



# Consolidated Interim Financial Statements

June 30, 2024

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## Report of Independent Registered Public Accounting Firm

To the shareholders and Board of Directors of  
Vale S.A.

### Results of review of interim financial statements

We have reviewed the accompanying consolidated interim statement of financial position of Vale S.A. and its subsidiaries (the "Company") as of June 30, 2024, and the related consolidated interim income statement and statements of comprehensive income for the three-month and six-month periods ended June 30, 2024 and June 30, 2023 and the consolidated interim statements of changes in equity and cash flows for the six-month periods ended June 30, 2024 and June 30, 2023, including the related notes (collectively referred to as the "interim financial statements"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial statements for them to be in conformity with IAS 34 - Interim Financial Reporting, as issued by the International Accounting Standards Board (IASB).

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statement of financial position of the Company as of December 31, 2023, and the related consolidated income statement and statements of comprehensive income, changes in equity and cash flows for the year then ended (not presented herein), and in our report dated February 22, 2024, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated statement of financial position as of December 31, 2023, is fairly stated, in all material respects, in relation to the consolidated statement of financial position from which it has been derived.

### Basis for review results

These interim financial statements are the responsibility of the Company's management. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial statements consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Rio de Janeiro, July 25, 2024

  
PricewaterhouseCoopers  
Auditores Independentes Ltda.

# Consolidated Interim Income Statement

In millions of United States dollars, except earnings per share

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023	2024	2023
Net operating revenue	4(b)	9,920	9,673	18,379	18,107
Cost of goods sold and services rendered	5(a)	(6,349)	(5,940)	(11,716)	(10,889)
<b>Gross profit</b>		<b>3,571</b>	<b>3,733</b>	<b>6,663</b>	<b>7,218</b>
<b>Operating expenses</b>					
Selling and administrative	5(b)	(137)	(139)	(277)	(257)
Research and development		(189)	(165)	(345)	(304)
Pre-operating and operational stoppage	25	(91)	(103)	(183)	(227)
Other operating revenues (expenses), net	5(c)	721	(454)	465	(677)
<b>Operating income</b>		<b>3,875</b>	<b>2,872</b>	<b>6,323</b>	<b>5,753</b>
Financial income	6	78	106	187	227
Financial expenses	6	(365)	(397)	(704)	(717)
Other financial items, net	6	(965)	134	(1,172)	(197)
Equity results and other results in associates and joint ventures	14 and 24	112	5	236	(50)
<b>Income before income taxes</b>		<b>2,735</b>	<b>2,720</b>	<b>4,870</b>	<b>5,016</b>
Income taxes	7	34	(1,792)	(414)	(2,210)
<b>Net income</b>		<b>2,769</b>	<b>928</b>	<b>4,456</b>	<b>2,806</b>
Net income attributable to noncontrolling interests		-	36	8	77
<b>Net income attributable to Vale's shareholders</b>		<b>2,769</b>	<b>892</b>	<b>4,448</b>	<b>2,729</b>
<b>Basic and diluted earnings per share attributable to Vale's shareholders</b>					
Common share (US\$)	8	0.65	0.20	1.04	0.62

The accompanying notes are an integral part of these interim financial statements.

# Consolidated Interim Statement of Comprehensive Income

In millions of United States dollars

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023	2024	2023
<b>Net income</b>		<b>2,769</b>	<b>928</b>	<b>4,456</b>	<b>2,806</b>
<b>Other comprehensive income:</b>					
<b>Items that will not be reclassified to income statement</b>					
Translation adjustments of the Parent Company		(4,014)	2,072	(5,239)	3,016
Retirement benefit obligations		4	(5)	44	(12)
Fair value adjustment to investment in equity securities		-	13	-	13
		<b>(4,010)</b>	<b>2,080</b>	<b>(5,195)</b>	<b>3,017</b>
<b>Items that may be reclassified to income statement</b>					
Translation adjustments of foreign operations		1,203	(249)	1,381	(406)
Net investment hedge	18(h)	(202)	95	(258)	144
Cash flow hedge	18(h)	-	(4)	-	15
Reclassification of cumulative translation adjustments to income statement (i)	15(a)	(1,048)	-	(997)	-
		<b>(47)</b>	<b>(158)</b>	<b>126</b>	<b>(247)</b>
<b>Comprehensive (loss) income</b>		<b>(1,288)</b>	<b>2,850</b>	<b>(613)</b>	<b>5,576</b>
Comprehensive income attributable to noncontrolling interests		1	36	7	84
<b>Comprehensive (loss) income attributable to Vale's shareholders</b>		<b>(1,289)</b>	<b>2,814</b>	<b>(620)</b>	<b>5,492</b>

(i) Mainly related to the effect of the reclassification of cumulative translation adjustments of PTVI in the amount of US\$1,063 (note 15a).

Items above are stated net of tax, when applicable, and the related taxes are disclosed in note 7.

The accompanying notes are an integral part of these interim financial statements.

# Consolidated Interim Statement of Cash Flows

In millions of United States dollars

	Notes	Six-month period ended June 30,	
		2024	2023
<b>Cash flow from operations</b>	<b>9(a)</b>	<b>6,832</b>	<b>7,539</b>
Interest on loans and borrowings paid	9(c)	(397)	(369)
Cash received on settlement of derivatives, net	18(d)	124	172
Payments related to the Brumadinho event	23	(400)	(621)
Payments related to de-characterization of dams	25	(251)	(173)
Interest on participative shareholders' debentures paid	20	(149)	(127)
Income taxes (including settlement program) paid		(972)	(911)
<b>Net cash generated by operating activities</b>		<b>4,787</b>	<b>5,510</b>
<b>Cash flow from investing activities:</b>			
Capital expenditures	4(c)	(2,723)	(2,338)
Payments related to the Samarco dam failure	24	(191)	(108)
Cash received (payments) from disposal of investments, net	9(b)	2,610	(67)
Dividends received from associates and joint ventures		42	105
Short-term investment		(16)	12
Other investing activities, net		(1)	3
<b>Net cash used in investing activities</b>		<b>(279)</b>	<b>(2,393)</b>
<b>Cash flow from financing activities:</b>			
Loans and borrowings from third parties	9(c)	1,960	1,800
Payments of loans and borrowings from third parties	9(c)	(592)	(620)
Payments of leasing	22	(85)	(92)
Dividends and interest on capital paid to Vale's shareholders	28(d)	(2,328)	(1,795)
Dividends and interest on capital paid to noncontrolling interest		-	(8)
Shares buyback program	28(c)	(389)	(2,124)
Acquisition of additional stake in VOPC	15(g)	-	(130)
<b>Net cash used in financing activities</b>		<b>(1,434)</b>	<b>(2,969)</b>
<b>Net increase in cash and cash equivalents</b>		<b>3,074</b>	<b>148</b>
Cash and cash equivalents in the beginning of the period		3,609	4,736
Effect of exchange rate changes on cash and cash equivalents		(204)	99
<b>Cash and cash equivalents at end of the period</b>		<b>6,479</b>	<b>4,983</b>

The accompanying notes are an integral part of these interim financial statements.

# Consolidated Interim Statement of Financial Position

In millions of United States dollars

	Notes	June 30, 2024	December 31, 2023
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents	21	6,479	3,609
Short-term investments	21	61	51
Accounts receivable	10	2,332	4,197
Other financial assets	13	168	271
Inventories	11	4,793	4,684
Recoverable taxes	7(e)	659	900
Judicial deposits	26(c)	-	611
Other		337	444
		<b>14,829</b>	<b>14,767</b>
Non-current assets held for sale	15(a)	-	3,933
		<b>14,829</b>	<b>18,700</b>
<b>Non-current assets</b>			
Judicial deposits	26(c)	585	798
Other financial assets	13	160	593
Recoverable taxes	7(e)	1,329	1,374
Deferred income taxes	7(b)	9,931	9,565
Other		1,289	1,257
		<b>13,294</b>	<b>13,587</b>
Investments in associates and joint ventures	14	3,715	1,872
Intangibles	16	10,195	11,631
Property, plant, and equipment	17	44,582	48,396
		<b>71,786</b>	<b>75,486</b>
<b>Total assets</b>		<b>86,615</b>	<b>94,186</b>
<b>Liabilities</b>			
<b>Current liabilities</b>			
Suppliers and contractors	12	4,769	5,272
Loans and borrowings	21	910	824
Leases	22	177	197
Other financial liabilities	13	1,467	1,676
Taxes payable	7(e)	1,242	1,314
Settlement program ("REFIS")	7(c)	383	428
Liabilities related to Brumadinho	23	974	1,057
Liabilities related to associates and joint ventures	24	1,605	837
De-characterization of dams and asset retirement obligations	25	956	1,035
Provisions for litigation	26(a)	115	114
Employee benefits	27	724	964
Other		421	376
		<b>13,743</b>	<b>14,094</b>
Liabilities associated with non-current assets held for sale	15(a)	-	561
		<b>13,743</b>	<b>14,655</b>
<b>Non-current liabilities</b>			
Loans and borrowings	21	12,860	11,647
Leases	22	1,183	1,255
Participative shareholders' debentures	20	2,451	2,874
Other financial liabilities	13	2,656	3,373
Settlement program ("REFIS")	7(c)	1,284	1,723
Deferred income taxes	7(b)	806	870
Liabilities related to Brumadinho	23	1,438	2,003
Liabilities related to associates and joint ventures	24	2,102	3,590
De-characterization of dams and asset retirement obligations	25	5,484	6,694
Provisions for litigation	26(a)	765	885
Employee benefits	27	1,221	1,381
Streaming transactions		1,948	1,962
Other		287	293
		<b>34,485</b>	<b>38,550</b>
<b>Total liabilities</b>		<b>48,228</b>	<b>53,205</b>
<b>Equity</b>			
Equity attributable to Vale's shareholders	28	36,974	39,461
Equity attributable to noncontrolling interests		1,413	1,520
<b>Total equity</b>		<b>38,387</b>	<b>40,981</b>
<b>Total liabilities and equity</b>		<b>86,615</b>	<b>94,186</b>

The accompanying notes are an integral part of these interim financial statements.

# Consolidated Interim Statement of Changes in Equity

In millions of United States dollars

	Notes	Share capital	Capital reserve	Profit reserves	Treasury shares	Other reserves	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale's shareholders	Equity attributable to noncontrolling interests	Total equity
<b>Balance as of December 31, 2023</b>		<b>61,614</b>	<b>1,139</b>	<b>21,877</b>	<b>(3,504)</b>	<b>(1,774)</b>	<b>(39,891)</b>	<b>-</b>	<b>39,461</b>	<b>1,520</b>	<b>40,981</b>
Net income		-	-	-	-	-	-	4,448	4,448	8	4,456
Other comprehensive income		-	-	(2,520)	-	61	(2,609)	-	(5,068)	(1)	(5,069)
Dividends and interest on capital of Vale's shareholders	28(d)	-	-	(2,364)	-	-	-	-	(2,364)	-	(2,364)
Transactions with noncontrolling interests (i)	15(a) and 15(b)	-	-	-	-	895	-	-	895	(114)	781
Shares buyback program	28(c)	-	-	-	(389)	-	-	-	(389)	-	(389)
Share-based payment program	27(a)	-	-	-	2	(11)	-	-	(9)	-	(9)
<b>Balance as of June 30, 2024</b>		<b>61,614</b>	<b>1,139</b>	<b>16,993</b>	<b>(3,891)</b>	<b>(829)</b>	<b>(42,500)</b>	<b>4,448</b>	<b>36,974</b>	<b>1,413</b>	<b>38,387</b>
<b>Balance as of December 31, 2022</b>		<b>61,614</b>	<b>1,139</b>	<b>20,744</b>	<b>(4,980)</b>	<b>(1,675)</b>	<b>(40,975)</b>	<b>-</b>	<b>35,867</b>	<b>1,491</b>	<b>37,358</b>
Net income		-	-	-	-	-	-	2,729	2,729	77	2,806
Other comprehensive income		-	-	1,402	-	7	1,354	-	2,763	7	2,770
Dividends and interest on capital of Vale's shareholders	28(d)	-	-	(437)	-	-	-	-	(437)	-	(437)
Dividends of noncontrolling interests		-	-	-	-	-	-	-	-	(37)	(37)
Transactions with noncontrolling interests	15(g)	-	-	-	-	3	-	-	3	(59)	(56)
Shares buyback program	28(c)	-	-	-	(2,124)	-	-	-	(2,124)	-	(2,124)
Treasury shares canceled	28(b)	-	-	(4,164)	4,164	-	-	-	-	-	-
Share-based payment program	27(a)	-	-	-	26	(15)	-	-	11	-	11
<b>Balance as of June 30, 2023</b>		<b>61,614</b>	<b>1,139</b>	<b>17,545</b>	<b>(2,914)</b>	<b>(1,680)</b>	<b>(39,621)</b>	<b>2,729</b>	<b>38,812</b>	<b>1,479</b>	<b>40,291</b>

(i) The effect on equity attributable to noncontrolling interests includes the derecognition of noncontrolling shareholders of PT Vale Indonesia Tbk in the amount of US\$1,628 (note 15a) and the recognition of noncontrolling shareholders of Vale Base Metals Limited in the amount of US\$1,514 (note 15b).

The accompanying notes are an integral part of these interim financial statements.



# Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

## 1. Corporate information

Vale S.A. (the "Parent Company") is a public company headquartered in the city of Rio de Janeiro, Brazil. Vale's share capital consists of common shares, traded on the stock exchange.

In Brazil, Vale's common shares are listed on B3 under the code VALE3. The Company also has American Depositary Receipts (ADRs), with each representing one common share, traded on the New York Stock Exchange (NYSE) under the code VALE. Additionally, the shares are traded on LATIBEX under the code XVALO, which is an unregulated electronic market established by the Madrid Stock Exchange for the trading of Latin American securities. The Company's shareholding structure is disclosed in note 28.

Vale, together with its subsidiaries ("Vale" or the "Company"), is one of the world's largest producers of iron ore and nickel. The Company also produces iron ore pellets and copper. Nickel and copper concentrates contain by-products such as platinum group metals (PGM), gold, silver, and cobalt. Most of the Company's products are sold to international markets, through the Company's main trading Company, Vale International S.A. ("VISA"), a wholly owned subsidiary located in Switzerland.

The Company is engaged in greenfield mineral exploration in six countries, including Brazil, USA, Canada, Chile, Peru and Indonesia. It also operates extensive logistics systems in Brazil and other regions worldwide, including railways, maritime terminals, and ports integrated with mining operations. Additionally, the Company has distribution centers to support its iron ore shipments globally.

As part of its strategy, Vale also holds investments in energy businesses to meet part of its energy consumption needs through renewable sources.

The Company's operations are organized into two operational segments: "Iron Ore Solutions" and "Energy Transition Metals" (note 4).

**Iron Ore Solutions** – Comprise iron ore extraction and iron ore pellet production, as well as the North, South, and Southeast transportation corridors in Brazil, including railways, ports and terminals linked to mining operations.

- **Iron ore:** Currently, Vale operates three systems in Brazil for the production and distribution of iron ore. The Northern System (Carajás, State of Pará, Brazil) is fully integrated and comprises three mining complexes and a maritime terminal. The Southeast System (Quadrilátero Ferrífero, Minas Gerais, Brazil) is fully integrated, consisting of three mining complexes, a railway, a maritime terminal, and a port. The Southern System (Quadrilátero Ferrífero, Minas Gerais, Brazil) consists of two mining complexes and two maritime terminals.
- **Iron ore pellets:** Vale operates six pelletizing plants in Brazil and two in Oman.

**Energy Transition Metals** – Includes the production of nickel, copper and its by-products. In 2023, the Company transferred the assets related to this segment to a new entity, "Vale Base Metals Limited" and sold a minority stake in this business to Manara Minerals (notes 3 and 15b).

- **Nickel:** The Company's primary nickel operations are conducted by Vale Canada Limited ("Vale Canada"), which owns mines and processing plants in Canada and Indonesia and nickel refining facilities in the United Kingdom and Japan. In June 2024, the Company concluded the divestment obligation in PT Vale Indonesia Tbk ("PTVI"), which resulted in the loss of control over this operation (note 15a). Vale also has nickel operations in Onça Puma, located in the State of Pará.
- **Copper:** In Brazil, Vale produces copper concentrates at Sossego and Salobo in Carajás, State of Pará. In Canada, Vale produces copper concentrates and copper cathodes associated with its nickel mining operations in Sudbury (located in Ontario), Voisey's Bay (located in Newfoundland and Labrador), and Thompson (located in Manitoba).
- **Cobalt, PGM, and other precious metals:** The ore extracted by Vale Canada in Sudbury yields cobalt, PGMs (Platinum Group Metals), silver, and gold as by-products, which are processed at refining facilities in Port Colborne, Ontario. In Canada, Vale Canada also produces refined cobalt at its Long Harbour facilities in Newfoundland and Labrador. The copper operations in Sossego and Salobo in Brazil also yield silver and gold as by-products.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 2. Basis of preparation of condensed consolidated interim financial statements

The condensed consolidated interim financial statements of the Company ("interim financial statements") have been prepared and are being presented in accordance with IAS 34 – Interim Financial Reporting, as issued by the International Accounting Standards Board ("IASB"). All relevant information for the interim financial statements, and only this information, are presented and consistent to those used by the Company's Management.

