

## CEE Equity Research

## Coal Mining, Poland

04 October 2024 08:05 CET

## Cliff-Hanger

## Recommendation Underperform maintained; TP at PLN18

The company has burnt PLN1.6bn cash in 1H2024, and we expect 3/4Q2024 EBITDAs at PLN0.2bn should trigger another PLN2bn cash burn in 2H24E, depressing JSW's Net Cash position to ~PLN3bn in Dec2024E. Also, the company may have "quietly" lost 0.6mt coal production in 2024E (gap between early goal at 14mt, 0.95mt impact of force majeure and 12.45mt guidance), and the management's suggestion of "increased intensity of natural hazards" bodes poorly for JSW's short- to long-term volume outlook. Hence, we appreciate hypothetical opex / capex restructuring totaling at PLN5.7bn in 2025-27 (implying PLN1.6bn cash upside p.a.), but without heavy workforce and wage cuts we believe these look pale in contrast to 2024E's PLN3.5bn cash burn. JSW remains an option for the Chinese stimuli, Australian cyclones and zloty weakening, but the company has not paid dividend for years, and we believe opex cuts would negate dividend payments terminally. Please also note, that our core scenario for JSW's implies PLN7.6bn of external equity inflows.

**Volume downside risk?** In September 2024 management cut 2024 volume guidance to 12.5mt, down 0.6mt in two months, implying 2H2024E volume at 6.45mt. The official statements "increased intensity of natural hazards" and "risk of loss of some resources" represents potential short- to long-term volume warning, likely exposing the official 16mt coal production guidance, we conclude (2H24 guidance annualized points at 12.9mt, no new force majeure).

**3Q/4Q24E Preview: PLN2bn cash burn?** We expect JSW's metcoal benchmarks at PLN930/t in 3Q2024E (down 9% y/y) and PLN851/t in 4Q2024E (down 30% y/y). Also, recently the management has lowered FY2024 coal production guidance to 12.45mt, implying mere 6.45mt 2H2024E production. 1H2024E opex trends remain discouraging, hence low volume and falling benchmarks should trim 3Q/4Q2024E EBITDAs to PLN0.2bn, we calculate. Most importantly, some PLN1bn of quarterly capex, along with likely inventories on the rise, may jointly result in JSW's 2H2024E cash burn close to PLN2bn, we believe.

**2025-27E restructuring at PLN5.7bn?** There's no official statement yet, but trade unions leaked that management might be eyeing PLN5.7bn in 2025-27 restructuring, incl. PLN1.4bn in capex cuts. PLN2.4bn of these would require social side's approval (outcome highly uncertain, we note), and almost all of these would be restored in 2028. Importantly, management proposes no lay-offs or salary cuts.

**Risks to our call.** Geology, mining volumes and USDPLN exchange rate represent the key down/up-side risks to JSW, in our view. Any further weakening of the Chinese economy or the continued global housing crunch pose downsides, while the Chinese stimuli could come in supportive. Any sudden climatic event could pose an upside. EU's implementation of CBAM could pose substantial upside, as well as JSW's seen as takeover target. Also, bullish long-term strategy update represents an upside risk.

**Forecasts, valuation, recommendation.** In our models we cut JSW's coal production to 13.25mt p.a., down from 14.0mt previously. Also, we assume wages remaining flat in years 2025-26E, growing at 2.63% p.a. as of 2027E, based on the management's scenario approach. Moreover, we include non-personnel opex savings at PLN588mn annually as of 2025E, and apply personnel cost-related PLN850mn opex cut in years 2026E and 2027E only. Also, we assume no workforce cuts, as the management does not propose these either. DCF-based valuation grows to PLN7 a share, and comparative valuation doubling to PLN43 triggers blended TP increase to PLN18. Remaining high downside to the stock makes us keep JSW at Underperform.

## JSW: Financial summary (year to December)

PLNmn	2021	2022	2023	2024E	2025E	2026E
Sales	10,629	20,199	15 338	11 669	11 494	11 544
EBITDA	2,483	10,564	4 213	961	1 480	2 729
EBIT	1,263	9,336	2 363	-7 320	-557	592
Net profit	904	7,561	997	-6 162	-684	244
P/E (x)	5.0	0.8	5.4	-0.5	-4.9	13.8
EV/EBITDA* (x)	3.2	0.1	0.5	3.5	3.4	2.1
DY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF Yield	-2.2%	133.5%	-19.7%	-105.0%	-48.7%	-18.7%

Source: Company data, Santander Brokerage Poland estimates, \* includes provisions

## Recommendation Underperform

## Target Price (Dec2025, PLN) 18

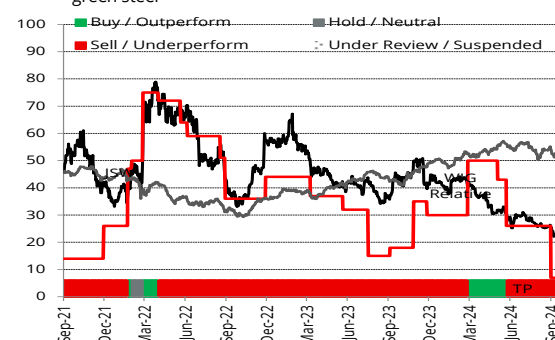
Price (PLN, October 03, 2024)	28.77
Market cap. (PLNmn)	3,378
Free float (%)	44.8
Number of shares (mn)	117.4

Previous report issued on Sept 04, 2024 with:

Recommendation	Underperform
TP (PLN, Dec'25)	7

## What has changed

- TP upped to PLN18 from PLN7, recommendation Underperform maintained
- Macro woes depressed metcoal prices to USD180/t (s-t) and below USD200/t (l-t), before the Chinese stimuli made it recover recently. The management also highlights rising low-priced Asian coke exports into the European market
- Unionists leaked opex / capex restructuring plan, potentially totaling PLN5.7bn in years 2025-27. It includes no workforce reduction nor wage cuts. PLN2.4bn depends on approval of the social side, and privileges are to be restored as of 2028;
- Company cut its FY24 coal production to 12.45mt, down 0.5mt in two months. Also, management highlights rising intensity of underground hazards, potentially a downside risk to future volumes
- JSW has burnt PLN1.1bn cash in 2Q24, and we expect the company's 3Q/4Q24E EBITDAs at PLN0.2bn apiece. It may result in another PLN2bn cash burn in 2H2024E, totaling PLN3.5bn in FY2024E;
- Chinese stimuli, Indian booming demand, weakening zloty, and the Australian intense climatic events represent upside risks to our forecasts / valuation. Also, bullish JSW strategy and EU's CBAM implementation could pose upsides, which could be easily negated by geologic event or EU's potential subsidies to 'green steel'



The chart measures performance against the WIG index.

## Main shareholders % of votes

State	55.2
-------	------

Source: Company data

## Company description

Europe's largest coking coal producer, also one of the largest European coke producers.

## Analyst

Pawel Puchalski, CFA  
Equity Analyst

(+48) 517 881 837

pawel.puchalski@santander.pl

## Key Stories

## Results' Section

### [-] 3Q/4Q2024E Results' Preview

Fig. 1. Metcoal / coke benchmarks, 1Q-4Q2024E [PLN/t]

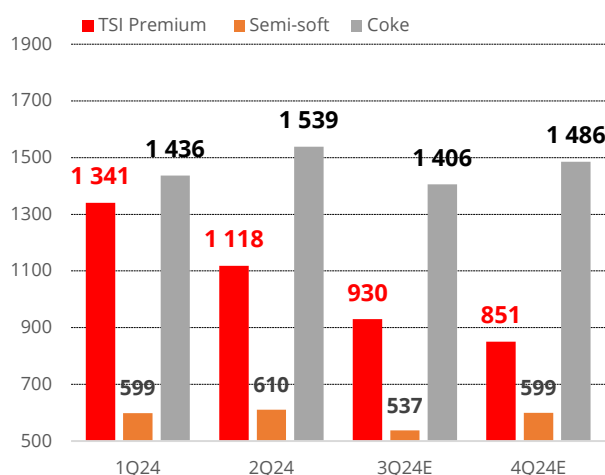
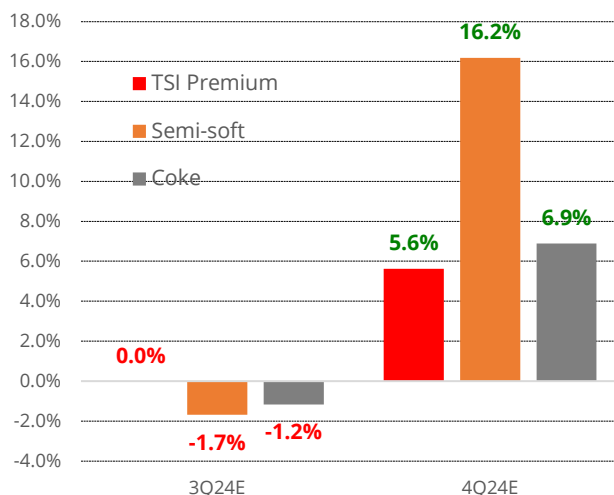


Fig. 2. Changes\* to JSW benchmarks: Sept2024 vs Aug2024



Source for both graphs: JSW, Australian metcoal futures by Bloomberg, Santander Brokerage Poland estimates, \* one-month changes to Santander's calculations

Fig. 3. JSW: 3Q/4Q2024E results' preview

PLNmnn	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24E	y/y	q/q	4Q24E	y/y	q/q
Sales	4 139	3 402	2 946	3 415	2 739	<b>2 720</b>	-20.0%	-0.7%	<b>2 772</b>	-5.9%	1.9%
EBITDA	1 369	531	700	532	-5	<b>236</b>	-55.6%	n.m.	<b>199</b>	-71.6%	-15.7%
EBITDA margin	33.1%	15.6%	23.7%	15.6%	-0.2%	<b>8.7%</b>	-6.9	8.9	<b>7.2%</b>	-16.6	-1.5
EBIT	961	85	206	48	-533	<b>-248</b>	n.m.	n.m.	<b>-285</b>	n.m.	n.m.
EBIT margin	23.2%	2.5%	7.0%	1.4%	-19.5%	<b>-9.1%</b>	-11.6	10.3	<b>-10.3%</b>	-17.3	-1.2
Net profit	787	-1 209	153	-10	-909	<b>-201</b>	n.m.	n.m.	<b>-231</b>	n.m.	n.m.
Net margin	19.0%	-35.5%	5.2%	-0.3%	-33.2%	<b>-7.4%</b>	28.2	25.8	<b>-8.3%</b>	-13.5	-0.9
	1 456	927	878	532	298	<b>236</b>	-79.5%	-44.0%	<b>199</b>	-77.3%	-15.7%

Source: Company data, Santander Brokerage Poland estimates

**Comment: Strong Negative.** We expect JSW's metcoal benchmarks at PLN930/t in 3Q2024E (down 9% y/y) and PLN851/t in 4Q2024E (down 30% y/y). Most importantly, these should come in substantially below 2Q2024's PLN1.1k/t benchmark price, representing strong downside to 3/4Q2024E reported results on standalone basis. Additionally, recently the management has lowered FY2024 coal production guidance to 12.45mt. JSW produced 6.0mt in 1H2024, hence we believe the company should deliver 3.1mt volume in 3Q2024E and 3.35mt in 3Q2024, higher to 2.87mt in 2Q2024. Keeping in mind 2Q2024 one-offs (PLN6.5bn write-off and PLN288mn bonus) and continually discouraging opex trends (energy and third-party costs on the rise), we expect JSW to post 3Q/4Q2024E EBITDAs at some PLN0.2bn per quarter.

Most importantly, multi-year inflationary trends may have resulted in JSW's must-have PLN1bn of quarterly capex, especially as the company has got to invest intensively in underground longwalls

to deliver potential coal production growth in the future. These, and likely inventories on the rise, should keep JSW's quarterly cash burn at ~PLN1bn per quarter, we calculate, depressing year-end Net Cash position to PLN3bn potentially, implying stunning 12-month PLN3.5bn cash burn.

