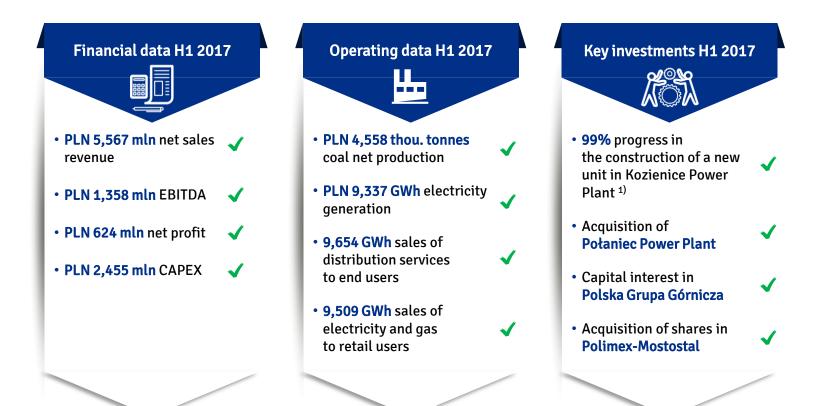


We develop sustainably and regularly achieve set objectives

Q2, H1 2017

### Sustainable development builds a strong energy and commodity group





Safety and stable development of an innovative commodity and energy group

### We are consecutively implementing our strategy



### **RESOURCES**



5.2 **GW** 

227 mln t installed potential of 3 mining fields electric power

121.3 thou, km

distribution lines including connections 15.7 thou.

**Employees** 

2.5 mln Customers

**FINANCE** H1 2017



PLN 5 567 mln PLN 1 358 mln PLN 624 mln PLN 2 455 mln net sales revenue

**EBITDA** 

net profit

CAPEX

**GOALS UNTIL 2025** 

Enea



10.9 mln t

own demand for bituminous coal

5.8-6.3 GW

installed conventional electric power 20.1 GWh 144 min/1.69

electricity sales

**PLN 26.4 bln** SAIDI/SAIFI

basic investment budget

## **Agenda**





### Coal, energy markets, operating data

Enea CG's financial results in Q2 and H1 2017

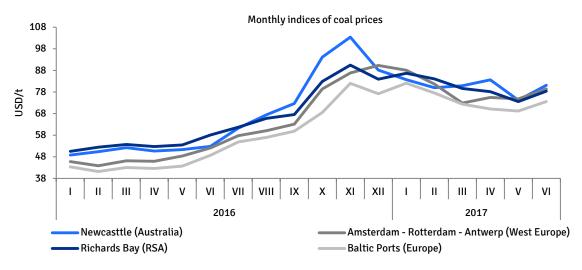
LW Bogdanka CG's financial results in Q2 and H1 2017

Key initiatives in H1 2017

Additional information

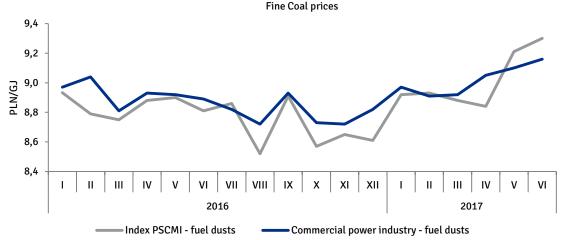
## Q2 2017 another quarter of coal price drops on the world markets and growth in prices on the domestic market





### Average price in H1 2017

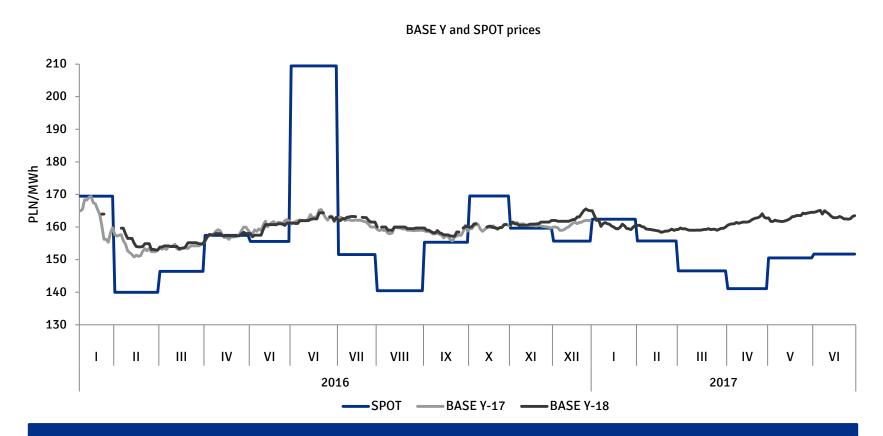
- Amsterdam Rotterdam
   Antwerp: 78.73 USD/t
- Richards Bay: 80.08 USD/t
- Newcastle: 80.60 USD/t
- Baltic Ports: 74.15 USD/t



