

MSCI ESG Research



Joint Webinar on Integrating Human Rights into Risk Management
2 and 4 MARCH 2021

Presented by Sylviane Carot

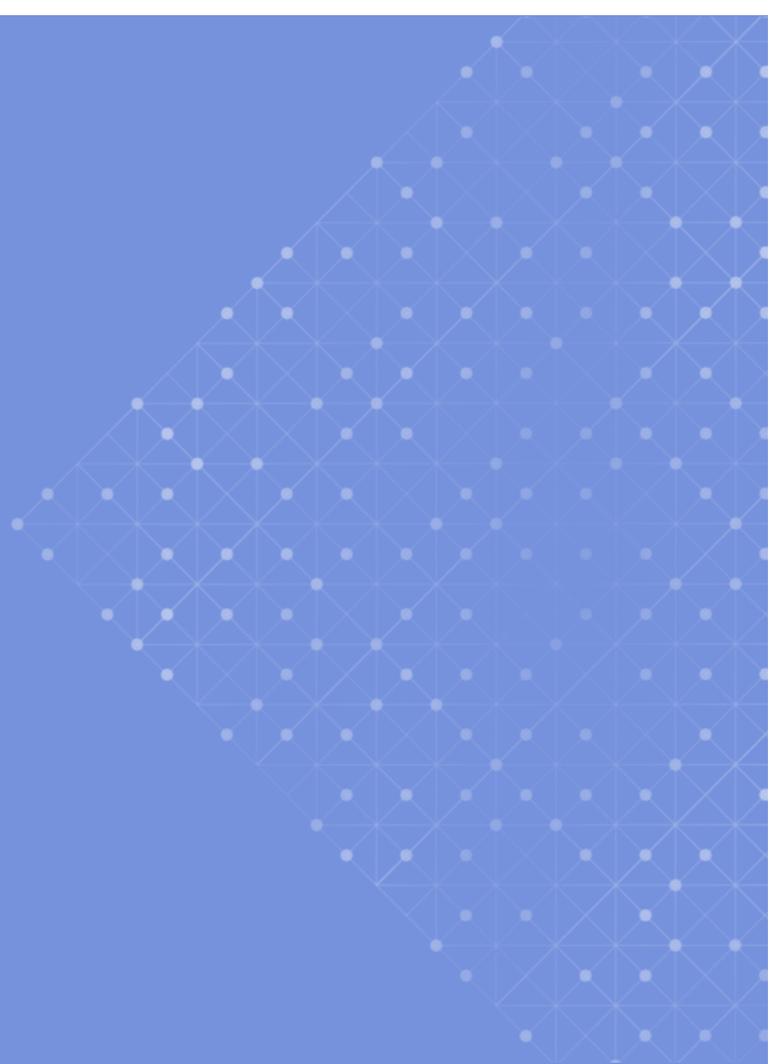
March 4, 2021

Agenda

- 1 MSCI ESG Ratings
- 2 How do we assess Human Rights issues



MSCI ESG Ratings



ESG ratings methodology



COMPANY, INDUSTRY, AND THEMATIC REPORTS



RATINGS, SCORES AND DATA



PORTFOLIO ANALYTICS & ESG INDEXES

Corporate governance analysis



CONSISTENT APPROACH ACROSS **ALL COMPANIES**
COVERAGE OF OVER **9,000 COMPANIES**
ROBUST FRAMEWORK OF **96 KEY METRICS WITH 10+ YEARS HISTORY**

Detailed analysis of:

- Shareholders and management alignment
- Relationship of governance structures, events, and corporate behavior
- Local market standards



Board

Size, director election standards, tenure and gender diversity
Assessment of financial, industry and risk management expertise



Pay

Robust data on CEO pay. Analysis of pay for performance link.
Assessment of compensation committee independence



Ownership and Control

Ownership structure, shareholder rights and key takeover defenses
Major owners and insider holdings



Accounting

Audit committee structure and fees paid to outside auditors.
Transparency metrics tied to revenue, expense recognition, asset-liability valuation



