

Vale S.A.  
Form 6-K/A  
February 28, 2013  
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**United States  
Securities and Exchange Commission**

Washington, D.C. 20549

**FORM 6-K/A**

**Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16  
of the  
Securities Exchange Act of 1934**

**For the month of**

**February, 2013**

**Vale S.A.**

**Avenida Graça Aranha, No. 26  
20030-900 Rio de Janeiro, RJ, Brazil**

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

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(Check One) Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1)

(Check One) Yes  No

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7)

(Check One) Yes  No

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

(Check One) Yes  No

If  Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b). 82- .

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REASON FOR AMENDMENT

The reason for this amendment is to amend certain annual financial information for the year ended Dec 31, 2012 furnished to the SEC in a report on Form 6-K on February 27, 2013. Specifically, we made minor adjustments to Note 32 Board of Directors, Fiscal Council, Advisory committee and Executives Officers.

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**Financial Statements**

**December 31, 2012**

**IFRS**

Filed with the CVM, SEC and HKEx on

February 27, 2013



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**Vale S.A.**

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**Independent auditor's report**

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

We have audited the accompanying consolidated financial statements of Vale S.A. and its subsidiaries (the Company), which comprise the consolidated balance sheet as at December 31, 2012 and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

**Management's responsibility for  
the consolidated financial statements**

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error.

In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Vale S.A. and its subsidiaries as at December 31, 2012, and their financial performance and their cash flows for the year then ended, in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

Rio de Janeiro, February 27, 2012

PricewaterhouseCoopers  
Auditores Independentes  
CRC 2SP000160/O-5 F RJ

João César de Oliveira Lima Júnior  
Contador CRC 1RJ077431/O-8



Table of Contents**Consolidated Balance Sheets**

Expressed in millions of United States dollars

|   | Note | December 31, 2012 | December 31, 2011 | December 31, 2010 |
|---|------|-------------------|-------------------|-------------------|
| <b>Current assets</b>                       |      |                   |                   |                   |
| Cash and cash equivalents                   | 7    | 5,832             | 3,531             | 7,584             |
| Short-term investments                      | 8    | 246               |                   | 1,793             |
| Unrealized gains on derivative instruments  | 25   | 281               | 595               | 52                |
| Accounts receivable                         | 9    | 6,795             | 8,505             | 8,211             |
| Related parties                             | 30   | 384               | 82                | 96                |
| Inventory                                   | 10   | 5,052             | 5,251             | 4,298             |
| Recoverable taxes                           | 12   | 2,260             | 2,230             | 1,603             |
| Advances to suppliers                       |      | 256               | 393               | 188               |
| Other                                       |      | 963               | 946               | 606               |
|   |      | <b>22,069</b>     | <b>21,533</b>     | <b>24,431</b>     |
| Non-current assets held for sale            | 11   | 457               |                   | 7,128             |
|   |      | <b>22,526</b>     | <b>21,533</b>     | <b>31,559</b>     |
| <b>Non-current assets</b>                   |      |                   |                   |                   |
| Related parties                             | 30   | 408               | 509               | 29                |
| Loans and financing agreements receivable   |      | 246               | 210               | 164               |
| Judicial deposits                           | 18   | 1,515             | 1,464             | 1,731             |
| Deferred income tax and social contribution | 21   | 3,981             | 1,894             | 1,358             |
| Recoverable taxes                           | 12   | 658               | 587               | 361               |
| Unrealized gains on derivative instruments  | 25   | 45                | 60                | 301               |
| Deposit on incentive/ reinvestment          |      | 160               | 229               | 143               |
| Other                                       |      | 604               | 538               | 472               |
|   |      | <b>7,617</b>      | <b>5,491</b>      | <b>4,559</b>      |
| Investments                                 | 13   | 6,384             | 8,013             | 4,394             |
| Intangible assets                           | 14   | 9,211             | 9,521             | 10,100            |
| Property, plant and equipment, net          | 15   | 84,882            | 82,342            | 76,015            |
|   |      | <b>108,094</b>    | <b>105,367</b>    | <b>95,068</b>     |
| <b>Total</b>                                |      | <b>130,620</b>    | <b>126,900</b>    | <b>126,627</b>    |

Table of Contents**Consolidated Balance sheets**

Expressed in millions of United States dollars, except number of shares

(continued)

|  | Note | December 31, 2012 | December 31, 2011 | December 31, 2010 |
|--|------|-------------------|-------------------|-------------------|
| <b>Liabilities</b>   |      |                   |                   |                   |
| <b>Current liabilities</b>   |      |                   |                   |                   |
| Suppliers and contractors  |      | 4,529             | 4,814             | 3,558             |
| Payroll and related charges  |      | 1,481             | 1,307             | 1,134             |
| Unrealized losses on derivative instruments  | 25   | 347               | 73                | 35                |
| Current portion of long-term debt  | 17   | 3,471             | 1,495             | 2,825             |
| Short-term debt  | 17   |                   | 22                | 139               |
| Loans from related parties   | 30   | 207               | 24                | 21                |
| Taxes payable and royalties  |      | 324               | 524               | 264               |
| Provision for income taxes   |      | 641               | 507               | 751               |
| Employee postretirement benefit obligations  | 21   | 205               | 169               | 188               |
| Provision for asset retirement obligations   | 19   | 70                | 73                | 75                |
| Dividends and interest on capital  |      |                   | 1,181             | 4,842             |
| Other  |      | 1,127             | 904               | 950               |
|  |      | <b>12,402</b>     | <b>11,093</b>     | <b>14,782</b>     |
| Liabilities directly associated with assets held for sale  |      | 160               |                   | 3,205             |
|  |      | <b>12,562</b>     | <b>11,093</b>     | <b>17,987</b>     |
| <b>Non-current liabilities</b>   |      |                   |                   |                   |
| Unrealized losses on derivative instruments  | 25   | 783               | 663               | 61                |
| Long-term debt   | 17   | 26,799            | 21,538            | 21,593            |
| Loans from related parties   | 30   | 72                | 91                | 2                 |
| Employee postretirement benefit obligations  | 21   | 1,660             | 1,550             | 2,003             |
| Provisions for contingencies   | 18   | 2,065             | 1,686             | 2,043             |
| Deferred income tax and social contribution  | 20   | 3,795             | 5,681             | 7,699             |
| Asset retirement obligations   | 19   | 2,678             | 1,849             | 1,443             |
| Stockholders debentures  | 29   | 1,653             | 1,336             | 1,284             |
| Redeemable noncontrolling interest   |      | 487               | 505               | 712               |
| Other  |      | 1,907             | 2,398             | 1,965             |
|  |      | <b>41,899</b>     | <b>37,297</b>     | <b>38,805</b>     |
| <b>Total liabilities</b>   |      | <b>54,461</b>     | <b>48,390</b>     | <b>56,792</b>     |
| <b>Stockholders equity</b>   |      |                   |                   |                   |
|  | 24   |                   |                   |                   |
| Preferred class A stock - 7,200,000,000 no-par-value shares authorized and 2,108,579,618 (2011 - 2,108,579,618) issued |      | 22,907            | 22,907            | 17,426            |
| Common stock - 3,600,000,000 no-par-value shares authorized and 3,256,724,482 (2011 - 3,256,724,482)                   |      | 37,671            | 37,671            | 27,840            |

