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VALE

Vale Day 2024: Discourse change!

LatAm Metals & Mining

Main takeaways:

In general terms, management emphasized **(i)** operational safety, especially after the renegotiation of the Mariana (MG) agreement, eliminating this stock overhang. At the same time, the **(ii)** goal of maintaining cost competitiveness throughout the cyclical phases of the business was reaffirmed. Regarding C1/t, as we will describe throughout the report, we believe that the company has greater possibilities of reducing costs and increasing margins even if iron ore bounces at US$90/t level (vs. ~US$102/t currently). Another point that caught our attention was that **(iii)** for the **first time in a while**, we heard Vale **talk less about "value over volume**" and more about **"delivering what the client needs".** In other words, the commercial strategy that should be in force from now on will be to present **operational flexibility**, focused mainly on **blends**, since the market today does not show a strong interest in buying high grade iron ore fines. Lastly, **(iv)** as usual, the company **updated its guidance's section,** which in general, some were revised to detract from value and others to add to it, with a **combination that culminated in a basically flat effect on our valuation model,** with no very disruptive surprises from a numerical point of view. **(v)** If well executed, the commercial strategy **seems to address one of the critical points we were making** about the company's high ambition to realize premiums with the Chinese market in decline. As we are already conservative in our assumptions on this matter and continue to see value extracted from our property model, we reiterate our **BUY rating**, with a **12M Target Price** of **R$78.50** for **VALE3-B3** (unchanged) and **US$13.00** for the **ADRs-NYSE** (vs. US$14.00 previously), implying an **upside** of **+34.26%**.

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Company

VALE US Equity
Buy

Price: US$ 9.64 (03-Dec-2024)
Target Price 12M: US$ 13.00 (NYSE)

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

Once again, **we attended Vale Day**, the most important event on the company's annual calendar, which took place yesterday, **December 3rd**. This year, the ceremony was **held in New York**, and included the participation of the management team, with **many members even occupying new positions** in the command chain. In attendance to talk to analysts and investors were Mr. Gustavo Pimenta (CEO), Mr. Marcelo Bacci (newly appointed CFO and former Suzano), Mr. Carlos Medeiros (Executive VP and Chief Operating Officer), Mr. Murillo Muller (interim CFO and Chief Controlling Officer), Mr. Rogério Nogueira (newly appointed Commercial VP) and Mr. Shaun Usmar (newly appointed CEO of VBM). Management followed the classic ritual of the event with a presentation, a formal Q&A section and a chat with the analysts present that preceded the official closing of the agenda.

Iron ore solutions

Production guidance revised to maximize value. The iron ore **production guidance** was revised to 2024, reaching **328Mt** (vs.325-330Mt previously), indicating a strategic move to stabilize volumes with an expectation of gradual growth to **360Mt in 2030** (unchanged vs. previous guidance). The continued emphasis on high quality ore (63-64% Fe) reinforces the company's competitive

positioning in the global market, by seeking premiums and strengthening margins. However, we still point out that dependence on Chinese demand, which is clearly in decline, remains a structural risk to the investment thesis and continues to worry the investors we spoke to.

Although the production target was already partly reflected in the market without major modifications, qualitative adjustments, such as the search for higher value-added products and improvements in cost control, bring potential to support margins in the medium term. This strategy not only dilutes fixed costs, but also increases FCF, if the price scenario remains minimally above the support zone of US$90/t, as we will comment on throughout the report. Even so, we believe that a weakening in global demand, driven above all by the slowdown in the Chinese economy, which accounts for ~70% of demand seaborne, could limit value capture due to investor skepticism.

Focus on ensuring competitiveness by lowering costs in the long run. During the presentation, Vale's management reinforced the **C1 ex. third-party purchase** cost drop to **US$18-19.5/t by 2030** (vs. **~US$22/t 24E**). As we have already commented in the last reports we published in our Metals & Mining coverage, the companies must do their best to overcome the inflation components that have increased C1/t over time, especially after 2019, so that they can then achieve a better level of efficiency and improve margins, even in the event that the 62% Fe benchmark is locked, so to speak, at US$90/t in the short term (today it is at ~US$102/t).

