Moody’s updates on Vale’s Credit Ratings

Rio de Janeiro, June 4, 2025 – Following the report released on June 2, 2025[1] by Moody's Investor Service (“Moody's”), Vale S.A. (“Vale” or “Company”) informs that the agency has today updated its report with a credit opinion on the Company, with a stable Baa2 rating.

The report is available on Moody's website, and also as an attachment to this communication. A free translation into Portuguese will be released to the market shortly.

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1 Available here.

CREDIT OPINION
4 June 2025

Update

Send Your Feedback

RATINGS

Vale S.A.

Domicile	Rio de Janeiro, Brazil
Long Term Rating	Baa2
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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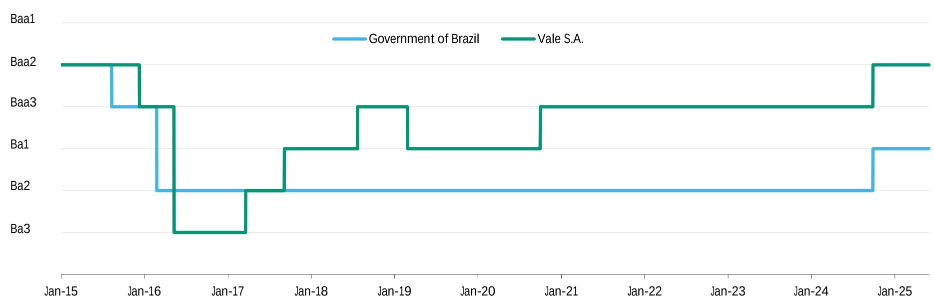
Vale S.A.

Update following change in outlook to stable from positive; Baa2 affirmed

Summary

On 2 June, we affirmed Vale S.A.'s Baa2 ratings and changed the outlook to stable from positive. The rating action follows the change in outlook on the Government of Brazil's (Ba1 stable) rating to stable from positive on 30 May, and the affirmation of Brazil's issuer and senior unsecured ratings at Ba1 and its senior unsecured shelf ratings at (P)Ba1. Vale's rating is constrained by the sovereign rating as a result of its asset concentration in Brazil (about 73% of total fixed assets) and the majority of which is iron ore. Given the large cash flow reliance on iron ore assets located in Brazil, we are unlikely to widen the rating differential to the Government of Brazil rating. To be rated more than two notches above the sovereign rating, Vale would need to have a substantial majority of its operating assets located outside the country and generate a significant majority of its cash flow from outside the country.

Exhibit 1
Vale's rating is constrained by Brazil's sovereign rating



Source: Moody's Ratings

Credit strengths

- » Large scale in the global iron ore and nickel markets, with a growing position in copper
- » Competitive cost position and focus on profitability in iron ore and base metals
- » Focus on high-quality iron ore reduces margin volatility
- » Low leverage and comfortable debt amortization schedule, which help it better manage commodity price volatility
- » Reduction in environmental, social and governance (ESG) risks with an improvement in corporate governance, risk management and operational safety

Credit challenges

- » Risk of additional cash outflows related to the tailings dam accidents — in Brumadinho and Mariana (Samarco Mineração S.A. [Samarco, B2 positive]), although this risk is materially lower after agreements have been settled
- » Concentration in iron ore, which makes the company's performance dependent on steel industry fundamentals, particularly the steel production levels in China

Rating outlook

The stable outlook reflects the expectation that Vale will maintain its strong operating and financial performance over the next 12-18 months, keeping its financial discipline in capital allocation, excellent liquidity and a conservative balance sheet and debt protection metrics while it continues to invest in growth, with the expansion in nickel and copper leading to a more balanced cash flow contribution between iron ore and base metals. The stable outlook also incorporates our expectation that there will be no significant increase in provisions and cash disbursements related to Brumadinho or Samarco that could affect the company's liquidity or leverage.

Factors that could lead to an upgrade

An upward rating movement would require a sustainably strong performance, supported by leading market positioning in its main segments and low-cost operations, and positive free cash flow (FCF) generation through different industry cycles, with further diversification coming from stronger contribution of the base metals segments to cash flows. An upgrade would also depend on the maintenance of excellent liquidity and a continued disciplined approach to capital allocation related to capex and shareholder returns. Moreover, an upward rating movement would be subject to the relative position of Vale's rating to Brazil's sovereign rating. Quantitatively, an upgrade would be considered if the company can sustain:

- » Moody's-adjusted total debt/EBITDA below 2x
- » interest coverage, measured by (EBITDA - capex)/interest expense, above 8x and
- » retained cash flow (RCF)/debt above 40%

Factors that could lead to a downgrade

We could downgrade Vale's ratings should the actual costs related to the disasters in Brumadinho or disbursements related to Samarco be substantially above the amounts already provisioned due to higher fines and settlements, litigations and class actions, or if operations endure production disruptions, higher costs or lower commodity prices, affecting profitability and FCF generation, leading to a deterioration in liquidity. Evidence that ESG initiatives, enhanced risk control and governance oversight fail to progress as planned could also lead to a negative rating action. A downgrade of the Government of Brazil's rating would also trigger a downgrade. Quantitatively, we could downgrade the rating if, on a sustained basis:

» leverage (total debt/EBITDA) rises towards 2.5x or above

» interest coverage, measured by (EBITDA - capex)/interest expense, falls below 5.5x

» RCF/debt stays below 35%

Key indicators

Exhibit 2

Vale S.A.