The interim financial statements have been prepared to update users on the relevant events and transactions that occurred in the period and must be read together with the financial statements for the year ended December 31, 2023. Except by the accounting policy described in note 7 – Taxes, all accounting policies, accounting estimates and judgments, risk management and measurement methods are the same as those adopted in the preparation of the latest annual financial statements.

These interim financial statements were authorized for issue by the Board of Directors on July 25, 2024.

#### a) New and amended standards

In April 2024, the IASB issued IFRS 18 – Presentation and Disclosure in Financial Statements, which replaces IAS 1 – Presentation of Financial Statements. IFRS 18 introduces new requirements on presentation within the statement of income statement, requires disclosure of 'management-defined performance measures' and includes new requirements for aggregation and disaggregation of financial information based on the identified "roles" of the primary financial statements and the notes. IFRS 18 will be effective for annual reporting periods beginning on or after January 1, 2027, and the Company is currently assessing the potential impacts arising from the standard.

Certain other new accounting standards, amendments and interpretations have been published that are not mandatory for December 31, 2024, reporting periods or have not materially impacted these interim financial statements. The Company did not early adopt any of these standards and does not expect them to have a material impact in future reporting periods.

#### b) Functional currency and presentation currency

The interim financial statements of the Company and its associates and joint ventures are measured using the currency of the primary economic environment in which each entity operates ("functional currency"), in the case of the Parent Company it is the Brazilian real ("R\$"). For presentation purposes, these interim financial statements are presented in United States dollars ("US\$") as the Company believes that this is how international investors analyze the financial statements.

The main exchange rates used by the Company to translate its foreign operations are as follows:

	Closing rate		Three-month period ended June 30,		Average rate Six-month period ended June 30,	
	June 30, 2024	December 31, 2023	2024	2023	2024	2023
	US Dollar ("US\$")	5.5589	4.8413	5.2129	4.9485	5.0843
Canadian dollar ("CAD")	4.0620	3.6522	3.8107	3.6860	3.7426	3.7654
Euro ("EUR")	5.9547	5.3516	5.6132	5.3867	5.4969	5.4831

### 3. Significant events and transaction related to the three-month period ended June 30, 2024

- Shareholders remuneration** – In July 2024 (subsequent event), the Board of Directors approved remuneration to its shareholders in the amount of US\$1,608, which is expected to be paid in September 2024. Further details are presented in note 28(d) of these interim financial statements.
- Divestment of PT Vale Indonesia Tbk ("PTVI")** – In June 2024, the Company, together with Sumitomo Metal Mining Co. Ltd. and PT Mineral Industri Indonesia ("MIND ID"), completed the divestment transaction of PTVI. As a result, Vale received US\$155 and lost control over PTVI, which resulted in a gain of US\$1,059 recorded in the income statement for the period ended June 30, 2024. Further details are presented in note 15(a) of these interim financial statements.
- Notes offering and bond tender offers** – In June 2024, Vale issued bonds of US\$1 billion, maturing in 2054 with a coupon of 6.45% per year. In July 2024 (subsequent event), this amount was substantially used to redeem bonds maturing in 2026, 2036 and 2039. Further details are presented in note 9(c) of these interim financial statements.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

- **Strategic partnership in the Metals for Energy Transition business** – In April 2024, the Company completed the transaction with Manara Minerals to sell a 10% stake in Vale Base Metals Limited, which is the holding of the Metals for Energy Transition business, for the amount of US\$2,455. As a result, Vale recognized a gain of US\$895 in equity as “Transactions with noncontrolling interests”. Further details are presented in note 15(b) of these interim financial statements.

### 4. Information by business segment and geographic area

The segments are aligned with products and reflect the structure used by Management to evaluate the Company's performance. The responsible bodies for making operational decisions, allocating resources and evaluating performance are the Executive Committee and Board of Directors. Accordingly, the performance of the operating segments is assessed based on a measure of adjusted EBITDA, among other measures.

In 2024, consistently with the reports analyzed by the executive committee and Board of Directors, the Company changed its adjusted EBITDA definition to include the “EBITDA from associates and joint ventures”, which is a measure of their “equity results” (note 14) excluding (i) net finance costs; (ii) depreciation, depletion, and amortization; (iii) taxation and (iv) impairments.

Therefore, the Company's adjusted EBITDA is defined as operating income or loss, including the EBITDA from interests in associates and joint ventures; and excluding (i) depreciation, depletion, and amortization; and (ii) impairment and results on disposal of non-current assets, net and other. The comparative information in these interim financial statements was revised to reflect this change in the adjusted EBITDA definition.

Additionally, as a result of the reorganization of assets and the governance established for the Energy Transition Metals segment, the “Other” segment was reorganized for a better allocation of direct effects on the Iron Ore Solutions and Energy Transition Metals businesses. These effects were allocated to each segment starting from the six-month period ended June 30, 2024.

Segment	Main activities
<b>Iron Ore Solutions</b>	Comprises the extraction and production of iron ore, iron ore pellets, other ferrous products, and its logistic related services.
<b>Energy Transition Metals</b>	Includes the extraction and production of nickel and its by-products (gold, silver, cobalt, precious metals and others), and copper, as well as its by-products (gold and silver).
<b>Other</b>	Includes corporate expenses not allocated to the operating segment, research and development of greenfield exploration projects, as well as expenses related to the Brumadinho event and de-characterization of dams and asset retirement obligations.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### a) Adjusted EBITDA

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023 (revised)	2024	2023 (revised)
Iron ore		3,071	3,175	5,578	5,871
Iron ore pellets		724	757	1,606	1,449
Other ferrous products and services		92	150	162	220
<b>Iron Solutions</b>		<b>3,887</b>	<b>4,082</b>	<b>7,346</b>	<b>7,540</b>
Nickel		108	240	125	593
Copper		351	236	635	456
Other energy transition metals		(52)	-	(96)	-
<b>Energy Transition Metals</b>		<b>407</b>	<b>476</b>	<b>664</b>	<b>1,049</b>
<b>Other (i)</b>		<b>(301)</b>	<b>(560)</b>	<b>(579)</b>	<b>(877)</b>
<b>Adjusted EBITDA</b>		<b>3,993</b>	<b>3,998</b>	<b>7,431</b>	<b>7,712</b>
Depreciation, depletion and amortization		(793)	(779)	(1,507)	(1,435)
Impairment and results on disposal of non-current assets, net and other (ii)		928	(118)	855	(157)
EBITDA from associates and joint ventures		(253)	(229)	(456)	(367)
<b>Operating income</b>		<b>3,875</b>	<b>2,872</b>	<b>6,323</b>	<b>5,753</b>
Equity results and other results in associates and joint ventures	14	112	5	236	(50)
Financial results	6	(1,252)	(157)	(1,689)	(687)
<b>Income before income taxes</b>		<b>2,735</b>	<b>2,720</b>	<b>4,870</b>	<b>5,016</b>

(i) Includes income (expenses) from Vale Base Metals Limited that were not allocated to the operating segment in the amount of US\$2 and US\$(45) for the three and six-month period ended June 30, 2024, respectively.

(ii) Includes adjustments of US\$82 and US\$149 for the three and six-month period ended June 30, 2024, respectively, (2023: US\$52 and US\$87, respectively), to reflect the performance of the streaming transactions at market prices.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### b) Net operating revenue by shipment destination

	Three-month period ended June 30, 2024						Total
	Iron Solutions			Energy Transition Metals			
	Iron ore	Iron ore pellets	Other ferrous products and services	Nickel and other products	Copper	Other energy transition metals	
China	4,787	-	-	84	94	29	4,994
Japan	710	87	1	129	-	-	927
Asia, except Japan and China	605	112	2	82	136	-	937
Brazil	273	410	172	12	-	1	868
United States of America	-	51	-	196	-	7	254
Americas, except United States and Brazil	-	107	-	141	39	-	287
Germany	89	49	-	81	67	-	286
Europe, except Germany	265	11	-	141	366	10	793
Middle East, Africa, and Oceania	-	567	-	7	-	-	574
<b>Net operating revenue</b>	<b>6,729</b>	<b>1,394</b>	<b>175</b>	<b>873</b>	<b>702</b>	<b>47</b>	<b>9,920</b>

	Three-month period ended June 30, 2023						Total
	Iron Solutions			Energy Transition Metals			
	Iron ore	Iron ore pellets	Other ferrous products and services	Nickel and other products	Copper	Other	
China	4,364	2	-	217	55	-	4,638
Japan	623	54	-	147	-	-	824
Asia, except Japan and China	519	67	3	227	-	-	816
Brazil	361	465	124	18	-	26	994
United States of America	-	97	-	334	-	-	431
Americas, except United States and Brazil	-	102	-	123	2	-	227
Germany	47	-	1	123	123	-	294
Europe, except Germany	321	119	-	181	312	-	933
Middle East, Africa, and Oceania	-	507	-	9	-	-	516
<b>Net operating revenue</b>	<b>6,235</b>	<b>1,413</b>	<b>128</b>	<b>1,379</b>	<b>492</b>	<b>26</b>	<b>9,673</b>

	Six-month period ended June 30, 2024						Total
	Iron Solutions			Energy Transition Metals			
	Iron ore	Iron ore pellets	Other ferrous products and services	Nickel and other products	Copper	Other energy transition metals	
China	8,315	-	-	138	186	29	8,668
Japan	1,230	152	1	226	-	-	1,609
Asia, except Japan and China	1,204	151	5	190	200	-	1,750
Brazil	602	931	317	20	-	4	1,874
United States of America	-	103	-	374	-	20	497
Americas, except United States and Brazil	-	228	-	264	101	-	593
Germany	157	84	-	177	194	-	612
Europe, except Germany	506	52	-	299	598	21	1,476
Middle East, Africa, and Oceania	7	1,278	-	15	-	-	1,300
<b>Net operating revenue</b>	<b>12,021</b>	<b>2,979</b>	<b>323</b>	<b>1,703</b>	<b>1,279</b>	<b>74</b>	<b>18,379</b>

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

	Six-month period ended June 30, 2023						Total
	Iron Solutions			Energy Transition Metals			
	Iron ore	Iron ore pellets	Other ferrous products and services	Nickel and other products	Copper	Other	
China	7,639	2	-	295	109	-	8,045
Japan	1,102	106	-	305	-	-	1,513
Asia, except Japan and China	922	108	5	367	44	-	1,446
Brazil	722	874	229	37	-	51	1,913
United States of America	-	183	-	759	-	-	942
Americas, except United States and Brazil	1	248	-	266	2	-	517
Germany	138	33	1	297	253	-	722
Europe, except Germany	693	258	-	543	574	-	2,068
Middle East, Africa, and Oceania	-	923	-	18	-	-	941
<b>Net operating revenue</b>	<b>11,217</b>	<b>2,735</b>	<b>235</b>	<b>2,887</b>	<b>982</b>	<b>51</b>	<b>18,107</b>

No customer individually represented 10% or more of the Company's revenues in the periods presented above.

### c) Assets by segment

	June 30, 2024				December 31, 2023			
	Iron Solutions	Energy Transition Metals	Other	Total	Iron Solutions	Energy Transition Metals	Other	Total
Investments in associates and joint ventures	1,320	1,910	485	3,715	1,349	-	523	1,872
Property, plant and equipment and intangibles	34,598	17,483	2,696	54,777	38,376	18,341	3,310	60,027

	2024				Three-month period ended June 30, 2023			
	Iron Solutions	Energy Transition Metals	Other	Total	Iron Solutions	Energy Transition Metals	Other	Total
<b>Capital expenditures</b>								
Sustaining capital (i)	613	372	15	1,000	472	326	34	832
Project execution	293	33	2	328	255	95	26	376
	<b>906</b>	<b>405</b>	<b>17</b>	<b>1,328</b>	<b>727</b>	<b>421</b>	<b>60</b>	<b>1,208</b>

	2024				Six-month period ended June 30, 2023			
	Iron Solutions	Energy Transition Metals	Other	Total	Iron Solutions	Energy Transition Metals	Other	Total
<b>Capital expenditures</b>								
Sustaining capital (i)	1,294	700	34	2,028	984	589	63	1,636
Project execution	613	72	10	695	491	167	44	702
	<b>1,907</b>	<b>772</b>	<b>44</b>	<b>2,723</b>	<b>1,475</b>	<b>756</b>	<b>107</b>	<b>2,338</b>

(i) According to the Company's shareholders remuneration policy, minimum remuneration to Vale shareholders are calculated based on 30% of the adjusted EBITDA less sustaining capital investments.

### d) Assets by geographic area

	June 30, 2024				December 31, 2023			
	Investments in associates and joint ventures	Intangible	Property, plant and equipment	Total	Investments in associates and joint ventures	Intangible	Property, plant and equipment	Total
Brazil	1,805	8,451	30,317	40,573	1,872	9,822	33,769	45,463
Canada	-	1,742	11,703	13,445	-	1,808	11,890	13,698
Americas, except Brazil and Canada	-	-	4	4	-	-	4	4
Indonesia	1,910	-	57	1,967	-	-	59	59
China	-	1	10	11	-	1	14	15
Asia, except Indonesia and China	-	-	672	672	-	-	731	731
Europe	-	-	603	603	-	-	678	678
Oman	-	1	1,216	1,217	-	-	1,251	1,251
<b>Total</b>	<b>3,715</b>	<b>10,195</b>	<b>44,582</b>	<b>58,492</b>	<b>1,872</b>	<b>11,631</b>	<b>48,396</b>	<b>61,899</b>

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 5. Costs and expenses by nature

#### a) Cost of goods sold, and services rendered

	Three-month period ended June 30,		Six-month period ended June 30,	
	2024	2023	2024	2023
Services	(1,200)	(994)	(2,231)	(1,793)
Freight	(1,184)	(999)	(2,122)	(1,681)
Depreciation, depletion and amortization	(763)	(737)	(1,441)	(1,350)
Materials	(720)	(716)	(1,361)	(1,307)
Personnel	(683)	(717)	(1,236)	(1,405)
Acquisition of products	(496)	(547)	(870)	(1,082)
Fuel, oil and gas	(363)	(425)	(732)	(810)
Royalties	(347)	(320)	(636)	(552)
Energy	(157)	(185)	(326)	(352)
Others	(436)	(300)	(761)	(557)
<b>Total</b>	<b>(6,349)</b>	<b>(5,940)</b>	<b>(11,716)</b>	<b>(10,889)</b>

#### b) Selling and administrative expenses

	Three-month period ended June 30,		Six-month period ended June 30,	
	2024	2023	2024	2023
Personnel	(52)	(63)	(119)	(119)
Services	(45)	(36)	(79)	(68)
Depreciation and amortization	(9)	(14)	(19)	(25)
Other	(31)	(26)	(60)	(45)
<b>Total</b>	<b>(137)</b>	<b>(139)</b>	<b>(277)</b>	<b>(257)</b>

#### c) Other operating revenues (expenses), net

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023	2024	2023
Expenses related to Brumadinho event	23	(69)	(271)	(171)	(382)
Provision for litigations	26(a)	(54)	(52)	(104)	(83)
Profit sharing program		(40)	(32)	(125)	(87)
Impairment and results on disposal of non-current assets, net (i)	15(a)	1,010	(66)	1,004	(70)
Other		(126)	(33)	(139)	(55)
<b>Total</b>		<b>721</b>	<b>(454)</b>	<b>465</b>	<b>(677)</b>

(i) In the three-month period ended June 30, 2024, includes the gain from the divestment in PT Vale Indonesia Tbk in the amount of US\$1,059 (note 15a) and net losses on disposal of property, plant and equipment and intangible assets in the amount of US\$49 (notes 16 and 17).

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 6. Financial results

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023	2024	2023
<b>Financial income</b>					
Short-term investments		75	82	156	170
Other		3	24	31	57
		<b>78</b>	<b>106</b>	<b>187</b>	<b>227</b>
<b>Financial expenses</b>					
Loans and borrowings interest	9(c)	(203)	(180)	(369)	(355)
Interest on REFIS		(23)	(38)	(51)	(76)
Interest on lease liabilities	22	(14)	(15)	(28)	(30)
Interest on supplier liabilities		(44)	(53)	(90)	(91)
Other		(81)	(111)	(166)	(165)
		<b>(365)</b>	<b>(397)</b>	<b>(704)</b>	<b>(717)</b>
<b>Other financial items, net</b>					
Foreign exchange and indexation losses, net		(253)	(750)	(626)	(1,226)
Participative shareholders' debentures	20	(241)	321	(77)	274
Derivative financial instruments, net	18(c)	(471)	563	(469)	755
		<b>(965)</b>	<b>134</b>	<b>(1,172)</b>	<b>(197)</b>
<b>Total</b>		<b>(1,252)</b>	<b>(157)</b>	<b>(1,689)</b>	<b>(687)</b>

### 7. Taxes

#### a) Income tax reconciliation

In December 2021, the Organization for Economic Co-operation and Development ("OECD") released the Pillar Two model rules to reform international corporate taxation. Multinational economic groups within the scope of these rules are required to calculate their effective tax rate in each country where they operate, the "GloBE effective tax rate".