This reduction in C1/t should be driven by **(i)** greater dilution of fixed costs through increased production, especially in the Northern System, **(ii)** better logistical infrastructure combined with solutions such as the long-distance belt conveyor (Serra Sul asset) and **(iii)** the highest level of the USD/BRL exchange rate in the historical series, today above the R$6.00 barrier, which helps to dilute costs that Vale has in BRL, as there is a conversion to USD in the P&L.

Although the target is in line with the previous guidance and does not present a substantial novelty in this regard, we believe that the inclusion of more robust operational modernization initiatives and the company's greater emphasis on explaining how the reduction will become feasible from a technical point of view offers greater predictability in execution. We know that investors are, for the most part, very skeptical on this point, and given the difficulties of structural inflation in C1, we understand the reason for looking at the numbers indicated by the company with a certain tone of suspicion. Even so, **our perception of Vale Day is positive**, especially about costs. It's possible that this disbelief will be dispelled as the company proves that it can achieve its guidance, and this unlocks the market valuation, which is very depreciated nowadays.

In the short term, what about C1/t and All-in costs? The situation looks promising. The target for C1 cash cost **ex. purchase from third parties** was adjusted to **US$22.0/t in 2024** vs. US$21.5-23.0/t in the previous guidance, showing a drop of -4.3% in relation to the upper band, although it was only slightly below

our projection (-1.3% vs. Genial Est.), which was updated at the Investor Tour in mid-September to US$22.3/t. This means that management was confident at yesterday's event that Vale will be able to close 2024 with a -1.2% y/y drop in C1/t. Although it's a soft drop, we say it's an emblematic reduction, marking the first year since at least 2020 that the company would achieve a y/y cost cut.

For 2025, C1 ex. third-party purchases remain within the projected range of **US$20.5-22.0/t**. We assess that the expected reduction is largely positive for FCFE, being driven by efficiency programs and dilution of fixed costs due to the increase in volumes, in addition to the dilutive effect of the higher USD/BRL exchange rate, as we have already explained. The **All-in Cost**, in turn, remains stable, with a forecast of **US$57/t (24E)**, reducing to **US$50-54/t (26E)**.

One point we note is that, within the assumptions used by Vale to arrive at these figures, is a **USD/BRL exchange rate of R$5.50**, which seems quite conservative to us, given that the FX rate has broken through the R$6.00 barrier and that Brazil's fiscal situation seems to be deteriorating. Therefore, it is possible to imagine an FX rate above the level established by Vale in 2025 and possibly in 2026, which would imply both C1/t and All-in even lower than the guidance. Remember that every +US$0.10 increase in the FX rate corresponds to a -US$0.5/t reduction in All-in.

Management says that demand remains solid, but the market is pricing otherwise. The volume guidance also assumes a gradual increase in global steel production to **2,350Mt (40E)** vs. **1,910Mt (24E)**, with growth in the **Indian, Southeast Asian and MENA** regions standing out. Although Chinese demand shows signs of slowing down, the company believes that geographical diversification in global steel consumption reduces dependence on the Chinese market, creating opportunities. Domestic reindustrialization, combined with increased intensity in the use of steel, reinforces the prospects for growth in the medium and long term.

From Vale's perspective, seaborne demand for iron ore should remain basically flat, reaching **1,545Mt (30E)**, with only a slight reduction of -0.5% vs. 24E. Although we have noticed in recent events that management has been trying to talk to the market to dispel the idea that Vale's thesis is as dependent as imagined on the Chinese market, on the other hand, it is hard to imagine China no longer playing a central role in this narrative. Along these lines, we think that the increase in scrap consumption could help to reduce dependence on iron ore imports, pushing seaborne demand even lower. At the same time, the regions we have mentioned are showing growth driven by the installation of new blast furnaces and greater consumption of pellet feed.