ESG Ratings focus on most relevant ESG factors by industry



IDENTIFY KEY ISSUES
DISCLOSE
GOVERNANCE

INDUSTRY-SPECIFIC

UNIVERSALLY APPLICABLE

ENVIRONMENTAL (E)		SOCIAL (S)		GOVERNANCE (G)	
Climate Change	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability	Human Capital	Labor Management Health & Safety Human Capital Development Supply Chain Labor Standards	Corporate Governance	Board Pay Ownership Accounting
Natural Capital	Water Stress Biodiversity & Land Use Raw Material Sourcing	Product Liability	Product Safety & Quality Chemical Safety Financial Product Safety Privacy & Data Security Responsible Investment Ins. Health & Demographic Risk	Corporate Behavior	Business Ethics Anti-competitive Practices Corruption & Instability Financial System Instability Tax Transparency
Pollution & Waste	Toxic Emissions & Waste Packaging Material & Waste Electronic Waste	Stakeholder Opposition	Community Relations* Controversial Sourcing		
Environmental Opportunities	Clean Tech Green Building Renewable Energy	Social Opportunities	Access to Communications Access to Finance Access to Health Care Nutrition & Health		



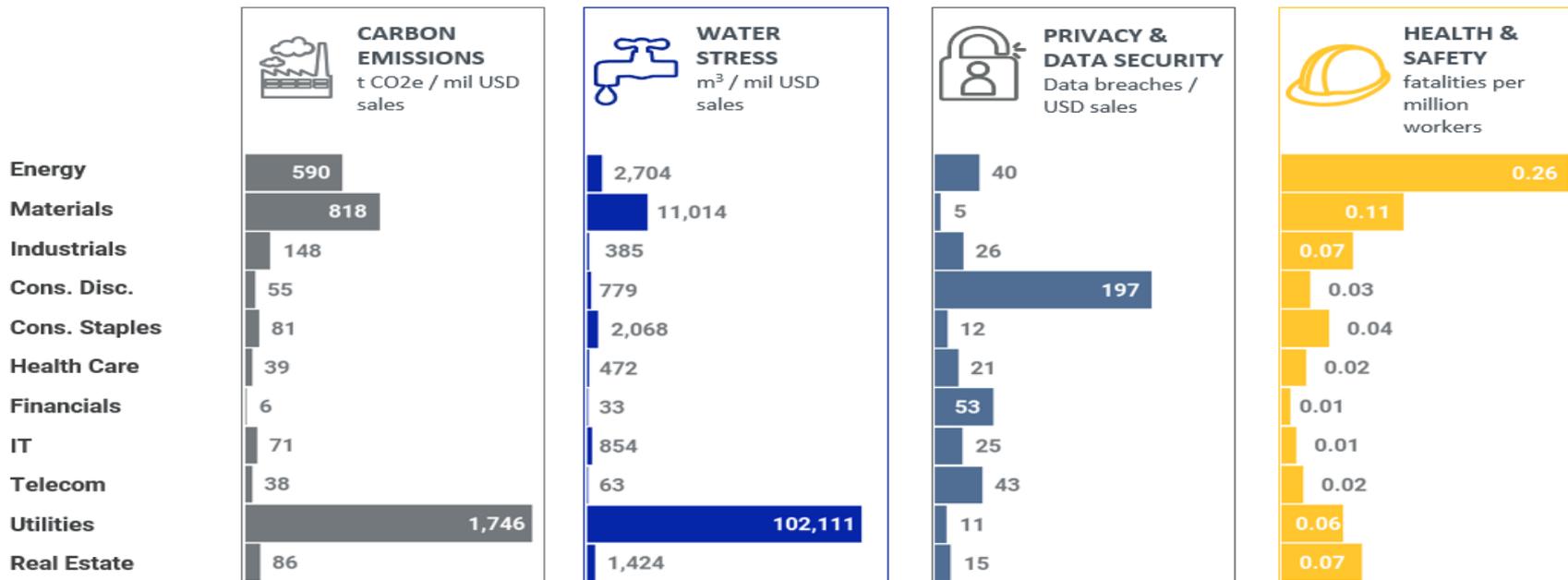
ESG

Which issues are more relevant



IDENTIFY KEY ISSUES
BY INDUSTRY

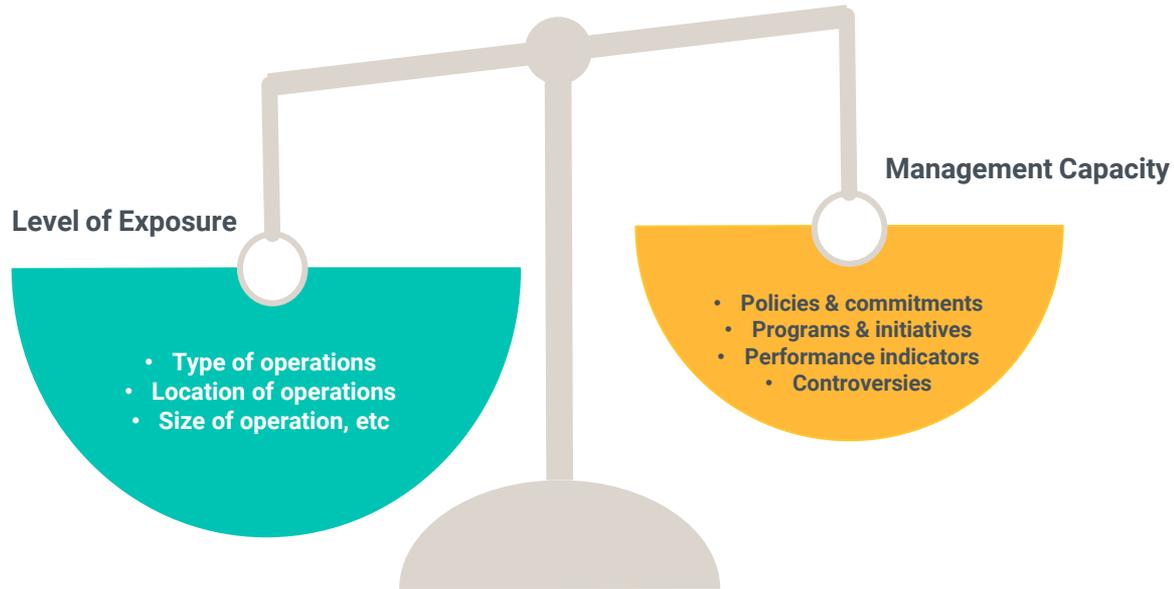
QUANTITATIVE APPROACH TO **OBJECTIVELY** DEFINE THE ECONOMICALLY RELEVANT E&S ISSUES FOR EACH OF THE **156 INDUSTRY MODELS**



