



# Interim Financial Statements

## September 30, 2020

BRGAAP in R\$ (English)

**Vale S.A. Interim Financial Statements  
Contents**

|   | <b>Page</b> |
|---|-------------|
| Report on review of quarterly information                                   | 3           |
| Consolidated and Parent Company Income Statement                            | 5-6         |
| Consolidated and Parent Company Statement of Comprehensive Income           | 7           |
| Consolidated and Parent Company Statement of Cash Flows                     | 8-9         |
| Consolidated and Parent Company Statement of Financial Position             | 10          |
| Consolidated Statement of Changes in Equity                                 | 11          |
| Consolidated and Parent Company Value Added Statement                       | 12          |
| Notes to the Interim Financial Statements                                   | 13          |
| 1. Corporate information  |             |
| 2. Basis of preparation of the interim financial statements                 |             |
| 3. Significant events in the current period                                 |             |
| 4. Brumadinho's dam failure   |             |
| 5. Information by business segment and by geographic area                   |             |
| 6. Costs and expenses by nature   |             |
| 7. Financial results  |             |
| 8. Income taxes   |             |
| 9. Basic and diluted earnings (loss) per share                              |             |
| 10. Accounts receivable   |             |
| 11. Inventories   |             |
| 12. Other financial assets and liabilities                                  |             |
| 13. Investments in associates and joint ventures                            |             |
| 14. Intangibles   |             |
| 15. Property, plant and equipment   |             |
| 16. Loans, borrowings, cash and cash equivalents and short-term investments |             |
| 17. Liabilities related to associates and joint ventures                    |             |
| 18. Financial instruments classification                                    |             |
| 19. Fair value estimate   |             |
| 20. Derivative financial instruments  |             |
| 21. Provisions  |             |
| 22. Litigations   |             |
| 23. Employee post-retirement obligations                                    |             |
| 24. Stockholders' equity  |             |
| 25. Related parties   |             |
| 26. Parent Company information (individual interim information)             |             |
| 27. Additional information about derivatives financial instruments          |             |



(A free translation of the original in Portuguese)

Vale S.A.

## **Report on review of quarterly information**

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

### **Introduction**

We have reviewed the accompanying consolidated and parent company interim accounting information of Vale S.A. ("Company"), included in the Quarterly Information Form - ITR for the quarter ended September 30, 2020, which comprises the statements of financial position as of September 30, 2020 and the respective income statements and the statements of comprehensive income for the three and nine-month periods then ended, of changes in equity for the nine-month period then ended, the parent company statement of cash flows for the nine-month period then ended and the consolidated statements of cash flows for the three and nine-month periods then ended, and a summary of significant accounting policies and other explanatory information.

Management is responsible for the preparation of the consolidated and parent company interim accounting information in accordance with the accounting standard CPC 21 - Interim Financial Reporting, of the Brazilian Accounting Pronouncements Committee (CPC), and the International Accounting Standard (IAS) 34 - Interim Financial Reporting, issued by the International Accounting Standards Board (IASB), as well as the presentation of this information in accordance with the standards issued by the Brazilian Securities Commission (CVM), applicable to the preparation of the Quarterly Information - ITR. Our responsibility is to express a conclusion on this interim accounting information based on our review.

### **Scope of review**

We conducted our review in accordance with Brazilian and International Standards on Reviews of Interim Financial Information (NBC TR 2410 - Review of Interim Financial Information Performed by the Independent Auditor of the Entity and ISRE 2410 - Review of Interim Financial Information Performed by the Independent Auditor of the Entity, respectively). A review of interim information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Brazilian and International Standards on Auditing and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

### **Conclusion on the interim information**

Based on our review, nothing has come to our attention that causes us to believe that the accompanying consolidated and parent company interim accounting information included in the quarterly information referred to above has not been prepared, in all material respects, in accordance with CPC 21 and IAS 34 applicable to the preparation of the Quarterly Information - ITR, and presented in accordance with the standards issued by the CVM.



(A free translation of the original in Portuguese)

Vale S.A.

### **Emphasis of matter**

#### **Brumadinho's dam failure**

We draw attention to Note 4 to the consolidated and parent company interim accounting information that describes the actions taken by the Company and the impacts on the interim accounting information as a consequence of the Brumadinho's dam failure. As disclosed by Management, the Company has incurred costs and recorded provisions based on its best estimates and assumptions. Given the nature and uncertainties inherent in this type of event, the amounts recognized and/or disclosed will be reassessed by the Company and may be adjusted significantly in future periods, as new facts and circumstances become known. Our conclusion is not qualified in relation to this matter.

### **Other matters**

#### **Value added statements**

The quarterly information referred to above includes the parent company and consolidated statements of value added for the nine-month period ended September 30, 2020. These statements are the responsibility of the Company's management and are presented as supplementary information under IAS 34. These statements have been subjected to review procedures performed together with the review of the interim accounting information for the purpose of concluding whether they are reconciled with the interim accounting information and accounting records, as applicable, and if their form and content are in accordance with the criteria defined in the accounting standard CPC 09 - "Statement of Value Added". Based on our review, nothing has come to our attention that causes us to believe that these statements of value added have not been properly prepared, in all material respects, in accordance with the criteria established in this accounting standard, and consistent with the parent company and consolidated interim accounting information taken as a whole.

Rio de Janeiro, October 28, 2020

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5

Patricio Marques Roche  
Contador CRC 1RJ081115/O-4

## Income Statement

In millions of Brazilian reais, except earnings per share data

|   |              | Consolidated                              |                |  |                 |
|---|--------------|---|----------------|--|-----------------|
|   |              | Three-month period ended<br>September 30, |                | Nine-month period ended<br>September 30, |                 |
|   | Notes        | 2020                                      | 2019           | 2020                                     | 2019            |
| Net operating revenue   | 5(c)         | 57,906                                    | 40,664         | 129,591                                  | 107,621         |
| Cost of goods sold and services rendered                              | 6(a)         | (25,893)                                  | (22,628)       | (67,775)                                 | (60,660)        |
| <b>Gross profit</b>   |              | <b>32,013</b>                             | <b>18,036</b>  | <b>61,816</b>                            | <b>46,961</b>   |
| <b>Operating expenses</b>   |              |   |                |  |                 |
| Selling and administrative expenses                                   | 6(b)         | (684)                                     | (504)          | (1,864)                                  | (1,349)         |
| Research and evaluation expenses                                      |              | (563)                                     | (495)          | (1,476)                                  | (1,114)         |
| Pre-operating and operational stoppage                                |              | (1,011)                                   | (1,140)        | (3,480)                                  | (3,268)         |
| Brumadinho event  | 4            | (613)                                     | (893)          | (2,014)                                  | (24,129)        |
| Other operating expenses, net   | 6(c)         | (612)                                     | (492)          | (2,161)                                  | (963)           |
|   |              | <b>(3,483)</b>                            | <b>(3,524)</b> | <b>(10,995)</b>                          | <b>(30,823)</b> |
| Impairment and disposals of non-current assets                        | 4, 13 and 15 | (1,608)                                   | (130)          | (4,004)                                  | (1,333)         |
| <b>Operating income</b>   |              | <b>26,922</b>                             | <b>14,382</b>  | <b>46,817</b>                            | <b>14,805</b>   |
| Financial income  | 7            | 370                                       | 525            | 1,576                                    | 1,368           |
| Financial expenses  | 7            | (6,571)                                   | (4,308)        | (11,993)                                 | (10,199)        |
| Other financial items, net  | 7            | (1,179)                                   | (773)          | (10,040)                                 | (1,149)         |
| Equity results and other results in associates and joint ventures     | 13 and 17    | (211)                                     | 501            | (3,763)                                  | (2,047)         |
| <b>Income before income taxes</b>                                     |              | <b>19,331</b>                             | <b>10,327</b>  | <b>22,597</b>                            | <b>2,778</b>    |
| <b>Income taxes</b>   | 8            |   |                |  |                 |
| Current tax   |              | (4,018)                                   | (3,382)        | (7,352)                                  | (5,770)         |
| Deferred tax  |              | (241)                                     | (484)          | 5,341                                    | 2,489           |
|   |              | <b>(4,259)</b>                            | <b>(3,866)</b> | <b>(2,011)</b>                           | <b>(3,281)</b>  |
| <b>Net income (loss)</b>  |              | <b>15,072</b>                             | <b>6,461</b>   | <b>20,586</b>                            | <b>(503)</b>    |
| Loss attributable to noncontrolling interests                         |              | (543)                                     | (81)           | (1,302)                                  | (239)           |
| <b>Net income (loss) attributable to Vale's stockholders</b>          |              | <b>15,615</b>                             | <b>6,542</b>   | <b>21,888</b>                            | <b>(264)</b>    |
| <b>Earnings (loss) per share attributable to Vale's stockholders:</b> |              |   |                |  |                 |
| <b>Basic and diluted earnings (loss) per share:</b>                   | 9            |   |                |  |                 |
| Common share (R\$)  |              | 3.04                                      | 1.26           | 4.27                                     | (0.05)          |

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

## Income Statement

In millions of Brazilian reais, except earnings per share data

|   | Parent company           |                |                         |                 |
|---|--------------------------|----------------|-------------------------|-----------------|
|   | Three-month period ended |                | Nine-month period ended |                 |
|   | September 30,            |                | September 30,           |                 |
|   | 2020                     | 2019           | 2020                    | 2019            |
| Net operating revenue   | 39,698                   | 28,257         | 83,346                  | 64,805          |
| Cost of goods sold and services rendered                              | (11,939)                 | (10,030)       | (30,498)                | (28,328)        |
| <b>Gross profit</b>   | <b>27,759</b>            | <b>18,227</b>  | <b>52,848</b>           | <b>36,477</b>   |
| <b>Operating revenues (expenses)</b>                                  |                          |                |                         |                 |
| Selling and administrative expenses                                   | (344)                    | (235)          | (944)                   | (640)           |
| Research and evaluation expenses                                      | (241)                    | (217)          | (621)                   | (552)           |
| Pre-operating and operational stoppage                                | (957)                    | (1,126)        | (3,118)                 | (3,171)         |
| Equity results from subsidiaries                                      | 3,461                    | (2,147)        | 3,456                   | 4,849           |
| Brumadinho event  | (613)                    | (893)          | (2,014)                 | (24,129)        |
| Other operating expenses, net   | (747)                    | (995)          | (2,590)                 | (650)           |
|   | <b>559</b>               | <b>(5,613)</b> | <b>(5,831)</b>          | <b>(24,293)</b> |
| Impairment and disposals of non-current assets                        | (76)                     | (2)            | (214)                   | (1,064)         |
| <b>Operating income</b>   | <b>28,242</b>            | <b>12,612</b>  | <b>46,803</b>           | <b>11,120</b>   |
| Financial income  | 74                       | 130            | 626                     | 298             |
| Financial expenses  | (6,409)                  | (3,315)        | (11,822)                | (9,060)         |
| Other financial items, net  | (1,373)                  | (340)          | (8,187)                 | (488)           |
| Equity results and other results in associates and joint ventures     | (211)                    | 501            | (3,763)                 | (2,047)         |
| <b>Income (loss) before income taxes</b>                              | <b>20,323</b>            | <b>9,588</b>   | <b>23,657</b>           | <b>(177)</b>    |
| <b>Income taxes</b>   |                          |                |                         |                 |
| Current tax   | (3,298)                  | (2,890)        | (5,713)                 | (4,438)         |
| Deferred tax  | (1,410)                  | (156)          | 3,944                   | 4,351           |
|   | <b>(4,708)</b>           | <b>(3,046)</b> | <b>(1,769)</b>          | <b>(87)</b>     |
| <b>Net income (loss) attributable to Vale's stockholders</b>          | <b>15,615</b>            | <b>6,542</b>   | <b>21,888</b>           | <b>(264)</b>    |
| <b>Earnings (loss) per share attributable to Vale's stockholders:</b> |                          |                |                         |                 |
| <b>Basic and diluted earnings (loss) per share:</b>                   |                          |                |                         |                 |
| Common share (R\$)  | 3.04                     | 1.26           | 4.27                    | (0.05)          |

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



## Statement of Comprehensive Income

In millions of Brazilian reais

|   | Consolidated             |               |                         |                |
|---|--------------------------|---------------|-------------------------|----------------|
|   | Three-month period ended |               | Nine-month period ended |                |
|   | September 30,            |               | September 30,           |                |
|   | 2020                     | 2019          | 2020                    | 2019           |
| <b>Net income (loss)</b>  | <b>15,072</b>            | <b>6,461</b>  | <b>20,586</b>           | <b>(503)</b>   |
| <b>Other comprehensive income (loss):</b>   |                          |               |                         |                |
| <b>Items that will not be subsequently reclassified to income statement</b>                   |                          |               |                         |                |
| Retirement benefit obligations  | 422                      | (291)         | (624)                   | (840)          |
| Fair value adjustment to investment in equity securities                                      | 815                      | (449)         | 312                     | (811)          |
| <b>Total items that will not be subsequently reclassified to income statement, net of tax</b> | <b>1,237</b>             | <b>(740)</b>  | <b>(312)</b>            | <b>(1,651)</b> |
| <b>Items that may be subsequently reclassified to income statement</b>                        |                          |               |                         |                |
| Translation adjustments   | 3,753                    | 6,623         | 25,967                  | 6,900          |
| Net investments hedge (note 20b)  | (458)                    | (630)         | (3,484)                 | (546)          |
| Cash flow hedge (note 20b)  | (299)                    | (4)           | (291)                   | (4)            |
| <b>Total of items that may be subsequently reclassified to income statement, net of tax</b>   | <b>2,996</b>             | <b>5,989</b>  | <b>22,192</b>           | <b>6,350</b>   |
| <b>Total comprehensive income</b>   | <b>19,305</b>            | <b>11,710</b> | <b>42,466</b>           | <b>4,196</b>   |
| Comprehensive income (loss) attributable to noncontrolling interests                          | (726)                    | (49)          | (2,976)                 | (216)          |
| <b>Comprehensive income attributable to Vale's stockholders</b>                               | <b>20,031</b>            | <b>11,759</b> | <b>45,442</b>           | <b>4,412</b>   |

|   | Parent company           |               |                         |                |
|---|--------------------------|---------------|-------------------------|----------------|
|   | Three-month period ended |               | Nine-month period ended |                |
|   | September 30,            |               | September 30,           |                |
|   | 2020                     | 2019          | 2020                    | 2019           |
| <b>Net income (loss)</b>  | <b>15,615</b>            | <b>6,542</b>  | <b>21,888</b>           | <b>(264)</b>   |
| <b>Other comprehensive income (loss):</b>   |                          |               |                         |                |
| <b>Items that will not be subsequently reclassified to income statement</b>                   |                          |               |                         |                |
| Retirement benefit obligations  | 210                      | (9)           | 191                     | (43)           |
| Fair value adjustment to investment in equity securities                                      | 680                      | (368)         | 344                     | (656)          |
| Equity results  | 347                      | (363)         | (847)                   | (952)          |
| <b>Total items that will not be subsequently reclassified to income statement, net of tax</b> | <b>1,237</b>             | <b>(740)</b>  | <b>(312)</b>            | <b>(1,651)</b> |
| <b>Items that may be subsequently reclassified to income statement</b>                        |                          |               |                         |                |
| Translation adjustments   | 3,936                    | 6,591         | 27,641                  | 6,877          |
| Net investments hedge (note 20b)  | (458)                    | (630)         | (3,484)                 | (546)          |
| Equity results  | (299)                    | (4)           | (291)                   | (4)            |
| <b>Total of items that may be subsequently reclassified to income statement, net of tax</b>   | <b>3,179</b>             | <b>5,957</b>  | <b>23,866</b>           | <b>6,327</b>   |
| <b>Total comprehensive income</b>   | <b>20,031</b>            | <b>11,759</b> | <b>45,442</b>           | <b>4,412</b>   |

Items above are stated net of tax and the related taxes are disclosed in note 8.

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

## Statement of Cash Flows

In millions of Brazilian reais

|  | Consolidated             |                |                         |                 |
|--|--------------------------|----------------|-------------------------|-----------------|
|  | Three-month period ended |                | Nine-month period ended |                 |
|  | September 30,            |                | September 30,           |                 |
|  | 2020                     | 2019           | 2020                    | 2019            |
| <b>Cash flow from operations (a)</b>   | <b>29,919</b>            | <b>20,496</b>  | <b>50,107</b>           | <b>46,237</b>   |
| Interest on loans and borrowings paid (note 16)                                    | (1,117)                  | (1,912)        | (3,126)                 | (3,781)         |
| Derivatives received (paid), net   | (672)                    | (362)          | 62                      | (817)           |
| Interest on participative stockholders' debentures paid                            | (3)                      | -              | (472)                   | (351)           |
| Income taxes (including settlement program)  | (2,509)                  | (1,961)        | (6,189)                 | (5,202)         |
| <b>Net cash provided by operating activities</b>                                   | <b>25,618</b>            | <b>16,261</b>  | <b>40,382</b>           | <b>36,086</b>   |
| <b>Cash flow from investing activities:</b>  |                          |                |                         |                 |
| Investment fund applications   | (172)                    | -              | (672)                   | -               |
| Capital expenditures   | (4,693)                  | (3,544)        | (14,893)                | (8,715)         |
| Additions to investments   | (1)                      | (281)          | (366)                   | (283)           |
| Acquisition of subsidiary, net of cash (note 13)                                   | -                        | (1,570)        | -                       | (3,454)         |
| Proceeds from disposal of assets and investments                                   | 449                      | 82             | 466                     | 475             |
| Dividends received from associates and joint ventures                              | 10                       | 1              | 419                     | 762             |
| Judicial deposits and restricted cash related to Brumadinho event (note 4)         | 50                       | 6,683          | (50)                    | (5,888)         |
| Short-term investment  | -                        | (3,770)        | 3,318                   | (3,820)         |
| Other investments activities, net  | (1,056)                  | 232            | (1,978)                 | (371)           |
| <b>Net cash used in investing activities</b>                                       | <b>(5,413)</b>           | <b>(2,167)</b> | <b>(13,756)</b>         | <b>(21,294)</b> |
| <b>Cash flow from financing activities:</b>  |                          |                |                         |                 |
| Loans and borrowings from third-parties (note 16)                                  | 9,585                    | 3,784          | 34,004                  | 11,886          |
| Payments of loans and borrowings from third-parties (note 16)                      | (29,368)                 | (7,013)        | (31,674)                | (14,213)        |
| Payments of leasing  | (244)                    | (206)          | (726)                   | (507)           |
| Dividends and interest on capital paid to stockholders                             | (18,492)                 | -              | (18,492)                | -               |
| Dividends and interest on capital paid to noncontrolling interest                  | (15)                     | (395)          | (56)                    | (683)           |
| <b>Net cash used in financing activities</b>                                       | <b>(38,534)</b>          | <b>(3,830)</b> | <b>(16,944)</b>         | <b>(3,517)</b>  |
| <b>Increase (decrease) in cash and cash equivalents</b>                            | <b>(18,329)</b>          | <b>10,264</b>  | <b>9,682</b>            | <b>11,275</b>   |
| Cash and cash equivalents in the beginning of the period                           | 66,333                   | 23,176         | 29,627                  | 22,413          |
| Effect of exchange rate changes on cash and cash equivalents                       | 1,885                    | 2,204          | 10,580                  | 1,956           |
| <b>Cash and cash equivalents at end of the period</b>                              | <b>49,889</b>            | <b>35,644</b>  | <b>49,889</b>           | <b>35,644</b>   |
| <b>Non-cash transactions:</b>  |                          |                |                         |                 |
| Additions to property, plant and equipment - capitalized loans and borrowing costs | 67                       | 133            | 274                     | 429             |
| <b>Cash flow from operating activities:</b>  |                          |                |                         |                 |
| Income before income taxes   | 19,331                   | 10,327         | 22,597                  | 2,778           |
| <b>Adjusted for:</b>   |                          |                |                         |                 |
| Provisions related to Brumadinho event (note 4)                                    | -                        | -              | 108                     | 22,126          |
| Equity results and other results in associates and joint ventures                  | 211                      | (501)          | 3,763                   | 2,047           |
| Impairment and disposal of non-current assets                                      | 1,608                    | 130            | 4,004                   | 1,333           |
| Depreciation, depletion and amortization   | 4,162                    | 3,690          | 12,174                  | 10,505          |
| Financial results, net   | 7,380                    | 4,556          | 20,457                  | 9,980           |
| <b>Changes in assets and liabilities:</b>  |                          |                |                         |                 |
| Accounts receivable  | (1,513)                  | 1,973          | (4,031)                 | 1,213           |
| Inventories  | (1,626)                  | (214)          | (3,157)                 | (1,019)         |
| Suppliers and contractors (i)  | 1,064                    | 1,635          | (1,260)                 | 3,198           |
| Provision - Payroll, related charges and other remunerations                       | 792                      | 737            | 538                     | (374)           |
| Payments related to Brumadinho event (note 4) (ii)                                 | (1,176)                  | (1,544)        | (2,975)                 | (2,786)         |
| Other assets and liabilities, net  | (314)                    | (293)          | (2,111)                 | (2,764)         |
| <b>Cash flow from operations (a)</b>   | <b>29,919</b>            | <b>20,496</b>  | <b>50,107</b>           | <b>46,237</b>   |

(i) Includes variable lease payments.

(ii) Additionally, the Company incurred in expenses in the amount of R\$613 and R\$1,906 for the three and nine-month periods ended September 30, 2020, respectively, and R\$893 and R\$1,906 for the three and nine-month periods ended September 30, 2019, respectively, which did not qualify for provision and, as such were recognized in the income statement.

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



## Statement of Cash Flows

In millions of Brazilian reais

|  | Parent company                        |                 |
|--|---------------------------------------|-----------------|
|  | Nine-month period ended September 30, |                 |
|  | 2020                                  | 2019            |
| <b>Cash flow from operations (a)</b>   | <b>34,147</b>                         | <b>31,350</b>   |
| Interest on loans and borrowings paid  | (4,426)                               | (3,801)         |
| Derivatives received (paid), net   | (735)                                 | (946)           |
| Interest on participative stockholders' debentures paid                            | (472)                                 | (351)           |
| Income taxes (including settlement program)  | (5,379)                               | (3,852)         |
| <b>Net cash provided by operating activities</b>                                   | <b>23,135</b>                         | <b>22,400</b>   |
| <b>Cash flow from investing activities:</b>  |                                       |                 |
| Capital expenditures   | (7,534)                               | (4,548)         |
| Additions to investments   | (1,563)                               | (5,708)         |
| Investment fund applications   | (672)                                 | -               |
| Proceeds from disposal of assets and investments                                   | 174                                   | 61              |
| Dividends received   | 422                                   | 1,650           |
| Judicial deposits and restricted cash related to Brumadinho event                  | (50)                                  | (5,888)         |
| Short-term investment  | 3,234                                 | (3,435)         |
| Other investments activities, net (i)  | 7,857                                 | (3,413)         |
| <b>Net cash provided by (used in) investing activities</b>                         | <b>1,868</b>                          | <b>(21,281)</b> |
| <b>Cash flow from financing activities:</b>  |                                       |                 |
| Loans and borrowings from third-parties  | 25                                    | 2,894           |
| Payments of loans and borrowings from third-parties                                | (3,210)                               | (4,143)         |
| Payments of leasing  | (136)                                 | (114)           |
| Dividends and interest on capital paid to stockholders                             | (18,492)                              | -               |
| <b>Net cash used in financing activities</b>                                       | <b>(21,813)</b>                       | <b>(1,363)</b>  |
| <b>Increase (decrease) in cash and cash equivalents</b>                            | <b>3,190</b>                          | <b>(244)</b>    |
| Cash and cash equivalents in the beginning of the period                           | 9,597                                 | 4,835           |
| Effects of disposals of subsidiaries and merger, net of cash and cash equivalents  | 188                                   | -               |
| <b>Cash and cash equivalents at end of the period</b>                              | <b>12,975</b>                         | <b>4,591</b>    |
| <b>Non-cash transactions:</b>  |                                       |                 |
| Additions to property, plant and equipment - capitalized loans and borrowing costs | 274                                   | 428             |
| <b>Cash flow from operating activities:</b>  |                                       |                 |
| Income (loss) before income taxes  | 23,657                                | (177)           |
| <b>Adjusted for:</b>   |                                       |                 |
| Provisions related to Brumadinho event   | 108                                   | 22,126          |
| Equity results from subsidiaries   | (3,456)                               | (4,849)         |
| Equity results and other results in associates and joint ventures                  | 3,763                                 | 2,047           |
| Impairment and disposal of non-current assets                                      | 214                                   | 1,064           |
| Depreciation, amortization and depletion   | 5,984                                 | 5,729           |
| Financial results, net   | 19,383                                | 9,250           |
| <b>Changes in assets and liabilities:</b>  |                                       |                 |
| Accounts receivable  | (14,555)                              | (2,605)         |
| Inventories  | (853)                                 | (532)           |
| Suppliers and contractors  | (116)                                 | 3,510           |
| Provision - Payroll, related charges and other remunerations                       | 539                                   | 120             |
| Payments related to Brumadinho event (note 4)                                      | (2,975)                               | (2,786)         |
| Other assets and liabilities, net  | 2,454                                 | (1,547)         |
| <b>Cash flow from operations (a)</b>   | <b>34,147</b>                         | <b>31,350</b>   |

(i) Includes loans and advances from/to related parties.