## [-] 2Q2024 Results' Review

[published within Flashnote on September 30, 2024]

**Fig. 4. JSW: 2Q2024 results' review**

PLNmn	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	y/y	q/q	SANe	Cons.
Sales	4 149	4 851	4 139	3 402	2 946	3 415	<b>2 739</b>	-33.8%	-19.8%	2 739	2 749
EBITDA	1 831	1 956	1 369	531	700	532	<b>-6 355</b>	n.m.	n.m.	-98	-59
EBITDA margin	44.1%	40.3%	33.1%	15.6%	23.7%	15.6%	<b>-232.0%</b>	-265.1	-247.6	-3.6%	-2.1%
EBIT	1 530	1 575	961	85	206	48	<b>-6 883</b>	n.m.	n.m.	-582	-524
EBIT margin	36.9%	32.5%	23.2%	2.5%	7.0%	1.4%	<b>-251.3%</b>	-274.5	-252.7	-21.2%	-19.1%
Net profit	1 233	1 267	787	-1 209	153	-10	<b>-6 052</b>	n.m.	n.m.	-465	-449
Net margin	29.7%	26.1%	19.0%	-35.5%	5.2%	-0.3%	<b>-221.0%</b>	-240.0	-220.7	-17.0%	-16.3%
Adj. EBITDA	1 826	1 965	1 456	927	878	532	<b>298</b>	-72.9%	-39.4%	192	

Source: Company data, Santander Brokerage Poland estimates

Below we list key takeaways from the company's 2Q2024 report:

- One-offs, unique events. The company created PLN6.3bn net asset write-down, depressing its reported results down EBITDA line. Additionally, the company presents PLN0.3bn bonus to employees as one-off. Gain on Rainy-Day fund (booked into EBITDA) down to PLN93mn in 2Q2024, down PLN60mn q/q and down from PLN236mn in 1Q2023;
- Cash Position. Rainy-Day fund at PLN5.8bn, total Net Cash position at PLN5.05bn, including leases at PLN4.5bn. this compares to PLN6.1bn net cash position in 1q2024;
- Capex. JSW's 1H2024 capex at PLN2.1bn, implying PLN1bn investment outlays in 2Q2024;
- Coke by-products. 1H2024 sales lower by PLN152mn y/y, down 39% y/y;
- Total COGS at PLN4.15bn, up 2% y/y, including personnel costs at PLN1.95bn, down 3% y/y. These included PLN289mn one-off bonus in 2Q2024, compared to PLN261mn booked in 2Q2023;
- Mining Cash Cost at PLN2.6bn in 2Q2024, 5% higher y/y and PLN0.3bn higher q/q. Unit MCC at all-time high PLN903/t, 21% higher y/y and PLN170/t higher q/q. These include personnel cost at PLN1.37bn, flat y/y and PLN0.2bn higher q/q (including larger part of PLN0.3bn one-off);
- Conversion Cash Cost at PLN226mn in 2Q2024, down 14% q/q and down PLN40mn q/q, mostly driven by volume lower by 13% q/q. Unit CCC at PLN311/t, flat y/y and PLN3/t higher q/q;
- No. of employees at 32.3k in June 2024, a 3.5% increase (1,100 employees) vs December 2023;
- The company's conference call is scheduled for today at 10:00 am CET;
- JSW's Risk Profile, acc. to management. Here we present only risk factors that increased or decreased vs 2023, acc. to the management. Increase: Risk to coke volumes & reduced

coke market share (due to low metcoal); Risk of new environmental obligations (methane). Decrease: Dispute with trade unions; RFR level;

- Special statements concerning opex restructuring or future coal production volume: NONE. The direct quotes from the management's comment on 2Q2024 results at the press communique: "JSW's financial standing is not ideal".

**Comment: Strong Negative.** The company's adjusted 2Q2024 results come a notch above our estimates, with adj. EBITDA at PLN0.3bn, while the reported figures are depressed by PLN6.3bn write-down. We note the company's MCC remains on the steep rise, up to PLN2.6bn in 2Q2024, driving unit MCC reading to all-time high PLN903/t. The latter is high due to abnormally low quarterly volumes (impact of past force majeure) and PLN0.3bn one-off, but it still settles at stunning high USD235/t, we calculate, which compares poorly to metcoal price at USD200/t presently. Please also note, that the company is spending PLN1bn capex per quarter, and we believe this might represent a new long-term normal, potentially.

We believe that the most important news from 2Q2024 results is that **the company has seemingly burnt PLN1.1bn cash in one quarter, with its net cash position falling to PLN5.0bn in June 2024**. Also, its headcount grew by 1.1k employees, or 4.5%, in six months.

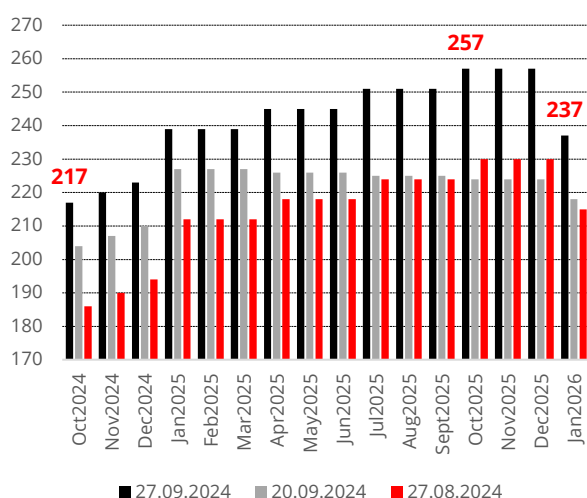
Last but not least, the **management suggests the situation is "not ideal", which we find an understatement**, to say the least, not coming in supportive during potential tough opex restructuring negotiations with the trade unions. Also, the management did not provide any information on the future post-asset write-off production volumes, or opex restructuring measures applied.

## Other Stories

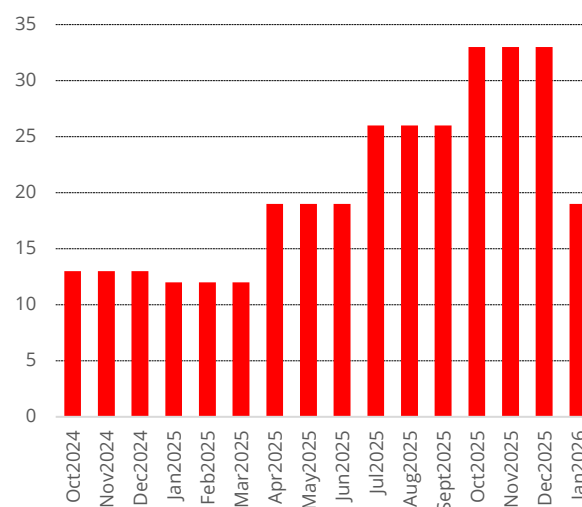
### [+] Chinese stimulus boosts metcoal & iron ore prices

*[published within Flashnote on September 30, 2024]*

**Fig. 5. Australian Metcoal, 27/09 vs 20/09 vs 27/08 [USD/t]**



**Fig. 6. Australian Metcoal, weekly price changes [USD/t]**



Source for both graphs: Bloomberg, Santander Brokerage Poland estimates

Ten days ago the Chinese government presented the package of its stimuli. These resulted in strong upside to copper prices, growing ~15% over a week. Late last week, iron ore and metcoal prices begun reacting, with both products' prices ending last week ~15% higher vs respective troughs two weeks ago.

Please note that while iron ore and metcoal prices grew substantially in the last two days, the prices of global steel (Chinese one, in particular) and molybdenum remained barely changed.

**Comment: Positive, short-lived, potentially?** The Australian forward contract metcoal prices grew by USD15-32/t over the last week, representing potentially substantial support to JSW's mid-to long-term results and FCFs. Still, please note that 5-month benchmarks used by JSW should result in the above-mentioned changes having very limited impact onto the company's (presumably very weak) 3Q2024E EBITDA & FCF, we believe.

Investors should keep in mind that the prices of global steel (Chinese one, in particular) and molybdenum remained barely changed in the above-mentioned period, we note. Also, coke prices still remain below their levels observed in late August. Therefore, we assume that either coke and steel prices would start rising significantly in the coming days, or the move of iron ore and metcoal represents a speculative bubble, rather than fundamentally-supported trend. Coke-makers and steelmakers would not be in position to pay higher and higher metcoal prices when coke / steel prices underperform metcoal.

## **[-] PLN6.3bn net asset write-off in coal / coke segments**

*[published as separate Flashnote on September 19, 2024]*

Acc. to today's communique (published after 9 p.m.), JSW completed impairment tests of its fixed assets. The tests showed a loss of value in the Coal and Coke segments in the total amount of approximately PLN6.815bn. The write-downs settle at PLN5.4bn in coal segment (all mines affected), and PLN1.4bn in coke segment. At the same time, the company will reverse write-offs in the Coal segment for a total amount of PLN510mn.

Additionally, the parent company will write-down PLN1.2bn of its JSW Koks subsidiary.

The net write-off will reduce the operating result of the Group. The events should not affect the liquidity situation of JSW, acc. to the communique.

**Comment: Minor Negative, with potential to turn into Very Strong Negative, if followed by communique on lost underground reserves.**

In the short-term, the company's Net Cash not EBITDA should be affected by the write-off, we admit. Naturally, net asset write-off totaling PLN6.3bn is negative news. Still, it would only represent downside to Group's EBIT and bottom lines. The latter could be of any importance only

provided that 2025 dividend payment could be possible, but the company highlighted repeatedly that financial arrangements forbid JSW pay dividend in next 12 months after the last amortization of Stability Fund (which is scheduled for Sept/Oct2024).

There are no more details presented, but in our view such scale of write-offs might suggest that soon the management might present an updated volume outlook, with some prospective underground reserves / longwalls hypothetically officially announced lost or economically unjustified. Please keep in mind that just one week ago (in communicate related to 2024 coal production cut to 12.45mt from 13.1mt) the management specifically pointed to “increased intensity of associated natural hazards [methane, fire, water, rock bursts, collapse] and limited possibilities of selecting effective prevention result in reduced progress of the walls, delay in their launch, and in extreme cases, the need to early termination [loss of some resources]”. The above-mentioned scenario could hypothetically turn 2024’s coal production guidance (12.45mt) into JSW’s new-normal, which in our view would represent very material downside to JSW’s short- to long-term financial outlook (EBITDA / FCF).

## **[-] FY2024 production cut to 12.45mt**

*[published as separate Flashnote on September 13, 2024]*

The company updated its FY2024 coal production guidance to 12.45mt, down from 13.07mt presented less than two months ago (communicate as of July 18, 2024). The statements from early 2024 suggested that the company could produce some 14mt.

Below we list key drivers of the subsequent production cut:

- No improvement at Pniówek longwall (an underground fire continues there for long months), which makes it impossible to kick off production in that area this year;
- JSW points at the increased intensity of associated natural hazards [methane, fire, water, rock bursts, collapse] and limited possibilities of selecting effective prevention result in reduced progress of the walls, delay in their launch, and in extreme cases, the need to complete them earlier [loss of some resources];
- Unpredicted delays in underground longwalls’ mechanization delayed initiation of production at F-3 longwall at Zofiówka-Bzie area;
- Contaminated ore extracted from Pniówek mine weakens the processing plant’s effectiveness. Additionally, the parent company will write-down PLN1.2bn of its JSW Koks subsidiary.

**Comment: Strong Negative, cut to 2024 production is NOT the most worrisome news. 0.6mt production cut should reduce 2024E EBITDA by PLN0.5bn and cash by PLN0.4bn. Management’s statement poses high downside risk to 2025E volumes, we believe (production at 12.9mt, substantially, below our estimates), and statements like “increased intensity of natural hazards” and “risk of loss of some resources” represent potential long-term profit-warning, hypothetically exposing the official 16mt coal production guidance, we conclude.**

**2024 cut implications.** We calculate that 0.6mt coal production loss could make the company lose PLN0.5bn at EBITDA and PLN0.4bn at cash. However, if the company’s processing plant is not

operating properly, JSW's share of coking coal could also come in weaker, potentially contributing to further expansion of EBITDA / FCF losses. Based on 13.07mt coal production in 2024E, we expected the company should produce ~PLN0.3bn EBITDA in 3Q & 4Q2024E apiece, but today's news should result in JSW's 4Q2024E core EBITDA turning into PLN0.2bn loss, potentially.