Measuring ESG Risk Exposure

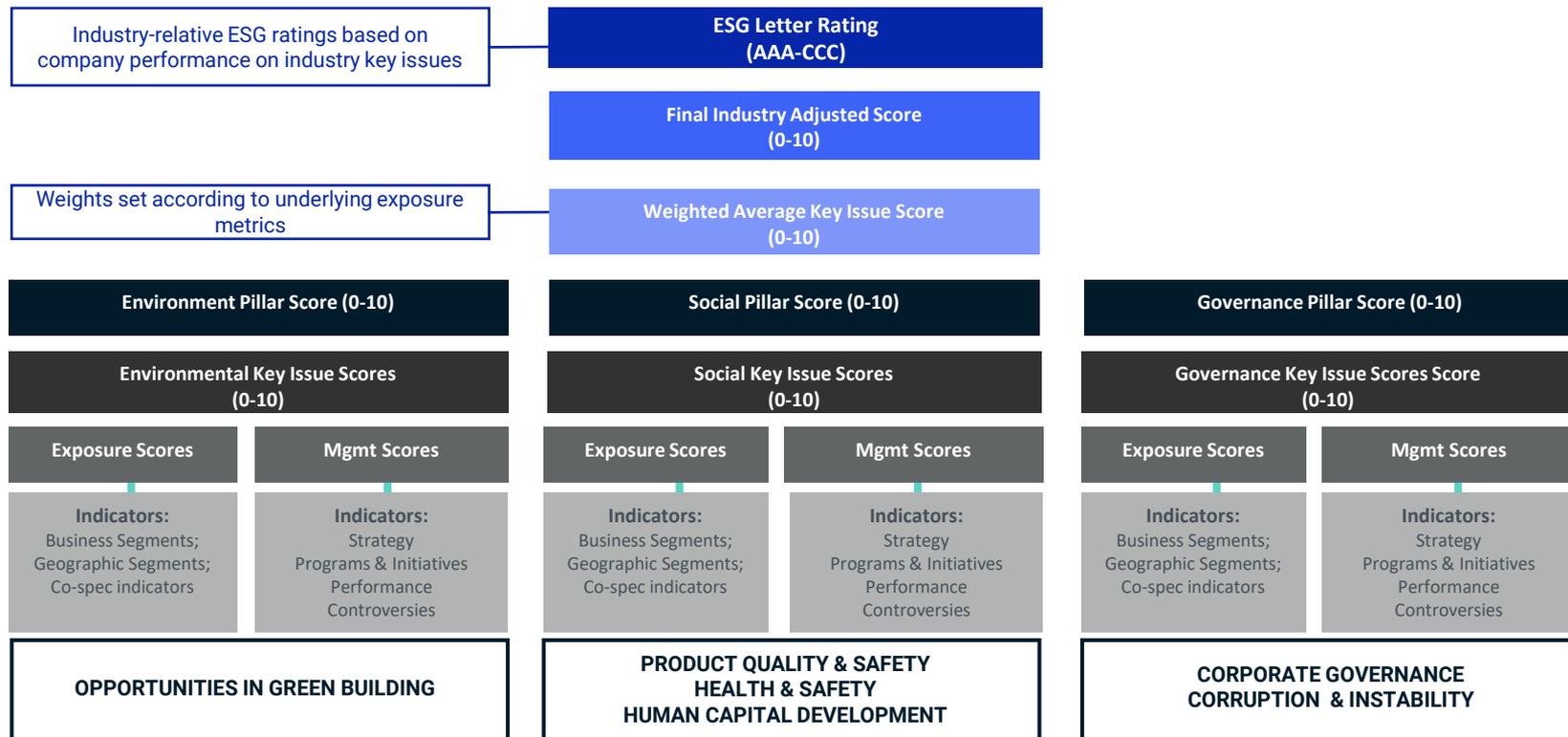


SCORE KEY ISSUES
(0-10)



**EVALUATE MANAGEMENT
STRATEGY IN THE CONTEXT OF RISK
EXPOSURE**

How this fits into the ESG Rating



HOW DO WE ASSESS HUMAN RIGHTS ISSUE?

WITHIN MSCI ESG RATINGS

MSCI ESG Rating Model: Key Issues

INDUSTRY-SPECIFIC		UNIVERSALLY APPLICABLE			
ENVIRONMENTAL (E)		SOCIAL (S)		GOVERNANCE (G)	
Climate Change	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability	Human Capital	Labor Management ✓ Health & Safety ✓ Human Capital Development Supply Chain Labor Standards ✓	Corporate Governance	Board Pay Ownership Accounting
Natural Capital	Water Stress Biodiversity & Land Use ✓ Raw Material Sourcing	Product Liability	Product Safety & Quality Chemical Safety Financial Product Safety Privacy & Data Security ✓ Responsible Investment Ins. Health & Demographic Risk	Corporate Behavior	Business Ethics Anti-competitive Practices Corruption & Instability ✓ Financial System Instability Tax Transparency
Pollution & Waste	Toxic Emissions & Waste Packaging Material & Waste Electronic Waste	Stakeholder Opposition	Community Relations* Controversial Sourcing ✓		
Environmental Opportunities	Clean Tech Green Building Renewable Energy	Social Opportunities	Access to Communications Access to Finance Access to Health Care Nutrition & Health		



