Development Committee	Appointment and Remuneration Committee
Janina Goss	Member from March 2, 2016			Member from March 2, 2016
Jarosław Głowacki		Member from March 2, 2016	Member from March 2, 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
Grzegorz Kuczyński	Member from March 2, 2016 Chairman from March 18, 2016	Member from March 2, 2016		
Witold Kozłowski		Member from Sept. 13, 2016 Chairman from October 25, 2016		Member from September 13, 2016
Radosław Osiński			Member from Sept. 13, 2016 Chairman from October 25, 2016	Member from September 13, 2016
Mieczysław Sawaryn			Member from March 2, 2016	Member from March 2, 2016 Chairman from August 8, 2016
Artur Składanek		Member from March 7, 2016	Member from March 2, 2016	

<sup>\*</sup> On April 6, 2017 the Company received a resignation from Mr. Mateusz Gramza from the Company's Supervisory Board with immediate effect.

## 3.8.6. 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 22.1 to the consolidated financial statements.

## 3.8.7. 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. The Court of Appeal in Warsaw dismissed the case because the petition was withdrawn without the waiver of claims.
- 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 April 3, 2017 the shareholder filed an appeal. With the verdict of April 18, 2017 the District Court rejected the appeal, due to failing to meet the deadline for submission thereof.
- 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. With the verdict of March 2, 2017 the Court of Appeal in Warsaw dismissed the shareholder's 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. The trial before the court was held on April 24, 2017. With the verdict of May 8, 2017 the court dismissed the shareholder's 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. The proceeding was dismissed through a ruling of March 14, 2017 as a result of the claim being withdrawn prior to the hearing.
- 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. The proceeding was dismissed through a ruling of March 17, 2017 as a result of the claim being withdrawn prior to the hearing.
- 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 proceeding was dismissed through a ruling of March 16, 2017 as a result of the claim being withdrawn prior to the hearing.
- On March 15, 2017 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 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., the company which bought claims of former shareholders of PGE Elektrownia Opole S.A., submitted a similar claim. Through an action brought to the District Court in Warsaw against PGE GiEK S.A., PGE S.A. and PwC Polska sp. z o.o. (the "Defendants"), Pozwy sp. z o.o. seeks a ruling on the payment by the Defendants, on in solidum terms, or alternatively jointly, to Pozwy sp. z o.o. of compensation amounting to over PLN 260 million, together with interest, for the allegedly improper (according to Pozwy sp. z o.o.) calculation of parity ratio for the exchange of PGE Elektrownia Opole S.A. shares for PGE GiEK S.A. in the process of merging these companies. This lawsuit was delivered to PGE S.A. on March 9, 2017, and the deadline for a reply to the lawsuit is established by the court as July 9, 2017.

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.

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

As at March 31, 2017 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. 3.8.7 regarding legal aspects in this report and in note 19.4 to the consolidated financial statements.

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

Within the Group, in the first quarter of 2017 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.

## 3.8.10. 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. 1.2.1 of the foregoing report.

## 3.8.11. 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. PGE's financial commitment in the Development Stage will not exceed amount of approx. PLN 700 million.

#### Proceeding for selection of technology

Further action 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.

## Site characterisation, environmental and other surveys

Site characterisation and environmental surveys connected with preparations for the construction of Poland's first nuclear plant began in March 2017. Works are being conducted at two sites: Lubiatowo-Kopalino and Żarnowiec, within Choczewo, Krokowa and Gniewino municipalities in the Pomeranian Voivodeship.

The surveys are focusing on activities necessary to prepare an environmental impact assessment and a site characterisation report. The works are expected to finish in the first half of 2020.

The aim of the environmental surveys is to specify the project's impact on the environment, broken down into the preparation, construction, operation and disassembly of the nuclear plant.

The aim of the site characterisation work is to obtain data to conduct an assessment of areas in terms of their usefulness as a nuclear plant site, including the verification of factors preventing the classification of area as one that meets nuclear safety requirements (major fault). The results of these works are necessary to develop solutions that ensure the plant's safe operation and reduction of its impact on the lives of nearby residents and the natural environmental to a minimum.

The surveys are being carried out by PGE EJ1, with the main role played by the survey programme contractor, ELBIS Sp. z o.o., which is part of PGE Group.

The following initiatives are planned as part of works that will be conducted in the second quarter of 2017 within environmental and site characterisation surveys:

- obtaining archive seismic and well data (including for the purposes of surveying deep soil) and to obtain the necessary technical data from technology providers in order to prepare the environmental impact assessment and site characterisation report,
- start of analysis concerning, among other things, cooling water and external threats at the locations,
- start of arrangements with Polskie Sieci Elektroenergetyczne S.A. to obtain information about the location of a connection point to the National Power System,
- start of work related to preparing a specification for a study on the power take-off corridor.