When the effective GloBE rate of any entity in the economic group, aggregated by jurisdiction where the group operates, is lower than the minimum rate defined at 15%, the multinational group must pay a supplementary amount of tax on profit, referring to the difference between its rate effective GloBE and the minimum tax rate.

From 2024, the Company is subject to OECD Pillar Two model rules in the Netherlands, Switzerland, United Kingdom, Japan and Luxembourg. However, there was no material impact on Company's income tax computation due to this matter and it does not expect any further impact on its future financial statements.

Income tax expense is recognized based on the estimate of the weighted average effective tax rate expected for the full year, adjusted for the tax effect of certain items that are recognized in full on the interim tax calculation. Therefore, the effective tax rate in the interim financial statements may differ from management's estimate of the effective tax rate for the year. The reconciliation of the taxes calculated according to the nominal tax rates and the amount of taxes recorded is shown below:

	Notes	Three-month period ended June 30,		Six-month period ended June 30,	
		2024	2023	2024	2023
<b>Income before income taxes</b>		<b>2,735</b>	<b>2,720</b>	<b>4,870</b>	<b>5,016</b>
<b>Income taxes at statutory rate (34%)</b>		<b>(930)</b>	<b>(925)</b>	<b>(1,656)</b>	<b>(1,705)</b>
<b>Adjustments that affect the taxes basis:</b>					
Tax incentives		298	497	767	902
Equity results		4	33	(3)	3
Reduction of tax loss carryforward		369	(172)	213	(243)
Reversal of deferred income tax related to Renova Foundation	24	-	(1,078)	-	(1,078)
Reclassification of cumulative adjustments to the income statement		(4)	-	(22)	-
Gain on divestment in PTVI	15(a)	358	-	358	-
Other		(61)	(147)	(71)	(89)
<b>Income taxes</b>		<b>34</b>	<b>(1,792)</b>	<b>(414)</b>	<b>(2,210)</b>
Current tax		(639)	(404)	(1,373)	(622)
Deferred tax		673	(1,388)	959	(1,588)
<b>Income taxes</b>		<b>34</b>	<b>(1,792)</b>	<b>(414)</b>	<b>(2,210)</b>



## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### b) Deferred income tax assets and liabilities

	Assets	Liabilities	Deferred taxes, net
<b>Balance as of December 31, 2023</b>	<b>9,565</b>	<b>870</b>	<b>8,695</b>
Effect in income statement	875	(96)	971
Incorporation	(2)	(2)	-
Other comprehensive income	602	15	587
Transfer between assets and liabilities	50	50	-
Translation adjustment	(1,159)	(31)	(1,128)
<b>Balance as of June 30, 2024</b>	<b>9,931</b>	<b>806</b>	<b>9,125</b>
<b>Balance as of December 31, 2022</b>	<b>10,770</b>	<b>1,413</b>	<b>9,357</b>
Effect in income statement	(1,620)	(32)	(1,588)
Other comprehensive income	(30)	(2)	(28)
Translation adjustment	784	32	752
<b>Balance as of June 30, 2023</b>	<b>9,904</b>	<b>1,411</b>	<b>8,493</b>

### c) Income taxes – Settlement program (“REFIS”)

	June 30, 2024	December 31, 2023
Current liabilities	383	428
Non-current liabilities	1,284	1,723
<b>REFIS liabilities</b>	<b>1,667</b>	<b>2,151</b>
<b>SELIC rate</b>	<b>10.50%</b>	<b>11.75%</b>

The balance mainly relates to the settlement program of claims regarding the collection of income tax and social contribution on equity gains of foreign subsidiaries and associates from 2003 to 2012. This amount bears SELIC interest rate (Special System for Settlement and Custody) and will be paid in monthly installments until October 2028 and the impact of the SELIC over the liability is recorded under the Company’s financial results (note 6).

### d) Uncertain tax positions (“UTP”)

The amount under discussion with the tax authorities is US\$4,982 as of June 30, 2024 (December 31, 2023: US\$5,408) which includes the reduction of tax losses in the amount of US\$658 as of June 30, 2024 (December 31, 2023: US\$754), if the tax authority does not accept the tax treatment adopted by the Company in relation to these matters.

	June 30, 2024			December 31, 2023		
	Assessed (i)	Potential (ii)	Total	Assessed (i)	Potential (ii)	Total
<b>UTPs not recorded on statement of financial position (iii)</b>						
Transfer pricing over the exportation of ores to a foreign subsidiary	1,967	2,610	4,577	2,144	3,010	5,154
Expenses of interest on capital	1,361	-	1,361	1,511	-	1,511
Proceeding related to income tax paid abroad	461	-	461	512	-	512
Goodwill amortization	696	117	813	606	190	796
Payments to Renova Foundation	150	467	617	167	536	703
Other	347	-	347	468	-	468
	<b>4,982</b>	<b>3,194</b>	<b>8,176</b>	<b>5,408</b>	<b>3,736</b>	<b>9,144</b>
<b>UTPs recorded on statement of financial position</b>						
Deduction of CSLL in Brazil	165	-	165	183	-	183
	<b>165</b>	<b>-</b>	<b>165</b>	<b>183</b>	<b>-</b>	<b>183</b>

(i) Includes the tax effects arising from the reduction of the tax losses and negative basis of the CSLL without fines and interest.

(ii) Includes the principal, without fines and interest.

(iii) Based on the assessment of its internal and external legal advisors, the Company believes that the tax treatment adopted for these matters will be accepted in decisions of the higher courts on last instance.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### e) Recoverable and taxes payables

	Current assets		Non-current assets		Consolidated Current liabilities	
	June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023
	Value-added tax ("ICMS")	212	232	2	5	36
Brazilian federal contributions ("PIS" and "COFINS")	244	355	981	1,010	4	615
Income taxes	195	302	346	358	1,031	429
Financial compensation for the exploration of mineral resources ("CFEM")	-	-	-	-	71	93
Other	8	11	-	1	100	152
<b>Total</b>	<b>659</b>	<b>900</b>	<b>1,329</b>	<b>1,374</b>	<b>1,242</b>	<b>1,314</b>

## 8. Basic and diluted earnings per share

The basic and diluted earnings per share are presented below:

	Three-month period ended June 30,		Six-month period ended June 30,	
	2024	2023	2024	2023
<b>Net income attributable to Vale's shareholders</b>	<b>2,769</b>	<b>892</b>	<b>4,448</b>	<b>2,729</b>
<b>Thousands of shares</b>				
Weighted average number of common shares outstanding	4,274,769	4,396,778	4,283,095	4,424,788
Weighted average number of common shares outstanding and potential ordinary shares	4,279,782	4,400,609	4,288,108	4,428,619
<b>Basic and diluted earnings per share</b>				
Common share (US\$)	0.65	0.20	1.04	0.62

## 9. Cash flows reconciliation

### a) Cash flow from operating activities

	Notes	Six-month period ended June 30,	
		2024	2023
<b>Cash flow from operating activities:</b>			
<b>Income before income taxes</b>		<b>4,870</b>	<b>5,016</b>
<b>Adjusted for:</b>			
Equity results and other results in associates and joint ventures	14	(236)	50
Impairment and results on disposal of non-current assets, net	5(c)	(1,004)	70
Review of estimates related to Brumadinho	23	(20)	140
Review of estimates related to de-characterization of dams	25	(131)	-
Depreciation, depletion and amortization		1,507	1,435
Financial results, net	6	1,689	687
<b>Changes in assets and liabilities:</b>			
Accounts receivable	10	1,768	1,439
Inventories	11	(461)	(520)
Suppliers and contractors	12	(150)	465
Other assets and liabilities, net		(1,000)	(1,243)
<b>Cash flow from operations</b>		<b>6,832</b>	<b>7,539</b>

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### b) Cash flow from investing activities

	Notes	Six-month period ended June 30,	
		2024	2023
Proceeds from the partial disposal of VBML shares	15(b)	2,455	-
Proceeds from the partial disposal of PTVI shares	15(a)	155	-
Proceeds from the divestment of Companhia Siderúrgica do Pecém	15(f)	-	1,082
Cash contribution to Companhia Siderúrgica do Pecém	15(f)	-	(1,149)
<b>Cash received (payments) from disposal of investments, net</b>		<b>2,610</b>	<b>(67)</b>

### c) Reconciliation of debt to cash flows arising from financing activities

	Quoted in the secondary market	Other debt contracts in Brazil	Other debt contracts on the international market	Total
<b>December 31, 2023</b>	<b>7,474</b>	<b>250</b>	<b>4,747</b>	<b>12,471</b>
Additions	1,000	-	960	1,960
Payments	(51)	(24)	(517)	(592)
Interest paid (i)	(227)	(11)	(159)	(397)
<b>Cash flow from financing activities</b>	<b>722</b>	<b>(35)</b>	<b>284</b>	<b>971</b>
Effect of exchange rate	(53)	(30)	29	(54)
Interest accretion	227	11	144	382
<b>Non-cash changes</b>	<b>174</b>	<b>(19)</b>	<b>173</b>	<b>328</b>
<b>June 30, 2024</b>	<b>8,370</b>	<b>196</b>	<b>5,204</b>	<b>13,770</b>
<b>December 31, 2022</b>	<b>6,497</b>	<b>280</b>	<b>4,404</b>	<b>11,181</b>
Additions	1,500	-	300	1,800
Payments	(517)	(38)	(65)	(620)
Interest paid (i)	(237)	(16)	(116)	(369)
<b>Cash flow from financing activities</b>	<b>746</b>	<b>(54)</b>	<b>119</b>	<b>811</b>
Effect of exchange rate	7	34	3	44
Interest accretion	234	16	131	381
<b>Non-cash changes</b>	<b>241</b>	<b>50</b>	<b>134</b>	<b>425</b>
<b>June 30, 2023</b>	<b>7,484</b>	<b>276</b>	<b>4,657</b>	<b>12,417</b>

(i) Classified as operating activities in the statement of cash flows.

### Funding

- In June 2024, the Company issued bonds of US\$1 billion with a coupon of 6.45% per year, payable semi-annually, and maturing in 2054. In July 2024 (subsequent event), Vale redeemed notes with maturity date in 2026, 2036 and 2039, in the total amount of US\$970 and paid a premium of US\$38.
- In April 2024, the Company contracted a loan of US\$90 with the Canadian Imperial Bank of Commerce ("CIBC") indexed to SOFR plus spread adjustments and maturing in 2024.
- In March 2024, the Company contracted a loan of US\$360 with the Japan Bank of International Cooperation ("JBIC") indexed to SOFR plus spread adjustments and maturing in 2035.
- In March 2024, the Company contracted a loan of US\$60 with the CIBC indexed to SOFR plus spread adjustments and maturing in 2024.
- In February 2024, the Company contracted a loan of US\$166 with Banco Santander indexed to SOFR plus spread adjustments and maturing in 2025.

## Notes to the Consolidated Interim Financial Statements

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- In February 2024, the Company contracted a loan of US\$34 with Credit Agricole Bank indexed to SOFR plus spread adjustments and maturing in 2025.
- From January to February 2024, the Company contracted a loan of US\$250 with Banco Bradesco with a fixed rate maturing in 2025.
- In March 2023, the Company contracted a loan of US\$300 with the Industrial and Commercial Bank of China Limited, Panama Branch ("ICBC") indexed to SOFR plus spread adjustments and maturing in 2028.
- In June 2023, Vale issued notes of US\$1,500 with a coupon of 6.125% per year, payable semi-annually, and maturing in 2033.

### Payments

- In January 2024, the Company paid principal and interest of debentures, in the amount of US\$46.
- In January 2023, the Company paid principal and interest of debentures, in the amount of US\$24.
- In June 2023, Vale redeemed notes with maturity date in 2026, 2036 and 2039, in the total amount of US\$500 and paid a premium of US\$22, recorded as "Bond premium repurchase" in the financial results for the three-month period ended June 30, 2023.

### d) Non-cash transactions

	Six-month period ended June 30,	
	2024	2023
<b>Non-cash transactions:</b>		
Additions to PP&E with capitalized loans and borrowing costs	13	10

## 10. Accounts receivable

	Notes	June 30, 2024	December 31, 2023
<b>Receivables from contracts with customers</b>			
Third parties			
Iron Solutions		1,550	3,406
Energy Transition Metals		663	743
Other		8	3
Related parties	29(b)	156	89
<b>Accounts receivable</b>		<b>2,377</b>	<b>4,241</b>
Expected credit loss		(45)	(44)
<b>Accounts receivable, net</b>		<b>2,332</b>	<b>4,197</b>

**Provisionally priced commodities sales** – The Company is mainly exposed to iron ore and copper price risk. The determination of the final sales price for these commodities is based on the pricing period outlined in the sales contracts, typically occurring after the revenue recognition date. Consequently, the Company initially recognizes revenue using a provisional invoice. Subsequently, the receivables associated with provisionally priced products are measured at fair value through profit or loss (note 19). Any fluctuations in the value of these receivables are reflected in the Company's net operating revenue.

The sensitivity of the Company's risk related to the final settlement of provisionally priced accounts receivables is detailed below:

	Thousand metric tons	Provisional price (US\$/ton)	Variation	June 30, 2024
				Effect on Revenue (US\$ million)
Iron ore	20,093	107	+/- 10%	+/- 214
Copper	64	8,986	+/- 10%	+/- 57

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 11. Inventories

	June 30, 2024	December 31, 2023
<b>Finished products</b>		
Iron Solutions	2,459	2,457
Energy Transition Metals	569	640
	<b>3,028</b>	<b>3,097</b>
Work in progress	868	567
Consumable inventory	1,052	1,159
Net realizable value provision (i)	(155)	(139)
<b>Total of inventories</b>	<b>4,793</b>	<b>4,684</b>

(i) In the six-month period ended June 30, 2024, the effect of provision for net realizable value was US\$53 (2023: US\$47).

### 12. Suppliers and contractors

	Notes	June 30, 2024	December 31, 2023
Third parties – Brazil		2,759	3,461
Third parties – Abroad		1,748	1,653
Related parties	29(b)	262	158
<b>Total</b>		<b>4,769</b>	<b>5,272</b>

The Company has supplier finance arrangements, which do not substantially modify the original liabilities terms and conditions and remain presented as suppliers. The outstanding balance related to those transactions was US\$1,391 as of June 30, 2024 (December 31, 2023: US\$1,438), of which US\$221 (December 31, 2023: US\$221) relates to the structure introduced by the Company with the exclusive purpose of enabling small and medium suppliers to anticipate their receivables with better interest rates, in line with Company's social pillar.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 13. Other financial assets and liabilities

	Notes	Current		Non-Current	
		June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023
<b>Other financial assets</b>					
Restricted cash		-	-	4	4
Derivative financial instruments	18	168	271	109	544
Investments in equity securities		-	-	47	45
		<b>168</b>	<b>271</b>	<b>160</b>	<b>593</b>
<b>Other financial liabilities</b>					
Derivative financial instruments	18	135	36	105	95
Other financial liabilities - Related parties	29(b)	144	290	-	-
Liabilities related to the concession grant	13(a)	680	591	2,551	3,278
Advances and other financial obligations (i)		508	759	-	-
		<b>1,467</b>	<b>1,676</b>	<b>2,656</b>	<b>3,373</b>

(i) Includes advances received from customers and other financial obligations.

#### a) Liabilities related to the concession grant

	Consolidated					Discount rate		Remaining term of obligations	
	December 31, 2023	Revision to estimates	Monetary and present value adjustments	Disbursements	Translation adjustment	June 30, 2024	June 30, 2024		December 31, 2023
Payment obligation	1,130	-	53	(29)	(147)	1,007	11.04%	11.04%	33 years
Infrastructure investment	2,739	(99)	69	(142)	(343)	2,224	6.48% - 6.51%	5.17% - 5.54%	8 years
	<b>3,869</b>	<b>(99)</b>	<b>122</b>	<b>(171)</b>	<b>(490)</b>	<b>3,231</b>			
Current liabilities	591					680			
Non-current liabilities	3,278					2,551			
<b>Liabilities</b>	<b>3,869</b>					<b>3,231</b>			

The Company is currently discussing with the Brazilian Ministry of Transport the general conditions for optimizing the investment plans of Estrada de Ferro Carajás ("EFC") and Estrada de Ferro Vitória a Minas ("EFVM") concessions contracts, both of which are currently being fulfilled by Vale in accordance with the contracts in place.

The potential change in the agreements is still uncertain as it is subject to conclusion of the negotiations and approval by the Company and relevant authorities. Any changes to the existing obligation will be recorded after the conclusion of the negotiations and based on the final terms agreed.