CAPTURING SUPPLY CHAIN RISKS A GRANULAR EXPOSURE ANALYSIS

LOCATION OF PRODUCTION

- % located in countries with poor labor standards
- Sources: Company Disclosure, International Labor Organization, US Bureau of International Labor Affairs

TYPE OF PRODUCTS

- Items more likely to be produced with child labor
- Sources: Company Disclosure, International Labor Organization, US Bureau of International Labor Affairs

BRAND VISIBILITY

- Extent to which company's brand is vulnerable to public or NGOs scrutiny
- Sources: Company Disclosure, Interbrand's Top 100 Global Brands

CONTROL OVER BRANDING

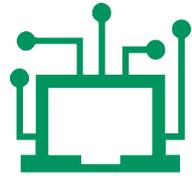
- Private Label as % of sales
- Sources: Company Disclosure

MEASURING SUPPLY CHAIN MITIGATION RESPONSE

A SYSTEMATIC ASSESSMENT



CAPTURING PRIVACY RISKS A GRANULAR EXPOSURE ANALYSIS



\$3.6M

On average, this was the **cost of a data breach** in 2017

Source: "Ponemon Institute's 2017 Cost of Data Breach Study: Global Overview", 2017



+164%

Increase in **stolen, lost or compromised records** in first half 2017

Source: "First Half 2017 Breach Level Index Report", Gemalto, 2017

DETERMINING COMPANY'S VULNERABILITY

Type of Operations: Percentage of revenue derived from business segments that:

- require collection and/or handling of sensitive personal data
- have witnessed high cost and frequency of data breaches

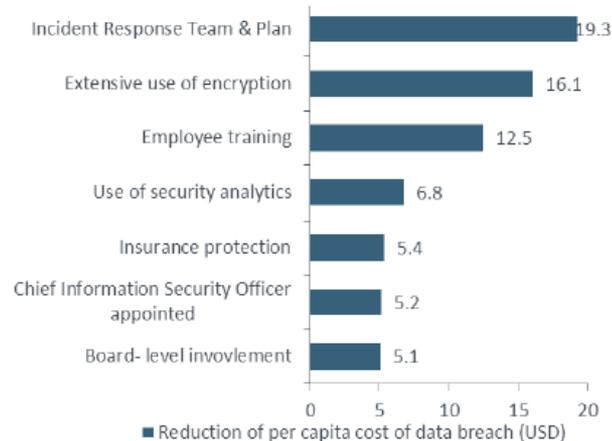
Location of Operations: Percentage of operations in countries with:

- strengthening or evolving privacy regulations
- high cost and frequency of data breaches

MEASURING PRIVACY MITIGATION RESPONSE

A SYSTEMATIC ASSESSMENT

WHY DOES IT MATTER FOR COMPANIES?



Source: Ponemon Institute, 2016 Annual Cost of Data Breach Study: Global Analysis, MSCI ESG Research "Software and Services Industry Report", March 2018

DETERMINING COMPANY'S MANAGEMENT CAPABILITY

- Scope of company's publicly available data protection policy
- Rights provided to individuals regarding the control of their data
- Data Breach/ Incident Response Plan
- Information Security Policies and Systems audits
- Access control and encryption of personal/sensitive data
- Transfer of personal data to third parties and consent requirement
- Minimization of data collection and retention
- Due diligence of suppliers and business partners
- Oversight of Privacy and Data security
- Training on data security and/or privacy-related risks
- Privacy enhancing technologies and initiatives

VALE S.A. (VALE3)

Steel | BR

Last ESG Rating action

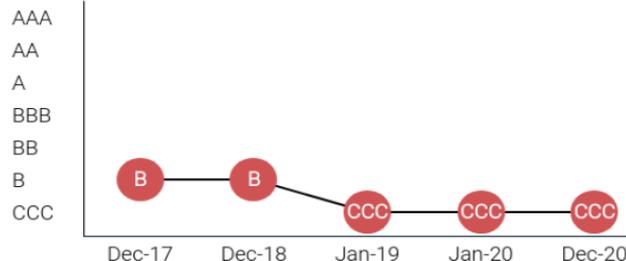
Rating action date: December 18, 2020

Vale's rating is unchanged at 'CCC'.

