



**We are building foundations for further development  
of an innovative raw materials and energy group**

Q2, H1 2016

## In H1 2016 we consistently worked on the improvement of the Group's operating efficiency

### Financial results

- **PLN 5,599.4 mln** net sales revenue
- **PLN 1,206.5 mln** EBITDA
- **PLN 471.2 mln** net profit
- **PLN 1,171.0 mln** CAPEX
- **1.7** net debt/EBITDA
- **PLN 202 mln** savings (56% of 2016 plan)

### Operating results

- **PLN 4,285 thou. tonnes** coal net production
- **PLN 6,807 GWh** electricity generation
- **9,332 GWh** sales of distribution services to end users
- **9,006 GWh** sales of electricity and gas to retail users

### Key investments

- **88%<sup>1)</sup>** progress in the construction of the new unit
- **Installation of the catalytic denitrogenation of flue gases** in Koziencice Power Plant
- **Flue gas desulphurisation plant** in Białystok Heat and Power Plant
- **Temporary stabilising checkdam** on the Vistula River

**Growth in revenue, profitability and production volumes**

# Agenda



**Coal, energy market, key operating and sales data**



**Enea CG's financial results in Q2 and H1 2016**



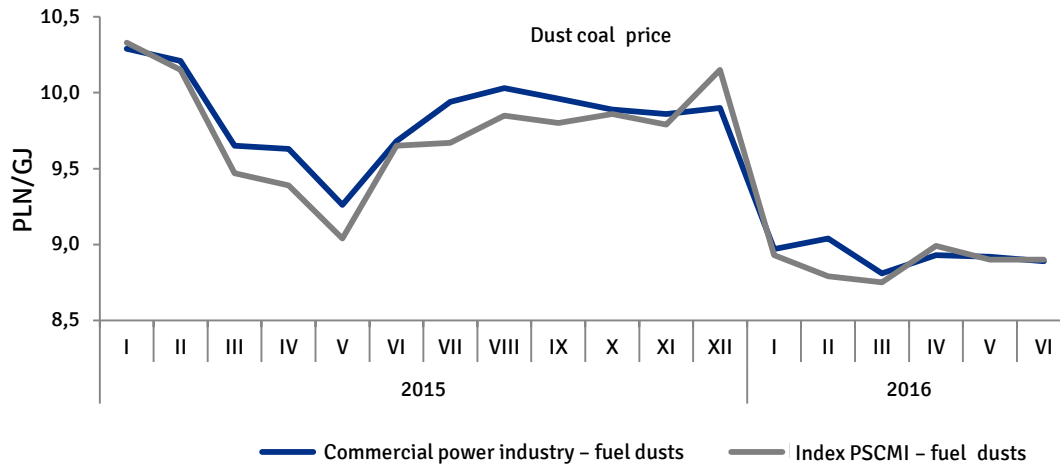
**LW Bogdanka CG's financial results in Q2 and H1 2016**



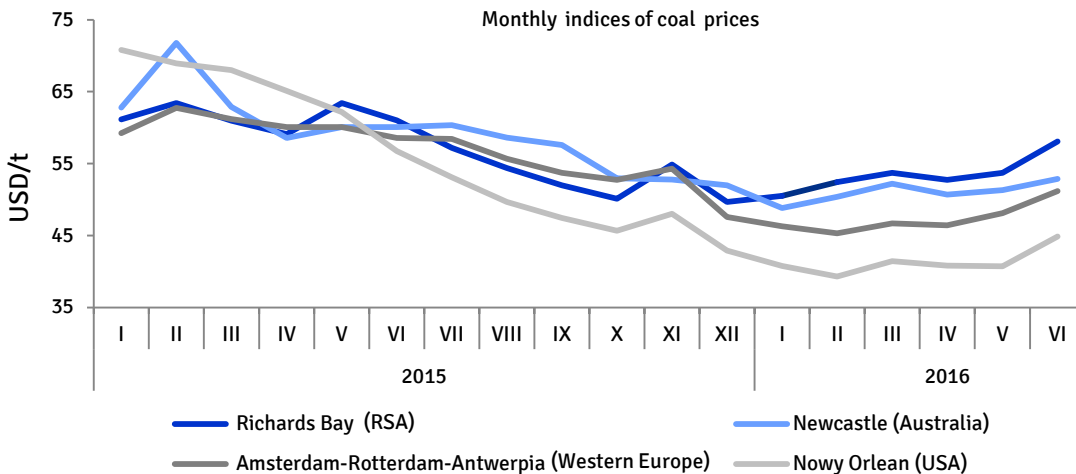
**Enea CG's key initiatives in H1 2016**



# Despite a rebound in Q2 2016 the average coal prices in all the global ports in H1 2016 remained below the levels from H1 2015



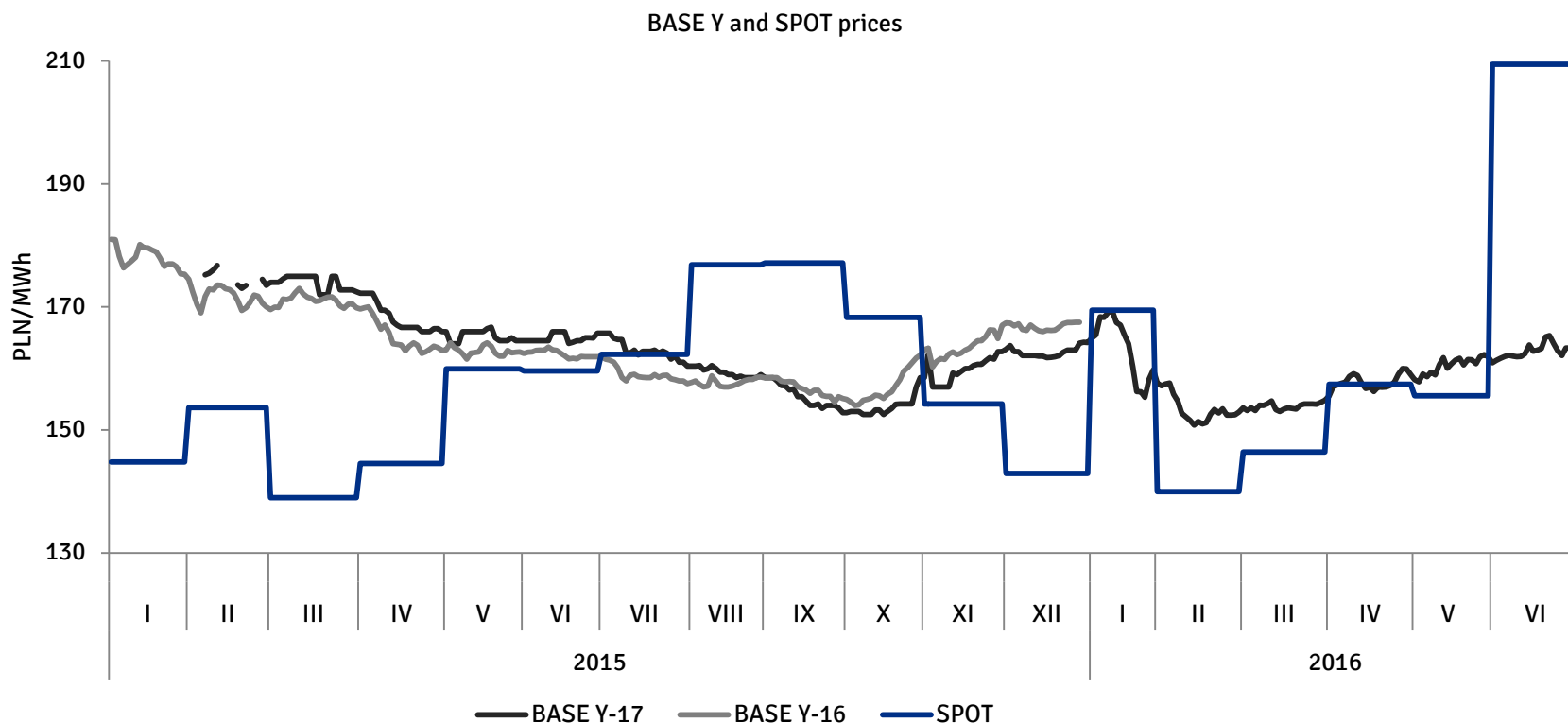
The average semi-annual price of fuel dusts for the commercial power industry dropped by ca. 8.8% yoy in H1 2016



