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VALE

Investor Tour 2024: Gradual improvement, no abrupt changes

LatAm Metals & Mining

Main takeaways:

(i) Operational improvements and **iron ore guidance revised upwards** to **323-330Mt** (vs. 310-320Mt previously); **(ii)** Growth and quality premiums; **(iii)** Base Metals news; **(iv)** Reduced costs through volume and efficiency improvements; **(v)** Demand for quality still weak, but Carajás is registering a premium of ~US$8/t; **(vi)** Mr. Pimenta's objectives in his new role as CEO; **(vii)** India could be a destination for Iron ore exports? We talk about that throughout the report; **(viii)** Essentially due to the excessive market penalty, with the company trading at an **EV/EBITDA 25E** of **3.3x** (vs. 5.0x historical average) and considering its solid cash flow generation at this discounted price level (**FCF Yield 25E ~13%**), in addition to the share buyback program, we reiterate our **BUY rating**. We incorporated the new guidance adjustments into our model, positioning it in the **middle of the new range** published by Vale (**326Mt Genial Est.**), but **without changing our Target Price**, due to the **spot price of iron ore** (~US$93/t). Although we are already working with a **bearish curve below consensus since February**, we believe that the average price will be even lower. We therefore maintain our **12M Target Price** for **VALE3-B3** at **R$78.50** and for the **ADRs-NYSE** at **US$14.50**, resulting in an **upside** of **+36.31%**.

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Company

VALE US Equity
Buy

Price: US$ 10.25 (11-Aug-2024)
Target Price 12M: US$ 14.50 (NYSE)

VALE3 BZ Equity
Target Price 12M: R$ 78.50 (B3)

Yesterday, September 11, Vale held an **investor tour in Carajás (PA)**. Before starting the tour of the facilities, the company gave a presentation to analysts and investors, including a Q&A session. The focus of the presentation was on the following topics: **(i)** iron ore **production guidance** for **2024 revised to 323-330Mt** (vs. 310-320Mt previously); **(ii)** quality expectations and iron ore mix premiums; **(iii)** expansion projects in the ferrous division (Vargem Grande and Capanema, both with +15Mtpy); **(iv)** copper and nickel projects and initiatives; **(v)** C1/t cost reduction and iron ore all-in. We will cover these topics throughout the report.

Operational improvement and ferrous guidance with slight expansion

Focus on operational excellence and improving production processes. After a brief introduction by Vale's current CFO and future CEO, Gustavo Pimenta, we followed the presentation by Carlos Medeiros, the company's COO. During his explanation, Mr. Medeiros highlighted crucial points such as the emphasis on safety and the impacts generated by operational excellence. He mentioned the increase in production, driven by greater asset reliability, as well as specific improvements that have resulted in greater efficiency, such as the **(i)** faster shift change at Serra Sul (80% faster than last year) and the **(ii)** bilateral loading strategy for trucks and heavy equipment at Serra Norte.

Increased production guidance for 2024 in iron ore. Mr. Medeiros also addressed the **(i)** geological model, which provides a more detailed knowledge of the ore body (OBK), **(ii)** the strategies adopted to mitigate restrictions related to cavities and smooth mine depletion, and, finally, **(iii)** presented a revision of the iron ore production guidance for 2024. The guidance was **changed to 323-330Mt** (vs. 310-320Mt previously), reflecting Vale's solid performance, which has been breaking production records in recent months.

Guidance unchanged for 2026 and 2030. Marcelo Spinelli, Vale's executive vice-president, presented the company's main projects and growth prospects, highlighting the potential impact of new projects up to 2026. He pointed out that these projects, including **(i)** Vargem Grande with +15Mtpy, **(ii)** Capanema also with +15Mtpy and **(iii)** expansion of S11D with +20Mtpy, should together add ~50Mtpy to iron ore production capacity. However, we would point out that this volume addition will be partially neutralized by losses resulting from licensing and mine depletion (mainly Serra Norte). Therefore, the company has maintained its projected guidance of 340-360Mt in 2026 and >360Mt from 2030 onwards, since these figures released at Vale Day in December last year already took expansion projects into account.

