genial | Equity Research

VALE

2Q23 Operational Preview and Base Metals' unit sale

LatAm Metals & Mining

Main takeaways:

(i) Cost figured in 2Q23 will probably remain above the company's guidance of US$20-21/t; **(ii)** i.o production expected to rise +14.5% q/q and +3.2% y/y Genial Est.; **(iii)** Sales normalizing after fixing logistics issues that heavy rains brought last quarter; **(iv)** We estimate realized fines prices down -11% q/q Genial Est.; **(v)** Pellet premiums showing recovery; **(vi)** How does the proposed sale of Base Metals help Vale become at even discounted levels? We reinforce our view that the Company is at an excellent entry point

Vale will release its **2Q23 Production and Sales report on 18th of July**, after market close. We expect better results q/q, mainly due to the normalization of port logistics in fine ores, although it is still partially carrying the high costs of 1Q23, without achieving much dilution of its fixed costs.

The Company usually schedules a significant proportion of its maintenance activities during rainy periods (Q1 and Q2). This strategy, while leading to an increase in expenditures, allows for almost full operational capacity during more favorable seasonal periods, specifically in Q3 and Q4. However, **investor attention should be directed to our forecast of only a modest improvement in 2Q23 regarding cost dilution capacity**, as significant reductions in C1/t are unlikely to materialize, even ensuring a quarter spared from one-off effects observed at the port of Ponta da Madeira (MA). Such forecasts derive largely from the **lag observed in inventory sales volumes**, which inherently bear little chilling effect from the high costs incurred during the previous quarter.

Historical data reflect that 2Qs have consistently been the period when Vale performs poorly on dilution, largely attributable to the forementioned cost burden of inventory sales. Taking into consideration the potential downward adjustment in C1/t during 2Q23 (US$25.2/t Genial Est. vs. US$26.6/t 1Q23), which would be a move contrary to established trends following a weak performance in the previous quarter, it is pertinent to mention that the **cost figured will still remain above the company's guidance of US$20-21/t**.

Consequently, thought historical trends our analysis suggest that investors should exercise caution and maintain practical expectations about the prospective performance of Vale's cost structure in 2Q23. **In our view, cost performance will show a more robust improvement only in 2H23**. This does not interfere with the fact that for us, **Vale's shares are heavily discounted**.

Analysts

Igor Guedes
+55 (11) 3206-8286
igor.guedes@genial.com.vc

Lucas Bonventi
+55 (11) 3206-8244
lucas.bonventi@genial.com.vc

Renan Rossi
+55 (11) 3206-1457
renan.rossi@genial.com.vc

Company

VALE US Equity
Buy

Price: US$ 14.31 (13-jul-2023)
Target Price 12M: US$ 16.75 (NYSE)

VALE3 BZ Equity
Target Price 12M: R$ 83.00 (B3)

2Q23 Operational Preview: Production and sales

Ore production to rise q/q and y/y. With an easing of seasonal rainfall, and the continued ramp-up of production, we expect iron ore production to reach 76.4Mt Genial Est., up +14.5% q/q and +3.2% y/y. Despite the more concentrated annual production in 2H23, we expect the 2023 guidance of 310-320Mt to be beaten by the advance already seen in 1Q23. As we commented in the last two reports where we talked about Vale, the company's production was not weak in 1Q23, on the contrary, it came 5% above Genial Est. On the other hand, Vale produced well (considering the typical seasonality of 1Qs) but sold poorly, as a significant volume of the Northern System production could not be disposed of due to the interruption of operations at the Ponta da Madeira port. Operations at the port have been normalized, and this volume should be disposed of in 2H23.

Pellets' production may grow in a more contained manner in 2Q23. We project that pellet should show milder increases in the quarter on a y/y basis compared to 1Q23, as the guidance of 36-40Mt for 2023 relies on the production at the Brucutu pelletization mill (MG), which recently received the license for production, but the start-up should occur only during 2H23. Therefore, we project a production volume of 8.8Mt Genial Est. (+6.1% q/q; +1.7% y/y).