## Social acceptance

The main aim of activities in this area is to achieve and maintain a high level of community support at the planned nuclear plant sites (eventually, at the selected site), allowing the programme to construct Poland's first nuclear plant to be conducted and to deliver knowledge about nuclear power and about the Programme to selected stakeholder groups at national and local level.

In the first quarter of 2017, works in the area of community acceptance focused on continuing activities within the Site Municipality Development Support Programme. Specifically, the Programme's budget for 2017 was adopted in the first quarter of 2017.

The second quarter of 2017 assumes the execution of the Programme's third edition as well as other communication activities intended to reinforce partner relations of PGE 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.

## Legal regulations concerning nuclear energy

In the first quarter of 2017, PGE S.A. participated in public consultations on a draft act on amendment of the Nuclear Law and consultations on a draft of the Urban and Construction Code Law.

## **Compensations from WorleyParsons**

In 2013, PGE EJ 1 sp. z o.o. ("PGE EJ1") 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"), in the amount of approximately PLN 253 million net (including basic scope of approximately PLN 167 million). Due to delays in the implementation of the agreement, in 2013 PGE EJ1 accrued to WorleyParsons a contractual penalty in the amount of approximately PLN 7 million. In addition, in connection with a further improper execution of services in 2014, PGE EJ1 accrued contractual penalties in the total amount of approximately PLN 43 million. On December 23, 2014, PGE EJ 1 terminated the contract for reasons attributable to WorleyParsons.

Contractual penalties of 2013 were deducted from the remuneration payable to WorleyParsons in 2014. Penalties for 2014 were partly deducted from the remuneration payable to WorleyParsons and partly obtained from the bank guarantee. After all deductions and amounts received by the company from the bank guarantee, PGE EJ1 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 approximately PLN 15 million plus statutory interest for late payment of the amount due.

On November 13, 2015, PGE EJ1 received a payment demand from WorleyParsons for about PLN 59 million due for WorleyParsons remuneration, which - according to the claimant - was deducted unduly, for the works that in opinion of WorleyParsons were unjustifiably not accepted and for the project management, as well as funds collected from the bank guarantee. The court obligated PGE EJ 1 sp. z o.o. to submit a statement of defence within three months from receipt. Moreover, value of claims by WorleyParsons amounting to approximately PLN 54 million was included in the WorleyParsons' payment demand for PLN 92 million of March 13, 2015 with regard to termination of the agreement. On March 24, 2017, PGE EJ1 received a procedural document expanding the action being brought by WorleyParsons from approximately PLN 59 million to approximately PLN 104 million (i.e. by around PLN 45 million). It is possible that WorleyParsons will file another claim amounting to approximately PLN 32 million representing the difference in amount of claims from the demand for payment of March 13, 2015 and the expanded claim received on March 24, 2017.

On March 29, 2017, mediation between the Parties took place – the meeting did not result in a settlement. PGE EJ1 expects a hearing date to be set, as well as a date for replying to WorleyParsons' letter expanding their claim.

The company does not accept the claim and regards its possible admission by the court as less likely than its dismissal.

Furthermore, on May 20, 2016, PGE EJ1 filed a motion with the District Court for the Capital City of Warsaw in Warsaw to commit WorleyParsons to attempt reaching a settlement concerning PGE EJ1's claims of PLN 41 million together with statutory interest for compensation for undue contractual performance. A conciliation meeting at the court is scheduled for June 8, 2017.

## 3.8.12. Sale of 100% stake in Exatel S.A. to the State Treasury

On March 29, 2017, the Management Board of PGE S.A. signed an agreement to sell 100% of the shares of Exatel S.A. to the State Treasury for PLN 368.5 million. Exatel S.A. is a telecommunications operator that provides solutions for business and public administration.

# 3.8.13. Distribution of profit for 2016

Information on distribution of profit for 2016 is presented in note 16.3 to the consolidated financial statements.

## 3.9. Transactions with related entities

Information about transactions with related entities is presented in note 21 to the consolidated financial statements.

#### 3.10. Publication of financial forecasts

PGE S.A. did not publish financial forecasts.

## 3.11. Information about shares and other securities

## 3.11.1. 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%
Total	1,869,760,829	1,869,760,829	100.00%

## 3.11.2. 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 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 2016 (i.e. March 7, 2017)	Change in number of owned shares	Number of shares as of submission date of the quarterly report (i.e. May 11, 2017)	Nominal value of shares as of submission date of the quarterly report (PLN)
Management Board	-	-	-	-
Supervisory Board	7	-	7	71.75
Jarosław Głowacki	7	-	7	71.75

Other member of the Management Board and Supervisory Board did not hold shares of the Company.