Therefore, until there is any change in the existing concession contracts, the Company will continue to comply with its obligations under the agreements, which are reflected in the Company's liability recorded in these interim financial statements.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 14. Investments in associates and joint ventures

Associates and joint ventures	% ownership	December 31, 2023	Equity results in income statement	Dividends declared	Translation adjustment	Fair value remeasurement (i)	Other	June 30, 2024
<b>Iron Solutions</b>								
Baovale Mineração S.A.	50.00	28	1	(1)	(4)	-	(1)	23
Companhia Coreano-Brasileira de Pelotização	50.00	73	13	-	(10)	-	-	76
Companhia Hispano-Brasileira de Pelotização	50.89	49	8	(6)	(7)	-	-	44
Companhia Ítalo-Brasileira de Pelotização	50.90	63	8	-	(9)	-	6	68
Companhia Nipo-Brasileira de Pelotização	51.00	150	19	(8)	(20)	-	-	141
MRS Logística S.A.	49.01	640	70	-	(88)	-	-	622
VLI S.A.	29.60	346	48	-	(48)	-	-	346
Samarco Mineração S.A. (note 24)	50.00	-	-	-	-	-	-	-
		<b>1,349</b>	<b>167</b>	<b>(15)</b>	<b>(186)</b>	<b>-</b>	<b>5</b>	<b>1,320</b>
<b>Energy Transition Metals</b>								
PT Vale Indonesia Tbk	33.88	-	-	-	-	1,910	-	1,910
		-	-	-	-	<b>1,910</b>	-	<b>1,910</b>
<b>Others</b>								
Aliança Geração de Energia S.A.	55.00	356	17	-	(50)	-	19	342
Aliança Norte Energia Participações S.A.	51.00	106	(5)	-	(13)	-	-	88
Other		61	1	(1)	(8)	-	2	55
		<b>523</b>	<b>13</b>	<b>(1)</b>	<b>(71)</b>	<b>-</b>	<b>21</b>	<b>485</b>
<b>Equity results in associates and joint ventures</b>		<b>1,872</b>	<b>180</b>	<b>(16)</b>	<b>(257)</b>	<b>1,910</b>	<b>26</b>	<b>3,715</b>
Other results in associates and joint ventures		-	56	-	-	-	-	-
<b>Equity results and other results in associates and joint ventures</b>		<b>-</b>	<b>236</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

(i) It refers to the remeasurement at fair value of the remaining stake held by Vale on PT Vale Indonesia Tbk, after the closing of the divestment transaction (note 15a).

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 15. Acquisitions and divestitures

	Reference	Three-month period ended June 30, 2024		Six-month period ended June 30, 2024	
		Results on disposals of non-current assets	Equity results and other results in associates and joint ventures	Results on disposals of non-current assets	Equity results and other results in associates and joint ventures
PT Vale Indonesia Tbk	15(a)	1,059	-	1,059	-
		<b>1,059</b>	<b>-</b>	<b>1,059</b>	<b>-</b>
	Reference	Three-month period ended June 30, 2023		Six-month period ended June 30, 2023	
		Results on disposals of non-current assets	Equity results and other results in associates and joint ventures	Results on disposals of non-current assets	Equity results and other results in associates and joint ventures
Mineração Rio do Norte	15(e)	-	(93)	-	(93)
Companhia Siderúrgica do Pecém	15(f)	-	-	-	37
		-	<b>(93)</b>	-	<b>(56)</b>

**a) Divestment on PT Vale Indonesia Tbk (“PTVI”) –** PTVI has a contract of work with the government of Indonesia to operate its mining licenses (“Contract of Work”), expiring in December 2025. To extend the period of the mining licenses beyond 2025, PTVI must meet certain requirements under the Contract of Work, including the commitment to meet a threshold of Indonesian participants in its shareholding structure.

In November 2023, the Company signed a Heads of Agreement with PT Mineral Industri Indonesia (“MIND ID”) and Sumitomo Metal Mining Co., Ltd. (“SMM”) regarding the divestment obligation in PTVI. Therefore, since the year ended December 31, 2023, PTVI assets and liabilities were classified as held for sale.

In June 2024, the transaction was concluded, and the Company reduced its interests in PTVI in approximately 10.5%. This divestment was carried out through (i) the issuance of PTVI’s new shares, thereby diluting Vale in 2.1%, and (ii) by the direct sale of 8.4% of Vale’s shares to MIND ID. As a result of the transaction, MIND ID became PTVI’s largest shareholder, holding approximately 34.0% of the issued shares, with the Company and SMM holding approximately 33.9% and 11.5%, respectively. The completion of the transaction fulfills the divestment obligations of the Contract of Work and satisfies a key condition for PTVI to extend its mining license until 2035, with potential extension beyond this period subject to certain requirements.

With the transaction, Vale received US\$155 for its shares and lost control over PTVI and so, the Company will no longer consolidate PTVI, which will be accounted for as an associate under the equity method due to the significant influence it will retain over PTVI.

As result, the Company recognized a gain of US\$1,059 in the income statement for the three-month period ended June 30, 2024, as “Other operating expenses, net”. This gain is due to the reclassification of cumulative translation adjustments of US\$1,063 and the gain on remeasurement of the interest retained at fair value of the US\$657, net of the loss on the reduction in PTVI stake in the amount of US\$661. The effects of this transaction are summarized below:

	June 28, 2024
Cash consideration received	155
Fair value of 33.9% interest retained (i)	1,910
<b>Effects of the deconsolidation:</b>	
Derecognition of net assets of PTVI	(3,697)
Gain on derecognition of noncontrolling shareholders	1,628
Gain on the reclassification of cumulative translation adjustments	1,063
<b>Gain on the transaction recorded in the income statement</b>	<b>1,059</b>

(i) The fair value of the 33.9% retained interest was estimated based on a third-party valuation report. The valuation considered the discounted cash flow method. The key assumptions considered were (i) discount rate of 7.75% with incremental risk premium of around 1.00% on certain assets, (ii) asset life through to 2065, and (iii) range of expected nickel prices from US\$/t 17,501 to US\$/t 21,000.



## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### Balance sheet of PTVI classified as held for sale

	June 30, 2024	December 31, 2023
<b>Assets</b>		
Cash and cash equivalents	-	703
Accounts receivable	-	20
Inventories	-	80
Taxes	-	117
Investments	-	13
Property, plant and equipment	-	2,792
Intangible	-	69
Other assets	-	139
	-	<b>3,933</b>
<b>Liabilities</b>		
Suppliers and contractors	-	172
Deferred income taxes	-	213
Other liabilities	-	176
	-	<b>561</b>
<b>Net assets held for sale</b>	-	<b>3,372</b>

**b) Strategic partnership in the Energy Transition Metals business** – In July 2023, the Company signed a binding agreement with Manara Minerals, a joint venture between Ma'aden and Saudi Arabia's Public Investment Fund, under which Manara Minerals would make an equity investment in Vale Base Metals Limited ("VBM"), the holding entity for Vale's Energy Transition Metals Business that was a wholly owned subsidiary. At the same time, Vale and Engine No. 1 entered into another binding agreement for an equity investment in VBM.

In April 2024, the Company concluded the transaction with Manara Minerals to sell 10% of the business for US\$2,455, which was fully contributed to VBM thereby diluting Vale to a 90% equity interest, retaining control over VBM. As a result, Vale recognized a gain from the sale in the amount of US\$895, of which US\$1,514 was attributable to noncontrolling interests recorded in the equity as "Transactions with noncontrolling interests".

Additionally, in April 2024, Vale and Engine No. 1 agreed to not proceed with the transaction, which was discontinued, without any penalties to both parties.

**c) Acquisition of Aliança Geração de Energia S.A. ("Aliança Geração")** – Aliança Geração is a joint venture of Vale, which operates hydroelectric and wind power plants in Brazil, in which the Company holds a 55% shareholding. The entity's power generation asset portfolio consists of seven hydroelectric power plants in the state of Minas Gerais and three wind farms in operation in the states of Rio Grande do Norte and Ceará, Brazil.

In March 2024, the Company entered into a binding agreement with Cemig Geração e Transmissão S.A. ("Cemig GT") for the acquisition of the entire 45% interest held for Cemig GT in Aliança Geração, for US\$486 (R\$2,700 million). The acquisition of the stake in Aliança Geração will be the first step towards creating an energy platform and, after the acquisition is completed, Vale will seek potential partners for this platform.

This transaction is in line with Vale's strategy of having an energy matrix based on renewable sources in Brazil and contributes to the Company's commitment to decarbonize operations at competitive costs.

Upon closing, which is subject to usual precedent conditions, including the consent of competent bodies, Vale will hold 100% of the shareholding, obtaining control over Aliança Geração, and consolidating its assets, liabilities and results in the Company's financial statements. The transaction's conclusion is expected for the second half of 2024.

**d) Acquisition of equity interest in Anglo American Minério de Ferro Brasil S.A. ("Anglo American Brasil")** – In February 2024, the Company entered into a binding agreement with Anglo American plc for the acquisition of 15% interest in Anglo American Brasil, the company that currently owns the Minas-Rio complex ("Minas-Rio"), in Brazil. Under the terms agreed, Vale will contribute with Serra da Serpentina iron ore resources and a cash contribution of US\$157.5, subject to adjustments at the closing date. Additionally, depending on the future iron ore prices, there may be an adjustment in the transaction price and the fair value adjustments of this mechanism will be recognized in the Company's income statements accordingly.

Following completion of the transaction, Vale will receive its pro-rata share of Minas-Rio production and the Company will also have an option to acquire an additional 15% shareholding in Minas-Rio. The option will be exercised at fair value, calculated at the time of exercise.

The closing of the transaction is subject to the usual conditions precedent and expected to occur in 2025. Upon completion of the transaction, Anglo American Brasil will be an associate of Vale and the investment will be accounted for under the equity method.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

**e) Mineração Rio do Norte S.A. (“MRN”)** – In April 2023, Vale signed a binding agreement with Ananke Alumina S.A. to sell its 40% stake in MRN, which has been impaired in full since 2021. Due to certain remaining commitments of the agreement, the Company recognized a provision of US\$93 with the corresponding impact in the income statement for the three-month period ended June 30, 2023, as “Equity results and other results in associates and joint ventures”. As a result, in November 2023 the Company concluded the transaction and transferred its shares in MRN to Ananke Alumina S.A.

**f) Companhia Siderúrgica do Pecém (“CSP”)** – In July 2022, the Company and the other shareholders of CSP signed a binding agreement with ArcelorMittal Brasil S.A. (“ArcelorMittal”) for the sale of CSP. In March 2023, the Company completed the sale of its interest in CSP to ArcelorMittal. Under the terms of the agreement, Vale has received US\$1,042 from the buyer and made a cash contribution of US\$1,189 to CSP upon closing, which was fully used to prepay the outstanding net debt of CSP as determined by the agreement. In addition, the Company derecognized its financial liability related to the guarantee granted to CSP, leading to a gain of US\$37 recognized as “Equity results and other results in associates and joint ventures” for the six-month period ended June 30, 2023.

**g) Vale Oman Pelletizing Company LLC (“VOPC”)** – In February 2023, OQ Group exercised their option to sell its 30% noncontrolling interest held in VOPC, a subsidiary consolidated by the Company. As a result, in April 2023, the Company completed the transaction and acquired the minority interest previously held by the OQ Group for US\$130, resulting in a gain of US\$3, recorded in equity as of June 30, 2023, as “Transactions with noncontrolling interests”, since it resulted from a transaction between shareholders. Upon closing, Vale owns 100% of VOPC's share capital.

## 16. Intangibles

	Goodwill	Concessions	Software	Research and development project	Total
<b>Balance as of December 31, 2023</b>	<b>3,263</b>	<b>7,689</b>	<b>104</b>	<b>575</b>	<b>11,631</b>
Additions	-	23	30	-	53
Disposals	-	(4)	-	(5)	(9)
Amortization	-	(125)	(29)	-	(154)
Translation adjustment	(252)	(989)	(12)	(73)	(1,326)
<b>Balance as of June 30, 2024</b>	<b>3,011</b>	<b>6,594</b>	<b>93</b>	<b>497</b>	<b>10,195</b>
Cost	3,011	8,200	606	497	12,314
Accumulated amortization	-	(1,606)	(513)	-	(2,119)
<b>Balance as of June 30, 2024</b>	<b>3,011</b>	<b>6,594</b>	<b>93</b>	<b>497</b>	<b>10,195</b>
<b>Balance as of December 31, 2022</b>	<b>3,189</b>	<b>6,434</b>	<b>87</b>	<b>528</b>	<b>10,238</b>
Additions	-	167	13	3	183
Disposals	-	(7)	-	-	(7)
Amortization	-	(123)	(21)	-	(144)
Translation adjustment	151	530	6	44	731
<b>Balance as of June 30, 2023</b>	<b>3,340</b>	<b>7,001</b>	<b>85</b>	<b>575</b>	<b>11,001</b>
Cost	3,340	8,601	600	575	13,116
Accumulated amortization	-	(1,600)	(515)	-	(2,115)
<b>Balance as of June 30, 2023</b>	<b>3,340</b>	<b>7,001</b>	<b>85</b>	<b>575</b>	<b>11,001</b>

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 17. Property, plant, and equipment

	Consolidated									
	Notes	Building and land	Facilities	Equipment	Mineral properties	Railway equipment	Right of use assets	Other	Constructions in progress	Total
<b>Balance as of December 31, 2023</b>		<b>10,119</b>	<b>9,239</b>	<b>4,450</b>	<b>6,925</b>	<b>2,612</b>	<b>1,359</b>	<b>2,484</b>	<b>11,208</b>	<b>48,396</b>
Additions (i)		-	-	-	-	-	(4)	-	2,749	2,745
Disposals		(5)	(16)	(7)	-	(3)	-	(1)	(70)	(102)
Assets retirement obligation	25(b)	-	-	-	(147)	-	-	-	-	(147)
Depreciation, depletion and amortization		(225)	(276)	(351)	(226)	(81)	(93)	(164)	-	(1,416)
Translation adjustment		(1,139)	(1,098)	(397)	(517)	(332)	(37)	(220)	(1,154)	(4,894)
Transfers		314	504	284	158	50	-	127	(1,437)	-
<b>Balance as of June 30, 2024</b>		<b>9,064</b>	<b>8,353</b>	<b>3,979</b>	<b>6,193</b>	<b>2,246</b>	<b>1,225</b>	<b>2,226</b>	<b>11,296</b>	<b>44,582</b>
Cost		15,956	13,724	9,706	14,734	3,917	2,089	4,929	11,296	76,351
Accumulated depreciation		(6,892)	(5,371)	(5,727)	(8,541)	(1,671)	(864)	(2,703)	-	(31,769)
<b>Balance as of June 30, 2024</b>		<b>9,064</b>	<b>8,353</b>	<b>3,979</b>	<b>6,193</b>	<b>2,246</b>	<b>1,225</b>	<b>2,226</b>	<b>11,296</b>	<b>44,582</b>
<b>Balance as of December 31, 2022</b>		<b>8,913</b>	<b>8,042</b>	<b>4,984</b>	<b>7,112</b>	<b>2,475</b>	<b>1,455</b>	<b>2,632</b>	<b>9,325</b>	<b>44,938</b>
Additions (i)		-	-	-	-	-	19	-	2,430	2,449
Disposals		(8)	(8)	(5)	-	(5)	-	(1)	(53)	(80)
Assets retirement obligation	25(b)	-	-	-	99	-	-	-	-	99
Depreciation, depletion and amortization		(224)	(250)	(364)	(241)	(81)	(91)	(163)	-	(1,414)
Translation adjustment		607	608	229	302	198	31	153	546	2,674
Transfers		772	586	371	46	47	-	166	(1,988)	-
<b>Balance as of June 30, 2023</b>		<b>10,060</b>	<b>8,978</b>	<b>5,215</b>	<b>7,318</b>	<b>2,634</b>	<b>1,414</b>	<b>2,787</b>	<b>10,260</b>	<b>48,666</b>
Cost		17,700	14,330	12,418	16,285	4,455	2,196	5,903	10,260	83,547
Accumulated depreciation		(7,640)	(5,352)	(7,203)	(8,967)	(1,821)	(782)	(3,116)	-	(34,881)
<b>Balance as of June 30, 2023</b>		<b>10,060</b>	<b>8,978</b>	<b>5,215</b>	<b>7,318</b>	<b>2,634</b>	<b>1,414</b>	<b>2,787</b>	<b>10,260</b>	<b>48,666</b>

(i) Includes capitalized interest, when applicable.

For more details regarding right of use and lease liability see note 22.