Vale continued its rehabilitation efforts following the Brumadinho dam collapse in 2019. The company began phasing out similar upstream high-risk dams, opting for the safer and more sustainable dry stacking method, which it aims to implement in 70% of operations by 2024. However, the total cost of the incident remains unclear, and a risk to shareholders, amid pending compensation settlements for victims and civic penalties by the state of Minas Gerais.

- ▶ Vale has faced community opposition over the safety and environmental risks posed by its operations, particularly of its dams. The company has restructured its grievance mechanism to improve stakeholder relations. Yet, it faces allegations of insufficient aid to Brumadinho residents and cutting payouts to victims of the 2015 Mariana dam failure. Moreover, Vale's plan to expand its Carajas operations in the biodiverse region of Brazil (86% in FY 2019) could increase its exposure to risks associated with disturbing fragile ecosystems and local communities.
- ▶ Vale's governance structure remains weaker than those of home market peers. It lacks an independent majority board and conducts significant related party transactions with three major shareholders. In 2019, Vale reported a tax-related dispute amounting to USD 347 million with the Brazilian government pertaining to its social contribution. It also announced an impairment charge of USD 2.4 billion (6.5% of 2019 revenue) related to its Mozambique and New Caledonia mines in Q4 2019.

ESG Rating history



ESG Rating history shows five most recent rating actions

ESG Rating scorecard

As of December 23, 2020

Key issue	Weight	Industry average	Score (0-10)	Change	Explanation
Weighted-Average Key Issue Score		3.4	2.2		
Governance	33%	3.5	1.5		
Corporate Governance		4.5	2.0		<ul style="list-style-type: none"> The company falls into the lowest scoring range relative to global peers, indicating concerns in multiple areas.
Corporate Behavior		4.1	4.2		<ul style="list-style-type: none"> Involved in moderate controversies Evidence of detailed policies on business ethics and corruption
Biodiversity & Land Use*	10%	2.7	0.0		<ul style="list-style-type: none"> Involved in very severe, severe & moderate controversies 96% of operations from business lines prone to environmental disturbance Efforts to mitigate adverse impact of operations on biodiversity lag peers
Carbon Emissions	10%	3.5	7.9		<ul style="list-style-type: none"> 98% of operations from less carbon-intensive business lines relative to peers Carbon Intensity 80% lower than industry average
Community Relations	10%	4.3	1.5		<ul style="list-style-type: none"> Involved in very severe, severe & moderate controversies 80% of operations derived from business lines that may impact natural ecosystems or the livelihood of local communities. Limited to no commitments toward the protection of human rights, and scarce evidence of community engagement initiatives.
Health & Safety	10%	3.3	1.2		<ul style="list-style-type: none"> Involved in very severe, severe & moderate controversies Limited evidence of efforts to reduce employee injuries/fatalities
Toxic Emissions & Waste	10%	2.2	0.0		<ul style="list-style-type: none"> Involved in very severe, severe & moderate controversies Environmental metrics intensities compare poorly to peers
Water Stress	10%	3.7	5.5		<ul style="list-style-type: none"> 90% of operations located in less water-stressed regions relative to peers Evidence of efforts to manage water usage, including reduction targets
Labor Management	7%	4.7	2.0		<ul style="list-style-type: none"> Involved in moderate controversy 98% of operations in markets with relatively high frequency of labor related work stoppages or strikes Relatively limited labor management initiatives compared to peers

