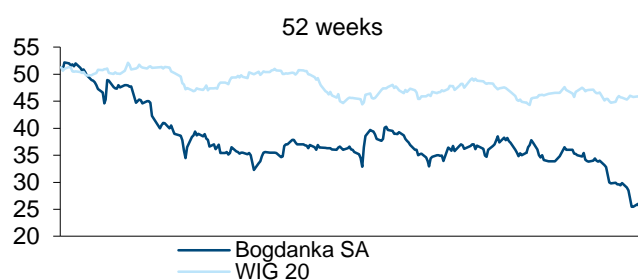


# Bogdanka SA

from Buy to Sell

PLN mn	2019e	2020e	2021e	2022e
Net sales	2 158.4	1 952.9	1 648.0	1 648.0
EBITDA	798.9	662.8	473.5	464.8
EBIT	375.5	223.7	7.9	-13.4
Net result after min.	308.4	183.8	8.0	-10.9
EPS (PLN)	9.07	5.40	0.23	-0.32
CEPS (PLN)	21.51	18.31	13.92	13.74
BVPS (PLN)	95.05	98.64	97.80	97.48
Div./share (PLN)	0.75	1.81	1.08	0.00
EV/EBITDA (x)	0.6	0.7	1.0	1.0
P/E (x)	2.3	3.9	89.8	nm
P/CE (x)	1.0	1.1	1.5	1.5
Dividend Yield	3.6%	8.6%	5.1%	0.0%

Share price (PLN) close as of 20/02/2020	21.0
Number of shares (mn)	34.0
Market capitalization (PLN mn / EUR mn)	,714 / ,167
Enterprise value (PLN mn / EUR mn)	,484 / ,113



Performance	12M	6M	3M	1M
in PLN	-59.1%	-42.6%	-44.4%	-38.2%
Reuters	LWBP.WA	Free float		34.0%
Bloomberg	LWB PW	Shareholders		Enea (66.0%)
Div. Ex-date	09/07/19			
<b>Target price</b>	<b>18.8</b>	Homepage:		www.lw.com.pl

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## Sacrificed at altar of politics - again

Power generation from hard coal declined by 5.1% y/y, while demand for thermal coal from the power sector declined by 10.1% y/y in 2019. Our 2020e forecasts envisage a 1.5% y/y decline of power consumption, 2.7% decline of generation from hard coal and 4.6% decline of demand for thermal coal from the power sector. Such a poor demand outlook is happening at a time of already high coal inventories of 13.5mn tonnes (or 145 days of consumption), the highest since 2015. The majority of scenarios for the Polish power market in 2020e result in a significant decline of demand for thermal coal and lignite units must again lower generation significantly to rescue thermal coal.

Challenging market fundamentals led LW Bogdanka to curtail its production rate by 25% until the end of February. This is happening despite its low inventories of only 1.9% of annual production seen at the end of 2019 (vs. approx. 10% in Upper Silesian mines). Such a curtailment would reduce supply by less than 100 thousand tonnes – hence the risk of extension. If curtailment was to last until the end of 2020, LW Bogdanka would produce approx. 7.3mn tonnes.

Those risks led us to cut 20/21e production forecasts to 8.5/8.0mn tonnes, while the coal price is expected to decline by 10% in 2021e (vs. the 7% expected previously). **These new forecasts prompt us to cut our 2021 EBITDA forecast by 19% and to significantly cut FCF as well as dividends outlook for 2021-24e period. The final outcome is the downgrade LW Bogdanka to Sell and revision of our target price downward to PLN 18.8.**

## Forecast revision

Preliminary figures published by LW Bogdanka lead us to align our 2019 forecasts for the year to match the reported data.

The forecasts for 2020-22e are changed in order to reflect the current outlook for demand for thermal coal from the power sector, i.e. the expected 4.6% decline of 2020e demand. Volume forecasts are cut to 8.5/8.0mn tonnes in 2020e/thereafter period from 9.6mn expected previously. The thermal coal price is expected to decline by 10% in 2021e (vs. the 7% decline that we expected previously).