## Notes to the Consolidated Interim Financial Statements

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### 18. Financial and capital risk management

#### a) Effects of derivatives on the statement of financial position

	June 30, 2024		December 31, 2023	
	Assets	Liabilities	Assets	Liabilities
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	13	70	109	30
IPCA swap	-	57	-	41
Dollar swap and forward transactions	230	100	650	-
SOFR swap	16	-	4	28
Treasury forwards	1	7	-	-
	<b>260</b>	<b>234</b>	<b>763</b>	<b>99</b>
<b>Commodities price risk</b>				
Gasoil, Brent and freight	16	-	52	22
Energy Transition Metals	1	5	-	8
	<b>17</b>	<b>5</b>	<b>52</b>	<b>30</b>
Other	-	1	-	2
<b>Total</b>	<b>277</b>	<b>240</b>	<b>815</b>	<b>131</b>

#### b) Net exposure

	June 30, 2024	December 31, 2023
<b>Foreign exchange and interest rate risk</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	(57)	79
IPCA swap	(57)	(41)
Dollar swap and forward transactions	130	650
SOFR swap	16	(24)
Treasury forwards	(6)	-
	<b>26</b>	<b>664</b>
<b>Commodities price risk</b>		
Gasoil, Brent and freight	16	30
Energy Transition Metals	(4)	(8)
	<b>12</b>	<b>22</b>
Other	(1)	(2)
<b>Total</b>	<b>37</b>	<b>684</b>

#### c) Effects of derivatives on the income statement

	Gain (loss) recognized in the income statement			
	Three-month period ended		Six-month period ended	
	2024	June 30, 2023	2024	June 30, 2023
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	(117)	134	(130)	178
IPCA swap	(23)	23	(28)	30
Dollar swap and forward operations	(318)	376	(346)	538
SOFR swap	12	12	44	15
Treasury forwards	(9)	13	(9)	13
	<b>(455)</b>	<b>558</b>	<b>(469)</b>	<b>774</b>
<b>Commodities price risk</b>				
Gasoil, Brent and freight	(19)	4	(2)	(20)
Energy Transition Metals	1	-	1	(1)
	<b>(18)</b>	<b>4</b>	<b>(1)</b>	<b>(21)</b>
Other	2	1	1	2
<b>Total</b>	<b>(471)</b>	<b>563</b>	<b>(469)</b>	<b>755</b>

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### d) Effects of derivatives on the cash flows

	Financial settlement inflows (outflows)	
	Six-month period ended June 30,	
	2024	2023
<b>Foreign exchange and interest rate risk</b>		
CDI & TJLP vs. US\$ fixed and floating rate swap	1	(8)
IPCA swap	(4)	3
Dollar swap and forward operations	117	118
LIBOR swap	-	4
SOFR swap	4	-
Treasury forwards	(3)	13
	<b>115</b>	<b>130</b>
<b>Commodities price risk</b>		
Gasoil, Brent and freight	12	3
Energy Transition Metals	(3)	5
	<b>9</b>	<b>8</b>
<b>Derivatives designated as cash flow hedge accounting</b>		
Nickel	-	34
	-	<b>34</b>
<b>Total</b>	<b>124</b>	<b>172</b>

### e) Market risk – Foreign exchange and interest rates

#### Protection programs for the R\$ denominated debt instruments and other liabilities

Flow	Notional				Average rate	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year		
	June 30, 2024	December 31, 2023	Index	June 30, 2024		December 31, 2023	June 30, 2024	June 30, 2024	2024	2025	2026+	
<b>CDI vs. US\$ fixed rate swap</b>				(16)	107	3	14	(2)	(2)	(12)		
Receivable	R\$ 4,581	R\$ 5,162	CDI	100.00%								
Payable	US\$ 1.061	US\$ 1,196	Fix	1.70%								
<b>TJLP vs. US\$ fixed rate swap</b>				(41)	(28)	(2)	2	(4)	(9)	(28)		
Receivable	R\$ 599	R\$ 694	TJLP +	1.07%								
Payable	US\$ 149	US\$ 173	Fix	3.47%								
				<b>(57)</b>	<b>79</b>	<b>1</b>	<b>16</b>	<b>(6)</b>	<b>(11)</b>	<b>(40)</b>		
<b>IPCA swap vs. US\$ fixed rate swap</b>				(57)	(41)	(4)	3	(4)	(10)	(43)		
Receivable	R\$ 924	R\$ 1,078	IPCA +	4.54%								
Payable	US\$ 228	US\$ 267	Fix	3.86%								
				<b>(57)</b>	<b>(41)</b>	<b>(4)</b>	<b>3</b>	<b>(4)</b>	<b>(10)</b>	<b>(43)</b>		
<b>R\$ fixed rate vs. US\$ fixed rate swap</b>				187	600	97	35	62	124	1		
Receivable	R\$ 14,004	R\$ 12,660	Fix	6.75%								
Payable	US\$ 2,705	US\$ 2,431	Fix	0.97%								
<b>Forward</b>	R\$ 8,335	R\$ 1,209	B	5.27	(57)	50	20	20	(62)	4	1	
				<b>130</b>	<b>650</b>	<b>117</b>	<b>55</b>	<b>-</b>	<b>128</b>	<b>2</b>		

## Notes to the Consolidated Interim Financial Statements

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The sensitivity analysis of these derivative financial instruments is presented as follows:

Instrument	Instrument's main risk events	Fair value	Scenario I (Δ of 25%)	Scenario II (Δ of 50%)
<b>CDI vs. US\$ fixed rate swap</b>	R\$ depreciation	(16)	(277)	(538)
	US\$ interest rate inside Brazil decrease	(16)	(47)	(81)
	Brazilian interest rate increase	(16)	(41)	(65)
Protected item: R\$ denominated liabilities	R\$ depreciation	n.a.	-	-
<b>TJLP vs. US\$ fixed rate swap</b>	R\$ depreciation	(41)	(76)	(112)
	US\$ interest rate inside Brazil decrease	(41)	(45)	(50)
	Brazilian interest rate increase	(41)	(46)	(51)
	TJLP interest rate decrease	(41)	(44)	(48)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.	-	-
<b>IPCA swap vs. US\$ fixed rate swap</b>	R\$ depreciation	(57)	(112)	(167)
	US\$ interest rate inside Brazil decrease	(57)	(63)	(70)
	Brazilian interest rate increase	(57)	(65)	(74)
	IPCA index decrease	(57)	(61)	(65)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.	-	-
<b>R\$ fixed rate vs. US\$ fixed rate swap</b>	R\$ depreciation	187	(459)	(1,104)
	US\$ interest rate inside Brazil decrease	187	158	127
	Brazilian interest rate increase	187	136	88
Protected item: R\$ denominated debt	R\$ depreciation	n.a.	-	-
<b>Forward</b>	R\$ depreciation	(57)	(436)	(814)
	US\$ interest rate inside Brazil decrease	(57)	(57)	(57)
	Brazilian interest rate increase	(57)	(57)	(57)
Protected item: R\$ denominated liabilities	R\$ depreciation	n.a.	-	-

### Protection program for interest rate US\$ denominated debt

Flow	Notional			Average rate	Fair value		Financial Settlement Inflows (Outflows) June 30, 2024	Value at Risk June 30, 2024	Fair value by year		
	June 30, 2024	December 31, 2023	Index		June 30, 2024	December 31, 2023			2024	2025	2026+
<b>SOFR vs. US\$ fixed rate swap</b>					16	(24)	4	5	-	12	4
Receivable	US\$ 2,150	US\$ 2,300	SOFR	0.00%							
Payable	US\$ 2,150	US\$ 2,300	Fix	3.77%							
					<b>16</b>	<b>(24)</b>	<b>4</b>	<b>5</b>	<b>-</b>	<b>12</b>	<b>4</b>

The sensitivity analysis of these derivative financial instruments is presented as follows:

Instrument	Instrument's main risk events	Fair value	Scenario I (Δ of 25%)	Scenario II (Δ of 50%)
<b>SOFR vs. US\$ fixed rate swap</b>	US\$ SOFR decrease	16	(36)	(91)
Protected item: SOFR US\$ indexed debt	US\$ SOFR decrease	n.a.	36	91

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### Protection for American treasury volatility related to bond issuance and tender offer transactions

Due to the volatility of the United States Treasury ("UST"), a treasury lock transaction was implemented to preserve the issuance of new bond occurred in June 2024 and the tender offer occurred in July 2024 (subsequent event).

Flow	June 30, 2024	Notional		Bought / Sold	Average rate	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
		June 30, 2024	December 31, 2023			June 30, 2024	December 31, 2023	June 30, 2024	June 30, 2024	2024
Treasury forwards	US\$ 1,130	-	-	S	4.44%	(6)	-	-	3	(6)
Treasury forwards	-	-	-	B	-	-	-	(3)	-	-

The sensitivity analysis of these derivative financial instruments is presented as follows:

Instrument	Instrument's main risk events	Fair value	Scenario I (Δ of 25%)	Scenario II (Δ of 50%)
<b>NDF Treasury</b>	Treasury increase	(6)	(46)	(81)
Protected item: Treasury US\$ indexed bonds	Treasury increase	N/A	46	81

### f) Protection program for product prices and input costs

Flow	Notional		Bought / Sold	Average strike (US\$)	Fair value		Financial settlement Inflows (Outflows)	Value at Risk	Fair value by year
	June 30, 2024	December 31, 2023			June 30, 2024	December 31, 2023	June 30, 2024	June 30, 2024	2024
<b>Brent crude oil (bbl)</b>									
Call options	12,763,500	19,907,250	B	91	12	45	1	7	12
Put options	12,763,500	19,907,250	S	59	-	(22)	-	-	-
<b>Forward Freight Agreement (days)</b>									
Freight forwards	330	1,210	B	15,636	4	7	11	1	4
					<b>16</b>	<b>30</b>	<b>12</b>	<b>8</b>	<b>16</b>

The sensitivity analysis of these derivative financial instruments is presented as follows:

Instrument	Instrument's main risk events	Fair value	Scenario I (Δ of 25%)	Scenario II (Δ of 50%)
<b>Brent crude oil (bbl)</b>				
Options	Price input decrease	12	(14)	(214)
Protected item: Part of costs linked to fuel oil prices	Price input decrease	n.a.	14	214
<b>Forward Freight Agreement (days)</b>				
Forwards	Freight price decrease	4	2	(1)
Protected item: Part of costs linked to maritime freight prices	Freight price decrease	n.a.	(2)	1

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### g) Other derivatives, including embedded derivatives in contracts

Flow	Notional				Fair value		Financial settlement Inflows (Outflows)	Value at Risk	Fair value by year	
	June 30, 2024	December 31, 2023	Bought / Sold	Average strike (US\$/ton)	June 30, 2024	December 31, 2023	June 30, 2024	June 30, 2024	2024	2025+
<b>Fixed price nickel sales protection (ton)</b>										
Nickel forwards	3,402	3,322	B	18,579	(4)	(8)	(3)	2	(3)	(1)
					(4)	(8)	(3)	2	(3)	(1)
<b>Embedded derivative (pellet price) in natural gas purchase (volume/month)</b>										
Call options	746,667	746,667	S	233	(1)	(2)	-	1	(1)	-
					(1)	(2)	-	1	(1)	-

The sensitivity analysis of these derivative financial instruments is presented as follows:

Instrument	Instrument's main risk events	Fair value	Scenario I (Δ of 25%)	Scenario II (Δ of 50%)
<b>Fixed price sales protection (ton)</b>				
Forwards	Nickel price decrease	(4)	(19)	(33)
Protected item: Part of nickel revenues with fixed prices	Nickel price decrease	n.a.	19	33
<b>Embedded derivative (pellet price) in natural gas purchase agreement (volume/month)</b>				
Embedded derivatives – Gas purchase	Pellet price increase	(1)	(4)	(10)

### h) Hedge accounting

	Gain (loss) recognized in the other comprehensive income			
	Three-month period ended June 30,		Six-month period ended June 30,	
	2024	2023	2024	2023
Net investments hedge	(202)	95	(258)	144
Cash flow hedge (i)	-	(4)	-	15

(i) In 2023, the Company had a nickel revenue hedge program contracted, which expired on December 31, 2023. In 2024, there was no revenue hedge programs in place.



## Notes to the Consolidated Interim Financial Statements

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### i) Financial counterparties' ratings

The transactions of derivative instruments, cash and cash equivalents, as well as short-term investments are held with financial institutions whose exposure limits are periodically reviewed and approved by the delegated authority. The financial institutions credit risk is performed through a methodology that considers, among other information, ratings provided by international rating agencies.

The table below presents the ratings in foreign currency as published by Moody's regarding the main financial institutions used by the Company to contract financial instruments, including derivative financial instruments.

	June 30, 2024		December 31, 2023	
	Cash and cash equivalents and investment	Derivatives	Cash and cash equivalents and investment	Derivatives
Aa2	706	1	338	-
Aa3	-	1	42	-
A1	2,587	26	2,022	50
A2	608	104	309	293
A3	1,146	3	186	22
Baa1	-	-	2	-
Baa2	20	-	16	-
Ba1 (i)	100	-	85	-
Ba2 (i)	782	99	287	314
Ba3 (i)	591	43	373	136
	<b>6,540</b>	<b>277</b>	<b>3,660</b>	<b>815</b>

(i) A substantial part of the balances is held with financial institutions in Brazil which are deemed investment grade in local currency.

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### 19. Financial assets and liabilities

#### a) Classification

The Company classifies its financial instruments in accordance with the purpose for which they were acquired, and determines the classification and initial recognition according to the following categories:

	Notes	June 30, 2024				December 31, 2023			
		Amortized cost	At fair value through OCI	At fair value through profit or loss	Total	Amortized cost	At fair value through OCI	At fair value through profit or loss	Total
<b>Financial assets</b>									
<b>Current</b>									
Cash and cash equivalents	21	6,479	-	-	6,479	3,609	-	-	3,609
Short-term investments	21	-	-	61	61	-	-	51	51
Derivative financial instruments	18	-	-	168	168	-	-	271	271
Accounts receivable	10	409	-	1,923	2,332	362	-	3,835	4,197
Judicial deposits	26(c)	-	-	-	-	611	-	-	611
		<b>6,888</b>	<b>-</b>	<b>2,152</b>	<b>9,040</b>	<b>4,582</b>	<b>-</b>	<b>4,157</b>	<b>8,739</b>
<b>Non-current</b>									
Judicial deposits	26(c)	585	-	-	585	798	-	-	798
Restricted cash	13	4	-	-	4	4	-	-	4
Derivative financial instruments	18	-	-	109	109	-	-	544	544
Investments in equity securities	13	-	47	-	47	-	45	-	45
		<b>589</b>	<b>47</b>	<b>109</b>	<b>745</b>	<b>802</b>	<b>45</b>	<b>544</b>	<b>1,391</b>
<b>Total of financial assets</b>		<b>7,477</b>	<b>47</b>	<b>2,261</b>	<b>9,785</b>	<b>5,384</b>	<b>45</b>	<b>4,701</b>	<b>10,130</b>
<b>Financial liabilities</b>									
<b>Current</b>									
Suppliers and contractors	12	4,769	-	-	4,769	5,272	-	-	5,272
Derivative financial instruments	18	-	-	135	135	-	-	36	36
Loans and borrowings	21	910	-	-	910	824	-	-	824
Leases	22	177	-	-	177	197	-	-	197
Liabilities related to the concession grant	13(a)	745	-	-	745	591	-	-	591
Other financial liabilities – Related parties	29	144	-	-	144	290	-	-	290
Advances and other financial obligations	13	508	-	-	508	759	-	-	759
		<b>7,253</b>	<b>-</b>	<b>135</b>	<b>7,388</b>	<b>7,933</b>	<b>-</b>	<b>36</b>	<b>7,969</b>
<b>Non-current</b>									
Derivative financial instruments	18	-	-	105	105	-	-	95	95
Loans and borrowings	21	12,860	-	-	12,860	11,647	-	-	11,647
Leases	22	1,183	-	-	1,183	1,255	-	-	1,255
Participative shareholders' debentures	20	-	-	2,451	2,451	-	-	2,874	2,874
Liabilities related to the concession grant	13(a)	2,979	-	-	2,979	3,278	-	-	3,278
		<b>17,022</b>	<b>-</b>	<b>2,556</b>	<b>19,578</b>	<b>16,180</b>	<b>-</b>	<b>2,969</b>	<b>19,149</b>
<b>Total of financial liabilities</b>		<b>24,275</b>	<b>-</b>	<b>2,691</b>	<b>26,966</b>	<b>24,113</b>	<b>-</b>	<b>3,005</b>	<b>27,118</b>

#### b) Hierarchy of fair value

	Notes	June 30, 2024				December 31, 2023			
		Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>									
Short-term investments	21	61	-	-	61	51	-	-	51
Derivative financial instruments	18	-	277	-	277	-	815	-	815
Accounts receivable	10	-	1,923	-	1,923	-	3,835	-	3,835
Investments in equity securities	13	-	47	-	47	-	45	-	45
		<b>61</b>	<b>2,247</b>	<b>-</b>	<b>2,308</b>	<b>51</b>	<b>4,695</b>	<b>-</b>	<b>4,746</b>
<b>Financial liabilities</b>									
Derivative financial instruments	18	-	240	-	240	-	131	-	131
Participative shareholders' debentures	20	-	2,451	-	2,451	-	2,874	-	2,874
		<b>-</b>	<b>2,691</b>	<b>-</b>	<b>2,691</b>	<b>-</b>	<b>3,005</b>	<b>-</b>	<b>3,005</b>

There were no transfers between levels 1, 2 and 3 of the fair value hierarchy during the period presented.