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|  |                |                |                |
|--|----------------|----------------|----------------|
| issued   |                |                |                |
| Mandatorily convertible notes - common shares  |                | 191            | 236            |
| Mandatorily convertible notes - preferred shares   |                | 422            | 528            |
| Treasury stock - 140,857,692 (2011 - 181,099,814) preferred and 71,071,482 (2011 - 86,911,207) common shares | (4,477)        | (5,662)        | (2,660)        |
| Results from operations with noncontrolling stockholders   | (400)          | 7              | 411            |
| Results from the translation/ issue of shares  | (152)          |                | 1,002          |
| Unrealized fair value gains/(losses)   | (552)          | 118            | (15)           |
| Cumulative translation adjustments   | (18,816)       | (20,665)       | (20,963)       |
| Retained earnings  | 38,390         | 41,806         | 43,504         |
| <b>Total Company stockholders equity</b>   | <b>74,571</b>  | <b>76,795</b>  | <b>67,309</b>  |
| Noncontrolling interests   | 1,588          | 1,715          | 2,526          |
| <b>Total stockholders equity</b>   | <b>76,159</b>  | <b>78,510</b>  | <b>69,835</b>  |
| <b>Total liabilities and stockholders equity</b>   | <b>130,620</b> | <b>126,900</b> | <b>126,627</b> |

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

Table of Contents**Consolidated Statements of Income**

Expressed in millions of United States dollars, except as otherwise stated

|  | Note | Year ended December 31, |                |                |
|--|------|-------------------------|----------------|----------------|
|  |      | 2012                    | 2011           | 2010           |
| Net operating revenue  | 26   | 47,694                  | 60,946         | 47,029         |
| Cost of goods sold and services rendered                                   | 27   | (26,483)                | (25,371)       | (20,420)       |
| <b>Gross profit</b>  |      | <b>21,211</b>           | <b>35,575</b>  | <b>26,609</b>  |
| <b>Operating (expenses)/ income</b>  |      |                         |                |                |
| Selling and administrative expenses  | 27   | (2,240)                 | (2,324)        | (1,696)        |
| Research and development expenses  | 27   | (1,478)                 | (1,674)        | (878)          |
| Other operating expenses, net  | 27   | (3,639)                 | (2,810)        | (2,205)        |
| Gains/(losses) on non-current assets held for sale                         |      | (506)                   |                |                |
| Impairment of assets   | 16   | (4,023)                 | 1,494          |                |
|  |      | <b>(11,886)</b>         | <b>(5,314)</b> | <b>(4,779)</b> |
| <b>Operating income</b>  |      | <b>9,325</b>            | <b>30,261</b>  | <b>21,830</b>  |
| Financial income   | 28   | 1,602                   | 1,907          | 1,775          |
| Financial expenses   | 28   | (5,709)                 | (5,480)        | (3,338)        |
| Equity results from associates   | 13   | 645                     | 1,138          | 997            |
| Impairment of investments  | 16   | (1,941)                 |                |                |
| <b>Income before income tax and social contribution</b>                    |      | <b>3,922</b>            | <b>27,826</b>  | <b>21,264</b>  |
| <b>Income tax and social contribution</b>                                  |      |                         |                |                |
|  | 20   |                         |                |                |
| Current income tax   |      | (2,529)                 | (5,547)        | (4,996)        |
| Deferred income tax  |      | 860                     | 276            | 1,304          |
| Deferred Income Tax of impairment  |      | 1,627                   |                |                |
| Reversal of Deferred Income Tax liabilities (Note 6.b.)                    |      | 1,236                   |                |                |
|  |      | <b>1,194</b>            | <b>(5,271)</b> | <b>(3,692)</b> |
| <b>Income from continuing operations</b>                                   |      | <b>5,116</b>            | <b>22,555</b>  | <b>17,572</b>  |
| <b>Results of discontinued operations</b>                                  |      |                         |                | (125)          |
| <b>Net income for the year</b>   | 26   | <b>5,116</b>            | <b>22,555</b>  | <b>17,447</b>  |
| Gain/(loss) attributable to noncontrolling interests                       |      | (257)                   | (233)          | 190            |
| <b>Net income attributable to the Company's stockholders</b>               |      | <b>5,373</b>            | <b>22,788</b>  | <b>17,257</b>  |
| <b>Earnings per share attributable to the Company's stockholders:</b>      |      |                         |                |                |
| <b>Basic and diluted earnings per preferred share and per common share</b> |      |                         |                |                |
| Continuing operations  |      | 0.99                    | 4.34           | 3.25           |

Discontinued operations

0.99

(0.02)

