



ENERGIA ODNAWIALNA



ENERGIA KONWENCJONALNA



DYSTRYBUCJA



OBRÓT

# POLENERGIA 3Q 2017 Results

November 9, 2017

## Agenda:

<b>01</b>	Summary of key issues	3-11
<b>02</b>	Consolidated financial results	12-23
<b>03</b>	Market and Regulatory Update	24-34
<b>04</b>	Appendix	
<b>A</b>	Group Descriptions	35-45

*W razie pytań dotyczących zawartości tej prezentacji prosimy o kontakt [PolenergialR@polenergia.pl](mailto:PolenergialR@polenergia.pl)*

**01**

## **Summary of key issues**

## Summary of key issues



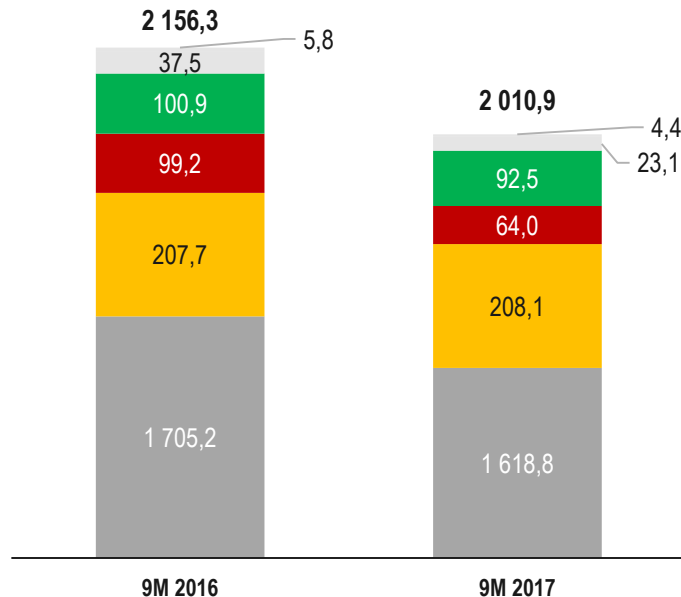
- **Excellent wind productivity:** Higher by 18% wind productivity basing on net electricity production compared to comparable period in previous year.
- **Trading:** Good results on electricity trading generated on lower volume thanks to higher margins.
- **Costs savings:** OPEX reduction. Positive influence of costs savings programme. As a result costs reduced PLN 9,1m reduction in 2016 and following PLN 4,4m in 2017.
- **Offshore:** Strong value growth maintained. Environmental decision for Bałtyk Środkowy II obtained in April 2017 which means that Polenergia possess decisions for both projects with capacity 1200 MW.
- **Storage:** Polenergia continuous market analysis od energy storage in Europe in cooperation with Convergent Energy + Power
- **Regulation:**
  - ✓ The distance act may be amended leading to reinstatement of historical Property Tax rules – possible delay in approval results in uncertainty for the next year;
  - ✓ Purchase obligation for certificates for RES electricity generated set at 17,5 % for 2018 and 18,5% in 2019 which gives a positive signal for reduction of current GC oversupply.



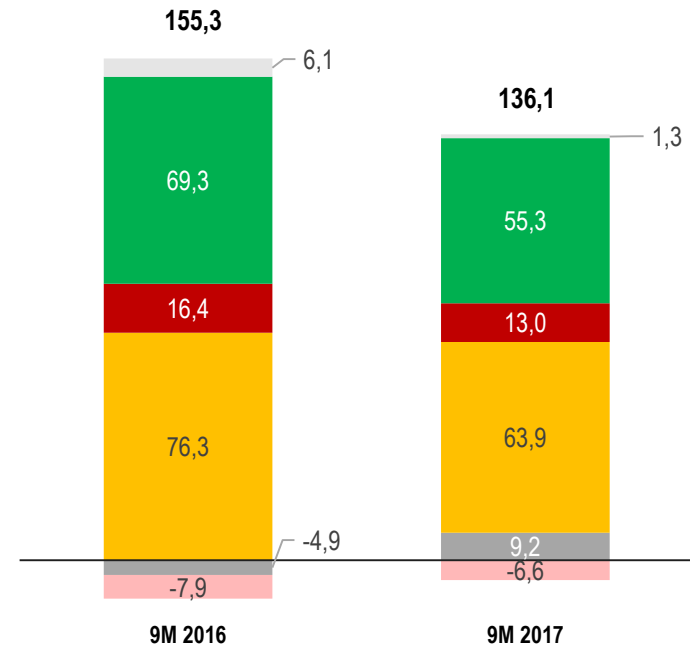
- **Market prices:**
    - ✓ Average GC prices lower by 37,3 PLN/MWh as compared to 2016. Most of volume held for sales by Polenergia Obrót in 2017 were hedged with average price higher than average market price in 2017;
    - ✓ Electricity price lower by 3,2 PLN/MWh as compared to 2016.
  - **Biomasa:** Lower results from lower sales volume and prices.
  - **Write-offs:** in 3Q 2017 following fixed assets write-offs were made:
    - ✓ Project Elektrownia Północ – 80,7m PLN
    - ✓ Biomasa Południe – 9,8m PLN
    - ✓ Project Grabowo – 8,4m PLN
- The write-offs are non-cash nature and do not affect EBITDA.
- **Regulation:**
    - ✓ Amendment to the RES Act decreasing replacement fee entered into force on 25.09.2017
    - ✓ Proposal that substitution fee to be set at 125% of prior year average GC price will limit GC price increase resulting from higher purchase obligation for 2018.
    - ✓ Cancellation of RES auction due to resolution of the Ministers Council. For the time being, there is no information provided when auctions can be resumed.

## Key financial data (9M 2017)

Revenues by segments in millions PLN



Adjusted EBITDA by segments in millions PLN



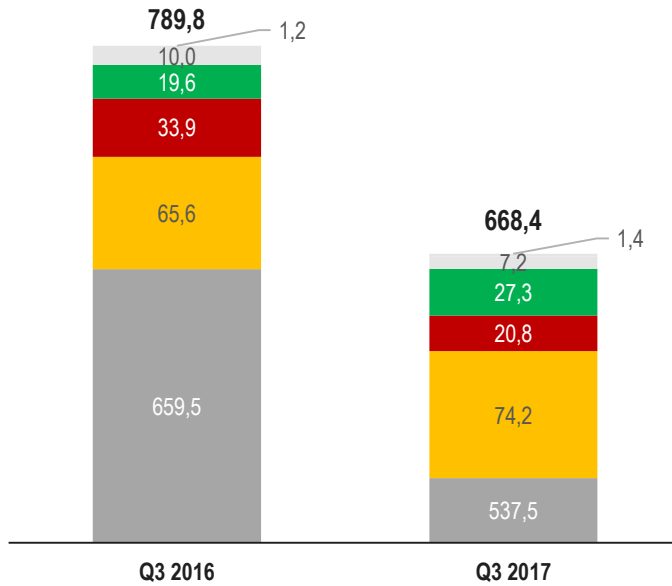
■ Trading  
■ Distribution  
■ Biomass

■ Conventional energy  
■ Wind power  
■ Other

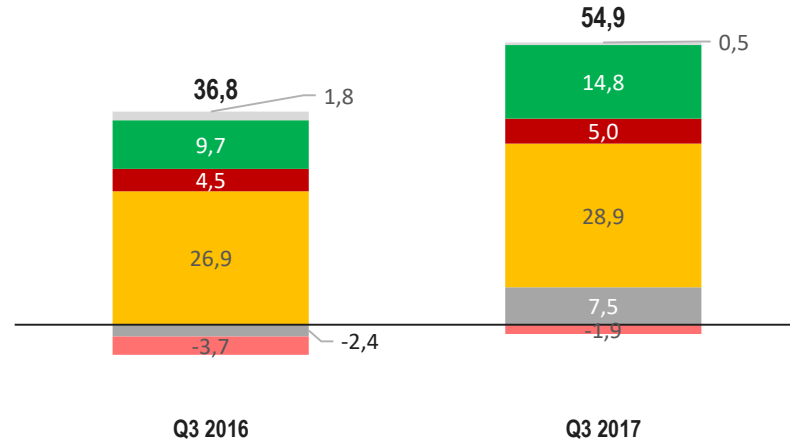
Higher margin in Trading, exceptional wind conditions and lower OPEX partially compensate effect of lower volumes in Trading, lower GC prices and higher real estate tax...

## Key financial data (Q3 2017)

Revenues by segments in millions PLN



Adjusted EBITDA by segments in millions PLN

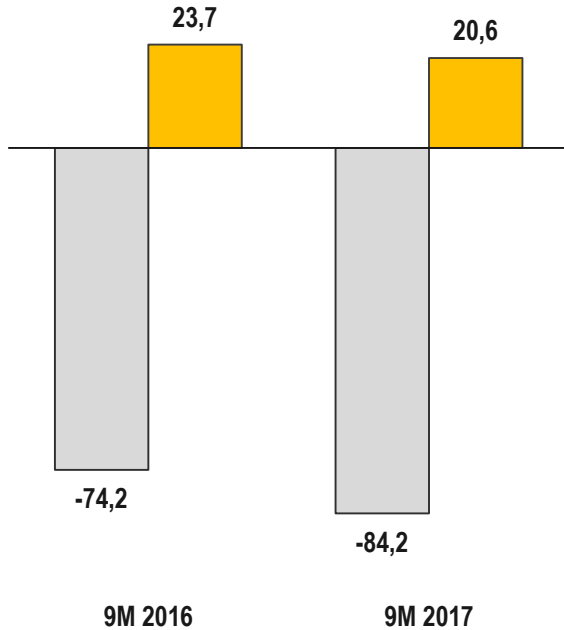


- Trading
- Distribution
- Biomass
- Conventional energy
- Wind power
- Other

... especially visible in Q3 2017 with EBITDA higher by 49%

## Key financial data

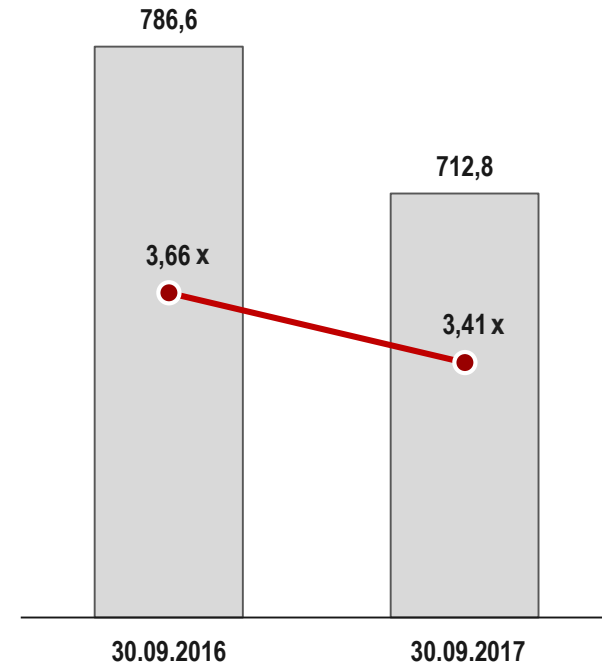
Net profit and adjusted net profit in millions PLN



□ Net profit (PLNm)    ■ Adjusted net profit (PLNm)

Adjustments [m PLN]	9M 2016	9M 2017	Difference
Effect of the purchase price allocation	4,5	4,5	0,0
Effect of unrealized exchange differences	0,5	(0,7)	(1,2)
Effect of AMC loans valuation	1,7	2,1	0,3
Write-offs	96,5	99,1	2,5
Effect of Zakrzów CHP sale	(5,3)	0,0	5,3
<b>TOTAL</b>	<b>97,9</b>	<b>104,9</b>	<b>6,9</b>

Group net debt (PLN in millions) and net debt / EBITDA index



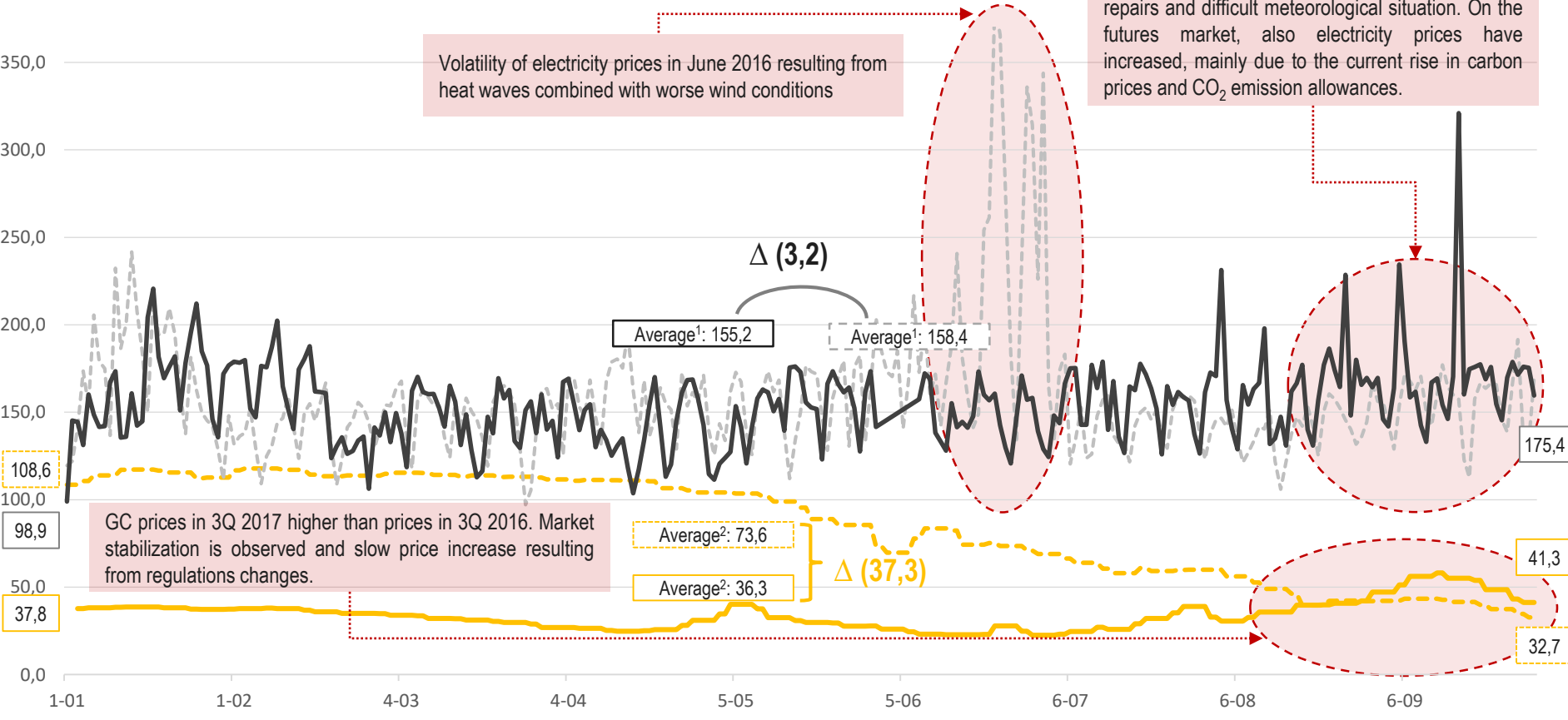
■ Net Debt (PLNm)    ●—● Net Debt/LTM EBITDA (PLNm)

## GC and electricity prices

### GC and Black Energy: 9M 2017 vs. 9M 2016 (PLN/MWh)

Price increase in 2017 from 162,4 PLN/MWh in January to 171,1 in September mainly due to technical limitations in the system resulting from repairs and difficult meteorological situation. On the futures market, also electricity prices have increased, mainly due to the current rise in carbon prices and CO<sub>2</sub> emission allowances.