Average price in H1 2017 of coal dust for commercial power industry grew by ca. 1.0% yoy

### In H1 2017 we observed a drop in energy prices yoy on the SPOT market

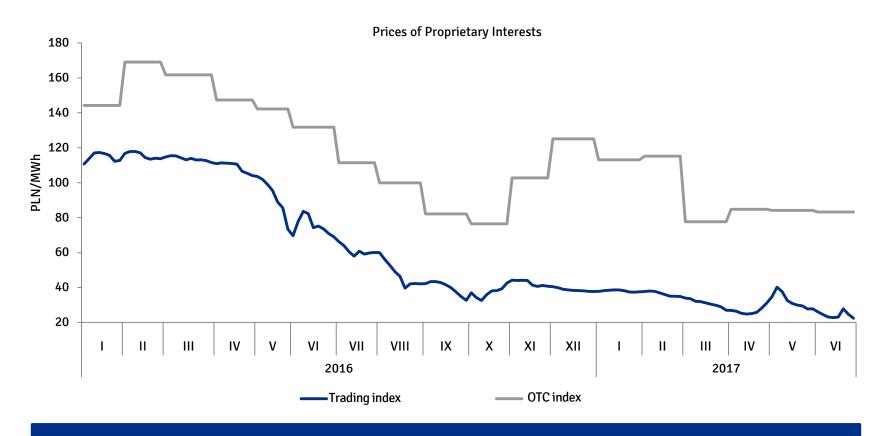




- Drop in the average price of baseload on SPOT market in H1 2017 by 7.2% yoy to 151.32 PLN/MWh
- The average energy price on forward market baseload for 2018 grew by 0.9% yoy to 163.50 PLN/MWh in H1 2017

## In H1 2017 prices of proprietary interests dropped by almost 1/3 in relation to H1 2016





- In H1 2017 the weighted average value of the session index dropped by 29% yoy to 22.46 PLN/MWh in relation to H2 2016
- · OTC market index in that period almost tripled in relation to the session index and amounted averagely to 92.98 PLN/MWh

### Prices of allowances for emissions of CO<sub>2</sub> were decreasing in H1 2017





EUA price on the forward market for EUA Dec-17 at the end of H1 2017 dropped by 18% to the level of 5.02 EUR/t in relation to the end of 2016

## In H1 2017 the Group generated good financial results



| Enea CG's operating data         | Q2 2016 | Q2 2017 | Change | H1 2016 | H1 2017             | Change   |
|----------------------------------|---------|---------|--------|---------|---------------------|----------|
| Generation of electricity [GWh]  | 3 456   | 5 581   | 61.5%  | 6 807   | 9 337               | 37.2% ✓  |
| Enea Elektrownia Połaniec        | -       | 2 398   | -      | -       | 2 692 <sup>1)</sup> | -        |
| from conventional sources        | 3 331   | 4 936   | 52.2%  | 6 529   | 8 484               | 30.1% 🗸  |
| Enea Elektrownia Połaniec        | -       | 1 844   | -      | -       | 2 050 <sup>1)</sup> | -        |
| from renewable sources of energy | 125     | 645     | 308.0% | 278     | 853                 | 202.2% 🗸 |
| Enea Elektrownia Połaniec        | -       | 554     | -      | -       | 642 <sup>1)</sup>   | -        |
| Gross generation of heat [TJ]    | 755     | 1 441   | 90.9%  | 3 035   | 3 724               | 22.7% 🗸  |
| Enea Elektrownia Połaniec        | -       | 594     | -      | -       | 702 <sup>1)</sup>   | -        |