**It could be worse, potentially...** Two months ago, Mr. Zietek (JSW's trade unionist) suggested that JSW's 2024 coal production might settle in 12.0-12.5mt range, officially challenging the management's 13.07mt guidance. It turns out that he was 100% correct, quite a disturbing news to management's predicting powers. Hence, if we assume he could be right at 12.0mt production goal, JSW's EBITDA might potentially come in weaker by another PLN0.5bn vs above-mentioned calculations.

**2025 volume downside risk?** The company's new 2024 coal production guidance implies 2H2024E production at 6.45mt only. If Pniowek's underground fire continues, and nature remains unsupportive (the core case to be applied for JSW, we assume), JSW's earliest outlook for 2025E coal production could settle at 12.9mt, substantially below our assumptions. Such scenario would result in accelerated cash burn, we conclude, and JSW's Rainy-Day Fund might be depleted in late 2025E, hypothetically. In such environment (and strong negative macro news flow from China and Europe), the restructuring might be required to keep company solvent, rather than offer any share price upside, we conclude.

**2024 production cut is NOT the major problem.** The company admits underground fire at one of its best mines (Pniowek) continues. More importantly, the company openly points that "the increased intensity of associated natural hazards [methane, fire, water, rock bursts, collapse] and limited possibilities of selecting effective prevention result in reduced progress of the walls, delay in their launch, and in extreme cases, the need to complete them earlier [loss of some resources]". We believe it might sound like very bearish outlook for the company's mid- to long-term coal production outlook. All analytical models assume JSW's annual coal production at 14-16mt, and the latter still represents the official production guidance for 2030. We believe the fact that the management admits that JSW faces "an increased intensity of natural hazards" that might result in "loss of some resources" might suggest high downside risk to the company's long-term production outlook.

## Opex Restructuring

### Management's wage growth assessment

In the company's 2Q2024 financial statements the management presented fundamentals of write-off calculations. These included 10% cut to modernization costs, and 5% cut to energy costs. With respect to personnel costs, these included:

- No lay-offs,
- No new hirings, and focus on natural attritions;
- Scenario approach to wage growth, ranging from wage total freeze in years 2025-29 (Optimistic Scenario), wage growth freeze in years 2025-26 (Base Scenario), to no cuts to



remuneration growth (Pessimistic Scenario). Management assigned scenarios likelihood respectively at 25%, 50% and 25%.

**Fig. 7. JSW: Management's scenario approach to wage growth, summarized**

Scenario	Probability	2025	2026	2027
Optimistic	25%	0.0%	0.0%	0.0%
Base	50%	0.0%	0.0%	3.5%
Pessimistic	25%	5.0%	5.0%	3.5%
<b>Weighted wage growth</b>		<b>1.25%</b>	<b>1.25%</b>	<b>2.63%</b>

Source: Company data, Santander Brokerage Poland estimates

Based on management's set of assumptions, we arrive at probability-weighted 2025/2026E wage growth at 1.25% per annum, expanding to 2.63% thereafter. To remain on the safe side, **in our model we assumed lack of wage growth in years 2025 & 2026, and we also applied management-driven 2.63% growth rate as of 2027E.**

## **[+] PLN5.7bn worth of 2024-27 restructuring proposals leaked (no layoffs, PLN2.4bn requires unionists' approval)**

*[published within Flashnote on October 03, 2024]*

Yesterday late evening (Oct 2, 2024), JSW's trade unions published an unconfirmed management's restructuring programme at its Facebook page. The trade unions believe it might have recently been sent to the company's Supervisory Board, for consultation.

Below we list key initiatives of JSW's restructuring programme for years 2024-2027. These are listed from the highest to lowest impact on JSW in zloty. Also, we **marked in red & bold all proposals that require an approval of the trade unions / employees:**

- PLN1.44bn. Reduction of investment outlays;
- **PLN1.22bn. Withholding of 14th salary payment for three years;**
- **PLN0.88bn. Withholding of in-kind coal payments for three years;**
- PLN0.54bn. Freeze on salaries coupled with natural attrition process;
- PLN0.43bn. Optimization of goods&materials' purchases;
- PLN0.32bn. Opex restructuring in JSW subsidiaries;
- PLN0.27bn. Technical issues' optimization within the parent company;
- **PLN0.15bn. Withholding of regeneration meals for some employees;**
- **PLN0.14bn. Change in holidays' accruals;**
- PLN0.13bn. Cuts to sponsoring and grants;
- **PLN0.09bn. Withholding of Occupational Safety & Health bonuses;**
- **PLN0.07bn. Withholding of subsidies for sickness absence.**

**Comment: Strong Positive, with asterisks, if confirmed and delivered. Total amount of the above-mentioned initiatives settles at high PLN5.6bn, or PLN1.6bn upside to annual FCF in years 2025-27, we calculate. These should warrant very strong share price reaction,**



**potentially, especially as investors might recollect late 2015's restructuring (combined with metcoal prices' rally) let JSW share price grow from PLN9 to PLN100 a share.**

**Only PLN0.5bn per annum of the above-mentioned should not require social side's approval, and the potential PLN2.4bn savings explicitly require unionists' approval (previously it took three quarters, strikes and CEO dismissal). Most importantly, the management proposes the bulk of savings would be gone in 2028, and it suggests no wage or workforce cuts – we believe the program is to save employees, not minority shareholder.**

The total amount of the above-mentioned restructuring initiatives settles at quite impressive PLN5.7bn for years 2024-2027 (PLN1.6bn upside to annual FCF, adj. for tax). These include PLN1.4bn cuts to capex (PLN0.5bn upside to annual FCF), and PLN4.3bn cuts to opex (PLN1.1bn upside to FCF, adj. for tax). Within the latter, six initiatives totalling PLN2.55bn (PLN0.7bn upside to FCF, adj. for tax) in potential savings requires an approval of the social side, while PLN1.76bn (PLN0.5bn upside to FCF, adj. for tax) does not require any approval.

If we assume the employees / trade unions agree on that until December 2024, we could expect 2025-27E coming PLN1.6bn better at FCF generation.

**Project drawbacks.** The project (and the fact that it exists) represents an undoubted positive news for the company. Though, below we present our concerns.

1) Capex grew to ~PLN4bn per annum due to strong inflationary pressures, hence capex cuts may come in detrimental to JSW's coal production capacity;

2) The bulk of opex savings requires approval of the social side, which we believe might be very time-consuming process, and the management might be forced to entire give up on these, curtail these, or grant substantial "welcome bonuses" to employees in exchange for their approval. Last time (2015), it took three quarters, employees' strikes and CEO dismissal for the trade unions to agree on three-year wages' cut, and JSW was an indebted company back then;

3) Out of six changes directly affecting employees' remuneration, five (PLN2.4bn, or 57% of all opex initiatives) relate to three-year suspension, not cancellation. If situation hypothetically improves in 2028, all these payments would be restored. In this light, we conclude the plan has been drafted for JSW's employees and mid-term solvency, not for minority shareholders;

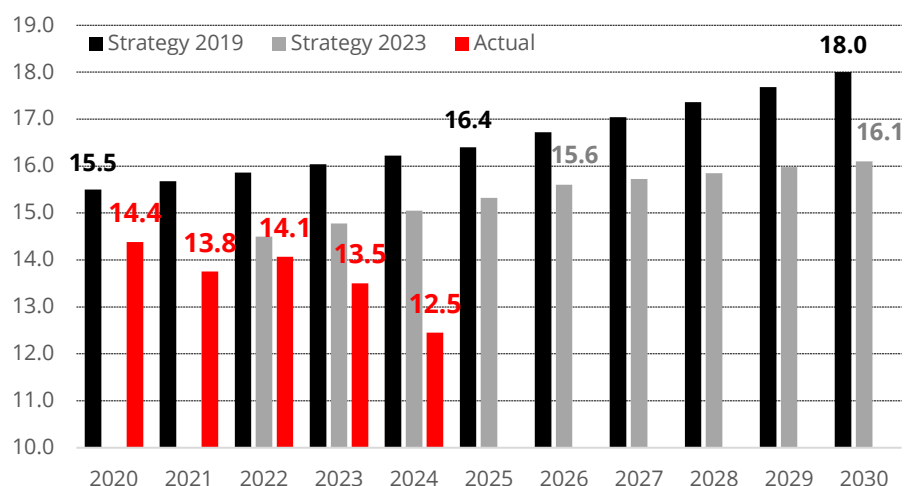
4) Lack of base salary cuts and / or group layoffs, while overstaffing represents JSW's most important problem, we believe;

5) We are quite certain that such plan would include suspension of dividend payment until 2028 minimum. We believe the company will never pay a dividend in the future, and such message announced should be negative to minority shareholders.

**Why may it not be enough?** So far the company has burnt PLN1.7bn in 1H2024, and we expect its FY2024E cash burn should settle at PLN3.6bn, potentially depleting JSW's Net Cash position below PLN3bn at year-end 2024E. True, the company lost 1mt coal production in several force majeures, but it also enjoyed previous year's unique support to 1Q2024 FCFs from very high 2023 metcoal / coke prices. The Chinese current and hypothetical future all-kind economical stimuli, and heavy Australian rainfall have the potential to support metcoal / coke prices in the short-to medium term, but the European macro malaise is a fact, and subsequent (frequency on the rise) underground geological events represent the most logical outcome, we believe.

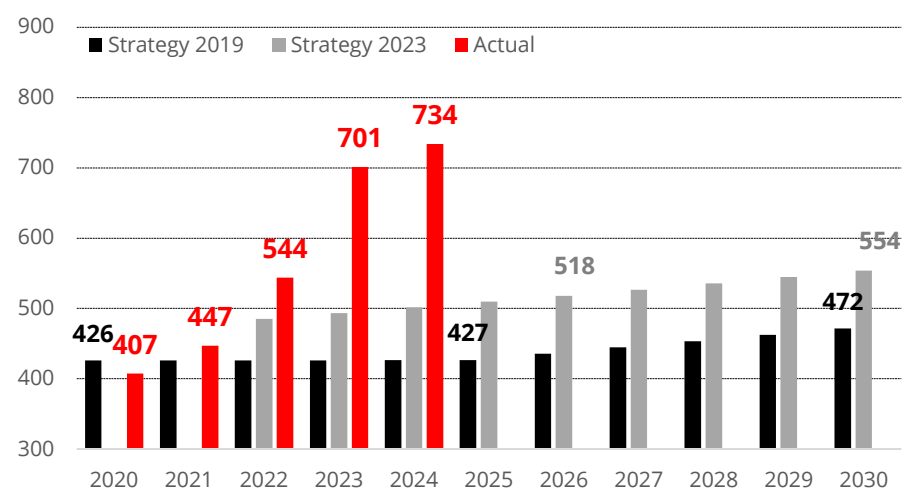
**This time will be different?** JSW published two strategies in the last five years, in 2019 and in 2023. Sadly, the reality check is very negative – this year the company should produce 12.45mt coal, shy of +16mt (2019 strategy) or +15mt (2023 strategy). Additionally, JSW MCC should expand to PLN9.1bn, up 50% in three years, and over 30% above levels suggested by the two previous strategies. The above-mentioned plan is not yet a strategy (and we have major doubts concerning future coal volumes), but we believe that the below-mentioned charts present JSW's lack of volume and cost control at its extreme.