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

Table of Contents**Consolidated Statement of Others Comprehensive Income**

Expressed in millions of United States dollars

|  | Year ended December 31, |               |               |
|--|-------------------------|---------------|---------------|
|  | 2012                    | 2011          | 2010          |
| <b>Net income</b>  | 5,116                   | 22,555        | 17,447        |
| <b>Other comprehensive income</b>  |                         |               |               |
| Cumulative translation adjustments   | (2,201)                 | (4,641)       | 2,065         |
| <b>Unrealized gains /(losses) on available-for-sale investmenties</b>                  |                         |               |               |
| Gross balance as of the year end   |                         | 3             | 23            |
| Tax benefits /(expenses)   | (1)                     |               | (10)          |
|  | (1)                     | 3             | 13            |
| <b>Cash flow hedge</b>   |                         |               |               |
| Gross balance as of the year end   | (113)                   | 118           | 36            |
| Tax benefits (expenses)  | (8)                     | 11            | (11)          |
|  | (121)                   | 129           | 25            |
| <b>Total other comprehensive income for the year</b>                                   | <b>2,793</b>            | <b>18,046</b> | <b>19,550</b> |
| <b>Other comprehensive income (deficit) attributable to Noncontrolling interests</b>   | (223)                   | (319)         | 255           |
| <b>Other comprehensive income (deficit) attributable to the Company s stockholders</b> | 3,016                   | 18,365        | 19,295        |
|  | <b>2,793</b>            | <b>18,046</b> | <b>19,550</b> |

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

Table of Contents**Statement of Changes in Equity**

Expressed in millions of United States dollars

|   | Capital       | Results from the translation of shares | Mandatorily convertible notes | Revenue reserves | Treasury stock | Unrealized fair value gain (losses) | Gains/(losses) from operations with noncontrolling stockholders | Cumulative translation adjustments | Retained earnings | Total Company stockholders equity |
|---|---------------|--|-------------------------------|------------------|----------------|-------------------------------------|---|------------------------------------|-------------------|-----------------------------------|
| <b>Balance as at January 1, 2010</b>                      | <b>43,869</b> | <b>(98)</b>                            | <b>2,398</b>                  | <b>28,298</b>    | <b>(1,150)</b> | <b>(12)</b>                         |   | <b>(21,758)</b>                    | <b>3,448</b>      | <b>54,995</b>                     |
| Net income for the year                                   |               |  |                               |                  |                |                                     |   |                                    | 17,257            | 17,257                            |
| Capitalization of reserves                                | 1,397         |  |                               | (1,397)          |                |                                     |   |                                    |                   |                                   |
| Capitalization of noncontrolling stockholder advances     |               |  |                               |                  |                |                                     |   |                                    |                   |                                   |
| Gains on conversions of shares                            |               | 1,100                                  | (1,591)                       |                  | 491            |                                     |   |                                    |                   |                                   |
| Repurchases of stock                                      |               |  |                               |                  | (2,001)        |                                     |   |                                    |                   | (2,001)                           |
| Additional remuneration for mandatorily convertible notes |               |  | (43)                          |                  |                |                                     |   |                                    |                   | (43)                              |
| Cash flow hedges, net of taxes                            |               |  |                               |                  |                | (15)                                |   |                                    |                   | (15)                              |
| Unrealized fair value results                             |               |  |                               |                  |                | 13                                  |   |                                    |                   | 13                                |
| Translation adjustments for the year                      |               |  |                               | 1,130            |                | (1)                                 |   | 795                                | 116               | 2,040                             |
| Dividends to noncontrolling stockholders                  |               |  |                               |                  |                |                                     |   |                                    |                   |                                   |
| Acquisitions and disposals of noncontrolling              |               |  |                               |                  |                |                                     | 411   |                                    |                   | 411                               |

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|  |               |              |            |               |                |             |            |                 |         |               |
|--|---------------|--------------|------------|---------------|----------------|-------------|------------|-----------------|---------|---------------|
| stockholders   |               |              |            |               |                |             |            |                 |         |               |
| Transfers to assets held for sale of noncontrolling stockholders |               |              |            |               |                |             |            |                 |         |               |
| Additional Remuneration  |               |              |            | (308)         |                |             |            |                 |         | (308)         |
| Interim interest on capital and dividends                        |               |              |            |               |                |             |            | (863)           |         | (863)         |
| <b>Destination of earnings:</b>                                  |               |              |            |               |                |             |            |                 |         |               |
| Supplemental distributions proposed to stockholders              |               |              |            |               |                |             |            | (4,177)         |         | (4,177)       |
| Appropriation to undistributed retained earnings                 |               |              |            | 15,781        |                |             |            | (15,781)        |         |               |
| <b>Balance as at December 31, 2010</b>                           | <b>45,266</b> | <b>1,002</b> | <b>764</b> | <b>43,504</b> | <b>(2,660)</b> | <b>(15)</b> | <b>411</b> | <b>(20,963)</b> |         | <b>67,309</b> |
| Net income for the year  |               |              |            |               |                |             |            | 22,788          |         | 22,788        |
| Capitalization of reserves                                       | 15,312        | (1,002)      |            | (14,310)      |                |             |            |                 |         |               |
| Capitalization of noncontrolling stockholder advances            |               |              |            |               |                |             |            |                 |         |               |
| Repurchases of stock   |               |              |            |               | (3,002)        |             |            |                 |         | (3,002)       |
| Supplemental distributions for mandatorily convertible notes     |               |              |            | (151)         |                |             |            |                 |         | (151)         |
| Cash flow hedge, net of taxes                                    |               |              |            |               |                | 128         |            |                 |         | 128           |
| Unrealized fair value results                                    |               |              |            |               |                | 3           |            |                 |         | 3             |
| Translation adjustments for the year                             |               |              |            | (2,777)       |                | 2           |            | 298             | (2,077) | (4,554)       |
| Dividends to noncontrolling stockholders                         |               |              |            |               |                |             |            |                 |         |               |
| Redeemable noncontrolling stockholder interests                  |               |              |            |               |                |             |            |                 |         |               |
| Acquisitions and disposals of noncontrolling stockholders        |               |              |            |               |                |             |            |                 | (404)   | (404)         |
|  |               |              |            |               |                |             |            | (4,141)         |         | (4,141)       |