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

## Statement of Financial Position

In millions of Brazilian reais

|  | Notes | Consolidated          |                      | Parent company        |                      |
|--|-------|-----------------------|----------------------|-----------------------|----------------------|
|  |       | September 30,<br>2020 | December 31,<br>2019 | September 30,<br>2020 | December 31,<br>2019 |
| <b>Assets</b>  |       |                       |                      |                       |                      |
| <b>Current assets</b>                                |       |                       |                      |                       |                      |
| Cash and cash equivalents                            | 16    | 49,889                | 29,627               | 12,975                | 9,597                |
| Short-term investments                               | 16    | 707                   | 3,329                | 707                   | 3,309                |
| Accounts receivable                                  | 10    | 17,002                | 10,195               | 36,412                | 16,599               |
| Other financial assets                               | 12    | 2,562                 | 3,062                | 32                    | 1,140                |
| Inventories  | 11    | 24,418                | 17,228               | 6,217                 | 5,310                |
| Prepaid income taxes                                 |       | 660                   | 1,492                | 301                   | 648                  |
| Recoverable taxes                                    |       | 2,011                 | 2,227                | 657                   | 929                  |
| Others   |       | 1,707                 | 1,538                | 2,133                 | 1,569                |
|  |       | <b>98,956</b>         | <b>68,698</b>        | <b>59,434</b>         | <b>39,101</b>        |
| <b>Non-current assets</b>                            |       |                       |                      |                       |                      |
| Judicial deposits                                    | 22(c) | 11,504                | 12,629               | 11,181                | 12,242               |
| Other financial assets                               | 12    | 13,938                | 11,074               | 3,970                 | 3,972                |
| Prepaid income taxes                                 |       | 3,047                 | 2,407                | -                     | -                    |
| Recoverable taxes                                    |       | 2,998                 | 2,446                | 1,887                 | 1,471                |
| Deferred income taxes                                | 8(a)  | 54,210                | 37,151               | 41,513                | 28,770               |
| Others   |       | 3,416                 | 1,998                | 976                   | 937                  |
|  |       | <b>89,113</b>         | <b>67,705</b>        | <b>59,527</b>         | <b>47,392</b>        |
| Investments  | 13    | 11,482                | 11,278               | 187,665               | 144,594              |
| Intangibles  | 14    | 37,307                | 34,257               | 16,215                | 16,271               |
| Property, plant and equipment                        | 15    | 214,280               | 187,733              | 109,116               | 105,875              |
|  |       | <b>352,182</b>        | <b>300,973</b>       | <b>372,523</b>        | <b>314,132</b>       |
| <b>Total assets</b>                                  |       | <b>451,138</b>        | <b>369,671</b>       | <b>431,957</b>        | <b>353,233</b>       |
| <b>Liabilities</b>                                   |       |                       |                      |                       |                      |
| <b>Current liabilities</b>                           |       |                       |                      |                       |                      |
| Suppliers and contractors                            |       | 17,478                | 16,556               | 10,606                | 10,765               |
| Loans, borrowings and leases                         | 16    | 5,775                 | 5,805                | 3,735                 | 4,323                |
| Other financial liabilities                          | 12    | 10,062                | 5,658                | 10,956                | 6,678                |
| Taxes payable  |       | 4,554                 | 2,065                | 3,585                 | 1,062                |
| Settlement program ("REFIS")                         | 8(c)  | 1,764                 | 1,737                | 1,728                 | 1,702                |
| Liabilities related to associates and joint ventures | 17    | 3,880                 | 2,079                | 3,880                 | 2,079                |
| Provisions   | 21    | 5,732                 | 4,956                | 3,567                 | 3,210                |
| Liabilities related to Brumadinho                    | 4     | 5,282                 | 6,319                | 5,282                 | 6,319                |
| De-characterization of dams                          | 4     | 1,804                 | 1,247                | 1,804                 | 1,247                |
| Interest on capital                                  |       | -                     | 6,333                | -                     | 6,333                |
| Others   |       | 3,928                 | 3,051                | 4,555                 | 3,181                |
|  |       | <b>60,259</b>         | <b>55,806</b>        | <b>49,698</b>         | <b>46,899</b>        |
| <b>Non-current liabilities</b>                       |       |                       |                      |                       |                      |
| Loans, borrowings and leases                         | 16    | 79,207                | 54,038               | 23,021                | 20,546               |
| Other financial liabilities                          | 12    | 29,831                | 17,622               | 120,643               | 76,365               |
| Settlement program ("REFIS")                         | 8(c)  | 12,899                | 14,012               | 12,643                | 13,733               |
| Deferred income taxes                                | 8(a)  | 9,220                 | 7,585                | -                     | -                    |
| Provisions   | 21    | 43,891                | 34,233               | 11,448                | 11,368               |
| Liabilities related to Brumadinho                    | 4     | 3,463                 | 5,703                | 3,463                 | 5,703                |
| De-characterization of dams                          | 4     | 7,071                 | 8,787                | 7,071                 | 8,787                |
| Liabilities related to associates and joint ventures | 17    | 4,495                 | 4,774                | 4,495                 | 4,774                |
| Streaming transactions                               |       | 11,379                | 8,313                | -                     | -                    |
| Others   |       | 2,061                 | 1,649                | 4,835                 | 3,578                |
|  |       | <b>203,517</b>        | <b>156,716</b>       | <b>187,619</b>        | <b>144,854</b>       |
| <b>Total liabilities</b>                             |       | <b>263,776</b>        | <b>212,522</b>       | <b>237,317</b>        | <b>191,753</b>       |
| <b>Stockholders' equity</b>                          |       |                       |                      |                       |                      |
| Equity attributable to Vale's stockholders           | 24    | 194,640               | 161,480              | 194,640               | 161,480              |
| Equity attributable to noncontrolling interests      |       | (7,278)               | (4,331)              | -                     | -                    |
| <b>Total stockholders' equity</b>                    |       | <b>187,362</b>        | <b>157,149</b>       | <b>194,640</b>        | <b>161,480</b>       |
| <b>Total liabilities and stockholders' equity</b>    |       | <b>451,138</b>        | <b>369,671</b>       | <b>431,957</b>        | <b>353,233</b>       |

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

## Statement of Changes in Equity

In millions of Brazilian reais

|  | Share capital | Capital reserve | Profit reserves | Treasury stocks | Other reserves | Cumulative translation adjustments | Retained earnings | Equity attributable to Vale's stockholders | Equity attributable to noncontrolling interests | Total stockholders' equity |
|--|---------------|-----------------|-----------------|-----------------|----------------|------------------------------------|-------------------|--|---|----------------------------|
| <b>Balance at December 31, 2019</b>                      | <b>77,300</b> | <b>3,634</b>    | <b>28,577</b>   | <b>(6,520)</b>  | <b>(5,673)</b> | <b>64,162</b>                      | <b>-</b>          | <b>161,480</b>                             | <b>(4,331)</b>                                  | <b>157,149</b>             |
| <b>Net income (loss)</b>                                 | -             | -               | -               | -               | -              | -                                  | <b>21,888</b>     | <b>21,888</b>                              | <b>(1,302)</b>                                  | <b>20,586</b>              |
| Other comprehensive income                               | -             | -               | -               | -               | (1,470)        | 25,024                             | -                 | 23,554                                     | (1,674)   | 21,880                     |
| Dividends and interest on capital of Vale's stockholders | -             | -               | (12,350)        | -               | -              | -                                  | -                 | (12,350)                                   | -   | (12,350)                   |
| Dividends of noncontrolling interest                     | -             | -               | -               | -               | -              | -                                  | -                 | -  | (42)  | (42)                       |
| Capitalization of noncontrolling interest advances       | -             | -               | -               | -               | -              | -                                  | -                 | -  | 71  | 71                         |
| Assignment and transfer of shares (note 24)              | -             | -               | -               | 68              | -              | -                                  | -                 | 68   | -   | 68                         |
| <b>Balance at September 30, 2020</b>                     | <b>77,300</b> | <b>3,634</b>    | <b>16,227</b>   | <b>(6,452)</b>  | <b>(7,143)</b> | <b>89,186</b>                      | <b>21,888</b>     | <b>194,640</b>                             | <b>(7,278)</b>                                  | <b>187,362</b>             |

  

|  | Share capital | Capital reserve | Profit reserves | Treasury stocks | Other reserves | Cumulative translation adjustments | Retained earnings | Equity attributable to Vale's stockholders | Equity attributable to noncontrolling interests | Total stockholders' equity |
|--|---------------|-----------------|-----------------|-----------------|----------------|------------------------------------|-------------------|--|---|----------------------------|
| <b>Balance at December 31, 2018</b>                | <b>77,300</b> | <b>3,634</b>    | <b>42,502</b>   | <b>(6,604)</b>  | <b>(5,912)</b> | <b>59,483</b>                      | <b>-</b>          | <b>170,403</b>                             | <b>3,280</b>                                    | <b>173,683</b>             |
| <b>Loss</b>  | -             | -               | -               | -               | -              | -                                  | <b>(264)</b>      | <b>(264)</b>                               | <b>(239)</b>                                    | <b>(503)</b>               |
| Other comprehensive income                         | -             | -               | -               | -               | (1,474)        | 6,150                              | -                 | 4,676                                      | 23  | 4,699                      |
| Dividends of noncontrolling interest               | -             | -               | -               | -               | -              | -                                  | -                 | -  | (331)   | (331)                      |
| Capitalization of noncontrolling interest advances | -             | -               | -               | -               | -              | -                                  | -                 | -  | 76  | 76                         |
| Assignment and transfer of shares (note 24)        | -             | -               | -               | 84              | -              | -                                  | -                 | 84   | -   | 84                         |
| <b>Balance at September 30, 2019</b>               | <b>77,300</b> | <b>3,634</b>    | <b>42,502</b>   | <b>(6,520)</b>  | <b>(7,386)</b> | <b>65,633</b>                      | <b>(264)</b>      | <b>174,899</b>                             | <b>2,809</b>                                    | <b>177,708</b>             |

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

## Value Added Statement

In millions of Brazilian Reals

|   | Consolidated  |               | Parent company                        |               |
|---|---------------|---------------|---------------------------------------|---------------|
|   |               |               | Nine-month period ended September 30, |               |
|   | 2020          | 2019          | 2020                                  | 2019          |
| <b>Generation of value added</b>                                    |               |               |                                       |               |
| <b>Gross revenue</b>  |               |               |                                       |               |
| Revenue from products and services                                  | 130,618       | 108,680       | 84,263                                | 65,722        |
| Revenue from the construction of own assets                         | 4,194         | 4,772         | 1,617                                 | 2,595         |
| Other revenues  | 797           | 507           | 479                                   | 329           |
| <b>Less:</b>  |               |               |                                       |               |
| Cost of products, goods and services sold                           | (19,050)      | (16,453)      | (9,806)                               | (7,908)       |
| Material, energy, third-party services and other                    | (27,572)      | (26,152)      | (8,203)                               | (8,391)       |
| Impairment of non-current assets and others results                 | (4,004)       | (1,333)       | (214)                                 | (1,064)       |
| Brumadinho event  | (2,014)       | (24,129)      | (2,014)                               | (24,129)      |
| Other costs and expenses  | (11,253)      | (7,461)       | (6,965)                               | (4,716)       |
| <b>Gross value added</b>  | <b>71,716</b> | <b>38,431</b> | <b>59,157</b>                         | <b>22,438</b> |
| Depreciation, amortization and depletion                            | (12,174)      | (10,505)      | (5,984)                               | (5,729)       |
| <b>Net value added</b>  | <b>59,542</b> | <b>27,926</b> | <b>53,173</b>                         | <b>16,709</b> |
| <b>Received from third parties</b>                                  |               |               |                                       |               |
| Equity results from entities  | (3,763)       | (2,047)       | (307)                                 | 2,802         |
| Financial income  | 9,159         | 3,041         | 7,622                                 | 2,349         |
| <b>Total value added to be distributed</b>                          | <b>64,938</b> | <b>28,920</b> | <b>60,488</b>                         | <b>21,860</b> |
| Personnel and charges   | 6,303         | 6,049         | 2,998                                 | 2,593         |
| Taxes and contributions   | 8,257         | 8,571         | 7,478                                 | 4,690         |
| Interest (net derivatives and monetary and exchange rate variation) | 29,318        | 12,855        | 26,795                                | 11,469        |
| Other remunerations of third party funds                            | 474           | 1,948         | 1,329                                 | 3,372         |
| Dividends and interest on capital                                   | 12,350        | -             | 12,350                                | -             |
| Reinvested net income (absorbed loss)                               | 9,538         | (264)         | 9,538                                 | (264)         |
| Loss attributable to noncontrolling interest                        | (1,302)       | (239)         | -                                     | -             |
| <b>Distributed value added</b>                                      | <b>64,938</b> | <b>28,920</b> | <b>60,488</b>                         | <b>21,860</b> |

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

## 1. Corporate information

Vale S.A. and its subsidiaries ("Vale" or the "Company") are iron ore and iron ore pellets producers, key raw materials for steelmaking, and producers of nickel, which is used to produce stainless steel and metal alloys employed in the production process of several products. The Company also produces copper, metallurgical and thermal coal, manganese ore and, platinum group metals, gold, silver and cobalt. The information by segment is presented in note 5.

Vale S.A. (the "Parent Company") is a public company headquartered in the city of Rio de Janeiro, Brazil with securities traded on the stock exchanges of São Paulo – B3 S.A. (VALE3), New York - NYSE (VALE) and Madrid – LATIBEX (XVALO).

## 2. Basis of preparation of the interim financial statements

### a) Statement of compliance

The condensed consolidated and individual interim financial statements of the Company ("interim financial statements") have been prepared and are being presented in accordance with IAS 34 Interim Financial Reporting (Technical Pronouncement - CPC 21 (R1) Interim Statements) of the International Financial Reporting Standards ("IFRS"), as issued by *International Accounting Standards Board* ("IASB") and also in accordance with accounting practices adopted in Brazil by the Brazilian Accounting Pronouncements Committee ("CPC"), that have been approved by the Brazilian Securities and Exchange Commission ("CVM"). All relevant information from its own interim financial statements, and only this information, are being presented and correspond to those used by management in the management of the Company.

### b) Basis of presentation

The interim financial statements have been prepared to update users about relevant events and transactions that occurred in the period and should be read in conjunction with the financial statements for the year ended December 31, 2019. The accounting policies, accounting estimates and judgements, risk management and measurement methods are the same as those applied when preparing the last annual financial statements. The selected notes of the Parent Company are presented in a summarized form in note 26.

These interim financial statements were authorized for issue by the Executive Board on October 28, 2020.

The interim financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates ("functional currency"), which in the case of the Parent Company is the Brazilian real ("R\$").

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

|                         | Closing rate          |                      | Three-month period ended |                       | Average rate<br>Nine-month period ended |                       |
|-------------------------|-----------------------|----------------------|--------------------------|-----------------------|---|-----------------------|
|                         | September 30,<br>2020 | December 31,<br>2019 | September 30,<br>2020    | September 30,<br>2019 | September 30,<br>2020                   | September 30,<br>2019 |
| US Dollar ("US\$")      | 5.6407                | 4.0307               | 5.3772                   | 3.9684                | 5.0793                                  | 3.8887                |
| Canadian dollar ("CAD") | 4.2344                | 3.1034               | 4.0366                   | 3.0051                | 3.7505                                  | 2.9258                |
| Euro ("EUR" or "€")     | 6.6132                | 4.5305               | 6.2876                   | 4.4123                | 5.7207                                  | 4.3679                |

### 3. Significant events in the current period

#### a) Main events

The financial position, cash flows and performance of the Company were particularly affected by the following events and transactions during the three-month period ended September 30, 2020:

- As announced in September 2020, the exclusivity period to negotiate the sale of Vale Nouvelle-Calédonie S.A.S. ("VNC") to New Century Resources Limited ended and the parties did not reach an agreement for the sale of VNC. Further details on the transaction and plans for such investment are presented in note 5(b).
- In September 2020, the Company entered into an agreement to sell its investment held in Biopalma, resulting in a loss of R\$507 (note 5b).
- In September 2020, the Company decided to close its operations at the Simões Filho plant in Bahia, resulting in an impairment loss of R\$404 (note 5b).
- In August 2020, the conditions precedent of the agreement to sell the Company's stake in Henan Longyu were concluded and until October 2020, the Company received R\$608 out of the total agreed consideration in the amount of R\$832 (note 13b).
- On September 30, 2020, the Company paid stockholders' remuneration in the amount of R\$12,350, see note 24.
- On October 7, 2020 (subsequent event), the Company concluded the agreement for the divestiture of PT Vale Indonesia Tbk ("PTVI") and received R\$1,560 (note 13b).
- On October 9, 2020 (subsequent event), the Company approved the incorporation of a joint venture to build and operate an expansion project for the Shulanghu Port facilities, located in China. Vale's capital contribution to the project is estimated to range from R\$620 to R\$903 (note 13b).

#### b) Coronavirus pandemic

**Background** - The coronavirus pandemic developed rapidly in 2020, with reports of several fatalities from COVID-19, including the locations of the Company's main operations. A significant portion of the Company's revenue comes from sales to customers in Asia and Europe, regions that have had their economic activities affected as a result of the pandemic. Vale also has an extensive logistics and supply chain, including several ports, distribution centers and suppliers that have operations in the affected regions.

The Company has taken several measures to monitor and prevent the effects of COVID-19, including health and safety measures for its employees (such as social distancing and remote working) and actions to secure the supply of materials essential to the Company's production process.

Vale has pledged more than R\$538 to support humanitarian aid programs in the communities where the Company operates, with special focus on Brazil communities that have been more adversely affected by the pandemic. These resources are being used to purchase medical supplies and equipment, among other actions taken against COVID-19. This amount was recognized as "Other operating expenses" in the income statement for the three and nine-month periods ended September 30, 2020.

The Company is closely monitoring the impact of the COVID-19 on its business. To date, COVID-19 has not had a significant operational or financial impact on the Company, other than those already disclosed on these interim financial statements. However, if the pandemic continues for an extended period of time or increases in intensity in the regions where Vale operates, the Company's financial conditions or results of operations in 2020 may be adversely impacted.



**Impairment and onerous contracts** - The Company assessed whether there were any triggering events suggesting an impairment test for its non-financial assets and concluded there have been no changes in the circumstances that would indicate an impairment loss in the Company's cash generating units ("CGUs").

During this year, some of the Company's operations were temporarily suspended due to COVID-19. These operations have already been resumed and, therefore, the main long-term assumptions applied on the preparation of the cash flow models, such as commodity prices and production levels, remain unchanged for the impairment trigger assessment.

**Voisey's Bay, Nickel** - On March 16, 2020, the Company reduced its Voisey's Bay mining operation and placed it in care and maintenance, as a precaution to avoid exposure when travelling to the remote site and to help to protect the health and well-being of Nunatsiavut and Innu indigenous communities in Labrador in face of the COVID-19 pandemic. On July 3, 2020, the Company resumed this operation, which reached its full operational capacity in August 2020.

**Mozambique, Coal** - In 2019, the Company fully impaired the assets related to this CGU because the expected yield of metallurgical coal and thermal coal will not be achieved, mostly due to technical issues on the project and operation of the assets related to this CGU. As a result, the Company has decided to implement a new mining plan and a new plant strategy to achieve the ramp-up of this asset, which includes shortening the life of mine and completing a plant overhaul. However, in addition to the slowdown in the operational activities, the COVID-19 pandemic has caused travel and equipment transportation restrictions and so, the Company has revisited the plans for the Mozambique coal processing plant stoppage. The halting of the processing plants' operations that was previously expected to start in the second quarter of 2020, will now take place in November 2020. Other than this, the plan for this CGU has not changed and, therefore, no further impact was recognized in the period ended September 30, 2020.

**Liquidity** - As a precautionary measure to increase its cash position and preserve financial flexibility considering the uncertainties resulting from the COVID-19 pandemic, in March 2020, Vale drew down its revolving credit lines in the amount of R\$26,997 (US\$5 billion) and discontinued the nickel hedge program, through the sale of option contracts for the total amount of R\$1,123. In September 2020, the Company repaid in full the amount that was drawn from revolving credit lines (note 16).

**Deferred tax liabilities** - On March 31, 2020, the government of Indonesia issued a regulation ("PERPPU-1") to manage the economic impact of the global COVID-19 pandemic, which affects Indonesia's tax policies. The 25% income tax rate was reduced to 22% in fiscal years 2020 and 2021 and will later be reduced to 20% as of fiscal year 2022. Therefore, the Company has measured the deferred income tax of PT Vale Indonesia Tbk ("PTVI"), considering the effective promulgation of the new income tax rate. As a result, the Company recognized an income tax gain of R\$393 in the nine-months period ended September 30, 2020.

**Fair value of other assets and liabilities** - At this time, the effects of the pandemic have not caused significant impacts on the fair value of the Company's assets and liabilities. However, unusual significant changes have occurred in the value of financial assets in many markets since the pandemic began. The effects of the pandemic remain uncertain, making it impossible to predict the final impact it could have on the economy and, in turn, on the Company's business, liquidity and financial position, meaning that the fair value of assets and liabilities may change in subsequent periods.

#### 4. Brumadinho dam failure

On January 25, 2019, a tailings dam (“Dam I”) failed at the Córrego do Feijão mine, in the city of Brumadinho, state of Minas Gerais. 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.

Vale has been taking the necessary actions to support the victims and to mitigate and recover the social and environmental damages resulting from the event, including indemnification and donations to those affected by the dam rupture. The Company has created the Special Recovery and Development Board, which is in-charge of those measures related to the Brumadinho dam rupture.

The Company has also informed the market and Brazilian authorities of its decision to speed up the plan to “de-characterize” its tailings dams built under the upstream method (same method as Brumadinho’s dam), certain “centerline structures” and dikes, located in Brazil. Therefore, the Company has a total provision to comply with these assumed obligations in the amount of R\$17,620 as at September 30, 2020 (R\$22,056 as at December 31, 2019).

##### a) De-characterization of the dams

The changes in the provision to carry out the de-characterization of the upstream structures, centerline structures and dikes for the nine-month periods ended September 30, 2020 and 2019 are as follows:

|                                 | Consolidated              |                          |
|---------------------------------|---------------------------|--------------------------|
|                                 | 2020                      | 2019                     |
| <b>Balance at January 1,</b>    | <b>10,034</b>             | <b>-</b>                 |
| Provision recognized            | -                         | 7,515                    |
| Disbursements                   | (980)                     | (62)                     |
| Present value valuation         | (179)                     | 280                      |
| <b>Balance at September 30,</b> | <b>8,875</b>              | <b>7,733</b>             |
|                                 | <b>September 30, 2020</b> | <b>December 31, 2019</b> |
| Current liabilities             | 1,804                     | 1,247                    |
| Non-current liabilities         | 7,071                     | 8,787                    |
| <b>Liabilities</b>              | <b>8,875</b>              | <b>10,034</b>            |

In addition to the de-characterization projects of the upstream dams, which are already reserved as at September 30, 2020, the Company is assessing whether there are other structures that would meet the criteria to be de-characterized as well. In addition, at the current stage of studies and analysis, it is not yet possible to estimate if an additional provision for the de-characterization of other structures will be recorded in future reporting periods.

##### b) Framework Agreements and donations

The Company has been working together with the authorities and society to remediate the environmental and social impacts of the event. Therefore, the Company has started negotiations and entered into agreements with the relevant authorities and affected people. Vale has also developed studies and projects 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, especially alongside the Paraopeba river.

On April 1, 2020, the judge of the 2nd Public Finance Court of Belo Horizonte released R\$500 from the judicial deposits of the Company. On May 15, 2020, the judge released an additional amount of R\$1,000. Both amounts were released to the State of Minas Gerais to be used by the State Government on actions against COVID-19 pandemic and were considered as compensation for part of the obligation assumed by the Company due to the Brumadinho dam rupture.

The changes in the provision for the nine-month periods ended September 30, 2020 and 2019 are as follows:

|  | <b>Consolidated</b>       |                          |
|--|---------------------------|--------------------------|
|  | <b>2020</b>               | <b>2019</b>              |
| <b>Balance at January 1,</b>                   | <b>12,022</b>             | <b>-</b>                 |
| Provision for social and economic compensation | 108                       | 14,239                   |
| Disbursements (i)                              | (3,495)                   | (2,194)                  |
| Present value valuation                        | 110                       | 163                      |
| <b>Balance at September 30,</b>                | <b>8,745</b>              | <b>12,208</b>            |
|  | <b>September 30, 2020</b> | <b>December 31, 2019</b> |
| Current liabilities                            | 5,282                     | 6,319                    |
| Non-current liabilities                        | 3,463                     | 5,703                    |
| <b>Liabilities</b>                             | <b>8,745</b>              | <b>12,022</b>            |

(i) Includes cash outflows of R\$1,995 and the realization of judicial deposits of R\$1,500.

The Company is under negotiations with the Government of the State of Minas Gerais (“GEMG”) and other relevant authorities for an additional agreement for collective damages indemnification and further compensation for the society and environment. The goal of Vale with a potential agreement would be to provide a stable legal framework for the execution of reparation and compensation, with the suspension of the existing civil lawsuits.

The potential agreement is still very uncertain as it is subject to conclusion of the ongoing negotiations and approval by the Company, the Government of the State of Minas Gerais, Public Prosecutors and other Authorities and Intervenient parties.

The estimate of the economic impact of a potential agreement will depend on (i) final agreement on the list of reparation and compensation projects, (ii) a detailed assessment of the estimates of the amounts to be spent on the reparation and compensation projects being discussed, (iii) an analysis of the detailed scope of such projects to determine their overlap with the initiatives and amounts already provisioned; and (iv) the timing of the execution of projects and disbursements, which will impact the present value of the obligations.

Based on the current terms under discussion, and preliminary estimates subject to the uncertainties listed above, such possible agreement might result in an additional provision of approximately R\$8 billion. All accounting impacts, if any, will be recorded in the period an agreement is reached. Therefore, the provisions recorded in these interim financial statements do not include the potential outcome of the current negotiation as it is not yet possible to reliably estimate an amount or whether the current negotiations will be successful.

### c) Incurred expenses

The Company has incurred expenses, which do not qualify for provision and have been recognized in the income statement, in the amount of R\$613 and R\$1,906 for the three and nine-month periods ended September 30, 2020, respectively and R\$893 and R\$1,906 for the three and nine-month periods ended September 30, 2019, respectively. These expenses include communication services, accommodation and humanitarian assistance, equipment, legal services, water, food aid, taxes, among others.

### d) Operation stoppages

The Company has suspended some operations due to judicial decisions or technical analysis performed by Vale on its upstream dam structures. The Company has been recording losses in relation to the operational stoppage and idle capacity of the ferrous mineral segment in the amounts of R\$600 and R\$1,879 for the three and nine-month periods ended September 30, 2020, respectively, and R\$704 and R\$2,248 for the three and nine-month periods ended September 30, 2019, respectively. The Company is working on legal and technical measures to resume all operations at full capacity.

### e) Assets write-off

Following the event and the decision to speed up the de-characterization of the upstream dams, the Company recognized a loss of R\$251 and R\$836 as “Impairment and disposal of non-current assets” for the three and nine-month periods ended September 30, 2019 in relation to the assets written-off of the Córrego do Feijão mine and those related to the other upstream dams in Brazil. In 2020, the Company did not write-off any asset related to the Brumadinho event.