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### c) Fair value of loans and borrowings

	June 30, 2024		December 31, 2023	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Quoted in the secondary market:</b>				
Bonds	8,253	8,227	7,253	7,404
Debentures	117	117	221	213
<b>Debt contracts in Brazil in:</b>				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	196	196	250	250
Basket of currencies and bonds in US\$ indexed to SOFR	153	163	153	168
<b>Debt contracts in the international market in:</b>				
US\$, with variable and fixed interest	4,976	5,296	4,504	4,950
Other currencies, with variable interest	9	8	9	9
Other currencies, with fixed interest	66	69	81	85
<b>Total</b>	<b>13,770</b>	<b>14,076</b>	<b>12,471</b>	<b>13,079</b>

### 20. Participative shareholders' debentures

	Average price (R\$)		Three-month period ended June 30,		Financial result Six-month period ended June 30,		Liabilities December 31,	
	2024	2023	2024	2023	2024	2023	June 30, 2024	2023
	Participative shareholders' debentures	35.06	31.35	(241)	321	(77)	274	2,451

On April 1<sup>st</sup>, 2024, the Company made available for withdrawal as remuneration the amount of US\$149 for the second semester of 2023 (2023: US\$127 for the second semester of 2022).

## Notes to the Consolidated Interim Financial Statements

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### 21. Loans, borrowings, cash and cash equivalents and short-term investments

#### a) Net debt

The Company monitors the net debt with the objective of ensuring the continuity of its business in the long term.

	Note	June 30, 2024	December 31, 2023
Loans and borrowings		13,770	12,471
Leases	22(b)	1,360	1,452
<b>Gross debt</b>		<b>15,130</b>	<b>13,923</b>
(-) Cash and cash equivalents		6,479	3,609
(-) Short-term investments (i)		61	51
(-) Cash and cash equivalents of PTVI	15(a)	-	703
<b>Net debt</b>		<b>8,590</b>	<b>9,560</b>

(i) Substantially comprises investments in an exclusive investment fund, which portfolio is made by committed transactions and Selic Treasury Notes ("LFTs"), which are floating-rate securities issued by the Brazilian government.

#### b) Cash and cash equivalents

	June 30, 2024	December 31, 2023
R\$	1,625	953
US\$	4,620	2,516
Other currencies	234	140
<b>Total</b>	<b>6,479</b>	<b>3,609</b>

#### c) Loans and borrowings

##### i) Outstanding balance of loans and borrowings by type and currency

	Average interest rate (i)	Current liabilities		Non-current liabilities	
		June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023
<b>Quoted in the secondary market:</b>					
US\$ Bonds (ii)	6.08%	-	-	8,157	7,157
R\$ Debentures	8.74%	33	96	82	119
<b>Debt contracts in Brazil in (iii):</b>					
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	10.18%	43	49	153	200
Basket of currencies and bonds in US\$ indexed to SOFR	6.89%	-	-	150	150
<b>Debt contracts in the international market in:</b>					
US\$, with variable and fixed interest	6.04%	645	500	4,255	3,945
Other currencies, with variable interest	4.23%	-	-	9	9
Other currencies, with fixed interest	4.11%	12	12	54	67
<b>Accrued charges</b>		177	167	-	-
		<b>910</b>	<b>824</b>	<b>12,860</b>	<b>11,647</b>

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable as of June 30, 2024.

(ii) In June 2024, the Company issued bonds of US\$1 billion with a coupon of 6.45% per year, payable semi-annually, and maturing in 2054.

(iii) The Company entered into derivatives to mitigate the exposure to cash flow variations of all floating rate debt contracted in Brazil, resulting in an average cost of 3.22% per year in US\$.

The reconciliation of loans and financing with cash flows arising from financing activities is presented in note 9(C).

## Notes to the Consolidated Interim Financial Statements

Expressed in millions of United States dollar, unless otherwise stated

### ii) Future flows of principal and interest of loans and borrowings payments

	Principal	Estimated future interest payments (i)
2024	176	423
2025	892	865
2026	560	811
2027	1,689	714
Between 2028 and 2030	3,326	1,805
2031 onwards	6,950	3,744
<b>Total</b>	<b>13,593</b>	<b>8,362</b>

(i) Based on interest rate curves and foreign exchange rates applicable as of June 30, 2024 and considering that the payments of principal will be made on their contracted payments dates. The amount includes the estimated interest not yet accrued and the interest already recognized in the annual financial statements.

### Covenants

Some of the Company's loans and borrowings agreements with lenders contain financial covenants. The primary financial covenants in those agreements require maintaining certain ratios, such as leverage ratio and interest coverage. The Company did not identify any instances of noncompliance as of June 30, 2024.

## 22. Leases

### a) Right of use

	December 31, 2023	Additions and contract modifications	Depreciation	Translation adjustment	June 30, 2024
Ports	628	-	(27)	(7)	594
Vessels	415	-	(23)	-	392
Pelletizing plants	193	-	(26)	(22)	145
Properties	80	(1)	(12)	(6)	61
Energy plants	34	-	(3)	(1)	30
Mining equipment	9	(3)	(2)	(1)	3
<b>Total</b>	<b>1,359</b>	<b>(4)</b>	<b>(93)</b>	<b>(37)</b>	<b>1,225</b>

### b) Leases liabilities

	December 31, 2023	Additions and contract modifications	Payments (i)	Interest	Translation adjustment	June 30, 2024
Ports	682	-	(34)	12	(2)	658
Vessels	397	-	(34)	8	-	371
Pelletizing plants	207	-	(5)	4	(25)	181
Properties	102	(1)	(9)	2	(1)	93
Energy plants	49	-	(2)	1	(1)	47
Mining equipment	15	(3)	(1)	1	(2)	10
<b>Total</b>	<b>1,452</b>	<b>(4)</b>	<b>(85)</b>	<b>28</b>	<b>(31)</b>	<b>1,360</b>
Current liabilities	197					177
Non-current liabilities	1,255					1,183
<b>Total</b>	<b>1,452</b>					<b>1,360</b>

(i) The total amount of the variable lease payments not included in the measurement of lease liabilities was US\$117 recorded in the income statement in the six-month period ended June 30, 2024 (2023: US\$74).

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### Annual minimum payments and remaining lease term

The following table presents the undiscounted lease obligation by maturity date. The lease liability recognized in the statement of financial position is measured at the present value of such obligations.

	2024	2025	2026	2027	2028 onwards	Total	Remaining term (years)	Discount rate
Ports	33	66	54	43	694	890	2 to 19	4% to 5%
Vessels	30	59	54	53	239	435	1 to 9	3% to 4%
Pelletizing plants	50	44	15	15	85	209	1 to 9	2% to 6%
Properties	15	17	15	13	36	96	1 to 10	2% to 7%
Energy plants	4	9	6	5	39	63	2 to 6	5% to 6%
Mining equipment	4	5	4	1	-	14	1 to 4	3% to 6%
<b>Total</b>	<b>136</b>	<b>200</b>	<b>148</b>	<b>130</b>	<b>1,093</b>	<b>1,707</b>		

### 23. Brumadinho dam failure

In January 2019, a tailings dam ("Dam I") experienced a failure at the Córrego do Feijão mine, in the city of Brumadinho, state of Minas Gerais, Brazil. The failure released a flow of tailings debris, destroying some of Vale's facilities, affecting local communities and disturbing the environment. The tailings released have caused an impact of around 315 km in extension, reaching the nearby Paraopeba River. The dam failure in Brumadinho ("event") resulted in 270 fatalities or presumed fatalities and caused extensive property and environmental damage in the region.

As a result of the dam failure, the Company recognized provisions to meet its assumed obligations, including indemnification to those affected by the event, remediation of the impacted areas and compensation to the society. Changes in the provisions are shown below:

	December 31, 2023	Revision to estimates	Monetary and present value adjustments	Disbursements	Translation adjustment	June 30, 2024
<b>Integral Reparation Agreement</b>						
Payment obligations	562	(8)	28	(100)	(66)	416
Provision for socio-economic reparation and others	592	(11)	37	(92)	(70)	456
Provision for social and environmental reparation	843	(32)	26	(55)	(103)	679
	<b>1,997</b>	<b>(51)</b>	<b>91</b>	<b>(247)</b>	<b>(239)</b>	<b>1,551</b>
<b>Other obligations</b>						
Tailings containment, geotechnical safety and environmental reparation	684	(12)	28	(69)	(84)	547
Individual indemnification	83	-	6	(44)	(7)	38
Other	296	43	18	(40)	(41)	276
	<b>1,063</b>	<b>31</b>	<b>52</b>	<b>(153)</b>	<b>(132)</b>	<b>861</b>
<b>Liability</b>	<b>3,060</b>	<b>(20)</b>	<b>143</b>	<b>(400)</b>	<b>(371)</b>	<b>2,412</b>

The cash flow for obligations are estimated for an average period ranging from 5 to 7 years and were discounted to the present value at an annual rate in real terms, which increased from 5.31% on December 31, 2023, to 6.50% on June 30, 2024.

In addition, the Company has incurred expenses, which have been recognized straight to the income statement as "Other operating revenues (expenses), net" (note 5c), in relation to tailings management, communication, humanitarian assistance, payroll, legal services, water supply, among others. The Company incurred expenses in the amount of US\$89 and US\$199 for the three and six-month period ended June 30, 2024, respectively (2023: US\$131 and US\$242, respectively).

## Notes to the Consolidated Interim Financial Statements

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### Judicial Settlement for Integral Reparation

The Settlement for Integral Reparation includes: (i) payment obligations, of which the funds will be used directly by the State of Minas Gerais and Institutions of Justice for socio-economic and socio-environmental compensation projects; (ii) socioeconomic projects in Brumadinho and other municipalities; and (iii) compensation of the environmental damage caused by the dam failure. These obligations are projected for an average period of 6 years.

For the obligations of (i) and (ii), the agreement specifies an amount for each project and changes in the original budget and deadlines may have an impact in the provision. In addition, the execution of the environmental recovery actions has no cap limit despite having been estimated in the Settlement for Integral Reparation due to the Company's legal obligation to fully repair the environmental damage caused by the dam failure. The expenses related to these obligations are deducted from the income tax calculation, in accordance with the Brazilian tax regulation, which is subject to periodic inspection by the competent authorities. Therefore, although Vale is monitoring this provision, the amount recorded could materially change depending on several factors that are not under the Company's control.

### Other obligations

The Company is also working to ensure geotechnical safety of the remaining structures at the Córrego do Feijão mine, in Brumadinho, and the removal and proper disposal of the tailings of Dam I, including dredging part of the released material and de-sanding from the channel of the river Paraopeba.

For the individual indemnification, Vale and the Public Defendants of the State of Minas Gerais formalized an agreement on April 5, 2019, under which those affected by the Brumadinho's dam failure may join an individual or family group out-of-Court settlement agreements for the indemnification of material, economic and moral damages. This agreement establishes the basis for a wide range of indemnification payments, which were defined according to the best practices and case law of Brazilian Courts, following rules and principles of the United Nations.

#### a) Contingent liabilities

##### Public civil actions brought by the State of Minas Gerais and state public prosecutors for damages resulting from the failure of Dam I

The Company is party to public civil actions brought by the State of Minas Gerais and justice institutions, claiming compensation for socioeconomic and socio-environmental damages resulting from the dam failure and seeking a broad range of decisions ordering Vale to execute specific remediation and reparation actions. As a result of the Judicial Settlement for Integral Reparation, settled in February 2021, the requests for the reparation of socio-environmental and socioeconomic damages caused by the dam failure were substantially resolved. The individual damages were excluded from the Judicial Settlement for Integral Reparation, and the Term of Commitment signed with the Public Defendants of the State of Minas Gerais was ratified, whose parameters are utilized as a basis for the settlement of individual agreements. The phase of sentence liquidation was instituted in the aforementioned public civil actions for the quantification of the alleged remaining individual damages, with Vale having filed an instrument appeal against this decision, still pending judgment. The likelihood of a financial loss to the Company is classified as possible and it is not yet possible to reliably estimate the amount of a potential loss to Vale.

##### Public civil action and investigation under the Brazilian Anticorruption Law

In October 2020, the Brazilian Office of the Comptroller General ("CGU") notified the Company about an administrative proceeding prosecution based on the same allegations mentioned above under the Brazilian Law 12,846/2013 in connection with inspection and monitoring activities related to the Brumadinho dam. In August 2022, the CGU understood that Vale has failed to present reliable information to the Brazilian National Mining Agency ("ANM"), as once a positive stability condition statement ("DCE") was issued for the Dam I, where it should be negative in the view of the CGU. Thus, even recognizing the non-existence of corruption acts or practices, the CGU fined Vale US\$15 (R\$86 million), which is the minimum amount established by law, i.e., the CGU recognizes the non-involvement or tolerance of the Company's top management.

In September 2023, CGU denied the request for reconsideration filed by the Company and, therefore, Vale paid the fine of US\$15 (R\$86 million) in 2023. Vale disagrees with the decision and is adopting the appropriate legal measures.

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### Class action in the United States

Vale is defending itself against a class action brought before a Federal Court in New York and filed by holders of securities – American Depositary Receipts (“ADRs”) – issued by Vale. In May 2020, the Court issued a decision that denied the Motion to Dismiss presented by the Company. The Discovery phase was concluded in November 2023. Upon the filing of a pre-motion letter for the Motion for Summary Judgment presented in January 2024 by the parties, the Court should decide whether the Parties may file their motion for summary judgment.

On November 24, 2021, a new complaint was filed before the same Court by eight Plaintiffs, all investment funds, as an “opt-out” litigation from the class action already pending in the Eastern District of New York court, asserting virtually the same allegations in the main class action. A decision from the Court is pending on the Motion to Dismiss presented by the Company.

The likelihood of loss of these proceedings is considered possible. However, considering the current phase of these lawsuits, it is not yet possible to reliably estimate the amount of a potential loss. The amount of damages sought in these claims is unspecified.

### Criminal proceedings and investigations

In January 2020, the State Prosecutors of Minas Gerais (“MPMG”) filed criminal charges against 16 individuals (including former executive officers of Vale and former employees) for a number of potential crimes, including homicide, and against Vale S.A. for alleged environmental crimes.

In November 2021, the Brazilian Federal Police concluded the investigation on potential criminal responsibility related with the Brumadinho dam failure and the final report sent to the Federal Public Prosecutors (“MPF”).

In January 2023, after the Federal Supreme Court recognized the competence of the Federal Court to judge the cause, the MPF ratified the complaint authored by the MPMG, previously offered in 2020 to the Justice of Brumadinho, and the rectification was received by the Federal Court. Parallel to the criminal action, the MPF and the Brazilian Federal Police continue to conduct a separate investigation into the causes of the dam failure in Brumadinho, which may result in new criminal proceedings. Currently, the process is suspended, due to a judicial decision. It is not possible to estimate when a final decision will be issued by the Federal Court. The likelihood of a financial loss to the Company is classified as possible and it is not yet possible to reliably estimate the amount of a potential loss to Vale.

### Public civil actions brought by labor unions

In 2021, public civil actions were filed with Labor Court of Betim in the State of Minas Gerais, by a workers' unions claiming the compensation for death damages to own and outsourced employees, who died as a result of the failure of Dam I. Initial decisions sentenced Vale to pay US\$180 thousand (R\$1 million) per fatality. In June 2023, the Superior Labor Court ruled on the lawsuit filed by workers' union, sustaining the initial decision that condemned Vale. The Company is defending itself in the lawsuits and considers that the likelihood of loss is possible.

### Securities and Exchange Commission (“SEC”) and investigations conducted by the CVM

On April 28, 2022, the SEC filed a lawsuit against Vale in the U.S. District Court for the Eastern District of New York, alleging that certain Vale's disclosures related to dam safety management prior to the dam failure in Brumadinho violated U.S. securities laws. On March 28, 2023, Vale reached a settlement with the SEC to fully resolve this litigation. Under the agreement, without admitting or denying the settled claims, Vale paid US\$56 during the year ended December 31, 2023. The settlement resolves the litigation without judgment on the claims based upon intentional or reckless fraud. In April 2023, the settlement was approved and granted by the Court.

CVM is also conducting investigations relating to Vale's disclosure of relevant information to shareholders, investors and the market in general, especially regarding the conditions and management of Vale's dams. The likelihood of loss of this proceeding is classified as possible and it is not yet possible to reliably estimate the amount of a potential loss to the Company.



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### Arbitration proceedings in Brazil filed by shareholders, a class association and foreign investment funds

In Brazil, Vale is named as a defendant in (i) one arbitration filed by 385 minority shareholders, (ii) two arbitrations filed by a class association allegedly representing all Vale's noncontrolling shareholders, and (iii) three arbitrations filed by foreign investment funds.

In the six proceedings, the claimants argue that Vale was aware of the risks associated with the dam and failed to disclose it to its shareholders. Based on such argument, they claim compensation for losses caused by the decrease in share price. The expectation of loss is classified as possible for the six procedures and, considering the initial phase, it is not possible at this time to reliably estimate the amount of a possible loss.