|   |               |            |               |                |            |          |                 |          |               |
|---|---------------|------------|---------------|----------------|------------|----------|-----------------|----------|---------------|
| Interim interest on capital and dividends                 |               |            |               |                |            |          |                 |          |               |
| <b>Destination of earnings:</b>                           |               |            |               |                |            |          |                 |          |               |
| Supplemental distributions proposed to stockholders       |               |            |               |                |            |          |                 | (1,181)  | (1,181)       |
| Appropriation to undistributed retained earnings          |               |            | 15,389        |                |            |          |                 | (15,389) |               |
| <b>Balance as of December 31, 2011</b>                    | <b>60,578</b> | <b>613</b> | <b>41,806</b> | <b>(5,662)</b> | <b>118</b> | <b>7</b> | <b>(20,665)</b> |          | <b>76,795</b> |
| Net income for the year                                   |               |            |               |                |            |          |                 | 5,373    | 5,373         |
| Capitalization of noncontrolling stockholder advances     |               |            |               |                |            |          |                 |          |               |
| Gains on conversion of shares                             |               | (152)      | (545)         |                | 1,185      | (488)    |                 |          |               |
| Additional remuneration for mandatorily convertible notes |               |            | (68)          |                |            |          |                 |          | (68)          |
| Cash flow hedges, net of taxes                            |               |            |               |                |            | (121)    |                 |          | (121)         |
| Unrealized fair value results                             |               |            |               |                |            | (1)      |                 |          | (1)           |
| Translation adjustments for the year                      |               |            | (4,024)       |                |            | (60)     |                 | 1,849    | (2,235)       |
| Dividends to noncontrolling stockholders                  |               |            |               |                |            |          |                 |          |               |
| Redeemable noncontrolling stockholders interest           |               |            |               |                |            |          |                 |          |               |
| Acquisitions and disposals of noncontrolling stockholders |               |            |               |                |            |          |                 | (407)    | (407)         |
| Realization of reserve                                    |               |            | (362)         |                |            |          |                 | 362      |               |
| <b>Destination of earnings:</b>                           |               |            |               |                |            |          |                 |          |               |
| Appropriation to undistributed retained earnings          |               |            | 531           |                |            |          |                 | (5,735)  | (5,204)       |

|  |               |              |               |                |              |              |                 |  |               |
|--|---------------|--------------|---------------|----------------|--------------|--------------|-----------------|--|---------------|
| Remuneration<br>intermediate                   |               |              |               |                |              |              |                 |  |               |
| <b>Balance as of<br/>December 31,<br/>2012</b> | <b>60,578</b> | <b>(152)</b> | <b>37,951</b> | <b>(4,477)</b> | <b>(552)</b> | <b>(400)</b> | <b>(18,816)</b> |  | <b>74,132</b> |

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

Table of Contents**Consolidated Statement of Cash Flows**

Expressed in millions of United States dollars

|  | 2012            | Year ended December 31,<br>2011 | 2010            |
|--|-----------------|---------------------------------|-----------------|
| <b>Cash flow from operating activities:</b>  |                 |                                 |                 |
| Net income   | 5,116           | 22,555                          | 17,447          |
| <b>Adjustments to reconcile net income with cash from operations</b>                 |                 |                                 |                 |
| Results of equity investments  | (645)           | (1,138)                         | (997)           |
| Realized gains on assets held for sale   | 505             | (1,494)                         |                 |
| Results from discontinued operations   |                 |                                 | 125             |
| Depreciation, amortization and depletion   | 4,288           | 3,944                           | 3,092           |
| Deferred income tax and social contribution  | (860)           | (276)                           | (1,304)         |
| Reversal of deferred income tax (note 5a)  | (1,236)         |                                 |                 |
| Deferred Income Tax of impairment  | (1,627)         |                                 |                 |
| Foreign exchange and indexation (gain) losses, net                                   | 1,309           | 3,139                           | (605)           |
| Loss on disposal of property, plant and equipment                                    | 216             | 223                             | 623             |
| Unrealized derivative (gains) losses, net  | 613             | 490                             | 594             |
| Impairment   | 5,964           |                                 |                 |
| Stockholders debentures  | 109             |                                 |                 |
| Other  | (333)           | 1                               | 240             |
| <b>Decrease (increase) in assets:</b>  |                 |                                 |                 |
| Accounts receivable from customers   | 1,900           | (821)                           | (3,800)         |
| Inventories  | (296)           | (1,343)                         | (425)           |
| Recoverable taxes  | 177             | (563)                           | 42              |
| Other  | 530             | (295)                           | 345             |
| <b>Increase (decrease) in liabilities:</b>   |                 |                                 |                 |
| Suppliers and contractors  | (168)           | 1,076                           | 928             |
| Payroll and related charges  | 185             | 285                             | 214             |
| Taxes and contributions  | (143)           | (2,478)                         | 1,311           |
| Other  | 531             | 153                             | 192             |
| <b>Net cash provided by operating activities</b>                                     | <b>16,135</b>   | <b>23,458</b>                   | <b>18,022</b>   |
| <b>Cash flow from investing activities:</b>  |                 |                                 |                 |
| Short-term investments   | (246)           | 1,793                           | 1,954           |
| Loans and advances   | 292             | (178)                           | (58)            |
| Guarantees and deposits  | (116)           | (186)                           | (94)            |
| Additions to investments   | (474)           | (504)                           | (87)            |
| Additions to property, plant and equipment   | (15,777)        | (16,075)                        | (12,647)        |
| Dividends/interest on capital received from Joint controlled entities and associates | 460             | 1,038                           | 1,161           |
| Proceeds from disposal of investments held for sale                                  | 974             | 1,081                           |                 |
| Acquisitions/sales of subsidiaries   |                 |                                 | (6,252)         |
| <b>Net cash used in investing activities</b>   | <b>(14,887)</b> | <b>(13,031)</b>                 | <b>(16,023)</b> |
| <b>Cash flow from financing activities:</b>  |                 |                                 |                 |
| <b>Short-term debt</b>   |                 |                                 |                 |