**Fig. 8. JSW's volumes: 2019 strategy, 2023 strategy and actual [mt]**



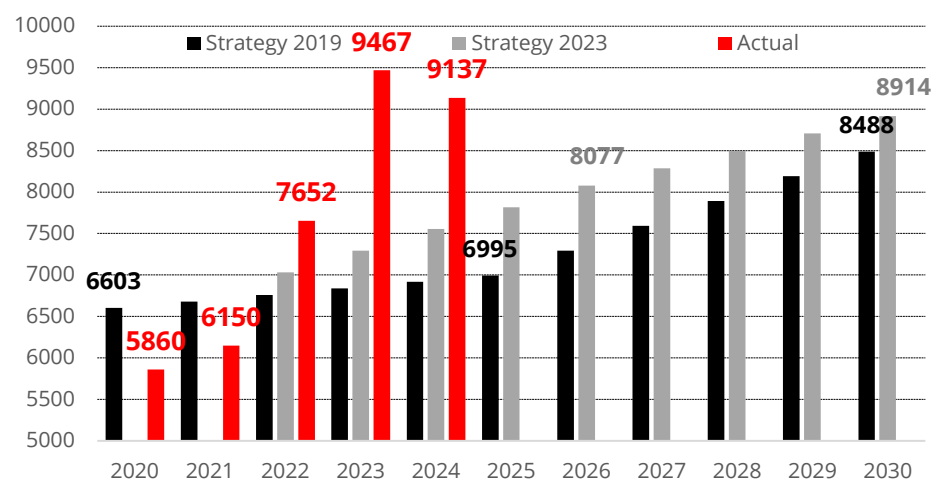
Source: Company Data, Santander Brokerage Poland estimates, 2019 strategy presented outlook for years 2025 and 2030, 2023 strategy presented outlook for years 2026 and 2030

**Fig. 9. JSW's Unit MCC: 2019 strategy, 2023 strategy and actual [PLN/t]**



Source: Company Data, Santander Brokerage Poland estimates, 2019 strategy presented outlook for years 2025 and 2030, 2023 strategy presented outlook for years 2026 and 2030

**Fig. 10. JSW's total MCC: 2019 strategy, 2023 strategy and actual [PLNm]**



Source: Company Data, Santander Brokerage Poland estimates, 2019 strategy presented outlook for years 2025 and 2030, 2023 strategy presented outlook for years 2026 and 2030

## **[-] New personnel assumptions: freeze on hirings, freeze on salaries' growth – Facebook**

*[published within Santander CEE Daily on September 30, 2024]*

Last Friday, we found an internal note sent by JSW's management. It was published by trade unions at its Facebook webpage. The note said that below-mentioned assumption should be made during preparation of JSW's new technical and operational internal forecasts, which should ultimately result in the company's positive annual cash flows.

The note referred to assumptions to be applied with respect to personnel costs in general. The list of assumptions to be made included:

- Freeze on new hirings in the Group. Hiring new employees would require direct approval of the company's management board;
- 100% utilization of natural attrition;
- Freeze on wages' growth, starting from 2025. Also, the company intends to start analyzes of JSW's new remuneration policy, linking extra payments to personnel with Group's results and market environment;
- Optimization of working days, with the shift of workload towards Monday-Friday period, and reduction of workload planned for weekends and holidays.

**Comment: Negative.** We certainly agree that the freeze on salaries' growth, and freeze on new hirings are a must for JSW. Naturally, we fully agree that optimization of workload between regular working days and weekends/holidays should be implemented. Finally, the linkage between macro environment, Group's financial results and personnel costs should have been implemented years ago, we believe.

However, we believe all these might only put further personnel costs' growth on hold in the short term, potentially resulting in slow decline in the long-term. We believe that current environment requires way more radical approach, and **workforce cuts is the part we are missing the most in the above-mentioned management's set of assumptions.**

Moreover, we believe that the geology should remain very unsupportive of JSW's volumes in the short-, medium- and long-term. Hence, while the list of solutions above might come in positive, and current metcoal price rally might offer a short-term gain, these would keep **JSW very downside-exposed during the next major geological problems** (which rising likelihood had been highlighted by the management a moment ago).

## Opex Restructuring Mirages?

*[published within Flashnote on September 18, 2024]*

Acc. to wnp.pl internet portal, yesterday the company's CEO Janta wrote a letter to JSW employees. Based on the internet article, its key themes included:

- The current management board is focusing on specific proposals for solutions that will address the company's most urgent problems;
- The key in this aspect is to make production costs more realistic in relation to market conditions and to increase efficiency. However, these changes will not be possible without the understanding and support of the employees, which is why, on behalf of myself and other members of the Management Board, I would like to assure everyone that the well-being and stable jobs of our employees are an absolute priority for the Management Board;
- [Past] management decisions and agreements that seemed beneficial to employees in the short term turned out to be wrong in the long term. Today, with much lower prices on the global raw materials market, they translate into falling profitability of business and make it impossible to continue operating in the current model;
- The analysis of the employment structure in the last six years shows a disproportionate increase in the number of employees employed in the administrative part of the company in relation to changes in the employment of employees in technical positions. The lack of clearly defined goals and performance indicators point to the lack of a realistic vision for the company's development and the lack of care of all decision-makers in recent years for employees directly related to mining, who today carry the entire burden of costs on their shoulders - costs that are too high and largely unnecessary;
- Strategic decisions are still to be made by the management. Currently, the management board is focusing on specific proposals for solutions that will address the company's most urgent problems - m.in. increasing production, reducing costs and securing jobs for employees who represent its key asset.

**Comment: Positive, Hopefully?** After five months, the management suggests some opex optimization. Timing, scale, one-off burdens remain an unknown, and we believe the fundamental outlook seems quite miserable both at steel and at JSW's coal production volumes. We calculate that JSW would have required PLN2bn in annual savings to bring its FCFs at black again, which we find totally improbable scenario. Still, opex restructuring could hypothetically represent one of the (last?) JSW's share price drivers, we believe.

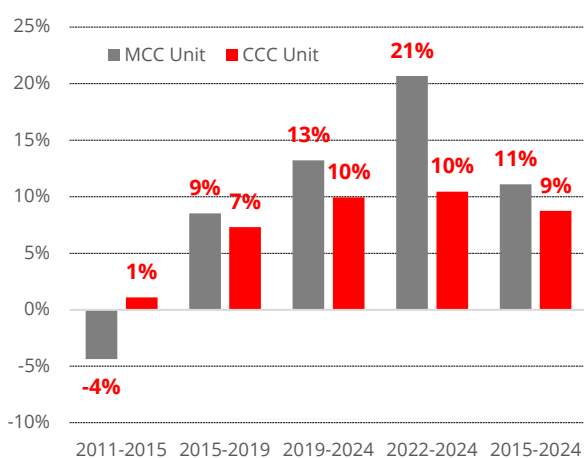
**Upsides.** The letter to JSW employees includes several statements that could be interpreted as potentially supportive of the company's results and valuation. "making production costs more realistic", "[past] management decisions and agreements that seemed beneficial to employees in the short term turned out to be wrong in the long term", "disproportionate increase in the number of employees employed in the administrative part of the company" and "lack of clearly defined goals and performance indicators" could hypothetically result in cuts at personnel costs, which represent some half of total JSW costs (on the steep rise in past decade).

**Downsides / Risks.** The timing, scale of potential optimization, and its costs represent major question marks, though. First, the current management has done nothing at opex restructuring for long five months, and a decade ago it took one long year before employees agreed on cuts. Also, all the facts brought up by the management have been an obvious conclusions, rather than secret knowledge, we conclude.

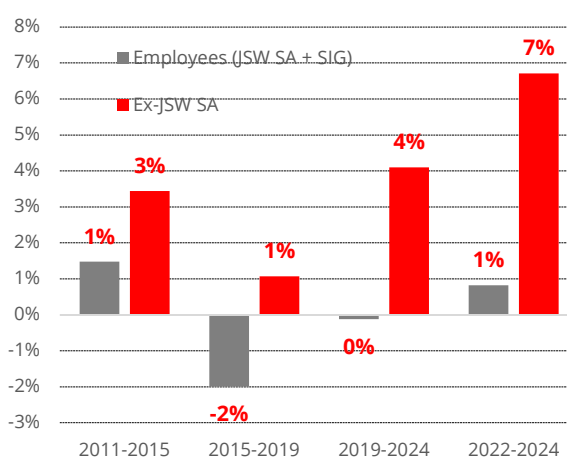
Moreover, the management underlines its care about securing jobs etc. While we believe some 1,500 administrative employment represents an easy prey (potentially offering PLN0.2bn opex saving per annum), the above-mentioned statement might suggest a change in remuneration schemes, rather than a 10-15% personnel cut. Finally, unionists still have strong hand against the management, we believe, hence the above-mentioned opex optimization might be preceded by (potentially substantial) one-off outlays, we assess.

**How much opex cuts are required?** At annual production of 13mt (which might become a challenge in long-term, we believe), the company should burn some PLN1.4bn cash, expanding potentially to some PLN2bn at 12.45mt output. In this light, at current prices JSW's opex optimization would have to settle at PLN2.0-2.4bn, to keep the company's FCF at nil. We believe the actual restructuring might settle at low hundreds million zloty per annum, hopefully, with the full-scale impact visible in 2026E, potentially preceded with some one-off payments / sweeteners.

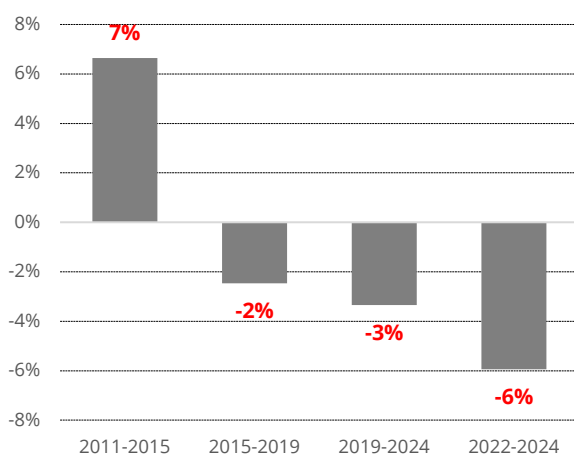
**Fig. 11. CAGRs at unit MCC / CCC**



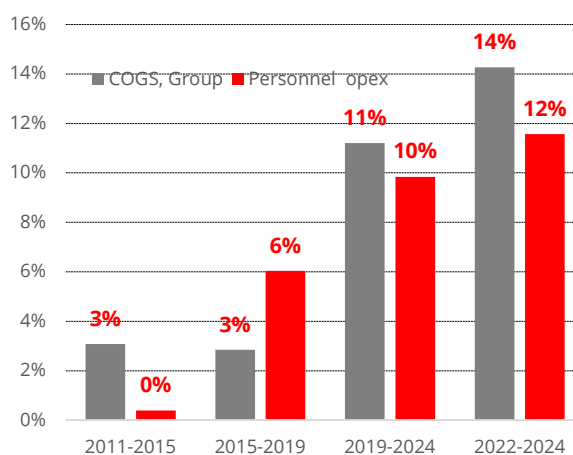
**Fig. 12. CAGRs at employees: miners and non-miners**