Members of the Management Board and Supervisory Board did not hold shares in the entities related to PGE S.A.

## 4. Electricity market and regulatory and business environment

## 4.1. Macroeconomic environment

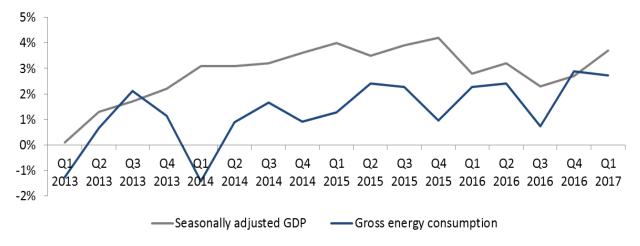
PGE Group's main operating area is Poland, and the domestic macroeconomic backdrop has a substantial impact on Group's results. At the same time, the condition of Poland's economy remains largely tied to the situation across the European Union and in global markets. The Group's financial results are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

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 generally 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 the first quarter of 2017, gross electricity consumption went up 2.73% compared to the analogical period of the previous year. The increase was higher than in the previous year, when consumption went up 2.09% compared to the analogical period of 2015.

Economic trends in the first quarter of 2017 remained positive in general. Median from the financial institutions forecasts for the GDP in the first quarter of 2017 indicates growth by 3.7% compared to the same period of the previous year.

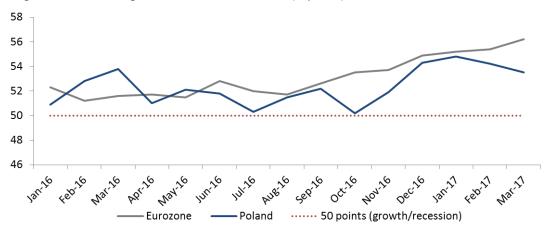




Source: GDP forecasts of financial institutions according to the survey by the Central Statistical Office of Poland, PSE.

Economic growth and rising electricity consumption were accompanied by optimistic condition of Polish industry, which is responsible for approx. 45% of domestic electricity consumption. The Purchasing Managers' Index (PMI) for industry reached 52.5 points in the first quarter of 2016, and 54.2 points on average in the first quarter of 2017. 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 the first quarter of 2016 reached an average level of 51.7 points, and 55.6 points in the analogical period of 2017.

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 the first quarter of 2017, it went up sharply by 7.3% y-o-y, compared to 3.0% in the comparable period of the previous year. The change resulted from increase in industrial production dynamics (8.1% y-o-y in the first quarter of 2017 versus 3.8% in the first quarter of 2016). Simultaneously, production in the whole energy sector increased (3.6% y-o-y in the first quarter of 2017 vs -1.3% in the first quarter of 2016). The value of industrial manufacturing depends on volumes of goods produced and prices. PPI in the first quarter of 2017 amounted to 4.4% in relation to comparable period of the preceding year. CPI reading amounted to 2.0% y-o-y at the end of March 2017.

Table: Key economic indicators for Poland.

Key economic indicators (% change y-o-y)	Q1 2017	Q1 2016
GDP <sup>1</sup>	3.7	3.9
CPI <sup>2</sup>	2.0	-0.9
PPI <sup>3</sup>	4.4	-1.7
Sold industrial production <sup>3</sup>	7.3	3.0
Sold production – manufacturing <sup>3</sup>	8.1	3.8
Sold production – energy <sup>3</sup>	3.6	-1.3
Dynamics of domestic electricity consumption <sup>4</sup>	2.7	2.1
Gross domestic electricity consumption (TWh) <sup>4</sup>	43.9	42.6
EUR/PLN <sup>5</sup>	4.32	4.36

Source: <sup>1</sup> For Q1 2017 GDP - survey by the Central Statistical Office of Poland among financial institutions, for Q1 2016 - data by the 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

# 4.2. Regulatory environment

## **Regulatory environment**

#### **Domestic**

- works on new Energy Policy of Poland until 2050
- publication of Strategy Of Responsible Development setting out the challenges and strategic projects for the energy area
- changes in scope of services like:
  - modification of current Operational 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, divergent court rulings regarding property
  tax base (whether just the mast or the entire installation with 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 19.4 to the consolidated financial statements
- works on new draft Water Law Act introducing fees for water services, including the use of water for energy purposes
- work on a legislative package that is intended to transform linear economy towards a circular economy and might contribute to a change in the classification of coal combustion byproducts.