<sup>1)</sup> Data for 14 March - 30 June 2017

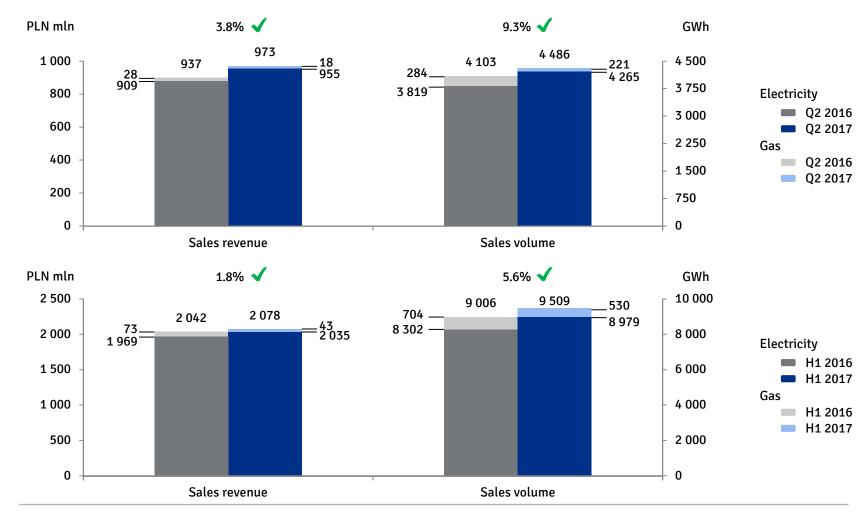
# We provide our Customers with energy and services of constantly better quality



| Operating data – area of distribution                                   | Q2 2016 | Q2 2017 | Change     | H1 2016 | H1 2017 | Change     |   |
|---|---------|---------|------------|---------|---------|------------|---|
| Sales of distribution services to end users [GWh]                       | 4 605   | 4 679   | 1.6%       | 9 332   | 9 654   | 3.5%       | ✓ |
| SAIDI planned and unplanned interruptions (HV, MV) [min.]               | 72.97   | 37.14   | -49.1%     | 111.82  | 77.97   | -30.3%     | ✓ |
| SAIFI planned and unplanned interruptions (HV, MV) [pcs]                | 1.00    | 0.73    | -27.0%     | 1.71    | 1.49    | -12.9%     | ✓ |
| Contracts performed in the reference period of 18 months - group IV [%] | 86.17   | 97.76   | 11.59 p.p. | 86.25   | 97.37   | 11.12 p.p. | ✓ |
| Contracts performed in the reference period of 18 months - group V [%]  | 96.34   | 99.05   | 2.71 p.p.  | 94.96   | 97.71   | 2.75 p.p.  | ✓ |

# We have reported a growth in the total volume of electricity and gas sales to retail customers





# In H1 2017 LW Bogdanka CG sold by 6.5% coal more than in the previous year



| LW Bogdanka CG's operating results ['000 tonnes] | Q2 2016 | Q2 2017 | Change   | H1 2016 | H1 2017 | Change            |
|--|---------|---------|----------|---------|---------|-------------------|
| Gross output                                     | 3 187   | 3 128   | -1.9%    | 6 920   | 6 757   | -2.4%             |
| Net production                                   | 1 950   | 2 136   | 9.5%     | 4 285   | 4 558   | 6.4% ✓            |
| Yield  | 61.2%   | 68.3%   | 7.1 p.p. | 61.9%   | 67.5%   | 5.6 p.p. <b>✓</b> |
| Sale of coal                                     | 2 195   | 2 273   | 3.6%     | 4 379   | 4 662   | 6.5% 🗸            |
| Closing stocks                                   | 134     | 21      | -84.3%   | 134     | 21      | -84.3%            |