In the meetings we've had with investors, sentiment remains bearish for mining. Considering the universe of investors with whom we have contact with, including some meetings we had in New York held in the past couple of days, the vast majority are either out of Vale in long positions or have very small participation in their portfolios.

The majority of the fund managers we have spoken remain bearish about the mining, with a still very exacerbated fear of the effect that changes in the Chinese real estate market and in the demographic framework of the region will have on the demand side, which would justify the high discount of Vale's shares compared to the fair value we find in our proprietary model. We have recently seen investors betting on one-off equity stories for the steel market, such as Gerdau (especially the local ones), and a more bullish sentiment for the Pulp & Paper segment in general.

Vale mentions challenges on the supply side, but we don't see the system under pressure in the near future. According to the company's view, iron ore supply is already facing significant obstacles, with a projected decline to **1,495Mt (30E) vs.** ~1**,600Mt (24E)**, attributed to **(i)** depletion, **(ii)** rising operating costs from global players and **(iii)** regulatory complexities. According to management, to meet the projected demand of **1,545Mt (30E)**, it would be necessary for the 62% Fe benchmark curve to always be above **US$90/t**, making new volume replacement projects economically viable. This, in a way, supports our thesis that iron ore could not fall below this level in the short term, mainly based on the high-cost portion of supply, which although it is smaller in scale in the seaborne system, still has a weight that is not negligible (20-30%).

Even so, we think that both the majors and the smaller mining companies have volume expansion projects for the coming years, the best known of which is Rio Tinto's start-up of Simandou in 2026, in New Guinea, with a capacity of 60Mtpy and reserves of ~68% Fe. Our forecast is that the project will be delayed, due to the high CAPEX levels to create the necessary infrastructure, pushing the start-up to 2027. Given this, we believe that the balance between supply and demand should continue to loosen over the next few years, **without any kind of supply pressure that would significantly raise prices** to some level above US$120/t from a fundamentalist point of view.

Flexibility in the mix is a point that draws attention. This potential imbalance between supply and demand emphasizes the importance of optimizing the product mix, ensuring competitiveness and mitigating the impacts of depreciated quality premiums and higher costs in the lower silica segments. In this sense, Mr. Rogério Nogueira, who recently took over as Commercial VP after Mr. Spinelli left the position, seemed very vocal in refining the strategy towards flexibility, composing not necessarily a higher value mix, but one that best meets clients' needs in a business that has volatile margins due to its cyclical nature. We've been talking about the urgent necessity for steel mills to cut costs, which in turn is why industry is currently neglecting iron ore with less silica.

This is the main reason that, for the first time, we're hearing from Vale a **discourse that is less emphatic on the theme of "value over volume**" and more focused on **"delivering what the client needs".** We see Vale's products positioned in the ideal sintering zone. In this regard, the company does have a competitive edge, with blending centers in **Brazil (~125Mtpy)**, **Malaysia (~25Mtpy)** and **China (~13Mtpy**).

One of the products with the most appetite in the market is the BRBF, which mixes iron ore extracted in Carajás (PA), with a higher Fe % and less silica, with a lower graded ore, extracted from the Southeast system (MG). We believe that this type of solution, coupled with customization geared more towards meeting the specific needs of each client in different types of situations, is already a reality and will increasingly take over the commercial fronts of the global iron ore market.

The sales mix will be adaptable to the cyclical conditions of the business. According to the commercial strategy discussed during the event, in high price scenarios, the company will focus on maximizing production and prioritizing high quality products, while in more depressed price scenarios, the strategy will focus on optimizing the portfolio and lower cost products. This approach seems to guarantee operational resilience, but the ability to capture **premiums** is still a big question mark for investors. We remain skeptical about achieving guidance on this point, where **All-in** was maintained at **US$3-4/t (25E)** and was **revised downwards** by **26E** to **US$4-6/t** (vs. US$8-12/t previously). The lower band of the new figure came close to what we already had in our model, indicating that our skepticism was correct.