US Millions	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	LTM (Mar-25)	Moody's Forward View for the next 12-18 months
Revenue	39,545.0	54,502.0	43,839.0	41,784.0	38,056.0	37,716.0	38,000 - 40,000
EBIT Margin %	34%	50%	40%	32%	30%	29%	25% - 30%
Debt / EBITDA	1.0x	0.5x	0.6x	0.9x	1.1x	1.2x	1.0x - 1.5x
(EBITDA - CAPEX) / Interest Expense	13.4x	31.1x	16.8x	8.7x	7.5x	7.2x	6.5x - 7.0x
RCF / Debt	88%	94%	87%	79%	42%	44%	40% - 45%

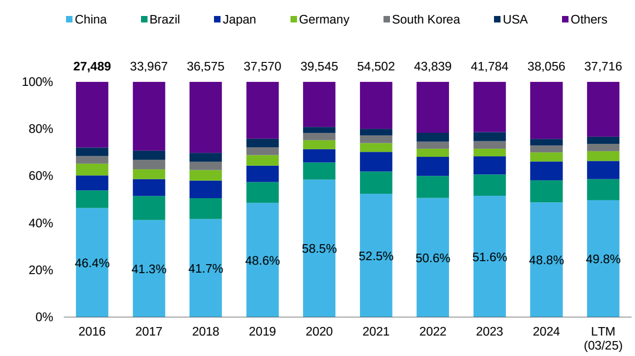
All figures and ratios are calculated using Moody's estimates and standard adjustments. The forecasts (f) or projections (proj.) are Moody's opinion and do not represent the views of the issuer. Periods are financial year end unless indicated.
Source: Moody's Ratings

Profile

Headquartered in Rio de Janeiro, Vale S.A. is one of the world's largest mining companies. It is among the world's top producers of iron ore and nickel, with relevant operations in copper and supplemental positions in energy production. The company's principal mining operations are in Brazil and Canada, and also Indonesia. Despite Vale's geographic and commodity diversification, its Brazilian iron ore operations and its strong position in the seaborne iron ore markets remain the main drivers of revenue and cash flow. As of March 2025, ferrous minerals (primarily iron ore and pellets) accounted for around 82% of the company's net revenue, while the remaining 18% was mainly related to energy transition metals (primarily nickel and copper). In the 12 months that ended March 2025, Vale reported net operating revenue of $37.7 billion.

Exhibit 3

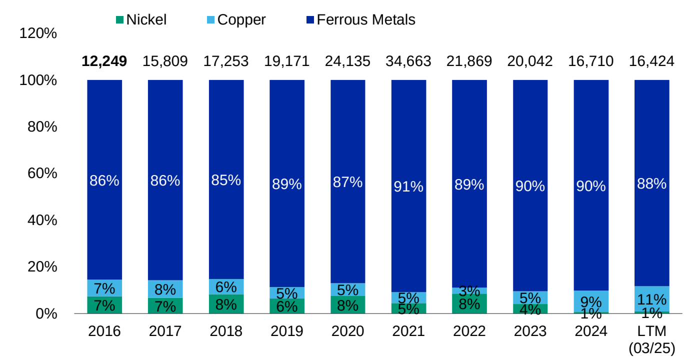
China, as the largest steel producer globally, consistently accounts for the majority of revenue due to Vale's large reliance on iron ore
In $ millions



Source: Company filings

Exhibit 4

EBITDA remains highly concentrated in iron ore, as copper production is relatively small and nickel operations face challenging market conditions
In $ millions



Adjusted EBITDA from continuing operations reported in Vale's filings.
Source: Company filings

Detailed credit considerations

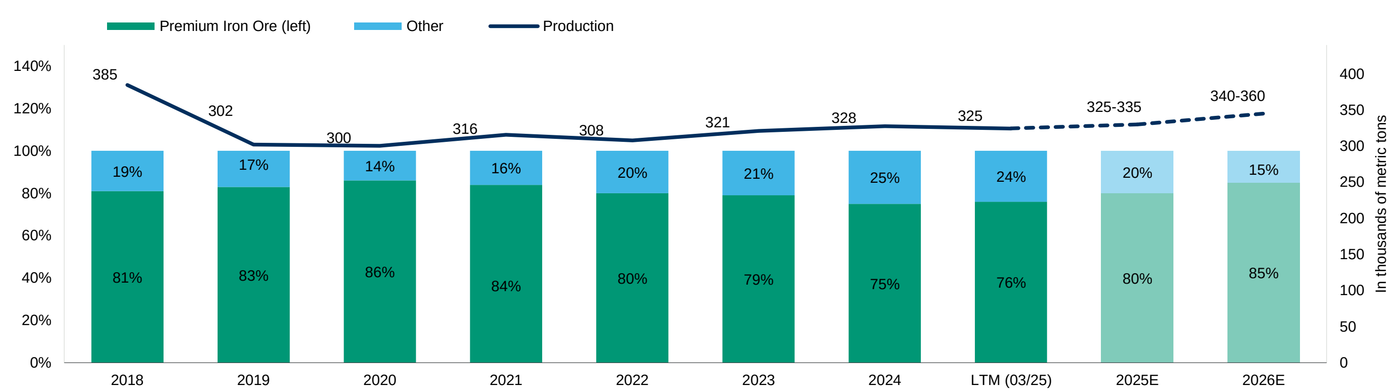
Low-cost, gradual volume increase and continued improvement in mix of iron ore will support strong business profile and reduce costs

Vale is one of the world's largest diversified mining companies (along with Rio Tinto Limited [A1 stable], BHP Group Limited [BHP, A1 stable] and Anglo American plc [Baa2 stable]). Vale's large scale and low-cost profile have historically supported its strong credit metrics. Vale benefits from its global business platform, and significant strength in iron ore and base metals, particularly nickel. With growth projected in copper, the company will become a relevant global copper producer in the long run (beyond 2030).

