



RENEWABLE ENERGY

CONVENTIONAL ENERGY

DISTRIBUTION

TRADE

POLENERGIA 1H 2016 Results

August 11, 2016



	TABLE OF CONTENTS	
1	Financial Results	3-11
2	Market Update and Regulatory Surrounding	12-19
3	Appendices	
	A Business/Project Descriptions	20-30





Financial Results

3



Summary of 2Q 2016: negative impact of GC market collapse

- Profitability improvement still visible: 1H 2016 adjusted EBITDA increased by 8% to PLN 118,5m as compared to 1H 2015;
- <u>369MW capacity installed</u>: 245,3MW wind farms, 124MW ENS and cogeneration, 36% increase YoY;
- <u>Market Prices</u>: electricity prices increasing towards the end of quarter. Weak GC market continues influencing results of Polenergia negatively in Wind and Trading segments;
- Onshore Wind: PLN 55m write-off caused by WTI Act being adopted. Decreasing GC prices, weaker wind conditions offset partially by production on new wind farms (Skurpie and Mycielin) and cost savings in Łukaszów and Modlikowice;
- <u>Conventional Power</u>: 1H 2016 EBITDA improvement largely due to effect of annual price projections update and resultant positive stranded cost effect;
- <u>**Trading:**</u> negatively affected by collapse in GC market, partially offset by good results on gas contracts;
- Distribution: improved performance due to higher volumes and margins on energy and gas distribution;
- **Offshore:** environmental decision for Baltyk Srodkowy III obtained, strong value growth potential;
- Dividend: the dividend of PLN 0.5 per share for 2015 was paid in July 2016;

- Despite the difficult regulatory environment, Polenergia was able to increase its adjusted EBITDA margin as compared to 1H 2015;
- Regulatory perspectives remain uncertain;
- Polenergia's vertical profile provides consolidated hedge against regulatory challenges in onshore wind.





- In 1H 2016 prices of GC were decreasing, while electricity prices were increasing (small, positive influence on spot contracts concluded by Polenergia Obrót).
- IH 2016 productivity of wind farms was below 1H 2015 productivity.

POLENERGIA 1H 2016/1H 2015 comparison





Consolidated results for 6M 2016 – P&L

Polenergia Group Income Statement (kPLN)	6M 2016	6M 2015	Diff y/y	Diff y/y [%]		
Revenues from sales	1 366 494	1 355 346	11 148		•	
Including trading segment	1 045 626	1 005 862	39 764			
Cost of sales	(1 288 474)	(1 273 785)	(14 689)			
Including trading segment	(1 043 613)	(998 033)	(45 580)			
Gross profit on sales	78 020	81 561	(3 541)	-4%		
Other operating income	4 609	2 873	1 736			
Administrative expenses	(16 434)	(14 942)	(1 492)			
Other operating expenses	(55 870)	(2 131)	(53 739)			
Gross result on sale	10 325	67 361	(57 036)			
Depreciation	56 182	41 559	14 623			
Eliminating the effect of wind farms development write-off	54 213	-	54 213		_	Detailed analysis of EBITDA by segment is presented on the
EBITDA	120 720	108 920	11 800	11%	_	following pages.
Eliminating the effect of purchase price allocation	(1 362)	1 206	(2 568)			010
Elimination of fundraising costs	-	143	(143)			
Eliminating the effect of Zakrzów CHP sale	(813)	-	(813)			Higher financial income due to sale of Zakrzów CHP, partly
Adjusted EBITDA*	118 545	110 269	8 276	8%		offset by lower interest income resulting from lower cash
Financial income	5 669	4 956	713			balance and lower interest rates.
Financial expenses	(32 170)	(22 930)	(9 240)			
Profit (loss) before tax	(16 176)	49 387	(65 563)			Higher interest expense resulting from commencement of
Income tax	(8 871)	(13 381)	4 510		\mathbf{N}	new projects partially offset by decrease in debt in other
Net Profit (loss)	(25 047)	36 006	(61 053)	-170%		operating assets.
Eliminating the effect of the purchase price allocation	3 000	5 076	(2 076)		· `	
Eliminating the effect of unrealized exchange differences	1 111	(476)	1 587			Lower income tax results from lower profit before tax.
Elimination of the effect of AMC loans valuation	1 005	2 407	(1 402)			
Elimination of fundraising costs	-	116	(116)			1) Purchase price allocation effect of non-goodwill assets
Eliminating the effect of wind farms development write-off	54 213	-	54 213		⊢	 2) Unrealized exchange differences (mostly in Dipol due to
Eliminating the effect of Zakrzów CHP sale	(5 285)		(5 285)			loan in EUR)
Adjusted Net Profit*	28 997	43 129	(14 132)	-33%	_	3) AMC: IFRS accounting approach to loan valuation
Adjusted EBITDA margin	8,7%	8,1%	0,5%			4) Write-off resulting from WTI Act 5) Result on Zakrzów CHP sale
Adjusted EBITDA (excluding trading segment)	121 054	106 836	14 218			5) Result of Zakizow CRF Sale
Adjusted EBITDA margin (excluding trading segment)	37,7%	30,6%	7,2%			