### Change in estimates

Consolidated, IFRS (PLN, mn)	2020e			2021e			2022e		
	Now	Before	Change	Now	Before	Change	Now	Before	Change
Revenues	1 952.9	2 242.8	-12.9%	1 648.0	2 041.0	-19.3%	1 648.0	nd	
EBITDA	662.8	791.8	-16.3%	473.5	585.8	-19.2%	464.8	nd	
EBIT	223.7	352.7	-36.6%	7.9	118.6	-93.3%	-13.4	nd	
Net income	183.8	288.3	-36.2%	8.0	97.6	-91.8%	-10.9	nd	

Source: Erste Group Research

## Valuation

We employed a DCF model as our primary valuation tool, based on our forecasts for 2020-24e. We used a discount rate based on WACC and a terminal value based on perpetuity and the diluted number of shares. The DCF model reflects the value of LW Bogdanka in a more proper way than a peer comparison, as it includes future prospects.

### Assumptions

Our estimates are based on the following assumptions:

- Risk-free rate at 2.0%, equity premium at 6%, debt premium of 2%.
- CAPEX forecast is aligned with future expected production volumes, with availability of dedicated companies and labour force impacting on pricing of services, too.
- Thermal coal price is assumed to be driven by deficit/oversupply expectations for Polish coal market. Hence, we assume thermal coal price to remain flat in 2020e – due to already signed contracts – and then to collapse by approx. 10% in 2021e, due to rising oversupply pressures. No growth is envisaged thereafter.
- EBIT margin assumption in Terminal Year is lowered from 6.0% to 2.0%, due to deterioration of thermal coal market fundamentals seen throughout 2019/20 and expected long period of solving current situation of high inventories, as well as expected drop of demand for thermal coal after 2025e, i.e. upon expected decommissioning of significant portion of coal capacities at end of CRM market at that time.
- Cost side is expected to reflect both savings efforts as well as need for particular volume of preparatory work. Volume of preparatory work in 2020/21e is forecast to decline to 29/24km and remain flat thereafter. These lower volumes as well as expected reduction of employee demands related to coal crisis are expected to allow LWB to keep unit mining cash cost flat in forecasted period.
- Nominal tax rate assumed at 19% in 2020-24e.

The terminal value growth rate at 0% is to account for risks embedded in the pricing forecasts, reserves replacement risks and power market structure and power demand risks.

### Peer group comparison

	P/E			EV/EBITDA		
	2020e	2021e	2022e	2020e	2021e	2022e
GLENCORE PLC	16.0	12.9	12.3	6.2	5.5	5.1
WHITEHAVEN COAL LTD	22.4	10.9	10.1	7.2	5.2	4.9
CNX RESOURCES CORP	76.6	125.7	15.9	6.5	5.6	6.7
PEABODY ENERGY CORP	neg	103.2	neg	3.0	2.4	2.4
ARCH COAL INC - A	5.3	4.2	3.3	2.8	2.4	2.1
CHINA SHENHUA ENERGY CO-A	7.4	7.6	7.5	3.9	4.0	4.0
COAL INDIA LTD	6.2	5.9	5.7	3.3	3.1	2.9
BUMI SERPONG DAMAI PT	9.1	10.3	10.3	8.6	8.1	7.8
ADARO ENERGY TBK PT	7.0	7.5	7.5	3.6	3.7	3.7
BANPU PUBLIC CO LTD	14.5	10.3	na	11.3	9.9	8.7
YANZHOU COAL MINING CO-H	3.1	3.5	3.8	5.6	6.3	6.3
SHANXI COKING CO LTD-A	6.7	6.0	6.5	na	na	na
<b>Median total</b>	<b>7.4</b>	<b>8.9</b>	<b>7.5</b>	<b>5.6</b>	<b>5.2</b>	<b>4.9</b>
<b>LW Bogdanka</b>	<b>3.9</b>	<b>89.8</b>	<b>na</b>	<b>0.7</b>	<b>1.0</b>	<b>1.0</b>
<i>Premium/discount</i>	<i>-47%</i>	<i>905%</i>	<i>na</i>	<i>-88%</i>	<i>-81%</i>	<i>-81%</i>
<b>Implied value</b>	<b>39.8</b>	<b>2.1</b>	<b>na</b>	<b>101.1</b>	<b>65.1</b>	<b>58.8</b>