Average price in H1 2016:

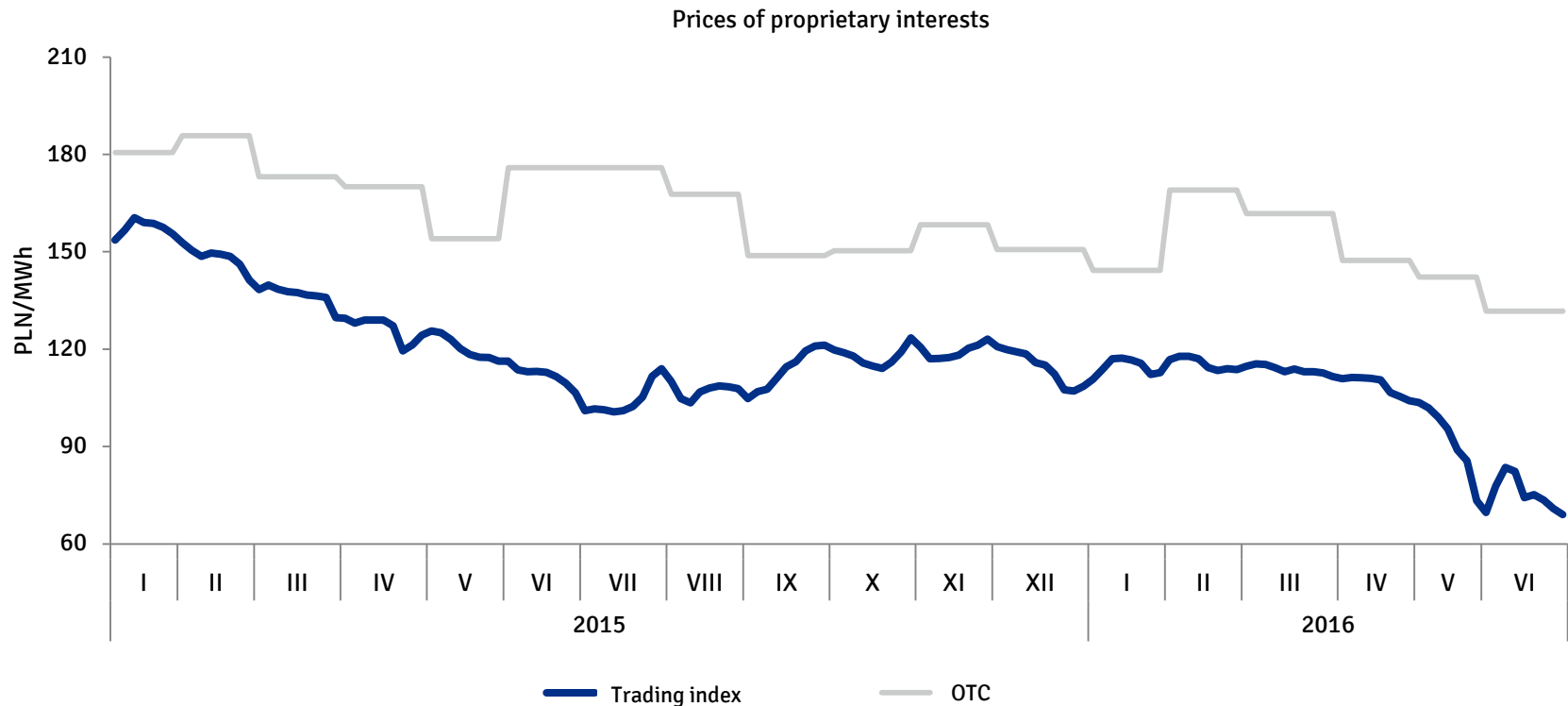
- Amsterdam - Rotterdam - Antwerp: 46.82 USD/t
- Richards Bay: 53.49 USD/t
- Newcastle: 51.04 USD/t
- New Orleans: 41.31 USD/t

# In H1 2016 growths in prices on the SPOT energy market were reported



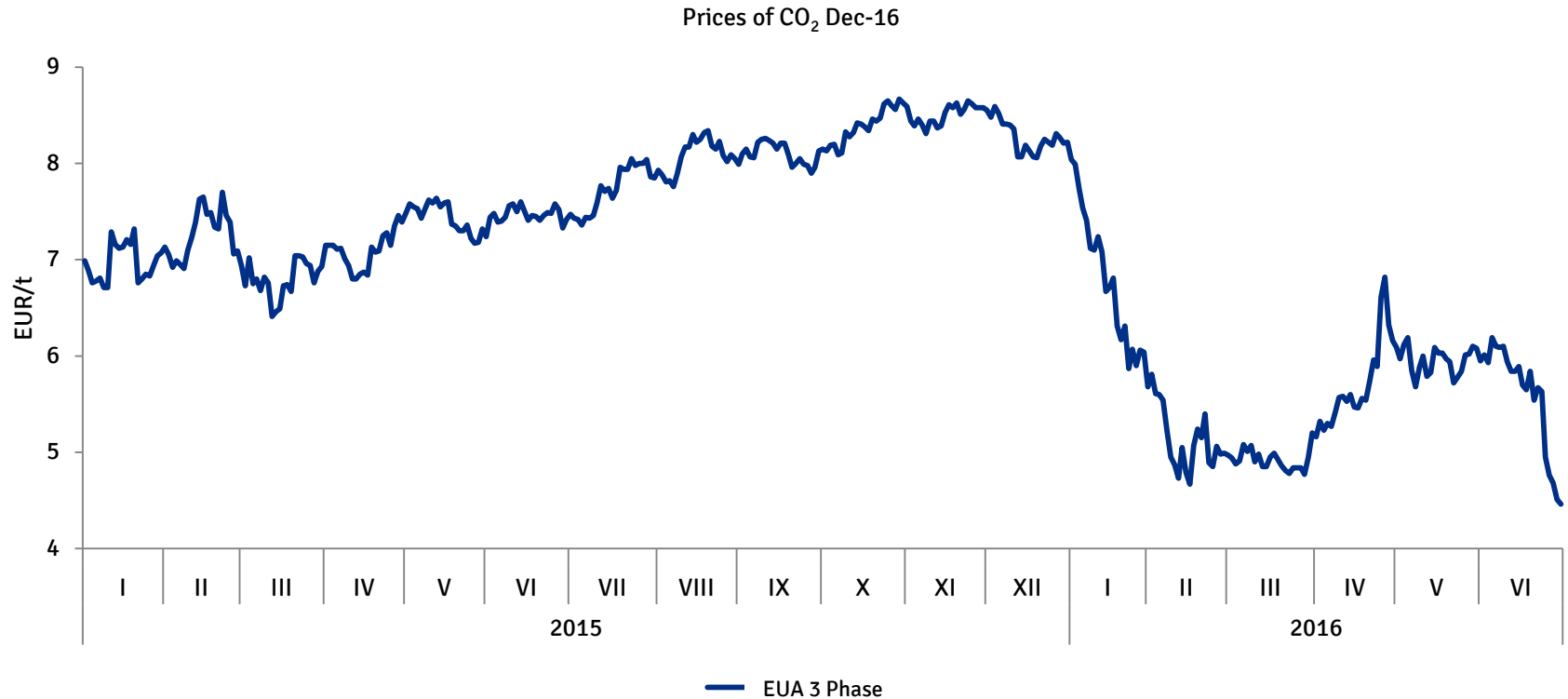
- Growth in the average price of baseload on SPOT market in H1 2016 by 8.6% yoy to 163.10 PLN/MWh
- Drop in energy prices on forward market - price of baseload for 2017 dropped by 3.0% yoy to 162.50 PLN/MWh in H1 2016

## In H1 2016 prices of proprietary interests dropped considerably in relations to H2 2015



- In H1 2016 the weighted average value of the session index dropped by 10.8% yoy to 101.95 PLN/MWh in relation to H2 2015
- OTC market index in that period was by 49% higher than the session index and amounted averagely to 151.49 PLN/MWh