*) adjusted for non-cash/one-off items



Consolidated results for 6M 2016 – EBITDA Analysis



EBITDA Build-up 6M 2016

EBITDA Bridge 6M 2016/ 6M 2015



- Conventional energy: significantly higher EBITDA (by PLN 7.8m) result from update of energy, gas and CO2 price forecasts for 2016 – 2020 (in 1Q 2016) that changed allocation of stranded costs compensation in the whole compensation system period (2008 – 2020).
- Wind farm segment: slight decrease in EBITDA (by PLN 0.4m y/y) despite commencement of new projects (Mycielin 48MW and Skurpie 43,7MW) mainly due to lower green certificates prices.
- Distribution segment: EBITDA increased y/y (by PLN 4,1m) mainly due to reversal of rebate provision and higher sales volumes.
- **4. Trading segment:** EBITDA decreased y/y (by PLN 5.9m) mainly due to lower green certificates prices. This effect was partially offset by better gas trading results.
- 5. Biomass: stable performance.
- 6. Unallocated management costs: significant reduction (by PLN 3,2m) is a result of savings program initiated in 2Q 2016.

Consolidated cash flow analysis

Consolidated statement of cash flows (PLN m)	2Q 2016	6M 2016	
A. Cash flows from operating activities			
I.EBITDA	33	121	Adjustments include mainly change in working capital (PLN -25m) and CIT
II. Adjustments	2	(38) -	settlement (PLN -13m).
III. Net cash flow from operating activities (I+/-II)	35	83	
B. Cash flows from investing activities			
I. Cash received	5	5	Capital expenditures include construction of Mycielin WF (PLN 47m), distribution
II. Expenses	(17)	(64) _	segment development (PLN 4m) and further projects development (PLN 10m).
III. Net cash flow from investing activities (I-II)	(11)	(59)	
C. Cash flows from financing activities			Cash inflows result from debt drawdawns including: Mycielin WF (PLN 53m), GSR
I. Cash received	36	81 -	(PLN 22m), Distribution Segment (PLN 3m) and ENS (PLN 2m).
II. Expenses	(40)	(105) -	
III. Net cash flow from financing activities (I-II)	(4)	(24)	Debt repayment and interest payments - mainly Wind Farms (73m), ENS (26m),
D. Net cash flow, total (A.III+/-B.III+/-C.III)	19	(0)	and Distribution Segment (1m).
E. Balance transition of cash, including:	19	(0)	
F. Cash and cash equivalents at beginning of period	343	362	
G. Consolidated cash and cash equivalents at end of period	362	362	
Consolidated debt	1 150	1 150	
Consolidated net debt	788	788	

• Adjusted EBITDA for the last 12M (from July 1st 2015 to June 30th 2016) amounted to PLN 231.2m and Group's net debt at 1H 2016 was PLN 788.1m

It implies Net debt / EBITDA ratio of 3.41x

Net profit - overview of the changes y / y



Adjusted net profit decreased by PLN 14.1m, due to:

