

Rio de Janeiro, March 18th, 2025

To: MSCI ESG Research

Attn.: Whitney Rauschenbach, Global Head of ESG Issuer Relations and Samuel Block, Materials Sector Lead

Subject: Feedback and review of our MSCI's rating analysis

Dear Whitney Rauschenbach and Samuel Block,

On behalf of Vale, I would like to acknowledge the critical role of rating providers in promoting sustainable development across businesses. Your work is crucial to advancing the ESG agenda and driving positive change across industries. We reaffirm Vale's commitment to embedding sustainability into our business in order to ensure a solid and positive economic, social, and environmental legacy. We present our initiatives with transparency and accountability, disclosing our impacts, risks, and opportunities.

We are committed to engaging with our stakeholders to understand their concerns. We recognize the value of objective benchmarking of our performance against peers and support efforts by ESG rating agencies. We provide detailed responses to queries from rating agencies and review their assessments. Despite numerous attempts to engage with the MSCI analyst team to understand the methodology and provide relevant information through the platform, our feedback has not been captured effectively. We have performed a detailed review of MSCI's rating and controversies analysis and I am writing to you to share our views and concerns in the following pages. Given that only a few of our comments are reflected in MSCI's final assessment, leading to questions from some of our stakeholders, we intend to share these points on our website to facilitate access to our investors to the information that they require on these topics.

We recognize that written responses on a platform or a letter may not fully capture the essence of our operations or safety improvements, and we are available to clarify any questions. I would also like to personally extend an invitation to the MSCI team to visit our operations in Brazil, where it will be able to see firsthand the reparation work and to engage with people from the local communities of the affected areas, while also seeing our measures for dam safety, biodiversity and climate. I hope you accept our sincere invitation.

Thank you once again and we look forward to your soonest reply.

Kind regards,



Gustavo Pimenta

Vale's CEO

Vale's analysis of MSCI Report

ESG Risk Rating Report

We kindly ask that the MSCI team thoroughly consider our feedback on the most recent update to Vale's Rating Action. Our analysis has uncovered several factual inconsistencies in the December 2024 update vs. the December 2023 update that we would like to bring to your attention. We are highlighting these perceived errors to you and the team since they are factual inconsistencies that are detrimental to both your clients and our shareholders.

We look forward to collaborating on the below points and the update of our ESG Risk Rating Report.

1. Carbon Emissions Targets

The Carbon Emissions "Targets" score has been downgraded, with Vale's practice going from "On pace to achieve current reduction target" to "Not on pace to achieve current reduction target". This is factually incorrect as all targets are on pace:

- Vale's Scope 1 and 2 emissions have decreased from 12.2 million tons CO2 in 2017 to 9.7 million tons CO2 in 2023 which represents a reduction of 25.89% (more than half the 33% target for 2030).
- Vale's Scope 3 emissions have decreased from 529.5 million tons CO2 in 2018 to 451.2 million tons CO2 in 2023 which represents a reduction of 15% (which is on track for the company's net zero commitment by 2050 and its 2035 reduction target of 15% relative to a 2018 baseline).
- 88.5% of electricity consumption uses renewable energy (up from 79% in 2017), which again aligns with the company-wide target to reach 100% renewable energy by 2030.

2. Carbon Emissions (Mitigation)

The Carbon Emissions "Mitigation" score has been reduced from a score of 7.0 to a score of 5.0. This would be logical if the sub-criteria scores had been downgraded, however the opposite is true. As you can see from the below snapshots (page 49 for the December 2023 version and page 45 for the December 2024 version) the climate "Mitigation" criteria scoring has improved while the "Mitigation" score has been downgraded:

Mitigation				Mitigation			
Strength of Greenhouse Gas Mitigation Strategy (0-10 Score, 0=worst, 10=best)				Strength of Greenhouse Gas Mitigation Strategy (0-10 Score, 0=worst, 10=best)			
7.00				5.00			
Programs or actions to reduce the emissions intensity of core operations							
Use of cleaner sources of energy	Some efforts	Aggressive efforts	LOW MID TOP	Use of cleaner sources of energy	Some efforts	Aggressive efforts	LOW MID TOP
Capture GHG emissions	No evidence	Aggressive efforts	LOW MID TOP	Capture GHG emissions	No evidence	Aggressive efforts	LOW MID TOP
Energy consumption management and operational efficiency enhancements	Some efforts	Aggressive efforts	LOW MID TOP	Energy consumption management and operational efficiency enhancements	Some efforts	Aggressive efforts	LOW MID TOP
CDP disclosure	Yes	Yes	LOW MID TOP	CDP disclosure	Yes	Yes	LOW MID TOP
Other initiatives (e.g. carbon offsets)	No evidence	Aggressive efforts	LOW MID TOP	Other initiatives (e.g. carbon offsets)	Limited efforts / information	Aggressive efforts	LOW MID TOP