Source: Factset, Erste Group Research

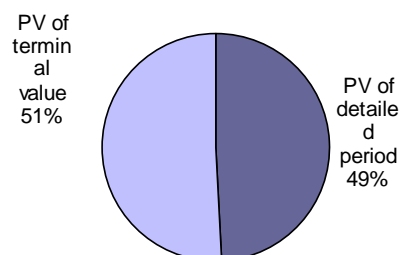
## WACC calculation

	2020e	2021e	2022e	2023e	2024e	NY / TV
Risk free rate	2.0%	2.0%	2.0%	2.0%	2.0%	4.0%
Equity risk premium	6.0%	6.0%	6.0%	6.0%	6.0%	5.0%
Beta	1.0	1.0	1.0	1.0	1.0	1.0
<b>Cost of equity</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>9.0%</b>
Cost of debt	4.0%	4.0%	4.0%	4.0%	4.0%	6.0%
Effective tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
<b>After-tax cost of debt</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>4.9%</b>
Equity weight	99%	99%	99%	99%	99%	99%
<b>WACC</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>8.0%</b>	<b>9.0%</b>

## DCF valuation

(PLN mn)	2020e	2021e	2022e	2023e	2024e	NY / TV
<i>Sales growth</i>	-9.5%	-15.6%	0.0%	0.0%	0.0%	0.0%
EBIT	223.7	7.9	-13.4	-33.0	-33.0	33.0
<i>EBIT margin</i>	11.5%	0.5%	-0.8%	-2.0%	-2.0%	2.0%
<i>Tax rate</i>	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
Taxes on EBIT	-42.5	-1.5	2.5	6.3	6.3	-6.3
<b>NOPLAT</b>	<b>181.2</b>	<b>6.4</b>	<b>-10.9</b>	<b>-26.7</b>	<b>-26.7</b>	<b>26.7</b>
+ Depreciation	439.1	465.5	478.2	489.1	489.1	489.1
<i>Capital expenditures / Depreciation</i>	113.9%	96.7%	94.1%	92.0%	92.0%	99.4%
+/- Change in working capital	-6.2	-9.1	0.0	0.0	0.0	0.0
<i>Chg. working capital / chg. Sales</i>						
- Capital expenditures	-500.0	-450.0	-450.0	-450.0	-450.0	-492.0
<b>Free cash flow to the firm</b>	<b>126.5</b>	<b>31.1</b>	<b>17.4</b>	<b>12.4</b>	<b>12.4</b>	<b>23.8</b>
<i>Terminal value growth</i>						0.0%
Terminal value						265.5
Discounted free cash flow - Dec 31 2019	117.2	26.7	13.8	9.1	8.5	181.1
<b>Enterprise value - Dec 31 2019</b>	<b>356.3</b>					
Minorities	10.2					
Net debt	-240.0					
Other assets	0.0					
Other adjustments	0.0					
<b>Equity value - Dec 31 2019</b>	<b>586.2</b>					
Number of shares outstanding (mn)	34.0					
Cost of equity	8.0%					
<b>12M target price per share (PLN)</b>	<b>18.8</b>					
Share price as of Feb 20th (PLN)	21.0					
<i>Up/Downside</i>	-10.4%					