Gustavo Pimenta joins as CEO. Mr. Spinelli mentioned several other project opportunities from now on. Still in the 2024–2030-time window that have not been approved or licensed, we highlight the expansion of Serra Leste (PA) and Itabira (MG). We believe that the speed of execution of these projects will depend more on Vale's alignment with the authorities. We hope that with Mr. Pimenta taking over as CEO, dialogue with the competent government bodies will be more fluid than it was under Eduardo Bartolomeo and that the transition will take place more quickly than we initially expected.

Quality over volume strategy. The company emphasized several times in the presentation the growing priority of quality over volume, noting that steelmakers will increasingly demand greater efficiency from their blast furnaces, which would be achieved with iron ore with a lower silica content (above 62% Fe). Therefore, the sinter feed quality of the northern system would prevail in the long term, adding premiums on top of the 62% Fe curve. In the agglomerates section, as well as highlighting the more prominent premium on pellet feeds, Vale commented on briquettes, which had some setbacks after the commissioning phase at the Tubarão (ES) plant, causing delays in the sales schedule. It is expected that the modifications to resolve the impasses will be completed in November and that production will begin at a normalized pace in December.

Investors have doubts about the strategy of focusing on quality premiums. On this point, even if Vale's strategy is to prioritize the quality of the mix rather than simply growing volume, the truth is that the market in the short term is showing the opposite. Steel mills in China are opting to buy a greater volume of low-grade iron ore. We interpret that, on the one hand, the long-term fundamentals seem to us to be in line with Vale's strategy of increasing the quality of the mix and raising more premium. On the other hand, unless there is more severe environmental pressure to decarbonize, we don't believe that Chinese mills will opt for products with less silica and more expensive premiums, in the current context of squeezed margins in steelmaking. The biggest challenge for this strategy in the short term is still a context that Vale does not control (the macroeconomic situation in China).

The increase in guidance is obviously positive, but not a surprise. Although we welcome the increase in guidance, the news does not surprise us. As stated in our other publications throughout the year, Vale had been delivering an operational performance in iron ore fines above our estimates since 4Q23. We had already changed the estimate for 2024 in our proprietary model in April, from the middle of the guidance in force until then, to the top, at 320Mt. This time, Vale confirms our optimism about production and increases its own target by ~3% by the end of the year. In addition to improved operational efficiency in extraction, this revision is partly due to the **(i)** 1 month earlier start of operations at Vargem Grande 1, now in September, which adds ~15Mtpy to production. In addition, we also attribute **(ii)** a more favorable climatic environment for mining activity in Brazil, marked by drier conditions, with the transition from El Niño to La Niña.

Energy transition metals (VBM)

Negative changes in Nickel, but positive in Copper. Vale had already made a presentation on June 20 about the review of Vale Base Metals (VBM) assets and, in a very similar way, has now demonstrated on the Investor Tour the **(i)** potential of resources, **(ii)** improved productivity of copper mines, with efficiency gains and **(iii)** potential for development and optimization of nickel assets. For guidance, Vale reduced its nickel production volume expectation for 2024 to 153-168Kt (vs. 160-175Kt previously), due to a greater impact from maintenance carried out in 1H24. Costs have also risen, with an expected all-in now at US$15,000-16,500/t (vs. US$14,500-16,000/t previously).

On the other hand, the company reduced its all-in cost guidance for copper to US$3,300-3,800/t (vs. US$4,000-4,500/t previously). In terms of numbers, our calculations point to an effect that is only marginally negative (~2% of VBM's EBITDA), given the higher profitability of Copper, which is experiencing a positive price momentum, and which would now have a lower cost, partially offset by a worsening in estimates for Nickel (both in production and cost).

Investors pay almost nothing for VBM at the current market valuation. The entire operation and strategy presented for Vale's base metals unit (VBM) seems excellent to us, with a view to improving the assets over the next few years. However, our perception is that VBM is not usually a representative bullish driver or catalyst for Vale's shares. This is unfortunate and goes against a partial movement of fundamentals, since we believe that VBM is basically getting off "for free" within the company's current market valuation (trading well below the ~7x EV/EBTIDA multiple of the base metals sector). Therefore, as encouraging as the figures look, we believe that the operation will have to be carried out very well in order to generate the value creation that the company estimates.