Iron ore production volumes in 2024 stayed at 328 million tons, in line with the revised annual guidance of 323-330 million tons. Vale anticipates that production volumes will slightly increase in 2025 to 325-335 million tons and further increase its annual production capacity to 340-360 million tons by 2026 after completing its projects in the Vargem Grande complex (started in September 2024), Capanema (started in November 2024) and S11D (start-up expected in H2 2026). Beyond 2030, Vale aims to produce aroun 360 million tons but with a much stronger focus on high-quality products (64%-65% iron content). Vale expects to increase the share of premium products (Carajas ore, Brazilian Blend Fines, pellets and briquettes) to 83% in 2026 and 90% in the long run from the current level of 75%. At the same time, Vale will increase the share of high-grade iron ore agglomerates over time.

Exhibit 5

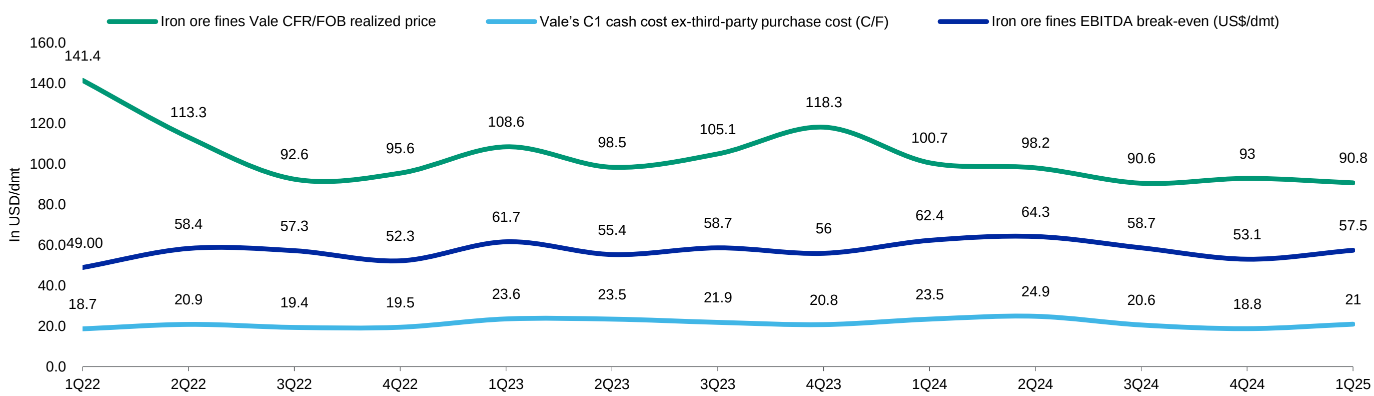
Vale will see its share of premium iron ore rise, which will bring higher margins



Source: Company's filings

Despite Vale's large scale, the company experienced an increase in costs in 2023-24, following an industry-wide cost increase. C1[1] cash costs totaled $21.8 per ton (excluding third-party purchases) in 2024, up from $19.6 per ton in 2022, but lower than the $22.3 per ton in 2023. This increase is explained by the effect of overall inflationary pressures on the mining industry, such as on diesel and raw materials, including freight costs. In Q1 2025, C1 cash costs declined to $21.0 per ton and Vale anticipates that C1 costs will be in the $20.5-$22.0 per ton range in 2025 and below $20 per ton in 2026 and beyond, which is in line with that of large iron ore producers globally.

Exhibit 6
Iron ore C1 cash costs (excluding third-party purchases) and break-even costs increased because of industrywide cost pressures but have already started to decline
$/dry metric ton (dmt)



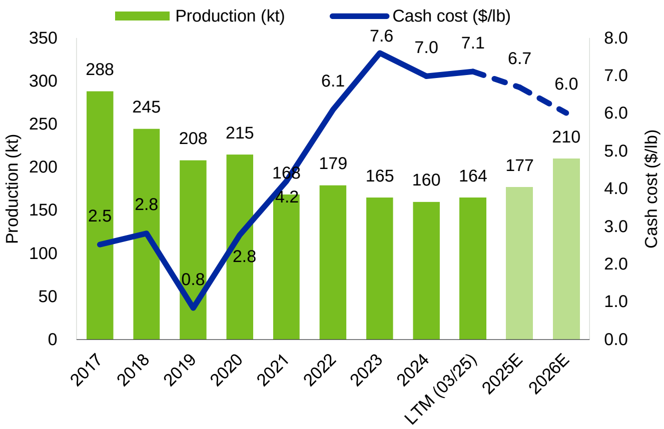
Source: Company filings

Expansion in base metals enhances diversification and bring higher earnings stability

Vale has a significant pipeline of projects to expand the production of copper and nickel, and increase the contribution of base metals in its consolidated results. The increase in base metal production volumes will reduce Vale's cash flow reliance on iron ore, expand its geographic diversification and position it as a relevant participant in commodities that will experience higher demand on the back of energy transition. Vale is already among the top producers of nickel, but the expansion in copper will place Vale among the largest copper producers globally.