As for the infrastructure needed to adapt the sales mix, during the presentation it was mentioned that there are **20 blend-in ports**, located mainly in Brazil, Malaysia and China, as we mentioned, and a concentration capacity of **~150Mtpy**, leading to a reduction in **time to market**, while the company optimizes the portfolio to meet specific demands. In addition, leadership in the agglomerates market, such as pellets and briquettes, positions Vale as an essential supplier to customize the steel industry's needs.

And how do quality products fit into this story? The share of high-quality products, such as **IOCJ** and **pellet feed**, is expected to grow to **~70% of sales (30E)**, while agglomerates increase from **~12% (24E)** to **~20% (30E)**. With iron ore prices supported at **~US$90/t**, Vale should leverage its integrated supply chain to meet the growing demand for sustainable, high-quality solutions. The company commented that no asset today fails to make a margin with iron ore at this price level. This means that the breakeven of these assets is less than US$90/t and that the price could fall even further, and Vale would still be a profitable company, unlike other players in the global supply system.

Advancing the commercial strategy through partnerships. Among the initiatives commented on during the management presentation, we highlight the Mega Hubs, developed in partnership with the Jiangsu Jinma Group, which include high quality iron ore concentration plants, as well as the potential acquisition of an additional stake in the **Minas-Rio** project with Anglo American, adding **+3.8Mtpy** of **pellet feed**. In the base metals segment, copper stands out as a strategic priority, with growth targets from **350kt** to **420-500kt by 2030**, and ambitious projections to reach **700kt by 2035**.

In the agglomerates market, Vale projects significant growth, from **~38Mt (24E)** to **60-70Mt (30E)**, with a greater share of products aimed at direct reduction (DR). To support this expansion, the company is strengthening its production capacity with the acquisition stake on assets such as **Minas-Rio**, the construction of new concentration plants in Sohar and the Mega Hubs, followed by the ramp-up of briquette plants in the USA.

Mega Hubs and better relations with the government to speed up licensing. Vale is transforming is creating value by repositioning part of the upstream chain of steel mills to regions with competitive energy, promoting operational efficiency and alignment with global decarbonization targets. With the introduction of Mega Hubs, the company is integrating stages such as briquetting and direct reduction (DR) into its production chain, which were previously carried out by clients alone. The Mega Hubs strategy is leveraged by an **asset-light** business model, which accelerates implementation through strategic partnerships. To date, Vale has signed agreements in five countries and is conducting 7 advanced discussions with clients, with the potential to unlock more than 30Mt of feed for DR over the next decade.

In addition, the rationalization of lower costs and the greater clarity given in the presentation during yesterday's event on the execution of Mega Hubs contribute to reinforcing the investment thesis. Despite this, the regulatory complexity, and delays in exploration licenses, especially in Carajás (PA), require attention. Even so, we have the perception that the administration, now led by Mr. Gustavo Pimenta, should make the dialogue with the government smoother and facilitate agility in issuing licenses. On the other hand, when we spoke to investors, even though they also thought this was possible, the feeling we got was that the market have a “wait and see” approach, and many are still concerned about the speed of licensing in order to meet volume and quality guidance , both of which are necessarily linked to the ramp-ups of projects such as Capenema, Vargem Grande and S11D add up.

What stage are the new expansion projects at? The company is speeding up the commissioning of strategic projects, such as **Capanema**, with operations already started ahead of schedule in November, adding **+15Mtpy of capacity** (after ramp-up) at a very competitive cost of less than **US$20/t**. Additional projects, such as **Vargem Grande (+15Mtpy)** already started up in September and the **expansion of the S11D mine (+20Mtpy from 2H26 onwards)**, complement the upgrade in capacity for the coming years.

In addition, the company commented on the **Orion Project** and the expansion of the **Conceição II Plant**, with targets of reaching **12Mtpy** of **pellet feed** in the medium term. These projects not only increase production capacity, but also align Vale with a potential greater demand for high quality iron ore in the future, although this may not be reflected in the market conditions we are currently seeing today.