#### International

- regulations of climate and energy package determining reduction targets for years 2021-2030; legal implementation of energy union concept, including inter alia:
  - legislative proposal regarding revision of Directive 2003/87/EC (the EU ETS Directive), including provisions specifying the following: level of linear reduction factor (LRF), division of emission allowances into emissions sold at auctions and allocated free of charge, removal of a specific volume of emissions, operation of the Market Stabilisation Reserve mechanism, level of funds and ways of fund distribution for the Modernisation Fund, appropriately to compensation mechanism Modernisation Fund or a free of charge allocation of emission allowances;
  - legislative proposal with regard to revision of the Renewable Energy (RED II) 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 related to internal electricity market regulation ("EMR") and a legislative proposal related to common rules for internal electricity market ("EMD"), 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 European assessment of capacities sufficiency and a CO<sub>2</sub> emission standard for capacity market units at a level of 550 g/kWh);
  - legislative proposal regarding regulation 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 30% 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. BAT conclusions will likely be published in the second half of 2017 therefore the deadline for adapting to new emission requirements will probably be in the second half of 2021, at the latest.

## 4.2.1. Electricity prices

#### **Domestic market - Prices**

#### **Day-ahead market**

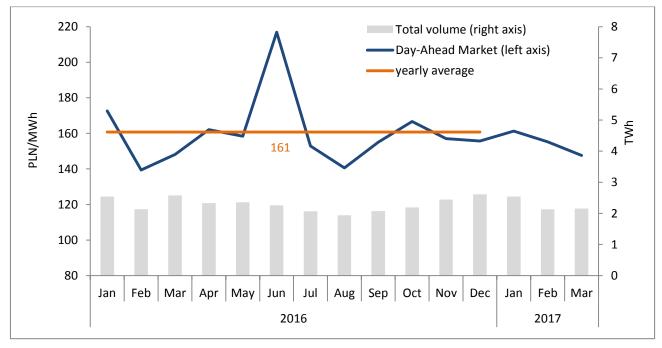
In the first quarter of 2017, the average price on the day ahead market ("IRDN index") was PLN 155/MWh, up by 1% from the average price in the previous year's first quarter (PLN 154/MWh).

From the viewpoint of the quarterly average, the impact of key price factors was neutral:

- comparable coal prices: PSCMI1 (Q1 2017) PLN 8.89/GJ compared to PLN 8.81/GJ in the same period last year (+1% y-o-y),
- comparable balance of repair-related losses in the National Power System,
- increase in national demand with concurrent export opportunities resulting in a relative balance of cross-border trade (similar import and export volumes) and moderate growth in wind generation (+5% y-o-y),
- moderate decline in  $CO_2$  emission costs in the first quarter of 2017: average EUA prices for December 2017 reached EUR 5.19/ $t^1$  compared to EUR 5.72/t in the same period last year (-9% y-o-y).

Stable level of prices y-o-y is an average statistic for the quarter, however particular months of 2017 differed from the same months of 2016 roku (as illustrated in the chart below), monthly volatility is mainly related to the weather factor, those fluctuations were particularly visible in the base period due to uncommonly high windiness in February 2016.

Chart: Monthly prices and price volatility at the day ahead market in 2016–2017 (TGE)\*.



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

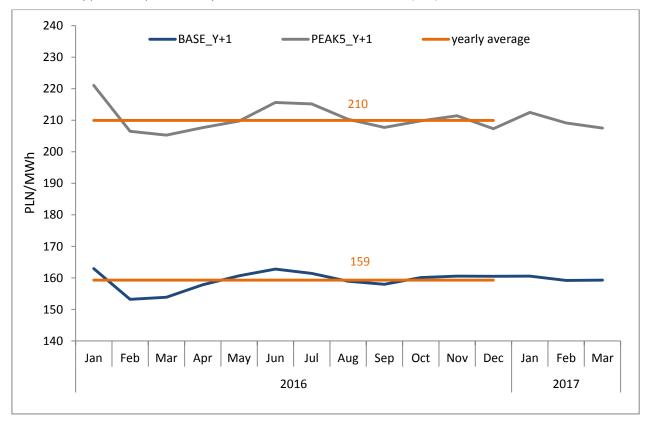
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<sup>&</sup>lt;sup>1</sup> Volume-weighted average

## **Forward market**

The average price for BASE\_Y-18 contracts in the first quarter of 2017 reached PLN 160/MWh, while in the same period of last year BASE\_Y-17 cost PLN 157/MWh on average (+2% y-o-y). Trading volume for BASE\_Y-18 in the first quarter of 2017 was 7.0 TWh — this is 35% lower than the BASE\_Y-17 trading volume in the first quarter of 2016. The average price of PEAK5\_Y-18 in the first quarter of 2017 was PLN 210/MWh, the same level as the average price for PEAK5\_Y-17 in the first quarter of last year (0% y-o-y). PEAK5\_Y-18 trading volume in the first quarter of 2017 reached 0.6 TWh, down 42% from PEAK5\_Y-17 trading volume in the first quarter of 2016

Chart: Monthly prices and price volatility on the forward market in 2016-2017 (TGE)\*.