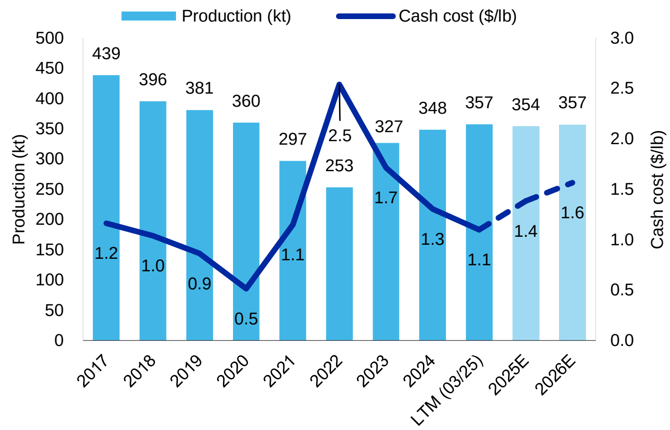
In nickel, Vale Base Metals (VBM, Baa3 stable) plans to reach annual production of 160,000-175,000 tons in 2025, supported by projects currently underway in Canada (Sudbury, Voisey's Bay and Thompson), in line with the 159,900 tons produced in 2024; and aims to further increase production to 175,000-210,000 tons in 2026, supported by projects in Canada and Brazil (Onça Puma). VBM has revised its long-term goal (2030 and beyond) for annual nickel production from 300,000 tons to 210,000-250,000 tons, following the reduction in its stake in PTVI in Indonesia, which is no longer consolidated within VBM. For copper, growth will come from projects in Brazil and Canada, with annual production estimated at 340,000-370,000 tons in 2025 and 350,000-380,000 tons in 2026, supported by Salobo III. In the long run (beyond 2030), Vale plans to reach about 700,000 tons of copper production, supported by growth in Brazil, with Alemão and other projects in the Carajás region (Novo Carajás, announced in February 2025).

Exhibit 7
Nickel production will increase, whereas costs will decline



Historical includes New Caledonia. The forecasts are Moody's opinion and do not represent the views of the issuer.
Sources: Company's filings and Moody's Ratings

Exhibit 8
Copper production will increase as well, and Vale will become a key participant in this commodity

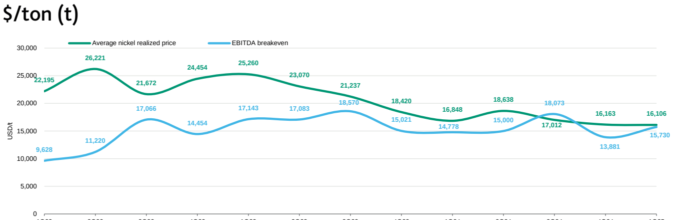


The forecasts are Moody's opinion and do not represent the views of the issuer.
Sources: Company's filings and Moody's Ratings

All-in costs for base metals (copper and nickel) will remain below market prices. In 2024, performance was strained by lower nickel volumes, primarily because of the deconsolidation of PTVI in Indonesia, and weaker nickel prices. VBM's all-in costs for nickel remained at $15,420 per ton in 2024, within the $15,000-$16,500 per ton guidance. All-in sustaining costs for copper and nickel decreased in Q1 2025, driven by higher production volumes and enhanced by-product revenue. Nickel costs are likely to continue to decrease in 2025-26, bolstered by the Voisey's Bay underground mine ramp-up and efficiency initiatives. We expect further savings on operational expenses and capital expenditures through 2027.

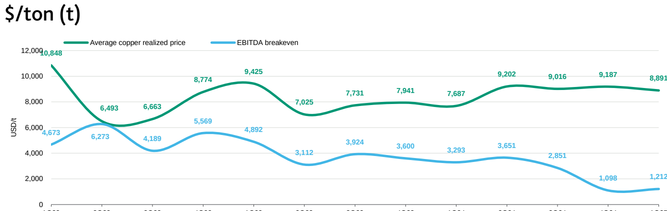
Over time, energy transition will further support demand for nickel and copper, and we expect stronger EBITDA contribution from these two metals to the consolidated cash flow of Vale.

Exhibit 9
EBITDA breakeven for nickel still high, close to average realized prices
$/ton (t)



Source: Company filings

Exhibit 10
EBITDA breakeven for copper better positioned relative to average realized prices
$/ton (t)



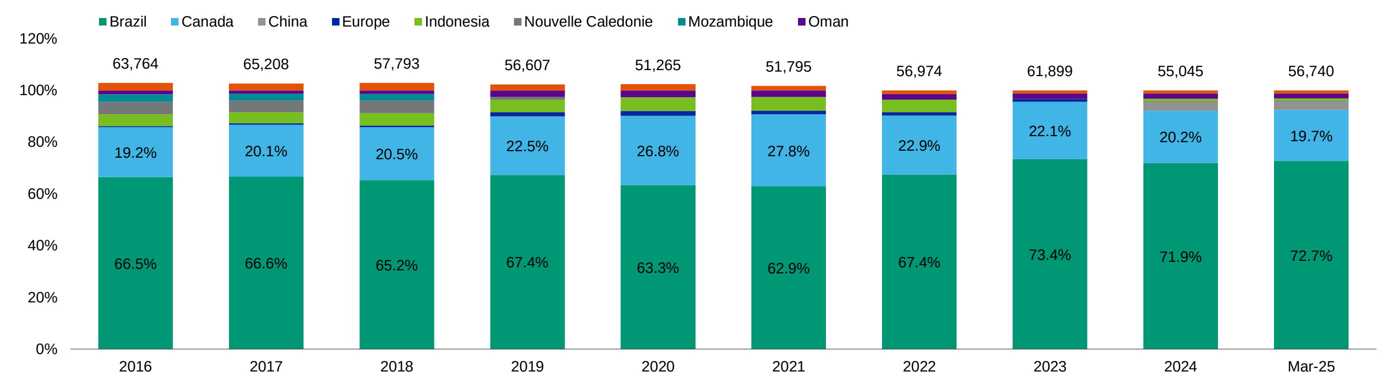
Consider EBITDA break-even ex-Hu'u for 3Q23 and 4Q23
Source: Company filings

Iron ore asset concentration in Brazil constrains the rating

Vale is currently rated two notches above the rating of the Government of Brazil, supported by the company's position as the largest iron ore producer globally, with its cash flow and profitability having minimal correlation with domestic economic conditions. Vale is highly unlikely to default as a consequence of sovereign credit stress or default because its high reliance on China and large developed countries provides reasonable insulation from Brazil's macroeconomic and political environment. About 90% of Vale's revenue is generated outside Brazil. Moreover, cash generated outside Brazil covers debt service and principal payment, and, therefore, restrictions on capital flows are unlikely to constrain Vale's ability to service debt.