3. Water Stress (Governance and Strategy)

Vale's Water Stress Governance score has now been assessed to assume that only the CSR/Sustainability Committee are responsible for water-related risks. Vale's governance of these issues (and disclosure thereof) has not changed YoY, and it is clearly disclosed within our response to the CDP Water Security Questionnaire (which is attached together with this letter) the specific

responsibilities of the CEO, the Executive Vice President of Sustainability, the Executive Officer of Sustainability and Institutional Relations, and the Sustainability Committee (pages 116 to 126).

4. Biodiversity (Governance)

Vale's Biodiversity practices score has decreased from 7.3 to 6.7 even though it remains as best practice for each individual criteria – to be clear there is not a single sub-criterion that has been downgraded.

5. Health and Safety (Governance & Strategy)

Vale's Health and Safety practices score has decreased from a 6.0 to a 4.7 as the criteria covering "Evidence of health and safety management system certified to recognized standard" has been downgraded from "Yes" to "No". However, there is substantial evidence in the attached ESG Databook which discloses that Vale's health and safety management system (otherwise known as the Vale Production System (VPS)) is fully aligned with the ISO 45001. In addition, 100% of Vale's employees and third parties are covered by the VPS which has been independently assured by PricewaterhouseCoopers Auditores Independentes Ltda.

6. Labor Management (Strategy)

Vale's Labor Management practices score has decreased from a 5.2 to a 4.3 as the criteria covering "Non-Compensation Benefits including pension and retirement" has been downgraded from "benefits cover selected employees" to "scope not determinable". Within the attached ESG Databook, the scope of employees receiving non-compensation benefits is made very clear per benefit and per work regime:

Benefits offered to employees, by work regime (2023)				
Benefits	Brazil		Canada	
	Permanent	Temporary	Permanent	Temporary
Health care	Offered	Offered	Offered	Not offered
Dental care	Offered	Offered	Offered	Not offered
Life Insurance	Offered	Offered	Offered	Not offered
Private Pension Plan	Offered	Offered	Offered	Not offered
Personal Accident Insurance	Offered	Offered	Offered	Not offered
Education	Offered	Offered	Offered	Not offered*
Annual Incentive Plan	Offered	Offered	Offered	Not offered
Subsidy for the purchase of medicines	Offered	Offered	Offered	Not offered

7. Community Relations (Community Impact and Disturbance)

Vale's Community Relations practices score has been reduced from an 8.4 to an 8.2 as the criteria covering "Monitors the effectiveness of its human rights policy" has been downgraded from "General statements on monitoring the human rights policy performance exists" to "No evidence". As disclosed on [Vale's Human Rights webpage](#), Vale has defined a structured monitoring process (see section 'Managing Human Rights risks and impacts') with 3 lines of defence to assess the effectiveness of its internal controls related to Human Rights including an annual due diligence process (see [Human Rights due diligence on operations](#)). In addition, the section 'Commitments and Targets' details Vale's 2025 roadmap which includes policy

commitment and integration, risk and impact assessment, monitoring and reporting, Grievance mechanisms and Whistleblowing channel and remediation.

8. Corporate Governance (Board)

Vale currently has an “Audit Committee Industry Expert” red flag. However, as disclosed in the MSCI report, MSCI consider Manuel (Ollie) De Sousa-Oliveira who sits on the audit committee to be an industry expert:

AUDIT OVERSIGHT

Audit Committee - Number Of Meetings: 10

The VALE board of directors includes a fully independent audit committee and at least one member of that committee meets our standards for financial expertise.

Name	M/F	Age	Board Tenure (Years)	Boards	Independent of Mgmt	Independent of Other Interests	Committee Status
Douglas Upton	M	64	1	1	Yes	Yes	Member
Manuel (Ollie) De Sousa-Oliveira I S	M	72	3	1	Yes	Yes	Chair
Paulo César Hartung Gomes	M	67	1	1	Yes	Yes	Member

S - Financial Expert I - Industry Expert

ESG Controversies Report

We understand that Vale has been involved in various controversies and ESG analysis involves a degree of subjectivity. However, we have observed that MSCI tends to prioritize NGO allegations reported in media articles over the data and information provided by Vale.

Below, we outline several areas where we have supplied MSCI with substantial information on concrete progress yet received minimal feedback and no changes in MSCI's conclusions.