# In H1 2016 there was a considerable price reduction on the market of allowances for emissions of CO<sub>2</sub>

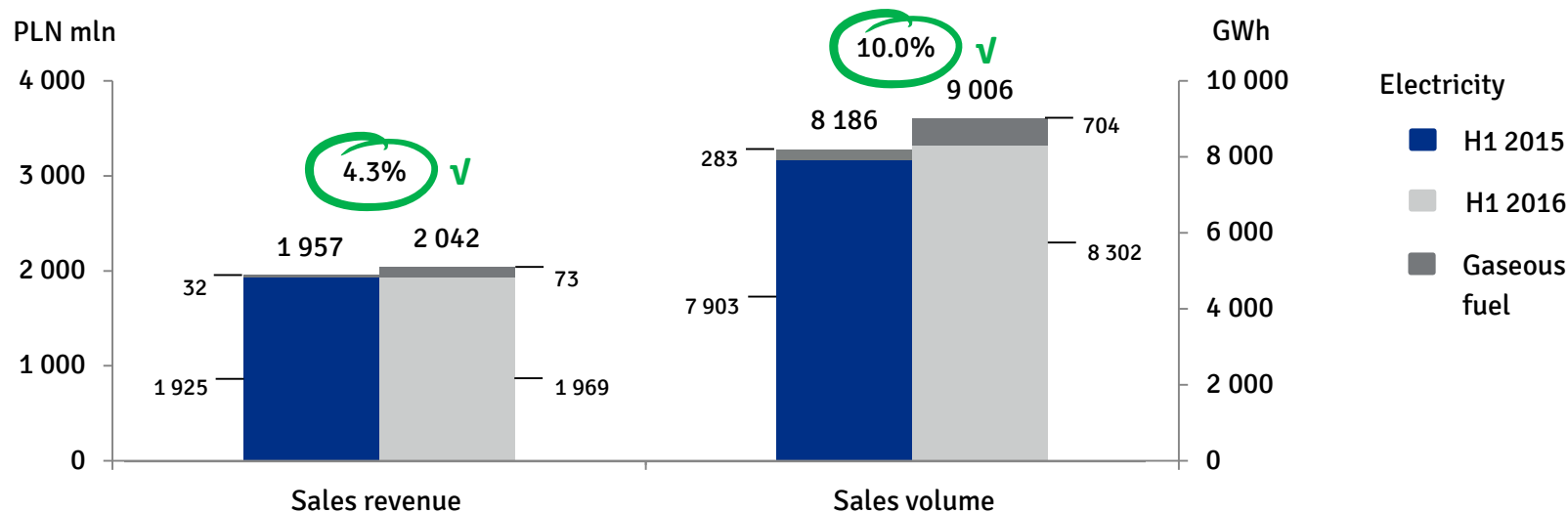


EUA price on the forward market for EUA Dec-16 during H1 2016 dropped by 45% to 4.48 EUR/t

## We reported solid operating and sales results



Enea CG's operating data	Q2 2015	Q2 2016	Change	H1 2015	H1 2016	Change
Generation of electricity [GWh]	3 330	3 456	3.8% ✓	6 293	6 807	8.2% ✓
<i>from conventional sources</i>	3 103	3 331	7.3% ✓	5 795	6 529	12.7% ✓
<i>from renewable sources of energy</i>	227	125	-44.9%	498	278	-44.2%
Gross generation of heat [TJ]	933	755	-19.1%	3 147	3 035	-3.6%
Sales of distribution services to end users [GWh]	4 346	4 605	6.0% ✓	8 992	9 332	3.8% ✓
Sales of electricity and gaseous fuel to retail customers [GWh]	3 845	4 103	6.7% ✓	8 186	9 006	10.0% ✓





## LW Bogdanka CG implements a anticipated plan of mining and sales



LW Bogdanka CG's operating results ['000 tonnes]	Q2 2015	Q2 2016	Change	H1 2015	H1 2016	Change
Gross output	2 784	3 187	14.5% ✓	5 758	6 920	20.2% ✓
Net production	1 901	1 950	2.6% ✓	3 891	4 285	10.1% ✓
Yield	68.3%	61.2%	-7.1 p.p.	67.6%	61.9%	-5.7 p.p.
Sale of coal	1 876	2 195	17.0% ✓	3 821	4 379	14.6% ✓
Closing stock	376 <sup>1)</sup>	134	-64.4% ✓	376 <sup>1)</sup>	134	-64.4% ✓

1) The level of stock presented as at 30 June 2015 includes the coal deposit (33 thou. tonnes) realised for one of coal recipients. The deposit was fully accounted for by the Parent (supplied to recipients) until the end of 2015

# Agenda



Coal, energy market, key operating and sales data



**Enea CG's financial results in Q2 and H1 2016**



LW Bogdanka CG's financial results  
in Q2 and H1 2016



Enea CG's key initiatives in H1 2016



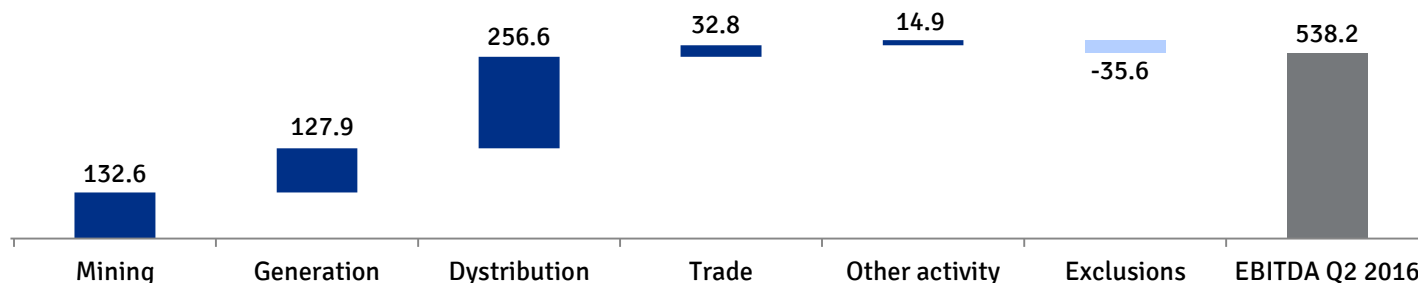
## Optimisation of processes and exploitation of synergies allowed us to generate good financial results



Enea CG's financial results [PLN mln]	Q2 2015	Q2 2016	Change	H1 2015	H1 2016	Change
Net sales revenue	2 165.8	2 662.7	22.9% ✓	4 612.2	5 599.4	21.4% ✓
EBIT	196.9	221.9	12.7% ✓	524.2	610.6	16.5% ✓
<i>EBIT without assets write-down</i>	<i>196.9</i>	<i>263.9</i>	<i>34.1% ✓</i>	<i>524.2</i>	<i>652.6</i>	<i>24.5% ✓</i>
EBITDA	385.1	538.2	39.8% ✓	894.1	1 206.5	34.9% ✓
Net profit	152.9	180.8	18.2% ✓	418.3	471.2	12.7% ✓
<i>Net profit without assets write-down</i>	<i>152.9</i>	<i>214.8</i>	<i>40.5% ✓</i>	<i>418.3</i>	<i>505.2</i>	<i>20.8% ✓</i>
Net cash flows from operating activities	594.2	766.8	29.1% ✓	782.9	1 162.1	48.4% ✓
CAPEX	526.2	790.2	50.2%	1 122.7	1 171.0	4.3%
Net debt / EBITDA <sup>1)</sup>	0.8	1.7	0.9	0.8	1.7	0.9


1) Debt = long-term and short-term: credits, loans and debt securities + financial lease liabilities


# Enea CG responds flexibly to the changes in the regulatory and market environment



<b>Q2 2016 [PLN mln]</b>	<b>132.6</b>	<b>127.9</b>	<b>265.6</b>	<b>32.8</b>	<b>14.9</b>	<b>-35.6</b>	<b>538.2</b>
<b>Share in EBITDA in Q2 2016</b>	24.6%	23.8%	49.3%	6.1%	2.8%	-6.6%	-
<b>EBITDA margin</b>	30.9%	15.7%	35.7%	2.0%	11.5%	-	20.2%
<b>Change [PLN mln]</b>	132.6	15.2	-5.2	1.6	11.2	-2.2	153.1
<b>Change [%]</b>	<b>100.0%</b>	<b>13.5%</b>	<b>-1.9%</b>	<b>5.0%</b>	<b>300.2%</b>	<b>-6.7%</b>	<b>39.8%</b>