However, about 73% of Vale's total fixed assets are located in Brazil, most of which are iron ore, followed by Canada at about 20%. To be rated more than two notches above the sovereign rating, a company would need to have a substantial majority of its operating assets located outside the country and generate a significant majority of its cash flow outside of the country. Given Vale's large share of assets in Brazil and high cash flow reliance on assets located in the country, the sovereign rating remains a constraint to the company's rating.

Exhibit 11
Significant asset concentration in Brazil, followed by Canada
In $ millions



Source: Company filings

Settlement for Fundão dam collapse reduces uncertainty related to Samarco

In October 2024, Samarco, Vale and BHP Billiton Brasil LTDA entered a final agreement with the Federal Government of Brazil (Ba1 stable), the State of Minas Gerais, State of Espirito Santo, public prosecutors and public defenders (public authorities) to settle the Framework Agreement obligations, the Federal Public Prosecution Office civil claim and other claims by public authorities related to Samarco's Fundão dam collapse in November 2015. The agreement was approved by Brazil's Supreme Court in November 2024.

The BRL170 billion ($31.7 billion) final agreement includes past and future obligations: BRL38 billion ($7.9 billion) had already been disbursed for remediation and compensation measures until Q3 2024 (as of Q1 2025, $9.2 billion has been already disbursed); BRL100 billion ($18 billion) is to be paid in 20 installments over 20 years to the federal government, the States of Minas Gerais and Espírito Santo, and the municipalities to fund compensatory programs and actions tied to public policies; and BRL32 billion ($5.8 billion) in performance obligations by Samarco to the Federal Union for initiatives related to individual indemnification, resettlement and environmental recovery.

Exhibit 12
Provisions and expenses related to the Samarco accident since 2016

In USD million	2016	2017	2018	2019	2020	2021	2022	2023	2024	LTM (03/25)
Balance at the beginning of period		**1,077**	**996**	**1,121**	**1,700**	**2,074**	**3,112**	**3,321**	**4,427**	**3,663**
Provisions	1,163	38	403	758	1,095	1,700	89	1,200	956	(2)
Disbursements	(139)	(294)	(290)	(315)	(394)	(392)	(338)	(553)	(808)	(162)
Others adjustments	53	175	12	136	(327)	(270)	458	459	(912)	338
Balance at the end of period	**1,077**	**996**	**1,121**	**1,700**	**2,074**	**3,112**	**3,321**	**4,427**	**3,663**	**3,837**
Working capital contributions to Samarco	**71**	**142**	**84**	**102**	**166**	**21**	**0**	**0**	**0**	**0**

Source: Company filings

The settlement agreement defines Samarco's legal liabilities, clarifies cash flow visibility and reduces the risk of future disbursements from Samarco, Vale and BHP.

However, uncertainties remain related to the lawsuits in the UK and the Netherlands. In December 2022, BHP filed a “Contribution Claim” against Vale, requesting the company to share the indemnification established in the “UK Claim” against BHP in a group action for damages filed in the courts of UK and Wales by groups deemed affected by the Samarco dam breach.

Moreover, in March 2024, a court in Amsterdam granted a preliminary injunction freezing the shares in Vale Holdings B.V. and the economic rights attached to those shares, as a guarantee for an original amount of around $986 million (€920 million), but in March 2025 the value declined to $742 million as some parties left the litigation. The freezing orders were issued in anticipation of a legal action to be brought against Vale by certain Brazilian municipalities and an organization that represents individuals and small businesses that claim to have been affected by the collapse of the Samarco dam.

In July 2024, Vale disclosed that it had entered an agreement with BHP, without any admission of liability, in relation to the legal actions in the UK and the Netherlands relating to the Fundão Dam rupture in Brazil in 2015. The effect of the agreement is that should BHP ultimately be found to have any liability to the claimants in the UK Claims, or should Vale ultimately be found to have any liability to the claimants in the Netherlands, such liability would be shared equally between BHP and Vale. All other terms of the agreement remain strictly confidential. The first phase of the trial was concluded in the UK in early 2025, but no decision was announced.

Continued improvements in safety of tailings dams reduce risks related to Brumadinho

An important component of lowering the risk of tailings dams is the continuous increase in the share of dry processing production to 77% of total iron ore production in 2024, which compares with 40% in 2014. Additionally, 15.5% of total iron ore production in 2023 relied on dry stacking and only 15.5% relied on tailing dams (not upstream dams), which significantly reduces the risk of tailings dams.

Since 2019, Vale has consistently progressed in its commitment to eliminate all its upstream tailings dams in Brazil. To execute the program, Vale has already disbursed over BRL12 billion ($2.2 billion). From the 30 inactive upstream dams of Vale in 2019, 17 were de-characterized until December 2024 and 13 are under ongoing de-characterization. At the end of March 2025, Vale had $2.3 billion in provisions for the de-characterization of tailings dams and $2.1 billion related to the Brumadinho dam incident, including provisions for remediation and reparation obligations under the judicial settlement for reparation, individual indemnification and other commitments.

In February 2021, Vale announced it had reached a BRL37.7 billion (around $7 billion) agreement with Brazilian authorities for the reparation of the environmental and social damage resulting from the accident at Brumadinho, which has largely resolved the uncertainty around the collective damage. Out of a total of BRL37.7 billion under the framework agreement, Vale had already achieved 75% of reparations as of March 2025.