1) Corrego do Feijão Mine, Brazil: Multiple employee and civilian fatalities and damage resulting from Brumadinho tailings dam failure

MSCI states *this controversy will be considered for upgrade when most or all of the following conditions are addressed:*

- i. Compensation given to families affected by deaths, injuries, and displacement due to the tailings spill.*
- ii. The company takes concrete measures to improve health and safety policies in the facility as well as the company's sites worldwide.*
- iii. Repair or replacement of the residential properties damaged in the flood.*
- iv. Independent review of any new or rebuilt tailings storage facilities by third-party engineers.*
- v. Submission of a risk assessment and disaster preparedness plan, including an early warning system, for the Corrego do Feijão mine.*
- vi. Safety review of other tailings storage facilities under the company's control globally.*
- vii. Conclusion or dismissal of lawsuits, and major investigations conducted by major authorities or regulators.*

Vale has presented factual evidence that most of the previous conditions are addressed.

In relation to item i, iii and vii:

- Since the dam collapse, Vale has provided all necessary resources to address the impacts, with initiatives divided between those targeting individual and collective damages.

- Compensation: In terms of providing individual financial support, Vale entered into an agreement with the State Attorney General's Office of Minas Gerais, the Public Prosecutors' Office of Minas Gerais, the State Public Defenders' Office of Minas Gerais, the Federal Attorney General's Office, the Federal Public Prosecutors' Office, and the Federal Public Defenders' Office, pursuant to which we committed to make monthly emergency aid payments to affected individuals through October 2021.
- In addition to emergency aid, Vale has also paid extrajudicial civil and labor indemnities, in line with our commitment to compensate all those who have suffered any damage
- The funding provided by Vale for indemnities and financial aid includes:
 - Indemnities paid to approximately 16,700 individuals, totaling R\$ 3.7 billion, including: 14,200 beneficiaries receiving about R\$ 2.5 billion in judicial and extrajudicial civil indemnities.
 - 2,500 beneficiaries receiving approximately R\$ 1.2 billion in labor indemnities.
 - About 100,000 people receiving a total of R\$ 2.4 billion.
 - Vale has also voluntarily donated R\$ 36 million to around 1,000 people.
 - More than 5,600 people have received support through Program Comprehensive Assistance to the Affected Person (PAIA), which provides free support and counseling after indemnity payments.
- Global Reparation Agreement: In February 2021, Vale signed an Integral Reparation Agreement with government authorities committing to the integral reparation in Brumadinho, implementing actions to restore and remediate the community and the environment. Vale has been implementing the actions defined in the agreement and has already completed over 75% of the agreement in line with the defined schedule. All obligations will be fulfilled by the end of the agreement term in 2031, and it is estimated that 90% of the agreement will be fulfilled by 2026.
- As a result of the Global Settlement, the requests and legal claims for the reparation of socio-environmental and socioeconomic damages caused by the dam failure were substantially resolved.

For more information: <https://vale.com/esg/brumadinho#iniciativas>

In relation to item ii, iv, v, and vi:

- Risk and Health and Safety: After the Brumadinho dam disaster, Vale made significant changes to its risk and tailings management practices, establishing a new risk governance structure with four executive committees and a Technical executive member overseeing Safety and Operational Excellence, reporting directly to the CEO.
- Since 2020, we have achieved significant reductions (-69% 2024 vs 2019) in high-consequence (N2) injuries and have made continued progress toward our target of zero fatalities and life-changing injuries. By 2024, Vale reported the lowest Total Recordable Injury Frequency Rate (TRIFR) among its global peers. To prevent catastrophic incidents, Vale started to monitor process safety-related events (P Events), which involve potential unplanned or uncontrolled releases of energy or hazardous materials. Health and safety data are regularly updated and communicated in reports like the annually updated [ESG Databook](#).
- Dam Safety: Vale launched the Dam Decharacterization Program to eliminate all 30 upstream dams by 2035, with 57% decharacterized by December 2024. The company has been actively reducing dam risk levels and prioritizing community and environmental safety.
- Risk assessment and disaster preparedness plan Emergency plan: Vale's dams and tailings storage facilities (TSFs) must have an Emergency Action Plan for Mining Dams (PAEBM), which undergoes annual Conformity and Operability Assessments by an

external company. Vale discloses information on its emergency planning for dams at: <https://vale.com/en/paebm>

- Safety review of tailings globally: All Vale's tailings globally are reviewed monthly by an engineer on record.
- Furthermore, Vale has implemented the Global Industry Standard on Tailings Management (GISTM) across all its Tailings Storage Facilities (TSFs).
- Vale has implemented a comprehensive approach to dam safety and risk management through its Three Lines of Defense model, which includes Internal audit and external third-party reviewers, including Independent Tailings Review Boards (ITRBs), offer independent assurance and advice on tailings management. More information on third party review can be found at: <https://vale.com/en/gestao-e-desempenho>

Even with all the factual data disclosed by Vale, as of today, our MSCI rating of this controversy has the same severity level as it did in 2019 after the accident, without any recognition for the progress and reparation work in Brumadinho, as well as the transformation within the company.