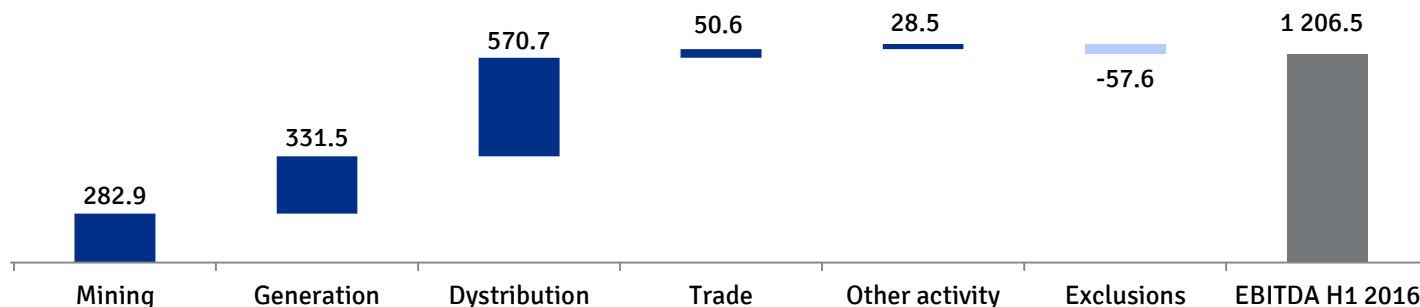
- growth in sale volumes of coal by 17% ✓ 
- growth in sales revenue by over 3% ✓
- lower average selling price of coal by over 11%

- higher margin on generation by PLN 21.2 mln ✓ 
- lower margin on trade and the Balancing Market by PLN 4.5 mln
- lower result in water and wind areas by PLN 5.7 mln


- higher revenue from the sale of distribution services to end users by PLN 18 mln ✓ 
- optimisation of employee benefits and costs of materials by PLN 9 mln ✓
- lower result on the other operating activity PLN 17 mln


- growth in sale volumes by 3.9% ✓ 
- result on gaseous fuel ✓
- higher costs of ecological obligations by 25.7%
- higher average purchase price of energy by 1.8%


## EBITDA result was impacted the most by the areas of mining, generation and distribution




<b>H1 2016 [PLN mln]</b>	<b>282.9</b>	<b>331.5</b>	<b>570.7</b>	<b>50.6</b>	<b>28.5</b>	<b>-57.6</b>	<b>1 206.5</b>
<b>Share in EBITDA in H1 2016</b>	23.4%	27.5%	47.3%	4.2%	2.4%	-4.8%	-
<b>EBITDA margin</b>	33.3%	19.6%	37.3%	1.5%	10.6%	-	21.5%
<b>Change [PLN mln]</b>	282.9	42.4	27.1	-30.5	10.2	-19.7	312.4
<b>Change [%]</b>	<b>100.0%</b>	<b>14.7%</b>	<b>5.0%</b>	<b>-37.6%</b>	<b>55.4%</b>	<b>-52.0%</b>	<b>34.9%</b>

- growth in sale volumes of coal by 15% ✓ 
- lower average selling price of coal by ca. 11%
- growth in revenue from sale of goods and materials

- higher margin on generation by PLN 50.2 mln ✓ 
- higher revenue from sales of electricity and heat by PLN 8.4 mln and PLN 8.3 mln, respectively ✓
- lower result in water and wind areas by PLN 12.1 mln

- higher revenue from the sale of distribution services to end users by PLN 24 mln ✓ 
- optimisation of employee benefits and material costs by PLN 12 mln ✓
- higher costs of purchasing transmission services by PLN 10 mln

- growth in sale volumes by 5.0% ✓ 
- result on gaseous fuel ✓
- lower average selling price by 2.7%
- higher costs of ecological obligations by 16.6%

# Agenda



Coal, energy market, key operating and sales data



Enea CG's financial results in Q2 and H1 2016



**LW Bogdanka CG's financial results  
in Q2 and H1 2016**



Enea CG's key initiatives in H1 2016

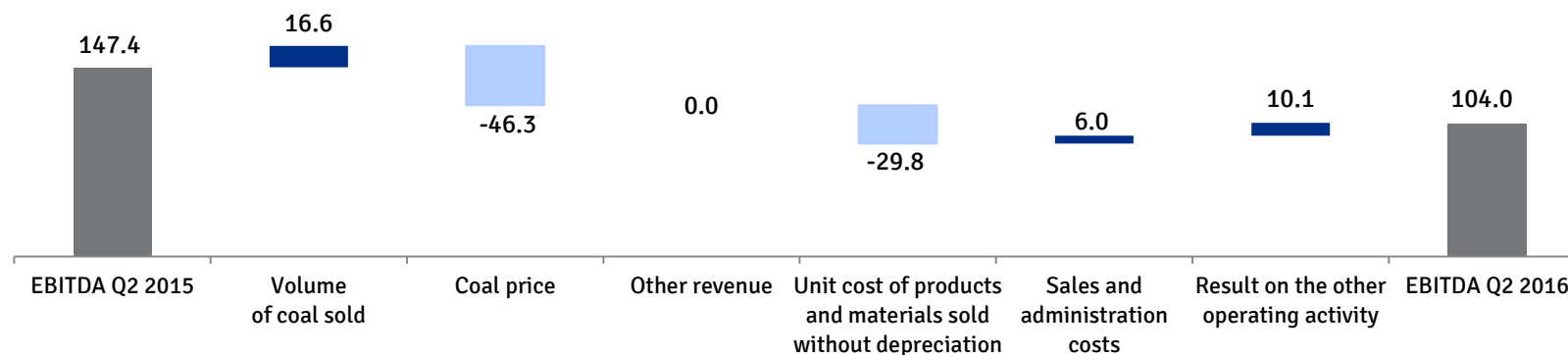


## Good financial results despite low coal prices



LW Bogdanka CG's financial results [PLN mln]	Q2 2015	Q2 2016	Change	H1 2015	H1 2016	Change
Net sales revenue	415.3	428.4	3.2% ✓	843.6	848.9	0.6% ✓
EBIT	53.2	17.7	-66.7%	101.3	96.6	-4.7%
EBITDA	147.4	104.0	-29.4%	291.8	277.4	-4.9%
Net profit	42.8	20.5	-52.1%	75.5	75.0	-0.7%
CAPEX	79.1	89.3	12.9%	161.6	151.1	-6.5%
Net debt / EBITDA	0.7	0.4	-42.9% ✓	0.7	0.4	-42.9% ✓

## Lower EBITDA in Q2 2016 was determined by a drop in coal price by 11.2%

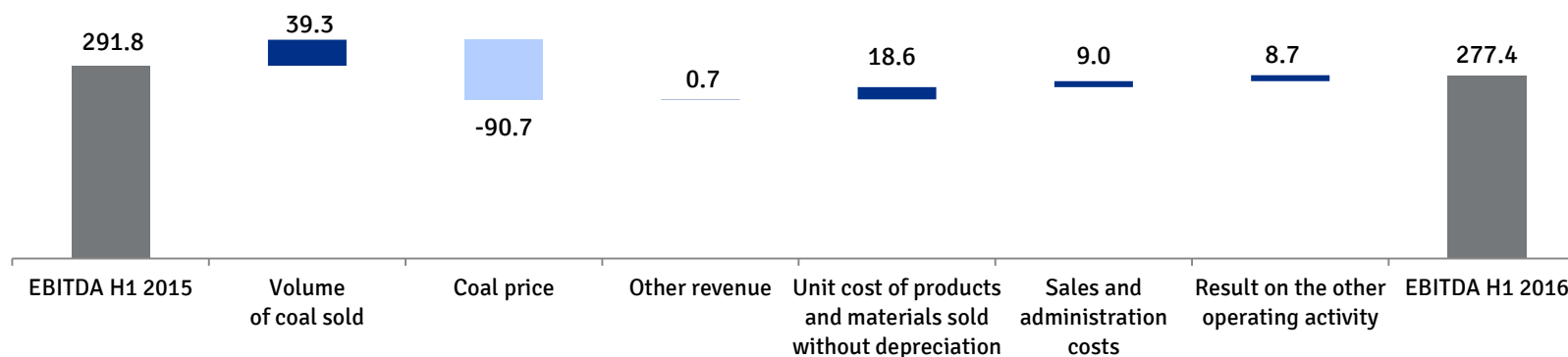


<b>Q2 2016 [PLN mln]</b>	<b>114.3</b>	<b>368.0</b>	<b>5.4</b>	<b>270.3</b>	<b>25.7</b>	<b>10.0</b>	<b>104.0</b>
<b>Q2 2015 [PLN mln]</b>	97.7	414.3	5.4	240.5	31.7	-0.1	147.4
<b>Change [PLN mln]</b>	16.6	-46.3	0.0	-29.8	6.0	10.1	-43.4
<b>Change [%]</b>	<b>17.0%</b>	<b>-11.2%</b>	<b>0.0%</b>	<b>12.4%</b>	<b>-18.9%</b>	<b>-</b>	<b>-29.4%</b>