- 1. Change in adjustments: detailed decomposition of normalizing adjustments for 6M 2016 and 6M 2015 was presented on P&L summary page (explained in detail on Slide 7).
- 2. Increased Adjusted EBITDA (explained in detail on Slide 8).
- 3. Increased depreciation (by PLN 14.6m), which is primarily driven by depreciation of new wind farm projects;
- 4. Lower interest income (by PLN 1.6m) resulting form lower cash balance and lower interest rates;
- 5. Higher interest costs and fees (by PLN 9.9m) resulting from increased debt service due to commisioning of new projects;
- 6. Positive CIT impact (PLN 3.7m) due to lower profit before tax as a result of all above mentioned effects;

POLENERGIA Balance sheet

Assets (PLN m)	As at 30.06.2016	As at 31.12.2015	Diff
Fixed assets (long-term)	2 418	2 448	(30)
Tangible fixed assets	2 156	2 192	(36)
Intangible assets	44	49	(5)
Goodwill of subordinate entities	185	185	(0)
Financial assets	13	6	7
Long-term receivables	5	5	(0)
Deferred income tax	14	11	3
Accruals	0	0	0
Current Assets (short-term)	676	751	(75)
Stock	52	47	5
Receivables from deliveries and services	107	159	(52)
Receivables from income tax	7	3	4
Other short-term receivables	22	65	(43)
Accruals	9	11	(2)
Short-term financial assets	118	104	14
Cash and cash equivalents	362	362	(0)
Total Assets	3 094	3 199	(105)

Liabilities (PLN m)	As at 30.06.2016	As at 31.12.2015	Diff
Equity	1 351	1 397	(46)
Long-term liabilities	1 320	1 304	16
Loans and borrowings	1 052	1027	25
Provision from deferred income tax	74	66	8
Reserves	1	2	(1)
Accruals	61	64	(3)
Other liabilities	132	145	(13)
Current liabilities	423	498	(75)
Loans and borrowings	98	121	(23)
Trade payables	125	179	(54)
A liability for income tax	1	7	(6)
Other liabilities	182	166	16
Reserves	3	4	(1)
Accruals	14	21	(7)
Total liabilities	3 094	3 199	(105)

Write-off of wind farms in development partially offset by increased value of Mycielin wind farm due to capex spent in the period.

Change in receivables result from decrease in trade receivables in wind farms, distribution and trading segments.

Mainly valuation of contracts in trading segment.

Other liabilities consist of ENS liabilities due to long term contracts termination settlement (KDT), long term liabilities in trading segment and PPA liability.

Trade payables decreased as a result of change in trade liabilities in distribution and trading segments and in Mycielin WF.

Mainly valuation of contracts in trading segment.

Adjusted EBITDA for the last 12M (from July 1st 2015 to June 30th 2016) amounted to PLN 231.2m and Group's net debt at 1H 2016 was PLN 788.1m

It implies Net debt / EBITDA ratio of 3.41x





Market Update and Regulatory Surrounding

Evolution of regulatory uncertainty and effect on share price



Key strategic focus in 2H 2016

Continue cost savings (current plan: PLN7-9m reduction in 2017)

Defend value of onshore operating wind farms

- Green Certificates
- Real Estate Tax risk
- Prepare for "switch" into auctions
- Bank discussions
- Grow value of ready to build WF / prepare for auctions
 - Wind farms alone
 - Hybrid auction preparation/potential



3

Capacity auctions

- ENS: critical part of Polish electricity system after black start services contract with PSE in case of total Polish Power System (KSE) failure (black-out).
- New installations: EP



14

Regulatory issues: WTI Act and Amendment to RES Act

Wind Turbine Investment Act ("anti-wind")

Status:

 The Act was accepted by the Senate and was signed by the President of Poland on 22 June. The Act came into force on 16 July.

Key provisions:

Property tax

 The extension of "building" definition by the technical part of the windmill (including a turbine), may constitute basis for the request to the calculation of property tax base including wind turbine.

Minimum distance

- Minimum distance: 10h.
- Wind farms that already posses or have initiated the procedure for the issuance of building permit as at the date on which the Act comes into force will get them for 3 years period in accordance to old rules (i.e. without taking into account minimum distance requirement). During this period FW must received a use permit.
- Polenergia has a building permit for a 267 MW WF ready for auction, these farms are unaffected.
- Current provisions mean that approx. 400MW of wind farms that are currently in development will not be granted building permit and have been written off.

Amendment to RES Act

Status:

- The amendment was accepted by the Parliament and accepted by the Senate.
- President signed Amendment to the RES Act on 27 June. The Act came into force on 1 July.