Vale Base Metals (VBM)

Nickel guidance revised downwards. At the event, VBM's new CEO, Mr. Shaun Usmar, presented the company's new projections for nickel, but with some downward revisions (but in line with our estimates), which were already more bearish than the previous indication. In short, the target production volume is now: **(i)** ~160Kt 24E (vs. 153-168Kt previously); **(ii)** 160-175Kt 25E; **(iii)** 175-210Kt 26E (vs. 190-210Kt previously); **(iv)** 210-250Kt 30E (vs. >300Kt previously). The completion of Voisey's Bay will add +45Ktpy to production and is expected to reach full ramp-up in 2H26. As the main nickel supplier to the US, Voisey's Bay strengthens the competitiveness of Vale's operations in Canada, helping to dilute fixed costs.

Everyone loves copper! The company also revised its copper guidance to: **(i)** ~345Kt 24E (vs. 320-355Kt previously), marking an expansion of +39.7% y/y; **(ii)** 340-370Kt 25E; **(iii)** 350-380Kt 26E (vs. 375-410Kt previously); **(iv)** 420-500Kt 30E (vs. 900Kt previously). The reduction in the long-term projection reflects the exclusion of the Hu'u Project (Indonesia), which would contribute 300-350Ktpy, as well as delays in the ramp-up of the Alemão Project (+60Ktpy), in Carajás (PA), and other brownfield projects. In addition, the company estimated a potential of +700Kt of copper from 2030 onwards, accelerating hubs in Carajás, with emphasis on **(i)** Hub Sul, anticipating the Cristalino Project (60-100Ktpy) and 118 (60-70Ktpy); **(ii)** Hub Norte, with the development of Paulo Afonso (70-100Ktpy); **(iii)** Small warehouses (35-45Ktpy), with expectations of advances in strategic partnerships. Voisey's Bay will also add 20Ktpy of copper to production. Vale remains optimistic about the growing demand, reinforced by its global expansion initiatives. As Mr. Shaun pointed out, “everyone loves copper!”

Our Take on Vale

CAPEX is revised downwards vs. our previous estimates. The company is confident that it can maintain a very controlled level of capital expenditure, including a downward revision in CAPEX compared to our previous estimates. This signals an even more disciplined allocation, generating incremental value not fully captured in the previous version of our proprietary model. Total **24E CAPEX guidance** has been slightly adjusted to **US$ 6.1bn** (vs. US$ 6.0-6.7bn previously). This reduction is directed towards strategic projects such as energy transition and briquetting, which have positive returns in the long term.

For **2025-2026**, CAPEX is maintained at **~US$6.5bn/year** (-13% vs. Genial Est). It's important to remember that we have increased our CAPEX projection to better accommodate the VBM expansion projects discussed in the Asset Review in June. We also point out that 2025 and 2026 will be years of greater pressure on FCF due to the payment flow from the Mariana (MG) settlement, which was recently renegotiated after years of discussion between Vale, BHP and government bodies in Brazil, eliminating an uncertainty that had been hanging over and putting pressure on share prices. Lower CAPEX should help to mitigate part of cash flow outcomes in these years vs. what we initially expected.

Disbursements related to commitments and effect on dividends. The payments flow involving commitments to reparations acts and compensation for the accidents in Brumadinho (MG) and Mariana (MG), through contributions made to Samarco and the Renova foundation, are proceeding according to the schedule that was proposed and disclosed by the company along with the 3Q24 results. In yesterday's presentation, Vale stressed that 73% of the Brumadinho agreements had been concluded by November 2024. The expanded net debt target was maintained at **US$10-20bn**, with the current position of **US$16.5bn 24E**, ensuring financial flexibility for strategic investments and shareholder returns.