Base metals with opposite dynamics. We have contrary expectations for nickel and copper, which represent the main metals of Vale's energy transition unit, given annual downward guidance for the former and upward guidance for the latter. Therefore, we are projecting nickel clocking in at 36.9kt Genial Est. (-10.1% q/q; +6.2% y/y), seeking the guidance of 160-175kt, and for copper our model is in at 77.8kt Genial Est. (+16.1% q/q; +39.1% y/y), in accordance with its guidance of 335-370kt.

Table1. Production Summary Vale (2Q23E Genial Est.)

Production Summary (Kt)	2Q23E Genial Est.	1Q23 Reported	% q/q	2Q22 Reported	% y/y
Iron Ore[1]	76.480	66.774	14,5%	74.107	3,2%
Pellets	8.822	8.319	6,1%	8.672	1,7%
Nickel	36,9	41,1	-10,1%	34,8	6,2%
Copper	77,8	67,0	16,1%	55,9	39,1%

[1] Including third-party purchases, run-of-mine and feed of other pelletization plants.

Source: Genial Investimentos, Vale

Gap between i.o production and sales should normalize. The gap between iron ore production and fine ore sales should return to historical levels this quarter, due to the normalization of shipments at the ports of Ponta da Madeira (MA), which drain iron ore from the Northern System. We expect sales volume at 65.0Mt Genial Est., up +41.9% q/q and +3.6% y/y.

In addition, we expect sales for the other ores to follow the trend seen in production, with pellets expected to hit 8.9Mt Genial Est. (+9.4% qty; +0.6% y/y), and base metals sales totaling 42.3kt for nickel (+5.5% q/q; +7.6% y/y), and 75.6kt for copper (+20.5% q/q; +45.4% y/y).

Table2. Shipments Summary Vale (2Q23E Genial Est.)

Vale Shipments Summary (Kt)	2Q23E Genial Est.	1Q23 Reported	% q/q	2Q22 Reported	% y/y
Iron ore fines	65.057	45.861	41,9%	62.769	3,6%
Pellets	8.896	8.133	9,4%	8.843	0,6%
ROM	1.608	1.665	-3,5%	1.550	3,7%
Nickel	42,3	40,1	5,5%	39,3	7,6%
Copper	75,6	62,7	20,5%	52,0	45,4%

[1] Including third-party purchases

Source: Genial Investimentos, Vale

We estimate realized fines prices to be down by -11% q/q. Benchmark curves for i.o showed declines during 2Q23, with the 62% Fe closing at an average of US$111.0/t vs. US$125.5/t in 1Q23 (-11.6% q/q; -19.5% y/y); we expect Vale's realized price for fine ores to follow the same trend and stand at US$102.1/t Genial Est. vs. US$108.6/t in 1Q23, leading to decrease of -US$6.5/t for the quarter, even with the lagged provisioned price having a positive effect of +US$2.8/t and the forward provisioned with +US$0.1/t overall, assuming a premium of +US$1.6/t. Our model is structured for 2Q23 with pricing system with 19% of sales lagged, 62% currently and 19% forward.

Pellet premiums improving. For 2Q23, as ~30% of pellet sales are lagged, we expect pellet premiums over the 65% Fe reference curve to increase. References curves closed the quarter with an average of US$128.5/t, which with our expectation of premium over the curve at US$30/t Genial Est. (+US$7.8/t q/q; -US$8.5/t y/y), we then project a realized price of US$158.5/t Genial Est., down -2.5% q/q and -21.3% y/y.

Nevertheless, premiums for 3Q23 are already being negotiated and are showing improvements around +US$10/t, due to pricing dynamics at more reasonable levels in the European, Japanese and US markets. It is important to highlight here that although the dynamics of the 65% Fe reference curve, which underlies the premium, is heavily influenced by market conditions in China, in the case of pellet sales Vale has a relevant exposure in the other three markets we mentioned. Therefore, the contracts price dynamics are still influenced by the reference curves, however, linked to the market appetite conditions that today are better in those countries than it is in China, which favors a price spread above the reference.