Key provisions:

- □ The new shape of baskets auction
- All projects (biomass, onshore, offshore) are captured. Potential for hybrid combination.
- □ The new shape of green certificates system
- The draft contains announcement of changes of the GC redemption requirements set at 19,35% in 2017 after the separation of "blue" basket certificates for biogas with redemption obligation set at the level of 0.65%
- Final decision is expected by 30 November 2016. Consultations have commenced.

Introduction of local biomass definition

- New type of biomass will be introduced local biomass agricultural biomass produced originally within 300 km from the plant.
- To receive a GC or support under the auction an appropriate share of local biomass will have to be maintain. The size of this contribution will be set out implementing provisions.
- In case of sufficiently high level of purchase obligation of local biomass (will be specified in implementing provisions) demand for produced pellets may increase. It is also possible an increase in the price of biomass which can result in smaller supply of green certificates from co-firing;

□ Modification of specific provisions relating to offshore FW

 The project extends the time to produce electricity from offshore wind to 120 months from the signing of connection agreement. Changing the period to produce electricity and basket definition indicate the importance of offshore FW technology in the Government strategy.

15



Regulatory issues: draft ordinance on reference prices announced

Installation type		Reference price	Opportunity for Polenergia
Biomass	≤50MW	415	\checkmark
Onshore	>1MW	385	1
Offshore		470	\checkmark
Hybrid Installation	>1MW	430	\checkmark

Reference prices announced support our key focus areas: Offshore, Hybrid, Onshore and Biomass

V POLENERGIA Offshore windfarms: huge growth potential maintained

- Two projects of offshore wind farms with a total capacity of 1,2 GW, which are scheduled to commence operations consecutively in 2022 and 2026; Commencement of construction is expected in 2019.
- In July 2016 obtained Poland's first environmental permit for Offshore Wind Farm Baltyk Środkowy III project with planned capacity of 600 MW. The decision for another 600 MW is expected later this year;
- Taking as a reference point value of the project at the RTB stage (i.e. with Construction Permit) Polenergia assesses the current progress of offshore wind farm projects at 45% (among others projects have permit use of artificial islands, placement of submarine cables and signed Connection Agreement with PSE).
- Based on actual transactions in the European market in recent times, the potential value of offshore wind farm projects at the time of Financial Close may reach c.260k EUR* / 1MW;

- Impact on Polish Economy: Total potential investment will greatly benefit the local communities and the Polish economy. Local Polish content, directly or indirectly, could account for about PLN 6bn (60% of total costs).
- MS TFI (PGZ Group) owns 38% of Bilfinger Mars Offshore in Szczecin (foundations for Offshore). Vice President of MS TFI recently stated that *"soon the first* offshore wind farm project will be build in Poland". Baltyk Srodkowy III developed by Polenergia is the most advanced Offshore project in Poland.



Assuming this valuation, we can determine the potential value of the project as:

* Multiple based on purchase of Gode Wind I and II by Dong Energy from PNE Wind in 2012, according to data published by Bloomberg New Energy Finance



Levelised cost of electricity – offshore wind at US\$110/MWh target for 2020 (BNEF)

Historical and forecasted LCOE using various learning rates vs commissioning year (USD/MWh)



Notes: Reading off the chart will give the LCOE at the time of commissioning. For example, the historic LCOE reaches until 2017 because for a project commissioned in 2017 it reflects the calculated LCOE at pre-construction 2 years prior. Calculations based on forecasted number of units rather than installed capacity. Conversion rate of USD/GBP = 1.5 and USD/EUR = 1.1 (last 3 month average).

Offshore could have significant positive impact on Polish economy



> PLN 60bn in additional GDP and up to 70 thousand jobs across entire Polish economy – easily offsetting (or providing an alternative) to any potential restructuring effect of Polish coal mines thus providing a good replacement alternative for the Polish State.