## **Agenda**





Coal, energy markets, operating data

Enea CG's financial results in Q2 and H1 2017

LW Bogdanka CG's financial results in Q2 and H1 2017

Key initiatives in H1 2017

Additional information

## Financial security is the priority for Enea Group in its operations



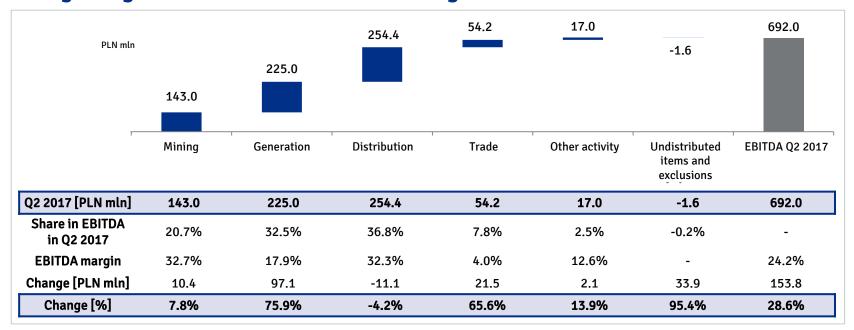
| Enea CG's financial data [PLN mln] | Q2 2016 | Q2 2017 | Change | H1 2016 | H1 2017                   | Change         |
|------------------------------------|---------|---------|--------|---------|---------------------------|----------------|
| Net sales revenue                  | 2 662.7 | 2 857.1 | 7.3%   | 5 599.4 | 5 566.8                   | -0.6%          |
| Enea Elektrownia Połaniec          | -       | 531.9   | -      | -       | 613.3 <sup>2)</sup>       | -              |
| EBIT                               | 221.9   | 399.0   | 79.8%  | 610.6   | 781.6                     | 28.0% 🗸        |
| Enea Elektrownia Połaniec          | -       | 65.0    | -      | -       | <i>62.7</i> <sup>2)</sup> | -              |
| EBITDA                             | 538.2   | 692.0   | 28.6%  | 1 206.5 | 1 358.4                   | 12.6% 🗸        |
| Enea Elektrownia Połaniec          | -       | 74.9    | -      | -       | 75.4 <sup>2)</sup>        | -              |
| Net profit                         | 180.8   | 302.6   | 67.4%  | 471.2   | 623.8                     | 32.4% <b>✓</b> |
| Enea Elektrownia Połaniec          | -       | 57.7    | -      | -       | 55.7 <sup>2)</sup>        | -              |
| Net debt / EBITDA <sup>1)</sup>    | 1.7     | 2.1     | 23.5%  | 1.7     | 2.1                       | 23.5%          |

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

<sup>2)</sup> Data for 14 March 14 - 30 June 2017

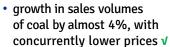
## As a consequence of greater generation capacity Enea Group realised the highest growth in EBITDA in the area of generation





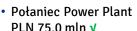
ليبيل

#### Mining



 drop in the unit cost of goods sold excluding depreciation v

#### Generation



- higher revenue from Regulatory System Services by PLN 7.7 mln √
- lower margin on generation by PLN 13.9 mln

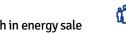
#### Distribution

- higher revenue from the sale of distribution services to end users by PLN 64 mln √
- higher costs of purchasing transmission services by PLN 57 mln

#### Trade

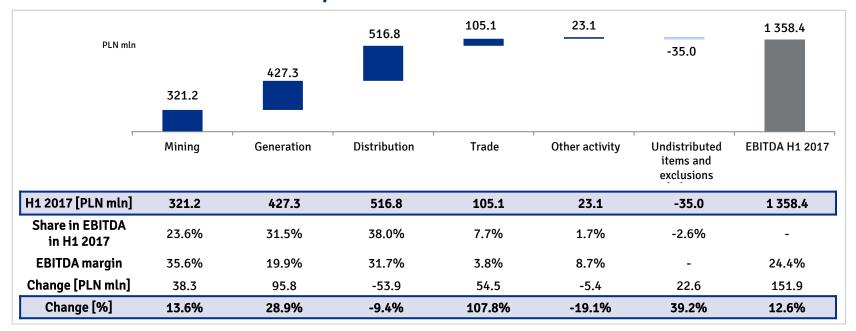
- growth in energy sale volumes by 11.7% √
- lower average energy selling price by 5.9%
- lower average purchase price of energy by 11.0 % √
- lower costs of ecological obligations by 50.1% √





### Balanced structure of the Group's EBITDA constitutes strong foundations for further development





ليبيل

#### Mining

- growth in sales volumes of coal by over 6%, with concurrently lower prices **√**
- · growth in sale revenue by over 6% √
- · drop in the unit cost of goods sold excluding depreciation ✓