**Fig. 13. CAGRs at mining volumes**

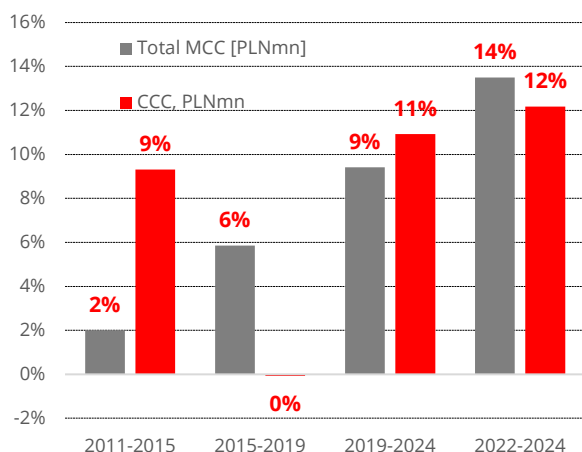


**Fig. 14. CAGRs at total COGS / personnel costs**

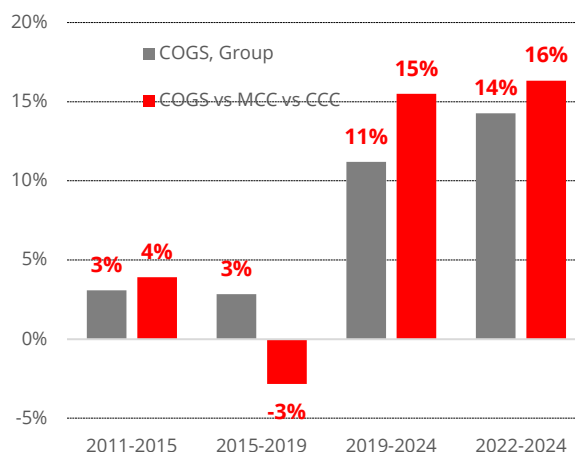


Source for all graphs: company data, Santander Brokerage Poland estimates

**Fig. 15. CAGRs at MCC / CCC, in PLNmn**

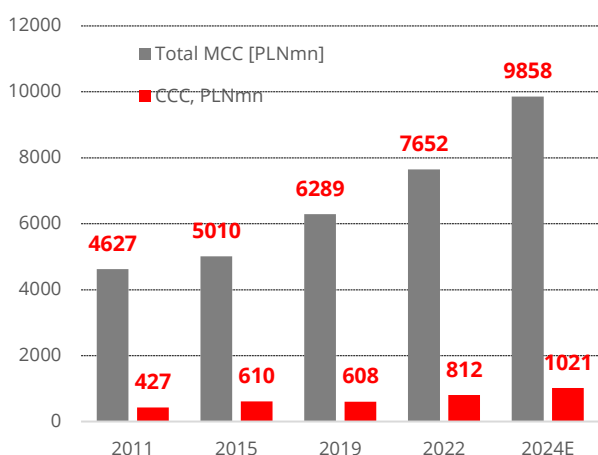


**Fig. 16. CAGRs at total COGS, vs CAGR at [COGS - MCC - CCC]**

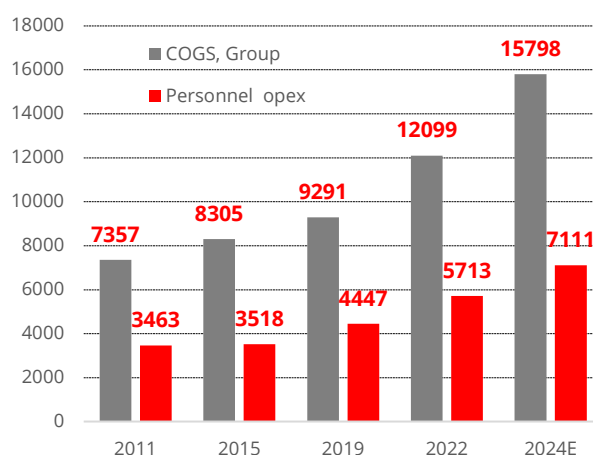


Source for all graphs: company data, Santander Brokerage Poland estimates

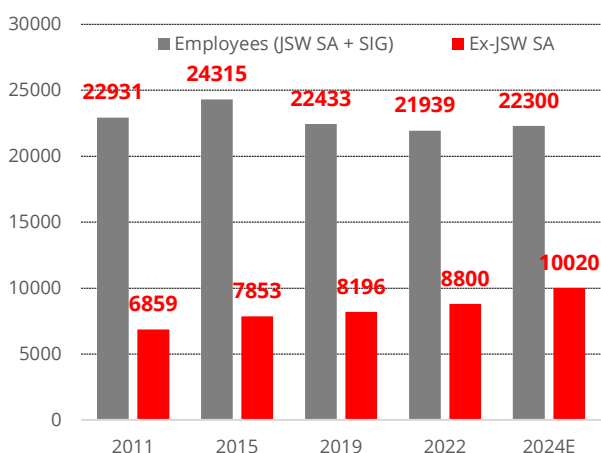
**Fig. 17. MCC & CCC costs [PLNmn]**



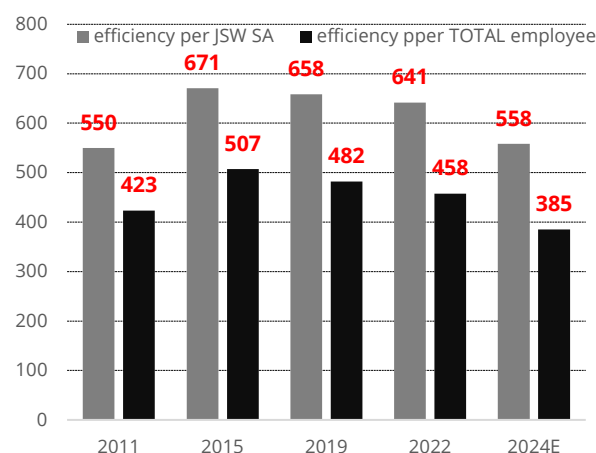
**Fig. 18. COGS, personnel costs [PLNmn]**



**Fig. 19. Number of employees, miners vs Group**



**Fig. 20. Effectiveness per employee [coal tonnes / employee]**



Source for all graphs: company data, Santander Brokerage Poland estimates

## Key assumptions and forecast changes

In our core scenario, we set metcoal **prices** at USD224/t (USD6/t higher vs previous research report), based on Jan2027 metcoal futures. The alternative scenario relies on long-term metcoal prices at USD270/t. Also, in line with the management's hinting on rising Chinese / Indonesian coke imports to Europe, in the long term we lower coke-to-metcoal ratio to range from 1.2x (high metcoal prices) to 1.4x (low metcoal prices), vs 1.4-1.6x previously.

**Volumes.** The management trimmed its FY2024 coal production guidance to 12.45mt, down 0.5mt in two months, pointing to persisting geological hazards and risk to JSW reserves. Please note that last force majeure were to trim 2024 production by 0.95mt (acc. to official communiques), and 12.45mt settles 1.55mt below 14mt threshold, suggesting that minor geological problems cancelled out additional 0.6mt coal volume in 2024E, we calculate. 2H2024 volume should settle at 6.45mt (no new force majeure assumed), and in light of the management-highlighted risks, we trim our forecast of JSW's annual coal production to 13.25mt from 14.0mt previously.

At **opex**, based on management's set of assumptions (presented at 1H2024 financial report), in our model we assumed lack of wage growth in years 2025 & 2026, and we also applied management-driven 2.63% growth rate as of 2027E. With respect to opex cutting initiatives, we trust in the management's effectiveness, and we introduce PLN588mn of annual opex savings (unrelated to social side's approval) terminally as of 2025E. At opex savings which require social approval, we apply the full amount of management-proposed savings (PLN850mn per annum) in years 2026 and 2027 (instead of proposed 2025-27 period), as we assume this might be concession required by the social side. Please note that the document that leaked at Facebook assumed these cuts would be gone in 2028, and thus we cancel these out as of 2028E.

Fig. 21. JSW: Key assumptions – regular scenario (52% probability)

	unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	...	2030E
USDPLN exchange rate		3.77	3.94	3.78	3.61	3.84	3.92	3.87	4.46	4.21	3.94	3.86		3.86
<b>Realized Prices</b>														
Thermal coal	USD/t	57	48	55	69	71	64	58	102	167	119	110		96
Coking coal (incl. discount)	USD/t	100	98	173	183	165	112	162	341	278	227	199		202
Coke	USD/t	173	149	250	303	276	186	329	491	355	336	315		357
Thermal coal	PLN/t	214	188	207	248	273	250	224	457	703	468	424		369
Coking coal (incl. discount)	PLN/t	376	389	656	658	634	440	631	1,513	1,121	897	769		778
Coke	PLN/t	650	586	943	1,094	1,058	762	1,280	2,184	1,495	1 323	1 215		1 378
<b>Volumes - Production</b>														
Thermal coal	kt	5,162	5,255	4,093	4,670	4,554	3,323	2,750	3,082	2,629	2 541	1 656		1 656
Coking coal	kt	11,152	11,580	10,676	10,349	10,208	11,062	11,006	10,985	10,876	9 909	11 594		11 594
Total coal	kt	16,313	16,835	14,768	15,020	14,762	14,385	13,756	14,067	13,505	12 450	13 250		13 250
Coke	kt	4,222	4,144	3,458	3,563	3,169	3,331	3,659	3,221	3,351	3 218	3 320		3 320
<b>Volumes - Sales</b>														
Thermal coal	kt	5,497	5,289	4,167	4,366	3,882	3,196	3,332	3,563	2,518	1 690	1 656		1 656
Coking coal	kt	5,801	6,364	5,901	6,001	5,807	6,313	6,938	6,451	6,277	5 753	7 162		7 162
Total coal	kt	11,297	11,653	10,068	10,366	9,688	9,509	10,270	10,014	8,795	7 442	8 818		8 818
Coke	kt	4,015	4,133	3,460	3,538	2,929	3,642	3,611	3,228	3,320	3 411	3 320		3 320



### Costs

Mining Cash Costs	PLNmn	5,009	4,232	4,616	5,954	6,314	5,860	6,150	7,652	9,467	9 137	8 337	9 130
Unit Mining Cash Costs	PLN/t	309	251	314	399	429	407	447	544	701	734	629	689
Cash Conversion Cost	PLNmn	610	553	515	575	608	593	633	812	1,055	1 043	1 047	1 140
Unit Cash Conversion Cost	PLN/t	144	133	149	162	194	178	173	252	315	324	315	343

Sources: Company data, Santander Brokerage Poland estimates

**Fig. 22. JSW: Key assumptions – La Niña scenario (48% probability)**

	unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	...	2030E
USDPLN exchange rate		3.77	3.94	3.78	3.61	3.84	3.92	3.87	4.46	4.21	3.94	3.86		3.86
<b>Realized Prices</b>														
Thermal coal	USD/t	57	48	55	69	71	64	58	102	167	119	110		96
Coking coal (incl. discount)	USD/t	100	98	173	183	165	112	162	341	278	227	220		243
Coke	USD/t	173	149	250	303	276	186	329	491	355	336	320		386
Thermal coal	PLN/t	214	188	207	248	273	250	224	457	703	468	424		369
Coking coal (incl. discount)	PLN/t	376	389	656	658	634	440	631	1,513	1,121	897	849		938
Coke	PLN/t	650	586	943	1,094	1,058	762	1,280	2,184	1,495	1 324	1 235		1 489
<b>Volumes - Production</b>														
Thermal coal	kt	5,162	5,255	4,093	4,670	4,554	3,323	2,750	3,082	2,629	2 541	1 656		1 656
Coking coal	kt	11,152	11,580	10,676	10,349	10,208	11,062	11,006	10,985	10,876	9 909	11 594		11 594
Total coal	kt	16,313	16,835	14,768	15,020	14,762	14,385	13,756	14,067	13,505	12 450	13 250		13 250
Coke	kt	4,222	4,144	3,458	3,563	3,169	3,331	3,659	3,221	3,351	3 218	3 320		3 320
<b>Volumes - Sales</b>														
Thermal coal	kt	5,497	5,289	4,167	4,366	3,882	3,196	3,332	3,563	2,518	1 690	1 656		1 656
Coking coal	kt	5,801	6,364	5,901	6,001	5,807	6,313	6,938	6,451	6,277	5 753	7 162		7 162
Total coal	kt	11,297	11,653	10,068	10,366	9,688	9,509	10,270	10,014	8,795	7 442	8 818		8 818
Coke	kt	4,015	4,133	3,460	3,538	2,929	3,642	3,611	3,228	3,320	3 411	3 320		3 320
<b>Costs</b>														
Mining Cash Costs	PLNmn	5,009	4,232	4,616	5,954	6,314	5,860	6,150	7,652	9,467	9 137	8 337		9 300
Unit Mining Cash Costs	PLN/t	309	251	314	399	429	407	447	544	701	734	629		702
Cash Conversion Cost	PLNmn	610	553	515	575	608	593	633	812	1,055	1 043	1 047		1 140
Unit Cash Conversion Cost	PLN/t	144	133	149	162	194	178	173	252	315	324	315		343

Sources: Company data, Santander Brokerage Poland estimates

**Fig. 23. JSW: Forecasts' changes (regular scenario, 52% probability)**

PLNm	2024E			2025E			2026E		
	New	Previous	Change	New	Previous	Change	New	Previous	Change
Sales	11669	12093	-4%	11494	11956	-4%	11544	12273	-6%
EBITDA	961	1250	-23%	1480	675	119%	2729	907	201%
EBIT	-7320	-2685	n.m.	-557	-1360	n.m.	592	-1228	n.m.
Net profit	-6162	-2289	n.m.	-684	-1215	n.m.	244	-1124	n.m.