In one of the proceedings filed by foreign funds, the Claimants initially estimated the amount of the alleged losses would be approximately US\$324 (R\$1,800 million). In another proceeding filed by foreign funds, the Claimants initially estimated the amount of the alleged losses would be approximately US\$702 (R\$3,900 million). In the procedure presented by minority shareholders, the applicants estimated the alleged losses at approximately US\$540 (R\$3,000 million), which could be increased later, as alleged by the applicants.

The Company disagrees with the ongoing proceedings and understands that, in this case and at the current stage of the proceedings, the probability of loss in the amount claimed by the foreign funds is remote.

### Other proceedings

Vale is defendant in a number of investigations and proceedings brought by individuals, business entities, investors, associations, unions, legislative bodies, non-governmental organizations and other entities seeking remediation and compensation for environmental, property and personal damages resulting from the Brumadinho dam failure, including alleged violations of securities laws. The potential loss was US\$109 as of June 30, 2024 (December 31, 2023: US\$94) and the likelihood of a potential loss to the Company is classified as possible.

### d) Insurance

The Company is negotiating with insurance companies the payment of indemnification under its civil liability and Directors and Officers Liability Insurance. In six-month period ended June 30, 2024, the Company received US\$8 (2023: US\$11) from insurers which was recorded in income statement as "Other operating revenues (expenses), net" (note 5c).

## 24. Liabilities related to associates and joint ventures

In November 2015, the Fundão tailings dam owned by Samarco Mineração S.A. ("Samarco") experienced a failure, flooding certain communities and impacting communities and the environment along the Doce River. The dam failure resulted in 19 fatalities and caused property and environmental damage to the affected areas. Samarco is a joint venture equally owned by Vale S.A. and BHP Billiton Brasil Ltda. ("BHPB").

In 2016, Vale, Samarco and BHPB, entered into a Framework Agreement with the Federal Government of Brazil, the states of Espírito Santo and Minas Gerais and certain other public authorities to establish the Renova Foundation that is developing and executing environmental and socio-economic programs to remediate and provide compensation for damage caused by the Samarco dam failure.

In June 2018, Samarco, Vale and BHPB entered into a comprehensive agreement with the offices of the federal and state (Minas Gerais and Espírito Santo) prosecutors, public defenders and attorney general, among other parties ("TacGov Agreement"), improving the governance mechanism of Renova Foundation and establishing, among other things, a process for potential revisions to the remediation programs under the Framework Agreement.

These agreements aim to remediate and provide compensation for damage caused, of which Samarco has primary responsibility for funding the obligations, and Vale and BHPB have secondary funding obligations under the Framework Agreement in proportion to their 50 per cent shareholding in Samarco.

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### a) Provision related to the Samarco dam failure

The changes on the provision are presented below:

	<b>Total</b>
<b>Balance as of December 31, 2023</b>	<b>4,427</b>
Revision to estimates	(58)
Monetary and present value adjustments	85
Disbursements	(191)
Translation adjustments	(556)
<b>Balance as of June 30, 2024</b>	<b>3,707</b>

The cash outflows to meet the obligations are discounted to present value at an annual rate in real terms, which increased from 5.22% on December 31, 2023, to 6.44% on June 30, 2024.

### b) Contingent liabilities

#### Public Civil Action filed by the Federal Government and others and public civil action filed by the Federal Public Ministry ("MPF")

Vale is a defendant in several legal proceedings brought by governmental authorities and civil associations claiming recover socioenvironmental and socioeconomic damages and a number of specific remediation measures as a result of the Samarco's Fundão dam failure, including a claim brought by the Federal Public Prosecution Office in 2016 seeking several measures that amount to US\$28 billion (R\$155 billion), subject to interest and monetary adjustments, which the effect for Vale would be 50% of this amount.

This Public Civil Action was suspended as a result of the ratification of TacGov agreement. However, as pre-requisites established in the TacGov Agreement, for renegotiation of the Framework Agreement were not implemented during the established period, in 2020, the Brazilian Federal and State prosecutors and public defenders filed a request for the immediate resumption of this claim.

Therefore, Vale, Samarco, BHPB and Federal and State prosecutors have been engaging in negotiations to seek a definitive settlement of the obligations under the Framework Agreement and the US\$28 billion (R\$155 billion) Federal Public Prosecution Office claim.

The goal in signing a potential settlement agreement is to provide a stable framework for the execution of reparation and compensation measures related to the Samarco dam rupture, it also aims to settle all lawsuits brought by the public authorities involved.

#### Judicial decision requesting cash deposits and increase on the territories affected by the collapse

In March 2023, as part of a proceeding related to a potential increase on the number of territories recognized as affected by the collapse of Samarco's Fundão dam and covered by the TTAC, a Federal Court issued a decision ordering Vale and BHP Brasil to make judicial deposits in the total amount of US\$1.9 billion (R\$10.3 billion), in ten installments, which the effect for Vale would be 50% of this amount. On April 28, 2023, the Federal Court granted the companies' request for a suspensive effect on the decision that determined this deposit.

In August 2023, the judge issued a judicial decision recognizing the existence of new territories impacted by the collapse of the Fundão dam. The Company is adopting the appropriate legal measures and believes its provisions are sufficient to comply with the TTAC obligations.

#### Judicial decision on collective moral damages

In January 2024, the 4th Federal Lower Civil Court of Belo Horizonte issued a judicial decision requiring the payment of collective moral damages in the amount of US\$8.6 billion (R\$47.6 billion) (the effect for Vale would be 50% of this amount), subject to monetary adjustments from the date of the decision and interests from November 2015.

In May 2024, the Court partially accepted Vale's appeal, rectifying the value of the conviction to US\$8.4 billion (R\$46.7 billion) (the effect for Vale would be 50% of this amount), subject to monetary adjustments. Vale appealed for a review of the merits of the decision. In May 2024, a provisional sentence compliance was instituted by the Federal Union and the 4th Federal Court rejected the Union's request. Subsequently, against the decision that rejected the provisional sentence compliance, the Union appealed, the judgment of which is pending.

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The Company is defending itself and believes the likelihood of loss in relation of the merits of these proceedings is possible, however, the likelihood of loss in the alleged amount is assessed as remote.

### Claims in the United Kingdom and the Netherlands

**London Contribution claim** - As a result of the rupture of Samarco's Fundão dam failure, BHP Group Ltd ("BHP") was named as defendant in group action claims for damages filed in the courts of England and Wales for various plaintiffs, between individuals, companies and municipalities from Brazil that were supposedly affected by the Samarco dam failure (the "UK Claim").

In December 2022, BHP filed a "Contribution Claim" against Vale, requesting the Company to share the indemnification established in the UK Claim. Both the Contribution Claim and the UK Claim are still ongoing, and there has not been any decision on their merits.

The proceedings against BHP are still progressing in London and the first phase of the trial is expected to begin of the last quarter of 2024. It is not yet possible to reliably estimate the amount of a potential loss to Vale.

**Netherlands proceeding** - In March 2024, a court in Amsterdam granted a preliminary injunction freezing the shares in Vale Holdings B.V., a wholly owned subsidiary incorporated in the Netherlands, and the economic rights attached to those shares, in guarantee of an amount of approximately US\$986 (EUR920 million). 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 Samarco's Fundão dam in 2015.

In addition, in May and June 2024, three rogatory letters were fulfilled in Brazil, sent by the Amsterdam court, so that Vale could be notified about the filing of the lawsuit and the seizure orders. In the records of these rogatory letters, Vale has already anticipated its understanding about the lack of jurisdiction of the Dutch Justice to analyze the claims of the initial petition.

The first court event for Vale in the Dutch court is expected to take place in the first quarter of 2025. The Company is adopting the appropriate legal measures and believes its provisions are sufficient to comply with its obligations.

**Agreement on claims in the United Kingdom and the Netherlands** - In July 2024 (subsequent event), Vale and BHP have entered into a confidential agreement without any admission of liability pursuant to Vale and BHP will share equally any potential payment obligations arising from the UK and Dutch Claims, described above. As part of the agreement, the contribution claim brought by BHP against Vale in connection with the UK Claims will be withdrawn.

### Criminal proceedings

In September 2019, the court has dismissed part of the criminal charges but accepted charges of environmental crimes against Vale and one of its employees relating to an alleged omission in the provision of relevant information of environmental interest for public authorities. The Company cannot estimate when a final decision on the case will be issued. The likelihood of a financial loss to the Company is classified as possible and it is not yet possible to reliably estimate the amount of a potential loss to Vale.

### Tax proceeding

In September 2018, the federal tax authorities filed a request before a federal court in Belo Horizonte for an order to Vale's assets to secure the payment of Samarco's federal tax and social security debts, in the amount of approximately US\$2.0 billion (R\$11 billion) (as of June 2018). In May 2019, a favorable decision was issued dismissing the claim without prejudice, due to lack of procedural interest. The General Attorney for the National Treasury (Procuradoria Geral da Fazenda Nacional - "PGFN") filed an appeal to the local court, and a decision is pending. The likelihood of a financial loss to the Company is classified as possible and it is not yet possible to reliably estimate the amount of a potential loss to Vale.

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### Other proceedings

Vale is defendant in several private actions, before different state and federal courts in the states of Minas Gerais and Espírito Santo, brought by individuals and other entities seeking remediation and compensation for environmental, property and personal damages resulting from the Samarco dam failure. The potential loss was US\$6 as of June 30, 2024 (2023: US\$11) and the likelihood of a potential loss to the Company is classified as possible.

#### c) Judicial reorganization of Samarco

In April 2021, Samarco filed for Judicial Reorganization (“JR”) with the Courts of Minas Gerais to renegotiate its debt, which was held by bondholders abroad. The purpose of JR is to restructure Samarco’s debts and establish an independent and sustainable financial position, allowing Samarco to keep working to resume its operations safely and to fulfill its obligations related to the Renova Foundation.

In May 2023, Vale S.A. entered into a binding agreement jointly with BHPB, Samarco and certain creditors which hold together more than 50% of Samarco's debt, setting the parameters of Samarco’s debt restructuring to be implemented through a consensual restructuring plan, which was approved by the creditors, submitted to the JR Court in July 2023, and confirmed by the judge in September 2023.

In December 2023, Samarco’s existing US\$4.8 billion of financial debt held by creditors was exchanged for approximately US\$3.9 billion of long-term unsecured debt, bearing interest from 2023 to 2031.

After the execution of the plan, Samarco has a lean capital structure, in line with its operational ramp-up and cash flow generation. The plan considers the fund of the reparation and compensation programs capped at US\$1 billion from 2024 to 2030 and additional contributions after that period due to the Samarco’s projected cash flows generation.

#### d) Tax consequences for Vale arising from the consensual restructuring plan of Samarco

The plan provides that additional cash demands from Renova Foundation will be made through capital contributions to Samarco. The contributions have been carried out directly by Vale and BHPB to the Renova Foundation on behalf of Samarco and, therefore, they were deemed tax deductible as incurred, according to the Brazilian tax regulation. Therefore, due to the change in the mechanism to fund Renova, Vale will no longer be allowed to deduct future payments from its income tax computation as they are not tax deductible in Brazil. Thus, the deferred income tax asset over the provision in the amount of US\$1,078 was reversed in full, with the corresponding impact in the income statement for the six-month period ended June 30, 2023, recorded as “Income taxes” (note 7a).

## 25. Provision for de-characterization of dam structures and asset retirement obligations

The Company is subject to local laws and regulations, that requires the decommissioning of the assets that Vale operates at the end of their useful lives, therefore, expenses for demobilization occur predominantly after the end of operational activities. These obligations are regulated in Brazil by the ANM at the federal level and by environmental agencies at the state level. Among the requirements, the decommissioning plans must consider the physical, chemical and biological stability of the areas and post-closure actions for the period necessary to verify the effectiveness of the decommissioning. These obligations are accrued and are subject to critical estimates and assumptions applied to the measurement of costs by the Company. Depending on the geotechnical characteristics of the structures, the Company is required to de-characterize the structures, as shown in item a) below.

### Laws and regulations related to dam safety

In December 2023, the government of Minas Gerais published decree No. 48,747, which regulates the measurement and execution of environmental guarantees individually for each dam, based on the reservoir area, classification and purpose of the dam, and estimated de-characterization costs and should be kept throughout the useful life of the dam, from its startup phase until the de-characterization and socio-environmental recovery. The guarantee may be a cash deposit, bank deposit certificate, bank guarantee or insurance.

In June 2024, the government of Minas Gerais published decree No. 48,848, which amended Decree No. 48.747 and included property mortgage and property fiduciary lien as new modalities for environmental guarantees. The guarantees shall be presented up to 3 years, with half of the amount in 2024 and the remaining amount split between 2025 and 2026.

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The value of the guarantees is estimated at US\$324 (R\$1.8 billion), for which the Company intends to meet by providing property mortgage and property fiduciary lien, financial guarantees or insurance. Vale expects that the financial costs to be incurred will be immaterial.

### a) De-characterization of upstream geotechnical structures

As a result of the Brumadinho dam failure (note 23) and, in compliance with laws and regulations, the Company has decided to speed up the plan to “de-characterize” of all its dams and dikes, located in Brazil. The Company also operates tailings dams in Canada, including upstream compacted dams. However, the Company decided that these dams will be decommissioned using other methods, thus, the provision to carry out the decommissioning of dams in Canada is recognized as “Obligations for decommissioning assets and environmental obligations”, as presented in item (b) below.

These structures are in different stages of maturity, some of them still in the conceptual engineering phase, for which the estimate of expenditures includes in its methodology a high degree of uncertainty in the definition of the total cost of the project in accordance with best market practices.

Changes in the provisions are as follows:

	<b>Total</b>
<b>Balance as of December 31, 2023</b>	<b>3,451</b>
Revision to estimates	(131)
Disbursements	(251)
Monetary and present value adjustments	91
Translation adjustment	(422)
<b>Balance as of June 30, 2024</b>	<b>2,738</b>

The cash flow for de-characterization projects are estimated for a period up to 15 years and were discounted to present value at an annual rate in real terms, which increased from 5.41% to 6.45%.

### Operational stoppage and idle capacity

The Company has suspended some operations due to judicial decisions or technical analysis performed by Vale on its geotechnical structures located in Brazil. The Company has been recording losses in relation to the operational stoppage and idle capacity of the Iron Ore Solutions segment in the amounts of US\$36 and US\$79 for the three and six-month period ended June 30, 2024, respectively (2023: US\$50 and US\$124, respectively). The Company is working on legal and technical measures to resume all operations.

### b) Asset retirement obligations and environmental obligations

	<b>Liability</b>		<b>Discount rate</b>		<b>Cash flow maturity</b>	
	<b>June 30, 2024</b>	<b>December 31, 2023</b>	<b>June 30, 2024</b>	<b>December 31, 2023</b>	<b>June 30, 2024</b>	<b>December 31, 2023</b>
<b>Liability by geographical area</b>						
Brazil	1,914	2,415	6.41%	5.47%	2132	2132
Canada	1,529	1,592	1.47%	1.30%	2150	2150
Oman	159	158	3.46%	3.19%	2035	2035
Other regions	100	114	2.43%	2.04%	-	-
	<b>3,702</b>	<b>4,279</b>				
Operating plants	2,869	3,155				
Closed plants	833	1,124				
	<b>3,702</b>	<b>4,279</b>				

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### Provision changes during the period

	Asset retirement obligations	Environmental obligations	Total
<b>Balance as of December 31, 2023</b>	<b>3,779</b>	<b>500</b>	<b>4,279</b>
Disbursements	(85)	(36)	(121)
Revision to estimates	(201)	17	(184)
Monetary and present value adjustments	65	12	77
Translation adjustment	(294)	(55)	(349)
<b>Balance as of June 30, 2024</b>	<b>3,264</b>	<b>438</b>	<b>3,702</b>

### Financial guarantees

The Company has guarantees issued by financial institutions in the amount of US\$821 as of June 30, 2024 (December 31, 2023: US\$910), in connection with the asset retirement obligations for its Energy Transition Metals operations.

## 26. Legal proceedings

The Company is a defendant in numerous legal actions in the ordinary course of business, including civil, tax, environmental and labor proceedings.

The Company makes use of estimates to recognize the amounts and the probability of outflow of resources, based on reports and technical assessments and on management's assessment. Provisions are recognized for probable losses of which a reliable estimate can be made.

Arbitral, legal and administrative decisions against the Company, new jurisprudence and changes of existing evidence can result in changes regarding the probability of outflow of resources and on the estimated amounts, according to the assessment of the legal basis.

The lawsuits related to Brumadinho event (note 23) and the Samarco dam failure (note 24) are presented in its specific notes to these financial statements and, therefore, are not disclosed below.