#### Generation

- Połaniec Power Plant PLN 75.4 mln V
- higher revenue from **Regulatory System Services** by PLN 15.2 mln **√**
- lower margin on trade and the Balancing Market by PLN 27.6 mln

#### **Distribution**

- higher revenue from the sale of distribution services to end users by PLN 124 mln V
- lower costs of purchasing energy for coverage of book-tax difference by PLN 11 mln √
- higher costs of purchasing transmission services by PLN 114 mln

#### Trade

- growth in energy sale volumes by 8.2% √
- · lower average energy selling price by 4.4%
- lower average purchase price of energy by 10.2 % V
- lower costs of ecological obligations by 49.2% √





## **Agenda**





Coal, energy markets, operating data

Enea CG's financial results in Q2 and H1 2017

LW Bogdanka CG's financial results in Q2 and H1 2017

Key initiatives in H1 2017

Additional information

# Production and sales optimisation, and also strict cost control are reflected in generated financial results



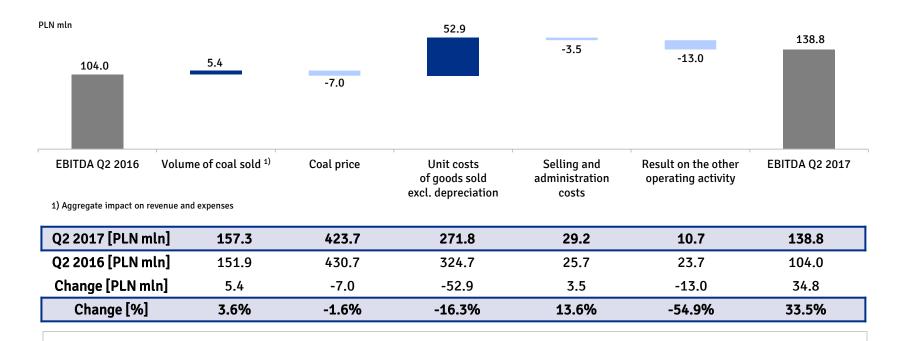
| LW Bogdanka CG's financial results [PLN mln] | Q2 2016 | Q2 2017 | Change | H1 2016 | H1 2017 | Change         |
|--|---------|---------|--------|---------|---------|----------------|
| Net sales revenue                            | 428.4   | 436.9   | 2.0%   | 848.9   | 902.1   | 6.3% 🗸         |
| EBIT   | 17.7    | 57.7    | 226.0% | 96.6    | 147.5   | 52.7% <b>√</b> |
| EBITDA 1)                                    | 104.0   | 138.8   | 33.5%  | 277.4   | 318.6   | 14.9% 🗸        |
| Net profit                                   | 20.5    | 43.9    | 114.1% | 75.0    | 112.1   | <b>49.5% ✓</b> |
| CAPEX  | 90.3    | 74.0    | -18.1% | 151.1   | 139.6   | -7.6%          |
| Net debt / EBITDA <sup>2)</sup>              | 0.43    | 0.07    | -83.7% | 0.43    | 0.07    | -83.7%         |

<sup>1)</sup> Explanation of EBITDA presentation difference of LW Bogdanka CG and area of mining in Enea CG in Q2 and H1 2017 is given in attachments 1-2

<sup>2)</sup> Debt = long-term liabilities due to bond issue + long-term credits and loans + short-term credits and loans