- drop of EBITDA by PLN 43.4 mln (-29.4%)
- growth in sale volumes of coal by 17.0% ✓
- drop in the price of sold coal by 11.2%
- growth in the unit cost of sold products and materials without depreciation (resulting from a growth in provisions and higher costs of production due to difficult mining and geological conditions)
- other revenue in Q2 2016 on the level of the same period of 2015
- drop in costs of sales and administration costs (derecognition of costs of management options for 2016 and previous years)
- positive result on the other operating activity (release of the unused provision for claims)



## In H1 2016 decreasing price of coal eliminated the growth in the volume and lower unit cost



<b>H1 2016 [PLN mln]</b>	<b>309.4</b>	<b>747.6</b>	<b>12.5</b>	<b>477.5</b>	<b>54.9</b>	<b>10.2</b>	<b>277.4</b>
<b>H1 2015 [PLN mln]</b>	270.1	838.3	11.8	496.1	63.9	1.5	291.8
<b>Change [PLN mln]</b>	39.3	-90.7	0.7	18.6	9.0	8.7	-14.4
<b>Change [%]</b>	<b>14.6%</b>	<b>-10.8%</b>	<b>5.9%</b>	<b>-3.7%</b>	<b>-14.1%</b>	<b>580.0%</b>	<b>-4.9%</b>

- drop of EBITDA by PLN 14.4 mln (-4.9%)
- growth in sale volumes of coal by 14.6% ✓
- drop in the price of sold coal by 10.8%
- drop in unit cost of sold products and materials without depreciation ✓
- higher other costs (from sales of scrap) ✓
- drop in costs of sales and administration costs (derecognition of costs of management options for 2016 and previous years, lower depreciation of fixed assets) ✓
- positive result on the other operating activity (release of the unused provision for claims) ✓

# Agenda



Coal, energy market, key operating and sales data



Enea CG's financial results in Q2 and H1 2016



LW Bogdanka CG's financial results  
in Q2 and H1 2016



**Enea CG's key initiatives in H1 2016**



# Key activities performed in each business area are directed at the Group's potential development



## Mining

- Completion of drilling works by research holes of "Ostrów" field
- Completion of the construction of the installations and all the objects of the central air-conditioning of Bogdanka field
- Investments within environmental protection e.g. extension of the object of extractive waste treatment
- Rationalisation of costs directly related to production
- Capital expenditures optimisation

## Generation

- Commencement of the modernisation of cooling water intake - temporary stabilising checkdam on the Vistula River
- Construction of flue gas desulphurisation plant on K7 and K8 boilers
- Unit No. 1 - obtaining the operating permit and commissioning of the installation of the catalytic denitrogenation of flue gases (SCR)
- 14.1 MW Baczyna wind farm commissioning
- Continuation of the SCR installation for units No. 4-8 and 1-2

## Distribution

- Considerable enhancement of planned and unplanned interruption indices in H1 2016:
  - SAIDI - by 35% yoy
  - SAIFI - by 26% yoy
- Introduction of innovative technology allowing for an automatic detection of damage and reduction in their coverage
- Launching the Connection Portal
- AMI pilot implementation
- Reduction in grid connection times
- Extension and modernising the power infrastructure

## Trade

- Sales:
- starting e-CSC for all the Customers
  - dynamic growth in gaseous fuel sales
  - sales channel diversification
- Wholesale trading:
- signing of a cooperation agreement with Polish Trading Point
  - continuation of Market Maker's activities on PPE
  - implementation of the strategy of managing the portfolio of proprietary interests resulting from certificates of origin for electricity generated from RES

# Construction of unit No. 11 is Enea Group's priority



## Unit No. 11 - works realised in Q2 2016

- Launching the fire installation required to run 110 kV voltage
- Assembly of MV switchboards and HVAC steering and control system in the electrical devices building
- Leakage and pressure test of pipelines of the condensate water treatment plant
- Foundations up to the level of 0.0 - slag container, reinforced concrete strip foundations of the carriage defrosting building
- Leakage and pressure test of pipelines of boiler blowers
- Completion of coal container assembly
- Assembly of the boiler's main burners, OFA channels and flue gas ventilator (static and dynamic part)



of the progress of  
the new unit's  
construction

The first powering from the reserve and start-up transformer in the switching station of Polskie Sieci Elektroenergetyczne - 110 kV voltage was fed



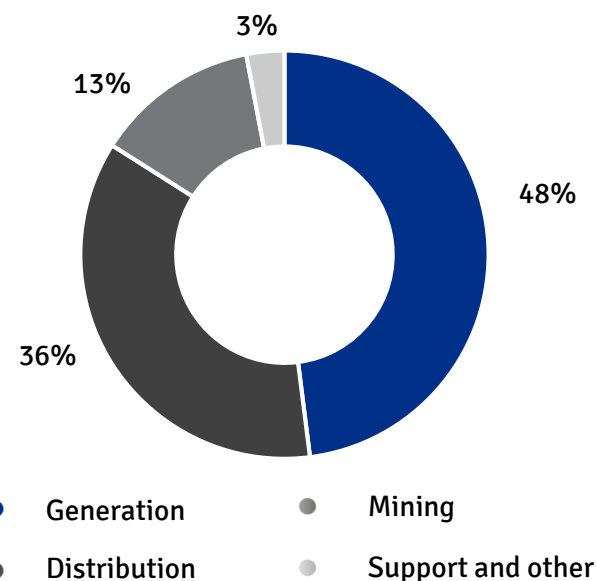
1) State as at August 2016

# Enea CG realises a vast CAPEX programme covering mainly the area of generation and distribution network



Capital expenditures [PLN mln]	H1 2015	H1 2016	Change	2016 Plan
Generation	821.3	556.8	-32.2%	1 969.5
Distribution	257.6	424.3	64.7%	847.7
Mining	-	152.7	-	437.9
Support and other	43.8	37.2	-15.1%	155.1
<b>Total</b>	<b>1 122.7</b>	<b>1 171.0</b>	<b>4.3%</b>	<b>3 410.2</b>

Capital expenditures in H1 2016



**PLN 75 mln**  
on investment relating to environmental protection in H1 2016

## After H1 2016 we have realised already more than half of the cost savings planned for 2016



[PLN mln]	H1 2016	2016
Generation	75	154
Distribution	111	175
Mining	12	29
Other	4	4
<b>TOTAL</b>	<b>202</b>	<b>362</b> ✓

- Business process optimisation
- Use of resources within Capital Group and fixed cost optimisation
- Outsourced services rationalisation
- Non-core liquidation