Reduced costs through improved volume and efficiency

Importance of C1/t in a situation of depressed iron ore prices. C1 cost is an essential metric for assessing the resilience of companies in the face of falling iron ore prices. This is because C1/t has an inflationary component over the years. As mine depletion occurs, companies start moving more mass with no economic value until it reaches the ore body, increasing costs over the years. In companies with less efficient C1/t, usually smaller players, the C1/t is very high compared to the majors, pushing the all-in to US$80-90/t (vs. ~US$57/t for Vale).

This means that if the price of 62% Fe iron ore enters this range and stays there for many months, these higher-cost miners will exit the market. Although it is difficult to create a reliable calculation, since not all the smaller companies report the figures, some market data suggests that ~15-20% of the global iron ore supply could be eliminated in this situation, which would cause a price upside via supply restriction, even with demand waning in China.

C1/t guidance reaffirmed once again. During the event, Vale presented its projections for C1 until the end of the year. In **August**, the company reached a C1 of **US$20.5/t** and projects a **further reduction** for the weighted average of 3Q24 and 4Q24. The gradual reduction in C1/t ex. third-party purchases over 2H24 vs. 1H24 was also expected by us, as we had already signaled in the 2Q24 review report, which is attached (Vale 2Q24 Review). This is because the cost reduction is consistent with the usual increase in production that seasonally occurs in the second half of the year, which allows for a greater dilution of fixed costs. Therefore, Vale once again reaffirms its guidance of **US$21.5-23/t in 2024**. For now, our estimate is **US$22.4/t 24E** (within guidance). Regarding the **all-in cost**, Vale also left the guidance of **US$53-57/t** for iron ore unchanged, pointing out that the trend is to reach the **upper limit** of this range, due to the impact of market premiums and the increase in spot freight rates.

Our Take on Vale

Demand for quality is weak, but Carajás is at a premium of +US$8/t. The company pointed out that the premium for Carajás (PA) is at a solid level, between US$8-10/t, information that is new to us. However, in 2Q24, we observed a negative quality premium for iron ore fines, reaching -US$3.3/t (or -US$0.1/t when considering the weighted contribution of pellets). We understand that this raises doubts about the penetration of the volume extracted from Carajás within the total shipping mix, especially in an unfavorable macroeconomic scenario for the export of high-quality iron ore.

Value over volume: We are skeptical of high premiums at the moment. In order to push the premium into negative territory at -U$3/t, as in 2Q24, we think it is possible that inventories at Carajás (PA) are high, and that sales are being very concentrated in high-silica sinter feed, coming from the southeastern system or from third-party purchases, although the company has stated that the inventory level in the northern system is under control. Vale believes in the future of the pellet operation, which has a more diversified client portfolio than iron ore fines and is therefore less dependent on China, and which is currently registering premiums of ~US$35-40/t. In the composite, the premium guidance weighting iron ore fines with pellets is US$3-4/t in 2024 and US$8-12/t in 2026. We remain of the opinion that it is extremely challenging for the company to achieve premiums close to the upper bands. We see Vale more likely to reach the lower bands, even with some difficulty.

Pimenta's management objectives. Gustavo Pimenta mentioned that one of his main objectives as the new CEO will be to strengthen the relationship with stakeholders, including the government, seeking to create solutions that benefit all the company's stakeholders. The relationship with the government is a critical issue for Vale, as we have highlighted on several occasions.

The company itself recognizes that it could be producing an additional 50Mt in Carajás and operating at a more competitive C1/t, at ~US$15/t (vs. the lower band of the guidance at US$21.5/t), if it weren't for the slowness in licensing. This has been, and will continue to be, one of Mr. Pimenta's main objectives, and he believes that discussions are moving towards greater alignment between the parties. Our expectation is that Vale's relationship with the authorities, especially for licensing, will improve under Mr. Pimenta's management compared to Eduardo Bartolomeo.

Could India be a destination? Vale presented information about the concentration plant in Sahar (located in Oman) and, due to its geographical proximity to India, executive vice-president Mr. Spinelli mentioned the possibility of exporting iron ore to the country. He pointed out that India could be a potential market, although the country has a balanced domestic production of iron ore (mainly low grade) and steel. According to Vale, the export opportunity would be concentrated in western India, with an estimated volume between 5-10Mt. In the short term, we don't see India as a substitute (even partial) for the volume previously consumed by China, given the bursting of the real estate bubble in 2021 (home sales are still falling by double digits).