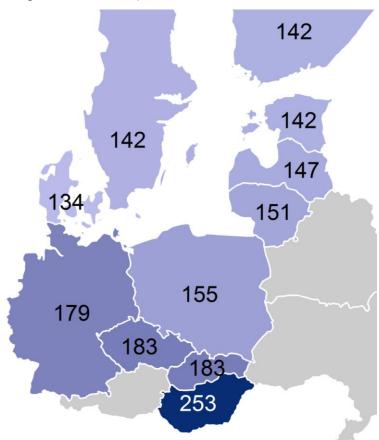
<sup>\*</sup> monthly average index level for forward contracts for the next year (Y+1), baseload and peak, calculation based on hourly quotations, weighted by the trading volume.

#### **International market**

## Wholesale market (comparison of day-ahead markets)

Compared to neighbouring countries, Poland showed spot-market energy price stability (+2% y-o-y). Low temperatures in Western Europe and problems at French nuclear plants resulted in price growth in Germany (+63% y-o-y) and the Czech Republic (+59% y-o-y). As a result, Polish electricity exports' competitiveness improved: the price in Poland was PLN 24/MWh lower than the average price in Germany and PLN 28/MWh lower than the average price in the Czech Republic. Despite a 33% y-o-y increase in average price, Sweden remained an import market for Poland. Energy prices in Lithuania declined by 7% y-o-y, due to which energy there was on average PLN 4/MWh cheaper than in Poland. To summarise, expensive energy in the west and south and cheap energy in the north had a stabilising effect on prices in Poland.

Chart: Comparison of average prices on Polish market and on selected European markets in the first quarter of 2017 (prices in PLN/MWh, average exchange rate EUR/PLN 4.32).



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

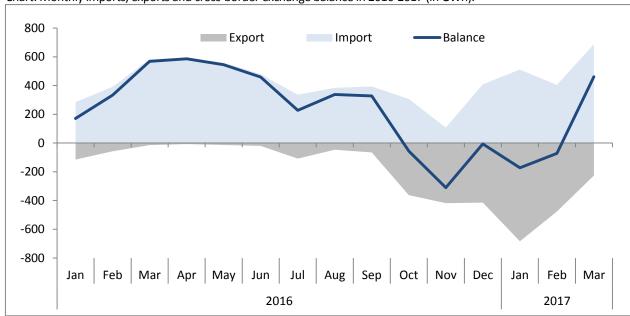
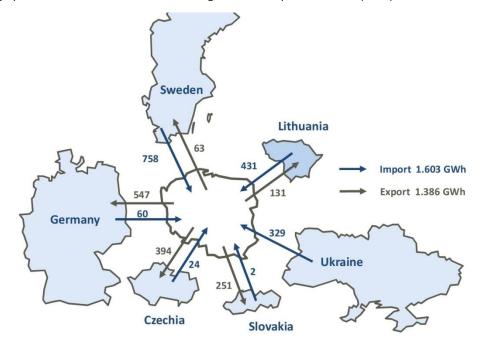


Chart: Monthly imports, exports and cross-border exchange balance in 2016-2017 (in GWh).

Source: own work based on PSE data.

In the first quarter of 2017, commercial trade balance was 0.22 TWh. Import volume of 1.60 TWh and export volume of 1.39 TWh were close to equilibrium. The sum total of absolute values of import and export, close to 3 TWh, shows that trading is intensifying (this level of trading has not been seen in this decade), but this is related to an extraordinary factor in the form of technical problems in France with concurrent low temperatures in Europe. In the first quarter of 2017, energy was mainly imported from north and east and exported south and west – these flows resulted from price differentials between markets.

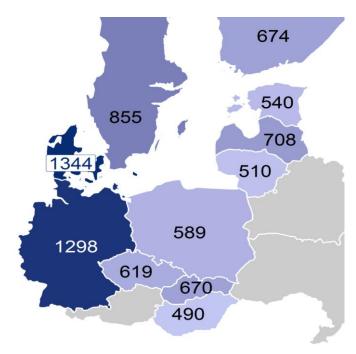
Diagram: Geographical structure of commercial exchange in the first quarter of 2017 (GWh).