### Higher EBITDA in Q2 2017 due to lower unit cost of sold goods

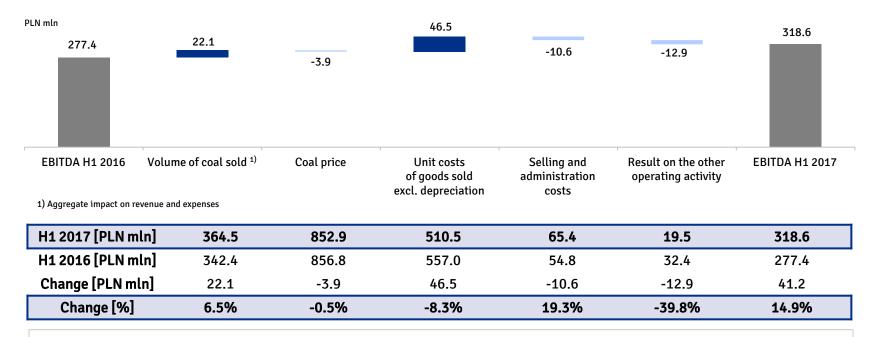




- growth in revenue realised mainly due to greater sales of coal by 78 thou. tonnes (3.6%), with concurrently lower prices √
- drop in the unit cost of sold products, goods and materials excluding amortisation better cost efficiency with a growing volume of coal sold and favourable balance of provisions ✓
- growth in selling costs and administration costs (in 2016 derecognition of costs of management options for 2016 and previous years)
- lower result on the other operating activity 2016 release of the provision for damages for Budimex due to a favourable, for LW Bogdanka SA, ruling of the Court of Appeal (higher base effect)

## Higher EBITDA in H1 2017 due to greater sales of coal and lower unit costs of goods sold

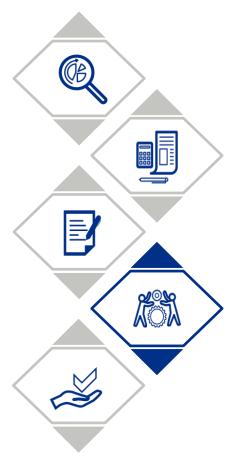




- growth in revenue realised mainly due to greater sales of coal by 283 thou. tonnes (6.5%), with concurrently slightly lower prices ✓
- drop in the unit cost of sold products, goods and materials excluding amortisation better cost efficiency with a growing volume of coal sold √
- higher administrative costs and selling costs: selling costs costs of logistic service and custom clearance of coal sold to Ukraine;
   administrative costs derecognition in 2016 of management options (lower base effect), in 2017 higher payments to the State Fund of Rehabilitation of Handicapped People and property tax
- lower result on the other operating activity 2016 release of the provision for damages for Budimex due to a favourable, for LW Bogdanka SA ruling of the Court of Appeal (higher base effect)

## **Agenda**





Coal, energy markets, operating data

Enea CG's financial results in Q2 and H1 2017

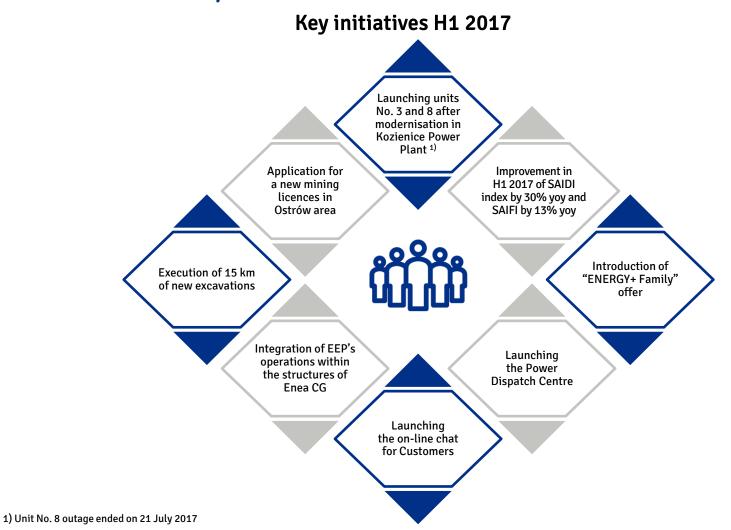
LW Bogdanka CG's financial results in Q2 and H1 2017

**Key initiatives in H1 2017** 

Additional information

# We have been strengthening the Group's position on the market due to an efficient cooperation of business areas





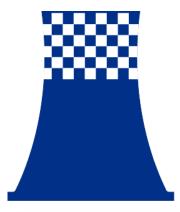
Key initiatives in H1 2017

## Construction of our major investment is at the final stage of implementation



### Unit No. 11 - works realised in Q2 2017

- · Cold start-ups of:
  - · condenser's cleaning system
  - ignition oil system
  - steam water system
  - blower system
  - main burner system
  - coal feeder and mill system
- Chemical cleansing of steam water systems
- HI-FOG fire-fighting installation fitting with detection and control within boiler burners
- Circulator mechanical assembly
- Functional tests and cold start-up of the deslagging and ash removal system
- Functional tests of steam water systems





construction 1)