Our Take on Vale

Summary: Production and sales. Our expectations are for iron ore production to reach 76.4Mt, marking an increase of +14.5% q/q and +3.2% y/y, as seasonal rains subside, and output continues to grow. The 2023 production guidance of 310-320Mt is likely to be achieved without major difficulties due to the advances seen in 1Q23. The historical disparity between iron ore production and fine ore sales is expected to minimize only mildly this quarter as shipments normalize at the port of Ponta da Madeira. However, further progress in this gap closure should only be seen in 3Q23, as Vale plans to offload a more representative portion of the 1Q23 spare volume only one quarter from now, taking advantage of the stronger seasonal movement typical of 2Hs.

Shipment volumes are projected at 65Mt Genial Est., an increase of +41.9% q/q and 3.6% y/y. Vale's price for fine ores is expected to follow the decelerating trends t/t of the 62% Fe reference curves and average US$102.1/t Genial Est., down -US$6.5/t from last quarter's realized price. All in all, we believe that on production and sales dynamics, Vale will report a substantial improvement over last quarter, which was anemic.

Cost will still be a point of interest. Historical records show that Vale's weakest performance for dilution, due to inventory sales costs, usually occurs in 2Qs. That is, the drop we expect in C1/t in 2Q23 (US$25.2/t Genial Est. vs. US$26.6/t 1Q23), considering the sequential behavior between 1Qs and 2Qs can be considered unusual, but still our projections point to a number above the guidance of US$20-21/t. Therefore, investors should be cautious and have realistic expectations on Vale's cost structure performance in 2Q23. We expect a significant improvement only in 2H23, but we still consider the stock undervalued.

We conducted a scenario sensitivity exercise that we believe is quite interesting for investors to understand why we look at Vale as a discounted company. This can be seen in our 2Q23 sector report on mining, in the chapter that discusses Vale, which is attached (Metals & Mining: Has the bearish scenario been fully priced in?). In addition to the variable stress approach, we took for that report in the appendix, we will demonstrate below one more point that reinforces our view that the Company today trades at a considerable discount.

Base metal's unit sale. News flow have suggested that the conclusion is near for the proposed sale of a 10% share in the Base Metals division to the Public Investment Fund (PIF) of Saudi Arabia. The suggested payment for this stake is approximately US$2.5bn. Recalling that initially the Company's intention was to sell the minority stake to some strategic player (miners or companies in the energy transition chain), and not to a financial player (banks or investment funds), Vale seems to have opened the possibilities to look at a less restricted number of potential buyers.

What do we think of the deal? If the sale is to be confirmed to an investment fund, our view is that long-term value generation would become lower. There is a current discussion whether a financial player would also be a strategic one. However, as much as there may indeed be people who understand the business within the management of a fund, the knowledge needed to unlock value from the unit would be better used, in our view, through a joint operation with a mining company or a company that belongs to the energy transition chain.

We believe that one of the reasons that may have made Vale look at a larger number of interested parties with different approaches, would be that those players, considered by us as more strategic, might not have reached an agreement with Vale in terms of proposal. In other words, they were willing to pay only a valuation level that seemed less attractive than what Vale was envisioning for the sale. In general, investment vehicles such as banks and funds can have a greater appetite to offer a more stretched valuation proposal. However, this is all hypothetical since the negotiations are confidential.

How does the offer help Vale become an even discounted company? In practical terms, although we ponder this aspect of the sale, the truth is that one approach to looking at the value of an M&A would be to understand whether there are buyers who would be willing to pay a certain price level at that time. This approach favors Vale to be even more attractive, since even considering our view that long term value creation for shareholders would be better directed if the sale occurs to a strategic player, even if it occurs to a financial player, the business is worth today what the investment fund is willing to pay. Thus, we see the subsidiary trading at a 23E EV/EBITDA of 10.4x, which with our **23E EBITDA expectation of US$2.4bn**, the Enterprise Value (EV) of the **base metals' unit would reach ~US$25bn**.