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 second half of 2016<sup>2</sup>, 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%.



Source: own work based on Energy prices in the EU. Eurostat, the statistical office of the European Union. EUR/PLN 4.36

Diagram: The share of additional charges in electricity prices for the individual customers in selected EU countries in the second 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 4.36

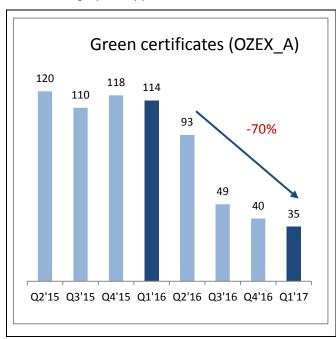
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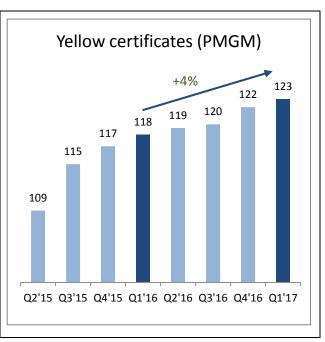
<sup>&</sup>lt;sup>2</sup> Eurostat data are published every six months.

#### 4.2.2. 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 first quarter of 2017, the average price of green certificates reached PLN 35/MWh and was 70% 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. In 2017, the obligation to redeem PMOZE certificates was set at 15.40%, while the obligation to redeem biogas certificates (PMOZE-BIO) at 0.60%. A single substitute fee applies to PMOZE and PMOZE-BIO certificates, which in 2017 remains at last year's level: PLN 300.03/MWh. The average price for the PMOZE-BIO certificate in the first quarter of 2017 was PLN 328/MWh (the price exceeded the substitute fee). In light of the existing regulations arising under the RES Act and an interpretation issued by the President of the Energy Regulatory Office, it is not possible to meet the redemption obligation for PMOZE-BIO for the second half of 2016 by paying the substitute fee – settlement using the substitute fee is conditional upon the relative value of the substitute fee to the weighted average yearly price of the certificate). The average price of yellow certificates in the first quarter of 2017 reached PLN 123/MWh, up 4% from the average price in the first quarter of the preceding year. The redemption obligation for yellow certificates in 2017 was raised from 6% to 7%, while the substitute fee was reduced from PLN 125/MWh to PLN 120/MWh).

Chart: Average quarterly prices of certificates.





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, PMGM-16, PMGM-17.

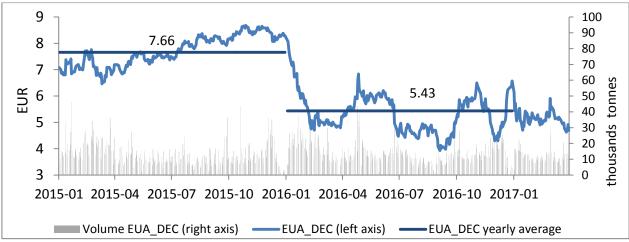
# 4.2.3. Prices of CO<sub>2</sub> emission rights

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 first quarter of 2017, the prices of EUA allowances reached EUR 5.19/t on average and were 9% lower than in the same period last year (EUR 5.72/t). The decline from 2016 might be related to the end of a 3-year backloading period and therefore an increase in the supply of EUAs on the primary market. The average quantity of allowances offered in auctions during this period was 4.4 million tonnes. In the same period of 2016, this amount was 3.5 million tonnes.

The highest prices were observed in January 2017, reaching an average of EUR 5.23/t. This price level was affected by the rise in December caused by high energy prices in Europe and high fuel prices in global markets. In subsequent days, a gradual price decline took place. In February, average prices reached EUR 5.16/t. After the Environment Council presented its draft revision of the EU ETS on February 28, 2017, EUA prices at the beginning of March went up to EUR 5.91/t. After such one-off bump, a slow decline began, ending the month with an average price of EUR 5.17/t.

Chart: Prices of CO<sub>2</sub> emission rights in the first quarter of 2017.



Source: Bloomberg, own work

In the first quarter of 2017, future EUA for December 2017 were priced in range EUR 4.63-6.14/tonne. In the same period, CERs in future contracts with delivery in December 2017 were priced in range EUR 0.26-0.29/tonne.

Further 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 will be published after voting at the European Council and Parliament.

## 4.2.4. 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 2017 and energy for 2016, while free allowances for electricity for 2017 will be received by the Group by the end of April 2018, 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 2016 was completed in April 2017.

Table: Emission of  $CO_2$  from major Group installations in the first quarter of 2017 in comparison to allocation of  $CO_2$  emission rights for 2017 (in Mg).