#### **f) Contingencies and other legal matters**

Vale is subject to significant contingencies due to the Brumadinho dam failure. Vale has already been named on several judicial and administrative proceedings brought by authorities and affected people and is currently under investigation. Vale is evaluating these contingencies and would recognize additional provisions based on the updates on the stage of these claims.

Following these contingencies, approximately R\$506 of the Company's bank accounts are restricted and R\$4,942 were converted into judicial deposits as at September 30, 2020.

For the Brumadinho event, the Company has financial guarantees in the amount of R\$5,819 in September 30, 2020. The expenses related to these financial guarantees in the amounts of R\$10 and R\$30 were recorded as financial expense in the Company's income statement for the three and nine-month periods ended September 30, 2020, respectively.

On August 26, 2020, the Public Prosecutor's Office of Minas Gerais ("MPMG") and other plaintiffs of the Public Civil Actions presented a request for ruling condemning Vale to indemnify alleged economic losses of the State of Minas Gerais and collective moral damages, both claims already considered in said Public Civil Actions filed against Vale in January 2019 as a result of the Brumadinho dam rupture. In that submission, the plaintiffs also requested the immediate freezing of R\$26.7 billion from the Company as a guarantee for the reimbursement of the alleged economic losses, which was dismissed by the judge of the 2nd Lower Court of Public Treasury of Belo Horizonte on October 6, 2020 (subsequent event). Said indemnification requests are still pending judgment and the Company is unable to estimate when a final decision will be issued.

On May 27, 2020, the MPMG requested the imposition of fines or forfeit of assets, rights and amounts of the Company, allegedly based on Article 5, item V of Brazilian Law 12.846/2013. According to the MPMG, Vale would have, through its employee's actions, hindered the inspection activities of public agencies in the complex. The Company was not required to present any guarantees based on a judicial decision.

On October 20, 2020 (subsequent event), the Company was informed that the Brazilian Office of the Comptroller General ("CGU") initiated an administrative proceeding based on the same allegations made by the MPMG.

Both proceedings are ongoing and the Company cannot estimate when a final decision will be issued.

##### *(f.i) Administrative sanctions*

In 2019, the Company was notified of the imposition of administrative fines by the Brazilian Institute of the Environment and Renewable Natural Resources ("IBAMA"), in the amount of R\$250.

On July 6, 2020, the Company signed an agreement with IBAMA, of which R\$150 will be used in environmental projects in 7 parks in the state of Minas Gerais, covering an area of approximately 794 thousand hectares, and R\$100 will be used in basic sanitation programs in the state of Minas Gerais. The total amount was deposited in court to be used in these environmental projects, subject to ratification of justice.

As at September 30, 2020, the administrative sanctions are recorded as "Liabilities related to Brumadinho".

##### *(f.ii) U.S. Securities class action suits*

As detailed in note 3 to the financial statements for the year ended December 31, 2019 and updated in the interim financial statements for 2020, Vale is defending itself against a potential class action lawsuit before a New York Federal Court filed by holders of securities - American Depositary Receipts ("ADRs") - issued by Vale.

Following the decision of the Court, in May 2020, rejecting part of the preliminary defense presented by the Company, the Discovery phase has started and is expected to be concluded by June 2021.

Based on the evaluation of the Company's legal counsel and given the very preliminary stage, the expectation of loss of this process is classified as possible. However, considering the initial phase of the potential class action, it is not possible at this time to reliably estimate the amount of a potential loss.

*(f.iii) Arbitration proceedings in Brazil filed by shareholders and a class association*

In Brazil, Vale is a defendant in (i) one arbitration filed by 166 minority shareholders, and (ii) one arbitration filed by a class association allegedly representing all Vale's minority shareholders.

In both proceedings, the Claimants argue Vale would be aware of the risks associated with the dam, and failed to disclose it to the shareholders, which would be required under the Brazilian applicable laws and the rules of *Comissão de Valores Mobiliários* (Securities and Exchange Commission of Brazil). Based on such argument, they claim compensation for losses caused by the decrease of the value of the shares.

Based on the evaluation of the Company's legal counsel and given the very preliminary stage, the expectation of loss of these proceedings is classified as possible. However, considering the initial phase of the arbitrations, it is not possible at this time to reliably estimate the amount of a potential loss.

*(f.iv) Cooperation with the CVM and the SEC*

The Company is cooperating with the SEC and the CVM by providing documents and other information concerning the failure of Dam I as requested by both agencies.

**g) Insurance**

The Company is negotiating with insurers the payment of indemnification under its operational risk and civil liability. However, these negotiations are still at a preliminary stage, therefore any payment of insurance proceeds will depend on the coverage definitions under these policies and assessment of the amount of loss. Due to uncertainties, no indemnification to the Company was recognized in these interim financial statements.

**Critical accounting estimates and judgments**

The measurement of the provision requires the use of significant judgments, estimates and assumptions. The provision reflects the estimated costs to comply with Vale's obligation in relation to the Brumadinho event.

The main critical assumptions and estimates applied in measuring the provision for de-characterization of the dams considers, among others: (i) volume of the waste to be removed based on data available and interpretation of the enacted laws and regulations; (ii) location availability for the tailings disposal; (iii) acceptance by the authorities of the proposed engineering methods and solution; and (iv) updates in the discount rate.

The provision for Framework Agreements and donations may be affected by factors including, but not limited to: (i) changes in the current estimated market price of the direct and indirect cost related to products and services, (ii) changes in timing for cash outflows, (iii) changes in the technology considered in measuring the provision, (iv) number of individuals entitled to the indemnification payments, (v) resolution of existing and potential legal claims, (vi) demographic assumptions, (vii) actuarial assumptions, and (viii) updates in the discount rate.

Therefore, future expenditures may differ from the amounts currently provided because the realized assumptions and various other factors are not always under the Company's control. These changes to key assumptions could result in a material impact to the amount of the provision in future reporting periods. At each reporting period, the Company will reassess the key assumptions used in the preparation of the projected cash flows and will adjust the provision, if required.

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

The Company operates the following reportable segments: Ferrous Minerals, Base Metals and Coal. The segments are aligned with products and reflect the structure used by Management to evaluate Company's performance. The responsible bodies for making operational decisions, allocating resources and evaluating performance are the Executive Boards and the Board of Directors. The performance of the operating segments is assessed based on a measure of adjusted LAJIDA (EBITDA).

As disclosed on note 4 to these Interim Financial Statements, the Company has created the Special Recovery and Development Board that reports to the CEO and is responsible to assess the costs related to the Brumadinho event. These costs are not directly related to the Company's operating activities and, therefore, were not allocated to any operating segment.

The Company allocates to "Others" the revenues and cost of other products, services, research and development, investments in joint ventures and associates of other business and unallocated corporate expenses.

### a) Adjusted LAJIDA (EBITDA)

The definition of Adjusted LAJIDA (EBITDA) for the Company is the operating income or loss plus dividends received and interest from associates and joint ventures, and excluding the amounts charged as (i) depreciation, depletion and amortization and (ii) impairment and disposal of non-current assets.

|                                     |                       |  |  |                         |  |  | Consolidated                                |
|-------------------------------------|-----------------------|--|--|-------------------------|--|--|---|
|                                     |                       |  |  |                         |  |  | Three-month period ended September 30, 2020 |
|                                     | Net operating revenue | Cost of goods sold and services rendered | Sales, administrative and other operating expenses | Research and evaluation | Pre operating and operational stoppage | Dividends received and interest from associates and joint ventures | Adjusted LAJIDA (EBITDA)                    |
| <b>Ferrous minerals</b>             |                       |  |  |                         |  |  |   |
| Iron ore                            | 39,614                | (11,110)                                 | (270)  | (164)                   | (649)                                  | 2  | 27,423                                      |
| Iron ore pellets                    | 6,416                 | (2,313)                                  | 7  | (8)                     | (89)                                   | -  | 4,013                                       |
| Ferroalloys and manganese           | 274                   | (233)                                    | (21)   | (1)                     | (49)                                   | -  | (30)  |
| Other ferrous products and services | 436                   | (324)                                    | 2  | (1)                     | -                                      | 8  | 121   |
|                                     | <b>46,740</b>         | <b>(13,980)</b>                          | <b>(282)</b>                                       | <b>(174)</b>            | <b>(787)</b>                           | <b>10</b>  | <b>31,527</b>                               |
| <b>Base metals</b>                  |                       |  |  |                         |  |  |   |
| Nickel and other products           | 7,072                 | (4,804)                                  | (121)  | (55)                    | (1)                                    | -  | 2,091                                       |
| Copper                              | 3,156                 | (1,017)                                  | (13)   | (81)                    | (1)                                    | -  | 2,044                                       |
|                                     | <b>10,228</b>         | <b>(5,821)</b>                           | <b>(134)</b>                                       | <b>(136)</b>            | <b>(2)</b>                             | <b>-</b>   | <b>4,135</b>                                |
| <b>Coal</b>                         | <b>551</b>            | <b>(1,726)</b>                           | <b>(28)</b>  | <b>(47)</b>             | <b>-</b>                               | <b>110</b>   | <b>(1,140)</b>                              |
| Brumadinho event                    | -                     | -  | (613)  | -                       | -                                      | -  | (613)                                       |
| COVID-19                            | -                     | -  | (76)   | -                       | -                                      | -  | (76)  |
| Others                              | 387                   | (463)                                    | (726)  | (207)                   | (12)                                   | -  | (1,021)                                     |
| <b>Total</b>                        | <b>57,906</b>         | <b>(21,990)</b>                          | <b>(1,859)</b>                                     | <b>(564)</b>            | <b>(801)</b>                           | <b>120</b>   | <b>32,812</b>                               |



## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



|                                     |                       |  |  |                         |  |  | Consolidated                                |
|-------------------------------------|-----------------------|--|--|-------------------------|--|--|---|
|                                     |                       |  |  |                         |  |  | Three-month period ended September 30, 2019 |
|                                     | Net operating revenue | Cost of goods sold and services rendered | Sales, administrative and other operating expenses | Research and evaluation | Pre operating and operational stoppage | Dividends received and interest from associates and joint ventures | Adjusted LAJIDA (EBITDA)                    |
| <b>Ferrous minerals</b>             |                       |  |  |                         |  |  |   |
| Iron ore                            | 26,118                | (10,077)                                 | (326)  | (114)                   | (650)                                  | -  | 14,951                                      |
| Iron ore pellets                    | 6,362                 | (2,893)                                  | (32)   | (20)                    | (105)                                  | -  | 3,312                                       |
| Ferroalloys and manganese           | 190                   | (153)                                    | (6)  | (2)                     | -                                      | -  | 29  |
| Other ferrous products and services | 466                   | (345)                                    | -  | (3)                     | -                                      | -  | 118   |
|                                     | <b>33,136</b>         | <b>(13,468)</b>                          | <b>(364)</b>                                       | <b>(139)</b>            | <b>(755)</b>                           | <b>-</b>   | <b>18,410</b>                               |
| <b>Base metals</b>                  |                       |  |  |                         |  |  |   |
| Nickel and other products           | 4,136                 | (2,681)                                  | (47)   | (43)                    | (64)                                   | -  | 1,301                                       |
| Copper                              | 1,966                 | (971)                                    | (8)  | (49)                    | -                                      | -  | 938   |
|                                     | <b>6,102</b>          | <b>(3,652)</b>                           | <b>(55)</b>  | <b>(92)</b>             | <b>(64)</b>                            | <b>-</b>   | <b>2,239</b>                                |
| <b>Coal</b>                         | <b>954</b>            | <b>(1,732)</b>                           | <b>19</b>  | <b>(39)</b>             | <b>-</b>                               | <b>114</b>   | <b>(684)</b>                                |
| Brumadinho event                    | -                     | -  | (893)  | -                       | -                                      | -  | (893)                                       |
| Others                              | 472                   | (441)                                    | (548)  | (225)                   | (14)                                   | 1  | (755)                                       |
| <b>Total</b>                        | <b>40,664</b>         | <b>(19,293)</b>                          | <b>(1,841)</b>                                     | <b>(495)</b>            | <b>(833)</b>                           | <b>115</b>   | <b>18,317</b>                               |

|                                     |                       |  |  |                         |  |  | Consolidated                               |
|-------------------------------------|-----------------------|--|--|-------------------------|--|--|--|
|                                     |                       |  |  |                         |  |  | Nine-month period ended September 30, 2020 |
|                                     | Net operating revenue | Cost of goods sold and services rendered | Sales, administrative and other operating expenses | Research and evaluation | Pre operating and operational stoppage | Dividends received and interest from associates and joint ventures | Adjusted LAJIDA (EBITDA)                   |
| <b>Ferrous minerals</b>             |                       |  |  |                         |  |  |  |
| Iron ore                            | 85,058                | (28,001)                                 | (677)  | (402)                   | (2,054)                                | 2  | 53,926                                     |
| Iron ore pellets                    | 15,098                | (6,191)                                  | 65   | (17)                    | (291)                                  | 283  | 8,947                                      |
| Ferroalloys and manganese           | 851                   | (682)                                    | (21)   | (6)                     | (105)                                  | -  | 37   |
| Other ferrous products and services | 1,222                 | (939)                                    | 10   | (6)                     | -                                      | 8  | 295  |
|                                     | <b>102,229</b>        | <b>(35,813)</b>                          | <b>(623)</b>                                       | <b>(431)</b>            | <b>(2,450)</b>                         | <b>293</b>   | <b>63,205</b>                              |
| <b>Base metals</b>                  |                       |  |  |                         |  |  |  |
| Nickel and other products           | 16,833                | (11,276)                                 | (294)  | (177)                   | (156)                                  | -  | 4,930                                      |
| Copper                              | 7,674                 | (2,940)                                  | (23)   | (237)                   | (1)                                    | -  | 4,473                                      |
|                                     | <b>24,507</b>         | <b>(14,216)</b>                          | <b>(317)</b>                                       | <b>(414)</b>            | <b>(157)</b>                           | <b>-</b>   | <b>9,403</b>                               |
| <b>Coal</b>                         | <b>1,734</b>          | <b>(5,369)</b>                           | <b>(6)</b>   | <b>(119)</b>            | <b>-</b>                               | <b>434</b>   | <b>(3,326)</b>                             |
| Brumadinho event                    | -                     | -  | (2,014)  | -                       | -                                      | -  | (2,014)                                    |
| COVID-19                            | -                     | -  | (545)  | -                       | -                                      | -  | (545)                                      |
| Others                              | 1,121                 | (1,241)                                  | (2,331)  | (512)                   | (38)                                   | 126  | (2,875)                                    |
| <b>Total</b>                        | <b>129,591</b>        | <b>(56,639)</b>                          | <b>(5,836)</b>                                     | <b>(1,476)</b>          | <b>(2,645)</b>                         | <b>853</b>   | <b>63,848</b>                              |

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



|                                     | Consolidated                               |  |  |                         |  |  |                          |
|-------------------------------------|--|--|--|-------------------------|--|--|--------------------------|
|                                     | Nine-month period ended September 30, 2019 |  |  |                         |  |  |                          |
|                                     | Net operating revenue                      | Cost of goods sold and services rendered | Sales, administrative and other operating expenses | Research and evaluation | Pre operating and operational stoppage | Dividends received and interest from associates and joint ventures | Adjusted LAJIDA (EBITDA) |
| <b>Ferrous minerals</b>             |  |  |  |                         |  |  |                          |
| Iron ore                            | 65,942                                     | (24,490)                                 | (947)  | (280)                   | (2,174)                                | -  | 38,051                   |
| Iron ore pellets                    | 17,775                                     | (7,992)                                  | (60)   | (59)                    | (193)                                  | 567  | 10,038                   |
| Ferroalloys and manganese           | 784  | (589)                                    | (15)   | (4)                     | -                                      | -  | 176                      |
| Other ferrous products and services | 1,249                                      | (955)                                    | 4  | (6)                     | -                                      | -  | 292                      |
|                                     | <b>85,750</b>                              | <b>(34,026)</b>                          | <b>(1,018)</b>                                     | <b>(349)</b>            | <b>(2,367)</b>                         | <b>567</b>   | <b>48,557</b>            |
| <b>Base metals</b>                  |  |  |  |                         |  |  |                          |
| Nickel and other products           | 12,044                                     | (8,388)                                  | (180)  | (99)                    | (110)                                  | -  | 3,267                    |
| Copper                              | 5,546                                      | (2,745)                                  | (20)   | (96)                    | -                                      | -  | 2,685                    |
|                                     | <b>17,590</b>                              | <b>(11,133)</b>                          | <b>(200)</b>                                       | <b>(195)</b>            | <b>(110)</b>                           | <b>-</b>   | <b>5,952</b>             |
| <b>Coal</b>                         | <b>3,221</b>                               | <b>(4,850)</b>                           | <b>22</b>  | <b>(85)</b>             | <b>-</b>                               | <b>331</b>   | <b>(1,361)</b>           |
| Brumadinho event                    | -  | -  | (24,129)   | -                       | -                                      | -  | (24,129)                 |
| Others                              | 1,060                                      | (1,075)                                  | (954)  | (485)                   | (24)                                   | 195  | (1,283)                  |
| <b>Total</b>                        | <b>107,621</b>                             | <b>(51,084)</b>                          | <b>(26,279)</b>                                    | <b>(1,114)</b>          | <b>(2,501)</b>                         | <b>1,093</b>   | <b>27,736</b>            |

Adjusted LAJIDA (EBITDA) is reconciled to net income (loss) as follows:

|  | Consolidated                           |               |                                       |               |
|--|--|---------------|---------------------------------------|---------------|
|  | Three-month period ended September 30, |               | Nine-month period ended September 30, |               |
|  | 2020                                   | 2019          | 2020                                  | 2019          |
| <b>Net income (loss) attributable to Vale's stockholders</b>           | <b>15,615</b>                          | <b>6,542</b>  | <b>21,888</b>                         | <b>(264)</b>  |
| Loss attributable to noncontrolling interests                          | (543)                                  | (81)          | (1,302)                               | (239)         |
| <b>Net income (loss)</b>   | <b>15,072</b>                          | <b>6,461</b>  | <b>20,586</b>                         | <b>(503)</b>  |
| Depreciation, depletion and amortization                               | 4,162                                  | 3,690         | 12,174                                | 10,505        |
| Income taxes   | 4,259                                  | 3,866         | 2,011                                 | 3,281         |
| Financial results  | 7,380                                  | 4,556         | 20,457                                | 9,980         |
| <b>LAJIDA (EBITDA)</b>   | <b>30,873</b>                          | <b>18,573</b> | <b>55,228</b>                         | <b>23,263</b> |
| <b>Items to reconciled adjusted LAJIDA (EBITDA)</b>                    |  |               |                                       |               |
| Equity results and other results in associates and joint ventures      | 211                                    | (501)         | 3,763                                 | 2,047         |
| Dividends received and interest from associates and joint ventures (i) | 120                                    | 115           | 853                                   | 1,093         |
| Impairment and disposal of non-current assets                          | 1,608                                  | 130           | 4,004                                 | 1,333         |
| <b>Adjusted LAJIDA (EBITDA)</b>  | <b>32,812</b>                          | <b>18,317</b> | <b>63,848</b>                         | <b>27,736</b> |

(i) Includes the remuneration of the financial instrument of the Coal segment.

## b) Assets by segment

|                  | September 30, 2020 |  |   | Consolidated<br>December 31, 2019 |  |   |
|------------------|--------------------|--|---|-----------------------------------|--|---|
|                  | Product inventory  | Investments in associates and joint ventures | Property, plant and equipment and intangibles (i) | Product inventory                 | Investments in associates and joint ventures | Property, plant and equipment and intangibles (i) |
| Ferrous minerals | 12,520             | 6,865  | 140,062   | 7,880                             | 6,970  | 135,143   |
| Base metals      | 7,450              | 91   | 104,480   | 5,457                             | 56   | 80,181  |
| Coal             | 309                | -  | -   | 243                               | -  | -   |
| Others           | -                  | 4,526  | 7,045   | 7                                 | 4,252  | 6,666   |
| <b>Total</b>     | <b>20,279</b>      | <b>11,482</b>                                | <b>251,587</b>                                    | <b>13,587</b>                     | <b>11,278</b>                                | <b>221,990</b>                                    |

|                  | Three-month period ended September 30, 2020 |                   |  | Consolidated<br>Three-month period ended September 30, 2019 |                   |  |
|------------------|---|-------------------|--|---|-------------------|--|
|                  | Capital expenditures (ii)                   |                   |  | Capital expenditures (ii)                                   |                   |  |
|                  | Sustaining capital                          | Project execution | Depreciation, depletion and amortization | Sustaining capital  | Project execution | Depreciation, depletion and amortization |
| Ferrous minerals | 2,160                                       | 198               | 2,160                                    | 1,595   | 361               | 2,173                                    |
| Base metals      | 1,802                                       | 378               | 1,932                                    | 1,071   | 175               | 1,179                                    |
| Coal             | 146   | -                 | -  | 314   | -                 | 267                                      |
| Others           | 6   | 3                 | 70                                       | 19  | 9                 | 71                                       |
| <b>Total</b>     | <b>4,114</b>                                | <b>579</b>        | <b>4,162</b>                             | <b>2,999</b>  | <b>545</b>        | <b>3,690</b>                             |

|                  | Nine-month period ended September 30, 2020 |                   |  | Consolidated<br>Nine-month period ended September 30, 2019 |                   |  |
|------------------|--|-------------------|--|--|-------------------|--|
|                  | Capital expenditures (ii)                  |                   |  | Capital expenditures (ii)                                  |                   |  |
|                  | Sustaining capital                         | Project execution | Depreciation, depletion and amortization | Sustaining capital   | Project execution | Depreciation, depletion and amortization |
| Ferrous minerals | 7,136                                      | 919               | 6,620                                    | 3,875  | 1,025             | 5,874                                    |
| Base metals      | 5,187                                      | 951               | 5,270                                    | 2,774  | 379               | 3,733                                    |
| Coal             | 659  | -                 | 83                                       | 609  | -                 | 687                                      |
| Others           | 16   | 25                | 201                                      | 31   | 22                | 211                                      |
| <b>Total</b>     | <b>12,998</b>                              | <b>1,895</b>      | <b>12,174</b>                            | <b>7,289</b>   | <b>1,426</b>      | <b>10,505</b>                            |

i) Goodwill is allocated mainly to ferrous minerals and base metals segments in the amount of R\$7,133 and R\$10,430 in September 30, 2020 and R\$7,133 and R\$7,495 in December 31, 2019, respectively.

ii) Cash outflows.

## Impairment of assets

**Ferrous minerals segment – Vale Manganês S.A. (“Vale Manganês”)** - In September 2020, the Company decided to shut down the Simões Filho operation, in Bahia, a plant that is part of Vale Manganês S.A. business, which used to produce ferroalloys of manganese (part of the ferrous minerals segment). The Company will continue operating its other plants to produce manganese ore.

Therefore, the Company has carried out an impairment test for the cash-generating unit (“CGU”) of Manganese, resulting in the full impairment of inventories, other assets related to the Simões Filho plant and the Company recognized additional provisions required for the closure of the site. As a result, the Company recognized an impairment loss of R\$404 as “Impairment and disposals of non-current assets” for the three and nine-month period ended September 30, 2020. The remaining carrying amount related to this CGU is R\$171 as at September 30, 2020.

**Base metals segment – Vale Nouvelle-Calédonie S.A.S. (“VNC”)** – On May 25, 2020, the Company announced that it had entered into a non-binding agreement to negotiate with exclusivity the sale of its entire interest in VNC to New Century Resources Limited (“NCZ”) for an insignificant consideration.

As a result of this negotiation, VNC's assets and liabilities were classified as "held for sale" and measured at fair value resulting in the recognition of an impairment loss of R\$295 and R\$2,078 recognized in the income statement as "Impairment and disposal of non-current assets" for the three and nine-month period ended September 30, 2020, respectively.

In September 2020, NCZ's exclusivity period ended and the parties did not reach an agreement for the sale of VNC, thus, the Company has restarted the search for a potential buyer. In the meanwhile, Vale has initiated studies of all options available to exit the operation, including placing VNC in care and maintenance in preparation for a possible shut down of the operation, should no sustainable solution be found in the coming months.

These studies take into consideration the financing needs to continue VNC operations, including the commitment to make investments to convert the tailings deposition from wet to dry-stacking ("Project Lucy"), which will cost approximately R\$2,820 (US\$500 million). Therefore, depending on the conclusion of those studies mentioned above, and the exit alternative chosen by the Company, additional losses and new provisions may be required in future reporting periods.

**Others – Biopalma da Amazônia S.A. ("Biopalma")** – In September 2020, the Company signed an agreement with Brasil Bio Fuels S.A. to sell its entire stake in Biopalma for an insignificant consideration. Biopalma is a company that cultivates a palm oil plantation to extract and sell that oil. As a result of this agreement, Biopalma's assets and liabilities were classified as "held for sale" and measured at fair value, resulting in a loss of R\$507 recognized in the income statement as "Impairment and disposals of non-current assets" for the three and nine-months period ended September 30, 2020. The transaction is expected to be concluded by the end of 2020, subject to preceded conditions, including the approval of the Administrative Council for Economic Defense (CADE).