**We are building foundations for further development  
of an innovative raw materials and energy group**

Q2, H1 2016



**Attachments**



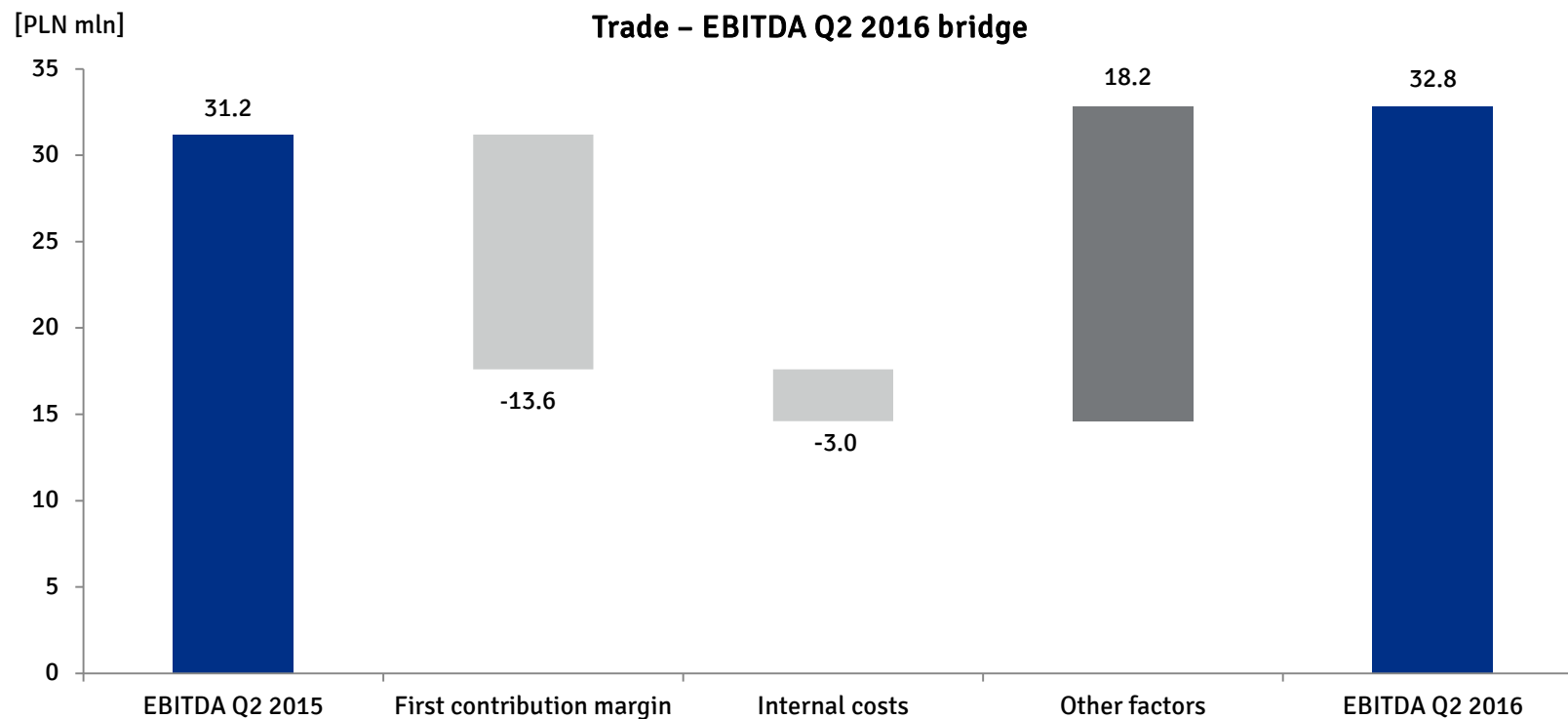
## Attachment 1 – We are continuing the commenced investment activities



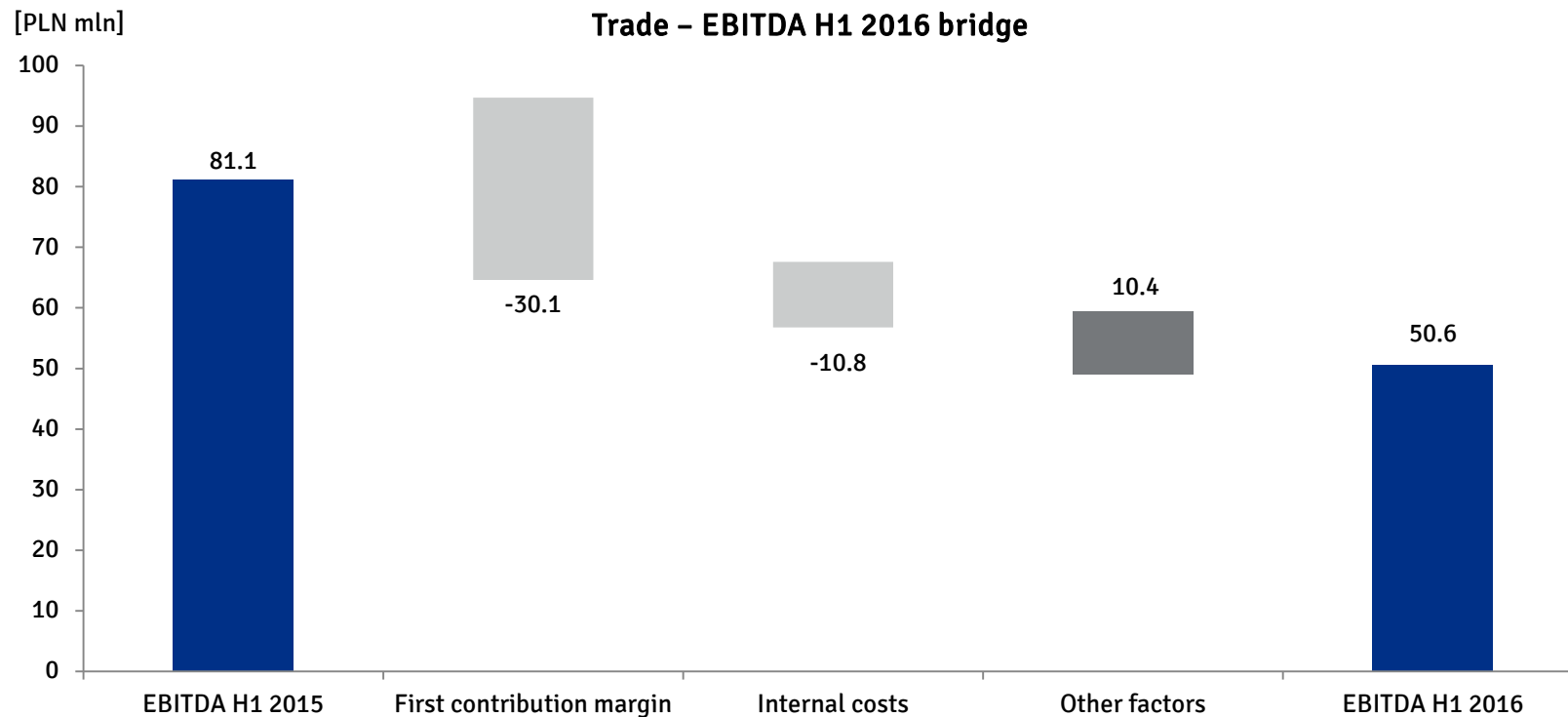
Investment	CAPEX H1 2016 [PLN mln]	Total CAPEX [PLN mln]	Work progress [%]	Anticipated date of completion
Construction of a 1,075 MW power unit No. 11	372.0	5 922.0	88% <sup>1)</sup>	2017
IOS IV flue gas desulphurisation plant	9.1	288.3	99%	2016
Modernisation of unit No. 4	2.6	31.8	19%	2017
Modernisation of unit No. 5	73.5	87.9	99%	2016
Construction of industrial waste and rainwater treatment	7.1	29.4	95%	2016
Installation of flue gases denitrification - SCR for units No. 1 and 2	6.2	97.9	98%	2016
Modernisation of unit No. 9 as a part of 2 x 500 MW units modernisation programme	0	90.0	1%	2017
Modernisation of cooling water intake - stabilising checkdam on the Vistula River	0.2	33.0	2%	2017
SCR installation and modernisation of electrostatic precipitators for units No. 9 and 10 as part of the 2 x 500 MW units modernisation programme	0.9	321.9	15%	2018
Installation of flue gases denitrification - SCR for units No. 4-8	31.6	203.7	78%	2017
Installation of flue gases denitrification - SNCR for unit No. 3	0	42.6	1%	2017
Construction of flue gas desulphurisation plant on K7 and K8 boilers	16.1	105.5	35%	2017
Modernisation of unit No. 10 as part of 2 x 500 MW units modernisation programme	0	88.1	1%	2018