2) Samarco Mineracao, Brazil: Multiple fatalities, hundreds displaced, and widespread property and environmental damage caused by Mariana dam disaster

MSCI states *the controversy would be considered for an upgrade if all or most of the following conditions have been met:*

- Repair or replacement of the residential properties damaged in the flood.*
- Compensation given to families affected by deaths, injuries, and displacement due to the tailings spill.*
- Cleanup of a substantial portion of soil and water bodies affected by the tailings spill.*
- Independent review of any new or rebuilt tailings storage facilities by third party engineers.*
- Submission of a risk assessment and disaster preparedness plan, including an early warning system, for the Germano mine.*
- Safety review of other tailings storage facilities under the company's control globally.*
- Conclusion or dismissal of lawsuits, and major investigations conducted by major authorities or regulators.*

In relation to item i, ii, iii and vii:

- In March 2016, Samarco, Vale and BHP Brasil entered into a Framework Agreement ("TTAC", acronym for Termo de Transação e Ajustamento de Conduta, or "Original Framework Agreement") with the Brazilian federal government, the two Brazilian states affected by the dam failure (Espírito Santos and Minas Gerais) and other government authorities to establish remediation and reparation programs for the communities and areas affected by the dam failure. Pursuant to the Framework Agreement, Renova was conducting a total of 42 social, economic, and environmental reparation programs in affected territories in a total amount of R\$ 38 billion, as of October 2024, including building 17 water treatment stations, solving ~90% of housing solutions for the affected families and recovering the Rio Doce River back to its pre-rupture conditions.
- On October 25th, 2025, Vale S.A., BHP Billiton Brasil Ltda and Samarco Mineração S.A., together with the Brazilian Federal Government, the state governments of Minas Gerais and Espírito Santo, the Federal State Prosecutors' and Public Defenders' offices and other Brazilian public entities signed a definitive and substantial settlement of claims related to the Fundão dam collapse ("Definitive Settlement"). The Definitive Settlement was approved by the Brazilian Supreme Court on Nov. 6th, 2024.

- The Definitive Settlement addresses all demands involving the signatory Brazilian public authorities, related to the collapse of Samarco's Fundão dam, including all socio-environmental damages and all collective and diffuse socioeconomic damages resulting from the rupture.
- The engagement of Brazilian authorities and public entities ensured legitimacy to the settlement, which was supported by social, environmental and technical criteria.
- Legal Processes: The signing of the definitive settlement agreement provides a stable framework for the execution of reparation and compensation measures related to the Samarco dam rupture; it also settles all lawsuits brought by the public authorities involved. On the International Claims, Vale believes the English and the Netherlands proceedings are unnecessary because they duplicate matters already covered by the existing and ongoing reparation work and legal agreements in Brazil.
- For more information on the agreement: <https://vale.com/esg/controversies>

In relation to item iv and v:

- In recent years, Samarco has expanded the Integrated Safety System with the Monitoring and Inspection Center (CMI), which monitors its geotechnical structures 24/7. The Center has approximately 1500 state-of-the-art equipment, which transmits data in real time to a specialized team, made up of specialist technicians and engineers responsible for carrying out visual inspections and systematic interpretation of the results of automatic and manual instruments. Geotechnical monitoring is carried out in accordance with the main engineering safety practices and in an integrated manner. The structures are also monitored by independent audits and have a Dam Integrity Assurance Statement (DCE). For more information: <https://www.samarco.com/estruturas-disposicao-rejeitos/?lang=en>

Even with all the factual data disclosed by Vale, as of today, our MSCI rating of this controversy has the same severity level as it did in 2015 after the accident, without any recognition for the progress.

In conclusion

We support third-party evaluations of our ESG performance and risk mitigation strategies. We value the independent insights they offer to stakeholders. A large number of our investors, analysts and banks use MSCI, one of the leading ESG rating agencies. However, we have concerns about MSCI's factual inconsistencies, the lack of transparency in its conclusions related to controversies, and its reliance on media articles over the data and information provided by Vale.

Our sincere goal is to make sure that our investors receive clear, transparent, and correct information about Vale.

Thank you for your support and attention to our company. We look forward to your response to the above considerations and are available to clarify or to discuss any of the issues we have raised. Please contact us if you would like to discuss any of the issues we have raised.

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