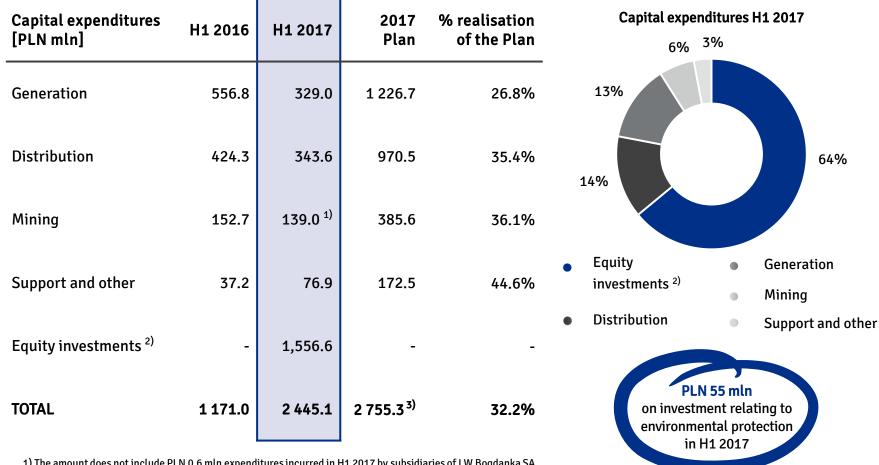
On 1 September the first synchronisation of the unit with the Public Power System was conducted

1) As at the end of August

Key initiatives in H1 2017

### Implementing the investments planned in the strategy we are increasing the Group's position





<sup>1)</sup> The amount does not include PLN 0.6 mln expenditures incurred in H1 2017 by subsidiaries of LW Bogdanka SA

Key initiatives in H1 2017 24

<sup>2)</sup> Not included in Enea CG's material and financial plan

<sup>3)</sup> The amount of expenditures resulting from the adjustment of Enea CG's material and financial plan

## **Agenda**





Coal, energy markets, operating data

Enea CG's financial results in Q2 and H1 2017

LW Bogdanka CG's financial results in Q2 and H1 2017

Key initiatives in H1 2017

**Additional information** 

## Our generation assets will comply with the standards within the deadlines required under BAT conclusions



## Estimated costs of adaptation

Modernised areas

### **Enea Wytwarzanie**



### ca. PLN 150 mln

- Modernisation of electrostatic precipitators of 200 MW units
- Modernisation of Flue Gas
   Desulphurisation Plant (IOS)
   No. I, II, IV to <130 mg/Nm<sup>3</sup>
- Continuous measurements installation on chimneys
- Reduction of heavy metals from sewage

### **Enea Połaniec**



#### ca. PLN 350 mln

- Completion of the installation of the catalytic denitrogenation of flue gases (SCR)
- Modernisation of IOS absorbers
- Modernisation/new electrostatic precipitators
- Mercury reduction installation
- Treatment plant modernisation

**Total** 

ca. PLN 500 mln

## We have been working over the reconstruction of the infrastructure damaged by the disaster



### **Effects of August storms:**

- ca. **250,000** Customers without power
- 85 damaged high-voltage poles
- ca. **2,500** damaged medium and low-voltage poles
- ca. 25 km high-voltage lines for restoration
- ca. **368 km** low and medium-voltage lines for restoration
- 24 damaged and switched off high-voltage lines
- 313 damaged medium-voltage lines
- 14 Transformer/Switching Stations without power supply
- over 7,200 transformer stations (medium voltage to low) without power supply