## Enterprise value breakdown



Source: Erste Group Research

## Sensitivity (per share)

		Terminal value EBIT margin				
		-2.0%	0.0%	2.0%	4.0%	6.0%
WACC	8.0%	4.9	12.2	19.5	26.9	34.2
	8.5%	5.3	12.2	19.2	26.1	33.0
	9.0%	5.8	12.3	18.8	25.3	31.9
	9.5%	6.1	12.3	18.5	24.7	30.9
	10.0%	6.5	12.4	18.2	24.1	30.0
		Terminal value growth				
		-2.0%	-1.0%	0.0%	1.0%	2.0%
WACC	8.0%	18.2	18.8	19.5	20.5	21.7
	8.5%	18.0	18.5	19.2	20.0	21.1
	9.0%	17.8	18.2	18.8	19.5	20.5
	9.5%	17.5	18.0	18.5	19.2	20.0
	10.0%	17.4	17.8	18.2	18.8	19.5

**Erste Securities Polska**

Bogdanka SA | Industrial Metals &amp; Mining | Poland

21 February 2020

<b>Income Statement</b>	<b>2017</b>	<b>2018</b>	<b>2019e</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	31/12/2022
<b>Net sales</b>	<b>1 780.32</b>	<b>1 756.67</b>	<b>2 158.40</b>	<b>1 952.90</b>	<b>1 647.95</b>	<b>1 647.95</b>
Cost of goods sold	-859.16	-1 583.97	-1 652.79	-1 581.70	-1 492.57	-1 513.89
<b>Gross profit</b>	<b>921.16</b>	<b>172.70</b>	<b>505.61</b>	<b>371.20</b>	<b>155.38</b>	<b>134.06</b>
SG&A	-75.02	-144.49	-146.77	-146.77	-146.77	-146.77
Other operating revenues	5.10	34.62	20.00	1.50	1.50	1.50
Other operating expenses	-3.98	-0.81	-3.29	-2.19	-2.19	-2.19
<b>EBITDA</b>	<b>1 203.64</b>	<b>469.19</b>	<b>798.91</b>	<b>662.82</b>	<b>473.47</b>	<b>464.81</b>
Depreciation/amortization	356.37	407.16	423.37	439.08	465.55	478.22
<b>EBIT</b>	<b>847.27</b>	<b>62.03</b>	<b>375.55</b>	<b>223.74</b>	<b>7.92</b>	<b>-13.40</b>
Financial result	-18.51	2.89	2.80	3.20	1.90	0.00
Extraordinary result	0.00	0.00	0.00	0.00	0.00	0.00
<b>EBT</b>	<b>828.76</b>	<b>64.92</b>	<b>378.35</b>	<b>226.94</b>	<b>9.82</b>	<b>-13.40</b>
Income taxes	-160.84	-11.12	-69.99	-43.12	-1.87	2.55
Result from discontinued operations	0.00	0.00	0.00	0.00	0.00	0.00
Minorities and cost of hybrid capital	0.31	0.17	0.00	0.00	0.00	0.00
<b>Net result after minorities</b>	<b>668.24</b>	<b>53.97</b>	<b>308.35</b>	<b>183.82</b>	<b>7.96</b>	<b>-10.86</b>
<b>Balance Sheet</b>	<b>2017</b>	<b>2018</b>	<b>2019e</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)						
Intangible assets	59.96	58.84	58.84	58.84	58.84	58.84
Tangible assets	3 240.31	3 270.29	3 346.93	3 407.85	3 392.30	3 364.09
Financial assets	128.54	134.69	147.64	161.89	177.56	194.80
<b>Total fixed assets</b>	<b>3 428.81</b>	<b>3 463.82</b>	<b>3 553.41</b>	<b>3 628.58</b>	<b>3 628.71</b>	<b>3 617.73</b>
Inventories	62.56	83.38	86.34	78.12	65.92	65.92
Receivables and other current assets	232.58	215.29	303.22	275.48	234.31	234.31