Business/Project Descriptions

20

C POLENERGIA **Group Structure**



VPOLENERGIA

Renewable listed vertically integrated utility with predictable returns and strong growth profile



V POLENERGIA **Onshore wind farms - operating**

Operating wind farms

Operating wind	Tarms			
# Location	Capacity (MW)	COD	Clients	 WF Puck Combined project capacity equals 22,0 MWe, comprise 11 turbine (Gamesa) 2,0 MW each; Location: Pomorskie voivodeship, district Puck; COD in January 2007; Average annual production of approximately 42 GWh;
1 Puck	22,0	2007	Energa, Polenergia Obrót	WF Modlikowice • Combined project capacity equals 24,0 MWe, comprise 12 turbine (Vestas) 2,0 MW each;
2 Modlikowice	24,0	2012	Tauron Sprzedaż	 Location: Dolnośląskie voivodeship, district złotoryjski; COD in 2012; Average annual production of approximately 50 GWh;
3 Łukaszów	34,0	2011	Tauron Sprzedaż	 WF Łukaszów Combined project capacity equals 34,0 MWe, comprise 17 turbine (Vestas) 2,0 MW each; Location: Dolnośląskie voivodeship, district złotoryjski; COD in 2012; Average annual production of approximately 74 GWh;
4 Gawłowice	48,3	10.2014	Polenergia Obrót	WF Gawłowice • Combined project capacity equals 48,3 MWe, comprise 21 turbine (Siemens) 2,3 MW each; • Location: Kuj. – pom. voivodeship, district grudziądzki; • COD in November 2014; • Planned annual production of approximately 144 GWh;
5 Rajgród	25,3	11.2014	Polenergia Obrót	 WF Rajgród Combined project capacity equals 25,3 MWe, comprise 11 turbine (Siemens) 2,3 MW each; Location: Podlaskie voivodeship, district grajewski; COD in October 2014; District grade development in a state of severe in a state of sever
6 Skurpie	43,7	08.2015	Polenergia Obrót	 Planned annual production of approximately 67 GWh; <u>WF Skurpie</u> Combined project capacity equals 43,7 MWe, comprise 19 turbine (Siemens) 2,3 MW each;
7 Mycielin	48,0	12.2015	Polenergia Obrót	 Location: Warmińsko-Mazurskie voivodeship, district działdowski; COD in August 2014; Planned annual production of approximately 122 GWh;
	245,3 MW			WF Mycielin Combined project capacity equals 48 Mwe, comprise 24 turbine (Vestas) 2,0 MW each; Location: Lubuskie voivodeship, district szprotawski; COD in December 2015; Planned annual production of approximately 136 MWh;

V POLENERGIA **Onshore wind farms – development portfolio**

Pipeline build up

- The portfolio of operating wind farms at YE2015 reached installed capacity equal 245,3 MW;
- Additional approx. 670 MW portfolio of wind farms under development of which:
 - 6 projects of 267 MW will participate in first auction planned for 2016;
 - Approx. 400 MW will participate in auctions in 2017-2019.

Pla	Planned participation in the first auction in 2016				
#	Location	Power (MW)	Building permit	Possible completion	
8	Piekło	12	Secured	2017	
9	Grabowo	40	Secured	2017	
10	Zielona	110	Secured	2018	
11	Kostomłoty	27	Secured	2018	
12	Bądecz	42	Secured	2018	
13	Szymankowo	36	Secured	2019	
		267 MW*			

* Increase in comparison to 1Q 2016 r. due to increase in permitted capacity in Kostomłoty WF.



- WPS Terms of connections to the Network
- PB Building Permit

Polenergia is a leading offshore wind farms developer in Poland

Description

- Two projects with total power of c. 1.2 GW
- The plan is to build offshore projects in cooperation with an experienced industrial player (50/50 JV)
- An additional option is third project with a capacity of 1,6 GW with a valid location permit
- In August 2014, connection agreement for 1200 MW with PSE SA was signed
- In July 2016 obtained Poland's first environmental permit for Offshore Wind Farm Baltyk Środkowy III project with planned capacity of 600 MW



Name of project	Bałtyk Środkowy III	Bałtyk Środkowy II
Actual planned capacity (MW)	600	600
Number of turbines	Ca. 75	Ca. 75
Distance from the shore	22 km	37 km
Region	116,6 km ²	122 km ²
Depth	25-39m	23-41m
Average wind speed	9 – 10 m/s	9 – 10 m/s



Planned key dates	Bałtyk Środkowy III	Bałtyk Środkowy II
Environmental decision	Secured	Q3 2016
Construction start	2020	2023
Commisionig date	2021/22	2026

Leading developer of offshore in Poland, supported by increasingly attractive cost economics. Also, the Polish government wants to impose regulations to suport offshore wind farm projects.