we have restored power supply on **the whole** area of our operations



we have restored power supply in **all** transformer stations

27



We develop sustainably and regularly achieve set objectives

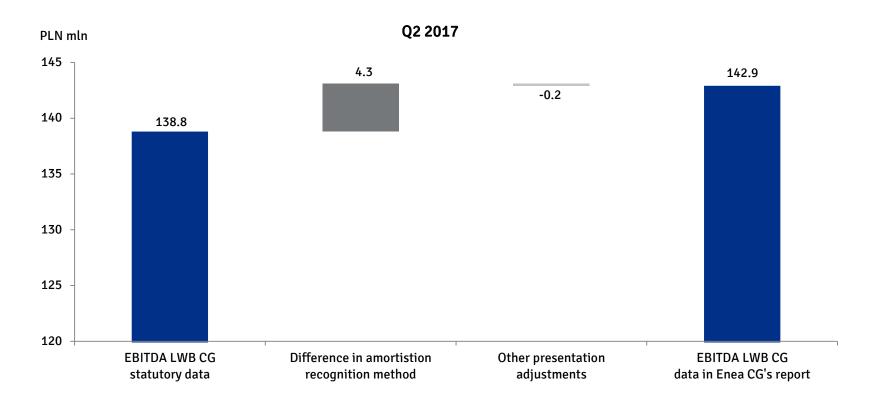
Q2, H1 2017



**Attachments** 

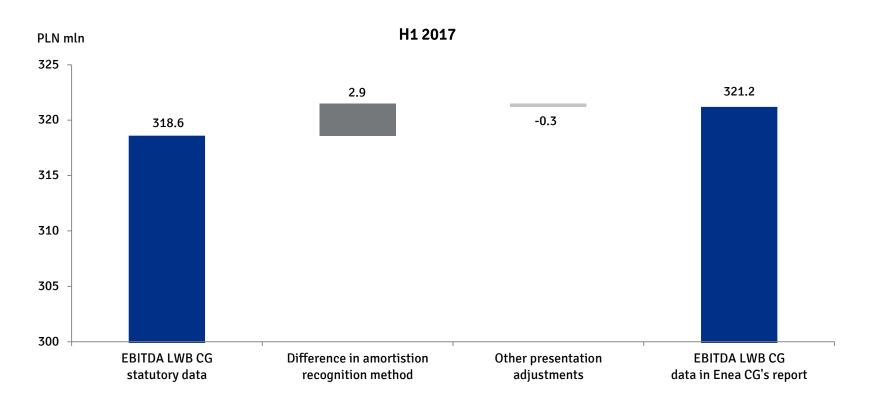


# Att. 1 - Explanation of EBITDA presentation difference in LW Bogdanka CG and Enea CG's area of mining in Q2 2017





# Att. 2 - Explanation of EBITDA presentation difference in LW Bogdanka CG and Enea CG's area of mining in H1 2017



## Att. 3 - Results of individual segments of the area of generation



|                       | Generation, including: |              |        |         |         |        |         |         |        |  |
|-----------------------|------------------------|--------------|--------|---------|---------|--------|---------|---------|--------|--|
| [PLN mln]             | Syste                  | em Power Pla | ints   |         | Heat    |        |         | RES     |        |  |
|                       | Q2 2016                | Q2 2017      | Change | Q2 2016 | Q2 2017 | Change | Q2 2016 | Q2 2017 | Change |  |
| Revenue<br>from sales | 727                    | 1 058        | 332    | 75      | 94      | 20     | 12      | 105     | 94     |  |
| EBIT                  | 76                     | 108          | 32     | -2      | 26      | 28     | -48     | 15      | 62     |  |
| EBITDA                | 117                    | 165          | 47     | 10      | 38      | 28     | 1       | 22      | 21     |  |
| CAPEX                 | 406                    | 75           | -331   | 15      | 8       | -7     | 0.3     | 0.4     | 0.1    |  |

|                       | Generation, including: |                          |        |         |         |        |         |         |        |  |
|-----------------------|------------------------|--------------------------|--------|---------|---------|--------|---------|---------|--------|--|
| [PLN mln]             | Syste                  | System Power Plants Heat |        |         | ts Heat |        |         |         |        |  |
|                       | H1 2016                | H1 2017                  | Change | H1 2016 | H1 2017 | Change | H1 2016 | H1 2017 | Change |  |
| Revenue<br>from sales | 1 419                  | 1 768                    | 349    | 239     | 247     | 8      | 33      | 134     | 101    |  |
| EBIT                  | 156                    | 188                      | 32     | 57      | 82      | 25     | -44     | 13      | 57     |  |
| EBITDA                | 239                    | 293                      | 54     | 82      | 107     | 25     | 10      | 27      | 16     |  |
| CAPEX                 | 526                    | 296                      | -230   | 26      | 33      | 7      | 5       | 0.4     | -4.6   |  |

Attachments 32