Volatility of electricity prices in June 2016 resulting from heat waves combined with worse wind conditions



GC prices in 3Q 2017 higher than prices in 3Q 2016. Market stabilization is observed and slow price increase resulting from regulations changes.

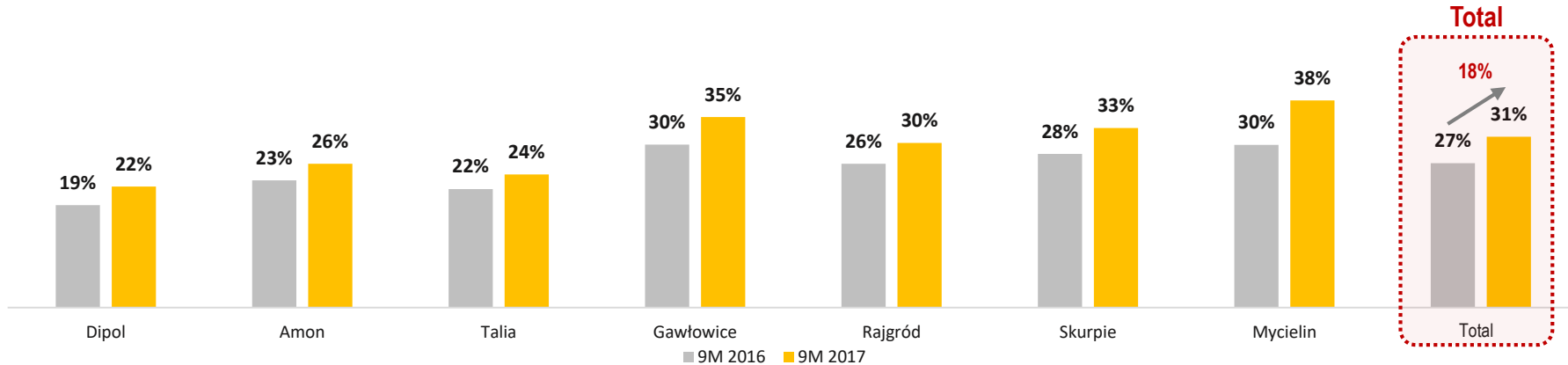
Source: TGE  
 1 Arithmetic average based on TGE quotations  
 2 Average price weighted by average volume of transactions on TGE. For the year 2017 the average price based on data between January and September

**In 9M 2017 average prices of GC were lower by 37,3 PLN/MWh, whereas average Black Energy prices were lower by 3,2 PLN/MWh in corresponding period in 2016**

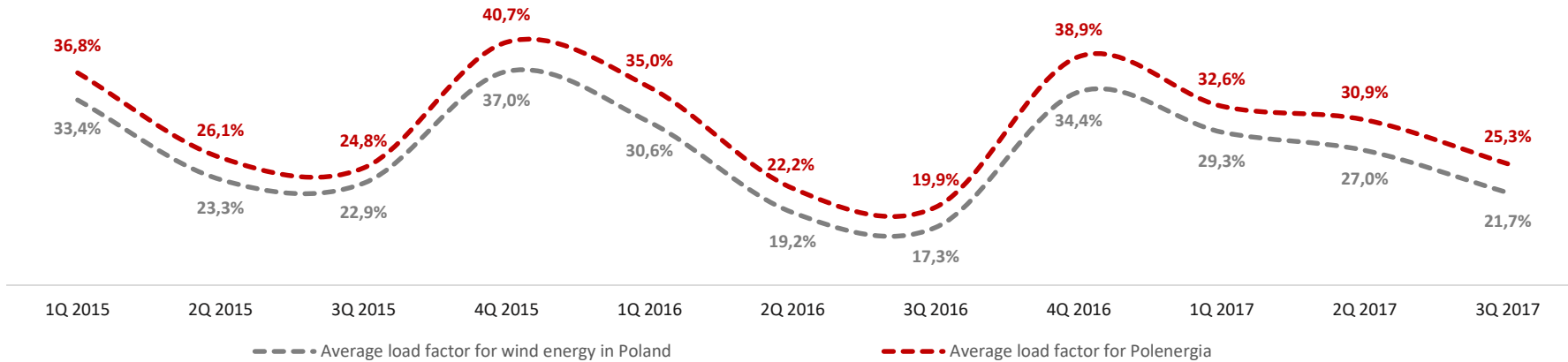


## Excellent productivity, load factors significantly above Polish average

Gross productivity – 9M 2017 vs. 9M 2016



Net productivity Polenergia's wind farms above average\*

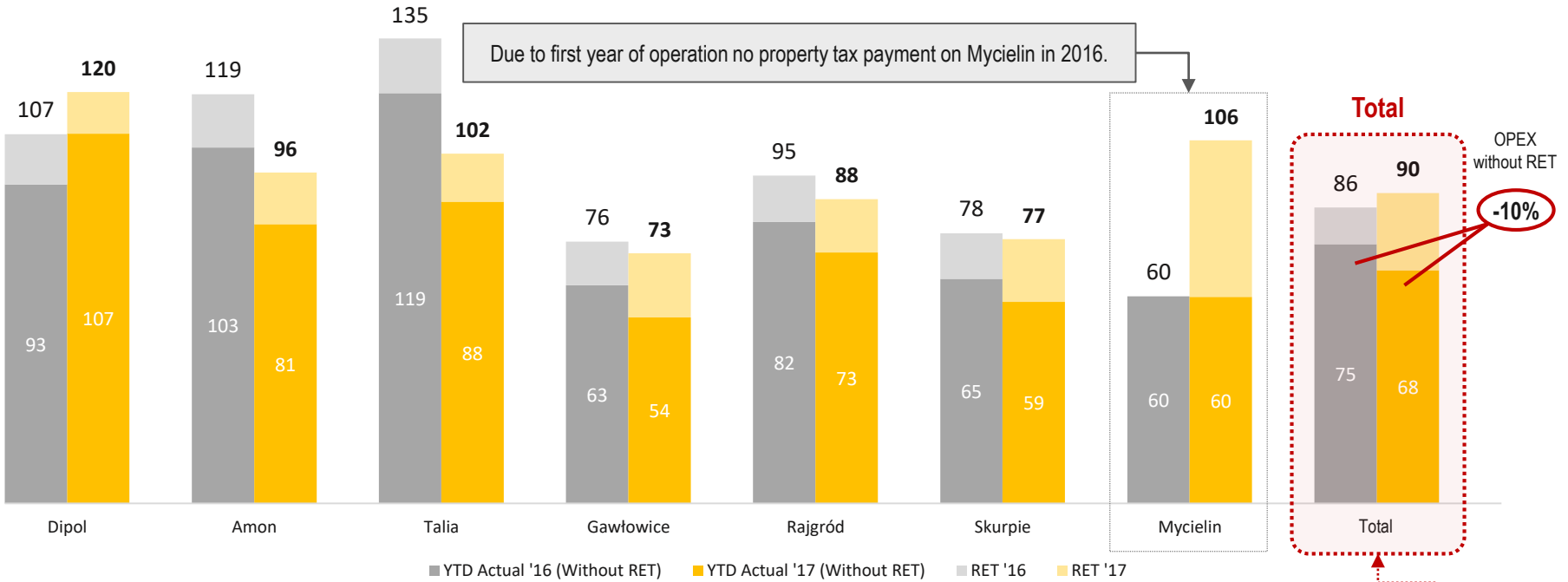


Source: Polenergia calculation based on own and ARE data

**Higher by 18% gross productivity compared to 9M 2016 and productivity above average in Poland**

\* Comparison based on net productivity (after consumption and losses) due to availability of sector data

## Wind Farms OPEX [PLN/MWh]



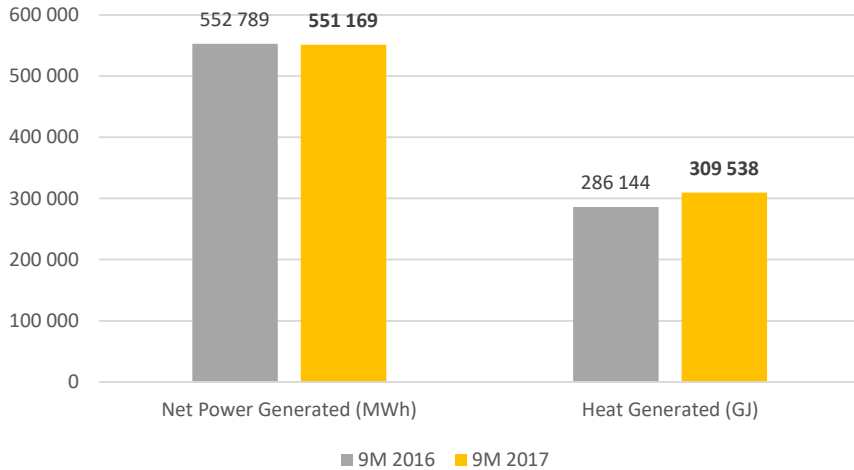
Excluding the RET premium increase, OPEX/MWh for 9M 2017 (PLN 68 / MWh) was lower by PLN 8 / MWh than in the corresponding period of the previous year (PLN 75 / MWh).

**Significant decrease of OPEX per MWh when adjusted for RET**

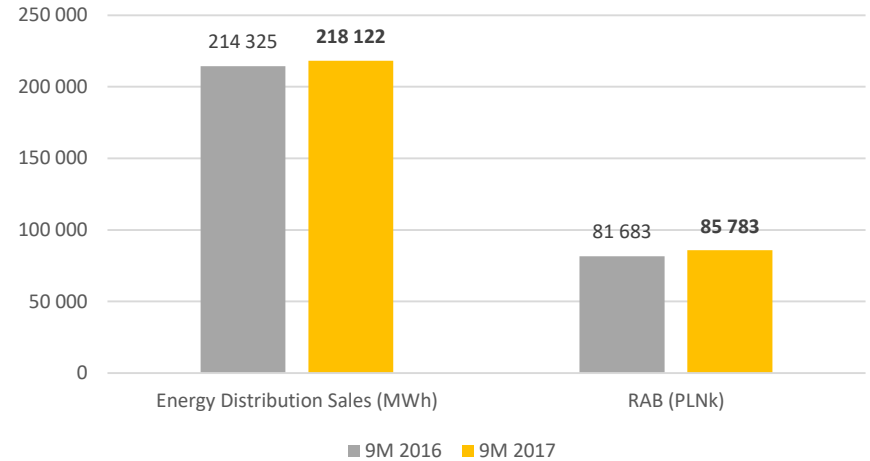
Note 1: Vestas is being fulfilling its contractual obligations, therefore Polenergia is not recording losses in WF Mycielín

## Stable operational performance

Conventional (ENS) volumes: 9M 2017 vs. 9M 2016

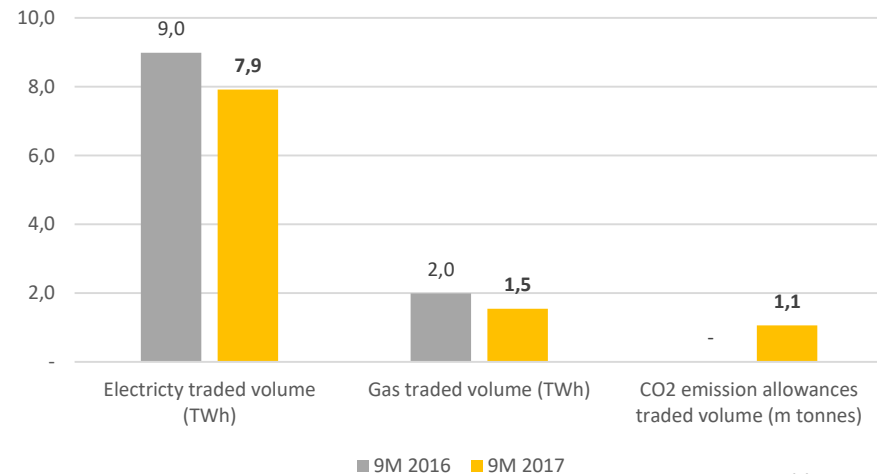


Distribution volumes: 9M 2017 vs. 9M 2016





- The production of the conventional energy segment and sales of the distribution segment remain stable.
- Good results in electricity trading achieved at lower volume thanks to higher margins. The continued development of CO<sub>2</sub> emission allowances trading.