VPOLENERGIA

ENS Gas-fired CHP – operational portfolio

Description

- Natural gas powered CHP plant with a capacity of 116 MWe and 70 MWt.
- Modern asset, which began commercial operations in 2000.
- Operating with high efficiency unit works as a power system.
- Produced energy is ejected by the three above-ground transmission lines with a capacity of 110 kV.
- CHP meets polish environmental standards.
- Fixed income and cash flow of stranded costs for 2020.
- ENS after 2020 will operate a gas turbine and a steam turbine, producing electricity and heat in combination. The Board assumes that the second turbine will be used as a power source for the intervention of the National Power System based on the agreement to share power with the operator of the National Power System. In addition, Nowa Sarzyna CHP as a source will be able to provide a service of the National Power System reconstruction under an agreement with the operator of the system;



Technical Specifications				
Installed capacity	116 MWe, 70 MWt			
Net capacity	113 MWe			
Avg. net output	Electricity ca. 750 GWh Heating ca. 435 TJ			
Technology	CCGT			
Fuel	Natural gas / fuel oil backup			
Efficiency	HHV (47.7%), LHV (52.9%)			
Туре	2*1 CCGT Thomassen (GE) frame 6			
COD	2000			
Availability	96.5%			

Compensation formula

- ENS generates revenue through the sale of electricity and heat, additionally receives compensation for stranded costs, compensation for gas and yellow certificates.
- Guaranteed compensation for stranded costs sufficient to cover all the costs of fuel and operating expense (EBIT = 0). It is calculated in such way to balance power and heat sales minus the cost of fuel and operating expense.
- Depreciation (included in the compensation) allows for debt service and interest costs.
- Gas Compensation and yellow certificates directly increase the profit before tax.

Electricity distribution

The length of the distribution network (number of projects)



Distribution of electricity

	In use	In development	Total
Distribution power	75 MW	19 MW	94 MW
Distribution volume	279 GWh	30 GWh	c. 309 GWh
Number of projects	31	12	43
Final users	10,5k	4,7k	ca. 15,2k
The length of the mediun voltage lines (km)	^{I-} 111,3	13,1	124,4
Number of substations	87	25	112
Number of transformers	143	34	177

Polenergia Distribution

Description

- Polenergia Distribution is a niche distributor of electricity to industrial, retail and commercial customers, ie. residential areas, factories, office buildings and shopping centers.
- Regulated entity based on WACC / WRA with approved investment plans.

Projects in development

- 12 projects based on contracts with developers of housing and industrial partner.
- All regulated in accordance with the system WACC / WRA with approved investment plans.
- Excellent platform for expansion on a larger scale – in the distribution of energy.

Increase in value and benefits for customers

Increase of value

- Obtaining a license to distribute electricity for the electrical infrastructure (ie. the "last mile") in non-residential buildings, ie. shopping centers and office buildings.
- Effective use of cooperation between the regulated activities (distribution of electricity) and commercial (sales of energy).
- Providing partners with opportunities to optimize the cost of electricity infrastructure during construction and maintenance.
- Effective use of cooperation within the Group.

A unique package of benefits for customers

- Immediate settlement or reduction of electrical infrastructure costs.
- Competitive tariffs for distribution and connection to the grid.
- All costs associated with the maintenance of infrastructure covered by Polenergia Distribution.
- Settlement for electricity by company.
- Risk of delays in payments for electricity transferred to company.
- The ability to change vendors (TPA) by the customers.

V POLENERGIA **Trading (Polenergia Obrót)**

Review of Polenergia Obrót (trading)

- Central platform for trading and risk management located in Warsaw.
- In January, 2013 the company took over the former
 Vattenfall Trading team operating in the energy markets in the CEE region.

Commercial activity

Expertise in the wholesale electricity trading, property rights and natural gas. The company has licenses for electricity trading, trade in gas fuels in Poland and foreign trade.

Important role in the value chain of Polenergia Group - market access, transfer of knowledge and information about the market, optimizing business processes, portfolio management.