Source: Santander Brokerage Poland estimates

**Fig. 24. JSW: Santander vs. market consensus (regular scenario, 52% probability)**

PLNm	2024E			2025E			2026E		
	SANe	Cons.	Diff.	SANe	Cons.	Diff.	SANe	Cons.	Diff.
Sales	11 669	12 271	-5%	11 494	12 901	-11%	11 544	12 940	-11%
EBITDA	961	1 286	-25%	1 480	1 910	-23%	2 729	1 985	37%
EBIT	-7 320	-584	n.m.	-557	-48	n.m.	592	-75	n.m.
Net profit	-6 162	-1 524	n.m.	-684	-89	n.m.	244	-130	n.m.

Source: Bloomberg, Santander Brokerage Poland estimates

**Fig. 25. JSW: Forecasts' changes \* (La Niña scenario, 48% probability)**

PLNm	2024E			2025E			2026E		
	New	Previous	Change	New	Previous	Change	New	Previous	Change
Sales	11 673	12 094	-3%	12 137	12 677	-4%	12 836	13 786	-7%
EBITDA	966	1 251	-23%	2 300	1 597	44%	4 109	2 335	76%
EBIT	-7 315	-2 684	n.m.	263	-439	n.m.	1 972	199	889%
Net profit	-6 158	-2 288	n.m.	-9	-458	n.m.	1 368	54	2419%

Source: Santander Brokerage Poland estimates, \* new alternative scenario vs previous alternative scenario

**Fig. 26. JSW: Santander vs. market consensus (La Niña scenario, 48% probability)**

PLNm	2024E			2025E			2026E		
	SANe	Cons.	Diff.	SANe	Cons.	Diff.	SANe	Cons.	Diff.
Sales	11 673	12 271	-5%	12 137	12 901	-6%	12 836	12 940	-1%
EBITDA	966	1 286	-25%	2 300	1 910	20%	4 109	1 985	107%
EBIT	-7 315	-584	n.m.	263	-48	n.m.	1 972	-75	n.m.
Net profit	-6 158	-1 524	n.m.	-9	-89	n.m.	1 368	-130	n.m.

Source: Bloomberg, Santander Brokerage Poland estimates

## Valuation

### DCF valuation

In this report we maintain our short-term 2024-25E RFR at 6.0%, and long-term assumptions at 5.0%.

**Fig. 27. JSW: WACC calculation**

	Years 2024-25E	Years 2026E onwards
Risk-free rate	6.0%	5.0%
Unlevered beta	1.20	1.20
Levered beta	1.55	1.55
Equity risk premium	6.0%	6.0%
<b>Cost of equity</b>	<b>15.3%</b>	<b>14.3%</b>
Risk-free rate	6.0%	5.0%
Debt risk premium	1.0%	1.0%
Tax rate	19%	19%
After tax cost of debt	5.7%	4.9%
%D	26%	26%
%E	74%	74%
<b>WACC</b>	<b>12.6%</b>	<b>11.7%</b>

Source: Santander Brokerage Poland estimates

**Fig. 28. JSW: DCF valuation (regular scenario, 52% probability)**

PLNmnn	2023	2024E*	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
<b>Revenues</b>	<b>15 338</b>	<b>11 669</b>	<b>11 494</b>	<b>11 544</b>	<b>11 718</b>	<b>11 922</b>	<b>12 098</b>	<b>12 128</b>	<b>12 145</b>	<b>12 162</b>
EBIT	2 363	-1 020	-557	592	427	-1 085	-1 070	-1 330	-1 591	-1 862
Cash taxes on EBIT	2 031	0	0	59	27	0	0	0	0	0
<b>NOPAT</b>	<b>332</b>	<b>-1 020</b>	<b>-557</b>	<b>532</b>	<b>400</b>	<b>-1 085</b>	<b>-1 070</b>	<b>-1 330</b>	<b>-1 591</b>	<b>-1 862</b>
Depreciation	1 681	1 980	2 037	2 137	2 237	2 337	2 337	2 337	2 337	2 337
Change in operating WC	70	0	-48	-36	4	4	0	36	-12	-8
<b>Capital expenditure</b>	<b>4 390</b>	<b>4 000</b>	<b>3 000</b>	<b>3 081</b>	<b>3 164</b>	<b>3 250</b>	<b>3 339</b>	<b>3 430</b>	<b>3 430</b>	<b>3 430</b>
<b>Free cash flow</b>	<b>-2 447</b>	<b>-3 039</b>	<b>-1 471</b>	<b>-375</b>	<b>-531</b>	<b>-2 002</b>	<b>-2 072</b>	<b>-2 459</b>	<b>-2 672</b>	<b>-2 947</b>
WACC		12.6%	12.6%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
PV FCF 2024-2032E	-9 949									
Terminal growth	-2.0%									
Terminal Value (TV)	-10 632									
PV TV	-3 893									
<b>Total EV</b>	<b>-13 842</b>									
Net debt**	-6 337									
<b>Necessary external financing</b>	<b>7 590</b>									
<b>Equity value</b>	<b>85</b>									
Number of shares (mn)	117.4									
Value per share (PLN, Jan 2024)	0.7									
<b>Target Price (Dec 2025, PLN)</b>	<b>1.0</b>									

Source: Santander Brokerage Poland estimates, assumed coking coal price at USD224/t as of 1Q2027E,

\* 2024E EBIT adjusted for PLN6.3bn provision; \*\* 2023 net debt, adjusted for 1) minorities, 2) PLN175mn of potentially non-refundable loan from PFR, 3) positive value of coke / coal inventories, not adjusted for provisions, 4) methane risk (at PLN130mn, methane risk likelihood at 5%)

**Fig. 29. JSW: DCF valuation (La Niña scenario, 48% probability)**

PLNmnn	2023	2024E*	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
<b>Revenues</b>	<b>15 338</b>	<b>11 673</b>	<b>12 137</b>	<b>12 836</b>	<b>13 016</b>	<b>13 226</b>	<b>13 444</b>	<b>13 671</b>	<b>13 906</b>	<b>14 150</b>
EBIT	2 363	-1 015	263	1 972	1 725	-60	55	-16	-72	-132
Cash taxes on EBIT	2 031	0	0	324	278	0	0	0	0	0
<b>NOPAT</b>	<b>332</b>	<b>-1 015</b>	<b>263</b>	<b>1 648</b>	<b>1 448</b>	<b>-60</b>	<b>55</b>	<b>-16</b>	<b>-72</b>	<b>-132</b>
Depreciation	1 681	1 980	2 037	2 137	2 237	2 337	2 337	2 337	2 337	2 337
Change in operating WC	70	0	-3	-28	4	4	0	8	-1	4
<b>Capital expenditure</b>	<b>4 390</b>	<b>4 000</b>	<b>3 000</b>	<b>3 081</b>	<b>3 164</b>	<b>3 250</b>	<b>3 339</b>	<b>3 430</b>	<b>3 430</b>	<b>3 430</b>
<b>Free cash flow</b>	<b>-2 447</b>	<b>-3 034</b>	<b>-697</b>	<b>732</b>	<b>517</b>	<b>-977</b>	<b>-946</b>	<b>-1 117</b>	<b>-1 164</b>	<b>-1 228</b>
WACC		12.6%	12.6%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
PV FCF 2023-2032E	-4 860									
Terminal growth	-2.0%									
Terminal Value (TV)	-772									
PV TV	-281									
<b>Total EV</b>	<b>-5 141</b>									
Net debt**	-6 340									
<b>Necessary external financing</b>	<b>0</b>									
<b>Equity value</b>	<b>1 199</b>									
Number of shares (mn)	117.4									
Value per share (PLN, Jan 2024)	10.2									
<b>Target Price (Dec 2025, PLN)</b>	<b>13.8</b>									

Source: Santander Brokerage Poland estimates, assumed coking coal price at USD270/t as of 1Q2027E

\* 2024E EBIT adjusted for PLN6.3bn provision; \*\* 2023 net debt, adjusted for 1) minorities, 2) PLN175mn of potentially non-refundable loan from PFR, 3) positive value of coke / coal inventories, not adjusted for provisions, 4) methane risk (at PLN130mn, methane risk likelihood at 5%)

## Comparative valuation

In our comparative valuation approach, we compare JSW to Warrior Met Coal separately, due to these two companies' business similarity (focus on metallurgical coal). However, we note that JSW has always been trading at a fraction of foreign peers' ratios, not to mention that JSW has not been paying dividend for years (and we expect it to keep it at nil terminally), in contrary to foreign peers. In this light, with this report we introduce thermal coal miner Bogdanka into our comparative valuation calculations. New weights settle at 40% for Bogdanka, 30% for Warrior and 15% for Developed / Emerging peers, vs 40% weight to Warrior Met Coal and 30% to Developed / Emerging peers each previously.

Along with the two scenarios, we also present outcomes of comparative valuation for "regular" and "La Niña" scenarios separately.

**Fig. 30. JSW: Comparative valuation**

Company	P/E			EV/EBITDA			P/CE		
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E
<b>Bogdanka</b>	n.a.	3.5	n.a.	0.1	0.1	0.1	1.1	1.1	1.2
<b>Warrior Met Coal</b>	9.7	8.6	8.1	5.1	4.6	4.3	6.4	5.9	5.5
<b>Mines in Developed Countries</b>									
CNX Resources Corp	22.2	16.8	12.8	7.5	6.6	6.2	5.5	5.9	5.9
Anglo American PLC	16.6	14.6	11.3	6.1	5.8	5.3	5.4	5.4	4.7
SunCoke Energy Inc	9.3	12.4	12.6	4.5	5.0	5.0	3.6	3.9	3.8
Teck Resources Ltd	29.2	27.7	23.6	8.9	9.9	9.2	7.8	9.8	8.7
BHP Group Ltd	11.3	12.5	12.8	5.8	5.9	6.0	6.3	6.5	6.5
<b>Median</b>	<b>16.6</b>	<b>14.6</b>	<b>12.8</b>	<b>6.1</b>	<b>5.9</b>	<b>6.0</b>	<b>5.5</b>	<b>5.9</b>	<b>5.9</b>
<b>Mines in Emerging Markets</b>									
China Coal Energy	6.4	6.3	6.1	4.7	4.7	4.6	6.8	6.8	6.8
Bukit Asam	7.7	7.8	8.0	4.6	5.1	4.4	5.5	5.9	5.0
Banpu	31.8	10.2	11.3	6.6	5.9	5.7	2.3	1.8	1.8
China Shenhua Energy	14.4	14.2	13.9	6.8	6.7	6.7	9.9	9.8	9.9
Adaro Energy	6.2	7.3	8.0	3.1	3.4	3.6			
Indo Tambangraya	5.6	6.4	7.2	2.1	2.1	2.6			
<b>Median</b>	<b>7.0</b>	<b>7.6</b>	<b>8.0</b>	<b>4.7</b>	<b>4.9</b>	<b>4.5</b>	<b>6.1</b>	<b>6.4</b>	<b>5.9</b>

Source: Bloomberg consensus estimates, Santander Brokerage Poland, share prices as of October 03, 2024

**Fig. 31. JSW: Multiple-based valuation implications (PLN/share) (regular scenario, 52% probability)**

		P/E	EV/EBITDA	P/CE	Average
		2024-26E	2024-26E	2024-26E	2024-26E
Bogdanka	40%	0	14	15	14
Warrior Met	30%	-40	79	76	38
Developed	15%	-69	101	77	36
Emerging	15%	-30	81	81	44
<b>Total</b>		<b>-27</b>	<b>51</b>	<b>47</b>	<b>29</b>

Source: Bloomberg, Santander Brokerage Poland estimates

**Fig. 32. JSW: Multiple-based valuation implications (PLN/share) (La Niña scenario, 48% probability)**

		P/E	EV/EBITDA	P/CE	Average
		2024-26E	2024-26E	2024-26E	2024-26E
Bogdanka	40%	0	23	22	22
Warrior Met	30%	9	119	110	79
Developed	15%	11	153	112	92
Emerging	15%	16	124	117	86
<b>Total</b>		<b>7</b>	<b>77</b>	<b>67</b>	<b>59</b>

Source: Bloomberg, Santander Brokerage Poland estimates

DCF remains our preferred valuation tool, as it relies more on the company's long-term outlook. Changes in financial results or changes in investors' preferences drive the comparable valuation, which we see as supportive to the DCF valuation methodology. Hence, we assign 70% weight to DCF valuation and 30% weight to comparable valuation.