Trading volumes: 9M 2017 vs. 9M 2016



## Strategic Roundup

Area	Strategic Objective	Status
<div data-bbox="59 462 256 651" style="background-color: #e0e0e0; border-radius: 15px; padding: 10px; text-align: center;"> <b>Resolve Current Issues</b> </div>	<b>1. Cost Optimization</b>	<ul style="list-style-type: none"> <li>▪ Continuation of costs savings (4,4m PLN reduction in salaries 9M 2017 vs. 9M 2016 continued cost reduction of PLN 9m from 2016).</li> </ul>
	<b>2. Defend Value</b>	<ul style="list-style-type: none"> <li>▪ Banking negotiations are progressing to reprofile debt where possible, negotiations continue. Change in financing conditions is justified by significant change in regulatory environment due to entry into force on 25.09.2017 Amendment of RES Act which changes the method of determining the substitution fee.</li> <li>▪ WF Dipol (Puck) – reprofiling finished with very successful result – impact on the Group within next 3 years of ca. PLN 7m</li> </ul>
	<b>3. Real Estate Tax Risk Minimization</b>	<ul style="list-style-type: none"> <li>▪ Multi-directional strategy which already hedged fully 30% of existing wind farm capacity for 2017 whilst minimizing where possible negative impact of regulations on the remaining farms. We monitor ongoing government work to restore the previous way of establishing the base for RET calculation.</li> </ul>
<div data-bbox="59 1011 276 1182" style="background-color: #f0e0e0; border-radius: 15px; padding: 10px; text-align: center;"> <b>Secure Growth and Diversification</b> </div> <div data-bbox="324 1125 664 1190" style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;">   </div>	<b>4. Morskie farmy wiatrowe</b>	<ul style="list-style-type: none"> <li>▪ Second environmental decision for Bałtyk Środkowy II obtained in April 2017;</li> <li>▪ Continue to develop the offshore project in accordance with plan.</li> </ul>
	<b>5. Technological/ Geographical Diversification</b>	<ul style="list-style-type: none"> <li>▪ We are at the advanced stage of preparation a technological and geographic diversification strategy, which will be announced next year, when all the effects of this year's amendments to the Renewable Energy Act are known. These changes concern, i.a. amount of the substitution fee, which directly affects the refinancing of our wind farms. We also want to wait for the approval of the changes, which restore the status before the adoption of last year's Wind Turbine Investment Act proposed by the Ministry of Energy to clarify the uncertainties surrounding wind farm property taxes.</li> <li>▪ We are actively looking for energy storage projects in Europe with our partner Convergent Energy</li> </ul>

**02**

## **Consolidated financial results**

## Consolidated 9M 2017 results – P&L

Polenergia Group Income Statement (mPLN)		9M 2017	9M 2016	Diff y/y	Diff y/y [%]
<b>Revenues from sales</b>		<b>2 010,9</b>	<b>2 156,3</b>	<b>(145,3)</b>	<b>-7%</b>
of which Trading segment		1 618,8	1 705,2	(86,4)	-5%
Cost of Goods Sold		(1 930,1)	(2 062,9)	132,9	-6%
of which costs by kind		(304,0)	(306,9)	2,9	-1%
<b>Gross profit on sales</b>		<b>80,8</b>	<b>93,3</b>	<b>(12,5)</b>	<b>-13%</b>
Selling, general and administrative costs		(24,3)	(25,6)	1,2	-5%
Other operating income/costs		(90,5)	(98,0)	7,5	-8%
<b>A</b>	<b>Gross result on sale (EBIT)</b>	<b>(34,0)</b>	<b>(30,2)</b>	<b>(3,7)</b>	<b>12%</b>
Depreciation		73,1	85,6	(12,5)	-15%
Write-offs		99,1	102,9	(3,8)	-4%
<b>EBITDA</b>		<b>138,2</b>	<b>158,2</b>	<b>(20,0)</b>	<b>-13%</b>
Eliminating the effect of purchase price allocation		(2,0)	(2,0)	-	0%
Eliminating the effect of Zakrzów CHP sale		-	(0,8)	0,8	-100%
<b>Adjusted EBITDA*</b>		<b>136,1</b>	<b>155,3</b>	<b>(19,2)</b>	<b>-12%</b>
<b>B</b>	Financial income	6,1	7,0	(0,9)	-12%
<b>C</b>	Financial expenses	(47,4)	(48,0)	0,7	-1%
<b>A+B+C</b>	<b>Profit (loss) before tax</b>	<b>(75,2)</b>	<b>(71,3)</b>	<b>(3,9)</b>	<b>5%</b>
Income tax		(9,0)	(2,9)	(6,1)	212%
<b>Net Profit (loss)</b>		<b>(84,2)</b>	<b>(74,2)</b>	<b>(10,0)</b>	<b>14%</b>
①	Eliminating the effect of the purchase price allocation	4,5	4,5	-	
②	Eliminating the effect of unrealized exchange differences	(0,7)	0,5	(1,2)	
③	Eliminating the effect of AMC loans valuation	2,1	1,7	0,3	
④	Eliminating the effect of biomass write-off	9,8	-	9,8	
⑤	Eliminating the effect of development write-offs	89,3	96,5	(7,2)	
⑥	Eliminating the effect of Zakrzów CHP sale	-	(5,3)	5,3	
<b>Adjusted Net Profit*</b>		<b>20,6</b>	<b>23,7</b>	<b>(3,1)</b>	<b>-13%</b>
<b>Adjusted EBITDA margin</b>		<b>6,8%</b>	<b>7,2%</b>	<b>-0,4%</b>	
Revenues from sales in Trading segment		1 618,8	1 705,2	(86,4)	
Costs of Goods Sold in Trading segment		(1 602,8)	(1 703,5)	100,8	
<b>Adjusted EBITDA (excl. trading segment)</b>		<b>126,9</b>	<b>160,2</b>	<b>(33,3)</b>	<b>-21%</b>
<b>Adjusted EBITDA margin (excl. trading segment)</b>		<b>32,4%</b>	<b>35,5%</b>	<b>-3,2%</b>	

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

Revenues for 9M lower by 7% as compared to analogical period of last year mainly due to lower revenues on sales and distribution of electricity in Trading and Distribution segments and lower revenues on pellet sales (result of limitation of activity - write-off on the value of assets of Biomass South plant).

Difference on costs by kind as well as sales and general and administrative expenses is presented on slide 17. Mainly visible effect of savings programme which resulted in decrease of salaries by 9,1 mPLN in 2016 and further 4,4 mPLN in 2017.

Lower depreciation due to turbine useful life extension in wind farm segment to 25 years.

Write-off are described in points 4 and 5 below.

EBITDA decomposition is presented on slide 20.

Higher CIT due to decrease in deferred tax provision (PLN 6,3m) connected mainly with write-off of gas pipeline project in 3Q 2016. This provision was made as a result of purchase price allocation connected with bringing to the Group structure Neutron Group in 2014.

Normalizing positions:

- 1) Effect of purchase price allocation (apart from goodwill)
- 2) Unrealized FX differences (mainly in Dipol due to loan in EUR)
- 3) Accounting approach to loan valuation (MSSF)
- 4) Write-off connected with discontinuance of an operation in Grupa PEP Biomasa Południe Sp. z o.o. (Biomass South plant).
- 5) Write-off connected with revaluation of fixed assets value of project Elektrownia Północ and resignation from construction of wind farm in Grabowo in 2017. In 2016 there is visible write off in PPG project.
- 6) Result on sale of EC Zakrzów

Lower margin resulting mainly from decrease in green certificate prices and one-off effect of higher base in 1Q 2016 in Conventional Energy segment.

## Consolidated 3Q 2017 results – P&L

Polenergia Group Income Statement (mPLN)		3Q 2017	3Q 2016	Diff y/y	Diff y/y [%]
<b>Revenues from sales</b>		<b>668,4</b>	<b>789,8</b>	<b>(121,4)</b>	<b>-15%</b>
of which Trading segment		537,5	659,5	(122,0)	-18%
Cost of Goods Sold		(632,1)	(777,0)	144,9	-19%
of which costs by kind		(97,0)	(96,0)	(1,0)	1%
<b>Gross profit on sales</b>		<b>36,3</b>	<b>12,7</b>	<b>23,6</b>	<b>186%</b>
Selling, general and administrative costs		(7,8)	(6,2)	(1,6)	27%
Other operating income/costs		(96,2)	(47,2)	(49,1)	104%
<b>A Gross result on sale (EBIT)</b>		<b>(67,7)</b>	<b>(40,6)</b>	<b>(27,1)</b>	<b>67%</b>
Depreciation		24,1	29,4	(5,2)	-18%
Write-offs		99,1	48,6	50,4	104%
<b>EBITDA</b>		<b>55,5</b>	<b>37,5</b>	<b>18,1</b>	<b>48%</b>
Eliminating the effect of purchase price allocation		(0,7)	(0,7)	-	0%
Eliminating the effect of Zakrzów CHP sale		-	-	-	-
<b>Adjusted EBITDA*</b>		<b>54,9</b>	<b>36,8</b>	<b>18,1</b>	<b>49%</b>
<b>B</b> Financial income		1,1	1,3	(0,2)	-15%
<b>C</b> Financial expenses		(15,1)	(15,9)	0,8	-5%
<b>A+B+C Profit (loss) before tax</b>		<b>(81,6)</b>	<b>(55,1)</b>	<b>(26,5)</b>	<b>48%</b>
Income tax		(3,9)	6,0	(9,8)	-165%
<b>Net Profit (loss)</b>		<b>(85,5)</b>	<b>(49,2)</b>	<b>(36,3)</b>	<b>74%</b>
① Eliminating the effect of the purchase price allocation		1,5	1,5	-	-
② Eliminating the effect of unrealized exchange differences		0,1	(0,6)	0,7	-
③ Eliminating the effect of AMC loans valuation		0,7	0,7	(0,0)	-
④ Eliminating the effect of biomass write-off		9,8	-	9,8	-
⑤ Eliminating the effect of development write-offs		89,3	42,3	47,0	-
⑥ Eliminating the effect of Zakrzów CHP sale		-	-	-	-
<b>Adjusted Net Profit*</b>		<b>15,8</b>	<b>(5,3)</b>	<b>21,1</b>	<b>402%</b>
<b>Adjusted EBITDA margin</b>		<b>8,2%</b>	<b>4,7%</b>	<b>3,6%</b>	
Revenues from sales in Trading segment		537,5	659,5	(122,0)	
Costs of Goods Sold in Trading segment		(527,8)	(659,9)	132,1	
<b>Adjusted EBITDA (excl. trading segment)</b>		<b>47,4</b>	<b>39,1</b>	<b>8,2</b>	<b>21%</b>
<b>Adjusted EBITDA margin (excl. trading segment)</b>		<b>36,2%</b>	<b>30,0%</b>	<b>6,1%</b>	

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

Revenues in 3Q lower by 15% mainly due to lower revenues from gas and electricity trading and distribution.

Difference on costs by kind as well as sales and general and administrative expenses is described on slide 18. Mainly visible effect of savings programme which resulted in decrease of salaries by further 1,7 mPLN in 3Q 2017.

Lower depreciation due to turbine useful life extension in wind farm segment to 25 years.

EBITDA decomposition is presented on slide 21.

Higher CIT due to decrease in deferred tax provision (PLN 6,3m) connected mainly with write-off of gas pipeline project in 3Q 2016. This provision was made as a result of purchase price allocation connected with bringing to the Group structure Neutron Group in 2014.

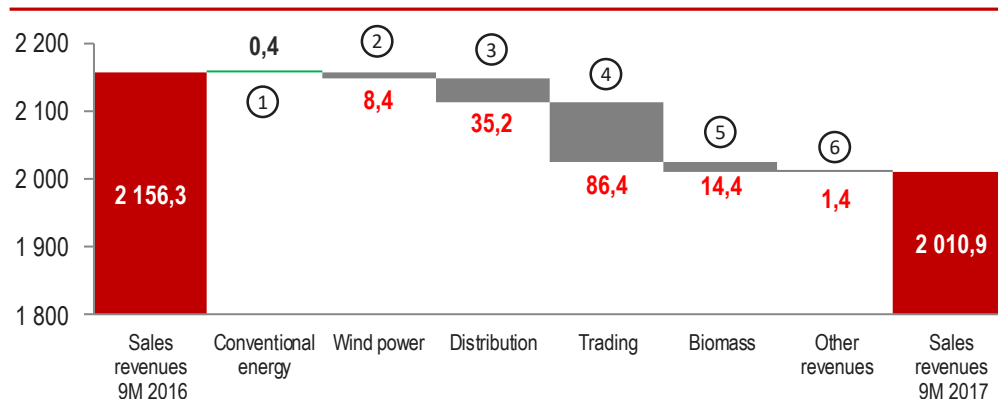
Normalizing positions:

- 1) Effect of purchase price allocation (apart from goodwill)
- 2) Unrealized FX differences (mainly in Dipol due to loan in EUR)
- 3) Accounting approach to loan valuation (MSSF)
- 4) Write-off connected with discontinuance of an operation in Grupa PEP Biomasa Południe Sp. z o.o. (Biomass South plant).
- 5) Write-off connected with revaluation of fixed assets value of project Elektrownia Północ and resignation from construction of wind farm in Grabowo in 2017. In 2016 there is visible write off in PPG project.
- 6) Result on sale of EC Zakrzów

**Increase in margin result mainly from better wind conditions and significant negative stock mark to market effect in 2016.**

## Revenues split and evolution: 9M 2017

### Revenues bridge 2016/2017



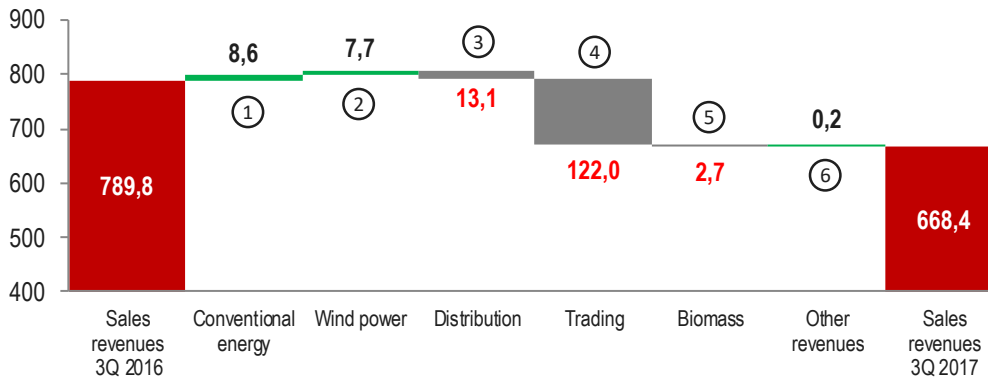
Revenues by segments (PLN m)	9M 2017	9M 2016	Diff	%
Conventional energy	208,1	207,7	0,4	0%
Wind power	92,5	100,9	(8,4)	-8%
Distribution	64,0	99,2	(35,2)	-35%
Trading	1 618,8	1 705,2	(86,4)	-5%
Biomass	23,1	37,5	(14,4)	-38%
Other revenues	4,4	5,8	(1,4)	-24%
<b>Total</b>	<b>2 010,9</b>	<b>2 156,3</b>	<b>(145,3)</b>	<b>-7%</b>

1. **Conventional energy:** Sales revenue at a comparable level as in the analogical period of last year.
2. **Wind power:** Lower revenues due to price decrease of green certificates year-on-year.
3. **Distribution:** Lower revenues due to lower margin on electricity distribution in 2017.
4. **Trading:** Lower revenues due to less market liquidity and lower volume of trade on the wholesale market.
5. **Biomass:** Sales revenue lower due to lower volumes and sales prices of pellets.
6. **Other revenues, including:** Revenues from lease and operator services, revenues from sales of goods, rental income.