Thus, with Vale currently at a market cap of ~US$60bn and net debt of US$8.2bn, we find an EV of US$68bn for all units, which after stripping out the base metals portion stands at US$43bn. Expecting a total **23E Adjusted EBITDA of US$15bn**, we have an EBITDA ex base metals of US$12.6bn, which results in a **23E EV/EBITDA multiple after the carve-out of 3.55x**, below the historical average of 4.84x, and **heavily discounted**.

We reinforce that Vale is at an excellent entry point. In addition to looking discounted via multiples and considering the sensitivity analysis we did in our previous report, we see that **share buyback programs** end up turning into **direct shareholder value generation**, with Vale repurchasing ~16% of its total shares over the past 3 years, not to mention the cumulative dividend that beats 52% of its market value today.

While all this value generation happens, we still expect that **the seasonal ramp-up in production throughout 2H23 should decrease its COGS/t**, by the ability of cost dilution and resolution of the logistical problems that happened only in 1Q23, but that should affect 2Q23 partially. Although a turbulent scenario in China brings an expectation of lower prices going forward, we understand that some internal signals throughout the year should be positive and increasing investors' confidence towards Vale. Therefore, we maintain our **BUY rating**, with a **12M Target Price of R$83.00** for **VALE-B3**, and a **12M Target Price of US$16.75** on **NYSE ADRs**, with **upside of +17.05**%.

Appendix: Vale

Figure 1. Vale – Income Statement in US$ Millions (Genial Est. 2023-2028)

Income Statement	2023E	2024E	2025E	2026E	2027E	2028E
Net Revenue	**42.081**	**42.155**	**43.584**	**44.967**	**45.547**	**46.723**
(-) COGS	(24.349)	(26.693)	(28.577)	(30.839)	(32.535)	(34.234)
Gross profit	**17.732**	**15.462**	**15.007**	**14.128**	**13.012**	**12.489**
(-) Expenses	(4.446)	(3.616)	(2.497)	(2.573)	(2.098)	**-2.025**
Adjusted EBITDA	**13.286**	**11.846**	**12.511**	**11.555**	**10.914**	**10.465**
(-) D&A	(3.409)	(3.566)	(3.709)	(3.850)	(3.986)	(4.113)
EBIT	**9.877**	**8.280**	**8.802**	**7.704**	**6.928**	**6.352**
(+/-) Financial Result	(690)	(416)	(225)	(4)	41	371
(-) Taxes	(188)	(55)	(49)	(4)	31	37
Net income	**9.000**	**7.808**	**8.527**	**7.696**	**7.000**	**6.760**
Profitability						
Net margin (%)	21,39%	18,52%	19,56%	17,12%	15,37%	14,47%

Figure 2. Vale– Cash Flow in US$ Million (Genial Est. 2023-2028)

Cash Flow	2023E	2024E	2025E	2026E	2027E	2028E
Net Revenue	**42.081**	**42.155**	**43.584**	**44.967**	**45.547**	**46.723**
(-) COGS	(24.349)	(26.693)	(28.577)	(30.839)	(32.535)	(34.234)
Adjusted EBITDA	**16.695**	**15.412**	**16.220**	**15.405**	**14.899**	**14.578**
EBIT	**13.286**	**11.846**	**12.511**	**11.555**	**10.914**	**10.465**
(-) Taxes	(188)	(55)	(49)	(4)	31	37
(+/-) Provisios and dams	784	(584)	394	(61)	371	197
(+) D&A	3.409	3.566	3.709	3.850	3.986	4.113
(+/-) Δ WK	(626)	(588)	626	(257)	(21)	(46)
(-) Capex	(5.878)	(6.020)	(6.173)	(6.217)	(6.217)	(6.217)
FCFF	**10.788**	**8.166**	**11.017**	**8.867**	**9.064**	**8.549**

Disclaimer

This report has been produced by the research department ("Genial Institucional Research") of Genial Institucional Corretora de Câmbio, Títulos e Valores Mobiliários S.A. ("Genial Institucional CCTVM"). Genial Institucional is a brand name of Genial Institucional CCTVM.