### c) Net operating revenue by geographic area

| Consolidated                                |                  |               |            |            |               |
|---|------------------|---------------|------------|------------|---------------|
| Three-month period ended September 30, 2020 |                  |               |            |            |               |
|   | Ferrous minerals | Base metals   | Coal       | Others     | Total         |
| Americas, except United States and Brazil   | 607              | 194           | -          | -          | 801           |
| United States of America                    | 546              | 950           | -          | -          | 1,496         |
| Germany                                     | 231              | 2,146         | -          | -          | 2,377         |
| Europe, except Germany                      | 1,466            | 3,621         | 65         | -          | 5,152         |
| Middle East, Africa and Oceania             | 2,152            | 17            | 65         | -          | 2,234         |
| Japan                                       | 2,499            | 504           | -          | -          | 3,003         |
| China                                       | 33,037           | 1,506         | -          | -          | 34,543        |
| Asia, except Japan and China                | 2,926            | 1,134         | 382        | -          | 4,442         |
| Brazil                                      | 3,276            | 156           | 39         | 387        | 3,858         |
| <b>Net operating revenue</b>                | <b>46,740</b>    | <b>10,228</b> | <b>551</b> | <b>387</b> | <b>57,906</b> |

| Consolidated                                |                  |              |            |            |               |
|---|------------------|--------------|------------|------------|---------------|
| Three-month period ended September 30, 2019 |                  |              |            |            |               |
|   | Ferrous minerals | Base metals  | Coal       | Others     | Total         |
| Americas, except United States and Brazil   | 555              | 882          | -          | -          | 1,437         |
| United States of America                    | 319              | 918          | -          | -          | 1,237         |
| Germany                                     | 1,149            | 356          | -          | -          | 1,505         |
| Europe, except Germany                      | 1,205            | 1,877        | 363        | -          | 3,445         |
| Middle East, Africa and Oceania             | 2,226            | 23           | 101        | -          | 2,350         |
| Japan                                       | 1,836            | 455          | 24         | -          | 2,315         |
| China                                       | 21,081           | 748          | -          | -          | 21,829        |
| Asia, except Japan and China                | 2,161            | 607          | 417        | -          | 3,185         |
| Brazil                                      | 2,604            | 236          | 49         | 472        | 3,361         |
| <b>Net operating revenue</b>                | <b>33,136</b>    | <b>6,102</b> | <b>954</b> | <b>472</b> | <b>40,664</b> |

| Consolidated                               |                  |               |              |              |                |
|--|------------------|---------------|--------------|--------------|----------------|
| Nine-month period ended September 30, 2020 |                  |               |              |              |                |
|  | Ferrous minerals | Base metals   | Coal         | Others       | Total          |
| Americas, except United States and Brazil  | 1,136            | 1,341         | -            | -            | 2,477          |
| United States of America                   | 903              | 2,844         | -            | -            | 3,747          |
| Germany                                    | 1,416            | 4,519         | -            | -            | 5,935          |
| Europe, except Germany                     | 3,947            | 7,597         | 462          | -            | 12,006         |
| Middle East, Africa and Oceania            | 4,745            | 79            | 308          | -            | 5,132          |
| Japan                                      | 5,747            | 1,504         | 56           | -            | 7,307          |
| China                                      | 69,168           | 2,900         | 75           | -            | 72,143         |
| Asia, except Japan and China               | 6,997            | 3,164         | 771          | -            | 10,932         |
| Brazil                                     | 8,170            | 559           | 62           | 1,121        | 9,912          |
| <b>Net operating revenue</b>               | <b>102,229</b>   | <b>24,507</b> | <b>1,734</b> | <b>1,121</b> | <b>129,591</b> |

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



|   | Consolidated                               |               |              |              |                |
|---|--|---------------|--------------|--------------|----------------|
|   | Nine-month period ended September 30, 2019 |               |              |              |                |
|   | Ferrous minerals                           | Base metals   | Coal         | Others       | Total          |
| Americas, except United States and Brazil | 1,732                                      | 2,363         | -            | -            | 4,095          |
| United States of America                  | 1,172                                      | 2,661         | -            | -            | 3,833          |
| Germany                                   | 3,344                                      | 1,370         | -            | -            | 4,714          |
| Europe, except Germany                    | 4,595                                      | 5,018         | 931          | -            | 10,544         |
| Middle East, Africa and Oceania           | 6,526                                      | 64            | 239          | -            | 6,829          |
| Japan                                     | 5,483                                      | 1,129         | 386          | -            | 6,998          |
| China                                     | 49,068                                     | 1,999         | -            | -            | 51,067         |
| Asia, except Japan and China              | 5,809                                      | 2,365         | 1,434        | -            | 9,608          |
| Brazil                                    | 8,021                                      | 621           | 231          | 1,060        | 9,933          |
| <b>Net operating revenue</b>              | <b>85,750</b>                              | <b>17,590</b> | <b>3,221</b> | <b>1,060</b> | <b>107,621</b> |

**Provisionally priced commodities sales** – The commodity price risk arises from volatility of iron ore, nickel, copper and coal prices. The Company is mostly exposed to the fluctuations in the iron ore and copper price. The selling price of these products can be measured reliably at each period, since the price is quoted in an active market. The final price of these sales will be determined during the fourth quarter of 2020.

The sensitivity of the Company's risk on final settlement of provisionally priced accounts receivables are presented below:

|                  | September 30, 2020   |                                |        |                   |
|------------------|----------------------|--------------------------------|--------|-------------------|
|                  | Thousand metric tons | Provisional price (US\$/tonne) | Change | Effect on Revenue |
| Iron ore         | 19,673               | 115.0                          | +/-10% | 1,216             |
| Iron ore pellets | 1,093                | 136.7                          | +/-10% | 80                |
| Copper           | 64                   | 8,678.3                        | +/-10% | 300               |

## 6. Costs and expenses by nature

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

|  | Consolidated                           |               |                                       |               |
|--|--|---------------|---------------------------------------|---------------|
|  | Three-month period ended September 30, |               | Nine-month period ended September 30, |               |
|  | 2020                                   | 2019          | 2020                                  | 2019          |
| Personnel                                | 2,221                                  | 2,005         | 6,025                                 | 5,821         |
| Materials and services                   | 4,351                                  | 3,779         | 12,022                                | 11,192        |
| Fuel oil and gas                         | 1,167                                  | 1,407         | 3,531                                 | 4,040         |
| Maintenance                              | 3,703                                  | 2,940         | 10,021                                | 8,109         |
| Energy                                   | 948                                    | 892           | 2,584                                 | 2,478         |
| Acquisition of products                  | 1,494                                  | 820           | 2,829                                 | 1,760         |
| Depreciation, depletion and amortization | 3,903                                  | 3,335         | 11,136                                | 9,576         |
| Freight                                  | 5,018                                  | 4,869         | 11,842                                | 11,052        |
| Others                                   | 3,088                                  | 2,581         | 7,785                                 | 6,632         |
| <b>Total</b>                             | <b>25,893</b>                          | <b>22,628</b> | <b>67,775</b>                         | <b>60,660</b> |
| Cost of goods sold                       | 25,140                                 | 21,863        | 65,632                                | 58,615        |
| Cost of services rendered                | 753                                    | 765           | 2,143                                 | 2,045         |
| <b>Total</b>                             | <b>25,893</b>                          | <b>22,628</b> | <b>67,775</b>                         | <b>60,660</b> |

### b) Selling and administrative expenses

|                               | Consolidated                           |            |                                       |              |
|-------------------------------|--|------------|---------------------------------------|--------------|
|                               | Three-month period ended September 30, |            | Nine-month period ended September 30, |              |
|                               | 2020                                   | 2019       | 2020                                  | 2019         |
| Selling                       | 110                                    | 92         | 293                                   | 267          |
| Personnel                     | 271                                    | 177        | 695                                   | 514          |
| Services                      | 151                                    | 97         | 405                                   | 201          |
| Depreciation and amortization | 50                                     | 49         | 203                                   | 163          |
| Others                        | 102                                    | 89         | 268                                   | 204          |
| <b>Total</b>                  | <b>684</b>                             | <b>504</b> | <b>1,864</b>                          | <b>1,349</b> |

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

|                               | Three-month period ended September 30, |            | Nine-month period ended September 30, |            |
|-------------------------------|--|------------|---------------------------------------|------------|
|                               | 2020                                   | 2019       | 2020                                  | 2019       |
| Provision for litigations (i) | 55                                     | 132        | 381                                   | 1,057      |
| Profit sharing program        | 184                                    | 86         | 402                                   | 283        |
| COVID-19 expenses             | 76                                     | -          | 545                                   | -          |
| Others (ii)                   | 297                                    | 274        | 833                                   | (377)      |
| <b>Total</b>                  | <b>612</b>                             | <b>492</b> | <b>2,161</b>                          | <b>963</b> |

(i) In 2019, includes the change in the expected outcome of probable loss of the lawsuit related to the accident of ship loaders, at the Praia Mole maritime terminal, in Espírito Santo.

(ii) In 2019, includes the reversal of the amount provided for the legal proceedings related to the Rede Ferroviária Federal S.A lawsuit.

## 7. Financial result

|  | Three-month period ended September 30, |                | Nine-month period ended September 30, |                 |
|--|--|----------------|---------------------------------------|-----------------|
|  | 2020                                   | 2019           | 2020                                  | 2019            |
| <b>Financial income</b>                    |  |                |                                       |                 |
| Short-term investments                     | 138                                    | 313            | 517                                   | 667             |
| Others (i)                                 | 232                                    | 212            | 1,059                                 | 701             |
|  | <b>370</b>                             | <b>525</b>     | <b>1,576</b>                          | <b>1,368</b>    |
| <b>Financial expenses</b>                  |  |                |                                       |                 |
| Loans and borrowings gross interest        | (1,119)                                | (1,024)        | (3,110)                               | (3,049)         |
| Capitalized loans and borrowing costs      | 67                                     | 133            | 274                                   | 429             |
| Participative stockholders' debentures     | (3,002)                                | (1,901)        | (4,341)                               | (4,211)         |
| Interest on REFIS                          | (50)                                   | (163)          | (228)                                 | (488)           |
| Interest on lease liabilities              | (90)                                   | (50)           | (261)                                 | (219)           |
| Financial guarantees (note 13)             | (1,905)                                | 95             | (2,771)                               | 165             |
| Others (ii)                                | (472)                                  | (1,398)        | (1,556)                               | (2,826)         |
|  | <b>(6,571)</b>                         | <b>(4,308)</b> | <b>(11,993)</b>                       | <b>(10,199)</b> |
| <b>Other financial items, net</b>          |  |                |                                       |                 |
| Net foreign exchange gains (losses)        | (80)                                   | 91             | (1,822)                               | 151             |
| Derivative financial instruments (note 20) | (1,051)                                | (308)          | (7,866)                               | 287             |
| Indexation losses, net                     | (48)                                   | (556)          | (352)                                 | (1,587)         |
|  | <b>(1,179)</b>                         | <b>(773)</b>   | <b>(10,040)</b>                       | <b>(1,149)</b>  |
| <b>Total</b>                               | <b>(7,380)</b>                         | <b>(4,556)</b> | <b>(20,457)</b>                       | <b>(9,980)</b>  |

(i) In 2020, includes amounts related to Eletrobrás' contingent assets in the amount of R\$301, see note 22e.

(ii) Includes expenses with cash tender offer repurchased in the amount of R\$1,014, for the three and nine-month period ended September 30, 2019.

## 8. Income taxes

### a) Deferred income tax assets and liabilities

|                                      | Assets        |  | Liabilities  |  | Consolidated        |
|--------------------------------------|---------------|--|--------------|--|---------------------|
|                                      |               |  |              |  | Deferred taxes, net |
| <b>Balance at December 31, 2019</b>  | <b>37,151</b> |  | <b>7,585</b> |  | <b>29,566</b>       |
| Effect in income statement           | 4,931         |  | (410)        |  | 5,341               |
| Translation adjustment               | 3,178         |  | 2,395        |  | 783                 |
| Other comprehensive income           | 8,950         |  | (350)        |  | 9,300               |
| <b>Balance at September 30, 2020</b> | <b>54,210</b> |  | <b>9,220</b> |  | <b>44,990</b>       |

|                                      | Assets        |  | Liabilities  |  | Consolidated        |
|--------------------------------------|---------------|--|--------------|--|---------------------|
|                                      |               |  |              |  | Deferred taxes, net |
| <b>Balance at December 31, 2018</b>  | <b>26,767</b> |  | <b>5,936</b> |  | <b>20,831</b>       |
| Effect in income statement           | 2,701         |  | 212          |  | 2,489               |
| Acquisition of subsidiaries (i)      | 382           |  | 935          |  | (553)               |
| Translation adjustment               | 590           |  | 599          |  | (9)                 |
| Other comprehensive income           | 1,985         |  | (359)        |  | 2,344               |
| <b>Balance at September 30, 2019</b> | <b>32,425</b> |  | <b>7,323</b> |  | <b>25,102</b>       |

(i) Refers to the acquisition of New Steel and Ferrous Resources Limited (note 13).



## b) Income tax reconciliation – Income statement

Income tax expense is recognized based on the estimate of the weighted average effective tax rate expected for the full year. The total amount presented as income taxes in the income statement is reconciled to the statutory rate, as follows:

|  | Three-month period ended September 30, |         | Nine-month period ended September 30, |         |
|--|--|---------|---------------------------------------|---------|
|  | 2020                                   | 2019    | 2020                                  | 2019    |
| Income before income taxes                   | 19,331                                 | 10,327  | 22,597                                | 2,778   |
| Income taxes at statutory rate - 34%         | (6,573)                                | (3,512) | (7,683)                               | (945)   |
| Adjustments that affect the basis of taxes:  |  |         |                                       |         |
| Tax incentives                               | 2,642                                  | 650     | 4,991                                 | 889     |
| Equity results                               | (10)                                   | 33      | (110)                                 | 289     |
| Addition (reversal) of tax loss carryforward | 596                                    | (732)   | 2,555                                 | (2,643) |
| Others                                       | (914)                                  | (305)   | (1,764)                               | (871)   |
| Income taxes                                 | (4,259)                                | (3,866) | (2,011)                               | (3,281) |

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

The balance mainly relates to the settlement program of the claims related to the collection of income tax and social contribution on equity gains of foreign subsidiaries and affiliates from 2003 to 2012. As at September 30, 2020, the balance of R\$14,663 (R\$1,764 classified as current liabilities and R\$12,899 classified as non-current liabilities) is due in 97 remaining monthly installments, bearing the SELIC interest rate (Special System for Settlement and Custody), which is the Brazilian federal funds rate. As at September 30, 2020, the SELIC rate was 2% per annum.

## d) Uncertain tax positions

In 2004, a definitive decision of the Federal Court of Appeals of the 2nd Region (“TRF”) granted to the Company the right to deduct the social security contributions on the net income (“CSLL”) from the taxable corporate income. In 2006, the Brazilian federal tax authorities commenced a rescission action (*ação rescisória*), seeking the reversal of the 2004 decision. In 2019, “TRF” decided in favor for the rescission action. Appeals were filed and the decisions are pending.

Due to the developments on this proceeding, the Company has decided to not deduct the “CSLL” from the taxable income prospectively from the 2019 year end. The Company determined that, based on its internal and external experts, the uncertainties associated to the deduction of the “CSLL”, which are not recognized in its interim financial statements, totaled R\$783 and it is probable that the Company’s treatments will be accepted by the Brazilian tax authority.

## 9. Basic and diluted earnings (loss) per share

The basic and diluted earnings (loss) per share are presented below:

|   | Three-month period ended September 30, |           | Nine-month period ended September 30, |           |
|---|--|-----------|---------------------------------------|-----------|
|   | 2020                                   | 2019      | 2020                                  | 2019      |
| Net income (loss) attributable to Vale's stockholders:        |  |           |                                       |           |
| Net income (loss)   | 15,615                                 | 6,542     | 21,888                                | (264)     |
| Thousands of shares   |  |           |                                       |           |
| Weighted average number of shares outstanding - common shares | 5,129,911                              | 5,181,093 | 5,129,475                             | 5,180,866 |
| Basic and diluted earnings (loss) per share:                  |  |           |                                       |           |
| Common share (R\$)  | 3.04                                   | 1.26      | 4.27                                  | (0.05)    |

The Company does not have potential outstanding shares or other instruments with dilutive effect on the earnings per share computation.

## 10. Accounts receivable

|   | Consolidated       |                   |
|---|--------------------|-------------------|
|   | September 30, 2020 | December 31, 2019 |
| Accounts receivable                     | 17,255             | 10,448            |
| Expected credit loss                    | (253)              | (253)             |
|   | <b>17,002</b>      | <b>10,195</b>     |
| Revenue related to the steel sector - % | 88.10%             | 87.33%            |

|  | Consolidated                           |      |                                       |      |
|--|--|------|---------------------------------------|------|
|  | Three-month period ended September 30, |      | Nine-month period ended September 30, |      |
|  | 2020                                   | 2019 | 2020                                  | 2019 |
| Impairment of accounts receivable recorded in the income statement | 5                                      | (7)  | 46                                    | (19) |

There is no customer that individually represents more than 10% of the Company's accounts receivable or revenues.

## 11. Inventories

|                      | Consolidated       |                   |
|----------------------|--------------------|-------------------|
|                      | September 30, 2020 | December 31, 2019 |
| Finished products    | 16,627             | 10,505            |
| Work in progress     | 3,652              | 3,082             |
| Consumable inventory | 4,139              | 3,641             |
| <b>Total</b>         | <b>24,418</b>      | <b>17,228</b>     |

|   | Consolidated                           |      |                                       |       |
|---|--|------|---------------------------------------|-------|
|   | Three-month period ended September 30, |      | Nine-month period ended September 30, |       |
|   | 2020                                   | 2019 | 2020                                  | 2019  |
| Reversal (provision) for net realizable value | 236                                    | 94   | 15                                    | (132) |

Finished and work in progress products inventories by segments are presented in note 5(b).

## 12. Other financial assets and liabilities

|  | Current            |                   | Consolidated Non-Current |                   |
|--|--------------------|-------------------|--------------------------|-------------------|
|  | September 30, 2020 | December 31, 2019 | September 30, 2020       | December 31, 2019 |
| <b>Other financial assets</b>              |                    |                   |                          |                   |
| Assets held for sale (note 13)             | 470                | 613               | -                        | -                 |
| Restricted cash                            | -                  | -                 | 787                      | 609               |
| Loans                                      | 17                 | -                 | 357                      | 350               |
| Derivative financial instruments (note 20) | 340                | 1,160             | 308                      | 742               |
| Investments in equity securities           | -                  | -                 | 3,522                    | 2,925             |
| Related parties - Loans (note 25)          | 1,735              | 1,289             | 8,964                    | 6,448             |
|  | <b>2,562</b>       | <b>3,062</b>      | <b>13,938</b>            | <b>11,074</b>     |
| <b>Other financial liabilities</b>         |                    |                   |                          |                   |
| Derivative financial instruments (note 20) | 2,531              | 377               | 5,370                    | 1,237             |
| Related parties - Loans (note 25)          | 4,216              | 3,951             | 5,300                    | 3,853             |
| Financial guarantees provided (note 13)    | -                  | -                 | 4,876                    | 2,116             |
| Participative stockholders' debentures     | -                  | -                 | 14,285                   | 10,416            |
| Advance receipts                           | 3,315              | 1,330             | -                        | -                 |
|  | <b>10,062</b>      | <b>5,658</b>      | <b>29,831</b>            | <b>17,622</b>     |

### Participative stockholders' debentures

At the time of its privatization in 1997, the Company issued a total of 388,559,056 debentures to then-existing stockholders, including the Brazilian Government. The debentures' terms were set to ensure that pre-privatization stockholders would participate in potential future benefits that might be obtained from exploration of mineral resources. This obligation will cease when all the relevant mineral resources are exhausted, sold or otherwise disposed of by the Company.

Holders of participative stockholders' debentures have the right to receive semi-annual payments equal to an agreed percentage of revenues less value-added tax, transport fee and insurance expenses related to the trading of the products, derived from these mineral resources. On October 1, 2020 (subsequent event), the Company made available for withdrawal as remuneration the amount of R\$494, as disclosed on the "Shareholders' debentures report" made available on the Company's website

The participative stockholders' debentures are measured at fair value through profit or loss based on the market approach. To calculate the fair value of the liabilities, the Company uses the weighted average price of the secondary market trades in the last month of the quarter.

## 13. Investments in associates and joint ventures

### a) Movements during the period

|   | Consolidated Total |               |
|---|--------------------|---------------|
|   | 2020               | 2019          |
| <b>Balance at January 1,</b>                        | <b>11,278</b>      | <b>12,495</b> |
| Additions (i)                                       | 366                | 285           |
| Translation adjustment                              | 484                | 148           |
| Equity results in income statement                  | (323)              | 850           |
| Equity results in statement of comprehensive income | (9)                | (15)          |
| Fair value adjustment (ii)                          | -                  | (630)         |
| Dividends declared                                  | (507)              | (701)         |
| Others  | 193                | 54            |
| <b>Balance at September 30,</b>                     | <b>11,482</b>      | <b>12,486</b> |

(i) In 2020, refers mainly to Companhia Siderúrgica do Pecém's capital increase.

(ii) In 2019, refers to fair value adjustment of the investment in Henan Longyu Energy Resources Co., Ltd., which was transferred later to assets held for sale.

The amount of investments by segments are presented in note 5(b).

**b) Acquisitions and divestitures**

**Divestment agreement in compliance with PT Vale Indonesia Tbk ("PTVI") Contract of Work** - PTVI, a public company in Indonesia, has an agreement in place with the government of the Republic of Indonesia to operate its mining licenses which includes a commitment to include Indonesian participants in its shareholding structure. Following this commitment, on June 19, 2020, the Company signed together with Sumitomo Metal Mining Co., Ltd. ("SMM"), an agreement for the sale of 20% of their stake in PTVI to PT Indonesia Asahan Aluminium ("PT Inalum"), an Indonesia state-owned enterprise.

On October 7, 2020 (subsequent event), the Company concluded the transaction and received a cash consideration of R\$1,560 (US\$278 million). After the closing of the transaction, Vale and SMM have a stake of 44.3% and 15%, respectively, totaling a 59.3% interest in PTVI and, therefore, the Company continues consolidating PTVI in its financial statements based on the shareholders' agreement signed by Vale and SMM at the closing of the transaction.

The transaction with non-controlling interests resulted in a loss of R\$1,230, which will be recognized in Stockholders' equity in the fourth quarter of 2020.

**Henan Longyu Energy Resources Co., Ltd ("Henan Longyu")** - In December, 2019, the Company entered into an agreement to sell its 25% interest in Henan Longyu, a company that operates two coal mines in China, for a total amount of R\$832 (US\$152 million). In August 2020, the conditions precedent of the agreement were concluded and until October 2020, the Company received R\$608 (US\$110 million) as part of the consideration for the transaction. The payment of the remaining amount is expected by the end of 2020.

**Ferrous Resources Limited ("Ferrous")** - On August 1, 2019, the Company acquired 100% of the share capital of Ferrous, a Company that operates iron ore mines nearby to the Company's operations in Minas Gerais, Brazil for the amount of R\$1,986 (US\$525 million). The Company acquired Ferrous to obtain access to additional iron ore reserves.

**New Steel Global N.V. ("New Steel")** - On January 24, 2019 the Company acquired 100% of the share capital of New Steel for the total amount of R\$1,884. New Steel is a company that develops iron ore processing and beneficiating technologies for iron ore through a completely dry process. The consideration paid is mainly attributable to the research and development project for processing and beneficiating iron ore, which are presented as "Intangibles" (note 14).

**West III Project** - On October 9, 2020 (subsequent event), the Company approved the incorporation of a joint venture with Ningbo Zhoushan Port Company Limited ("Ningbo Zhoushan Port"), to build and operate the project to expand the Shulanghu Port facilities, located in China. The Project secures strategic port capacity in China to further Vale's shipping and distribution costs optimization.

Vale will own 50% of the joint venture and Vale's capital contribution to the project is estimated to range from R\$620 (US\$110 million) to R\$903 (US\$160 million). The construction of the project, which is expected to take up to three years, will start after both parties obtain the anti-trust and other regulatory approvals in China.

**c) Financial guarantees provided**

As of September 30, 2020, the notional value of corporate financial guarantees provided by Vale (within the limit of its direct or indirect interest) for certain associates and joint ventures were R\$8,540 (R\$6,671 on December 31, 2019). The fair value of these financial guarantees is shown in note 12.

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



### Investments in associates and joint ventures (continued)

|   |             |                  |  |                   |  |       |                                       |       |  |      |                                       | Consolidated |
|---|-------------|------------------|--|-------------------|--|-------|---------------------------------------|-------|--|------|---------------------------------------|--------------|
|   |             |                  | Investments in associates and joint ventures |                   | Equity results in the income statement |       |                                       |       | Dividends received                     |      |                                       |              |
|   |             |                  |  |                   | Three-month period ended September 30, |       | Nine-month period ended September 30, |       | Three-month period ended September 30, |      | Nine-month period ended September 30, |              |
| Associates and joint ventures                   | % ownership | % voting capital | September 30, 2020                           | December 31, 2019 | 2020                                   | 2019  | 2020                                  | 2019  | 2020                                   | 2019 | 2020                                  | 2019         |
| Ferrous minerals                                |             |                  |  |                   |  |       |                                       |       |  |      |                                       |              |
| Baovale Mineração S.A.                          | 50.00       | 50.00            | 118  | 102               | 5                                      | 5     | 16                                    | 26    | 2                                      | 1    | 2                                     | 1            |
| Companhia Coreano-Brasileira de Pelotização     | 50.00       | 50.00            | 258  | 354               | 11                                     | 57    | 36                                    | 161   | -                                      | -    | 89                                    | 126          |
| Companhia Hispano-Brasileira de Pelotização (i) | 50.89       | 50.89            | 224  | 284               | 25                                     | 50    | 41                                    | 129   | -                                      | -    | 72                                    | 148          |
| Companhia Ítalo-Brasileira de Pelotização (i)   | 50.90       | 51.00            | 251  | 262               | (2)                                    | 49    | 49                                    | 106   | -                                      | -    | 119                                   | 109          |
| Companhia Nipo-Brasileira de Pelotização (i)    | 51.00       | 51.11            | 646  | 605               | -                                      | 107   | 40                                    | 301   | -                                      | -    | -                                     | 182          |
| MRS Logística S.A.                              | 48.16       | 46.75            | 2,074  | 1,999             | 65                                     | 110   | 133                                   | 211   | -                                      | -    | -                                     | -            |
| VLI S.A.  | 37.60       | 37.60            | 3,164  | 3,273             | (3)                                    | (22)  | (95)                                  | 8     | 8                                      | -    | 8                                     | -            |
| Zhuhai YPM Pellet Co.                           | 25.00       | 25.00            | 130  | 91                | -                                      | -     | -                                     | -     | -                                      | -    | -                                     | -            |
|   |             |                  | 6,865  | 6,970             | 101                                    | 356   | 220                                   | 942   | 10                                     | 1    | 290                                   | 566          |
| Base metals                                     |             |                  |  |                   |  |       |                                       |       |  |      |                                       |              |
| Korea Nickel Corp.                              | 25.00       | 25.00            | 91   | 56                | (3)                                    | -     | (2)                                   | (2)   | -                                      | -    | -                                     | -            |
|   |             |                  | 91   | 56                | (3)                                    | -     | (2)                                   | (2)   | -                                      | -    | -                                     | -            |
| Coal  |             |                  |  |                   |  |       |                                       |       |  |      |                                       |              |
| Henan Longyu Energy Resources Co., Ltd.         | 25.00       | 25.00            | -  | -                 | -                                      | -     | -                                     | (6)   | -                                      | -    | -                                     | -            |
|   |             |                  | -  | -                 | -                                      | -     | -                                     | (6)   | -                                      | -    | -                                     | -            |
| Others  |             |                  |  |                   |  |       |                                       |       |  |      |                                       |              |
| Aliança Geração de Energia S.A. (i)             | 55.00       | 55.00            | 1,879  | 1,894             | 27                                     | 9     | 111                                   | 100   | -                                      | -    | 126                                   | 111          |
| Aliança Norte Energia Participações S.A. (i)    | 51.00       | 51.00            | 622  | 646               | (9)                                    | 16    | (24)                                  | 21    | -                                      | -    | -                                     | -            |
| California Steel Industries, Inc.               | 50.00       | 50.00            | 1,306  | 975               | (44)                                   | 7     | (46)                                  | 109   | -                                      | -    | -                                     | 83           |
| Companhia Siderúrgica do Pecém (ii)             | 50.00       | 50.00            | -  | -                 | -                                      | (285) | (364)                                 | (285) | -                                      | -    | -                                     | -            |
| Mineração Rio do Norte S.A.                     | 40.00       | 40.00            | 345  | 393               | 27                                     | 22    | (28)                                  | 35    | -                                      | -    | -                                     | -            |
| Others  |             |                  | 374  | 344               | (129)                                  | (26)  | (190)                                 | (64)  | -                                      | -    | 3                                     | 2            |
|   |             |                  | 4,526  | 4,252             | (128)                                  | (257) | (541)                                 | (84)  | -                                      | -    | 129                                   | 196          |
| Total   |             |                  | 11,482                                       | 11,278            | (30)                                   | 99    | (323)                                 | 850   | 10                                     | 1    | 419                                   | 762          |

(i) Although the Company held a majority of the voting capital, the entities are accounted under the equity method due to the stockholders' agreement where relevant decisions are shared with other parties.