## Revenues split and evolution: 3Q 2017

### Revenues bridge 2016/2017

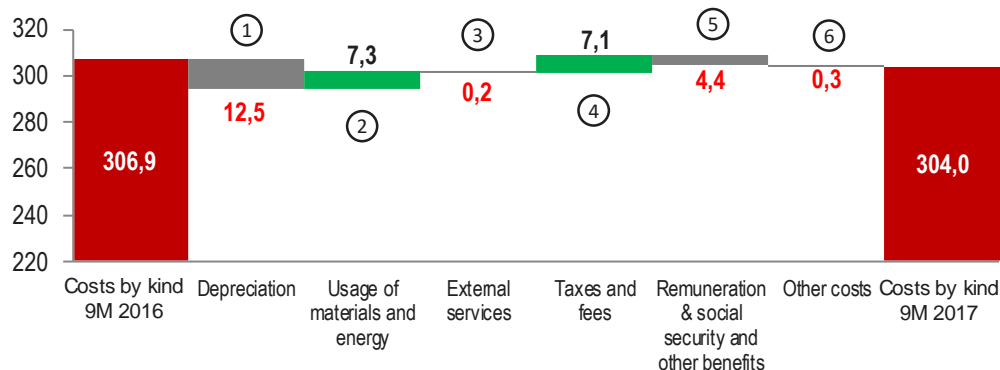


Revenues by segments (PLN m)	3Q 2017	3Q 2016	Diff	%
Conventional energy	74,2	65,6	8,6	13%
Wind power	27,3	19,6	7,7	39%
Distribution	20,8	33,9	(13,1)	-39%
Trading	537,5	659,5	(122,0)	-18%
Biomass	7,2	10,0	(2,7)	-27%
Other revenues	1,4	1,2	0,2	19%
<b>Total</b>	<b>668,4</b>	<b>789,8</b>	<b>(121,4)</b>	<b>-15%</b>

1. **Conventional energy:** Higher revenues in the third quarter are the result of higher gas compensation for 3Q 2017 vs. 3Q 2016.
2. **Wind power:** Higher revenues due to excellent productivity and a positive trend in green certificates prices in the 3Q 2017.
3. **Distribution:** Lower revenues due to lower margin on electricity distribution in 2017.
4. **Trading:** Lower revenues due to less market liquidity and lower volume of trade on the wholesale market.
5. **Biomass:** Sales revenue lower due to lower volumes and sales prices of pellets.
6. **Other revenues, including:** Revenues from lease and operator services, revenues from sales of goods and rental income.

## Operating cost split and evolution: 9M 2017

### Cost bridge 2016/2017

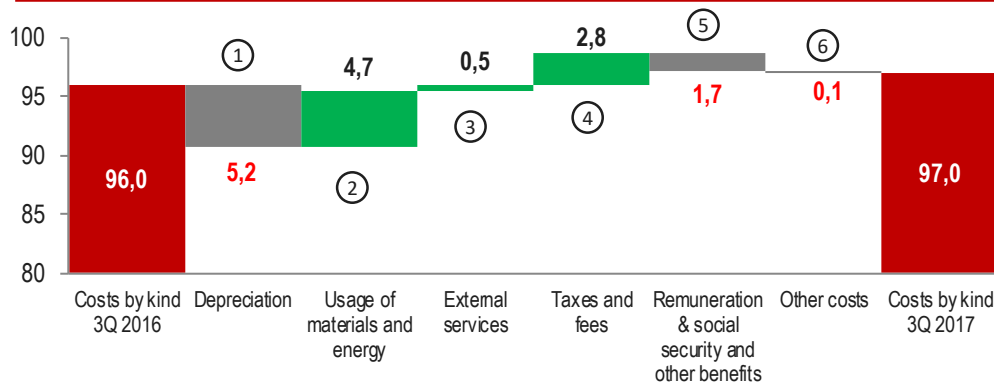


Operating cost split	9M 2017	9M 2016	Diff	%	
Depreciation	73,1	85,6	(12,5)	-15%	①
Usage of materials and energy	139,9	132,6	7,3	6%	②
External services	41,3	41,5	(0,2)	0%	③
Taxes and fees	19,9	12,8	7,1	56%	④
Remuneration	27,4	31,8	(4,4)	-14%	⑤
Other costs	2,4	2,6	(0,3)	-10%	⑥
<b>TOTAL OpEx</b>	<b>304,0</b>	<b>306,9</b>	<b>(2,9)</b>	<b>-1%</b>	
- Value of goods and materials sold (positive value)	1 650,4	1 781,6	(131,2)	-7%	⑦
- Selling, general and administrative costs (negative value)	(24,3)	(25,6)	1,2	-5%	⑧
<b>Cost of Goods Sold</b>	<b>1 930,1</b>	<b>2 062,9</b>	<b>(132,9)</b>	<b>-6%</b>	

- Depreciation:** Decrease mainly due to lengthening of economic useful life of turbines in wind farm segment and write-off made in 2016.
- Materials and energy:** Increase due to higher cost of gas in ENS, partially compensated by lower use of materials and energy in Biomass, Distribution, Wind Farm segments and those resulting from sale of EC Zakrzów.
- External services:** External services costs on similar level to comparable period in previous year.
- Taxes and charges:** Increase result from higher real estate tax in wind farms, mainly in WF Mycielin (lack of payment in 2016).
- Salaries:** Decrease in salaries is a result of savings programme introduced in HQ (Polenergia S.A. treated separately) (1,8 mPLN), sale of EC Zakrzów (0,2 mPLN) and headcount reduction in the Biomass segment (0,7 mPLN). Decrease in social insurance is consistent with decrease in salaries.
- Other:** Decrease in other costs by kind as a result of cost reduction within the Group.
- Cost of goods sold:** Decrease caused mainly by change in Distribution segment.
- Cost of sales and general admin:** Lower costs mainly resulting from savings plan. Negative value – costs already included at the level of costs by kind.

## Operating cost split and evolution: 3Q 2017

### Cost bridge 2016/2017

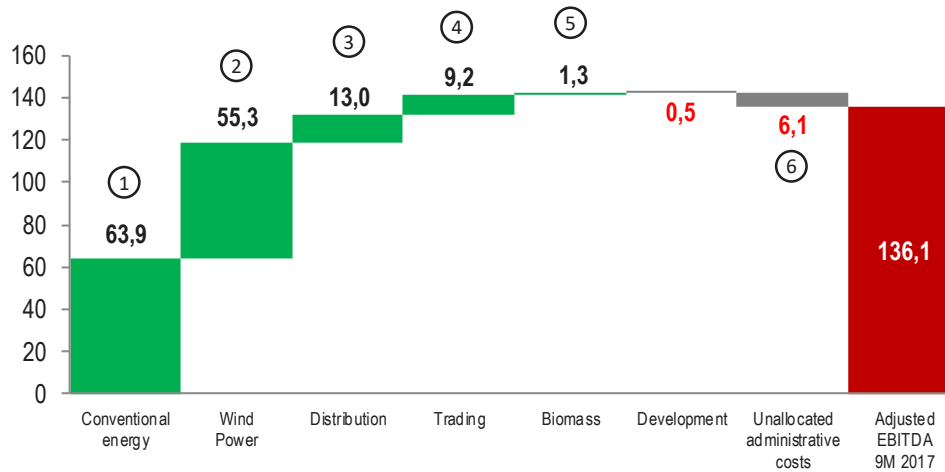


Operating cost split	3Q 2017	3Q 2016	Diff	%
Depreciation	24,1	29,4	(5,2)	-18% ①
Usage of materials and energy	43,1	38,4	4,7	12% ②
External services	13,4	12,9	0,5	4% ③
Taxes and fees	6,6	3,8	2,8	73% ④
Remuneration	9,0	10,7	(1,7)	-16% ⑤
Other costs	0,8	0,8	(0,1)	-10% ⑥
<b>TOTAL OpEx</b>	<b>97,0</b>	<b>96,0</b>	<b>1,0</b>	<b>1%</b>
- Value of goods and materials sold (positive value)	542,8	687,1	(144,3)	-21% ⑦
- Selling, general and administrative costs (negative value)	(7,8)	(6,2)	(1,6)	27% ⑧
<b>Cost of Goods Sold</b>	<b>632,1</b>	<b>777,0</b>	<b>(144,9)</b>	<b>-19%</b>

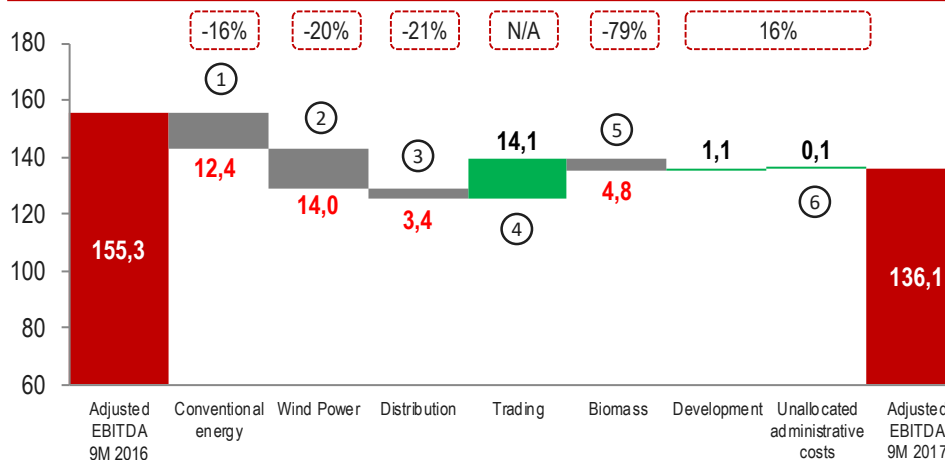
1. **Depreciation:** Decrease mainly due to lengthening of economic useful life of turbines in wind farm segment and write-off made in 2016.
2. **Materials and energy:** Increase due to higher cost of gas in ENS in 2017
3. **External services:** Slight increase of external services costs mainly in ENS
4. **Taxes and charges:** Increase results from higher real estate tax in wind farms, mainly due to RET paid in WF Mycielín (lack of payment in 2016)
5. **Salaries:** Decrease in salaries as a result of savings programme introduced in HQ and headcount reduction in the Biomass segment.
6. **Other:** Decrease in other costs by kind as a result of cost reduction within the Group.
7. **Cost of goods sold:** Decrease caused mainly by change in Distribution segment
8. **Cost of sales and general admin:** Higher costs resulting from adjustments in general admin costs, which were reclassified in 3Q 2016 to COGS.

## Consolidated 9M 2017 results – EBITDA analysis

### EBITDA Build-up 9M 2017



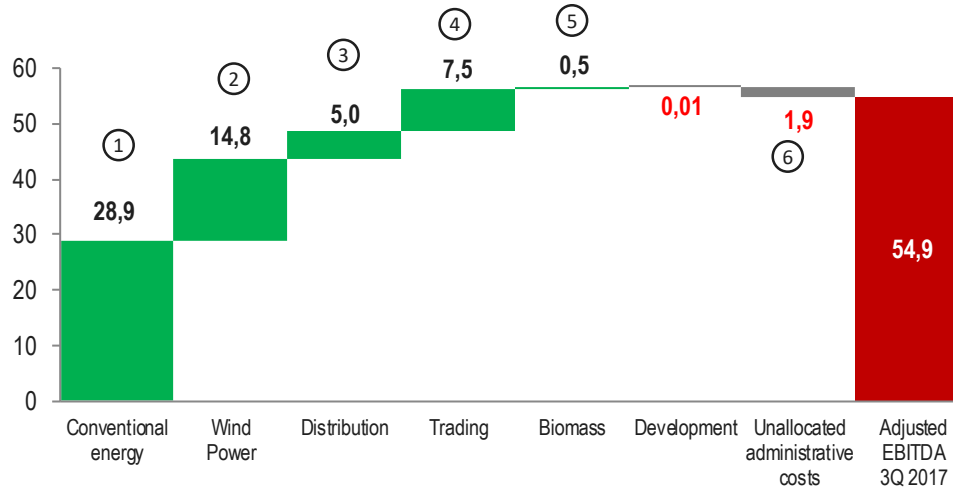
### EBITDA Bridge 9M 2016 / 9M 2017



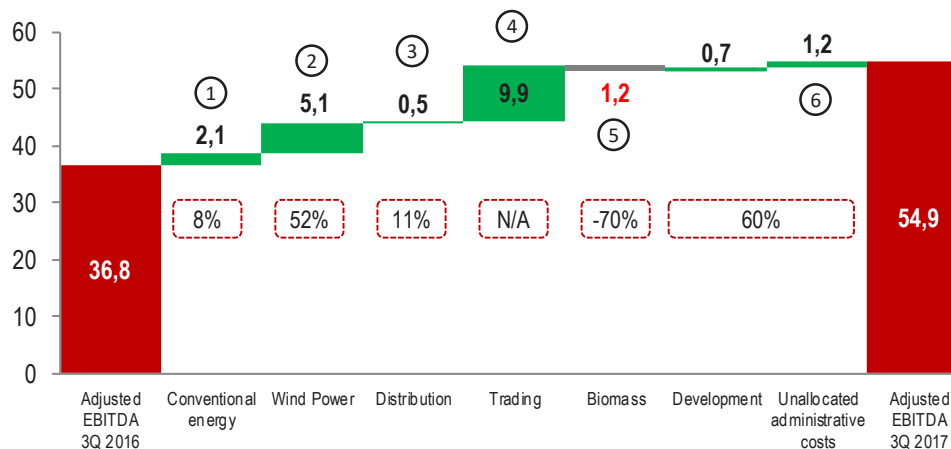
- Conventional Energy:** Lower EBITDA (by 12,4 mPLN), resulting from update (in 1Q2016) of energy, gas and CO2 price projections for 2016-2020, which changed the allocation of revenues from stranded costs compensation in the whole 2008-2020 (one-off influence of ca. 14,0 mPLN).
- Wind:** Decrease of EBITDA (by 14,0 mPLN) as a result of lower green certificate prices and higher RET, only partly compensated by higher production of wind farms.
- Distribution:** Decrease of EBITDA by 3,4 mPLN due to high 1Q 2016 base (reversal of provision for counterparty settlement) (one-off influence of ca. 2,5 mPLN) as well as lower margins on energy distribution in 2017.
- Trading:** EBITDA higher than last year (by 14,1 mPLN), mainly due to positive trend in GC prices (significant decrease in GC price in 2016) and better results in segment of electricity trading
- Biomass:** Decrease of EBITDA (by 4,8 mPLN) as a result of lower volumes and higher raw material prices.
- Unallocated administrative costs:** Operating costs lower due to optimization programme (influence visible at the level of costs by kind).

## Consolidated 3Q 2017 results – EBITDA analysis

### EBITDA Build-up 3Q 2017



### EBITDA Bridge 3Q 2016 / 3Q 2017



- Conventional Energy:** Higher EBITDA by 2,1m PLN is a result of higher gas compensation for 2016 (higher WG index and lower cost of coal) presented in 3Q 2017 (according to Information of President of Energy Regulatory Office no. 53/2017 from 2, August 2017).
- Wind:** Increase of EBITDA (by 5,1 mPLN) as a result of higher production of wind farms, partially compensated by decrease in green certificate prices.
- Distribution:** EBITDA comparable with 3Q 2016.
- Trading:** EBITDA higher than last year (by 9,9 mPLN), due to positive trend in GC prices (significant decrease in GC prices in previous year) and better results in segment of electricity trading.
- Biomass:** decrease of EBITDA (by 1,2 mPLN) as a result of lower volumes and higher raw material prices.
- Unallocated administrative costs:** Operating costs lower due to optimization programme (influence visible at the level of costs by kind).