1) State as at August 2016

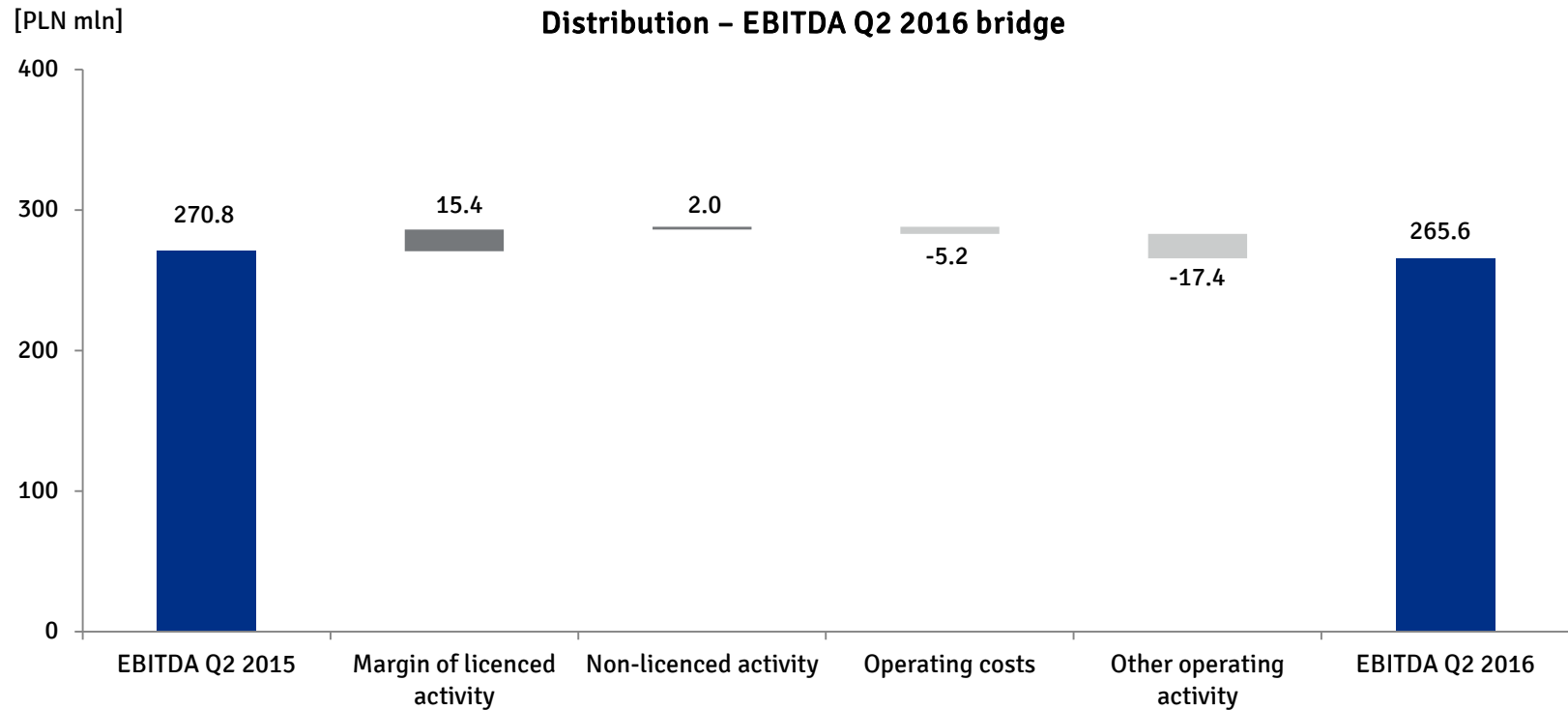
## Attachment 2 – Lower costs of written-off debts and lower provisions for litigation supported the EBITDA result of the area of trade in Q2 2016



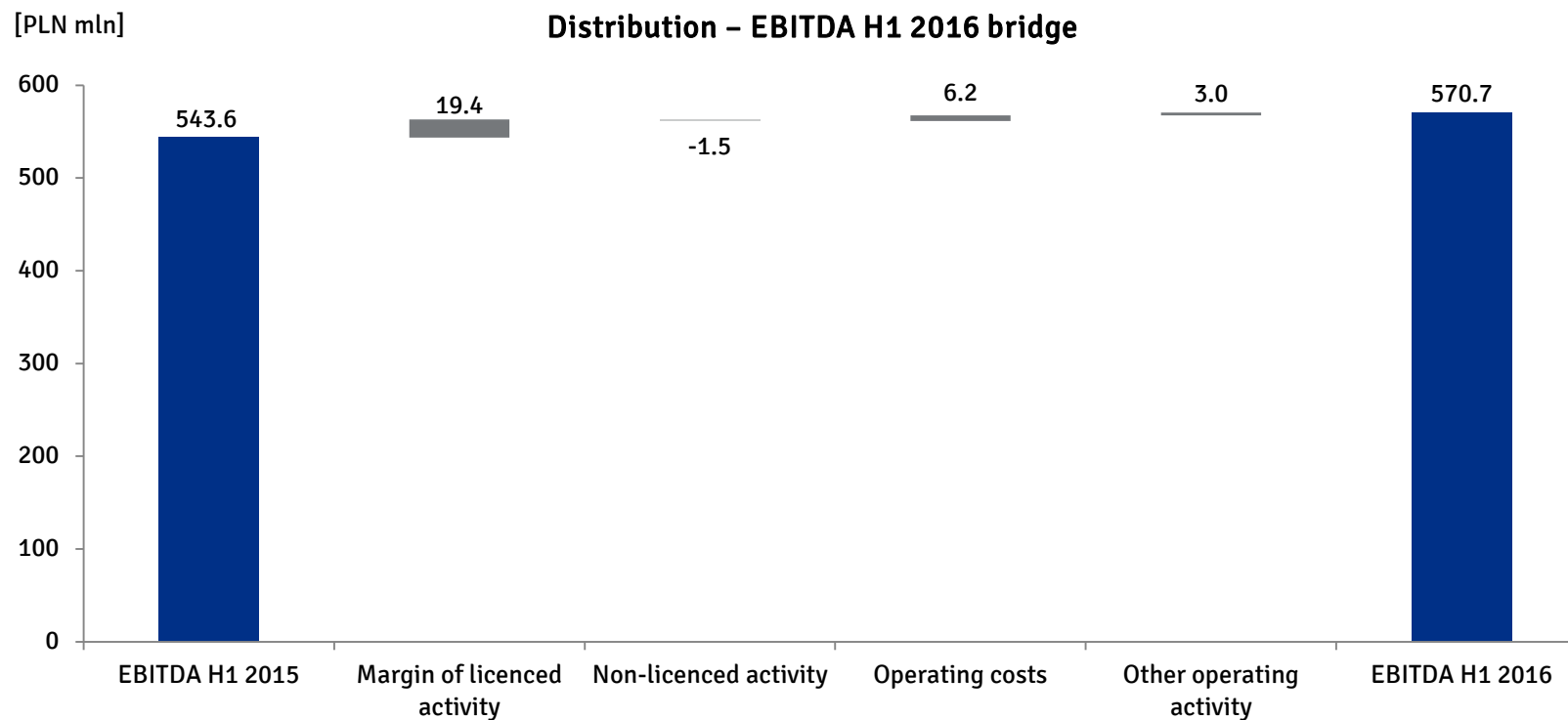
## Attachment 3 – First contribution margin and growth in trading costs significantly affected the reduction of the EBITDA result in the area of trade in H1 2016