Exhibit 13

Provisions and expenses related to the Brumadinho accident since 2019

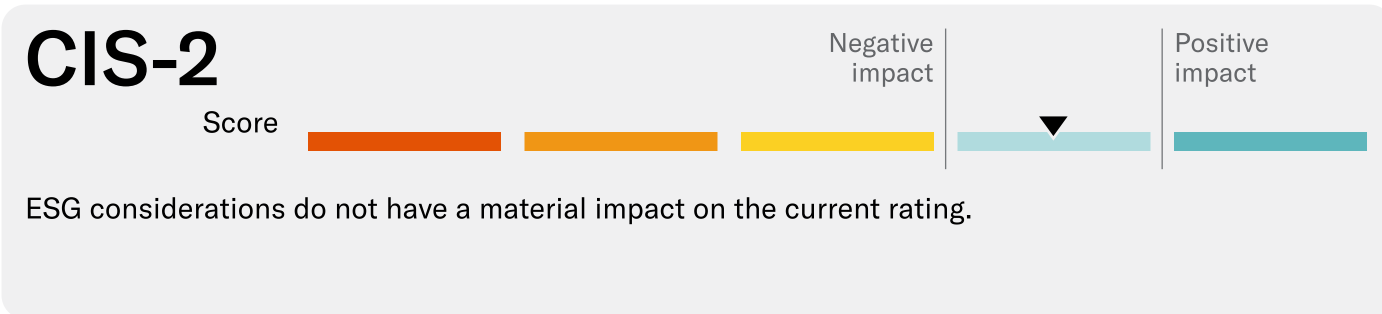
In USD millions	2019	2020	2021	2022	2023	2024	LTM (03/25)
Balance at the beginning of the period		**5,472**	**6,864**	**7,060**	**6,611**	**6,511**	**4,183**
Provisions	6,550	4,747	1,926	472	614	(90)	30
Disbursements	(989)	(2,122)	(1,726)	(1,442)	(1,788)	(1,442)	(163)
Other adjustments	(89)	(1,233)	(4)	578	1,059	(796)	424
Balance at the end of period	**5,472**	**6,864**	**7,060**	**6,611**	**6,496**	**4,183**	**4,474**

Source: Company filings

ESG considerations

Vale S.A.'s ESG credit impact score is CIS-2

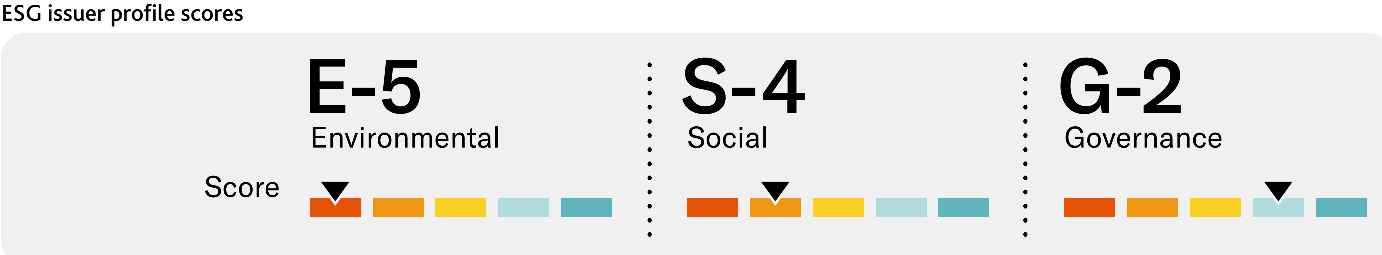
Exhibit 14
ESG credit impact score



Source: Moody's Ratings

Vale's credit Impact score reflects our assessment that ESG attributes are overall considered as having a neutral-to-low impact on the current rating, because the rating is constrained by the sovereign rating of the government of Brazil. Still, Vale has high exposure to environmental risks associated primarily with natural capital (mine closure and decomissioning of structures) and waste and pollution (including tailings dams). Vale's high exposure to social risks arise mainly from health and safety concerns around the operations as well as responsible production, given the previous tailings dams accidents. The company's governance considerations reflect Vale's financial strategy, strong balance sheet, solid liquidity and enhanced risk management following the dam collapse in 2019.

Exhibit 15
ESG issuer profile scores



Source: Moody's Ratings

Environmental

Vale credit exposure to environmental risks mainly related to natural capital and waste and pollution. The tailing dam incident in Brumadinho in 2019, which resulted in a large number of fatalities, extensive environmental damage and loss of production, and resulted in fines ($7 billion settlement) and litigations is an important consideration, as tailings dam management is the primary waste and pollution risk for this sector. Vale's operations are located in areas of abundant water availability, but has certain exposure to physical climate risk, in particular floods during the summer season in southern Brazil. However, Vale's large scale and footprint, and mine diversification mitigates climate hazards. Moreover, carbon transition risk is mitigated by the growing portfolio of base metals products, including nickel and copper, which will benefit by growing demand from energy transition.

Social

Vale is exposed to social risks, in particular those related to health and safety and responsible production. Improvements in safety of operations through initiatives taken to enhance the risk management control, particularly as the company progresses with the decommissioning of upstream tailings dams, jointly with the construction of backup dams (containment structures) and preventive removal of workers and civil population of riskier areas, have reduced the exposure to social risks, in particular health and safety. However, the tailings dam incident and its implications related to safety of operations, employee well-being and community stakeholder engagement and reputation remains an important credit consideration, reflected mostly in responsible production. Vale's exposure to other social risks such as human capital is not as high as most mining companies, given the absence of union disputes and strikes, while exposure to demographic and societal trends is somewhat mitigated by the company's exposure to commodities (copper, nickel) that are linked to battery production and the green economy, despite the concentration in iron ore.

Governance

Vale's governance score reflects Vale's solid financial strategy, strong balance sheet, robust liquidity and enhanced risk management after the tailings dam accident in January 2019.