## Valuation summary

Very steep metcoal benchmarks' erosion, rallying opex and high (and rising) capex jointly reduce JSW's DCF-based valuation deep into red in the core scenario, and we believe the company should require equity PLN7.6bn re-financing. Still, the most recent forecasts' increase and peers' re-rating supports the company's 2024-26E comparative valuation, we admit.

In our models we cut JSW's coal production to 13.25mt p.a., down from 14.0mt previously. Also, we assume wages remaining flat in years 2025-26E, growing at 2.63% p.a. as of 2027E, based on the management's scenario approach. Moreover, we include non-personnel opex savings at PLN588mn annually as of 2025E, and apply personnel cost-related PLN850mn opex cut in years 2026E and 2027E only. Also, we assume no workforce cuts, as the management does not propose these either.

**Fig. 33. JSW: Valuation changes\*\***

PLN per share	New	Previous	Change
DCF valuation (regular, 52% probability)	1	1	0%
DCF valuation (La Niña, 48% probability)	14	1	995%
<b>DCF valuation weighted</b>	<b>7</b>	<b>1</b>	<b>478%</b>
Comparative valuation (regular, 52% probability)	29	1	2800%
Comparative valuation (La Niña, 48% probability)	59	39	51%
<b>Comparative valuation weighted (based on 2024-26E)</b>	<b>43</b>	<b>19</b>	<b>126%</b>
<b>Blended valuation (Dec'2025)*</b>	<b>18</b>	<b>7</b>	<b>172%</b>

Source: Santander Brokerage Poland estimates, \* 70% DCF / 30% comparative, \*\* rounded values

## Financials

**Fig. 34. JSW: Income statement ('lack of La Niña' scenario, 52% probability)**

PLNm (year to December)	2020	2021	2022	2023	2024E	2025E	2026E
Net sales	6,989	10,629	20,199	15 338	11 669	11 494	11 544
COGS, ex. Depreciation	6,705	7,223	8,712	10 372	16 085	9 091	7 893
Depreciation	1,105	1,220	1,228	1 681	1 980	2 037	2 137
<b>EBITDA</b>	<b>-638</b>	<b>2,483</b>	<b>10,564</b>	<b>4 213</b>	<b>961</b>	<b>1 480</b>	<b>2 729</b>
Operating profit	-1,743	1,263	9,336	2 363	-7 320	-557	592
Net financial income (costs)	-76	-126	-116	-95	-172	-269	-280
Profit before tax	-1,819	1,137	9,221	2 267	-7 491	-826	312
Income tax	-324	216	1,752	1 727	-1 333	-147	59
<b>Net profit</b>	<b>-1,537</b>	<b>904</b>	<b>7,561</b>	<b>997</b>	<b>-6 162</b>	<b>-684</b>	<b>244</b>
<i>Gross margin</i>	-11.7%	20.6%	50.8%	21.4%	-54.8%	3.2%	13.1%
<i>EBITDA margin</i>	-9.1%	23.4%	52.3%	27.5%	8.2%	12.9%	23.6%
<i>Operating margin</i>	-24.9%	11.9%	46.2%	15.4%	-62.7%	-4.8%	5.1%
<i>Net profit margin</i>	-22.0%	8.5%	37.4%	6.5%	-52.8%	-5.9%	2.1%

Source: Company data, Santander Brokerage Poland estimates

**Fig. 35. JSW: Balance sheet ('lack of La Niña' scenario, 52% probability)**

PLNm (year to December)	2020	2021	2022	2023	2024E	2025E	2026E
<b>Current assets</b>	<b>4,004</b>	<b>4,659</b>	<b>14,984</b>	<b>13 174</b>	<b>12 701</b>	<b>10 989</b>	<b>10 334</b>
cash and equivalents	2,215	2,094	11,969	10 167	9 833	8 192	7 567
other short term investments	0	0	0	0	0	0	0
accounts receivable	659	1,596	1,800	1 798	1 368	1 348	1 354
inventories	880	653	990	<b>1 172</b>	<b>1 012</b>	<b>963</b>	<b>927</b>
prepaid expenses / other	250	316	224	37	487	487	487
<b>Fixed assets</b>	<b>11,027</b>	<b>11,303</b>	<b>11,980</b>	<b>14 620</b>	<b>10 340</b>	<b>11 302</b>	<b>12 216</b>
PPE	8,996	9,383	10,374	13 023	8 743	9 705	10 649
long-term investments	0	0	0	0	0	0	0
intangibles	175	186	139	199	199	199	199
goodwill	0	0	0	0	0	0	0
other	979	883	971	939	939	939	939
deferred taxes	877	850	496	459	459	459	429
<b>Total assets</b>	<b>15,031</b>	<b>15,962</b>	<b>26,963</b>	<b>27 794</b>	<b>23 040</b>	<b>22 291</b>	<b>22 551</b>
<b>Current liabilities</b>	<b>3,580</b>	<b>3,849</b>	<b>7,734</b>	<b>7 011</b>	<b>7 993</b>	<b>7 923</b>	<b>7 929</b>
bank debt	679	1,014	3,018	2 546	5 103	5 103	5 103
accounts payable	903	964	1,423	1 534	1 452	1 430	1 436
other current liabilities	1,524	1,428	2,845	2 346	943	943	943
provisions	475	443	448	585	496	448	448
<b>Long-term liabilities</b>	<b>4,134</b>	<b>3,815</b>	<b>3,292</b>	<b>3 811</b>	<b>4 290</b>	<b>4 290</b>	<b>4 290</b>
bank debt	2,093	1,658	1,096	782	1 490	1 490	1 490
other long-term liabilities	144	142	142	584	515	515	515
provisions	1,897	2,015	2,053	2 445	2 285	2 285	2 285
<b>Equity</b>	<b>6,920</b>	<b>7,852</b>	<b>15,437</b>	<b>16 469</b>	<b>10 308</b>	<b>9 624</b>	<b>9 868</b>
share capital	1,252	1,252	1,252	1 252	1 252	1 252	1 252
reserve capital	7,206	5,696	6,623	14 221	15 218	9 056	8 372
net income	-1,537	904	7,561	997	-6 162	-684	244
Minority Interest	397	446	501	<b>502</b>	<b>450</b>	<b>455</b>	<b>463</b>
<b>Total liabilities and equity</b>	<b>15,031</b>	<b>15,962</b>	<b>26,963</b>	<b>27 794</b>	<b>23 040</b>	<b>22 291</b>	<b>22 551</b>
<b>Net debt*</b>	<b>953</b>	<b>1,024</b>	<b>-7,354</b>	<b>-6 336</b>	<b>-2 790</b>	<b>-1 144</b>	<b>-511</b>

Source: Company data, Santander Brokerage Poland estimates, \* includes minorities

**Fig. 36. JSW: Cash flow statement ('lack of La Niña' scenario, 52% probability)**

<b>PLNmn (year to December)</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>
<b>Cash flow from operations</b>	<b>1,386</b>	<b>1,497</b>	<b>8,842</b>	<b>3 325</b>	<b>-4 374</b>	<b>1 354</b>	<b>2 418</b>
Net profit	650	904	7,561	997	-6 162	-684	244
Provisions	180	118	38	392	-160	0	0
Depreciation and amortization	1,034	1,220	1,228	1 681	1 980	2 037	2 137
Changes in WC, o/w	-243	-647	-83	-70	508	48	36
inventories	-474	228	-337	-182	159	50	36
receivables	348	-937	-204	2	430	21	-6
payables	-117	62	459	110	-82	-22	6
Other, net	-235	-98	97	325	-540	-48	0
<b>Cash flow from investments</b>	<b>-2,468</b>	<b>-1,595</b>	<b>-487</b>	<b>-4 378</b>	<b>827</b>	<b>-3 000</b>	<b>-3 051</b>
Additions to PPE and intangibles	-2,450	-1,619	-2,171	-4 390	-4 000	-3 000	-3 081
Change in long-term investments	0	0	0	0	0	0	0
Other, net	-19	23	1,684	12	-1 473	0	30
<b>Cash flow from financing</b>	<b>539</b>	<b>-22</b>	<b>1,520</b>	<b>-749</b>	<b>3 213</b>	<b>5</b>	<b>8</b>
Change in long-term borrowing	704	-435	-562	-314	708	0	0
Change in short-term borrowing	79	336	2,004	-472	2 557	0	0
Change in equity and profit distribution	-67	28	24	36	0	0	0
Dividends paid	-201	0	0	0	0	0	0
Other, net	24	50	55	1	-52	5	8
<b>Net change in cash and equivalents</b>	<b>-544</b>	<b>-120</b>	<b>9,875</b>	<b>-1 802</b>	<b>-334</b>	<b>-1 641</b>	<b>-625</b>
Beginning cash and equivalents	3,477	2,215	2,094	11 969	10 167	9 833	8 192
Ending cash and equivalents	2,933	2,094	11,969	10 167	9 833	8 192	7 567

Source: Company data, Santander Brokerage Poland estimates



# Santander Brokerage Poland

Jana Pawła II Avenue 17  
00-854 Warszawa  
fax. (+48) 22 586 81 09

## Equity Research

Kamil Stolarski, PhD, CFA, <i>Head of Equity Research Banks, Insurers, Strategy</i>	tel. (+48) 785 854 224	kamil.stolarski@santander.pl
Paweł Puchalski, CFA, <i>Equity Analyst Telecommunications, Metals &amp; Mining, Power</i>	tel. (+48) 517 881 837	pawel.puchalski@santander.pl
Tomasz Krukowski, CFA, <i>Equity Analyst Oil&amp;Gas, Pharma &amp; Biotech, CEE Non-Financials</i>	tel. (+48) 665 617 768	tomasz.krukowski@santander.pl
Adrian Kyrzcz, <i>Equity Analyst Construction, Real Estate, IT</i>	tel. (+48) 695 102 199	adrian.kyrzcz@santander.pl
Tomasz Sokołowski, <i>Equity Analyst Consumer, E-commerce</i>	tel. (+48) 695 201 141	tomasz.sokolowski@santander.pl
Michał Sopieli, <i>Equity Analyst Industrials, Chemicals, Quantitative Analysis</i>	tel. (+48) 693 720 651	michal.sopiel@santander.pl
Piotr Zielonka, CFA, <i>Equity Analyst Gaming, Strategy</i>	tel. (+48) 512 727 035	piotr.zielonka@santander.pl
Marcin Działek, <i>Analyst Technical Analysis</i>	tel. (+48) 665 610 596	marcin.dzialek@santander.pl

## Sales & Trading

<b>Kamil Kalemba, <i>Head of Institutional Equities</i></b>	tel. (+48) 601 288 432	kamil.kalemba@santander.pl
Mateusz Choromański, CFA, <i>Head of Sales Securities Broker, Investment Advisor</i>	tel. (+48) 451 151 800	mateusz.choromanski@santander.pl
Alex Kamiński	tel. (+48) 22 586 80 63	alex.kaminski@santander.pl
Błażej Leśków, <i>Securities Broker</i>	tel. (+48) 22 586 80 83	blazej.leskow@santander.pl
Michał Stępkowski, <i>Securities Broker</i>	tel. (+48) 514 889 285	michal.stepkowski@santander.pl
Marek Wardzyński, <i>Securities Broker</i>	tel. (+48) 22 586 80 87	marek.wardzynski@santander.pl
Adam Mizera, ACCA, CFA, <i>Securities Broker</i>	tel. (+48) 22 586 85 14	adam.mizera@santander.pl

## DISCLOSURES

All of the views expressed in this report accurately reflect the personal views of the Analyst of Equity Research Team in Santander Brokerage Poland which is a separate organizational unit of Santander Bank Polska S.A. ("Santander Bank Polska"), who is the author of this report. Santander Brokerage Poland emphasizes that this document is going to be updated at least once a year.