Gradual improvement in investor sentiment, without abrupt changes. We incorporated the new guidance adjustments into our proprietary model, positioning our estimate in the middle of the new range released by Vale of 323-330Mt. Therefore, the iron ore production assumption for 2024 is now **326Mt vs. 320Mt in our previous model**. This means a marginal increase of only 2%. Although we have noticed a partial improvement in investor sentiment towards the equity story (reflecting the stock's +2.8% rise in yesterday's trading session), for us, the new guidance was not a big surprise, nor do we believe that it will substantially alter 24E EBITDA (our account is only 1%). The big issue is that we believe Vale's shares were (and still are) heavily discounted. Therefore, good news (even if it has a low effect) can have a more noticeable impact on the share price.

New guidance does not mean an increase in the target price. As we highlighted above, we believe that the change in guidance is insufficient to cause a significant impact on our projections compared to the assumptions we were using before yesterday's event. Therefore, we continue without changing our Target Price, due to the **spot price of 62% Fe iron ore** (~US$93/t). Although we have been working with a **more bearish curve than the consensus since February**, when we estimated that the price would decelerate to an average of **US$98/t** in **3Q24E** and **US$95/t** in **4Q24E** vs. ~US$130/t at the time, it is still likely that the average price will be slightly lower than our projection at the beginning of the year. Later, in our sector reports, we will consider reducing our estimate if the commodity does not recover in the coming days.

Conversely, due to the excessive market penalty, with the company trading at an **EV/EBITDA 25E** of **3.3x** (vs. 5.0x historical average) and considering its **solid cash flow generation** at this discounted price level (**FCF yield 25E** of **~13%**), in addition to the share buyback program, we reiterate our **BUY rating**. We therefore maintain our **12M Target Price** for **VALE3-B3** at **R$78.50** and for **ADRs-NYSE** at **US$13.85**, resulting in an **upside** of **+36.31%**.

Appendix: Vale

Figure 1. Vale – Income Statement in US$ Millions (Genial Est. 2024-2029)

Income Statement	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**39.856**	**44.580**	**43.639**	**45.540**	**46.582**	**50.303**
(-) COGS	(25.001)	(27.973)	(28.162)	(29.333)	(30.901)	(33.368)
Gross Profit	**14.855**	**16.607**	**15.477**	**16.207**	**15.681**	**16.935**
(-) Expenses	(3.109)	(3.578)	(3.354)	(3.000)	(2.698)	(2.915)
Adjusted EBITDA	**14.914**	**16.284**	**15.617**	**16.866**	**16.819**	**18.022**
(-) D&A	(3.139)	(3.314)	(3.488)	(3.664)	(3.847)	(4.022)
EBIT	**11.774**	**12.970**	**12.129**	**13.202**	**12.971**	**14.000**
(+/-) Financial Result	(2.359)	(2.063)	(2.007)	(2.022)	(1.983)	(2.040)
(-) Taxes	(1.482)	(1.653)	(1.521)	(1.702)	(1.679)	(1.846)
Net income	**7.934**	**9.254**	**8.601**	**9.478**	**9.310**	**10.114**
Profitability						
Net margin (%)	19,91%	20,76%	19,71%	20,81%	19,99%	20,11%

Figure 2. Vale– Cash Flow in US$ Millions (Genial Est. 2024-2029)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**39.856**	**44.580**	**43.639**	**45.540**	**46.582**	**50.303**
(-) COGS	(25.001)	(27.973)	(28.162)	(29.333)	(30.901)	(33.368)
Adjusted EBITDA	**14.914**	**16.284**	**15.617**	**16.866**	**16.819**	**18.022**
Adjusted EBIT	**11.774**	**12.970**	**12.129**	**13.202**	**12.971**	**14.000**
(-) Taxes	(1.482)	(1.653)	(1.521)	(1.702)	(1.679)	(1.846)
(+) D&A	3.139	3.314	3.488	3.664	3.847	4.022
(+/-) Brumadinho and Samarco	(716)	(2.070)	(1.750)	(1.279)	(1.117)	(826)
(+/-) Δ WK	1.517	569	847	(393)	(244)	(463)
(-) Capex	(6.758)	(6.778)	(6.778)	(7.319)	(7.319)	(7.319)
FCFF	**7.475**	**6.352**	**6.416**	**6.173**	**6.459**	**7.568**

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