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|   |              |                 |                |
|---|--------------|-----------------|----------------|
| Additions   | 593          | 859             | 2,233          |
| Repayments  | (526)        | (955)           | (2,132)        |
| <b>Loans</b>  |              |                 |                |
| Additions   |              | 19              | 24             |
| Repayments  |              | (1)             | (25)           |
| <b>Long-term debt</b>   |              |                 |                |
| Additions   | 8,740        | 1,564           | 4,436          |
| Repayments  | (1,186)      | (2,621)         | (2,629)        |
| Dividends and interest on capital paid to stockholders                  | (6,000)      | (9,000)         | (3,000)        |
| Dividends and interest on capital attributed to noncontrolling interest | (45)         | (100)           | (140)          |
| Transactions with noncontrolling stockholders                           | (411)        | (1,134)         | 660            |
| Treasury stock  |              | (3,002)         | (1,510)        |
| <b>Net cash used in financing activities</b>                            | <b>1,165</b> | <b>(14,371)</b> | <b>(2,083)</b> |
| Increase (decrease) in cash and cash equivalents                        | 2,413        | (3,944)         | (84)           |
| Cash and cash equivalents of cash, beginning of the year                | 3,531        | 7,584           | 7,293          |
| Effect of exchange rate changes on cash and cash equivalents            | (112)        | (109)           | 375            |
| <b>Cash and cash equivalents, end of the year</b>                       | <b>5,832</b> | <b>3,531</b>    | <b>7,584</b>   |
| <b>Cash paid during the year for:</b>                                   |              |                 |                |
| Short-term interest   | (8)          | (3)             | (5)            |
| Long-term interest  | (1,308)      | (1,143)         | (1,097)        |
| Income tax and social contribution                                      | (1,238)      | (7,293)         | (1,972)        |
| <b>Non-cash transactions:</b>   |              |                 |                |
| Additions to property, plant and equipment - interest capitalization    | 335          | 234             | 164            |

Conversion of mandatorily convertible notes using 56,081,560 treasury stock (note 24c)

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

Table of Contents**Notes to Financial Statements**

Expressed in millions of United States Dollars, unless otherwise stated

**1- Operational Context**

Vale S.A. ( Vale or Parent Company ) is a Public Limited Liability Company with its headquarters in the city of Rio de Janeiro, Graça Aranha Avenue, 26, Downtown, State of Rio de Janeiro, Brazil and has its securities traded on the stock exchanges in Sao Paulo ( BM&F and BOVESPA ), New York ( NYSE ), Paris ( NYSE Euronext ) and Hong Kong ( HKEx ).

The Company and its direct and indirect subsidiaries ( Group , Company or We ) are principally engaged in the research, production and marketing of iron ore and pellets, nickel, fertilizer, copper, coal, manganese, ferroalloys, cobalt, platinum group metals and precious metals. In addition, it operates in the segments of energy, logistics and steel.

At December 31, 2012, our principal consolidated operating subsidiaries the following:

| Entities                                | % ownership | % voting capital | Location      | Principal activity        |
|---|-------------|------------------|---------------|---------------------------|
| <b>Subsidiaries</b>                     |             |                  |               |                           |
| Compañia Minera Miski Mayo S.A.C        | 40.00       | 51.00            | Peru          | Fertilizers               |
| Ferrovias Centro-Atlântica S. A.        | 99.99       | 99.99            | Brazil        | Logistics                 |
| Ferrovias Norte Sul S.A.                | 100.00      | 100.00           | Brazil        | Logistics                 |
| Mineração Corumbaense Reunida S.A.      | 100.00      | 100.00           | Brazil        | Iron ore and Manganese    |
| PT Vale Indonesia Tbk                   | 59.20       | 59.20            | Indonesia     | Nickel                    |
| Sociedad Contractual Minera Tres Valles | 90.00       | 90.00            | Chile         | Copper                    |
| Vale Australia Pty Ltd.                 | 100.00      | 100.00           | Australia     | Coal                      |
| Vale Canada Limited                     | 100.00      | 100.00           | Canada        | Nickel                    |
| Vale Fertilizantes S.A                  | 100.00      | 100.00           | Brazil        | Fertilizers               |
| Vale International Holdings GMBH        | 100.00      | 100.00           | Austria       | Holding and Research      |
| Vale International S.A                  | 100.00      | 100.00           | Switzerland   | Trading                   |
| Vale Manganês S.A.                      | 100.00      | 100.00           | Brazil        | Manganese and Ferroalloys |
| Vale Mina do Azul S.A.                  | 100.00      | 100.00           | Brazil        | Manganese                 |
| Vale Moçambique S.A.                    | 95.00       | 95.00            | Mozambique    | Coal                      |
| Vale Nouvelle-Calédonie SAS             | 80.50       | 80.50            | New Caledonia | Nickel                    |
| Vale Oman Pelletizing Company LLC       | 70.00       | 70.00            | Oman          | Pellet                    |
| Vale Shipping Holding PTE Ltd.          | 100.00      | 100.00           | Singapore     | Logistics                 |

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In a subsequent period, pursuant a contract with the Sultanate of Oman, Vale transferred 30 % of its shares to Oman Oil Company for R\$ 144 (US\$ 71).

The Board of Directors authorized these financial statements for issue on February 27, 2013.

### **2 - Summary of the Main Accounting Practices and Accounting Estimates**

#### **a) Basis of preparation**

The consolidated financial statements of the Company have been prepared in accordance with the International Financial Reporting Standards ( IFRS ) issued by the International Accounting Standards Board ( IASB ), and interpretations issued by International Financial Reporting Interpretations Committee ( IFRIC ).