Genial Rating

	Definition	Coverage
Buy	Expected return above +10% in relation to the Company's sector average	**46%**
Neutral	Expected return between +10% and -10% relative to the Company's industry average	**44%**
Sell	Expected return below -10% in relation to the Company's sector average	**5%**
under Review	Under review	**5%**

This report may not be reproduced, retransmitted, displayed or re-published to any other person, in whole or in part, for any purpose, without the prior written consent of Genial Institucional CCTVM, which consent may be sought by contacting the principal analyst, who is going to be responsible for obtaining the Control Room´s approval. Genial Institucional CCTVM accepts no liability whatsoever for the actions of third parties in this respect.

This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report is not tailored to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither Genial Institucional CCTVM nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion contained in this research report or lack of care in this research report's preparation or publication, or any losses or damages which may arise from the use of this research report.

Genial Institucional CCTVM may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups, or affiliates of Genial Institucional CCTVM

Investing in any of the non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. Non-US securities mentioned, recommended, offered, or sold by Genial Institucional CCTVM or its affiliates are not insured by the Federal Deposit Insurance Corporation and are subject to investment risks, including the possible loss of the entire principal amount invested. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States

The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

ANALYST(S) DISCLOSURES AND CERTIFICATION

The analysts hereby certify that the views expressed in this research report accurately reflect their personal views about the subject securities or issuers and it was prepared in an independent manner, including with respect to the person and to Genial Institucional.

The analyst's compensation is, directly or indirectly, determined by income from Genial Institucional´s business and financial operations.

In addition, the analysts certify that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

The compensation of the analyst who prepared this report is determined by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues, however, compensation may derive from the business and financial operations revenues of Genial Institucional CCTVM, its affiliates, parent companies and/ or subsidiaries as a whole, of which investment banking, sales and trading are a part. Compensation paid to analysts is the sole responsibility of Genial Institucional CCTVM.

The analysts **Igor Guedes, Lucas Bonventi and Renan Rossi** are the responsible for the content of this report and for meeting the requirements of Securities and Exchange Commission of Brazil (CVM) Instruction 598/2018.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

IMPORTANT DISCLOSURES FOR U.S. PERSONS

This research report was prepared by Genial Institucional CCTVM, a company authorized to engage in securities activities in Brazil. Genial Institucional CCTVM is not a registered broker-dealer in the United States (U.S.) and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act.) Genial Institucional CCTVM distributes such reports in the U.S. pursuant to Rule 15a-6 and in this context the chaperoning party (Brasil Plural Securities LLC) and in certain instances such distribution is part (or viewed) as part of a soft dollar arrangement established and maintained by Brasil Plural Securities LLC. Genial Institucional CCTVM does not provide this report (or any research) to U.S. persons pursuant to any express or implied understanding that those U.S. persons will direct commission income to Genial Institucional CCTVM.

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Brasil Plural Securities LLC, a registered broker dealer in the United States with an office at 545 Madison Ave., New York, NY 10022, (212) 388-5600. Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments directly through Genial Institucional CCTVM.

Brasil Plural Securities LLC accepts responsibility for the content of this research report, subject to the terms set out below, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor.

The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority (“FINRA”) and may not be an associated person of Brasil Plural Securities LLC and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

The disclosures contained in research reports produced by Genial Institucional CCTVM and distributed by Brasil Plural Securities LLC in the U.S. shall be governed by and construed in accordance with U.S. law. Additional information relative to the financial instruments discussed in this report is available upon request.