## Analysis of consolidated cash flow statement

Consolidated statement of cash flows (PLN m)	9M 2017	9M 2016
<b>A. Cash flows from operating activities</b>		
I. EBITDA	138	158
II. Adjustments	(56)	(24)
<b>III. Net cash flow from operating activities (I+/-II)</b>	<b>81</b>	<b>131</b>
<b>B. Cash flows from investing activities</b>		
I. Cash received	7	5
II. Expenses	(22)	(75)
<b>III. Net cash flow from investing activities (I-II)</b>	<b>(15)</b>	<b>(70)</b>
<b>C. Cash flows from financing activities</b>		
I. Cash received	18	81
II. Expenses	(141)	(162)
<b>III. Net cash flow from financing activities (I-II)</b>	<b>(123)</b>	<b>(81)</b>
<b>D. Net cash flow, total (A.III+/-B.III+/-C.III)</b>	<b>(57)</b>	<b>(20)</b>
E. Balance transition of cash, including:	(57)	(20)
F. Cash and cash equivalents at beginning of period	381	362
<b>G. Consolidated cash and cash equivalents at end of period</b>	<b>324</b>	<b>342</b>
<b>Consolidated debt</b>	<b>1 037</b>	<b>1 129</b>
<b>Consolidated net debt</b>	<b>713</b>	<b>787</b>

### Comment to 2017

Adjustments consist mainly of changes in working capital (- 59 mPLN) in Trading segment and ENS as well as income tax (+2 m PLN).

Investment expenditures are mainly related to development of distribution segment (7 mPLN) and project development (5 mPLN). In 2016 observed effect of WF Mycielín construction (46 mPLN).

Inflows are mainly attributable to investment loan drawdown in distribution segment (6 mPLN) and overdraft facility drawdown in ENS (12 mPLN).

Repayment of investment loans and interest, mainly wind farms (93 mPLN), ENS (43 mPLN, including 12 mPLN of overdraft facility) and Distribution (1 mPLN).

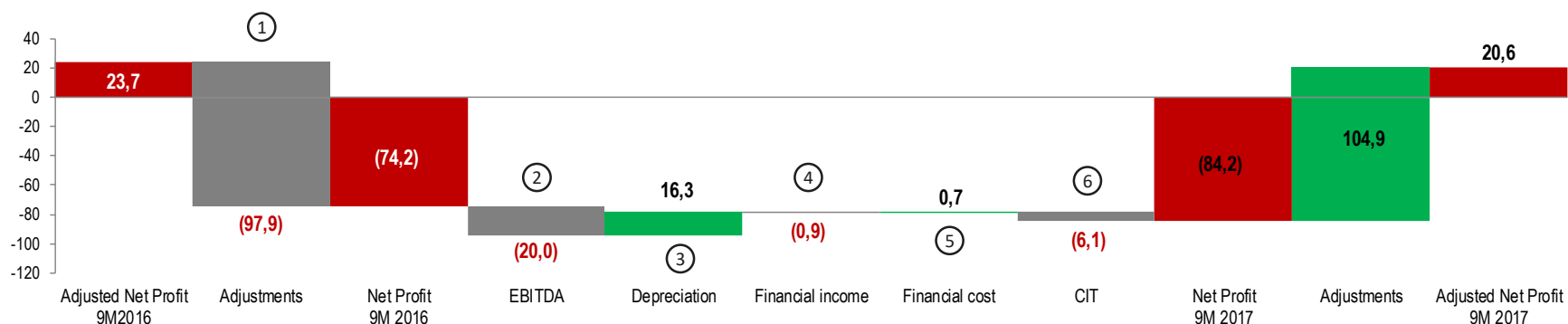
Includes 165 mPLN of cash at the level of Polenergia S.A. kept as protection against difficult market situation and funds for further diversification/growth.

- Adjusted EBITDA LTM (from 1/10/2016 to 30/09/2017) was equal to 208,8 mPLN, and net debt of the Group as at 30 September 2017 amounted to 712,8 mPLN.
- Net Debt / EBITDA is equal to 3,41x. Decrease as compared to 2016 (3,66x) result from lower EBITDA LTM.

**Lower Net Debt result from lower leverage compensated partially by lower cash balance, as a result Net Debt / EBITDA is lower than in 2016.**

## Net profit – overview of the changes y/y

EBITDA / Net profit [m PLN]	9M 2017	9M 2016	Difference	Adjustments [m PLN]	9M 2017	9M 2016	Difference
EBITDA	138,2	158,2	(20,0)	Effect of the purchase price allocation	4,5	4,5	0,0
Adjusted EBITDA	136,1	155,3	(19,2)	Effect of unrealized exchange differences	(0,7)	0,5	(1,2)
Net Profit/Loss	(84,2)	(74,2)	(10,0)	Effect of AMC loans valuation	2,1	1,7	0,3
Adjusted Net Profit/Loss	20,6	23,7	(3,1)	Write-offs	99,1	96,5	2,5
				Effect of Zakrzów CHP sale	0,0	(5,3)	5,3
				<b>TOTAL</b>	<b>104,9</b>	<b>97,9</b>	<b>6,9</b>



### Adjusted net profit decreased by 3,1 mPLN as a result of:

1. Detailed decomposition of normalizing adjustments for 9M 2016 and 2017 is presented above;
2. Effect of EBITDA (result worse by 20 mPLN);
3. Lower depreciation (by 12,5 mPLN) resulting mainly from change in economic useful life of wind projects (extension of useful life of turbines to 25 years due to technical reasons identified during dialogue with turbine producers) and cost of write-offs in 2016 (in the amount of 2,5 mPLN);
4. Lower financial revenues (by 0,9 mPLN), as a result of EC Zakrzów sale in 2016 (positive result of 3,2 mPLN) partially compensated with higher interest on deposits and positive FX changes;
5. Lower financial costs (by 0,7 mPLN) result mainly from lower interest and fees (by 0,7 mPLN);
6. Higher income tax (by 6,1 mPLN).

## Balance sheet

Assets (PLN m)	As at 30.09.2017	As at 31.12.2016	Diff
<b>Fixed assets (long-term)</b>	<b>2 078</b>	<b>2 271</b>	<b>(193)</b>
Tangible fixed assets	1 814	2 000	(186)
Intangible assets	33	39	(6)
Goodwill of subordinate entities	185	185	(0)
Financial assets	16	12	4
Long-term receivables	5	5	(0)
Deferred income tax	26	30	(4)
Accruals	0	0	0
<b>Current Assets (short-term)</b>	<b>584</b>	<b>703</b>	<b>(119)</b>
Stock	34	41	(7)
Receivables from deliveries and services	109	149	(40)
Receivables from income tax	2	6	(4)
Other short-term receivables	33	20	13
Accruals	7	6	1
Short-term financial assets	75	100	(25)
Cash and cash equivalents	324	381	(57)
<b>Total Assets</b>	<b>2 662</b>	<b>2 974</b>	<b>(312)</b>
Liabilities (PLN m)	As at 30.09.2017	As at 31.12.2016	Diff
<b>Equity</b>	<b>1 184</b>	<b>1 267</b>	<b>(83)</b>
<b>Long-term liabilities</b>	<b>939</b>	<b>1 016</b>	<b>(77)</b>
Loans and borrowings	747	820	(73)
Provision from deferred income tax	69	66	3
Reserves	24	26	(2)
Accruals	57	59	(2)
Other liabilities	43	45	(2)
<b>Current liabilities</b>	<b>539</b>	<b>692</b>	<b>(153)</b>
Loans and borrowings	289	296	(7)
Trade payables	124	156	(32)
A liability for income tax	1	1	0
Other liabilities	105	220	(115)
Reserves	3	3	0
Accruals	16	15	1
<b>Total liabilities</b>	<b>2 662</b>	<b>2 974</b>	<b>(312)</b>

Mainly depreciation of operating assets and write-offs partially compensated by increase in value in Distribution and Development segments, resulting from investment expenditures incurred in the period.

Decrease of receivables mainly due to decrease of trade receivables in Wind, Distribution, Trading and HQ segments.

Mainly value of contracts in Trading.

Change in cash balance was explained in the part related to cash flows.

Repayment of investment loans (WFs – 56 mPLN, ENS – 40 mPLN) offset by new investment loans drawings (Distribution – 6 mPLN) and overdraft (ENS – 12 mPLN).

Other liabilities consist mainly of liabilities of ENS related to LTC settlements, contracts in Trading and liability resulting from PPA.

Decrease in liabilities mainly as a result of lower trade liabilities in Trading and Distribution segments.

Mainly liabilities in ENS and valuation of contracts in Trading.

- Adjusted EBITDA LTM (from 1/10/2016 to 30/09/2017) amounted to 208,8 mPLN, while Net Debt as at 30 September 2017 was equal to 712,8 mPLN.
- Net Debt / EBITDA is equal to 3,41x.



**03**

## **Market & Regulatory Update**

## Key changes in legislation

(Amendment of the Act on RES as at 20.07.2017)

Issue:

Details

Impact on  
Polenergia

### *Change in substitution fee level*

- Amendment assumes linking the substitution fee level to the GC market prices so that in a given calendar year it is equal to 125% of weighted average of GC market prices for the previous year.
- Impact assessment clearly states that GC oversupply problem requires solving and proposed change in substitution fee combined with expected increase in GC redemption obligation quota to 19,5% in 2020 will result in decrease of oversupply to the negative level by 2020.



### *Determination of the obligation to write off certificates of origin from RES in 2018 and 2019*

- Determination of the obligation at the level of 17,5% in 2018 and 18,5% in 2019 is a positive signal for reducing of oversupply of Green Certificates, in particular, if the upward trend will be maintained according to assumptions of Draft Act amending the Act on Renewable Energy Sources.



**Introduced changes in legislation have potentially a positive impact on Polenergia**

## Key expected changes in legislation (1/2)

(Draft of RES Act amendment and other acts)

Issue:

Details:

Impact on  
Polenergia

***Return to a clear division of a wind turbine into the structural part and technical elements***

- Proposed definition of a wind farm implements a justified division of a wind turbine into the structural part and technical elements effectively reversing the negative effects of Wind Turbines Investment Act.
- This change solves the controversial problem of increased property tax on wind farms that is now returning to its previous lower level. There will be also no further room for different interpretations issued by local authorities or administrative courts.



***Resignation from the requirement to acquire use permit by 2019***

- As a consequence previously only projects with construction started before mid 2018 would satisfy this requirement. At the same time 2017 auction assumes only 100-150MW for onshore wind farms so all the other projects would lose the chance for subsidies.
- Proposed amendment revokes this limitation and increases chance for successful construction of the projects but limitation remains as a result of connection agreement validity (most of them expire in 2019)



***Enabling renovation of existing wind turbines***

- Amended provision allows for renovations that lead to change in functional and technical parameters of wind farm unless these activities do not increase environmental impact.
- This amendment allows for both re-powering of wind farms as well as retrofits leading to life extension, productivity increase or limiting the environmental impact.



**Majority of proposed changes into RES and WTI Act can have a positive impact on Polenergia**

## Key expected changes in legislation (2/2)

(Draft of Power Market Act)

### *Aim*

- The power market is expected to provide an additional source of revenues to energy producers in return for their willingness to offer - if needed - additional power. For this willingness will pay the energy recipients. The charge will be added to energy bills.
- Introduction of this mechanism aims to ensure the security of energy supply in the medium and long term.

### *Status of the project*

- Minister of Energy Krzysztof Tchórzewski forecasts that Power Market Act will enter into force at 1.01.2018
- Draft of the Act was submitted to parliament subcommittee
- Parallel to the work in the parliament there are negotiation with European Commission. EU recognizes the power market as a form of public aid, hence there is a need for approval for such solutions.

### *Consequences for ENS*

- Additional source of revenues – till 2027 energy producers will receive ca. PLN 26,9 bn
- According to the act draft in 2021 in Poland there will be power market with charges for the power
- Power charge will be added to the bills since 2021
- Power charge will depend on auctions results where the cheapest offer will win

**ENS will be part of power market. In 2020 ENS will be fully depreciated, debt-free gas power plant which will allow to successfully compete on the new market.**

## Regulatory issues: draft ordinance on reference prices confirmed

Installation type	Reference price 2017	Opportunity for Polenergia
Biomass	≤50MW	415 ✓
Onshore	>1MW	350 ✓
Offshore		470 ✓
Hybrid Installation	>1MW	405 ✓

- Ordinance regarding **reference prices** was published in March 2017.
- Ordinances regarding **maximum volumes and value** of energy that can be purchased through auction and **sequence of auctions** in 2017 were published in April.

In December 2016 and June 2017 Polish Energy Regulatory Office organized auctions for the following technology baskets:

Technology basket	Outcome	Price (PLN)
Existing agricultural biogas plants with installed capacity ≤ 1MW	7 offers submitted, 7 won. Total energy sold: 824,6 TWh	Min: 502,2 Max: 504,6
Existing agricultural biogas plants with installed capacity > 1MW	Auction did not happen due to too few offers submitted	
New installations, other than mentioned in Art. 73 sec. 3a item 1-3 and 6, RES Act, with installed capacity ≤ 1MW ( <b>PV installations</b> )	152 offers submitted, 84 won. Total energy sold: 1 567,3 TWh	Min: 253,5 Max: 408,8
Installations with an installed capacity ≤ 1 MW, with installed capacity utilization above 3 504 MWh / MW / year and with the emission not exceeding 100 kg / MWh ( <b>hydro plants</b> )	49 offers submitted, 49 won. Total energy sold: 416,6 TWh	Min: 30,0 Max: 468,0
New installations, other than mentioned in Art. 73 sec. 3a item 1-6 and , RES Act, with installed capacity ≤ 1MW ( <b>PV, Onshore and hydro installations</b> )	472 offers submitted, 352 won. Total energy sold: 4,721 TWh	Min: 195,0 Max: 398,87
Installations with an installed capacity ≤ 1 MW, with installed capacity utilization above 3 504 MWh / MW / year and with the emission not exceeding 100 kg / MWh ( <b>hydro plants</b> )	44 winning offers submitted Total energy sold: 312,4 GWh	Min: 290,0 Max: 474,0

**On 29.09.2017 RES auctions were cancelled as a result of a special regulation of the Council of Ministers. There is no information provided when auctions can be resumed.**

## Polenergia is looking for opportunities to develop new projects regardless to regulations



### Wind farms with secured building permit

- Polenergia possesses portfolio of 227 MW with building permit
- Projects are waiting for auctions. Due to cancellation of planned auctions in 2017, auctions for new wind projects can be held in 2018
- Polenergia analyzes alternative formulas for realization of the projects without auctions ex. using resources from Wielkopolski Regional Operational Program for the years 2014-2020
- Polenergia has applied for the Piekło project financing and we are currently waiting for results
  - Wielkopolski Regional Operational Program for the years 2014-2020 is financed from the funds of European Regional Development Fund under task 3.1.1 "Generation of energy from renewable energy sources"
  - Results will be published on February 2018



### Conversion of wind farm development projects into PV projects

- Polenergia in 2016 made a write-off on the portfolio of 266MW wind farms due to the lack of possibility to obtain a building permit after the entry into force of the Act on Wind Power Investment as at 20.05.2016.
- Some of these projects, despite the write-off, can be brought back to life ex. by converting them to PV which will allow to obtain a building permit.
- Currently, Polenergia implements a plan to transform the Niekarzyn 14MW project into a photovoltaic farm
  - 2H 2018 - participation in the auction planned
  - 2H 2019 - forecasted start of commercial activity
- In December 2016 and June 2017 auctions for PV farms took place
  - Total energy sold – 6 288,3 TWh
  - Prices up to 408 PLN/ MWh

**In anticipation of the announcement of the auction for wind farms Polenergia is looking for alternative solutions.**

## Polenergia Dystrybucja conducts pilot projects in the field of prosumer energy and electromobility



### Photovoltaics

- The offer is addressed both to individual and commercial customers
- The service includes:
  - individual technical and economic analysis
  - obtaining a grant on behalf of and for the Client
  - connecting to DSO network.
- As a part of the pilot project, the company made several micro-installations for individual customers with total capacity of 31 kWp and also is in talks with commercial customers in the field of PV installations with the capacity of over 40 kWp.
- In the area of R&D the company launched a micro-installation with the capacity of 5 kWp at one of own buildings. Currently, works in the field of energy storage is being carried out (off-grid PV installation + storage).