The financial statements have been prepared under the historical cost convention as adjusted to reflect the fair value of available for sale financial assets, and financial assets and liabilities (including derivative instruments) measured at fair value through the Statement of Income.

#### **b) Functional currency and presentation currency**

Items included in the financial statements of each Group s entities 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\$ ). For presentation purposes, these consolidated financial statements are presented in United States Dollars ( US\$ ) as we understand this is how our international investors are used to analyze our financial statements in order to take their decisions.

The operations with others currencies are translated into the functional currency of each entity using the actual exchange rate on the transaction dates. The foreign exchange gains and losses resulting from the settlement of these transactions and from the translation by exchange rates at the end of the year, relating to monetary assets and liabilities in other currencies, are recognized in the Statement of Income as financial expense or income.

In 2011, based on entity business assessment, the subsidiary Vale International had its functional currency changed from the Brazilian Real to US Dollar. This change did not cause significant effects in the financial statements presented.

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The exchange rates of the major currencies that impact our operations against the functional currency were:

|                         | Exchange rates used for conversions in Brazilian Reais - R\$ |                   |                   |
|-------------------------|--|-------------------|-------------------|
|                         | December 31, 2012  | December 31, 2011 | December 31, 2010 |
| US dollar - US\$        | 2.0435   | 1.8683            | 1.6662            |
| Canadian dollar - CAD   | 2.0546   | 1.8313            | 1.6700            |
| Australian dollar - AUD | 2.1197   | 1.9092            | 1.6959            |
| Euro - EUR or           | 2.6954   | 2.4165            | 2.2280            |

Translation differences on non-monetary financial assets and liabilities are recognized in income as part of fair value gain or loss. The exchange rate gain or loss of non-monetary financial assets, such as investments in shares classified as available for sale, is included in Comprehensive Income.

The net income and balance sheet of all Group entities whose functional currency is different from the presentation currency are translated into the presentation currency as follows: (i) The assets and liabilities for each Statement of Balance Sheet presented are translated at the closing rate at the Statement of Balance Sheet date; (ii) income and expenses for each Statement of Income are translated at the average exchange rates, except in specific transactions that, considering their relevance, are translated at the rate at the dates of transactions and; (iii) The components for each Stockholders' equity are translated at the rate at the dates of transactions. All resulting exchange differences are recognized in a separate component of the Stockholders' equity, named Cumulative Translation Adjustment.

**c) Consolidation and investments**

1. The consolidated financial statements reflect the balances of assets and liabilities and transactions of the Parent Company and its direct and indirect subsidiaries. Subsidiaries over which control is achieved through other means, such as stockholders agreement, are also consolidated even if we hold less than 51% of voting capital.

2. For associates, entities over which the Company has significant influence but not control, and jointly controlled entities, the investments are accounted for under the equity method.

3. Accounting practices of subsidiaries, joint ventures and associated companies are set to ensure consistency with the policies adopted by the Parent Company. Transactions between consolidated companies, as well as balances, unrealized profits and losses on these transactions are eliminated.

We evaluate the carrying value of our equity investment in relation to publicly quoted market prices when available. If the quoted market price is lower than book value, and such decline is considered other than temporary, we write-down our equity investments to the level of the quoted market value.

For interests in joint arrangements (e.g.: consortium agreements), the assets, liabilities and transactions of these enterprises are recognized in the proportion held by Vale.

**d) Business combinations**

When Vale acquires control over an entity, the identifiable assets acquired the liabilities and contingent liabilities assumed and the noncontrolling stockholders' interests recognized are measured initially at fair value at the acquisition date.

The excess of consideration transferred and of the fair value at the acquisition date of any previous equity interests in the acquire, against the fair value of group interests in the identifiable net assets acquired, is recorded as goodwill, which is allocated to each cash-generating unit.

**e) Segment information**

Operating and geographic segments are reported consistently with the internal reporting provide to, and used by, the Company's decision makers in evaluating performance and taking investment decisions. The information is analyzed by operating segment as follows:

**Bulk Material** - includes the extraction of iron ore and pellet production and the transport systems of Brazil, including railroads, ports and terminals, linked to mining operations. The manganese ore, ferroalloys and coal are also included in this segment.

**Base metals** includes the production of non-ferrous minerals, including nickel operations (co-products and by-products), copper



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and investment in aluminum affiliate.

**Fertilizers** comprises three major groups of nutrients: potash, phosphate and nitrogen.

**Logistical services** includes our system of cargo transportation for third parties divided into rail transport, port and shipping services.

**Other** comprises sales and expenses of other products and investments in joint ventures and associate in other businesses.

**f) Current and non-current assets and liabilities**

Vale classifies assets and liabilities as current when it expects to realize the assets and to settle the liabilities, within twelve months after the reporting period. Others assets and liabilities are classified as non-current.

**g) Cash equivalents and short-term investments**

The amounts recorded as cash and cash equivalents correspond to the values available in cash, bank deposits and investments in the short-term that have immediately liquidity and original maturity within 90 days. Other investments between 91 day and 360 day maturities are recognized as fair value through income and presented in short-term investments.

**h) Accounts receivables**

Represent receivables from the sale of products and services made by the Company. The receivables are initially recorded at fair value and subsequently measured at amortized cost, net of impairment losses, when applicable.

**i) Financial Assets**

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

- Financial assets measured at fair value through the Statement of Income – financial assets held for trading acquired for the purpose of selling in the short term.
- Loans and receivables – non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially measured at fair value and subsequently at amortized cost using the effective interest method.
- Available for sale – non-derivative financial assets not classified in another category of financial instrument. They are recognized at fair value through other comprehensive income. After the initial recognition, when financial assets available for sale do not have a quoted market price in an active market and whose fair value cannot be reliably measured, we are held at acquisition cost less impairment losses.

**j) Inventories**

Inventories are stated at the lower of average cost of acquisition or production and net realizable value. The inventories production cost is determined by variable and fixed costs, direct and indirect costs of production, using the average cost method. When applicable an estimate of losses with obsolete or slow-moving inventories is recognized.