Information Classification: GENERAL

TICKER: VALE3

SUB-INDUSTRY: Steel

COUNTRY: BR

LAST UPDATE: Feb 15, 2021

MEDIA REVIEW: Conducted weekly; no new updates since date of Last Update*

LOWEST SCORE

LOWEST FLAG

0/10

R

PERFORMANCE DASHBOARD

Significant Controversies by Indicator

	Flag	Score	Global Compact Status
Environment	R	0	
Biodiversity & Land Use	O	1	Watch List
Toxic Emissions & Waste	R	0	Fail
Social	R	0	
Customers	G	10	
No controversies were uncovered.			
Human Rights & Community	R	0	
Impact on Local Communities	R	0	Fail
Labor Rights & Supply Chain	R	0	
Health & Safety	R	0	Pass
Governance	Y	4	
Bribery & Fraud	Y	4	Pass

Summary

Vale S.A. faced significant criticism and liabilities related to the collapse of Feijão mine tailings dam in Minas Gerais, Brazil, resulting in at least 60 fatalities and more than 200 people missing in January 2019, including members of the nearby communities and workers from Vale. Tailings spilled from the breached dam buried Vale's administrative office and cafeteria, killing several of the company's employees. Threat of a second dam collapse resulted in the evacuation of local residents.

In November 2015, a similar incident involved the Fundão tailings dam breach in Minas Gerais. The company owns a 50% interest in Samarco Mineração, which operated the tailings dam. The dam failure also resulted in multiple casualties and widespread environmental and property damage, particularly in the village of Bento Rodrigues. Over 600 residents were displaced, and water supplies to thousands of residents in Minas Gerais state were disrupted due to the tailings spill. Mud and mining waste from the tailings dam severely contaminated over 650 kilometers of the Doce river system, smothering fish and other wildlife downstream of the dam.

Global Compact Compliance: Fail

of Controversy Cases by ESG Pillar (44 in total)

Very Severe Severe Moderate Minor

Very Severe Cases:

Last Reviewed:	February 2021
Date Initiated:	January 2019
Assessment:	Very Severe
Type:	Structural
Status:	Ongoing
Flag: R	Score: 0
Global Compact Compliance:	Fail
Global Compact Principle:	Principle 1 - Businesses should support and respect the protection of internationally proclaimed human rights.

Local community fatalities and damages resulting from the Corrego do Feijão Mine tailings dam collapse

Impact & Basis of Assessment

Scale of Impact: Extensive

Nature of Harm: Very Serious

Assessment Change Rationale: The assessment was downgraded to Very Severe in January 2019 due to the company's alleged responsibility for the collapse of Feijão tailings dam. The incident resulted in more than 50 fatalities. Approximately 300 people were also reported missing, including Vale's employees and members of the nearby communities.

In January 2019, the collapse of Corrego do Feijão Mine tailings dam I in Brumadinho, Minas Gerais State, Brazil, resulted in the spillage of millions of tons of non-toxic mud killing at least 200 people and leaving approximately 100 people missing thus far, including residents of Vila Ferteco community and Vale's employees. The dam had a capacity of 12 million cubic meters. Residents of Brumadinho town claimed that the population had not been alerted when the dam collapsed despite the company's alert system being in place. Two days after the mudslide, rescue operations were temporarily suspended and residents of Brumadinho town were ordered to evacuate due to a potential collapse of dam VI, which was also part of Brumadinho complex.

Following the dam burst, Brazilian courts froze BRL 11 billion (approximately USD 3 billion) of Vale's assets to pay for potential damages. The company also received BRL 350 million (approximately USD 93 million) in penalties from the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) and the Brumadinho municipality. Brazilian public prosecutors as well as the Federal Police announced investigations into Vale's responsibility and the causes of the dam collapse.

In February 2021, Vale announced it had entered into a BRL 37 billion (approximately USD 7 billion) settlement with Brazilian authorities to cover the costs of environmental and social remediation for the damages caused by the Feijao mine tailings dam collapse.

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