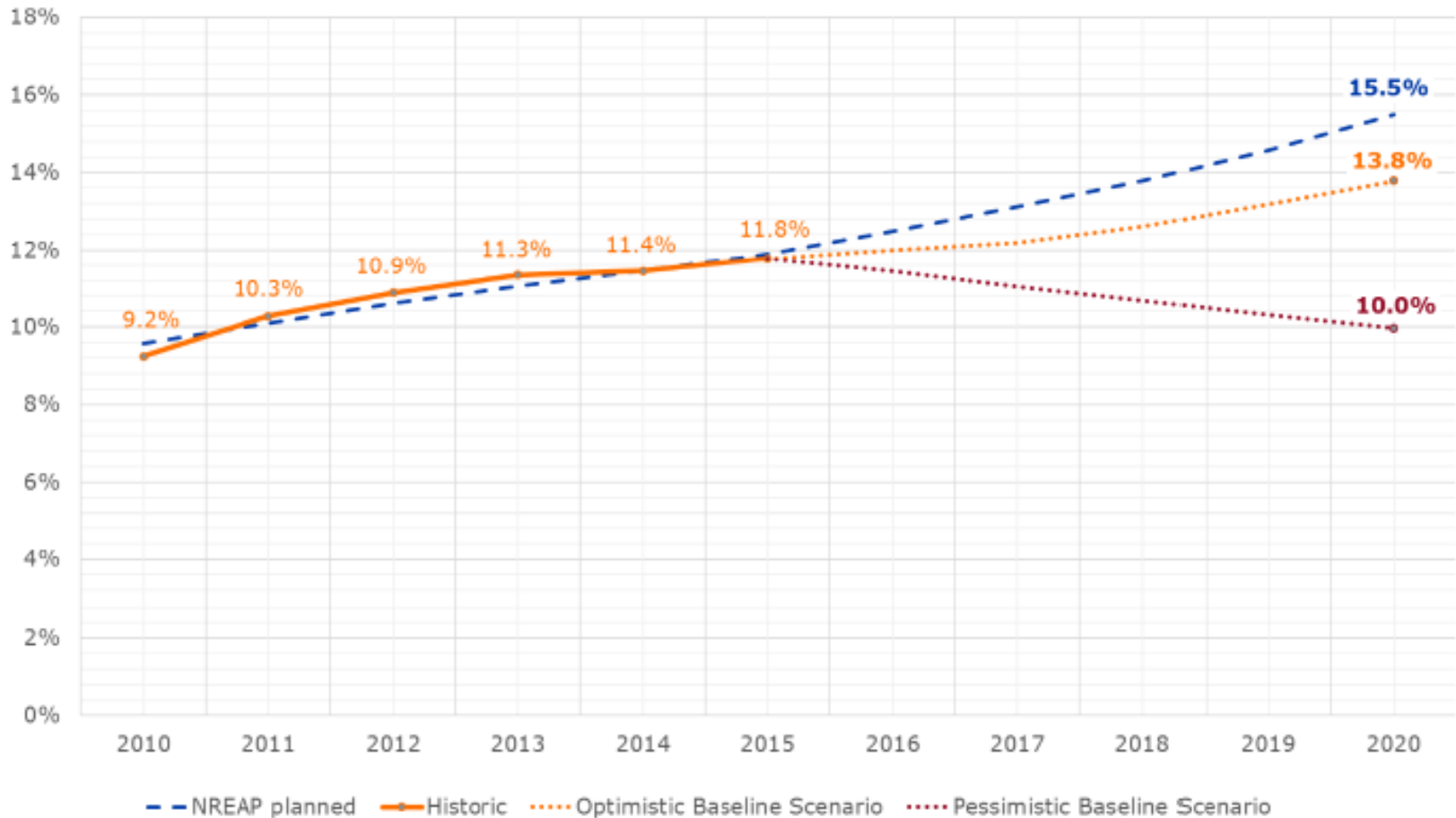


### Electric vehicle charging stations

- In 2017, the company launched pilot project to install an electric vehicle charging station (POLD-EV).
- Within the framework of the project, a comprehensive offer for the delivery, assembly and commissioning of the station has been developed
- The company's offer includes two types of stations – free standing stations –Vertica and wall mounted – Wollbox.
- The offer is addressed mainly to the administration of housing estates and development companies implementing investment projects.
- As a part of the project, the company has assembled several car charging stations in Warsaw and has signed contracts for the assembly of another 8 units by the end of 2017.

**Polenergia has acquired the competence to carry out projects in the area of PV and electromobility**

## Poland subject to serious risk of not meeting 2020 EU renewable energy targets

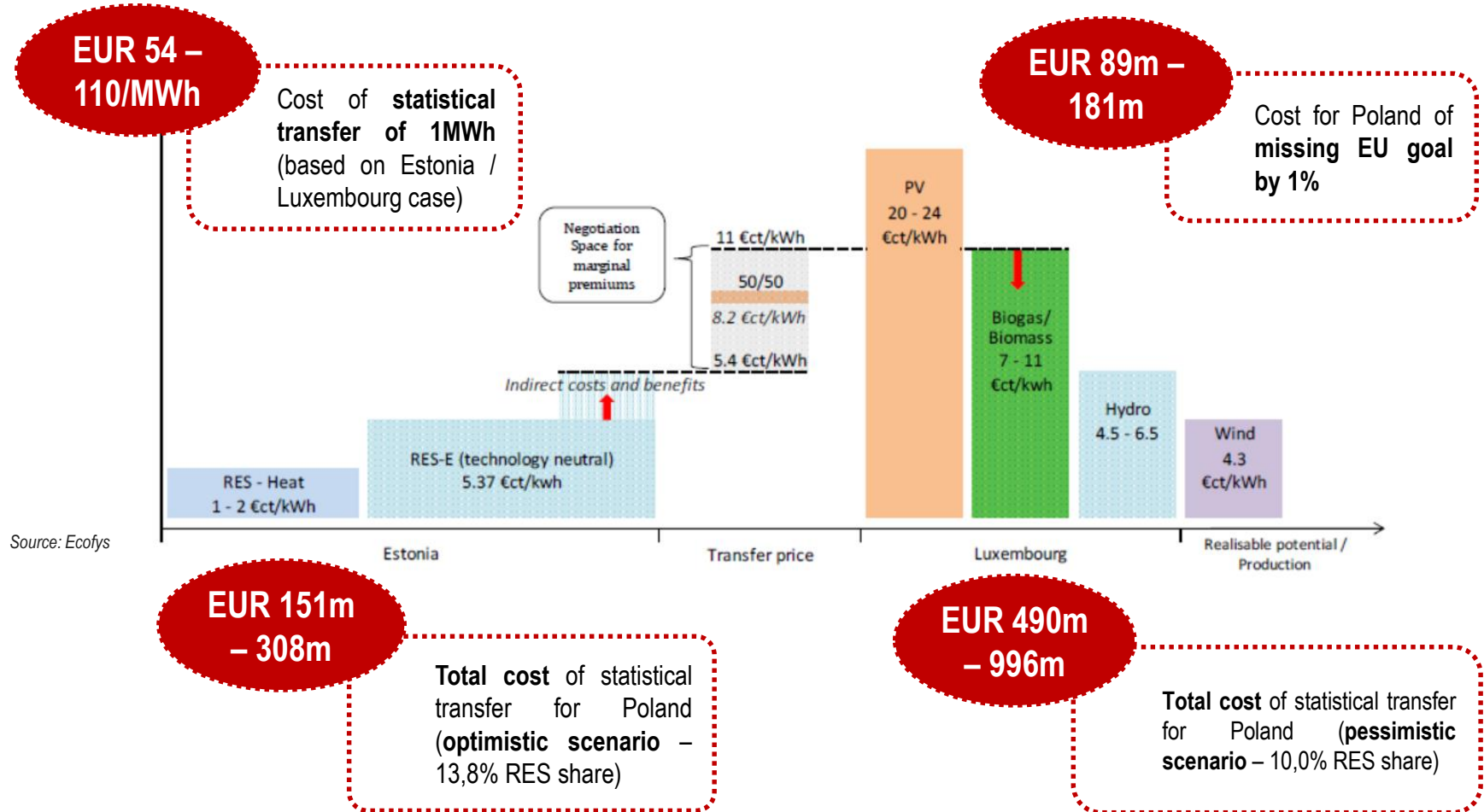


Source: Ecofys

**The estimated Poland's RES share range between 10.0% and 13.8% in 2020 for the pessimistic and optimistic scenarios respectively, while the target is set at 15,5%**

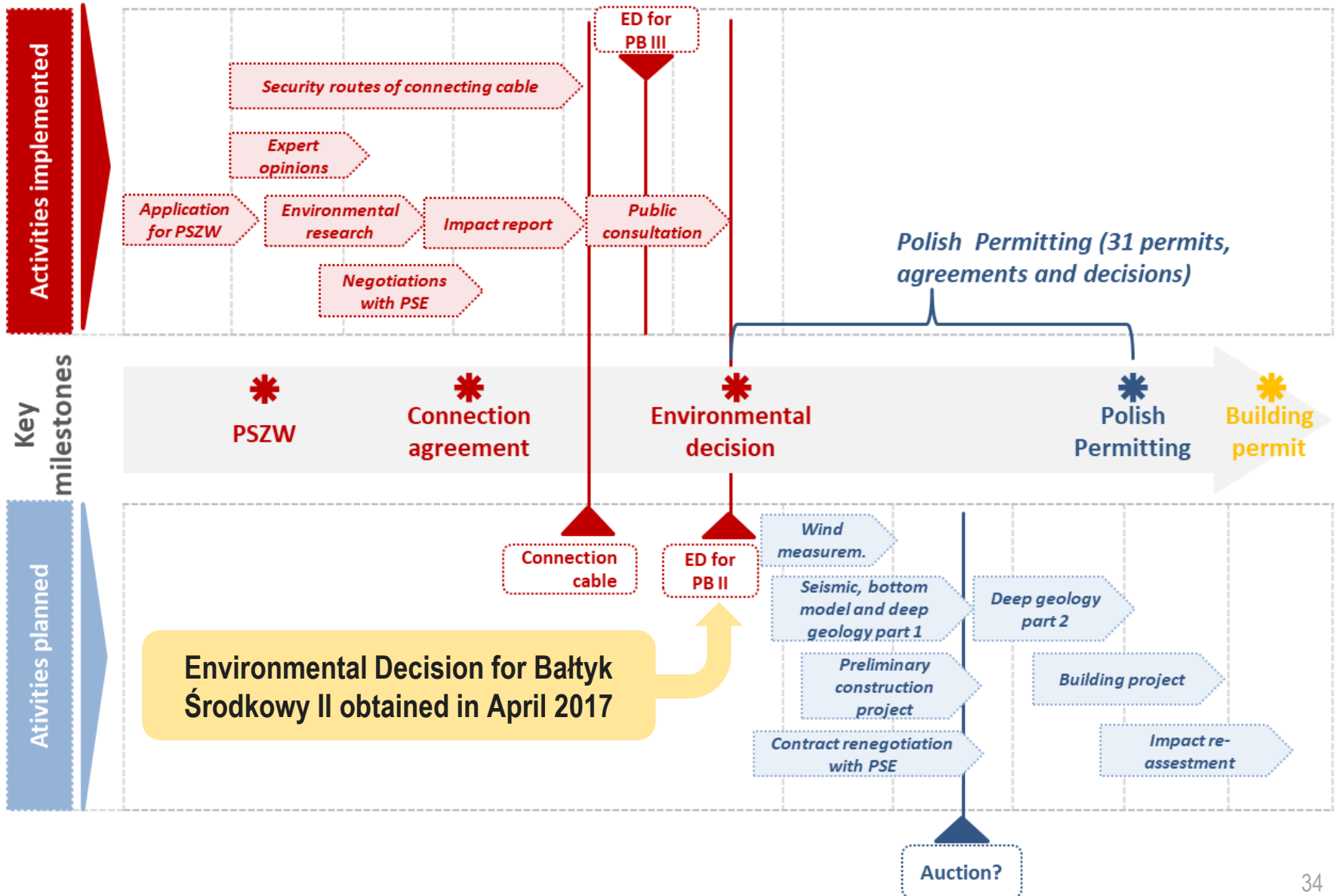


## The cost of missing EU targets can be significant



**In order to avoid substantial cost of statistical transfer, Poland needs to invest in new RES capacities and support the cheapest technologies such as onshore wind and PV**