(ii) Companhia Siderúrgica do Pecém ("CSP") is a joint venture and its results are accounted for under the equity method, in which the accumulated losses are capped to the Company's interest in the investee's capital based on the applicable law and requirements. That is, after the investment is reduced to zero, the Company does not recognize further losses nor liabilities associated with the investee.

## 14. Intangibles

### a) Movements during the period

|                                      | Consolidated  |               |                |            |  |               |
|--------------------------------------|---------------|---------------|----------------|------------|--|---------------|
|                                      | Goodwill      | Concessions   | Contract right | Software   | Research and development project and patents | Total         |
| <b>Balance at December 31, 2019</b>  | <b>14,628</b> | <b>16,005</b> | <b>563</b>     | <b>304</b> | <b>2,757</b>                                 | <b>34,257</b> |
| Additions                            | -             | 629           | -              | 62         | -  | 691           |
| Disposals                            | -             | (25)          | -              | (1)        | -  | (26)          |
| Amortization                         | -             | (683)         | (4)            | (84)       | -  | (771)         |
| Translation adjustment               | 2,935         | -             | 171            | 51         | (1)  | 3,156         |
| <b>Balance at September 30, 2020</b> | <b>17,563</b> | <b>15,926</b> | <b>730</b>     | <b>332</b> | <b>2,756</b>                                 | <b>37,307</b> |
| Cost                                 | 17,563        | 20,969        | 1,274          | 3,965      | 2,756  | 46,527        |
| Accumulated amortization             | -             | (5,043)       | (544)          | (3,633)    | -  | (9,220)       |
| <b>Balance at September 30, 2020</b> | <b>17,563</b> | <b>15,926</b> | <b>730</b>     | <b>332</b> | <b>2,756</b>                                 | <b>37,307</b> |

|                                      | Consolidated  |               |                |            |  |               |
|--------------------------------------|---------------|---------------|----------------|------------|--|---------------|
|                                      | Goodwill      | Concessions   | Contract right | Software   | Research and development project and patents (i) | Total         |
| <b>Balance at December 31, 2018</b>  | <b>14,155</b> | <b>15,737</b> | <b>530</b>     | <b>428</b> | -  | <b>30,850</b> |
| Additions                            | -             | 1,054         | -              | 125        | -  | 1,179         |
| Disposals                            | -             | (54)          | -              | (1)        | -  | (55)          |
| Amortization                         | -             | (755)         | (5)            | (220)      | -  | (980)         |
| Acquisition of subsidiary            | -             | 12            | -              | 6          | 2,757  | 2,775         |
| Translation adjustment               | 721           | 47            | 46             | 16         | -  | 830           |
| <b>Balance at September 30, 2019</b> | <b>14,876</b> | <b>16,041</b> | <b>571</b>     | <b>354</b> | <b>2,757</b>                                     | <b>34,599</b> |
| Cost                                 | 14,876        | 20,357        | 853            | 3,805      | 2,757  | 42,648        |
| Accumulated amortization             | -             | (4,316)       | (282)          | (3,451)    | -  | (8,049)       |
| <b>Balance at September 30, 2019</b> | <b>14,876</b> | <b>16,041</b> | <b>571</b>     | <b>354</b> | <b>2,757</b>                                     | <b>34,599</b> |

(i) Refers mainly to the acquisition of New Steel Global N.V. (note 13b).

### b) Early extensions of railway concessions

In 2018, the Company started the process for early extensions, for an additional period of 30 years, of the concession contracts for the Estrada de Ferro Vitória a Minas ("EFVM") and the Estrada de Ferro Carajás ("EFC"), both granted until June 2027.

On July 29, 2020, the Federal Court of Audit approved to submit the proceedings of the anticipated renewal of the railway concessions to the National Land Transportation Agency ("ANTT") and the Ministry of Infrastructure, for the evaluation of the technical studies and other legal documents related to the early extensions. After evaluating the proposed terms and conditions, the Company will submit the proposal, with the required counterparts, to its Board of Directors.



## 15. Property, plant and equipment

### a) Movements during the period

|  | Consolidated |               |               |               |                    |                     |               |                           |
|--|--------------|---------------|---------------|---------------|--------------------|---------------------|---------------|---------------------------|
|  | Land         | Building      | Facilities    | Equipment     | Mineral properties | Right of use assets | Others        | Constructions in progress |
| <b>Balance at December 31, 2019</b>      | <b>2,881</b> | <b>40,256</b> | <b>38,713</b> | <b>22,921</b> | <b>33,302</b>      | <b>6,819</b>        | <b>25,201</b> | <b>17,640</b>             |
| Additions (i)                            | -            | -             | -             | -             | -                  | 196                 | -             | 14,107                    |
| Disposals                                | (4)          | (31)          | (194)         | (8)           | (38)               | -                   | (47)          | (161)                     |
| Assets retirement obligation             | -            | -             | -             | -             | 1,912              | -                   | -             | -                         |
| Depreciation, depletion and amortization | -            | (1,677)       | (1,879)       | (2,802)       | (1,839)            | (671)               | (1,783)       | -                         |
| Impairment (ii)                          | (14)         | (802)         | (1,653)       | (78)          | (785)              | (3)                 | (439)         | (800)                     |
| Translation adjustment                   | 404          | 3,974         | 2,939         | 4,704         | 8,279              | 2,072               | 1,886         | 1,782                     |
| Transfers                                | 155          | 782           | 1,709         | 1,772         | 1,769              | -                   | 1,264         | (7,451)                   |
| <b>Balance at September 30, 2020</b>     | <b>3,422</b> | <b>42,502</b> | <b>39,635</b> | <b>26,509</b> | <b>42,600</b>      | <b>8,413</b>        | <b>26,082</b> | <b>25,117</b>             |
| Cost                                     | 3,422        | 76,989        | 60,690        | 57,356        | 90,981             | 10,392              | 50,766        | 25,117                    |
| Accumulated depreciation                 | -            | (34,487)      | (21,055)      | (30,847)      | (48,381)           | (1,979)             | (24,684)      | -                         |
| <b>Balance at September 30, 2020</b>     | <b>3,422</b> | <b>42,502</b> | <b>39,635</b> | <b>26,509</b> | <b>42,600</b>      | <b>8,413</b>        | <b>26,082</b> | <b>25,117</b>             |

|  | Consolidated |               |               |               |                    |                     |               |                           |
|--|--------------|---------------|---------------|---------------|--------------------|---------------------|---------------|---------------------------|
|  | Land         | Building      | Facilities    | Equipment     | Mineral properties | Right of use assets | Others        | Constructions in progress |
| <b>Balance at December 31, 2018</b>      | <b>2,459</b> | <b>42,434</b> | <b>43,536</b> | <b>24,826</b> | <b>32,931</b>      | <b>-</b>            | <b>28,175</b> | <b>13,120</b>             |
| Effects of IFRS 16/CPC 06 (R2) adoption  | -            | -             | -             | -             | -                  | 6,978               | -             | -                         |
| Additions (i)                            | -            | -             | -             | -             | -                  | 436                 | -             | 10,734                    |
| Disposals                                | (85)         | (308)         | (143)         | (206)         | (627)              | (24)                | (819)         | (53)                      |
| Assets retirement obligation             | -            | -             | -             | -             | 1,165              | -                   | -             | -                         |
| Depreciation, depletion and amortization | -            | (1,527)       | (1,908)       | (2,504)       | (1,753)            | (548)               | (1,926)       | -                         |
| Acquisition of subsidiary (iii)          | 233          | 56            | 156           | 173           | 1,044              | 6                   | 2             | 186                       |
| Translation adjustment                   | 43           | 1,047         | 925           | 1,060         | 2,228              | 416                 | 602           | 972                       |
| Transfers                                | 7            | 684           | 981           | 2,735         | 1,453              | -                   | 2,099         | (7,959)                   |
| <b>Balance at September 30, 2019</b>     | <b>2,657</b> | <b>42,386</b> | <b>43,547</b> | <b>26,084</b> | <b>36,441</b>      | <b>7,264</b>        | <b>28,133</b> | <b>17,000</b>             |
| Cost                                     | 2,657        | 74,581        | 70,636        | 51,751        | 72,663             | 7,812               | 48,321        | 17,000                    |
| Accumulated depreciation                 | -            | (32,195)      | (27,089)      | (25,667)      | (36,222)           | (548)               | (20,188)      | -                         |
| <b>Balance at September 30, 2019</b>     | <b>2,657</b> | <b>42,386</b> | <b>43,547</b> | <b>26,084</b> | <b>36,441</b>      | <b>7,264</b>        | <b>28,133</b> | <b>17,000</b>             |

(i) Includes capitalized borrowing costs.

(ii) Includes the impairment of VNC assets, Simões Filho and Biopalma.

(iii) Refers mainly to the acquisition of Ferrous (note 13b).

### b) Right-of-use assets (Leases)

|                  | December 31, 2019 | Additions and contract modifications | Depreciation | Translation adjustment | September 30, 2020 |
|------------------|-------------------|--------------------------------------|--------------|------------------------|--------------------|
| Ports            | 2,958             | 3                                    | (158)        | 1,013                  | 3,816              |
| Vessels          | 2,341             | -                                    | (208)        | 936                    | 3,069              |
| Pellets plants   | 676               | 156                                  | (138)        | -                      | 694                |
| Properties       | 521               | 18                                   | (104)        | 22                     | 457                |
| Energy plants    | 250               | -                                    | (28)         | 88                     | 310                |
| Locomotives      | -                 | 11                                   | -            | -                      | 11                 |
| Mining equipment | 73                | 5                                    | (35)         | 13                     | 56                 |
| <b>Total</b>     | <b>6,819</b>      | <b>193</b>                           | <b>(671)</b> | <b>2,072</b>           | <b>8,413</b>       |

### c) Guarantees

There are no material changes to the net book value of consolidated property, plant and equipment pledged to secure judicial claims and loans and borrowings (note 16) compared to those disclosed in the financial statements as at December 31, 2019.

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

### a) Net debt

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

|   | Consolidated       |                   |
|---|--------------------|-------------------|
|   | September 30, 2020 | December 31, 2019 |
| Debt contracts in the international markets | 67,971             | 42,298            |
| Debt contracts in Brazil                    | 7,864              | 10,327            |
| <b>Total of loans and borrowings</b>        | <b>75,835</b>      | <b>52,625</b>     |
| (-) Cash and cash equivalents               | 49,889             | 29,627            |
| (-) Short-term investments                  | 707                | 3,329             |
| <b>Net debt</b>                             | <b>25,239</b>      | <b>19,669</b>     |

### b) Cash and cash equivalents

Cash and cash equivalents include cash, immediately redeemable deposits and short-term investments with an insignificant risk of change in value. They are readily convertible to cash, being R\$14,294 denominated in R\$, indexed to the Brazilian Interbank Interest rate ("DI Rate" or "CDI"), R\$34,642 denominated in US\$ and R\$953 denominated in other currencies.

### c) Short-term investments

At September 30, 2020, the balance of R\$707 is substantially comprised of investments in an exclusive investment fund immediately liquid, whose portfolio is composed of committed transactions and Financial Treasury Bills ("LFTs"), which are floating-rate securities issued by the Brazilian government. At December 31, 2019, the balance of R\$3,329 is mainly comprised of investments directly in LFTs.

### d) Loans, borrowings and leases

#### i) Total debt

|  | Consolidated        |                   |                         |                   |
|--|---------------------|-------------------|-------------------------|-------------------|
|  | Current liabilities |                   | Non-current liabilities |                   |
|  | September 30, 2020  | December 31, 2019 | September 30, 2020      | December 31, 2019 |
| <b>Debt contracts in the international markets</b> |                     |                   |                         |                   |
| <b>Floating rates in:</b>                          |                     |                   |                         |                   |
| US\$   | 946                 | 456               | 16,499                  | 11,294            |
| EUR  | -                   | -                 | 1,323                   | 907               |
| <b>Fixed rates in:</b>                             |                     |                   |                         |                   |
| US\$   | 78                  | 593               | 42,694                  | 24,506            |
| EUR  | -                   | -                 | 4,960                   | 3,398             |
| Other currencies                                   | 3                   | 56                | 582                     | 427               |
| <b>Accrued charges</b>                             | <b>886</b>          | <b>645</b>        | <b>-</b>                | <b>16</b>         |
|  | <b>1,913</b>        | <b>1,750</b>      | <b>66,058</b>           | <b>40,548</b>     |
| <b>Debt contracts in Brazil</b>                    |                     |                   |                         |                   |
| <b>Floating rates in:</b>                          |                     |                   |                         |                   |
| R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI      | 2,170               | 2,620             | 5,014                   | 6,759             |
| Basket of currencies and US\$ indexed to LIBOR     | 252                 | 177               | 126                     | 226               |
| <b>Fixed rates in:</b>                             |                     |                   |                         |                   |
| R\$  | 111                 | 174               | 98                      | 181               |
| <b>Accrued charges</b>                             | <b>93</b>           | <b>174</b>        | <b>-</b>                | <b>16</b>         |
|  | <b>2,626</b>        | <b>3,145</b>      | <b>5,238</b>            | <b>7,182</b>      |
| <b>Total</b>                                       | <b>4,539</b>        | <b>4,895</b>      | <b>71,296</b>           | <b>47,730</b>     |

## Future flows of debt payments, principal and interest

|                       |               | Consolidated                           |
|-----------------------|---------------|--|
|                       | Principal     | Estimated future interest payments (i) |
| 2020                  | 332           | 783                                    |
| 2021                  | 3,626         | 3,640                                  |
| 2022                  | 6,794         | 3,408                                  |
| 2023                  | 6,721         | 3,252                                  |
| Between 2024 and 2028 | 24,461        | 12,751                                 |
| 2029 onwards          | 32,922        | 15,895                                 |
| <b>Total</b>          | <b>74,856</b> | <b>39,729</b>                          |

(i) Based on interest rate curves and foreign exchange rates applicable as at September 30, 2020 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 interim financial statements.

## Average annual interest rates by currency

|                             | Average interest rate (i) | Consolidated Total debt |
|-----------------------------|---------------------------|-------------------------|
| <b>Loans and borrowings</b> |                           |                         |
| US\$                        | 4.85%                     | 61,304                  |
| R\$ (ii)                    | 8.89%                     | 7,484                   |
| EUR (iii)                   | 3.79%                     | 6,455                   |
| Other currencies            | 3.46%                     | 592                     |
|                             |                           | <b>75,835</b>           |

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable at September 30, 2020.

(ii) R\$ denominated debt that bears interest at IPCA, IGP, CDI, TR or TJLP, plus spread. For a total of R\$6,949 the Company entered into derivative transactions to mitigate the exposure to the cash flow variations of the floating rate debt denominated in R\$, resulting in an average cost of 2.97% per year in US\$.

(iii) Eurobonds, for which the Company entered into derivatives to mitigate the exposure to the cash flow variations of the debt denominated in EUR, resulting in an average cost of 4.29% per year in US\$.

## Credit and financing lines

As a precautionary measure in order to increase the Company's cash position due to the uncertainties resulting from the COVID-19 pandemic, Vale drew down its revolving credit lines in March 2020. These credit lines were fully paid in September 2020. Therefore as at September 30, 2020, the total amount available under credit lines is R\$26,997 (US\$5 billion), of which R\$10,799 (US\$2 billion) maturing in June 2022 and R\$16,198 (US\$3 billion) maturing in December 2024.

## Funding

In July 2020, the Company issued through Vale Overseas Limited guaranteed notes due July 2030 totaling R\$8,214 (US\$1,500 million). The notes bear 3.750% coupon per year, payable semi-annually, and were sold at a price of 99.176% of the principal amount.

## Covenants

Some of the Company's debt agreements with lenders contain financial covenants. The primary financial covenants in those agreements require maintaining certain ratios, such as debt to EBITDA (Earnings before Interest Taxes, Depreciation and Amortization) and interest coverage. The Company has not identified any instances of noncompliance as at September 30, 2020.

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

|  | Consolidated         |
|--|----------------------|
|  | Loans and borrowings |
| <b>December 31, 2019</b>                   | <b>52,625</b>        |
| Additions                                  | 34,004               |
| Repayments                                 | (31,674)             |
| Interest paid                              | (3,126)              |
| <b>Cash flow from financing activities</b> | <b>(796)</b>         |
| Effect of exchange rate                    | 21,189               |
| Interest accretion                         | 2,817                |
| <b>Non-cash changes</b>                    | <b>24,006</b>        |
| <b>September 30, 2020</b>                  | <b>75,835</b>        |

## ii) Lease liabilities

|                  | December 31,<br>2019 | Additions and contract<br>modifications | Payments (i) | Interest (ii) | Translation<br>adjustment | September 30,<br>2020 |
|------------------|----------------------|---|--------------|---------------|---------------------------|-----------------------|
| Ports            | 3,023                | 3                                       | (283)        | 113           | 1,058                     | 3,914                 |
| Vessels          | 2,343                | -                                       | (270)        | 106           | 883                       | 3,062                 |
| Pellets plants   | 705                  | 156                                     | (38)         | 12            | -                         | 835                   |
| Properties       | 614                  | 18                                      | (58)         | 10            | 109                       | 693                   |
| Energy plants    | 282                  | -                                       | (7)          | 4             | 65                        | 344                   |
| Locomotives      | 154                  | 11                                      | (47)         | 11            | 68                        | 197                   |
| Mining equipment | 97                   | 5                                       | (23)         | 5             | 18                        | 102                   |
| <b>Total</b>     | <b>7,218</b>         | <b>193</b>                              | <b>(726)</b> | <b>261</b>    | <b>2,201</b>              | <b>9,147</b>          |

(i) The total amount of the variable lease payments not included in the measurement of lease liabilities, which have been recognized straight to the income statement, for the three and nine-month periods ended September 30, 2020 was R\$54 and R\$253, respectively, and for the three and nine-month periods ended September 30, 2019 was R\$729 and R\$1,921, respectively.

(ii) The interest accretion recognized in the income statement is disclosed in note 7.

## Annual minimum payments

|                  | 2020       | 2021       | 2022       | 2023       | 2024 onwards | Total        |
|------------------|------------|------------|------------|------------|--------------|--------------|
| Ports            | 23         | 124        | 124        | 124        | 3,249        | 3,644        |
| Vessels          | 96         | 367        | 361        | 350        | 2,617        | 3,791        |
| Pellets plants   | 141        | 141        | 124        | 34         | 389          | 829          |
| Properties       | 73         | 147        | 96         | 73         | 226          | 615          |
| Energy plants    | 6          | 34         | 34         | 34         | 350          | 458          |
| Locomotives      | 11         | 51         | 51         | 51         | 130          | 294          |
| Mining equipment | 6          | 34         | 28         | 17         | 11           | 96           |
| <b>Total</b>     | <b>356</b> | <b>898</b> | <b>818</b> | <b>683</b> | <b>6,972</b> | <b>9,727</b> |

The amounts in the table above presents the undiscounted lease obligation by maturity date. The lease liability disclosed as "Loans and borrowings" in the balance sheet is measured at the present value of such obligations.

## e) Guarantees

As at September 30, 2020 and December 31, 2019, loans and borrowings are secured by property, plant and equipment in the amount of R\$897 and R\$887, respectively. The securities issued through Vale's wholly-owned finance subsidiary Vale Overseas Limited are fully and unconditionally guaranteed by Vale.

## 17. Liabilities related to associates and joint ventures

On November 5, 2015, a rupture occurred in the Fundão tailings dam, in Mariana (State of Minas Gerais), operated by Samarco Mineração S.A. ("Samarco"), a joint venture controlled by Vale S.A. and BHP Billiton Brasil Ltda. ("BHP Brasil"). In March 2016, Samarco and its shareholders entered into a Framework Agreement with governmental authorities, in which Samarco, Vale and BHP Brasil agreed to establish the Renova Foundation, an entity responsible to develop and implement 42 long-term mitigation and compensation programs. In addition, the Company has a provision of R\$1,001 for the de-characterization of the Germano dam.

On October 25, 2019, Samarco obtained the Corrective Operation License for its operating activities in the Germano Complex. Following this authorization, Samarco has obtained all environmental licenses required to restart its operations and expects to start the gradual resumption of its operations at the end of 2020.

### Movements during the period

|                          | Consolidated |       |
|--------------------------|--------------|-------|
|                          | 2020         | 2019  |
| Balance at January 1,    | 6,853        | 4,346 |
| Provision increase       | 2,939        | 2,470 |
| Payments                 | (1,586)      | (729) |
| Present value valuation  | 169          | 397   |
| Balance at September 30, | 8,375        | 6,484 |

  

|                         | September 30, 2020 | December 31, 2019 |
|-------------------------|--------------------|-------------------|
| Current liabilities     | 3,880              | 2,079             |
| Non-current liabilities | 4,495              | 4,774             |
| Liabilities             | 8,375              | 6,853             |

### Renova Foundation

During the second quarter of 2020, Fundação Renova reviewed the assumptions used on the preparation of the estimates incorporated into the mitigation and compensation programs. The periodic review, resulted in an additional provision of R\$2,939 for the Company, which corresponds to its portion of the responsibility to support the Renova Foundation. The contingencies related to the Fundão dam rupture are disclosed in note 22.

### Samarco's working capital

In addition to the provision, Vale may provide a short-term credit facility up to R\$1,201 (US\$213 million), to support Samarco's cash requirements, of which R\$594 (US\$119 million) has already been made available during the nine-month period ended September 30, 2020. This amount was recognized in Vale's income statement as an expense in "Equity results and other results in associates and joint ventures".

### Insurance

Since the Fundão dam rupture, the Company has been negotiating with insurers the indemnification payments based on its general liability policies. During 2020, the Company received payments in the amount of R\$75 (US\$14 million) and recognized a gain in the income statement as "Equity results and other results in associates and joint ventures".

## Critical accounting estimates and judgments

Under Brazilian legislation and the terms of the joint venture agreement, Vale does not have an obligation to provide funding to Samarco. Accordingly, Vale's investment in Samarco was fully impaired and no provision was recognized in relation to the Samarco's negative equity.

The provision related to Renova Foundation requires the use of assumptions that may be mainly affected by: (i) changes in scope of work required under the Framework Agreement as a result of further technical analysis and the ongoing negotiations with the Federal Prosecution Office, (ii) resolution of uncertainty in respect of the resumption of Samarco's operations; (iii) updates of the discount rate; and (iv) resolution of existing and potential legal claims.

Moreover, the main critical assumptions and estimates applied in the Germano dam provision considers, among others: (i) volume of the waste to be removed based on historical data available and interpretation of the enacted laws and regulations; (ii) location availability for the tailings disposal; and (iii) acceptance by the authorities of the proposed engineering methods and solution.

As a result, future expenditures may differ from the amounts currently provided and changes to key assumptions could result in a material impact to the amount of the provision in future reporting periods. At each reporting period, the Company reassess the key assumptions used by Samarco in the preparation of the projected cash flows and adjust the provision, if required.