Santander Brokerage Poland acts as a market maker / liquidity provider, on principles specified in the Regulations of the Warsaw Stock Exchange (WSE), for the shares of **Jastrzębska Spółka Węglowa SA**, **Lubelski Węgiel Bogdanka SA** and therefore holds financial instruments issued by this issuer / these issuers.

Over the last 12 months Santander Bank Polska has received remuneration for providing non-investment banking services for: **Jastrzębska Spółka Węglowa SA**.

The issuer / issuers this report relates to, may hold shares of Santander Bank Polska in the amount of less than 5% of the total issued capital.

Santander Bank Polska Group, its affiliates, representatives or employees may occasionally undertake transactions or may be interested in acquiring securities of companies directly or indirectly related to those being analysed.

Santander Bank Polska or its affiliates may, from time to time, to the extent permitted by law, participate or invest in financing transactions with issuer / issuers this report relates to, perform services for or solicit business from such issuers and/or have a position or effect transactions in the financial instruments issued by these issuers (especially in relation to the services provided by PTE Santander Allianz SA), as a result Santander Bank Polska may be indirectly connected with these issuers. Santander Bank Polska does not rule out that in the period of preparing this report any Affiliate of Santander Bank Polska might purchase shares of the Issuer or any financial instruments being the subject of this report which may cause reaching at least 0,5% of the share capital.

Subject to the above, the Issuer is not bound by any contractual relationship with Santander Bank Polska, which might influence the objectivity of the recommendations contained in this report.

However, it cannot be ruled out that, in the period in which this report is in force, Santander Bank Polska will submit an offer to provide services for the issuer / issuers this report relates to, or will purchase or dispose of financial instruments issued by these issuers or whose value depends on the value of financial instruments issued by these issuers.

With the exception of remuneration from the Santander Brokerage Poland Analysts do not receive any other form of compensation for recommendations made. Remuneration received by the persons who prepare this report may be dependent, in an indirect way, from financial results gained from investment banking transactions, related to financial instruments issued by the Issuer, made by Santander Brokerage Poland or its Affiliates.

Global statistics presenting the rating of the covered companies and the share of companies provided with investment banking in the past 12M are available at: <https://www.santander.pl/inwestor/global-statistics>

A list of all recommendations on any financial instrument or issuer that were disseminated by Santander Brokerage Poland during the preceding 12 month period can be found on: <http://centruminformacji.santander.pl/fileserver/item/1501616>

## LIMITATION OF LIABILITY

This report was produced by Santander Brokerage Poland which is a separate organizational unit of Santander Bank Polska S.A. (Santander Bank Polska) with its registered office in Warsaw. Santander Brokerage Poland and brokerage activity conducted by Santander Brokerage Poland is subject to the supervision of the Financial Supervision Commission with its headquarters in Warsaw.

Santander Brokerage Poland is subject to the regulations of the Act on Trading in Financial Instruments dated July 29th 2005 (Journal of Laws of 2018, item 2286 - consolidated text, further amended), Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies dated July 29th 2005 (Journal of Laws of 2019 item 623 - consolidated text, further amended), Act on Capital Market Supervision dated July 29th 2005 (Journal of Laws of 2019, item 1871 - consolidated text, further amended). This report is addressed to qualified investors and professional clients as defined under the above indicated regulations and to Clients of Santander Brokerage Poland entitled to gain research reports based on the brokerage services agreements.

Santander Brokerage Poland may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. The investments and services contained or referred to in this report may not be suitable for particular investor and it is recommended to consult an independent investment advisor in case of doubts about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to investor's individual circumstances, or otherwise constitutes a personal recommendation to particular investor.

Affiliates of Santander Bank Polska may, from time to time, to the extent permitted by law, participate or invest in financing transactions with the issuer / issuers this report relates to, perform services for or solicit business from such issuers and/or have a position or effect transactions in the financial instruments issued by these issuers. Santander Brokerage Poland may, to the extent permitted by applicable Polish law, UK law and other applicable law or regulation, effect transactions in the financial instruments before this report is published to recipients.

Santander Brokerage Poland may have issued, and may in the future issue, other research reports that may be inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and Santander Brokerage Poland is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report.

Santander Brokerage Poland informs that success in past recommendations is not a guarantee of success in future ones.

Information and opinions contained herein have been compiled or gathered, with due care and diligence, by Santander Brokerage Poland from sources believed to be reliable, however Santander Brokerage Poland cannot ensure their accuracy or completeness. Investor shall be responsible for conducting their own investigation and analysis of the information contained or referred to in this report and of evaluating the merits and risks involved in the financial instruments forming the subject matter of this report. The information and opinions contained herein are subject to change without any notice.

Santander Brokerage Poland is not responsible for any losses incurred by Investors which were result of investment decisions based on recommendations issued by Santander Brokerage Poland, on condition that they were prepared with due care and diligence.

This report does not constitute an offer or invitation to subscribe for or purchase or carry out transactions in any financial instruments and shall not be considered as an offer to sell or to buy any securities. This report is furnished and presented to you solely for your information and shall not be reproduced or redistributed to any other person. This report nor any copy hereof shall not be disseminated, published or distributed directly or indirectly in the United States of America, Canada, Australia or Japan. Disseminating, publishing or distributing of this report directly or indirectly in the above countries or to any citizen or resident of these countries may be considered breach of the law or regulations related to the financial instruments in force in these countries. Dissemination, publishing or distribution of this report may be restricted by law in other countries. Persons who distribute this report shall make themselves aware of and adhere to any such restrictions. This report may be distributed in the United Kingdom to persons who have professional knowledge about investing in accordance with relevant regulations.

Opinions in this report must not be relied upon as having been authorised or approved by issuer. Santander Brokerage Poland informs that investing assets in financial instruments implies the risk of losing part or all the invested assets.

Santander Brokerage Poland indicates that the price of the financial instruments is influenced by lots of different factors, which are not or cannot be dependent from issuer and its business results. These are factors such as changing economical, law, political or tax condition. More information on financial instruments and risk connected with them can be found on [www.santander.pl/inwestor](http://www.santander.pl/inwestor) section disclaimers and risk.

The decision to purchase any of the financial instruments should be made only on the basis of the prospectus, offering circular or other documents and materials which are published on general release on the basis of Polish law.

## Ratings definitions:

**Outperform** - Total return 10% above benchmark. Upside of approximately  $\geq 15\%$ .

**Neutral** - Total return 0%-10% above benchmark. Upside of approximately 5%-15%.

**Underperform** - Total return below benchmark. Upside of approximately  $< 5\%$ .

NOTE: The relevant benchmark for European Equities (including CEE Equities) is the 1Y German Bund rate + ERP (5.5%).

The definition of ratings are indicative. Recommendations may differ from these guidelines when justified due to the market factors, industry trends, company specific event, etc. In such cases, a pertinent clarification for the discrepancy is included in the report.

Target prices set from January to June are for December 31st of the current year. Target prices set from July to December are for December 31st of the following year. Periodicity: our recommendations/ target prices for each issuer are going to be reviewed at least once a year and whenever market events so warrant.

In the Technical Analysis reports (TA reports), Santander Brokerage Poland does not apply direct investment ratings, and all opinions and elements of analysts' assessment are included in a descriptive form in the study itself.

The period of validity of the TA report is a maximum of 30 days, while the publication of a new TA report for a given financial instrument means that the previously published study is no longer valid.

Due to the short time horizon of the Technical Analysis reports, Santander Brokerage Poland is not going to update them on a regular basis.

In preparing this report Santander Brokerage Poland applied at least one of the following valuation methods: discounted cash flows (DCF), comparative, mid-cycle, dividend discount model (DDM), residual income, warranted equity method (WEV), SOTP valuation, liquidation value.

**The discounted cash flows (DCF) valuation method** is based on expected future discounted cash flows. One advantage of the DCF valuation method is that it takes into account all cash streams reaching Issuer and the cost of money over time. Some disadvantages of the DCF valuation method are that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.

**The comparative valuation method** is based on the economic rule of "one price". Some advantages of the comparative valuation method are that the analyst need only estimate a small number of parameters; the valuation is based on current market conditions; the relatively large accessibility of indicators for companies being compared; and that there is an extensive knowledge of the comparative method among investors. Some disadvantages of valuation by the comparative method are the considerable sensitivity of the results of the valuation on the choice of companies to the comparative group; the method can lead to a simplification of the picture of the company which in turn can lead to omitting certain important factors (e.g. growth dynamics, extra-operational assets, corporate governance, the repeatability of results, differences in applied accounting standards); and the uncertainty of the effectiveness of a market valuation of companies being compared.

**The mid-cycle multiple valuation** is based on long-term average valuation multiples of a sector or a peer group. The methodology aims to calculate a fair, through the cycle value of the company. Among its shortfalls is that at peaks and/or troughs of the cycle, the implied fair value may deviate substantially from the market's value of an analysed stock as well as the methods' reliance on the quality of external data (we usually use Bloomberg or Damodaran databases). Simplicity and average through-cycle value allowing to capture over- as well as under-valuation of a given stock are the main advantages of this methodology.

**The dividend discount model (DDM) valuation** is based on the net present value of the future dividends that are expected to be paid out by the company. Some advantages of the DDM valuation method are that it takes into account real cash flows to equity-owners and that the methodology is used in respect to companies with long dividend payout history. Main disadvantage of the DDM valuation method is that dividend payouts are based on a large number of parameters and assumptions, including dividend payout ratio.

**Residual income method** is conceptually close to the discounted cash flows method (DCF) for non-financial stocks, the difference being that it is based on expected residual income (returns over COE) rather than expected future cash flows. One advantage of this valuation method is that it captures the excess of profit potentially available to shareholders and the cost of money over time. Main disadvantage of the valuation method is that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.

**The warranted equity method (WEV)** is based on the formula  $P/BV = (\text{two year forward ROE less sustainable growth rate}) / (\text{Cost of equity less sustainable growth rate})$  which allows estimating a fair value (FV) of a given stock in two years' time. Subsequently the FV is discounted back to today. The main advantage of the WEV method is that it is a transparent one and based on relatively short term forecasts, hence substantially reducing the margin of forecasting error. The main disadvantage in our view is that the model is based on the principle that stock price should converge towards its fair value implied by company's ROE and COE.

**SOTP valuation** - different assets of a company are being valued according to different valuation methods, and the sum of these valuations represents the final valuation of the company. SOTP valuation advantages / disadvantages are identical to advantages and disadvantages of the specific valuation methods used.

**Liquidation value method** - liquidation value is the estimated amount of money that an asset or company could be quickly sold for, such as if it were to go out of business. Then, the estimated assets value is adjusted for liabilities and liquidation expenses. One advantage of this valuation method is its simplicity. This method does not account for intangible assets as goodwill, which is the main disadvantage.

In the opinion of Santander Brokerage Poland, this report has been prepared with all due diligence and excludes any conflict of interests which could influence its content. In Santander Bank Polska there are implemented internal regulations, which are designed to prevent conflicts of interest concerning recommendations. Physical and logic barriers are established, and the principles of documentation adequate to the type of Santander Bank Polska operations are implemented. Additionally, Santander Bank Polska introduced a number of obligations and restrictions relating to the protection of confidential information flow between organizational units.

The date and time on the first page of this report indicates the date of the production of the recommendation, and the dissemination of the recommendation takes place on the same day before the start of the session.

ANY PERSON WHO ACCEPTS THIS REPORT AGREES TO BE BOUND BY THE FOREGOING DISCLAIMER AND LIMITATIONS.

©2024 Santander Bank Polska. All Rights Reserved.