## Status of Offshore Wind

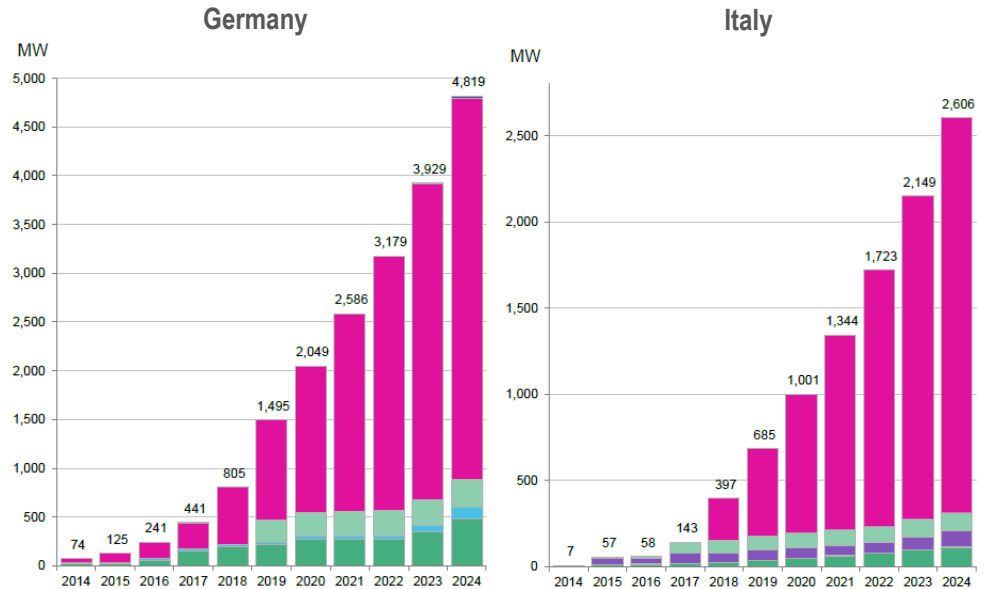


# Groundbreaking Storage Co-operation with Convergent Power

## Convergent Power overview

- **History:** founded in late 2011 with a pure-play focus on energy storage project development Convergent Power develops, owns, and operates cost-effective energy storage assets, creating new value for utilities, electricity end-users, and project investors (see: <http://www.convergentep.com/>);
- **Market Leader in US/Canada:** US\$40m in energy storage financing raised and deployed to-date in US and Canada; 70MW & 230MWh of projects contracted (7 Utilities + 3 large Industrial Customers). Trusted by investors such a Statoil (global energy player) and Great Plains Energy (leading US utility).
- **Strong revenue stream:** projects have stable revenues and create new value for the electric grid and its customers. All Convergent Projects in US/Canada generate high target equity IRR.
- **Technology-neutral:** select technologies / vendors to meet the application, safety & financing requirements of specific applications.

## Cumulative energy storage deployment by application, 2014-24 (MW)



Source: BNEF

According to BNEF, in 2016 in Germany there were 241MW of installed storage capacity. By 2024 installed capacity is estimated to increase to 4 819MW, which means 20 times increase. Total investment in new storage capacities in Germany is projected to amount to USD 4bn.

Approx. USD 2,5bn will be invested in energy storage in Italy. This will translate into increase of installed capacity from 58MW in 2016 to 2 606 MW in 2024 (40 times increase).



Partnership with Convergent Power to allow Polenergia become a technology agnostic IPP storage developer who owns, and operates cost-effective, high-yielding and financeable projects for both utilities and industrial customers

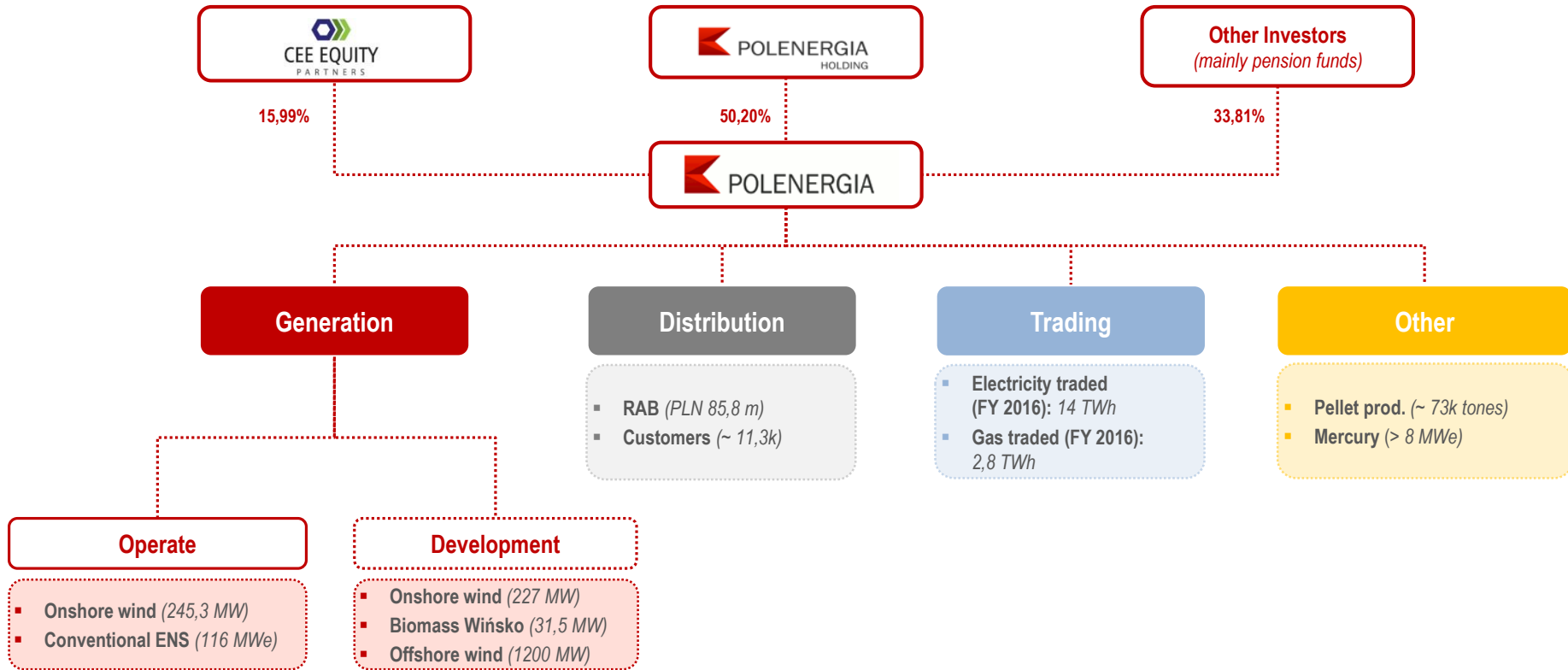
**04**

**Appendix**

**A**

Group Descriptions

## Group Structure



**Polenergia S.A. is listed on the Warsaw Stock Exchange, (c. 45 million shares traded), and is included in WIG80 index**

## Generation (in operation): Onshore wind

Location	Capacity (MW)	COD	Clients	Technical details
1 Puck	22,0	2007	Energa, Polenergia Obrót	<ul style="list-style-type: none"> <li>Combined project capacity equals 22,0 MWe, comprise 11 turbine (Gamesa) 2,0 MW each;</li> <li>Location: Pomorskie voivodeship, district Puck;</li> <li>Average annual production of approximately <b>45 GWh</b>;</li> </ul>
2 Modlikowice	24,0	2012	Tauron Sprzedaż	<ul style="list-style-type: none"> <li>Combined project capacity equals 24,0 MWe, comprise 12 turbine (Vestas) 2,0 MW each;</li> <li>Location: Dolnośląskie voivodeship, district złotoryjski;</li> <li>Average annual production of approximately <b>52 GWh</b>;</li> </ul>
3 Łukaszów	34,0	2012	Tauron Sprzedaż	<ul style="list-style-type: none"> <li>Combined project capacity equals 34,0 MWe, comprise 17 turbine (Vestas) 2,0 MW each;</li> <li>Location: Dolnośląskie voivodeship, district złotoryjski;</li> <li>Average annual production of approximately <b>78 GWh</b>;</li> </ul>
4 Gawłowice	48,3	2014	Polenergia Obrót, Energa	<ul style="list-style-type: none"> <li>Combined project capacity equals 48,3 MWe, comprise 21 turbine (Siemens) 2,3 MW each;</li> <li>Location: Kuj. – pom. voivodeship, district grudziądzki;</li> <li>Annual production of approximately <b>149 GWh</b>;</li> </ul>
5 Rajgród	25,3	2014	Polenergia Obrót, PGE	<ul style="list-style-type: none"> <li>Combined project capacity equals 25,3 MWe, comprise 11 turbine (Siemens) 2,3 MW each;</li> <li>Location: Podlaskie voivodeship, district grajewski;</li> <li>Annual production of approximately <b>70 GWh</b>;</li> </ul>
6 Skurpie	43,7	2015	Polenergia Obrót, Energa	<ul style="list-style-type: none"> <li>Combined project capacity equals 43,7 MWe, comprise 19 turbine (Siemens) 2,3 MW each;</li> <li>Location: Warmińsko-Mazurskie voivodeship, district działdowski;</li> <li>Annual production of approximately <b>128 GWh</b>;</li> </ul>
7 Mycielin	48,0	2015	Polenergia Obrót	<ul style="list-style-type: none"> <li>Combined project capacity equals 48 Mwe, comprise 24 turbine (Vestas) 2,0 MW each;</li> <li>Location: Lubuskie voivodeship, district szprotawski;</li> <li>Annual production of approximately <b>150 GWh</b>;</li> </ul>

Moc całkowita

245,3 MW



## Generation (in operation): Conventional ENS

Elektrociepłownia Nowa Sarzyna (ENS) is the first private gas power plant built in Poland as a green field project. The power plant has been in the commercial operation since June 2000.

### Business overview

- The facility is supplied with natural gas and has a total electricity output of 116 MWe and heat output of 70 MWt. The electrical energy generated by Nowa Sarzyna CHP is transmitted to the National Energy System via three 110 kV overhead transmission lines.
- Operating with high efficiency unit works as a power system.
- CHP meets polish environmental standards.
- Income and cash flow secured by stranded cost compensation system.
- ENS become a part of the agreement with PSE (entered into force on 1 July) under which provides services including reconstruction of the power system within the scope necessary to restore operation process of the National Power System (KSE) after a black-out.

#### Details of compensation formula

ENS generates revenue through the sale of electricity and heat, additionally receives compensation for stranded costs, gas compensation and yellow certificates.

Guaranteed compensation for stranded costs in principle is calculated in such way to balance power sales with the cost of fuel and operating expense.

Depreciation (included in the compensation) allows for debt service and interest costs.

Gas Compensation and yellow certificates increase the profit before tax.

Location of facility in Poland



### 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%)
Type	2*1 CCGT Thomassen (GE)
COD	2000
Availability	96.5%

Nowa Sarzyna CHP is uniquely predisposed to cooperate with the National Power System by provision of different system services including reconstruction of the power system under agreement with the system operator

## Generation (in development): Onshore wind/ Biomass Wińsko

### Pipeline build up

- The portfolio of operating wind farms at the end of Q3 2017 equal to **245,3 MW of installed capacity**;
- Additional portfolio of 5 wind farms projects with capacity of **227MW** in ready to build stage as follow:

#	Location	Power (MW)	Building permit
8	Piekło	12	Secured
9	Zielona	110	Secured
10	Kostomłoty	27	Secured
11	Bądecz	42	Secured
12	Szymankowo	36	Secured

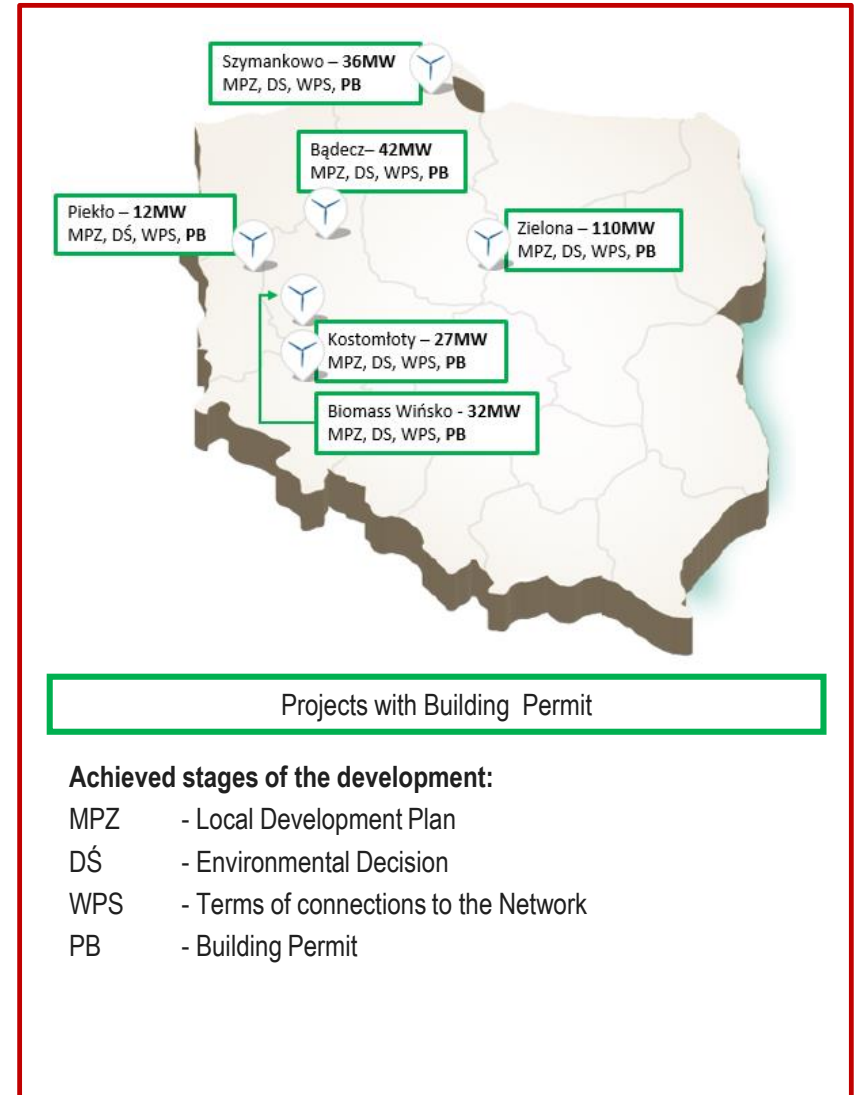
**227 MW**

### Biomass – Wińsko Power Plant in development

Polenergia is currently working on power plant with a capacity of 31,5 MWe in Wińsko - received all permits

#### Key features

Turbine	Condensation / Alstom
Cauldron	Vibrating grate / DP Cleantech
Installed power	31,5 MWe
Start-up	2020
Client	Delivery to the grid
Productivity (load factor)	92%
Efficiency	Electric 33%
Operational period	30 years