This disciplined approach allows for a balance between **(i)** sustainable growth, **(ii)** divided distribution, including the possibility of extraordinary payments, depending on FCF generation in the coming years, and **(iii)** a buyback program. Our **Dividend Yield** projection is **~11%** in **24E** and **~9%** in **25E**. As mentioned above, the year 2025 is hit hardest by the disbursement **of the Mariana agreement obligations**, with **~US$2bn** to be paid, putting pressure on the FCF and **momentarily reducing the dividend yield.**

The company continues to trade at a considerable discount to its peers. Looking at EV/EBITDA, Vale **s**till has a considerable discount vs. other majors, such as BHP and Rio Tinto, even after eliminating the two biggest overhangs we saw for the shares (succession in the CEO position and renegotiation of the Mariana agreement). We estimate that the gap is currently close to **30% vs. a historical discount of ~20%**. A critical point we have received from investors is the risk of political intervention, even though the CEO and CFO positions have been announced with the technical rigor of the choices.

Despite the progress, the market continues to assign discounted multiples (EV/EBITDA of 3.9x) relative to peers, as Vale trades at **3.3x EV/EBITDA 25E** (vs. 5x historical), reflecting uncertainties about project execution and consistency in delivering results. On the other hand, we assess that the normalized FCF yield projected until 2030 suggests that Vale is well positioned to deliver robust results, especially in a **scenario with limited downside risk for iron ore prices**, as we have explained throughout the report.

Discourse change! During the final chat, we **spoke to Mr. Daniel Stieler**, **chairman of Vale's board of directors**, about the succession process (which was well resolved, by the way) and how the company's relationship with the government will look from now on. According to Mr. Stieler's vision, Vale will improve communication with regulatory bodies to speed up licensing issues, which took a back seat under the old administration, with total transparency and without intervention from the company's internal side. Although it was turbulent, the succession process showed that the board is indeed committed to protecting the company from political pressure and, at the same time, re-establishing a necessary link for dialog with the government, in a business context that is necessary due to the operation of concessions.

Appendix: Vale

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

Income Statement	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**38.701**	**39.152**	**39.956**	**39.136**	**40.138**	**41.163**
(-) COGS	(23.761)	(23.119)	(24.141)	(23.723)	(24.096)	(24.553)
Gross Profit	**14.939**	**16.033**	**15.815**	**15.413**	**16.042**	**16.609**
(-) Expenses	(1.947)	(2.686)	(2.532)	(2.021)	(1.679)	(1.735)
Adjusted EBITDA	**16.066**	**16.777**	**16.674**	**16.966**	**18.130**	**18.823**
(-) D&A	(3.083)	(3.226)	(3.419)	(3.614)	(3.816)	(4.007)
EBIT	**12.984**	**13.551**	**13.255**	**13.352**	**14.314**	**14.817**
(+/-) Financial Result	(2.777)	(2.167)	(1.876)	(2.077)	(2.290)	(2.418)
(-) Taxes	(817)	(1.877)	(1.925)	(1.920)	(2.067)	(2.148)
Net income	**9.389**	**9.507**	**9.454**	**9.355**	**9.957**	**10.251**
Profitability						
Net margin (%)	24,26%	24,28%	23,66%	23,90%	24,81%	24,90%

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

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**38.701**	**39.152**	**39.956**	**39.136**	**40.138**	**41.163**
(-) COGS	(23.761)	(23.119)	(24.141)	(23.723)	(24.096)	(24.553)
Adjusted EBITDA	**16.066**	**16.777**	**16.674**	**16.966**	**18.130**	**18.823**
Adjusted EBIT	**12.984**	**13.551**	**13.255**	**13.352**	**14.314**	**14.817**
(-) Taxes	(797)	(1.635)	(1.657)	(1.684)	(1.882)	(1.975)
(+) D&A	3.083	3.226	3.419	3.614	3.816	4.007
(+/-) Brumadinho and Samarco	(97)	(1.940)	(1.629)	(1.176)	(1.025)	(747)
(+/-) Δ WK	266	986	957	(238)	349	(26)
(-) Capex	(6.470)	(7.018)	(7.018)	(7.559)	(7.559)	(7.559)
FCFF	**8.969**	**7.170**	**7.328**	**6.309**	**8.013**	**8.517**

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