## 18. Financial instruments classification

|  | September 30, 2020 |                           |                                      |                | December 31, 2019 |                           |                                      |                |
|--|--------------------|---------------------------|--------------------------------------|----------------|-------------------|---------------------------|--------------------------------------|----------------|
|  | 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              | 49,889             | -                         | -                                    | 49,889         | 29,627            | -                         | -                                    | 29,627         |
| Short-term investments                 | -                  | -                         | 707                                  | 707            | -                 | -                         | 3,329                                | 3,329          |
| Derivative financial instruments       | -                  | -                         | 340                                  | 340            | -                 | -                         | 1,160                                | 1,160          |
| Accounts receivable                    | 16,934             | -                         | 68                                   | 17,002         | 9,885             | -                         | 310                                  | 10,195         |
| Related parties                        | 1,735              | -                         | -                                    | 1,735          | 1,289             | -                         | -                                    | 1,289          |
|  | <b>68,558</b>      | <b>-</b>                  | <b>1,115</b>                         | <b>69,673</b>  | <b>40,801</b>     | <b>-</b>                  | <b>4,799</b>                         | <b>45,600</b>  |
| <b>Non-current</b>                     |                    |                           |                                      |                |                   |                           |                                      |                |
| Judicial deposits                      | 11,504             | -                         | -                                    | 11,504         | 12,629            | -                         | -                                    | 12,629         |
| Restricted cash                        | 787                | -                         | -                                    | 787            | 609               | -                         | -                                    | 609            |
| Derivative financial instruments       | -                  | -                         | 308                                  | 308            | -                 | -                         | 742                                  | 742            |
| Investments in equity securities       | -                  | 3,522                     | -                                    | 3,522          | -                 | 2,925                     | -                                    | 2,925          |
| Loans                                  | 357                | -                         | -                                    | 357            | 350               | -                         | -                                    | 350            |
| Related parties                        | 8,964              | -                         | -                                    | 8,964          | 6,448             | -                         | -                                    | 6,448          |
|  | <b>21,612</b>      | <b>3,522</b>              | <b>308</b>                           | <b>25,442</b>  | <b>20,036</b>     | <b>2,925</b>              | <b>742</b>                           | <b>23,703</b>  |
| <b>Total of financial assets</b>       | <b>90,170</b>      | <b>3,522</b>              | <b>1,423</b>                         | <b>95,115</b>  | <b>60,837</b>     | <b>2,925</b>              | <b>5,541</b>                         | <b>69,303</b>  |
| <b>Financial liabilities</b>           |                    |                           |                                      |                |                   |                           |                                      |                |
| <b>Current</b>                         |                    |                           |                                      |                |                   |                           |                                      |                |
| Suppliers and contractors              | 17,478             | -                         | -                                    | 17,478         | 16,556            | -                         | -                                    | 16,556         |
| Derivative financial instruments       | -                  | -                         | 2,531                                | 2,531          | -                 | -                         | 377                                  | 377            |
| Loans, borrowings and leases           | 5,775              | -                         | -                                    | 5,775          | 5,805             | -                         | -                                    | 5,805          |
| Interest on capital                    | -                  | -                         | -                                    | -              | 6,333             | -                         | -                                    | 6,333          |
| Related parties                        | 4,216              | -                         | -                                    | 4,216          | 3,951             | -                         | -                                    | 3,951          |
| Advance receipts                       | 3,315              | -                         | -                                    | 3,315          | 1,330             | -                         | -                                    | 1,330          |
|  | <b>30,784</b>      | <b>-</b>                  | <b>2,531</b>                         | <b>33,315</b>  | <b>33,975</b>     | <b>-</b>                  | <b>377</b>                           | <b>34,352</b>  |
| <b>Non-current</b>                     |                    |                           |                                      |                |                   |                           |                                      |                |
| Derivative financial instruments       | -                  | -                         | 5,370                                | 5,370          | -                 | -                         | 1,237                                | 1,237          |
| Loans, borrowings and leases           | 79,207             | -                         | -                                    | 79,207         | 54,038            | -                         | -                                    | 54,038         |
| Related parties                        | 5,300              | -                         | -                                    | 5,300          | 3,853             | -                         | -                                    | 3,853          |
| Participative stockholders' debentures | -                  | -                         | 14,285                               | 14,285         | -                 | -                         | 10,416                               | 10,416         |
| Financial guarantees                   | -                  | -                         | 4,876                                | 4,876          | -                 | -                         | 2,116                                | 2,116          |
|  | <b>84,507</b>      | <b>-</b>                  | <b>24,531</b>                        | <b>109,038</b> | <b>57,891</b>     | <b>-</b>                  | <b>13,769</b>                        | <b>71,660</b>  |
| <b>Total of financial liabilities</b>  | <b>115,291</b>     | <b>-</b>                  | <b>27,062</b>                        | <b>142,353</b> | <b>91,866</b>     | <b>-</b>                  | <b>14,146</b>                        | <b>106,012</b> |

## 19. Fair value estimate

### a) Assets and liabilities measured and recognized at fair value

|  | September 30, 2020 |               |            |               | December 31, 2019 |               |            |               |
|--|--------------------|---------------|------------|---------------|-------------------|---------------|------------|---------------|
|  | Level 1            | Level 2       | Level 3    | Total         | Level 1           | Level 2       | Level 3    | Total         |
| <b>Financial assets</b>                |                    |               |            |               |                   |               |            |               |
| Short-term investments                 | 707                | -             | -          | 707           | 3,329             | -             | -          | 3,329         |
| Derivative financial instruments       | -                  | 525           | 123        | 648           | -                 | 1,806         | 96         | 1,902         |
| Accounts receivable                    | -                  | 68            | -          | 68            | -                 | 310           | -          | 310           |
| Investments in equity securities       | 3,522              | -             | -          | 3,522         | 2,925             | -             | -          | 2,925         |
| <b>Total</b>                           | <b>4,229</b>       | <b>593</b>    | <b>123</b> | <b>4,945</b>  | <b>6,254</b>      | <b>2,116</b>  | <b>96</b>  | <b>8,466</b>  |
| <b>Financial liabilities</b>           |                    |               |            |               |                   |               |            |               |
| Derivative financial instruments       | -                  | 7,245         | 656        | 7,901         | -                 | 1,130         | 484        | 1,614         |
| Participative stockholders' debentures | -                  | 14,285        | -          | 14,285        | -                 | 10,416        | -          | 10,416        |
| Financial guarantees                   | -                  | 4,876         | -          | 4,876         | -                 | 2,116         | -          | 2,116         |
| <b>Total</b>                           | <b>-</b>           | <b>26,406</b> | <b>656</b> | <b>27,062</b> | <b>-</b>          | <b>13,662</b> | <b>484</b> | <b>14,146</b> |

The methods and techniques of evaluation used to measure the fair value of assets and liabilities are described in note 27(g). The fair value of derivatives within level 3 is estimated using discounted cash flows and option model valuation techniques with unobservable inputs of discount rates, stock prices and commodities prices.

There were no transfers between Level 1 and Level 2, or between Level 2 and Level 3 for the nine-month period ended September 30, 2020.

### Changes in Level 3 assets and liabilities during the period

|  | Consolidated     |                       |
|--|------------------|-----------------------|
|  | Financial assets | Financial liabilities |
| <b>Balance at December 31, 2019</b>            | <b>96</b>        | <b>484</b>            |
| Gain and losses recognized in income statement | 27               | 172                   |
| <b>Balance at September 30, 2020</b>           | <b>123</b>       | <b>656</b>            |

### b) Fair value of financial instruments not measured at fair value

|                           | Consolidated |            |         |         |
|---------------------------|--------------|------------|---------|---------|
|                           | Balance      | Fair value | Level 1 | Level 2 |
| <b>September 30, 2020</b> |              |            |         |         |
| Debt principal            | 74,856       | 84,345     | 58,167  | 26,178  |
| <b>December 31, 2019</b>  |              |            |         |         |
| Debt principal            | 51,774       | 58,784     | 36,208  | 22,576  |

Due to the short-term cycle, the fair value of cash and cash equivalents balances, financial investments, accounts receivable and accounts payable approximate their book values.

## 20. Derivative financial instruments

### a) Derivatives effects on statement of financial position

|  | Consolidated       |             |                   |             |
|--|--------------------|-------------|-------------------|-------------|
|  | September 30, 2020 |             | December 31, 2019 |             |
|  | Current            | Non-current | Current           | Non-current |
| <b>Foreign exchange and interest rate risk</b>   |                    |             |                   |             |
| CDI & TJLP vs. US\$ fixed and floating rate swap | -                  | -           | 53                | -           |
| IPCA swap  | 28                 | 186         | 337               | 474         |
| Pre-dollar swap                                  | -                  | -           | 78                | 31          |
| Forward transactions                             | -                  | -           | 6                 | -           |
|  | <b>28</b>          | <b>186</b>  | <b>474</b>        | <b>505</b>  |
| <b>Commodities price risk</b>                    |                    |             |                   |             |
| Gasoil, Brent and freight                        | 279                | 10          | 80                | -           |
| Others   | 33                 | 112         | 606               | 237         |
|  | <b>33</b>          | <b>112</b>  | <b>606</b>        | <b>237</b>  |
| <b>Total</b>                                     | <b>340</b>         | <b>308</b>  | <b>1,160</b>      | <b>742</b>  |

|  | Consolidated       |              |                   |              |
|--|--------------------|--------------|-------------------|--------------|
|  | September 30, 2020 |              | December 31, 2019 |              |
|  | Current            | Non-current  | Current           | Non-current  |
| <b>Foreign exchange and interest rate risk</b>   |                    |              |                   |              |
| CDI & TJLP vs. US\$ fixed and floating rate swap | 735                | 3,675        | 196               | 322          |
| IPCA swap  | 514                | 646          | 52                | 150          |
| Eurobonds swap                                   | 27                 | 142          | 24                | 117          |
| Pre-dollar swap                                  | 348                | 513          | 32                | 148          |
| Libor swap                                       | 8                  | 54           | -                 | -            |
| Forward transactions                             | 97                 | -            | -                 | -            |
|  | <b>1,729</b>       | <b>5,030</b> | <b>304</b>        | <b>737</b>   |
| <b>Commodities price risk</b>                    |                    |              |                   |              |
| Gasoil, Brent and freight                        | 483                | -            | 29                | -            |
| Others   | 319                | 340          | 44                | 500          |
| <b>Total</b>                                     | <b>2,531</b>       | <b>5,370</b> | <b>377</b>        | <b>1,237</b> |

### b) Effects of derivatives on the income statement, cash flow and other comprehensive income

|  | Consolidated                           |              |                                       |              |
|--|--|--------------|---------------------------------------|--------------|
|  | Three-month period ended September 30, |              | Nine-month period ended September 30, |              |
|  | 2020                                   | 2019         | 2020                                  | 2019         |
| <b>Foreign exchange and interest rate risk</b>   |  |              |                                       |              |
| CDI & TJLP vs. US\$ fixed and floating rate swap | (312)                                  | (423)        | (4,407)                               | (386)        |
| IPCA swap  | (316)                                  | 191          | (1,528)                               | 300          |
| Eurobonds swap                                   | 137                                    | (128)        | 30                                    | (211)        |
| Pre-dollar swap                                  | (310)                                  | (101)        | (1,117)                               | (113)        |
| Libor swap                                       | (30)                                   | -            | (58)                                  | -            |
|  | <b>(831)</b>                           | <b>(461)</b> | <b>(7,080)</b>                        | <b>(410)</b> |
| <b>Commodities price risk</b>                    |  |              |                                       |              |
| Gasoil, Brent and freight                        | 200                                    | (4)          | (898)                                 | 103          |
| Others (i)                                       | (420)                                  | 157          | 112                                   | 594          |
|  | <b>(420)</b>                           | <b>157</b>   | <b>112</b>                            | <b>594</b>   |
| <b>Total</b>                                     | <b>(1,051)</b>                         | <b>(308)</b> | <b>(7,866)</b>                        | <b>287</b>   |

(i) Mainly refers to the recognition in the current quarter of the fair value adjustment on the embedded derivative due to the renewal of a contract that guarantees a minimum return on a certain investment (note 27f).



## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



|  | Consolidated                            |              |                                       |                |
|--|---|--------------|---------------------------------------|----------------|
|  | Financial settlement inflows (outflows) |              |                                       |                |
|  | Three-month period ended September 30,  |              | Nine-month period ended September 30, |                |
|  | 2020                                    | 2019         | 2020                                  | 2019           |
| <b>Foreign exchange and interest rate risk</b>   |   |              |                                       |                |
| CDI & TJLP vs. US\$ fixed and floating rate swap | (343)                                   | (614)        | (591)                                 | (1,014)        |
| IPCA swap  | -                                       | -            | 1                                     | (101)          |
| Eurobonds swap                                   | -                                       | -            | (24)                                  | (19)           |
| Pre-dollar swap                                  | (176)                                   | (9)          | (234)                                 | 46             |
| Libor swap                                       | 3                                       | -            | (1)                                   | -              |
|  | <b>(516)</b>                            | <b>(623)</b> | <b>(849)</b>                          | <b>(1,088)</b> |
| <b>Commodities price risk</b>                    |   |              |                                       |                |
| Gasoil, Brent and freight                        | (183)                                   | 2            | (880)                                 | 2              |
| Others (i)                                       | 27                                      | 259          | 1,791                                 | 269            |
| <b>Total</b>                                     | <b>(672)</b>                            | <b>(362)</b> | <b>62</b>                             | <b>(817)</b>   |

(i) Includes the settlement of the nickel hedge program in the amount of R\$1,412 on April 1, 2020.

### Hedge in foreign operations

The Company uses financial instruments to protect its exposure to certain market risks arising from operating, financing and investment activities. The Company adopts net investment and cash flow hedge:

#### Net investments hedge

In January 2017, the Company implemented hedge accounting for the foreign currency risk arising from Vale S.A.'s net investments in Vale International S.A. and Vale Holding BV. Under the hedge accounting program, the Company's debt denominated in U.S. dollars and Euros serves as a hedge instrument for these investments. As at September 30, 2020, the carrying value of the debts designated as instrument hedge of these investments are R\$12,296 (US\$2,180 million) and R\$4,960 (EUR750 million). With the program, the impact of exchange rate variations on debt denominated in U.S. dollars and Euros has been partially recorded in other comprehensive income in the "Cumulative translation adjustments".

#### Cash flow hedge

In 2019, to reduce the volatility of its future cash flows arising from changes in nickel prices, the company implemented a Nickel Revenue Hedging Program. Under this program, hedge operations were executed using option contracts to protect a portion of the highly probable forecast sales at floating prices, thus establishing a cushion to guarantee prices above our Nickel Average Unit Cash Cost and investments for the hedged volumes. In April 2020, the hedge program was fully settled to increase the Company's cash position due to the COVID-19 pandemic. The cumulative gain recognized in the cash flow hedge reserve until the settlement of the option contracts are being reclassified to the income statement as the Company recognizes the revenue from nickel sales (hedged item).

|                       | Consolidated   |       |                                       |       |
|-----------------------|--|-------|---------------------------------------|-------|
|                       | Gain (loss) recognized in the other comprehensive income |       |                                       |       |
|                       | Three-month period ended September 30,                   |       | Nine-month period ended September 30, |       |
|                       | 2020   | 2019  | 2020                                  | 2019  |
| Net investments hedge | (459)  | (630) | (3,485)                               | (546) |
| Cash flow hedge       | (299)  | (4)   | (291)                                 | (4)   |

### c) Maturity of the derivative financial instruments

|                               | Last maturity dates |
|-------------------------------|---------------------|
| Currencies and interest rates | September 2029      |
| Palladium                     | March 2021          |
| Nickel                        | December 2021       |
| Brent                         | June 2021           |
| Gasoil                        | December 2020       |
| Others                        | December 2027       |

## 21. Provisions

|  | Current liabilities |                   | Non-current liabilities |                   |
|--|---------------------|-------------------|-------------------------|-------------------|
|  | September 30, 2020  | December 31, 2019 | September 30, 2020      | December 31, 2019 |
| Payroll, related charges and other remunerations | 3,828               | 3,183             | -                       | -                 |
| Onerous contracts                                | 274                 | 229               | 4,798                   | 3,489             |
| Environmental obligations                        | 519                 | 587               | 1,316                   | 980               |
| Asset retirement obligations (i)                 | 665                 | 638               | 19,219                  | 15,323            |
| Provisions for litigation (note 22)              | -                   | -                 | 6,295                   | 5,895             |
| Employee postretirement obligations (note 23)    | 446                 | 319               | 12,263                  | 8,546             |
| <b>Provisions</b>                                | <b>5,732</b>        | <b>4,956</b>      | <b>43,891</b>           | <b>34,233</b>     |

(i) The Company has issued letters of credit and surety bonds for R\$2,442 as at September 30, 2020 in connection with the Asset retirement obligations for its Base Metals operations.

## 22. Litigations

### a) Provision for legal proceedings

The Company recognizes provisions for probable losses of which a reliable estimate can be made. 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.

|                                      | Consolidated   |                  |                  |                          |
|--------------------------------------|----------------|------------------|------------------|--------------------------|
|                                      | Tax litigation | Civil litigation | Labor litigation | Environmental litigation |
| <b>Balance at December 31, 2019</b>  | <b>2,804</b>   | <b>1,213</b>     | <b>1,835</b>     | <b>43</b>                |
| Additions and reversals, net         | 89             | 226              | 57               | 9                        |
| Payments                             | (66)           | (64)             | (230)            | -                        |
| Indexation and interest              | 72             | 78               | 88               | 3                        |
| Translation adjustment               | 133            | 4                | 1                | -                        |
| <b>Balance at September 30, 2020</b> | <b>3,032</b>   | <b>1,457</b>     | <b>1,751</b>     | <b>55</b>                |

|                                      | Consolidated       |                  |                  |                          |
|--------------------------------------|--------------------|------------------|------------------|--------------------------|
|                                      | Tax litigation (i) | Civil litigation | Labor litigation | Environmental litigation |
| <b>Balance at December 31, 2018</b>  | <b>2,680</b>       | <b>644</b>       | <b>1,921</b>     | <b>13</b>                |
| Additions and reversals, net (ii)    | 49                 | 640              | 350              | 18                       |
| Payments                             | (69)               | (145)            | (412)            | -                        |
| Indexation and interest              | 15                 | 135              | 50               | 5                        |
| Translation adjustment               | 32                 | (10)             | 13               | -                        |
| <b>Balance at September 30, 2019</b> | <b>2,707</b>       | <b>1,264</b>     | <b>1,922</b>     | <b>36</b>                |

(i) Includes amounts regarding to social security claims that were classified as labor claims.

(ii) Includes the change in the expected outcome of probable loss of the lawsuit related to the accident of ship loaders, at the Praia Mole maritime terminal, in Espírito Santo.

### b) Contingent liabilities

As at September 30, 2020, the contingent liabilities for which the likelihood of loss is not considered remote, are presented as follows:

|                           | Consolidated       |                   |
|---------------------------|--------------------|-------------------|
|                           | September 30, 2020 | December 31, 2019 |
| Tax litigations           | 38,082             | 33,839            |
| Civil litigations         | 6,387              | 6,116             |
| Labor litigations         | 2,909              | 3,116             |
| Environmental litigations | 4,633              | 4,410             |
| Brumadinho event          | 767                | 635               |
| <b>Total</b>              | <b>52,778</b>      | <b>48,116</b>     |

**i - Tax litigations** - Refers to proceedings for: (i) corporate income tax ("IRPJ") and social contributions on the net income ("CSLL"), (ii) PIS and COFINS tax credits, (iii) value added tax on the services and circulation of goods ("ICMS"), (iv) the mining royalty known as CFEM (Compensação Financeira pela Exploração de Recursos Minerais). The variation in the contingent liability for the nine-month period ended September 30, 2020 is mainly due to new proceedings related to CFEM, ICMS and PIS, associated with the changes in the stage of the proceedings and monetary updates of the judicial claims under discussion.

**ii - 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.

**iii - 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.

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

### c) Judicial deposits

|                           | Consolidated       |                   |
|---------------------------|--------------------|-------------------|
|                           | September 30, 2020 | December 31, 2019 |
| Tax litigations           | 5,099              | 5,152             |
| Civil litigations         | 342                | 346               |
| Labor litigations         | 907                | 992               |
| Environmental litigations | 214                | 163               |
| Brumadinho event (note 4) | 4,942              | 5,976             |
| <b>Total</b>              | <b>11,504</b>      | <b>12,629</b>     |

### d) Guarantees contracted for legal proceedings

In addition to the above-mentioned tax, civil, labor and environmental judicial deposits, the Company contracted R\$9.7 billion in guarantees for its lawsuits, as an alternative to judicial deposits. Additionally, the Company contracted guarantees in the amount of R\$5.8 billion in connection with the Brumadinho event, which were presented in court according to agreements with Treasury Court of Minas Gerais and Public Prosecutor's Office.

### e) Contingencies related to Samarco accident

As disclosed by the Company in note 28 to the Financial Statements for the year ended December 31, 2019 and in previous Financial Statements, Vale is involved in several legal proceedings and investigations relating to the rupture of Samarco's tailings dam.

These proceedings include public civil actions brought by Brazilian authorities and multiple proceedings involving claims for significant amounts of damages and remediation measures. The Company expects the Framework Agreements to represent the settlement of the public civil action brought by the MPF and other related proceedings. There are also putative securities class actions in the United States against Vale and some of its current and former officers and a criminal proceeding in Brazil. The main updates regarding the lawsuits in the period were as follows:

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

The Framework Agreement established a possible renegotiation of Renova Foundation's reparation programs upon the completion of studies carried by specialist engaged by the Public Prosecutor's Office in this process. The studies of the aforementioned specialists have not yet been concluded and, therefore, these negotiations have not started. In October 2020, MPF required the continuance of its public civil action of R\$155 billion due to a deadlock in the hiring of Technical Assistants. The request will still be analyzed by the Judge of the 12th Federal Court after a statement by Samarco and its shareholders Vale and BHP. Depending on the conclusion of those experts and the decision to be issued in this regard, the Company may recognize additional provisions to comply with the requirements set the Framework Agreement.

(e.ii) Class Actions in the United States

In March 2017, the holders of securities issued by Samarco Mineração S.A. filed a collective action in the New York Federal Court against Samarco, Vale, BHP Billiton Limited, BHP Billiton PLC and BHP Brasil Ltda. based on U.S. Federal Securities laws.

After the appeal filed by the Plaintiff, the judgment is expected to be scheduled. The New York State Court of Appeals may rule the case during 2020. Based on the assessment of the Company's legal consultants, Vale has good arguments to oppose the appeal. Therefore, the expectation of loss of this case is classified as possible. However, considering the phase of the class action, it is not possible at this time to reliably estimate the amount of an eventual loss.

(e.iii) Class actions filed by holders of American Depositary Receipts

Vale and some of its executives have been named as defendants in class actions relating to securities before the New York Federal Court, filed by investors holding American Depositary Receipts ("ADRs") issued by the Company, based on the U.S. Federal Securities laws.

In June 2020, the case was closed as a result of the agreement reached by the parties, whereby the defendants agreed to pay the amount of R\$137, which was accepted by the Court. This amount was recognized in income as "Equity in earnings of affiliates and joint ventures."

(e.iv) Criminal proceeding

In September 2019, the federal court of Ponte Nova dismissed all criminal charges against Vale representatives relating to the first group of charges, but the second group of charges against Vale S.A. and one of the Company's employees remains ongoing. In March 2020, the judge scheduled a number of hearings to collect defense witnesses' testimonies and intent letters were issued for the same purpose. The Company cannot estimate when a final decision on the case will be issued.

**f) Contingent Assets**

(f.i) Compulsory Loan

In 2015, the Company requested for the enforcement of the judicial decision related to a favorable unappealable decision which partially recognized its right to refund the differences of monetary adjustments and interests due over to the third convertible bonds issued by Eletrobrás shares in the period within 1987 to 1993. In November 2019, the Company requested for the payment recognized by Eletrobrás as due and such requirement was granted by the court. In August 2020, the Company received R\$301 and the remaining amount are estimated at R\$380 is still under evaluation and, therefore, the asset was not recognized in the Company's interim financial statements.

(f.ii) ICMS in the PIS and COFINS calculation basis

Vale has been discussing the issue regarding the exclusion of ICMS in PIS and COFINS tax basis in two judicial proceedings, related to taxable events after December 2001. In one of the proceedings, the company has obtained a definitive favorable decision (res judicata). In the second proceeding the current decision is also favorable to the Company, but this proceeding has not reached the res judicata yet. The gain from both proceedings are estimated at R\$600. However, Vale is waiting for a final decision on the leading case that will be issued by Supreme Court, that may impact the outcome of these proceedings or the method of measuring this asset. Therefore, the Company did not record this asset in its interim financial statement.

(f.iii) Tax Litigation in Canada

Vale Canada Limited ("VCL") and the Canadian tax agency, affiliated with the Canadian Department of Justice, have signed an agreement on a tax dispute related to the tax treatment of receipts and expenses incurred by the VCL in merger and acquisition transactions that occurred in 2006. In 2019, the Company recognized an asset in the amount of R\$889 (CAD221 million), which corresponded to the amount due from the income tax refund, including estimated interest. In 2020, the Company recognized an additional amount of R\$84 (CAD21 million) related to interest. The total amount has been paid in full to the company.

#### (f.iv) Arbitration related to Simandou

In 2010, the Company acquired a 51% interest in BSG Resources Limited G ("BSGR"), which held concession rights and permits for iron ore exploration in the Republic of Guinea. In 2014, the Republic of Guinea revoked these concessions based on evidence that BSGR had obtained them through bribery of Guinean government officials. The Republic of Guinea did not make any finding of any involvement or responsibility on Vale's part.

The arbitral tribunal in London ruled in Vale's favor and ordered BSGR to pay to Vale the amount of approximately R\$11,281 (US\$2 billion) (with interest and costs). BSGR went into administration in March 2018, and Vale has commenced legal proceedings against BSGR before courts in London, England and in the United States District Court for the Southern District of New York to enforce the arbitral award against BSGR.

Vale intends to pursue the enforcement of the award and collection of the amounts due by all legally available means, but since there can be no assurance as to the timing and amount of any collections, the asset was not recognized in its interim financial statements.

