

JSW Group's operating activity in Q4 2022

In Q4 2022, total coal production in the JSW Group was 3.47 million tons and coke production was 0.68 million tons.

Its operating results are depicted in the table below:

Production ratios	Unit	Period			
		Q4 2021	Q3 2022	Q4 2022	
Coal segment					
(a+b) Total coal production:	million tons	3.57	3.43	3.47	
a) Coking coal production		2.75	2.64	2.76	
b) Steam coal production		0.82	0.79	0.71	
(a+b) Total coal sales:		3.80	3.49	3.29	
a) Coking coal sales		2.77	2.65	2.51	
<i>including internal sales</i>		1.14	1.07	0.91	
b) Steam coal sales		1.03	0.84	0.78	
Coke segment					
Total coke production		million tons	0.89	0.78	0.68
Sales of coke	0.88		0.70	0.75	

Coal and coke production in the JSW Group

The operating results of the coal segment in Q4 2022 were as follows:

- **total coal production** was 3.47 million tons, up by approx. 1.1% compared to Q3 2022 and down by approx. 2.9% compared to Q4 2021;
- **coking coal production** was roughly 2.76 million tons, up by approx. 4.8% compared to Q3 2022 and up approx. 0.5% compared to Q4 2021;
- **steam coal production** was 0.71 million tons, down by approx. 11.3% compared to Q3 2022 and down by approx. 14.1% compared to Q4 2021;
- **total coal sales** was approx. 3.29 million tons, down by approx. 5.8% compared to Q3 2022 and down by approx. 13.4% compared to Q4 2021;
- **total coking coal sales** were approx. 2.51 million tons, down by approx. 5.5% compared to Q3 2022 and down by approx. 9.6% compared to Q4 2021;
of which: internal sales were approx. 0.91 million tons, down by approx. 15.2% compared to Q3 2022 and down by approx. 20.2% compared to Q4 2021;
- **total steam coal sales** was approx. 0.78 million tons, down by approx. 6.7% compared to Q3 2022 and down by approx. 23.7% compared to Q4 2021;
- **coal sales to external customers** in Q4 2022 accounted for approx. 72% of the total volume.

The operating results of the coke segment in Q4 2022 were as follows:

- **total coke production** in Q4 2022 was 0.68 million tons, down by approx. 13.4% compared to Q3 2022 and down by approx. 24.2% compared to Q4 2021;
- **total coke sales** in Q4 2022 were 0.75 million tons, up approx. 7.9% compared to Q3 2022 and down approx. 14.6% compared to Q4 2021.

Market conditions in Q4 2022

- Coal segment¹
 - the average quotation of The Steel Index (TSI) in July-November 2022, affecting JSW's prices in Q4 2022, was USD 264 per ton. Compared to the average TSI price in April-August 2022 affecting the prices in Q3 2022, it fell 27%,
 - the estimated average PLN-per-ton price of coking coal sold by JSW to external buyers in Q4 2022 versus the previous quarter dropped by approx. 23%. Converted into USD at the National Bank of Poland's average exchange rate in the pertinent quarter, the decrease was approx. 22%,
 - the Polish Steam Coal Market Index (PSCMI1) in sales to the commercial and industrial energy sector stood at PLN 548.22 per ton in Q4 2022 (data for October and November 2022) rose by approx. 2% compared to the previous quarter,
 - the average price of steam coal sold by JSW in Q4 2022 in relation to the previous quarter increased by approx. 10%.

- Coke segment²
 - the prices of blast-furnace coke in the European market in Q3 2022 was USD 460 per ton, down by approx. 31% compared to Q2 2022,
 - the average PLN-per-ton total contract price of coke sold by the JSW Group in Q4 2022 decreased by approx. 29% compared to Q3 2022. Converted into USD at the National Bank of Poland's average exchange rate in the pertinent quarter, the decrease was approx. 28%.

Data source: Platts, Coke & Anthracite Market Report, polskirynekwegla.pl

¹ JSW sets prices with its customers on the basis of benchmark prices based on the daily prices of Australian premium hard coking coal grades, in most cases by calculating their mean values by using two methods:

- the Nippon Steel method – a quarterly benchmark price calculated as the average of the first two months of the current quarter and the last month of the previous quarter,
- the Q-1 method – quarterly benchmark prices calculated on the basis of the average prices in the previous quarter;

the above means that the average price of coking coal in a given quarter is influenced by prices over five months (from the previous quarter and the first two months of the current quarter)

² Coke prices are set at the turn of each quarter to reflect the market terms in negotiations. The optimal approach is to compare the prices obtained in a given quarter with the average price in the previous quarter.