**k) Non-current assets and liabilities held for sale**

Non-current assets and liabilities are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. Non-current assets and liabilities held for sale are measured at the lower of carrying amount and fair value, less cost of sales and presented as current assets, separate from other current assets and liabilities.

**l) Stripping Costs**

Stripping costs (the cost associated with the removal of overburdened and other waste materials) incurred during the development of mine, before production takes place, are capitalized as part of the depreciable cost of developing the property. Such costs are subsequently amortized during the useful life of the mine based on proven and probable reserves.



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Post-production stripping costs are included in the cost of inventory, except when a special campaign is developed to permit the access to a significant ore body. In these cases, the cost are capitalized as non-current asset and amortized during the extraction of the ore body.

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**m) Intangible assets**

Intangible assets are evaluated at the acquisition cost, less accumulated amortization and impairment losses, when applicable.

Intangible assets that have finite useful lives are amortized considering their effective use, while those with indefinite useful lives are not amortized but are tested at least annually in terms of their recoverability (impairment test).

The Company holds concessions to exploit railway assets over a certain period of time. Railways are classified as intangible assets and amortized over the shorter of their useful lives and the concession term will returned to the government.

Intangible assets acquired in a business combination are recognized separately from goodwill.

**n) Property, plant and equipment**

Property, plant and equipment are carried at acquisition or production cost. The asset costs include costs directly attributable to bringing the asset into use, financial charges incurred during the construction period, acquisition expenses, after deducting trade discounts and rebates, and estimated decommissioning and site restoration expenses (asset retirement obligations - Note 2v).

Assets are depreciated using the straight-line method based on the estimated useful lives, from the date on which the assets become available for their intended use, except for land which is not depreciated. The depletion of reserves is calculated based on the ratio between actual production and the total amount of proven reserves.

The depreciation and depletion are determined in accordance with the following estimated useful lives:

|               |                         |
|---------------|-------------------------|
| Buildings     | between 20 and 50 years |
| Installations | between 20 and 33 years |
| Equipment     | between 10 and 33 years |

|                    |                        |
|--------------------|------------------------|
| Computer Equipment | 5 years                |
| Mineral rights     | between 2 and 33 years |
| Locomotives        | 25 years               |
| Wagon              | 33 years               |
| Railway equipment  | 25 years               |
| Ships              | between 5 and 20 years |
| Other              | between 2 and 50 years |

The residual values and useful lives of assets are reviewed and adjusted, if necessary, at the end of each fiscal year.

Significant industrial maintenance costs (for example, ships and other such assets), including spare parts, assembly services, and others, are recorded in property, plant and equipment and depreciated through the next programmed maintenance overhaul.

**o) Non-controlling stockholders' interests**

The Company treats transactions with non-controlling stockholders' interests as transactions with equity owners of the Group. For purchases of non-controlling stockholders' interests, the difference between any consideration paid and the portion acquired of the carrying value of net assets of the subsidiary is recorded in stockholders' equity. Gains or losses, on disposals of non-controlling stockholders' interest, are also recorded in stockholders' equity.

When the Company ceases to hold control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. Furthermore, any amounts previously recognized in other comprehensive income relating to that entity are accounted for as if the Group had directly sold the related assets or liabilities. This means that the amounts previously recognized in other comprehensive income are reclassified in income.

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**p) Impairment of assets**

The Company assesses, at each reporting date whether there is evidence that the carrying amount of financial assets measured through amortized cost and long-live non-financial asset, should be impaired.

For financial assets measured through amortized cost, Vale compares the carrying amount with expected cash flows for the asset, and when appropriate, the carrying value is adjusted to cash flow value.

For long-live non-financial assets, when impairment indication are identified, the test is conducted by campaign the recoverable value of these assets grouped at the lowest levels for which there are separately identifiable cash flows of the cash-generating unit to which the asset belongs to their carrying amount. If we identify the need for adjustment, it is consistently appropriate to each asset s cash-generating unit.

For investments in affiliated companies with publicly traded stock, Vale assesses recoverability of assets when there is prolonged or significant decline in market value. The balance of their investments in relation to the market value of the shares, when available. If the market value is less than the carrying value of investments, and reducing for seasonal, the Company performs the adjustment of the investment to the realizable value quoted in the market.

The Company determines its cash flows based on approved budgets, considering mineral reserves and mineral resources calculated by internal experts, costs and investments based on the best estimate of past performance, sale prices consistent with the projections used in reports published by industry considering the market price when available and appropriate. Cash flows used are designed based on the life of each cash-generating unit (consumption of reserve units in the case of minerals) and considering discount rates that reflect specific risks relating to the relevant assets in each cash-generating unit, depending on their composition and location.

Regardless the indication of impairment of its carrying value, goodwill balances arising from business combinations and intangible assets with indefinite useful lives are tested for impairment at least once a year.

**q) Research and development**

**i. Expenditures on ore research**

Expenditure on ore research is considered operating expenses until the effective proof of the economic feasibility of commercial exploration of a given field. From then on, the expenditures incurred are capitalized as mine development costs.

**ii. Expenditures on feasibility studies and new technologies and others research**

Vale also conducts feasibility study for many whose business which we operates and researching new technologies to optimize the mining process. After proven to generate future benefits to the Company, the expenditures incurred are capitalized.

**r) Leases**

The Company classifies its contracts as finance leases or operating leases based on the substance of the contract as to whether it is linked to the transfer of substantially all risks and benefits of the assets ownership to the Company during their useful life.

For finance leases, the lower of the fair value of the leased asset and the present value of minimum lease payments is recorded in tangible fixed assets and the corresponding obligation recorded in liabilities. For operating leases, payments are recognized on a straight line basis during the term of the contract as a cost or expense in the Statement of Income.

**s) Accounts payable to suppliers and contractors**

Accounts payable to suppliers and contractors are obligations to pay for goods and services that were acquired in the ordinary course of business, and are initially recognized at fair value and subsequently measured at amortized cost using effective interest rate method.