Proprietary trading (trading on the stock exchange and OTC)

Low risk profile

Trade based on the physical delivery of the product

Limited risk profile - monitored daily

Polenergia Obrót	2015	1Q 2016
Energy sold	12 TWh	3,3 TWh
Natural gas sold	290 GWh	600 GWh

Polenergia Obrót – key highlights 2015/2016

- Apart from energy trading, Polenergia Obrót actively participates in the natural gas market, taking advantage from its ongoing liberalization. In Q1 2016 the company increased its natural gas volume to 0,6 TWh (more than two times as much as in the whole 2015).
- In 2016 Polenergia Obrót will start supplying gas in a physical delivery point.
- Polenergia Obrót also plans to take part in the forward market for green certificates formed by Towarowa Giełda Energii (Polish Power Exchange). As a step towards this market, in 2015 the company was the first in Poland to sell certificates of origin in the Polskie Gwarancje Pochodzenia Energii Programme (certificates originated from one of the wind farms in Polenergia Group).
- Polenergia Obrót signed an agreement with TGE (Polish Power Exchange) to act as a market maker. The agreement came into life on 1 July 2016.

EXAMPLENERGIA Bernau – Szczecin pipeline (Germany-Poland)

Overview

- Gas transmission project is ideally located to connect western gas markets with the isolated markets of Poland and other Eastern European countries (Ukraine, Lithuania)
- It is to provide the access to import infrastructure in Germany and become one of the key market openers of the East Europe gas market
- Customers in Poland (and potentially in neighbouring countries to the east and south of Poland) will gain access to the liquid Gaspool spot market which allows them to purchase gas at lower prices and from various suppliers, thus significantly improving their energy security and ensuring supplies of this strategic commodity in a diversified way
- Strategic partners are to be invited for joint development of the project in Poland and Germany, however the company assumes to hold minimum 51% of German part of the business
- Transmission return structured on attractive RAB based remuneration

Pipeline Bernau – Szczecin

ripenne bernau – 5202ecm				
Total technical capacity	3,0 - 5,0 bcm p.a.m			
Compressor stations	3 x 5,4 MW			
Lenght	c. 150km (30km in POL. 120km in GER)			
Project status				
FEED Design	Secured			
Construction Permits	Secured			
Rigths of way	C. 50% Secured			
TPA/Unbundling	In progress			
Commercial closing	In progress			
Grid connection	In progress			
EPC	To be completed			
Financing	To be completed			



General characteristics

EXIT FROM POLAND/ENTRY TO GERMANY EXIT FROM GERMANY/ENTERING TO POLAND



VPOLENERGIA

Other operating assets and projects

Coal power plant - Power station Północ

- The construction of coal-fired power plants with total capacity of 2 * 800 MW using supercritical technology.
- The project will be based on a long-term PPA contract with a guaranteed collection price for 20 years.

Planned power	to 2*800 Mwe
Efficiency	over 45%
Fuel (coal)	20-22 GJ/ton

Power Plant Mercury

- The power plant is located in Walbrzych
- Launched in July 2006.
- Power unit boiler fueled with gas and steam turbine with power above 8 MWe
- Power unit generates electricity from gas that is a byproduct in the production of coke in WZK Victoria
- The power plant operates on the basis of a contract concluded between Polenergia and Victoria WZK for supply of coke oven gas and electricity reception. The contract is valid until December 31 2021.

Biomass power plant

Polenergia is currently working on power plant with a capacity of 31 MWe in Wińsko - received all permits

Key features			
Turbine	Condensation / Alstom		
Cauldron	Vibrating grate / DP Cleantech		
Installed power	31 MWe		
Start-up	2020		
Client	Delivery to the grid		
Productivity (load factor)	92%		
Efficiency	Electric 33%		
Operational period	30 years		

Production of pellet

- In response to the growing demand, since 2008 Polenergia launched 3 projects which produce pellet from agricultural biomass, required for power industry and municipal power plants. The company has three pellet factories
 - North Factory, located in Sępólno Krajeńskie
 - South Factory, located in Ząbkowice Śląskie
 - East Factory, located in Zamość

	North Factory	South Factory	East Factory
Start-up	2009	2010/2011	2012
Annual production (t)*	28k	50k	54k

*Production in 2015, only pellet production