Operator	CO <sub>2</sub> emissions in Q1 2017*	Allocation of CO <sub>2</sub> emission rights for 2016**	
Bełchatów Power Plant	10 099 609	7 788 822	
Turów Power Plant	1 883 073	3 135 350	
Opole Power Plant	1 426 896	1 802 162	
ZEDO	1 255 924	1 484 923	
Bydgoszcz CHPs	277 169	347 386	
Lublin Wrotków CHP	219 285	202 222	
Gorzów CHP	144 067	158 071	
Rzeszów CHP	126 781	94 345	
Kielce CHP	85 124	64 141	
Zgierz CHP	55 386	26 016	
TOTAL	15 573 314	15 103 438	

<sup>\*</sup> estimates, emissions not verified - the data will be settled and certified by the authorised verifier of CO<sub>2</sub> emission on the ground of yearly reports of volume of CO<sub>2</sub> emissions

<sup>\*\*</sup> amount of granted CO₂ emission rights will be confirmed in the Regulation of the Council of Ministers in the first quarter of 2018

## 4.2.5. 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
TOTAL		6 317

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.

An adjustment period for PGE GiEK S.A. producers covered by the compensation system ended in December 2016.

On April 5, 2017, PGE GiEK S.A. received information about the initiation of a proceeding regarding the amount of annual adjustment of stranded costs for 2016. On April 10, 2017, PGE GiEK S.A. received information about the initiation of a proceeding regarding the amount of final adjustment of stranded costs.

According to the provisions of the LTC Act, the process of establishing the annual adjustment of stranded costs for 2016 should be completed by July 31, 2017, while the process of establishing the final adjustment of stranded costs by August 31, 2017. If no disagreements arise in these processes, decisions issued by the President of the Energy Regulatory Office will conclude the participation of PGE GiEK producers in the compensation system.

The impact of LTC compensations on results achieved by the PGE Group is described in note 22.1 to the consolidated financial statements.

## 4.3. Supply markets

## 4.3.1. Fuel purchase costs

Table: Volume and cost of purchase of fuels from third party suppliers in the first quarter of 2017 and 2016.

	Q1 2017		Q1 2016	
Type of fuel	Volume (tons ths)	Cost (PLN m)	Volume (tons ths)	Cost (PLN m)
Hard coal	1 308	290	1 193	263
Gas (cubic metres ths)	242 934	179	211 842	181
Biomass	133	24	267	57
Fuel oil	7	10	11	8
TOTAL		503		509

In the first quarter of 2017 the costs of purchasing primary fuels from providers outside the Group amounted to PLN 503 million and were lower by PLN 6 million than in the first quarter of 2016. Costs of purchase of the main fuels in PGE Capital Group were mostly affected by biomass and hard coal:

#### **Biomass**

- Lower purchase volume by 50% (PLN -29 million)
- Lower average price by 16% (PLN -4 million)

The lower volume of biomass purchases resulted from lower electricity production based on combustion and cocombustion of biomass given the non-profitability of biomass combustion (very low prices of certificates, termination of agreement by Enea S.A. to purchase property rights).

#### Hard coal

Higher purchase volume by 10% (PLN +25 million)

The higher volume of hard coal purchases results from the need to re-stock this material.

Higher average price by 1% (PLN +2 million)

The higher price of hard coal mainly results from the situation on the domestic and international mining market.

#### Gas

Higher purchase volume by 15% (PLN +27 million)

The higher volume of gas consumption results from growth in demand for fuel at cogeneration units operated by PGE GiEK S.A. Additional impact on larger gas purchases came from the commissioning of a new steam-and-gas unit at Gorzów CHP.

Lower average price by 14% (PLN -29 million)

Lower gas prices on the wholesale market with delivery in the first quarter of 2017 made it possible to reduce the fuel purchase costs for PGE GiEK S.A. units.

#### Fuel oil

Lower purchase volume by 36% (PLN -3 million)

The lower volume of heating oil purchases in the first quarter 2017, comparing to the same period of 2016, was caused by a lower number of energy unit start-ups connected with failures, planned repairs and demands from the TSO.

Higher average price by 98% (PLN +5 million)

The significant increase in the average price for heating oil was driven by growth in oil and refinery product prices across the world and a relatively high USD exchange rate (Q1 2017 to Q1 2016).

In the first quarter of 2017 approximately 71% of the electricity was produced from internally sourced lignite, whose extraction price is fully controlled by PGE Capital Group. In the comparable period of 2016 the share of lignite-based electricity generation in total Group's production was lower and amounted to 65%.