Other assets	0.00	0.00	0.00	0.00	0.00	0.00
Cash and cash equivalents	434.93	170.86	300.00	400.00	350.00	350.00
<b>Total current assets</b>	<b>730.07</b>	<b>469.53</b>	<b>689.56</b>	<b>753.59</b>	<b>650.23</b>	<b>650.23</b>
<b>TOTAL ASSETS</b>	<b>4 158.87</b>	<b>3 933.35</b>	<b>4 242.97</b>	<b>4 382.17</b>	<b>4 278.94</b>	<b>4 267.96</b>
Shareholders'equity	2 901.53	2 950.12	3 232.96	3 355.11	3 326.30	3 315.45
Minorities	10.00	10.18	10.18	10.18	10.18	10.18
Hybrid capital and other reserves	0.00	0.00	0.00	0.00	0.00	0.00
Pension and other LT personnel accruals	0.00	0.00	0.00	0.00	0.00	0.00
LT provisions	0.00	0.00	0.00	0.00	0.00	0.00
Interest-bearing LT debts	16.97	13.93	29.99	54.86	39.97	38.89
Other LT liabilities	495.47	522.50	522.50	517.59	515.13	515.13
<b>Total long-term liabilities</b>	<b>512.44</b>	<b>536.43</b>	<b>552.49</b>	<b>572.45</b>	<b>555.10</b>	<b>554.02</b>
Interest-bearing ST debts	305.15	3.21	29.99	54.86	39.97	38.89
Other ST liabilities	401.71	410.22	394.12	366.33	324.11	326.11
<b>Total short-term liabilities</b>	<b>744.91</b>	<b>446.80</b>	<b>457.51</b>	<b>454.61</b>	<b>397.53</b>	<b>398.49</b>
<b>TOTAL LIAB. , EQUITY</b>	<b>4 158.87</b>	<b>3 933.35</b>	<b>4 242.97</b>	<b>4 382.17</b>	<b>4 278.94</b>	<b>4 267.96</b>
<b>Cash Flow Statement</b>	<b>2017</b>	<b>2018</b>	<b>2019e</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
(IAS, PLN mn, 31/12)						
Cash flow from operating activities	608.52	458.87	611.81	611.93	466.55	452.15
Cash flow from investing activities	-372.05	-418.23	-500.00	-500.00	-450.00	-450.00
Cash flow from financing activities	-342.64	-304.78	17.33	-11.93	-66.55	-2.15
<b>CHANGE IN CASH , CASH EQU.</b>	<b>-106.18</b>	<b>-264.14</b>	<b>129.14</b>	<b>100.00</b>	<b>-50.00</b>	<b>0.00</b>
<b>Margins &amp; Ratios</b>	<b>2017</b>	<b>2018</b>	<b>2019e</b>	<b>2020e</b>	<b>2021e</b>	<b>2022e</b>
Sales growth	-0.3%	-1.3%	22.9%	-9.5%	-15.6%	0.0%
EBITDA margin	67.6%	26.7%	37.0%	33.9%	28.7%	28.2%
EBIT margin	47.6%	3.5%	17.4%	11.5%	0.5%	-0.8%
Net profit margin	37.5%	3.1%	14.3%	9.4%	0.5%	-0.7%
ROE	25.7%	1.8%	10.0%	5.6%	0.2%	-0.3%
ROCE	22.0%	1.6%	9.1%	5.2%	0.2%	-0.3%
Equity ratio	69.5%	74.7%	76.0%	76.3%	77.5%	77.4%
Net debt	-112.8	-153.7	-240.0	-290.3	-270.1	-272.2
Working capital	-14.8	22.7	232.0	299.0	252.7	251.7
Capital employed	3 274.2	3 308.7	3 505.3	3 572.2	3 561.2	3 548.2
Inventory turnover	12.8	21.7	19.5	19.2	20.7	23.0

Source: Company data, Erste Group estimates

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