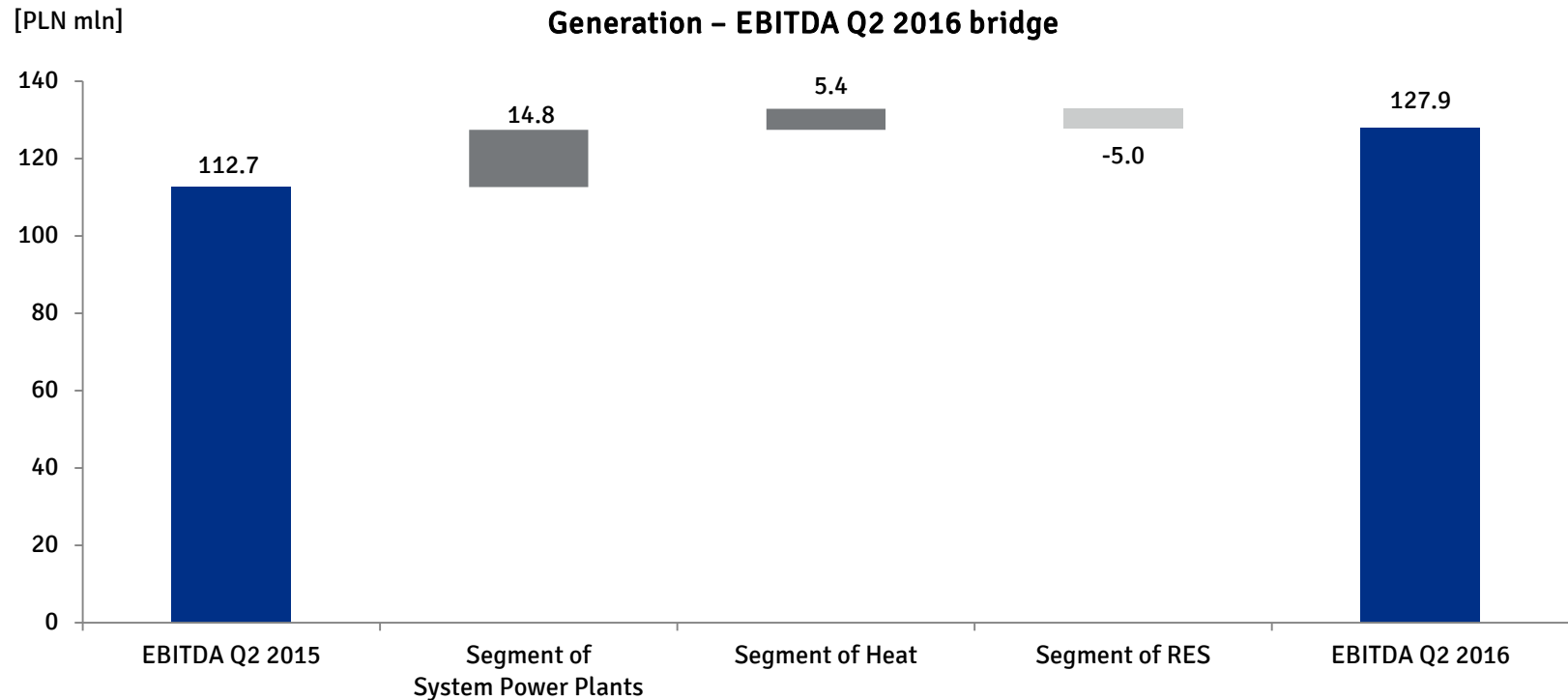
## Attachment 4 – Lower result on the other operating activity and higher operating costs charged the EBITDA result in the area of distribution in Q2 2016



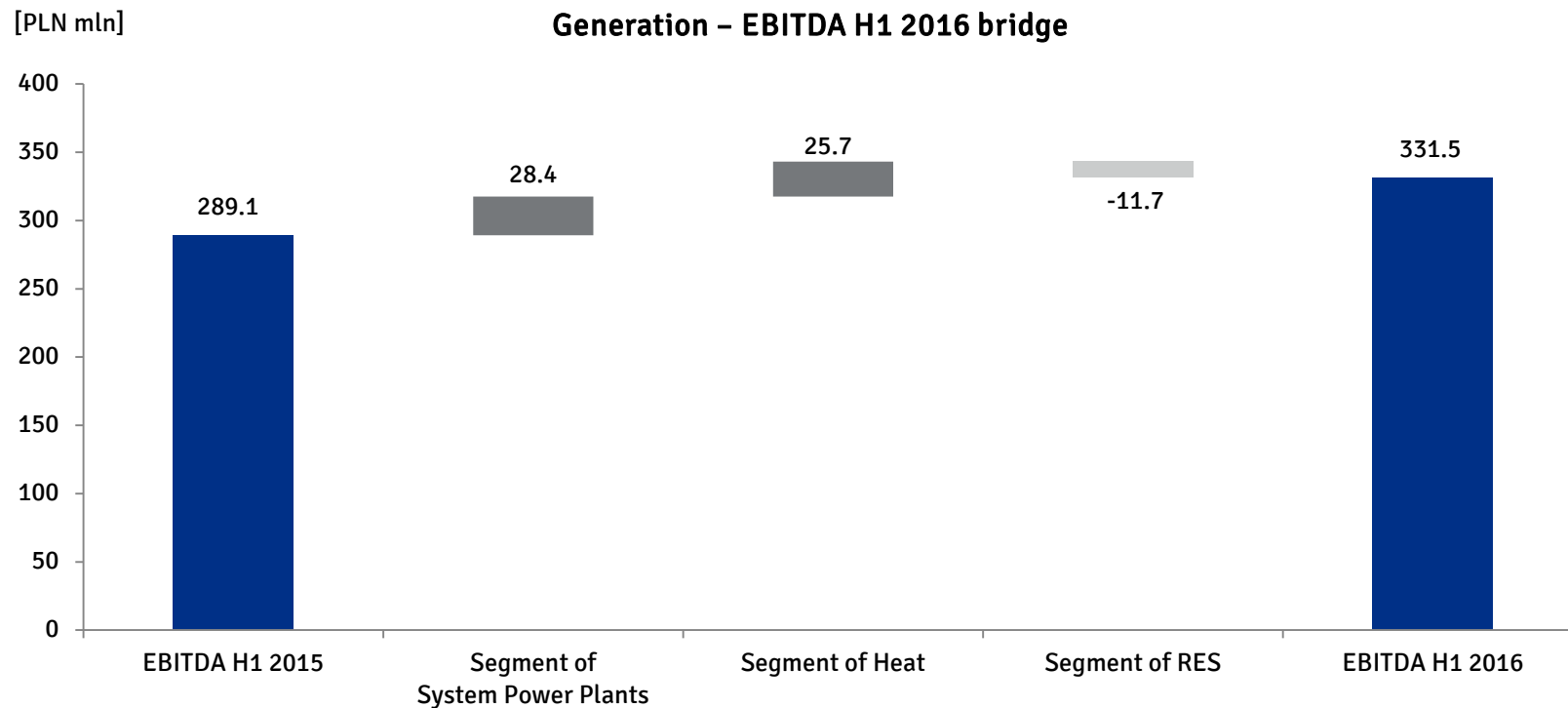
## Attachment 5 – In H1 2016 EBITDA of the area of distribution grew mainly due to higher margin on licensed activities and cost optimisation



## Attachment 6 – Higher margin on generation was determinant for an almost PLN 15 mln growth in the EBITDA result in the segment of system power plants in Q2 2016



## Attachment 7 – Due to very good results of the segments of system power plants and heat, EBITDA of the generation area grew by over PLN 42 mln



**Attachment 8 – RES segment’s results (area of wind) were affected by the establishment of a write-down of non-financial fixed assets**



[PLN mln]	Generation, including:								
	System power plants			Heat			RES		
	Q2 2015	Q2 2016	Change	Q2 2015	Q2 2016	Change	Q2 2015	Q2 2016	Change
Sales revenue	688	<b>727</b>	38	76	<b>75</b>	-2	17	<b>12</b>	-5
EBIT	51	<b>76</b>	24	-10	<b>-2</b>	8	-3	<b>-48</b>	-45
EBITDA	102	<b>117</b>	15	5	<b>10</b>	5	6	<b>1</b>	-5
CAPEX	296	<b>406</b>	110	11	<b>15</b>	4	8	<b>0</b>	-7

[PLN mln]	System power plants			Heat			RES		
	H1 2015	H1 2016	Change	H1 2015	H1 2016	Change	H1 2015	H1 2016	Change
Sales revenue	1,339	<b>1,419</b>	80	225	<b>239</b>	14	46	<b>33</b>	-13
EBIT	113	<b>156</b>	43	25	<b>57</b>	31	5	<b>-44</b>	-49
EBITDA	211	<b>239</b>	28	56	<b>82</b>	26	22	<b>10</b>	-12
CAPEX	780	<b>526</b>	-254	31	<b>26</b>	-5	10	<b>4</b>	-5