## 23. Employee post-retirement obligations

### Reconciliation of net liabilities recognized in the statement of financial position

|   | September 30, 2020          |                              |                | Consolidated<br>December 31, 2019 |                              |                |
|---|-----------------------------|------------------------------|----------------|-----------------------------------|------------------------------|----------------|
|   | Overfunded<br>pension plans | Underfunded<br>pension plans | Other benefits | Overfunded<br>pension plans       | Underfunded<br>pension plans | Other benefits |
| <b>Amount recognized in the statement of financial position</b> |                             |                              |                |                                   |                              |                |
| Present value of actuarial liabilities                          | (15,428)                    | (25,005)                     | (8,379)        | (16,148)                          | (17,818)                     | (6,066)        |
| Fair value of assets  | 19,386                      | 20,675                       | -              | 21,380                            | 15,019                       | -              |
| Effect of the asset ceiling                                     | (3,958)                     | -                            | -              | (5,232)                           | -                            | -              |
| <b>Liabilities</b>  | <b>-</b>                    | <b>(4,330)</b>               | <b>(8,379)</b> | <b>-</b>                          | <b>(2,799)</b>               | <b>(6,066)</b> |
| Current liabilities   | -                           | (51)                         | (395)          | -                                 | (50)                         | (269)          |
| Non-current liabilities   | -                           | (4,279)                      | (7,984)        | -                                 | (2,749)                      | (5,797)        |
| <b>Liabilities</b>  | <b>-</b>                    | <b>(4,330)</b>               | <b>(8,379)</b> | <b>-</b>                          | <b>(2,799)</b>               | <b>(6,066)</b> |

## 24. Stockholders' equity

### a) Share capital

As at September 30, 2020, the share capital was R\$77,300 corresponding to 5,284,474,782 shares issued and fully paid without par value.

| Stockholders   | September 30, 2020   |               |                      |
|--|----------------------|---------------|----------------------|
|  | Common shares        | Golden shares | Total                |
| Litel Participações S.A. and Litela Participações S.A. | 594,565,564          | -             | 594,565,564          |
| BNDES Participações S.A.                               | 188,496,276          | -             | 188,496,276          |
| Bradespar S.A.   | 293,907,266          | -             | 293,907,266          |
| Mitsui & Co., Ltd                                      | 286,347,055          | -             | 286,347,055          |
| Foreign investors - ADRs                               | 1,120,264,293        | -             | 1,120,264,293        |
| Foreign institutional investors in local market        | 1,303,467,605        | -             | 1,303,467,605        |
| FMP - FGTS   | 44,933,987           | -             | 44,933,987           |
| PIBB - Fund  | 3,555,545            | -             | 3,555,545            |
| Institutional investors                                | 973,136,217          | -             | 973,136,217          |
| Retail investors in Brazil                             | 321,237,134          | -             | 321,237,134          |
| Brazilian Government (Golden Share)                    | -                    | 12            | 12                   |
| <b>Shares outstanding</b>                              | <b>5,129,910,942</b> | <b>12</b>     | <b>5,129,910,954</b> |
| Shares in treasury                                     | 154,563,828          | -             | 154,563,828          |
| <b>Total issued shares</b>                             | <b>5,284,474,770</b> | <b>12</b>     | <b>5,284,474,782</b> |
| <b>Share capital per class of shares (in millions)</b> | <b>77,300</b>        | <b>-</b>      | <b>77,300</b>        |
| <b>Total authorized shares</b>                         | <b>7,000,000,000</b> | <b>-</b>      | <b>7,000,000,000</b> |

## b) Shares in treasury

The Company used 1,628,485 and 2,024,059 treasury shares, for the share based payment program of its eligible executives (Matching program), in the amount of R\$68 and R\$84 recognized as “assignment and transfer of shares” for the nine-month periods ended September 30, 2020 and 2019, respectively.

## c) Remuneration to the Company’s stockholders

On July 29, 2020, the Board of Directors approved the resumption of the stockholders’ remuneration policy, which was suspended as a result of the Brumadinho dam failure. This policy, formerly approved in March 2018, set a semi-annual payment that is calculated by applying 30% of Adjusted EBITDA less sustaining capital expenditures, subject to availability of profit reserves as required by the Brazilian corporate law. In addition, the Board of Directors approved the payment of interest on capital in the total gross amount of R\$7,253, equivalent to R\$1.414364369 per share, declared in December 2019 based on profit reserves.

On September 30, 2020, the Company paid stockholders’ remuneration in the amount of R\$12,350, R\$2,407510720 per share, R\$5,116 based on the interest on capital and R\$7,234 based on dividends, approved by Board of Directors on September 10, 2020. This amount will be reduced from the minimum mandatory remuneration for the year ended 2020 and deducted from the profit reserve, if necessary.

## 25. Related parties

The Company’s related parties are subsidiaries, joint ventures, associates, stockholders and its related entities and key management personnel of the Company. Transactions between the parent company and its subsidiaries are eliminated on consolidation and are not disclosed in this note.

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.

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

|                             | Consolidated                           |            |                    |         |                |            |                    |         |
|-----------------------------|--|------------|--------------------|---------|----------------|------------|--------------------|---------|
|                             | Three-month period ended September 30, |            |                    |         |                |            |                    |         |
|                             | 2020                                   |            |                    |         | 2019           |            |                    |         |
|                             | Joint Ventures                         | Associates | Major stockholders | Total   | Joint Ventures | Associates | Major stockholders | Total   |
| Net operating revenue       | 590                                    | 320        | 259                | 1,169   | 488            | 308        | 211                | 1,007   |
| Cost and operating expenses | (1,199)                                | (37)       | -                  | (1,236) | (1,846)        | (48)       | -                  | (1,894) |
| Financial result            | 26                                     | (6)        | (215)              | (195)   | 217            | -          | (140)              | 77      |

|                             | Consolidated                          |            |                    |         |                |            |                    |         |
|-----------------------------|---------------------------------------|------------|--------------------|---------|----------------|------------|--------------------|---------|
|                             | Nine-month period ended September 30, |            |                    |         |                |            |                    |         |
|                             | 2020                                  |            |                    |         | 2019           |            |                    |         |
|                             | Joint Ventures                        | Associates | Major stockholders | Total   | Joint Ventures | Associates | Major stockholders | Total   |
| Net operating revenue       | 1,268                                 | 897        | 697                | 2,862   | 1,108          | 830        | 556                | 2,494   |
| Cost and operating expenses | (3,811)                               | (90)       | -                  | (3,901) | (5,283)        | (104)      | -                  | (5,387) |
| Financial result            | 102                                   | 10         | (382)              | (270)   | 184            | (2)        | (260)              | (78)    |

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 and the logistical costs for using the Nacala Logistic Corridor.

## b) Outstanding balances with related parties

|                                   | September 30, 2020 |            |                          |               | December 31, 2019 |            |                          |               |
|-----------------------------------|--------------------|------------|--------------------------|---------------|-------------------|------------|--------------------------|---------------|
|                                   | Joint Ventures     | Associates | Major stockholders (iii) | Total         | Joint Ventures    | Associates | Major stockholders (iii) | Total         |
| <b>Assets</b>                     |                    |            |                          |               |                   |            |                          |               |
| Cash and cash equivalents         | -                  | -          | 6,943                    | <b>6,943</b>  | -                 | -          | 5,578                    | <b>5,578</b>  |
| Accounts receivable               | 698                | 80         | 17                       | <b>795</b>    | 367               | 88         | 19                       | <b>474</b>    |
| Dividends receivable              | 412                | 45         | -                        | <b>457</b>    | 335               | 25         | -                        | <b>360</b>    |
| Loans (i)                         | 10,699             | -          | -                        | <b>10,699</b> | 7,737             | -          | -                        | <b>7,737</b>  |
| Derivatives financial instruments | -                  | -          | -                        | -             | -                 | -          | 169                      | <b>169</b>    |
| Other assets                      | 427                | -          | -                        | <b>427</b>    | 262               | -          | -                        | <b>262</b>    |
| <b>Liabilities</b>                |                    |            |                          |               |                   |            |                          |               |
| Supplier and contractors          | 690                | 26         | 133                      | <b>849</b>    | 1,218             | 113        | 149                      | <b>1,480</b>  |
| Loans (ii)                        | -                  | 7,943      | 5,223                    | <b>13,166</b> | -                 | 5,511      | 6,804                    | <b>12,315</b> |
| Derivatives financial instruments | -                  | -          | 2,164                    | <b>2,164</b>  | -                 | -          | 259                      | <b>259</b>    |
| Other liabilities                 | 1,573              | 134        | -                        | <b>1,707</b>  | 2,293             | -          | -                        | <b>2,293</b>  |

(i) Refers to the loan with Nacala BV.

(ii) Mainly relates to the loan from Pangea Emirates Ltd.

(iii) Refers to regular financial instruments with large financial institutions of which the stockholders are part of the controlling "shareholders' agreement".

## 26. Select notes to Parent Company information (individual interim information)

### a) Other financial assets and liabilities

|  | Parent company     |                   |                    |                   |
|--|--------------------|-------------------|--------------------|-------------------|
|  | Current            |                   | Non-Current        |                   |
|  | September 30, 2020 | December 31, 2019 | September 30, 2020 | December 31, 2019 |
| <b>Other financial assets</b>          |                    |                   |                    |                   |
| Restricted cash                        | -                  | -                 | 527                | 530               |
| Loans                                  | -                  | -                 | 18                 | 18                |
| Derivative financial instruments       | 32                 | 450               | 307                | 593               |
| Investments in equity securities       | -                  | -                 | 3,077              | 2,555             |
| Related parties - Loans                | -                  | 690               | 41                 | 276               |
|  | <b>32</b>          | <b>1,140</b>      | <b>3,970</b>       | <b>3,972</b>      |
| <b>Other financial liabilities</b>     |                    |                   |                    |                   |
| Derivative financial instruments       | 1,731              | 280               | 4,556              | 972               |
| Related parties - Loans                | 9,215              | 6,392             | 96,926             | 62,861            |
| Financial guarantees                   | -                  | -                 | 4,876              | 2,116             |
| Participative stockholders' debentures | -                  | -                 | 14,285             | 10,416            |
| Advance receipts                       | 10                 | 6                 | -                  | -                 |
|  | <b>10,956</b>      | <b>6,678</b>      | <b>120,643</b>     | <b>76,365</b>     |

### b) Investments

|   | Parent company |                |
|---|----------------|----------------|
|   | 2020           | 2019           |
| <b>Balance at January 1st,</b>                      | <b>144,594</b> | <b>139,510</b> |
| Additions and Capitalizations                       | 2,039          | 5,708          |
| Disposals   | (117)          | (84)           |
| Translation adjustment                              | 41,834         | 9,289          |
| Equity results in income statement                  | 3,141          | 5,070          |
| Equity results in statement of comprehensive income | (1,150)        | (955)          |
| Dividends declared                                  | (1,304)        | (1,083)        |
| Merger (i)  | (2,105)        | -              |
| Others  | 733            | 86             |
| <b>Balance at September 30,</b>                     | <b>187,665</b> | <b>157,541</b> |

(i) On April 30, 2020 the incorporation of the wholly owned subsidiary Ferrous Resources do Brasil S.A. was approved at the General Shareholders' Meeting.

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



### c) Intangibles

|                                      | Parent company |              |            |               |
|--------------------------------------|----------------|--------------|------------|---------------|
|                                      | Concessions    | Right of use | Software   | Total         |
| <b>Balance at December 31, 2019</b>  | <b>15,993</b>  | <b>99</b>    | <b>179</b> | <b>16,271</b> |
| Additions                            | 640            | -            | 53         | 693           |
| Disposals                            | (24)           | -            | -          | (24)          |
| Amortization                         | (683)          | (4)          | (43)       | (730)         |
| Merger of Ferrous                    | -              | -            | 5          | 5             |
| <b>Balance at September 30, 2020</b> | <b>15,926</b>  | <b>95</b>    | <b>194</b> | <b>16,215</b> |
| Cost                                 | 20,969         | 223          | 2,581      | 23,773        |
| Accumulated amortization             | (5,043)        | (128)        | (2,387)    | (7,558)       |
| <b>Balance at September 30, 2020</b> | <b>15,926</b>  | <b>95</b>    | <b>194</b> | <b>16,215</b> |

|                                      | Parent company |              |            |               |
|--------------------------------------|----------------|--------------|------------|---------------|
|                                      | Concessions    | Right of use | Software   | Total         |
| <b>Balance at December 31, 2018</b>  | <b>15,240</b>  | <b>105</b>   | <b>277</b> | <b>15,622</b> |
| Additions                            | 1,054          | -            | 75         | 1,129         |
| Disposals                            | (54)           | -            | -          | (54)          |
| Amortization                         | (685)          | (4)          | (179)      | (868)         |
| <b>Balance at September 30, 2019</b> | <b>15,555</b>  | <b>101</b>   | <b>173</b> | <b>15,829</b> |
| Cost                                 | 19,830         | 223          | 2,492      | 22,545        |
| Accumulated amortization             | (4,275)        | (122)        | (2,319)    | (6,716)       |
| <b>Balance at September 30, 2019</b> | <b>15,555</b>  | <b>101</b>   | <b>173</b> | <b>15,829</b> |

### d) Property, plant and equipment

|  | Parent company |               |               |               |                    |                    |               |                           |                |
|--|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------------------|----------------|
|  | Land           | Building      | Facilities    | Equipment     | Mineral properties | Leasing agreements | Others        | Constructions in progress | Total          |
| <b>Balance at December 31, 2019</b>      | <b>1,797</b>   | <b>26,555</b> | <b>30,219</b> | <b>10,213</b> | <b>7,153</b>       | <b>2,114</b>       | <b>19,606</b> | <b>8,218</b>              | <b>105,875</b> |
| Additions (i)                            | -              | -             | -             | -             | -                  | 163                | -             | 6,991                     | 7,154          |
| Disposals                                | (4)            | (2)           | (139)         | (8)           | (30)               | -                  | (17)          | (4)                       | (204)          |
| Assets retirement obligation             | -              | -             | -             | -             | (247)              | -                  | -             | -                         | (247)          |
| Depreciation, amortization and depletion | -              | (909)         | (1,341)       | (1,056)       | (373)              | (272)              | (1,451)       | -                         | (5,402)        |
| Merger of Ferrous                        | 577            | 102           | 325           | 73            | 990                | 3                  | 6             | (136)                     | 1,940          |
| Transfers                                | 131            | 312           | 1,545         | 861           | 1,170              | -                  | 1,334         | (5,353)                   | -              |
| <b>Balance at September 30, 2020</b>     | <b>2,501</b>   | <b>26,058</b> | <b>30,609</b> | <b>10,083</b> | <b>8,663</b>       | <b>2,008</b>       | <b>19,478</b> | <b>9,716</b>              | <b>109,116</b> |
| Cost                                     | 2,501          | 34,957        | 41,277        | 19,481        | 11,647             | 2,588              | 34,175        | 9,716                     | 156,342        |
| Accumulated depreciation                 | -              | (8,899)       | (10,668)      | (9,398)       | (2,984)            | (580)              | (14,697)      | -                         | (47,226)       |
| <b>Balance at September 30, 2020</b>     | <b>2,501</b>   | <b>26,058</b> | <b>30,609</b> | <b>10,083</b> | <b>8,663</b>       | <b>2,008</b>       | <b>19,478</b> | <b>9,716</b>              | <b>109,116</b> |

|  | Parent company |               |               |               |                    |                    |               |                           |                |
|--|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------------------|----------------|
|  | Land           | Building      | Facilities    | Equipment     | Mineral properties | Leasing agreements | Others        | Constructions in progress | Total          |
| <b>Balance at December 31, 2018</b>      | <b>1,735</b>   | <b>26,559</b> | <b>30,593</b> | <b>10,004</b> | <b>7,689</b>       | <b>-</b>           | <b>19,240</b> | <b>7,996</b>              | <b>103,816</b> |
| Effects of IFRS 16/CPC 06 (R2) adoption  | -              | -             | -             | -             | -                  | 2,415              | -             | -                         | 2,415          |
| Additions (i)                            | -              | -             | -             | -             | -                  | -                  | -             | 4,496                     | 4,496          |
| Disposals                                | (7)            | (299)         | (130)         | (172)         | (178)              | -                  | (712)         | (35)                      | (1,533)        |
| Assets retirement obligation             | -              | -             | -             | -             | 556                | -                  | -             | -                         | 556            |
| Depreciation, amortization and depletion | -              | (757)         | (1,088)       | (1,020)       | (438)              | (226)              | (1,469)       | -                         | (4,998)        |
| Transfers                                | 8              | 761           | 841           | 1,327         | (351)              | -                  | 2,096         | (4,682)                   | -              |
| <b>Balance at September 30, 2019</b>     | <b>1,736</b>   | <b>26,264</b> | <b>30,216</b> | <b>10,139</b> | <b>7,278</b>       | <b>2,189</b>       | <b>19,155</b> | <b>7,775</b>              | <b>104,752</b> |
| Cost                                     | 1,736          | 33,830        | 39,019        | 18,318        | 9,762              | 2,415              | 32,203        | 7,775                     | 145,058        |
| Accumulated depreciation                 | -              | (7,566)       | (8,803)       | (8,179)       | (2,484)            | (226)              | (13,048)      | -                         | (40,306)       |
| <b>Balance at September 30, 2019</b>     | <b>1,736</b>   | <b>26,264</b> | <b>30,216</b> | <b>10,139</b> | <b>7,278</b>       | <b>2,189</b>       | <b>19,155</b> | <b>7,775</b>              | <b>104,752</b> |

(i) Includes capitalized borrowing costs.



## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



### e) Loans and borrowings

|  | Current liabilities |                   | Non-current liabilities |                   |
|--|---------------------|-------------------|-------------------------|-------------------|
|  | September 30, 2020  | December 31, 2019 | September 30, 2020      | December 31, 2019 |
| <b>Debt contracts in the international markets</b> |                     |                   |                         |                   |
| <b>Floating rates in:</b>                          |                     |                   |                         |                   |
| US\$   | 945                 | 445               | 8,038                   | 6,419             |
| <b>Fixed rates in:</b>                             |                     |                   |                         |                   |
| US\$   | -                   | 536               | 2,935                   | 2,098             |
| EUR  | -                   | -                 | 4,960                   | 3,398             |
| <b>Accrued charges</b>                             | <b>204</b>          | <b>238</b>        | <b>-</b>                | <b>-</b>          |
|  | <b>1,149</b>        | <b>1,219</b>      | <b>15,933</b>           | <b>11,915</b>     |
| <b>Debt contracts in Brazil</b>                    |                     |                   |                         |                   |
| <b>Floating rates in:</b>                          |                     |                   |                         |                   |
| R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI      | 1,747               | 2,279             | 5,014                   | 6,418             |
| Basket of currencies and US\$ indexed to LIBOR     | 252                 | 180               | 126                     | 225               |
| <b>Fixed rates in:</b>                             |                     |                   |                         |                   |
| R\$  | 88                  | 151               | 91                      | 155               |
| <b>Accrued charges</b>                             | <b>79</b>           | <b>157</b>        | <b>-</b>                | <b>-</b>          |
|  | <b>2,166</b>        | <b>2,767</b>      | <b>5,231</b>            | <b>6,798</b>      |
| <b>Total</b>                                       | <b>3,315</b>        | <b>3,986</b>      | <b>21,164</b>           | <b>18,713</b>     |

The future flows of debt payments (principal) are as follows:

|                       | Parent company |
|-----------------------|----------------|
|                       | Debt principal |
| 2020                  | 325            |
| 2021                  | 3,028          |
| 2022                  | 3,531          |
| 2023                  | 6,584          |
| Between 2024 and 2028 | 7,707          |
| 2029 onwards          | 3,021          |
|                       | <b>24,196</b>  |

### f) Provisions

|  | Current liabilities |                   | Non-current liabilities |                   |
|--|---------------------|-------------------|-------------------------|-------------------|
|  | September 30, 2020  | December 31, 2019 | September 30, 2020      | December 31, 2019 |
| Payroll, related charges and other remunerations | 2,526               | 2,124             | -                       | -                 |
| Environmental obligations                        | 428                 | 490               | 689                     | 585               |
| Asset retirement obligations                     | 463                 | 488               | 3,351                   | 3,567             |
| Provisions for litigation                        | -                   | -                 | 5,289                   | 5,102             |
| Employee postretirement obligations              | 150                 | 108               | 2,119                   | 2,114             |
| <b>Provisions</b>                                | <b>3,567</b>        | <b>3,210</b>      | <b>11,448</b>           | <b>11,368</b>     |

## g) Provisions for litigation

|                               |                |                  |                  | Environmental litigation | Parent company<br>Total of litigation provision |
|-------------------------------|----------------|------------------|------------------|--------------------------|---|
|                               | Tax litigation | Civil litigation | Labor litigation |                          |   |
| Balance at December 31, 2019  | 2,325          | 1,004            | 1,734            | 39                       | 5,102   |
| Additions and reversals, net  | 90             | 96               | 93               | 7                        | 286   |
| Payments                      | (54)           | (42)             | (213)            | -                        | (309)   |
| Indexation and interest       | 38             | 75               | 86               | 2                        | 201   |
| Merger Ferrous                | 1              | 3                | 3                | 2                        | 9   |
| Balance at September 30, 2020 | 2,400          | 1,136            | 1,703            | 50                       | 5,289   |

|                                   |                    |                  |                  | Environmental litigation | Parent company<br>Total of litigation provision |
|-----------------------------------|--------------------|------------------|------------------|--------------------------|---|
|                                   | Tax litigation (i) | Civil litigation | Labor litigation |                          |   |
| Balance at December 31, 2018      | 2,240              | 467              | 1,767            | 9                        | 4,483   |
| Additions and reversals, net (ii) | 51                 | 529              | 314              | 18                       | 912   |
| Payments                          | (22)               | (100)            | (290)            | -                        | (412)   |
| Indexation and interest           | 19                 | 107              | 49               | 6                        | 181   |
| Balance at September 30, 2019     | 2,288              | 1,003            | 1,840            | 33                       | 5,164   |

(i) Includes amounts regarding to social security claims that were classified as labor claims.

(ii) Includes the change in the expected outcome of probable loss of the lawsuit related to the accident of ship loaders, at the Praia Mole maritime terminal, in Espírito Santo.

## h) Contingent liabilities

|                          | September 30, 2020 | Parent company<br>December 31, 2019 |
|--------------------------|--------------------|-------------------------------------|
| Tax litigation           | 35,017             | 30,905                              |
| Civil litigation         | 4,733              | 4,589                               |
| Labor litigation         | 2,806              | 3,025                               |
| Environmental litigation | 3,750              | 4,239                               |
| Brumadinho event         | 767                | 635                                 |
| Total                    | 47,073             | 43,393                              |

## i) Income taxes

The total amount presented as income taxes in the income statement is reconciled to the rate established by law, as follows:

|   | Parent company<br>Nine-month period ended September 30, |         |
|---|---|---------|
|   | 2020  | 2019    |
| Income (loss) before income taxes           | 23,657  | (177)   |
| Income taxes at statutory rates - 34%       | (8,043)   | 60      |
| Adjustments that affect the basis of taxes: |   |         |
| Tax incentives                              | 4,438   | 535     |
| Equity results                              | 1,068   | 1,724   |
| Others (i)                                  | 768   | (2,406) |
| Income taxes                                | (1,769)   | (87)    |

(i) Refers to the impact on the parent company of the profit of the subsidiaries abroad taxed in Brazil.

## 27. Additional information about derivatives financial instruments

The risk of the derivatives portfolio is measured using the delta-Normal parametric approach and considers that the future distribution of the risk factors and its correlations tends to present the same statistic properties verified in the historical data. The value at risk estimate considers a 95% confidence level for a one-business day time horizon.

The following tables detail the derivatives positions for Vale and its controlled companies as of September 30, 2020, with the following information: notional amount, fair value including credit risk, gains or losses in the period, value at risk and the fair value breakdown by year of maturity.

### a) Foreign exchange and interest rates derivative positions

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

To reduce cash flow volatility, swap and forward transactions were implemented to convert into US\$ the cash flows from certain liabilities denominated in R\$ with interest rates linked mainly to CDI, TJLP and IPCA. In those swaps, Vale pays fixed or floating rates in US\$ and receives payments in R\$ linked to the interest rates of the protected liabilities.

The swap and forward transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments and other liabilities linked to R\$. These programs transform into US\$ the obligations linked to R\$ to achieve a currency offset in the Company's cash flows, by matching its receivables - mainly linked to US\$ - with its payables.

|   | Notional              |                      |        |                 | Fair value            |                      | Financial Settlement<br>Inflows (Outflows) | Value at<br>Risk      | Fair value by year |       |         |
|---|-----------------------|----------------------|--------|-----------------|-----------------------|----------------------|--|-----------------------|--------------------|-------|---------|
| Flow                                    | September<br>30, 2020 | December<br>31, 2019 | Index  | Average<br>rate | September<br>30, 2020 | December<br>31, 2019 | September 30, 2020                         | September<br>30, 2020 | 2020               | 2021  | 2022+   |
| CDI vs. US\$ fixed rate swap            |                       |                      |        |                 | (3,308)               | (155)                | (105)                                      | 235                   | (103)              | (445) | (2,761) |
| Receivable                              | R\$ 9,754             | R\$ 2,115            | CDI    | 100.18%         |                       |                      |  |                       |                    |       |         |
| Payable                                 | US\$ 2.285            | US\$ 558             | Fix    | 1.97%           |                       |                      |  |                       |                    |       |         |
| TJLP vs. US\$ fixed rate swap           |                       |                      |        |                 | (1,102)               | (304)                | (98)                                       | 55                    | (86)               | (317) | (699)   |
| Receivable                              | R\$ 1,791             | R\$ 2,111            | TJLP + | 1.14%           |                       |                      |  |                       |                    |       |         |
| Payable                                 | US\$ 501              | US\$ 601             | Fix    | 3.02%           |                       |                      |  |                       |                    |       |         |
| R\$ fixed rate vs. US\$ fixed rate swap |                       |                      |        |                 | (861)                 | (73)                 | (57)                                       | 63                    | (19)               | (442) | (401)   |
| Receivable                              | R\$ 2,541             | R\$ 2,173            | Fix    | 5.69%           |                       |                      |  |                       |                    |       |         |
| Payable                                 | US\$ 630              | US\$ 604             | Fix    | 0.22%           |                       |                      |  |                       |                    |       |         |
| IPCA vs. US\$ fixed rate swap           |                       |                      |        |                 | (1,161)               | 185                  | (48)                                       | 69                    | (1)                | (527) | (634)   |
| Receivable                              | R\$ 2,401             | R\$ 2,826            | IPCA + | 5.08%           |                       |                      |  |                       |                    |       |         |
| Payable                                 | US\$ 636              | US\$ 759             | Fix    | 0.04%           |                       |                      |  |                       |                    |       |         |
| IPCA vs. CDI swap                       |                       |                      |        |                 | 215                   | 424                  | -  | 5                     | -                  | 32    | 183     |
| Receivable                              | R\$ 678               | R\$ 1,634            | IPCA + | 6.63%           |                       |                      |  |                       |                    |       |         |
| Payable                                 | R\$ 678               | R\$ 1,350            | CDI    | 98.76%          |                       |                      |  |                       |                    |       |         |

| Flow    | Notional           |                   | Bought / Sold | Average rate (BRL/USD) | Fair value         |                   | Value at Risk      | Fair value by year |
|---------|--------------------|-------------------|---------------|------------------------|--------------------|-------------------|--------------------|--------------------|
|         | September 30, 2020 | December 31, 2019 |               |                        | September 30, 2020 | December 31, 2019 | September 30, 2020 | 2020+              |
| Forward | R\$ 916            | R\$ 121           | B             | 5.96                   | (97)               | 6                 | 23                 | (97)               |

## (ii) Protection program for EUR denominated debt instruments

To reduce the cash flow volatility, swap transactions were implemented to convert into US\$ the cash flows from certain debt instruments issued in Euros by Vale. In those swaps, Vale receives fixed rates in EUR and pays fixed rates in US\$.