## 4.3.2. 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 2017", which was prepared and published by the President of the Energy Regulatory Office.

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

Tariff came into force on January 1, 2017.

Distribution tariffs for 2017 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 2016:

- A tariff group decrease by 0.15%;
- B tariff group increase by 5.89%;
- C+R tariff group increase by 3.77%;
- G tariff group increase by 6.23%.

The change in distribution service rates takes into consideration a significant increase in the transition fee (from approx. 80% for tariff B groups to 106% for customers with highest consumption in tariff G groups) related to the costs of liquidating long-term contracts and RES fee (by approx. 47%) related to support mechanisms for the production of energy from renewable sources. These fees have an impact on growth of regulated revenue and distribution service fees, but they are fully transferred to entities in charge of support instruments, thus they do not impact profit of the distribution companies.

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

- A tariff group no change;
- B tariff group decrease by 0.55%;
- C+R tariff group decrease by 0.22%;
- G tariff group increase by 0.64%.

The quality regulation elements introduced in 2016 are being continued in 2017. 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 2017 will be included in tariff for 2019. In accordance with the assumptions adopted by the ERO, a penalty cannot exceed 2% of regulated revenue and value of 15% of return on capital in a given year.

## **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 decreased by approximately 1% in comparison to the prices in the first quarter of 2016.

# 5. 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 quarterly consolidated financial statements and comparative data were prepared in accordance with the governing accounting principles, present a fair, true and reliable view of the material and financial situation of PGE Capital Group and its financial result.

The report of the Management Board on the activities of PGE Capital Group presents a true view of the development, achievements and situation of the Capital Group.

## 6. Approval of the Management Board's Report

The foregoing Management Board's Report on activities of the Capital Group of PGE Polska Grupa Energetyczna S.A. was approved for publication by the Management Board of the parent company on May 11, 2017.

Warsaw, May 11, 2017

Signatures of Members of the Management Board of PGE Polska Grupa Energetyczna S.A.

President of the Management	t end of the control
Board	Henryk Baranowski
Vice-President	
of the Management Board	Bolesław Jankowski
Vice-President	
of the Management Board	Wojciech Kowalczyk
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Vice-President	
of the Management Board	Marek Pastuszko
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Vice-President	
of the Management Board	Paweł Śliwa
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Vice-President	
of the Management Board	Ryszard Wasiłek
Vice-President	
of the Management Board	Emil Wojtowicz

# Glossary

A:!!	and a constitution that he have a been a constant and the
Ancillary control	services provided to the transmission system operator, which are indispensable for the proper
services (ACS)	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
Base, baseload	exchanges and the TSO as the balancing company.  standard product on the electricity market: a constant hourly power supply per day in a given period, for
base, baseloau	example week, month, quarter or year.
Best Practices	Document "Best Practice for GPW Listed Companies 2016" adopted by the resolution of the GPW
Dest Fractices	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	the generation of electricity to ensure the quality and reliability of the national power system; this
generation	applies to generating units in which generation must continue due to the technical limitations of the
Brank and	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	a power company engaging in the distribution of gaseous fuels or electricity, responsible for traffic in the
Operator (DSO)	gas or electricity distribution systems, current and long-term security of operation of the system, the
operator (BSO)	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	a naturally with a naminal valtage of 110 M
(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 m3 of space at a pressure of 101.325 Pa and a temperature of 0°C.
NO <sub>x</sub>	nitrogen oxides.
Operational Capacity Reserve (ORM)	ORM constitutes of generation capacities of active Production Schedular Units (JGWa) in operation or layover, representing excess capacity over electricity demand available to the TSO under the Energy Sale Agreements and on the Balancing Market in unforced generation
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  Property rights	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 negotiable exchange-traded rights under green and co-generation certificates
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PSCMI1	Polish Steam Coal Market Index
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	a source of generation using wind power, solar radiation, geothermal energy, waves, sea currents and tides, flow
Source (RES)	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
TPA, TPA rule	exchange trading.  Third Party Access the owner or enerator of the network infractivisture to third parties in order to supply
	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	a power company engaging in the transmission of gaseous fuels or electric energy, responsible for traffic in a gas
Operator (TSO)	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	an energy network with a voltage equal to 220 kV or higher.
network (UHV)	
V (volt)	electrical potential unit, electric voltage and electromotive force in the International System of Units (SI), 1 V=
	$1J/1C = (1 \text{ kg x m}^2) / (A \text{ x s3}).$
W (watt)	a unit of power in the International Systems of Units (SI), $1 \text{ W} = 1 \text{J/1s} = 1 \text{ kg x m}^2 \text{ x s-3}$ .
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.