### a) Provision for legal proceedings

	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
<b>Balance as of December 31, 2023</b>	<b>90</b>	<b>380</b>	<b>514</b>	<b>15</b>	<b>999</b>
Additions and reversals, net	5	18	78	3	104
Payments	(2)	(58)	(53)	-	(113)
Indexation and interest	9	15	1	1	26
Translation adjustment	(13)	(52)	(68)	(3)	(136)
<b>Balance as of June 30, 2024</b>	<b>89</b>	<b>303</b>	<b>472</b>	<b>16</b>	<b>880</b>
<b>Balance as of December 31, 2022</b>	<b>576</b>	<b>291</b>	<b>411</b>	<b>14</b>	<b>1,292</b>
Additions and reversals, net	3	27	51	2	83
Payments	(3)	(23)	(39)	(3)	(68)
Indexation and interest	18	20	11	2	51
Translation adjustment	49	23	37	1	110
<b>Balance as of June 30, 2023</b>	<b>643</b>	<b>338</b>	<b>471</b>	<b>16</b>	<b>1,468</b>

The Company has considered all information available to assess the likelihood of an outflow of resources and in the preparation on the estimate of the costs that may be required to settle the obligations.

**Tax litigations** – The Company is party to several administrative and legal proceedings related mainly to the incidence of Brazilian federal contributions ("PIS" and "COFINS"), Value-added tax ("ICMS") and other taxes.

**Civil litigations** – Refers to lawsuits for: (i) indemnities for losses, payments and contractual fines due to contractual imbalance or non-compliance that are alleged by suppliers, and (ii) land claims referring to real estate Vale's operational activities.

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**Labor litigations** – Refers to lawsuits for individual claims by in-house employees and service providers, primarily involving demands for additional compensation for overtime work, moral damages or health and safety conditions.

**Environmental litigations** – Refers mainly to proceedings for environmental damages and issues related to environmental licensing.

### b) Contingent liabilities

	June 30, 2024	December 31, 2023
Tax litigations	6,347	7,235
Civil litigations	1,343	1,366
Labor litigations	294	378
Environmental litigations	1,265	1,320
<b>Total</b>	<b>9,249</b>	<b>10,299</b>

### c) Judicial deposits

	June 30, 2024	December 31, 2023
Tax litigations	372	1,127
Civil litigations	82	122
Labor litigations	122	148
Environmental litigations	9	12
<b>Total</b>	<b>585</b>	<b>1,409</b>

**Tax litigations** – In December 2023, a judicial decision was issued to the lawsuit filed by Valepar (merged by Vale) in 2011 seeking the right to exclude the amount of dividends received in the form of interest on capital (“JCP”) from the PIS and COFINS tax base. This proceeding is fully guaranteed by a judicial deposit. This judicial decision determined the conversion of the judicial deposit to the Government, resulting in the reclassification of the amount to payable taxes and the judicial deposit to current assets in the financial statements for the year ended December 31, 2023. In April 2024, the proceeding was settled with the judicial deposit.

### d) Guarantees contracted for legal proceedings

In addition to the above-mentioned tax, civil, labor and environmental judicial deposits, the Company contracted US\$2.7 billion (December 31, 2023: US\$2.7 billion) in guarantees for its lawsuits, as an alternative to judicial deposits.

## 27. Employee benefits

	Notes	Current liabilities		Non-current liabilities	
		June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023
Payroll, related charges and other remunerations		636	867	-	-
Share-based payments	27(a)	18	27	-	-
Employee post-retirement obligation	27(b)	70	70	1,221	1,381
		<b>724</b>	<b>964</b>	<b>1,221</b>	<b>1,381</b>

### a) Share-based payments

For the long-term incentive programs, the Company compensation plans include Matching Program and Performance Share Unit program (“PSU”), with three-year-vesting cycles, respectively, with the aim of encouraging employee’s retention and encouraging their performance. The fair value of the programs is recognized on a straight-line basis over the three-year required service period, net of estimated losses.

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### Matching Program

The fair value of the Matching program was estimated using the Company's share price and ADR and the number of shares granted on the grant date. The information by valid programs during the six-month period ended June 30, 2024 is shown below:

	2024 Program	2023 Program	2022 Program
Granted shares	2,244,659	1,330,503	1,437,588
Share price	12.02	15.94	20.03

### Performance Shares Units ("PSU")

The fair value of the PSU program was measured by estimating the performance factor using Monte Carlo simulations for the Return to Shareholders Indicator and health and safety and sustainability indicators. The assumptions used for the Monte Carlo simulations are shown in the table below by valid program during the six-month period ended June 30, 2024, as well as the result used to calculate the expected value of the total performance factor.

	2024 Program	2023 Program	2022 Program
Granted shares	1,873,175	1,177,755	1,709,955
Date shares were granted	April 29, 2024	January 2, 2023	January 3, 2022
Share price	12.49	16.6	13.81
Expected volatility	35.60%	48.33%	39.00%
Expected term (in years)	3	3	3
Expected shareholder return indicator	66.95%	72.42%	51.20%
Expected performance factor	83.47%	79.32%	53.08%

### b) Employee post-retirement obligation

#### Reconciliation of assets and liabilities recognized in the statement of financial position

	June 30, 2024		December 31, 2023	
	Overfunded pension plans	Underfunded pension plans and other benefits	Overfunded pension plans	Underfunded pension plans and other benefits
<b>Movements of assets ceiling</b>				
<b>Balance at beginning of the period</b>	<b>1,071</b>	<b>-</b>	<b>1,114</b>	<b>-</b>
Interest income	38	-	103	1
Changes on asset ceiling	(125)	-	(192)	(28)
Translation adjustment	(109)	-	73	-
Transfer	-	-	(27)	27
<b>Balance at end of the period</b>	<b>875</b>	<b>-</b>	<b>1,071</b>	<b>-</b>
<b>Amount recognized in the statement of financial position</b>				
Present value of actuarial liabilities	(4,308)	(1,613)	(4,517)	(2,266)
Fair value of assets	5,243	322	5,656	815
Effect of the asset ceiling	(875)	-	(1,071)	-
<b>Assets (liabilities)</b>	<b>60</b>	<b>(1,291)</b>	<b>68</b>	<b>(1,451)</b>
Current liabilities	-	(70)	-	(70)
Non-current assets (liabilities) (i)	60	(1,221)	68	(1,381)
<b>Assets (liabilities)</b>	<b>60</b>	<b>(1,291)</b>	<b>68</b>	<b>(1,451)</b>

(i) Overfunded pension plans assets are recorded as "Other non-current assets" in the balance sheet.



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### 28. Equity

#### a) Share capital

As of June 30, 2024, the share capital was US\$61,614 corresponding to 4,539,007,580 shares issued and fully paid without par value. The Board of Directors may, regardless of changes to by-laws, approve the issue and cancellation of common shares, including the capitalization of profits and reserves to the extent authorized.

Shareholders			June 30, 2024
	Common shares	Golden shares	Total
Previ (i)	397,799,856	-	397,799,856
Mitsui&co (i)	286,347,055	-	286,347,055
Blackrock, Inc (ii)	289,063,618	-	289,063,618
<b>Total shareholders with more than 5% of capital</b>	<b>973,210,529</b>	<b>-</b>	<b>973,210,529</b>
Free floating	3,297,692,482	-	3,297,692,482
Golden shares	-	12	12
<b>Total outstanding (without shares in treasury)</b>	<b>4,270,903,011</b>	<b>12</b>	<b>4,270,903,023</b>
Shares in treasury	268,104,557	-	268,104,557
<b>Total capital</b>	<b>4,539,007,568</b>	<b>12</b>	<b>4,539,007,580</b>

(i) Number of shares owned by shareholders, as per statement provided by the custodian, based on shares listed at B3.

(ii) Number of shares as reported in BlackRock, Inc.'s Schedule 13G/A, filed with the SEC.

#### b) Cancellation of treasury shares

During the six-month period ended June 30, 2023, the Board of Directors approved cancellations of common shares issued by the Company, acquired and held in treasury, without reducing the value of its share capital. The effects were transferred to shareholders' equity as "Treasury shares canceled", between "Profit reserves" and "Treasury shares". There were no share cancellations during the six-month period ended June 30, 2024.

	Number of canceled shares	Carrying amount
Cancellation approved on March 2, 2023	239,881,683	4,164
<b>Six-month period ended June 30, 2023</b>	<b>239,881,683</b>	<b>4,164</b>

#### c) Share buyback program

	Total of shares repurchased		Effect on cash flows	
	2024	2023	Six-month period ended June 30	
			2024	2023
<b>Shares buyback program up to 150,000,000 shares (i)</b>				
Acquired by Parent	17,413,659	-	231	-
Acquired by wholly owned subsidiaries	11,645,514	-	158	-
<b>Total</b>	<b>29,059,173</b>	<b>-</b>	<b>389</b>	<b>-</b>
<b>Shares buyback program up to 500,000,000 shares (ii)</b>				
Acquired by Parent	-	73,179,052	-	1,102
Acquired by wholly owned subsidiaries	-	67,979,481	-	1,022
<b>Total</b>	<b>-</b>	<b>141,158,533</b>	<b>-</b>	<b>2,124</b>
<b>Shares buyback program</b>	<b>29,059,173</b>	<b>141,158,533</b>	<b>389</b>	<b>2,124</b>

(i) On October 26, 2023, a new share buyback program limited to a maximum of 150,000,000 common shares and their respective ADRs, over the next 18 months started from the end of the program previously on going.

(ii) On April 27, 2022, the Board of Directors approved the common shares buyback program, limited to a maximum of 500,000,000 common shares or their respective ADRs, with a term of 18 months. This program was concluded in 2023.

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### d) Remuneration approved

The Company's By-laws determines as its minimum mandatory remuneration to Vale shareholders an amount equal to 25% of the net income, after appropriations to legal and tax incentive reserves. The remuneration approved as interest on capital ("JCP") is gross up with the income tax applicable to Vale's shareholders. The remuneration to Vale's shareholders was based on the following resolutions:

- On July 25, 2024 (subsequent event), the Board of Directors approved interest on capital to its shareholders in the total amount of US\$1,608, which will be paid in September 2024 as an anticipation of the remuneration for the year ended December 31, 2024.
- On February 22, 2024, the Board of Directors approved dividends to its shareholders in the total amount of US\$2,364. This remuneration was fully paid in March 2024.
- On February 16, 2023, the Board of Directors approved the shareholder's remuneration of US\$1,569, of which US\$1,132 is part of the minimum mandatory remuneration for the year ended December 31, 2022 and US\$437 as an additional remuneration. This remuneration was fully paid in March 2023.

## 29. Related parties

The Company's related parties are subsidiaries, joint ventures, associates, shareholders and its related entities and key management personnel of the Company.

Related party transactions were made by the Company on terms equivalent to those that prevail in arm's-length transactions, with respect to price and market conditions that are no less favorable to the Company than those arranged with third parties.

Net operating revenue relates to sale of iron ore to the steelmakers and right to use capacity on railroads. Cost and operating expenses mostly relates to the variable lease payments of the pelletizing plants.

Purchases, accounts receivable and other assets, and accounts payable and other liabilities relate largely to amounts charged by joint ventures and associates related to the pelletizing plants operational lease and railway transportation services.

### a) Transactions with related parties

	Three-month period ended June 30,					
	2024			2023		
	Net operating revenue	Cost and operating expenses	Financial result	Net operating revenue	Cost and operating expenses	Financial result
<b>Joint Ventures</b>						
Aliança Geração de Energia S.A.	-	(24)	-	-	(26)	-
Pelletizing companies (i)	-	(75)	(7)	-	(45)	(11)
MRS Logística S.A.	-	(126)	-	-	(114)	-
Norte Energia S.A.	-	(16)	-	-	(33)	-
Other	8	14	-	11	(2)	-
	<b>8</b>	<b>(227)</b>	<b>(7)</b>	<b>11</b>	<b>(220)</b>	<b>(11)</b>
<b>Associates</b>						
VLI	109	(4)	-	76	(5)	-
Other	-	-	-	-	-	-
	<b>109</b>	<b>(4)</b>	<b>-</b>	<b>76</b>	<b>(5)</b>	<b>-</b>
<b>Shareholders</b>						
Cosan	-	(2)	-	-	-	-
Bradesco	-	-	(191)	-	-	197
Mitsui	56	-	-	85	-	-
Banco do Brasil	-	-	1	-	-	-
	<b>56</b>	<b>(2)</b>	<b>(190)</b>	<b>85</b>	<b>-</b>	<b>197</b>
<b>Total</b>	<b>173</b>	<b>(233)</b>	<b>(197)</b>	<b>172</b>	<b>(225)</b>	<b>186</b>

(i) Aggregated entities: Companhia Coreano-Brasileira de Pelotização, Companhia Hispano-Brasileira de Pelotização, Companhia Ítalo-Brasileira de Pelotização and Companhia Nipo-Brasileira de Pelotização.

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	Six-month period ended June 30,					
	2024			2023		
	Net operating revenue	Cost and operating expenses	Financial result	Net operating revenue	Cost and operating expenses	Financial result
<b>Joint Ventures</b>						
Companhia Siderúrgica do Pecém	-	-	-	93	-	-
Aliança Geração de Energia S.A.	-	(51)	-	-	(52)	-
Pelletizing companies (i)	-	(152)	(16)	-	(88)	(25)
MRS Logística S.A.	-	(216)	-	-	(178)	-
Norte Energia S.A.	-	(31)	-	-	(60)	-
Other	17	(7)	(3)	16	(5)	-
	<b>17</b>	<b>(457)</b>	<b>(19)</b>	<b>109</b>	<b>(383)</b>	<b>(25)</b>
<b>Associates</b>						
VLI	191	(10)	(1)	145	(11)	(1)
Other	-	(1)	3	-	-	-
	<b>191</b>	<b>(11)</b>	<b>2</b>	<b>145</b>	<b>(11)</b>	<b>(1)</b>
<b>Shareholders</b>						
Cosan	-	(3)	-	-	-	-
Bradesco	-	-	(230)	-	-	269
Banco do Brasil	-	-	1	-	-	-
Mitsui	117	-	-	130	-	-
	<b>117</b>	<b>(3)</b>	<b>(229)</b>	<b>130</b>	<b>-</b>	<b>269</b>
<b>Total</b>	<b>325</b>	<b>(471)</b>	<b>(246)</b>	<b>384</b>	<b>(394)</b>	<b>243</b>

(i) Aggregated entities: Companhia Coreano-Brasileira de Pelotização, Companhia Hispano-Brasileira de Pelotização, Companhia Ítalo-Brasileira de Pelotização and Companhia Nipo-Brasileira de Pelotização.

### b) Outstanding balances with related parties

	Assets					
	June 30, 2024			December 31, 2023		
	Cash and cash equivalents	Accounts receivable	Dividends receivable and other assets	Cash and cash equivalents	Accounts receivable	Dividends receivable and other assets
<b>Joint Ventures</b>						
Pelletizing companies (i)	-	-	-	-	-	27
MRS Logística S.A.	-	14	30	-	16	34
Other	-	4	13	-	4	43
	-	<b>18</b>	<b>43</b>	-	<b>20</b>	<b>104</b>
<b>Associates</b>						
VLI	-	117	-	-	46	-
PTVI	-	1	-	-	-	-
Other	-	1	2	-	1	2
	-	<b>119</b>	<b>2</b>	-	<b>47</b>	<b>2</b>
<b>Shareholders</b>						
Cosan	-	-	-	-	1	-
Bradesco	406	-	96	176	-	313
Banco do Brasil	35	-	-	58	-	-
Mitsui	-	2	-	-	5	-
	<b>441</b>	<b>2</b>	<b>96</b>	<b>234</b>	<b>6</b>	<b>313</b>
Pension plan	-	17	-	-	16	-
<b>Total</b>	<b>441</b>	<b>156</b>	<b>141</b>	<b>234</b>	<b>89</b>	<b>419</b>

(i) Aggregated entities: Companhia Coreano-Brasileira de Pelotização, Companhia Hispano-Brasileira de Pelotização, Companhia Ítalo-Brasileira de Pelotização and Companhia Nipo-Brasileira de Pelotização.

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	June 30, 2024		December 31, 2023	
	Supplier and contractors	Financial instruments and other liabilities	Supplier and contractors	Financial instruments and other liabilities
<b>Joint Ventures</b>				
Pelletizing companies (i)	110	144	51	290
MRS Logística S.A.	15	-	48	-
Other	32	-	39	-
	<b>157</b>	<b>144</b>	<b>138</b>	<b>290</b>
<b>Associates</b>				
VLI	2	143	1	59
PTVI	92	-	-	-
Other	-	-	4	-
	<b>94</b>	<b>143</b>	<b>5</b>	<b>59</b>
<b>Shareholders</b>				
Cosan	1	-	1	-
Bradesco	-	58	-	23
	<b>1</b>	<b>58</b>	<b>1</b>	<b>23</b>
<b>Pension plan</b>	10	-	14	-
<b>Total</b>	<b>262</b>	<b>345</b>	<b>158</b>	<b>372</b>

(i) Aggregated entities: Companhia Coreano-Brasileira de Pelotização, Companhia Hispano-Brasileira de Pelotização, Companhia Ítalo-Brasileira de Pelotização and Companhia Nipo-Brasileira de Pelotização.

### c) Key management personnel compensation

During the six-month period ended June 30, 2024, the compensation of the Company's key management personnel was US\$15 (2023: US\$20).