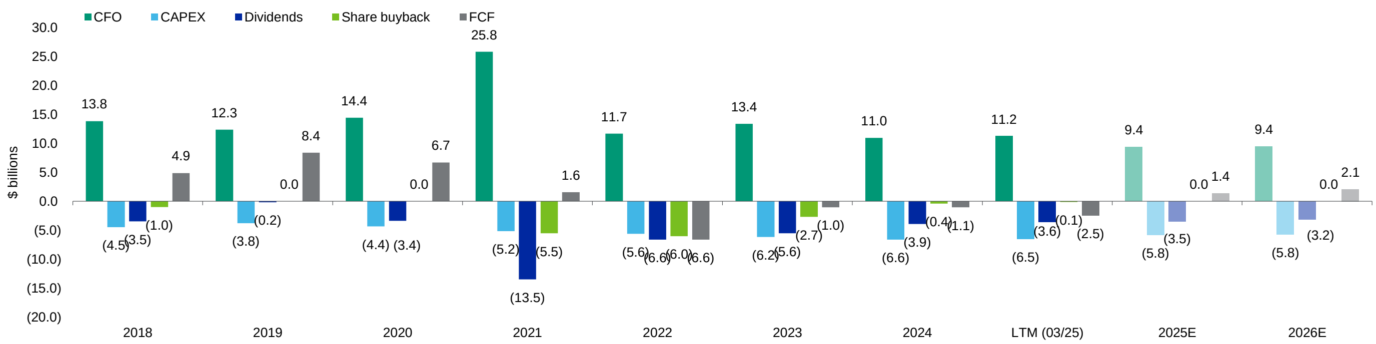
ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity analysis

Vale has excellent liquidity, supported by $4.0 billion in cash and $5.0 billion available under its revolving credit facility agreements ($2 billion due in November 2026 and $3 billion due in February 2029) at the end of 1Q25. The company generated cash flow from operations of $7.6 billion in the 12 months that ended March 2025, and after dividend distribution of $3.6 billion and capital spending of $6.5 billion, free cash flow (FCF) is negative in $2.5 billion. All figures include Moody's standard adjustments.

Exhibit 16

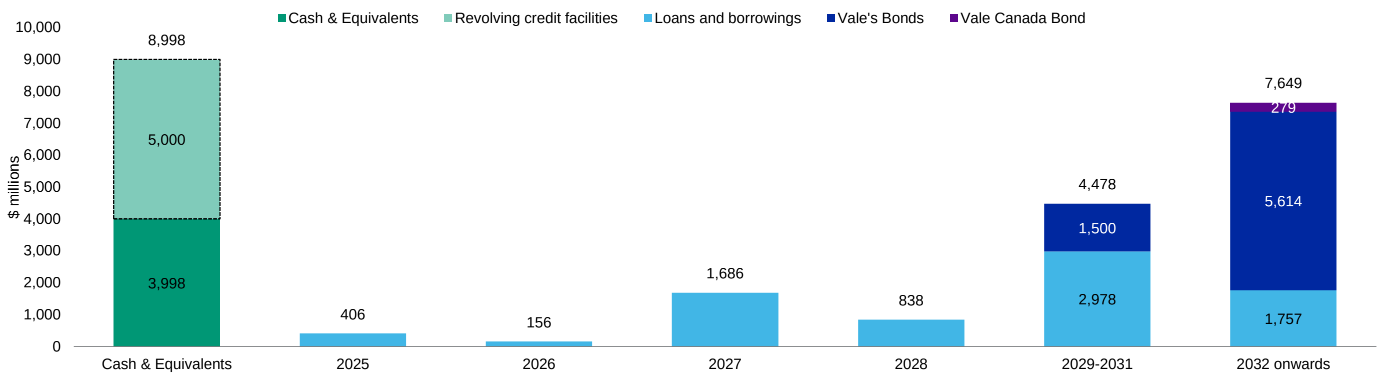
Lower iron ore prices and higher capital spending temporarily reduced FCF generation, but we expect stronger positive FCF supported by higher volumes (iron ore and base metals) and lower costs



Source: Company filings

Vale has a conservative approach to capital allocation relative to capital spending, dividend distribution and debt levels. The company aims at maintaining net financial debt levels between $10 billion and $20 billion, focusing on the center of the range ($15 billion), and including commitments related to Brumadinho and Samarco. The company's debt amortization schedule is very comfortable, with maturities concentrated beyond 2029. In Q1 2025, Vale upsized its 30-year $1 billion bond issued in 2024 by $750 million, with proceeds used to tender its 2034, 2036 and 2039 bonds.

Exhibit 17
Debt amortization schedule as of March 2025; total reported financial debt of $15.4 billion



Does not include accrued interest and leases.
Sources: Company filings and Moody's Ratings

Vale's dividend payout is based on the policy established in March 2018, which is 30% of (EBITDA - sustaining capital spending), with payments set twice a year — in September for H1 results and in March of the following year for H2 results.

Vale's leverage (Moody's-adjusted total gross debt/EBITDA) was 1.2x for the 12 months that ended March 2025, and it has remained close to (or below) 1x since 2020. Some of the company's financing documents contain covenants related to debt/EBITDA and the interest coverage ratio, but debt with financial covenants represents less than 20% of its total debt. The company is in full compliance with these covenants.

Although most of Vale's iron ore and mining operations are under the parent company, it also has subsidiaries, associates and joint venture (JV) interests, both domestically and abroad. Although some of these entities may have debt and creditor obligations, which have the first claim on cash flow before distribution to the parent, they are relatively modest compared with the assets held within and the earnings generated by the parent company. Vale's debt-financing requirements are met by bonds, bank loans, debentures and other trade finance vehicles. Vale Overseas Limited (Baa2 stable), incorporated as a Cayman Islands-domiciled company, is a wholly owned finance subsidiary of Vale and is used as a vehicle to issue US dollar-denominated notes.