The swap transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments linked to EUR. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to EUR/US\$ exchange rate.

| Flow   | Notional           |                   |       | Average rate | Fair value         |                   | Financial Settlement Inflows (Outflows) | Value at Risk      | Fair value by year |      |       |
|--|--------------------|-------------------|-------|--------------|--------------------|-------------------|---|--------------------|--------------------|------|-------|
|  | September 30, 2020 | December 31, 2019 | Index |              | September 30, 2020 | December 31, 2019 | September 30, 2020                      | September 30, 2020 | 2020               | 2021 | 2022+ |
| <b>EUR fixed rate vs. US\$ fixed rate swap</b> |                    |                   |       |              | (169)              | (141)             | (24)                                    | 26                 | -                  | (26) | (143) |
| Receivable                                     | € 500              | € 500             | Fix   | 3.75%        |                    |                   |   |                    |                    |      |       |
| Payable  | US\$ 613           | US\$ 613          | Fix   | 4.29%        |                    |                   |   |                    |                    |      |       |

## (iii) Protection program for Libor floating interest rate US\$ denominated debt

To reduce the cash flow volatility, swap transactions were implemented to convert Libor floating interest rate cash flows from certain debt instruments issued by Vale into fixed interest rate. In those swaps, Vale receives floating rates and pays fixed rates in US\$.

| Flow                                  | Notional           |                   |           | Average rate | Fair value         |                   | Financial Settlement Inflows (Outflows) | Value at Risk      | Fair value by year |      |       |
|---------------------------------------|--------------------|-------------------|-----------|--------------|--------------------|-------------------|---|--------------------|--------------------|------|-------|
|                                       | September 30, 2020 | December 31, 2019 | Index     |              | September 30, 2020 | December 31, 2019 | September 30, 2020                      | September 30, 2020 | 2020               | 2021 | 2022+ |
| <b>Libor vs. US\$ fixed rate swap</b> |                    |                   |           |              | (62)               | -                 | -                                       | 19                 | -                  | (7)  | (54)  |
| Receivable                            | US\$ 950           | -                 | Libor (i) | 0.13%        |                    |                   |   |                    |                    |      |       |
| Payable                               | US\$ 950           | -                 | Fix       | 0.48%        |                    |                   |   |                    |                    |      |       |

(i) Including Libor 3M and Libor 6M

## b) Commodities derivative positions and freight derivative positions

### (i) Protection program for the purchase of fuel oil used on ships

In order to reduce the impact of fluctuations in fuel oil prices on the hiring and availability of maritime freight and, consequently, to reduce the Company's cash flow volatility, hedging operations were carried out through options contracts on Brent Crude Oil and Gasoil (10ppm) for different portions of the exposure.

The derivative transactions were negotiated over-the-counter and the protected item is part of the Vale's costs linked to the price of fuel oil used on ships. The financial settlement inflows/outflows are offset by the protected items' losses/gains.

### Brent Crude Oil Options

| Flow         | Notional (bbl)     |                   |               | Average strike (US\$/bbl) | Fair value         |                   | Financial settlement Inflows (Outflows) | Value at Risk      | Fair value by year |
|--------------|--------------------|-------------------|---------------|---------------------------|--------------------|-------------------|---|--------------------|--------------------|
|              | September 30, 2020 | December 31, 2019 | Bought / Sold |                           | September 30, 2020 | December 31, 2019 | September 30, 2020                      | September 30, 2020 | 2020+              |
| Call options | 12,352,494         | 7,048,500         | B             | 60                        | 226                | 45                | -                                       | 22                 | 226                |
| Put options  | 12,352,494         | 7,048,500         | S             | 34                        | (190)              | (14)              | (319)                                   | 30                 | (189)              |
| <b>Total</b> |                    |                   |               |                           | <b>36</b>          | <b>31</b>         | <b>(319)</b>                            | <b>52</b>          | <b>37</b>          |

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



### Gasoil Options

| Flow         | Notional (bbl)     |                   | Bought / Sold | Average strike (US\$/bbl) | Fair value         |                   | Financial settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year 2020 |
|--------------|--------------------|-------------------|---------------|---------------------------|--------------------|-------------------|--|----------------------------------|-------------------------|
|              | September 30, 2020 | December 31, 2019 |               |                           | September 30, 2020 | December 31, 2019 |  |                                  |                         |
| Call options | 4,246,500          | 7,710,750         | B             | 87                        | 1                  | 26                | -  | -                                | 1                       |
| Put options  | 4,246,500          | 7,710,750         | S             | 55                        | (278)              | (10)              | (552)  | 26                               | (278)                   |
| <b>Total</b> |                    |                   |               |                           | <b>(277)</b>       | <b>16</b>         | <b>(552)</b>   | <b>26</b>                        | <b>(277)</b>            |

### Freight derivative positions

To reduce the impact of maritime freight price volatility on the Company's cash flow, freight hedging transactions were implemented, through Forward Freight Agreements (FFAs). The protected item is part of Vale's costs linked to maritime freight spot prices. The financial settlement inflows/outflows of the FFAs are offset by the protected items' losses/gains due to freight price changes.

The FFAs are contracts traded over the counter and can be cleared through a Clearing House, in this case subject to margin requirements.

| Flow             | Notional (days)    |                   | Bought / Sold | Average strike (US\$/day) | Fair value         |                   | Financial Settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year 2020+ |
|------------------|--------------------|-------------------|---------------|---------------------------|--------------------|-------------------|--|----------------------------------|--------------------------|
|                  | September 30, 2020 | December 31, 2019 |               |                           | September 30, 2020 | December 31, 2019 |  |                                  |                          |
| Freight forwards | 3,610              | 1,050             | B             | 13,949                    | 47                 | 1                 | (12)   | 14                               | 47                       |

### (ii) Protection programs for base metals products

#### Operational Hedging Programs

In the operational hedging program for nickel sales at fixed prices, derivatives transactions were implemented, usually through the purchase of nickel forwards, to convert into floating prices the contracts with clients that required a fixed price.

| Flow                         | Notional (ton)     |                   | Bought / Sold | Average strike (US\$/ton) | Fair value         |                   | Financial settlement Inflows (Outflows) | Value at Risk      | Fair value by year |      |
|------------------------------|--------------------|-------------------|---------------|---------------------------|--------------------|-------------------|---|--------------------|--------------------|------|
|                              | September 30, 2020 | December 31, 2019 |               |                           | September 30, 2020 | December 31, 2019 | September 30, 2020                      | September 30, 2020 | 2020               | 2021 |
| Fixed price sales protection |                    |                   |               |                           |                    |                   |   |                    |                    |      |
| Nickel forwards              | 2,216              | -                 | B             | 12,289                    | 30                 | -                 | 18                                      | 4                  | 21                 | 9    |
| Total                        |                    |                   |               |                           | 30                 | -                 | 18                                      | 4                  | 21                 | 9    |

### Nickel Revenue Hedging Program

The Company implemented a Nickel Revenue Hedging Program in 2019, which has been discontinued in April 2020 to increase the Company's cash position as a result of COVID-19 pandemic. The cumulative gain recognized in the cash flow hedge reserve until the settlement are being reclassified to the income statement as the Company recognizes the revenue from nickel sales (hedged item).

| Flow                           | Notional (ton)     |                   | Bought / Sold | Fair value         |                   | Financial settlement Inflows (Outflows) | Value at Risk      | Fair value by year |      |
|--------------------------------|--------------------|-------------------|---------------|--------------------|-------------------|---|--------------------|--------------------|------|
|                                | September 30, 2020 | December 31, 2019 |               | September 30, 2020 | December 31, 2019 | September 30, 2020                      | September 30, 2020 | 2020               | 2021 |
| Nickel Revenue Hedging Program |                    |                   |               |                    |                   |   |                    |                    |      |
| Call options                   | -                  | 75,984            | S             | -                  | (49)              | -                                       | -                  | -                  | -    |
| Put options                    | -                  | 75,984            | B             | -                  | 652               | 1,412                                   | -                  | -                  | -    |
| Total                          |                    |                   |               | -                  | 603               | 1,412                                   | -                  | -                  |      |

## Palladium Revenue Hedging Program

To reduce the volatility of its future cash flows arising from changes in palladium prices, the Company implemented a Palladium Revenue Hedging Program. Under this program, hedge operations were executed using forwards and option contracts to protect a portion of the highly probable forecast sales at floating prices. A hedge accounting treatment is given to this program.

The derivative transactions under the program are negotiated over-the-counter and the financial settlement inflows/outflows are offset by the protected items' losses/gains due to palladium price changes.

| Flow                                     | Notional (t oz)    |                   |               |                            | Fair value         |                   | Financial settlement                  | Value at                | Fair value by year |            |
|--|--------------------|-------------------|---------------|----------------------------|--------------------|-------------------|---------------------------------------|-------------------------|--------------------|------------|
|  | September 30, 2020 | December 31, 2019 | Bought / Sold | Average strike (US\$/t oz) | September 30, 2020 | December 31, 2019 | Inflows (Outflows) September 30, 2020 | Risk September 30, 2020 | 2020               | 2021       |
| <b>Palladium Revenue Hedging Program</b> |                    |                   |               |                            |                    |                   |                                       |                         |                    |            |
| Palladium Forwards                       | 2,400              | -                 | S             | 2,214                      | (1)                | -                 | 17                                    | -                       | (1)                | -          |
| Call Options                             | 14,400             | -                 | S             | 2,387                      | (13)               | -                 | -                                     | 4                       | (3)                | (10)       |
| Put Options                              | 14,400             | -                 | B             | 2,050                      | 5                  | -                 | -                                     | 2                       | 1                  | 4          |
| <b>Total</b>                             |                    |                   |               |                            | <b>(9)</b>         | <b>-</b>          | <b>17</b>                             | <b>6</b>                | <b>(3)</b>         | <b>(6)</b> |

## Embedded derivatives in contracts

The Company has some nickel concentrate and raw materials purchase agreements in which there are provisions based on nickel and copper future prices behavior. These provisions are considered as embedded derivatives.

| Flow            | Notional (ton)     |                   |               |                           | Fair value         |                   | Financial settlement                  | Value at Risk      | Fair value by year |
|-----------------|--------------------|-------------------|---------------|---------------------------|--------------------|-------------------|---------------------------------------|--------------------|--------------------|
|                 | September 30, 2020 | December 31, 2019 | Bought / Sold | Average strike (US\$/ton) | September 30, 2020 | December 31, 2019 | Inflows (Outflows) September 30, 2020 | September 30, 2020 | 2020               |
| Nickel forwards | 708                | 1,497             | S             | 14,576                    | (1)                | 9                 | -                                     | 2                  | (1)                |
| Copper forwards | 544                | 1,009             | S             | 6,527                     | (1)                | (1)               | -                                     | -                  | (1)                |
| <b>Total</b>    |                    |                   |               |                           | <b>(2)</b>         | <b>8</b>          | <b>-</b>                              | <b>2</b>           | <b>(2)</b>         |

## c) Wheaton Precious Metals Corp. warrants

The Company owned warrants issued by Wheaton Precious Metals Corp. (WPM), a Canadian company with stocks negotiated on the Toronto Stock Exchange and the New York Stock Exchange. Such warrants have payoff similar to that of an American call option and were received as part of the payment regarding the sale of part of gold payable flows produced as a sub product from Salobo copper mine and some nickel mines in Sudbury. In February 2020, the Company sold all of its warrants of Wheaton (equivalent to 10,000,000 common shares) for US\$2.50 per warrant, totaling R\$110 (US\$25 million).

| Flow         | Notional (quantity of warranties) |                   |               |                             | Fair value         |                   | Financial settlement                  | Value at Risk      | Fair value by year |
|--------------|-----------------------------------|-------------------|---------------|-----------------------------|--------------------|-------------------|---------------------------------------|--------------------|--------------------|
|              | September 30, 2020                | December 31, 2019 | Bought / Sold | Average strike (US\$/share) | September 30, 2020 | December 31, 2019 | Inflows (Outflows) September 30, 2020 | September 30, 2020 | 2023               |
| Call options | -                                 | 10,000,000        | B             | -                           | -                  | 105               | 110                                   | -                  | -                  |

#### d) Call options associated to debentures convertible into shares

The Company has debentures which lenders have the option to convert the outstanding debt into a specified quantity of an associate's shares, held by the Company. This option may be fully, or partly exercised, upon payment to the Company of the strike price, considering the terms, conditions and other limitations existing in the agreement, at any time and at the discretion of the creditor, until the maturity date of the debentures. The creditor also has the right to reconstitute the amount of shares required to achieve a total stake of 8% in this associate's shares, at a pre-established price in the option contract, which may be exercised up to December 15<sup>th</sup>, 2020, subject to the full exercise of the options associated with the debentures.

| Flow               | Notional (quantity) |                   | Bought / Sold | Average strike (R\$/share) | Fair value         |                   | Financial settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year 2027 |
|--------------------|---------------------|-------------------|---------------|----------------------------|--------------------|-------------------|--|----------------------------------|-------------------------|
|                    | September 30, 2020  | December 31, 2019 |               |                            | September 30, 2020 | December 31, 2019 |  |                                  |                         |
| Conversion options | 140,239             | 140,239           | S             | 8,436                      | (337)              | (206)             | -  | 15                               | (337)                   |

#### e) Option related to a Special Purpose Entity "SPE"

The Company acquired in January 2019 a call option related to shares of certain special purpose entities, which are part of a wind farm located in Bahia, Brazil. This option was acquired in the context of the Company's signing of electric power purchase and sale agreements with an SPE, supplied by this wind farm.

| Flow        | Notional (quantity) |                   | Bought / Sold | Average strike (R\$/share) | Fair value         |                   | Financial settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year 2022 |
|-------------|---------------------|-------------------|---------------|----------------------------|--------------------|-------------------|--|----------------------------------|-------------------------|
|             | September 30, 2020  | December 31, 2019 |               |                            | September 30, 2020 | December 31, 2019 |  |                                  |                         |
| Call option | 137,751,623         | 137,751,623       | B             | 2.74                       | 123                | 96                | -  | 12                               | 123                     |

#### f) Embedded derivatives in contracts

In 2014, the Company sold part of its stake in an associate to an investment fund, of which sales contract establishes, under certain conditions, a minimum return guarantee on the investment whose maturity was extended to December 2021 during this quarter. This is considered an embedded derivative, with payoff equivalent to a put option.

| Flow       | Notional (quantity) |                   | Bought / Sold | Average strike (R\$/share) | Fair value         |                   | Financial settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year 2021 |
|------------|---------------------|-------------------|---------------|----------------------------|--------------------|-------------------|--|----------------------------------|-------------------------|
|            | September 30, 2020  | December 31, 2019 |               |                            | September 30, 2020 | December 31, 2019 |  |                                  |                         |
| Put option | 1,105,070,863       | 1,105,070,863     | S             | 4.17                       | (319)              | (278)             | -  | 42                               | (319)                   |

The Company has also a natural gas purchase agreement in which there's a clause that defines that a premium can be charged if the Company's pellet sales prices trade above a pre-defined level. This clause is considered an embedded derivative.

| Flow         | Notional (volume/month) |                   | Bought / Sold | Average strike (US\$/ton) | Fair value         |                   | Financial settlement Inflows (Outflows) September 30, 2020 | Value at Risk September 30, 2020 | Fair value by year |       |
|--------------|-------------------------|-------------------|---------------|---------------------------|--------------------|-------------------|--|----------------------------------|--------------------|-------|
|              | September 30, 2020      | December 31, 2019 |               |                           | September 30, 2020 | December 31, 2019 |  |                                  | 2020               | 2021+ |
| Call options | 746,667                 | 746,667           | S             | 233                       | (1)                | (3)               | -  | -                                | -                  | (1)   |

#### **g) Methods and techniques of evaluation**

Derivative financial instruments are evaluated through the use of market curves and prices impacting each instrument at the closing dates.

For the pricing of options, the Company often uses the Black & Scholes model. In this model, the fair value of the derivative is determined basically as a function of the volatility and the price of the underlying asset, the strike price of the option, the risk-free interest rate and the option maturity. In the case of options where payoff is a function of the average price of the underlying asset over a certain period during the life of the option, the Company uses Turnbull & Wakeman model. In this model, in addition to the factors that influence the option price in the Black-Scholes model, the formation period of the average price is also considered.

In the case of swaps, both the present value of the long and short positions are estimated by discounting their cash flows by the interest rate in the related currency. The fair value is determined by the difference between the present value of the long and short positions of the swap in the reference currency.

For the swaps indexed to TJLP, the calculation of the fair value assumes that TJLP is constant, that is, the projections of future cash flows in Brazilian Reais are made considering the last TJLP disclosed.

Forward and future contracts are priced using the future curves of their corresponding underlying assets. Typically, these curves are obtained on the stock exchanges where these assets are traded, such as the London Metals Exchange ("LME"), the Commodity Exchange ("COMEX") or other providers of market prices. When there is no price for the desired maturity, Vale uses an interpolation between the available maturities.



## h) Sensitivity analysis of derivative financial instruments

The following tables present the potential value of the instruments given hypothetical stress scenarios for the main market risk factors that impact the derivatives positions. The scenarios were defined as follows:

- *Probable*: the probable scenario was defined as the fair value of the derivative instruments as at September 30, 2020
- *Scenario I*: fair value estimated considering a 25% deterioration in the associated risk variables
- *Scenario II*: fair value estimated considering a 50% deterioration in the associated risk variables

| Instrument  | Instrument's main risk events             | Probable | Scenario I | Scenario II |
|---|---|----------|------------|-------------|
| <b>CDI vs. US\$ fixed rate swap</b>                 | R\$ depreciation                          | (3,308)  | (6,617)    | (9,926)     |
|   | US\$ interest rate inside Brazil decrease | (3,308)  | (3,473)    | (3,644)     |
|   | Brazilian interest rate increase          | (3,308)  | (3,471)    | (3,642)     |
| Protected item: R\$ denominated liabilities         | R\$ depreciation                          | n.a.     | -          | -           |
| <b>TJLP vs. US\$ fixed rate swap</b>                | R\$ depreciation                          | (1,102)  | (1,853)    | (2,604)     |
|   | US\$ interest rate inside Brazil decrease | (1,102)  | (1,124)    | (1,146)     |
|   | Brazilian interest rate increase          | (1,102)  | (1,162)    | (1,216)     |
|   | TJLP interest rate decrease               | (1,102)  | (1,157)    | (1,212)     |
| Protected item: R\$ denominated debt                | R\$ depreciation                          | n.a.     | -          | -           |
| <b>R\$ fixed rate vs. US\$ fixed rate swap</b>      | R\$ depreciation                          | (861)    | (1,734)    | (2,607)     |
|   | US\$ interest rate inside Brazil decrease | (861)    | (881)      | (901)       |
|   | Brazilian interest rate increase          | (861)    | (921)      | (977)       |
| Protected item: R\$ denominated debt                | R\$ depreciation                          | n.a.     | -          | -           |
| <b>IPCA vs. US\$ fixed rate swap</b>                | R\$ depreciation                          | (1,161)  | (2,131)    | (3,101)     |
|   | US\$ interest rate inside Brazil decrease | (1,161)  | (1,197)    | (1,235)     |
|   | Brazilian interest rate increase          | (1,161)  | (1,257)    | (1,350)     |
|   | IPCA index decrease                       | (1,161)  | (1,229)    | (1,297)     |
| Protected item: R\$ denominated debt                | R\$ depreciation                          | n.a.     | -          | -           |
| <b>IPCA vs. CDI swap</b>                            | Brazilian interest rate increase          | 215      | 202        | 189         |
|   | IPCA index decrease                       | 215      | 202        | 189         |
| Protected item: R\$ denominated debt linked to IPCA | IPCA index decrease                       | n.a.     | (202)      | (189)       |
| <b>EUR fixed rate vs. US\$ fixed rate swap</b>      | EUR depreciation                          | (169)    | (1,097)    | (2,026)     |
|   | Euribor increase                          | (169)    | (174)      | (179)       |
|   | US\$ Libor decrease                       | (169)    | (174)      | (179)       |
| Protected item: EUR denominated debt                | EUR depreciation                          | n.a.     | 1,097      | 2,026       |
| <b>US\$ floating rate vs. US\$ fixed rate swap</b>  | US\$ Libor decrease                       | (61)     | (79)       | (97)        |
| Protected item: Libor US\$ indexed debt             | US\$ Libor decrease                       | n.a.     | 79         | 97          |
| <b>NDF BRL/USD</b>                                  | R\$ depreciation                          | (97)     | (356)      | (616)       |
|   | US\$ interest rate inside Brazil decrease | (97)     | (109)      | (121)       |
|   | Brazilian interest rate increase          | (97)     | (152)      | (209)       |
| Protected item: R\$ denominated liabilities         | R\$ depreciation                          | n.a.     | -          | -           |

## Selected Notes to the Interim Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated



| Instrument  | Instrument's main risk events | Probable | Scenario I | Scenario II |
|---|-------------------------------|----------|------------|-------------|
| <b>Fuel oil protection</b>                                      |                               |          |            |             |
| Options   | Price input decrease          | (236)    | (737)      | (1,305)     |
| Protected item: Part of costs linked to fuel oil prices         | Price input decrease          | n.a.     | 737        | 1,305       |
| <b>Maritime Freight protection</b>                              |                               |          |            |             |
| Forwards  | Freight price decrease        | 47       | (20)       | (87)        |
| Protected item: Part of costs linked to maritime freight prices | Freight price decrease        | n.a.     | 20         | 87          |
| <b>Nickel sales fixed price protection</b>                      |                               |          |            |             |
| Forwards  | Nickel price decrease         | -        | -          | -           |
| Protected item: Part of nickel revenues with fixed prices       | Nickel price decrease         | n.a.     | -          | -           |
| <b>Palladium Revenue Hedging Program</b>                        |                               |          |            |             |
| Options   | Palladium price increase      | (8)      | (46)       | (92)        |
| Protected item: Part of palladium future revenues               | Palladium price increase      | n.a.     | 46         | 92          |
| <b>Conversion options</b>                                       |                               |          |            |             |
|   | Stock value increase          | (337)    | (583)      | (889)       |
| <b>Option - SPCs</b>  |                               |          |            |             |
|   | SPCs stock value decrease     | 123      | 53         | 11          |
| Instrument  | Main risks                    | Probable | Scenario I | Scenario II |
| Embedded derivatives - Raw material purchase (nickel)           | Nickel price increase         | (1)      | (16)       | (31)        |
| Embedded derivatives - Raw material purchase (copper)           | Copper price increase         | (1)      | (6)        | (11)        |
| Embedded derivatives - Gas purchase                             | Pellet price increase         | (1)      | (2)        | (5)         |
| Embedded derivatives - Guaranteed minimum return                | Stock value decrease          | (319)    | (840)      | (1,827)     |

## 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 published by agencies Moody's and S&P regarding the main financial institutions that we hire derivative instruments, cash and cash equivalents transactions

| Long term ratings by counterparty     | Moody's | S&P  |
|---------------------------------------|---------|------|
| ABN Amro                              | A1      | A    |
| Agricultural Bank of China            | A1      | A    |
| ANZ Australia and New Zealand Banking | Aa3     | AA-  |
| Banco ABC                             | Ba3     | BB-  |
| Banco Bradesco                        | Ba3     | BB-  |
| Banco do Brasil                       | Ba3     | BB-  |
| Banco Itaú Unibanco                   | Ba3     | BB-  |
| Banco Safra                           | Ba3     | BB-  |
| Banco Santander                       | A2      | A    |
| Banco Votorantim                      | Ba3     | BB-  |
| Bank Mandiri                          | Baa2    | BBB- |
| Bank of America                       | A2      | A-   |
| Bank of China                         | A1      | A    |
| Bank of Montreal                      | Aa2     | A+   |
| Bank of Nova Scotia                   | A2      | A+   |
| Bank of Shanghai                      | Baa2    | -    |
| Bank of Tokyo Mitsubishi UFJ          | A1      | A-   |
| Bank Rakyat Indonesia (BRI)           | Baa2    | BBB- |
| Barclays                              | Baa2    | BBB  |
| BBVA Banco Bilbao Vizcaya Argentaria  | A3      | A-   |
| BNP Paribas                           | Aa3     | A+   |
| BTG Pactual                           | Ba3     | BB-  |
| Caixa Econômica Federal               | Ba3     | BB-  |
| Calyon                                | Aa3     | A+   |
| China Construction Bank               | A1      | A    |
| CIBC Canadian Imperial Bank           | Aa2     | A+   |
| CIMB Bank                             | Baa1    | A-   |
| Citigroup                             | A3      | BBB+ |

| Long term ratings by counterparty       | Moody's | S&P  |
|---|---------|------|
| Credit Suisse                           | Baa2    | BBB+ |
| Deutsche Bank                           | A3      | BBB+ |
| Goldman Sachs                           | A3      | BBB+ |
| HSBC                                    | A2      | A-   |
| Industrial and Commercial Bank of China | A1      | A    |
| Intesa Sanpaolo Spa                     | Baa1    | BBB  |
| Banco Itaú Unibanco                     | Ba3     | BB-  |
| JP Morgan Chase & Co                    | A2      | A-   |
| Macquarie Group Ltd                     | A3      | BBB+ |
| Mega International Commercial Bank      | A1      | A    |
| Millenium BIM                           | A1      | A-   |
| Mitsui & Co                             | A1      | A-   |
| Mizuho Financial                        | A1      | A-   |
| Morgan Stanley                          | A3 *    | BBB+ |
| Muscat Bank                             | B1      | BB-  |
| National Australia Bank                 | Aa3     | AA-  |
| National Bank of Canada                 | Aa3     | A    |
| National Bank of Oman                   | B1      | -    |
| Natixis                                 | A1      | A+   |
| Royal Bank of Canada                    | Aa2     | AA-  |
| Rabobank                                | Aa3     | A+   |
| Société Générale                        | A1      | A    |
| Standard Bank Group                     | Ba2     | -    |
| Standard Chartered                      | A2      | BBB+ |
| Sumitomo Mitsui Financial               | A1      | A-   |
| Toronto Dominion Bank                   | Aa3     | AA-  |
| UBS                                     | Aa3     | A-   |
| Unicredit                               | Baa1    | BBB  |