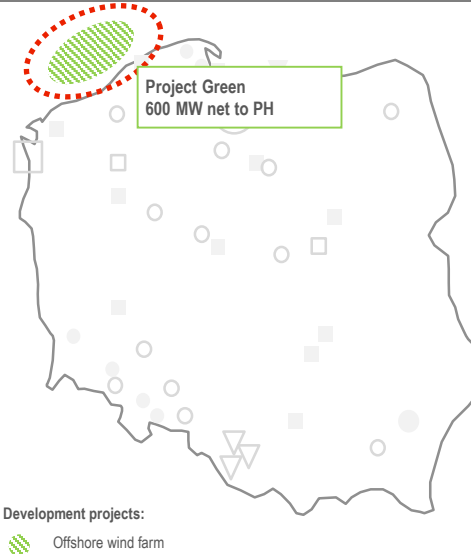


## Generation (in development): Offshore wind

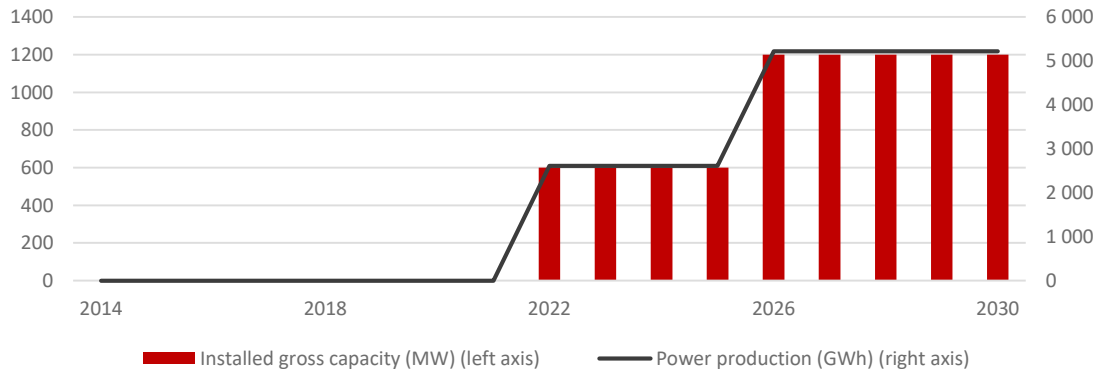
### Description

- 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. In April 2017 Polenergia received second environmental permit which means that Polenergia possess two environmental permits with total planned capacity of 1,2 GW
- Polenergia is the No 1 in Poland in the offshore wind development. PGE Group, second behind with their 1 GW project is about 2 years less advanced (beginning of environmental survey)
- No other companies have secured connection agreements, with no further offshore wind connection capacity available in the system now.

### Location and power



### Installed capacity and electricity generation



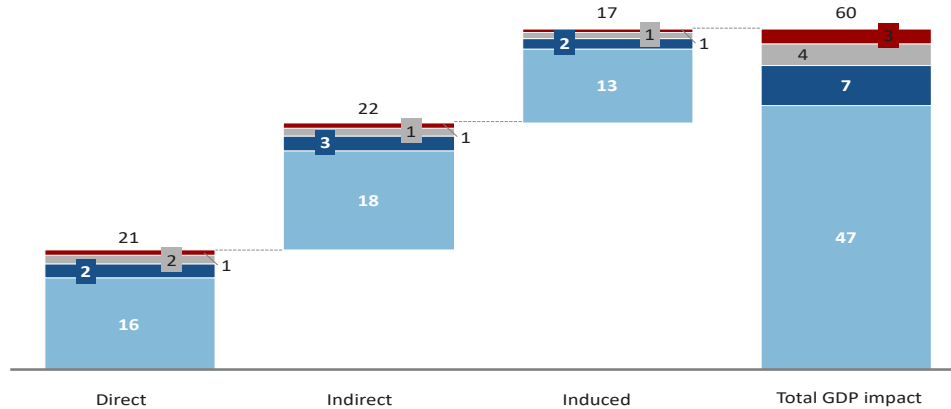
	Bałtyk Środkowy III	Bałtyk Środkowy II	Bałtyk Północny (susp.)
Site Permit Net Area (sq.km)	116,6	122	128,5
Site Permit Max. Capacity (MW)	1200	1200	1560
Planned Capacity (MW)	600	600	>600
Depth (m)	25-39	23-41	25-35
Distance to the shore (straight line, km)	22	37	81
Planned turbines (MW)	8	8-10	8-10
Planned number of turbines	75	60-75	60-75+
Average wind speed (m/s)	9-10	9-10	9-10

Planned key dates	Bałtyk Środkowy III	Bałtyk Środkowy II
Environmental decision	Secured	Secured
Construction start	2020	2023
Commissioning 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 support offshore wind farm projects.**

# Offshore could have significant impact on Polish economy

Impact on GDP 2019-2030 from 6 GW wind farms, PLN billion



1 In 2014 prices, compared to 2014 GDP

Percent of 10 year GDP<sup>1</sup>

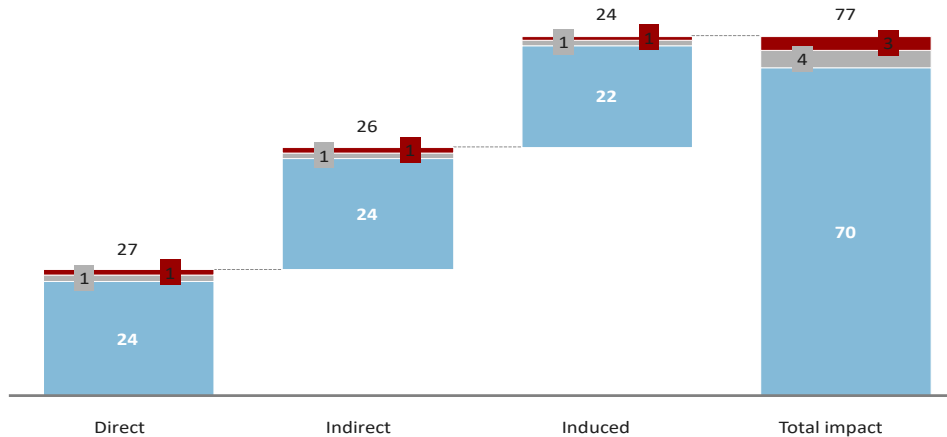
Potential Tax revenues

0.34

PLN 15bn

- Infrastructure
- Export
- O&M
- Capex

Impact on employment 2019-2030 from 6 GW wind farms, thousands of FTEs (average)



1 For Q1 2016 – unemployed 1.2 million

SOURCE: GUS; McKinsey

Percent of unemployed<sup>1</sup>

6,4

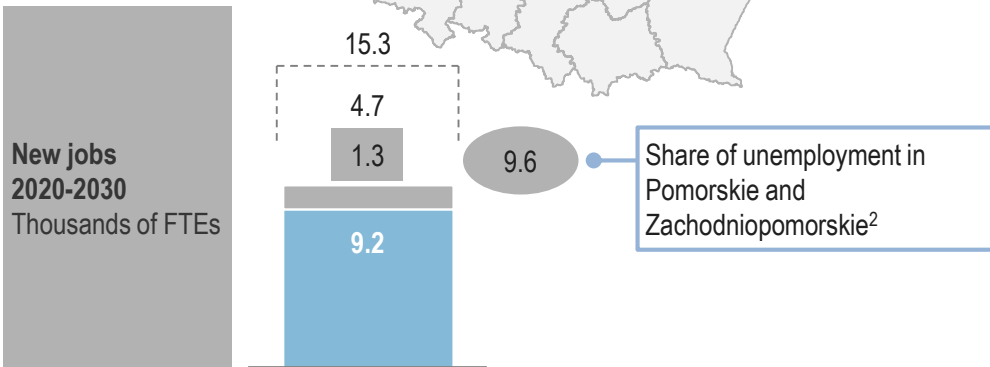
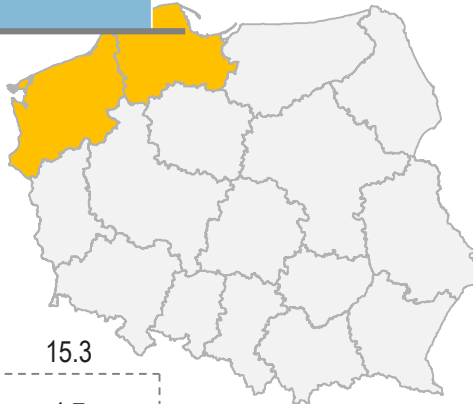
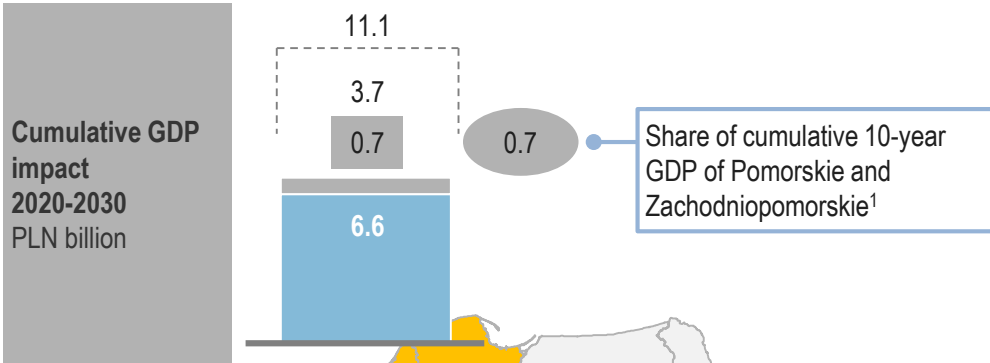
**> PLN 60bn in additional GDP and up to 77 thousand jobs across entire Polish economy – easily offsetting (or providing an alternative) to any potential restructuring effect of Polish coal mines thus providing a good replacement alternative for the Polish State.**

## Coastal regions will not be the only beneficiaries of Offshore investments

Economic impact of offshore wind on Pomorskie and Zachodniopomorskie in 2020-2030  
 – over PLN 11 billion GDP and over 15 000 jobs

Companies in Poland already involved in offshore wind development

Indirect and induced impact<sup>3</sup>   O&M (direct impact)   Construction + export (direct impact)



Current coal mining regions of Poland will also benefit from the offshore wind industry

1 Based on latest available GDP by voievodship GUS data (2012)  
 2 Based on GUS Q1 2016 data  
 3 Share of indirect and induced estimated based on share in Polish GDP in 2012 of Pomorskie (5.7%) and Zachodniopomorskie (3.7%)

## Polenergia Distribution

### Business overview

- Polenergia Dystrybucja is a distributor and supplier of electricity to industrial, residential and commercial customers, ie. residential areas, factories, office buildings and shopping centers. The Company is operating in various regions of Poland, additionally with a country-wide energy sales license.
- Regulated entity based on WACC / WRA with approved investment plans ensuring stable and predictable cash flows.

### Distribution „islands” across Poland/majority in Warsaw;

- Largest Polish independent distributor after main 4 Polish state-owned DSOs, 2nd largest in Warsaw after Innogy
- 31 projects in operation and 20 in development based on ERO approved Investment Plan until 2020
- c.11,3k clients distributing 285 GWh across 110 km of power lines, 87 substations and 143 transformers

#### Increase in value and benefits for customers

**Combined profits:** Effective use of cooperation between the regulated activities (distribution of electricity) and commercial (sales of energy).

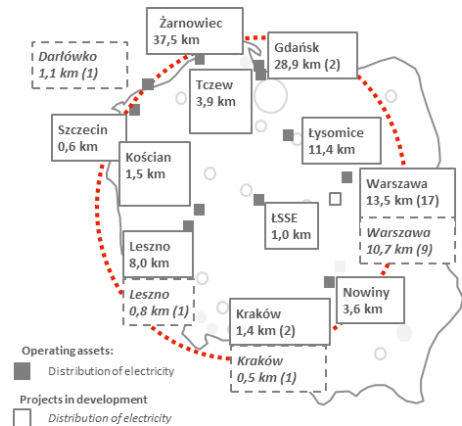
**Unique package of benefits:** Immediate settlement or reduction of electrical infrastructure costs, Competitive tariffs for distribution and connection to the grid, all costs associated with the maintenance of infrastructure covered by Polenergia Distribution, settlement for electricity by company, the ability to change vendors (TPA) by the customers

**Part of Polenergia Group:** strategic player with strong financial discipline

Obtaining a license to distribute electricity for the electrical infrastructure (ie. the "last mile") in non-residential buildings, ie. shopping centers and office buildings. Providing partners with opportunities to optimize the cost of electricity infrastructure during construction and maintenance.

**Stable regulatory returns combined with profits on electricity supply to the final customers**

### The length of the distribution network (number of projects)



Business results	Unit	FY 2015	FY 2016
<b>Distribution sales</b>	<b>GWh</b>	<b>278,8</b>	<b>284,0</b>
Electricity sales	GWh	294,2	140,2
CAPEX	m PLN	6,9	8,2
<b>RAB (end of year)</b>	<b>m PLN</b>	<b>81,7</b>	<b>85,8</b>

	In use	In Development	Total
<b>Distribution power</b>	<b>75 MW</b>	<b>19 MW</b>	<b>94MW</b>
Final users	11,3k	5,1k	16,4k
Number of substations	91	25	116
<b>Number of transformers</b>	<b>146</b>	<b>34</b>	<b>180</b>

## Polenergia Trading

Polenergia Trading specializes in wholesale trading of electricity, natural gas, property rights and certificates of origin, as well as the management of energy contracts for the Polenergia Group entities and other external companies.

### Business overview

- Polenergia Trading is one of the most dynamically growing companies in the sector of electric energy trade in Poland.
- Central platform for trading and risk management located in Warsaw.
- The Company specializes in wholesale trading of electricity, natural gas, property rights and certificates of origin both under long-term contracts and current transactions and operates as market maker on the POLPX property right market.

### Key highlights 2016

- In July 2016 Polenergia Trading signed an agreement with TGE (Polish Power Exchange) to play the **market maker role** with respect to electricity instruments.
- In 2016 Polenergia Obrót started supplying gas in a physical delivery point.
- As the first company on the Polish market**, Polenergia Trading initiated transactions for certificates of origin on behalf of energy producers from Polenergia Group (certificates originated from one of the wind farms in Polenergia Group).
- In 2014 Polenergia Trading obtained concession for trade in natural gas and trade in gas with foreign clients and actively participates in this market. In 2016 the company increased its natural gas volume to 2,8 TWh



Business results	Unit	2015	2016
Electricity traded	TWh	12	12
Natural gas traded	GWh	290	2597

Current market share of Trading in the wholesale energy market in Poland is estimated at approx. 5-5,5% in 2016.

### Pellet production

- In response to the growing demand, since 2008 Polenergia launched 2 projects which produce pellet from agricultural biomass, required for power industry and municipal power plants. The company has two pellet factories
  - North Factory, located in Sępólno Krajeńskie
  - East Factory, located in Zamość

	North Factory	East Factory
Start-up	2009	2012
Annual production (t)*	21k	52k

\* Production in 2016, only pellet production

### Gas – Mercury Power Plant

- 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.