Methodology and scorecard

Vale's scorecard-indicated outcome under our Mining rating methodology is Baa1, based on data for the 12 months that ended March 2025. On a forward-looking basis for the next 12-18 months, the scorecard-indicated outcome maps Baa1, under our 12-month price assumption of iron ore at $90/ton, which indicates the strength of Vale's credit quality even in a scenario of weaker commodity prices. The current rating is Baa2, which remains constrained by the sovereign rating.

Exhibit 18

Rating factors

Vale S.A.

Methodology: Mining published on 31 Mar 2025	Current LTM (Mar-25)		Moody's Forward View Next 12-18 months (as of May-25)	
Factor 1: SCALE (15%)	Measure	Score	Measure	Score
a) Revenues (USD Billion)	$37.7	A	$38.0 - $40.0	A
Factor 2: BUSINESS PROFILE (30%)				
a) Business Profile	Baa	Baa	Baa	Baa
Factor 3: PROFITABILITY AND EFFICIENCY (10%)				
a) EBIT Margin	28.9%	A	25.0% - 30.0%	A
Factor 4: LEVERAGE AND COVERAGE (25%)				
a) Debt / EBITDA	1.2x	A	1.0x - 1.5x	A
b) (EBITDA - CAPEX) / Interest Expense	7.2x	Baa	6.5x - 7.0x	Baa
c) RCF / Debt	44.2%	Baa	40.0% - 45.0%	Baa
Factor 5: FINANCIAL POLICY (20%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Rating Outcome:				
a) Scorecard Indicated Outcome		Baa1		Baa1
b) Actual Rating Assigned				Baa2

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 3/31/2025(L). [3] This represents our forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Ratings

Ratings

Exhibit 19

Category	Moody's Rating
VALE S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	Baa2
Senior Unsecured	Baa2
VALE OVERSEAS LIMITED	
Outlook	Stable
Bkd Senior Unsecured	Baa2
VALE BASE METALS LIMITED	
Outlook	Stable
Issuer Rating	Baa3
VALE CANADA LTD.	
Outlook	Stable
Senior Unsecured	Baa3

Source: Moody's Ratings

Appendix

Exhibit 20

Peer comparison

Vale S.A

	Vale S.A. Baa2 Stable			Rio Tinto plc A1 Stable			Fortescue Ltd Ba1 Stable			Anglo American plc Baa2 Stable			BHP Group Limited A1 Stable		
(in US millions)	FYE Dec-23	FYE Dec-24	LTM Mar-25	FYE Dec-22	FYE Dec-23	FYE Dec-24	FYE Jun-23	FYE Jun-24	LTM Dec-24	FYE Dec-22	FYE Dec-23	FYE Dec-24	FYE Jun-23	FYE Jun-24	LTM Dec-24
Revenue	$41,784	$38,056	$37,716	$55,554	$54,041	$53,658	$16,871	$18,220	$16,346	$35,127	$30,656	$27,354	$53,817	$55,658	$53,602
EBIT Margin	31.7%	29.9%	28.9%	34.3%	29.3%	29.3%	48.3%	47.3%	37.1%	32.7%	22.7%	18.2%	41.4%	36.2%	39.5%
Debt/EBITDA	0.9x	1.1x	1.2x	0.5x	0.7x	0.7x	0.5x	0.5x	0.6x	1.1x	1.8x	2.4x	0.9x	0.9x	0.8x
(EBITDA - Capex) / Int Expense	8.7x	7.5x	7.2x	20.8x	10.4x	9.5x	30.1x	24.9x	15.9x	9.5x	2.4x	1.2x	17.6x	9.7x	10.6x
RCF/Debt	79.4%	42.2%	44.2%	63.3%	63.0%	64.2%	74.6%	74.4%	47.6%	40.5%	25.3%	19.4%	29.5%	53.7%	47.4%

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months.
Source: Moody's Ratings

Exhibit 21

Moody's-adjusted debt breakdown

Vale S.A.

(in US Millions)	FYE Dec-20	FYE Dec-21	FYE Dec-22	FY Dec-23	FY Dec-24	LTM Ending Mar-25
As Reported Debt	**15,027.0**	**13,782.0**	**12,712.0**	**13,923.0**	**15,505.0**	**16,196.0**
Pensions	641.0	204.0	269.0	0.0	1,180.0	1,180.0
Operating Leases	0.0	0.0	0.0	0.0	0.0	0.0
Non-Standard Adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Moody's-Adjusted Debt	**15,668.0**	**13,986.0**	**12,981.0**	**14,226.0**	**16,685.0**	**17,376.0**

All figures are calculated using Moody's estimates and standard adjustments.
Source: Moody's Financial Metrics™

Exhibit 22

Moody's-adjusted EBITDA breakdown

Vale S.A.

(in US Millions)	FYE Dec-20	FYE Dec-21	FYE Dec-22	FY Dec-23	FY Dec-24	LTM Ending Mar-25
As Reported EBITDA	11,434.0	33,299.0	23,489.0	15,252.0	12,958.0	13,160.0
Pensions	25.0	21.0	19.0	28.0	78.0	78.0
Unusual	4,824.0	-3,215.0	-2,927.0	919.0	583.0	170.0
Moody's-Adjusted EBITDA	16,283.0	30,105.0	20,581.0	16,199.0	15,078.0	14,867.0

All figures are calculated using Moody's estimates and standard adjustments.
Source: Moody's Financial Metrics™

Endnotes

1 C1 cost is a standard metric of the mining industry to denote the direct production costs of mining operations.

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