**t) Loans and financing**

Loans and Financing are initially measured at fair value, net of transaction costs incurred and are subsequently carried at amortized cost and updated using the effective interest rate method. Any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the Statement of Income over the period of the loans, using the effective interest rate method. Fees paid on the establishment of the loan are recognized as transaction costs of the loan.

Compound financial instruments issued by the Company which include financial liability (debt) components and Stockholders equity components, comprise notes mandatorily convertible into preferred or common stock.





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The liability component of a compound financial instrument is initially recognized at fair value that is determined using discounted cash flow, considering the interest rate market for a non-convertible debt instrument with similar characteristics (period, value, credit risk). After initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest rate method.

The Stockholders' equity component is recognized at the difference between the total values received by the Company with the issuance of the securities, and the initial recognition amount of the liability component. After initial recognition, the stockholders' equity component of a compound financial instrument is not remeasured until its conversion.

**u) Provision**

Provisions are recognized only when there is a present obligation (legal or constructive) resulting from a past event, and it is probable that settlement of this obligation would result in an outflow of resources and the amount of the obligation may be reasonably estimated. Provisions are reviewed and adjusted to reflect the current best estimate at the end of each reporting period. Provisions are measured at the present value of the expenditure expected to be required to settle an obligation using a pre-tax rate, which reflects current market assessments of time value of money and the risks specific to the obligation. The increase in the obligation due to the passage of time is recognized as interest expense.

**v) Provision for asset retirement obligations**

The provision made by the Company refers basically to costs in order to mine closure, with the completion of mining activities and decommissioning of assets related to mine. The provision is set initially recording a liability for long-term return on fixed asset item. The long-term liability is updated using a discount rate of long-term updated and recorded at Statement of income for this period, in the counter entry of financial expenses. The asset is depreciated linearly over the useful life and recorded at Statement of income.

**w) Employee benefits**

**i. Current benefits – wages, vacations and related taxes**

Payments of benefits such as wages, vacation past due or accrued vacation, as well their related social security taxes over those benefits, are recognized monthly in income, at the accrual basis.

**ii. Current benefits profit sharing**

The Company has a profit sharing policy, based on the achievement of the Company as a whole, specific areas as well as employees individual performance goals. The Company recognizes provision based on the recurring measurement of the compliance with goals, using the accrual basis and recognition of present obligation arising from past events in the estimated outflow of resources in the future. The counter entry of the provision is recorded as cost of sales or service rendered or operating expenses in accordance with the activity of each employee.

**iii. Non-current benefits non-current incentive**

The Company has established a procedure to award certain eligible executives (Matching Plan and Long-Term Incentive Plan - ILP) with the goal of encouraging retention and sustained performance among others. The Matching plan establishes that these executives eligible to the plan are entitled to a specific quantity of their own preferred class A stocks of the Company, and shall be entitled at the end of three years to a cash sum corresponding to the market value of the shares lot initially linked by the executives, provided that they are under the ownership of executives throughout the entirety of the period. As well as matching, the ILP provides at the end of three years the payment in the amount equivalent to a certain number of shares based on the assessment of the executives' career and Company performance factors in relation to a group of companies of similar size (per group). Liabilities are measured at each reporting date, at fair value, based on market quotations. Obligations are measured at each reporting date, to the fair value based on market quotations. The compensation costs incurred are recognized in income during the three-year vesting period as defined.

**iv. Non-current benefit pension cost and other post-retirement benefits**

The Company maintains several retirement plans for its employees.

For defined contribution plans, the Company's obligation is limited to a monthly contribution linked to a pre-defined percentage over remuneration of employees related to these plans.

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For defined benefit plans, actuarial calculations are periodically obtained for liabilities determined in accordance with the Projected Unit Credit Method in order to estimate the Company's obligation. The liability recognized in the Balance Sheet is the present value of the defined benefit obligation at the Balance Sheet date, less the fair value of plan assets, with adjustments for past service cost not recognized. Actuarial gain and loss are appointed and controlled at corridor method. This method separates the amounts which exceed the limits of 10% of amounts of assets or liabilities, whichever is greater; amortizing it based on the remaining life expectancy active participants of plan. For plans without active participants, the excess amount is recognized fully in the income. Past service costs that arise with changes in plans are released immediately in income.

For plans with a surplus position, the Company does not recognize any asset or benefit in the Balance Sheet or Statement of Income, in the absence of a clear position on the use of this surplus. For plans with a deficit position, the Company recognizes liabilities and results arising from the actuarial valuation and actuarial gains and losses generated by the evaluation of these plans in income, according to the corridor method.

**x) Derivative financial instruments and hedging operations**

The Company uses derivative instruments to manage its financial risks as a way to hedge these risks. The Company does not use derivative instruments for speculative purposes. Derivative financial instruments are recognized as assets or liabilities on the Statement of Balance Sheet and are measured at fair value. Changes in fair value of derivatives are recorded in each year as gains or losses in the statements of income or in unrealized fair value gain/ (losses) in stockholders' equity when the transaction is illegible and characterized as an effective cash flow hedge.

The Company documents the relationship between hedging instruments and hedged items with the objective of risk management and strategy for carrying out hedging operations. The Company also documents its assessment, both initially and continuously, that the derivatives used in hedging transactions are highly effective in their changes in fair value or cash flows of hedged items.

The variations in fair value of derivative financial instruments designated as cash flow hedges have their effective component recorded in unrealized fair value gain/ (losses) and recognized as stockholders' equity; and their ineffective component recorded in income. The amounts recorded in Comprehensive Income, will only be transferred to the income in an appropriate account (cost, operating expense or financial expense) when the hedged item is actually performed.

**y) Current and deferred income tax and social contribution**

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The amounts of income tax and social contribution are recognized in the Statement of Income, except for items recognized directly in stockholders' equity, in which cases the tax is also recognized in stockholders' equity.

The provision for income tax is calculated individually for each entity in the Group based on tax rates and tax rules in force in the location of the entity. The recognition of deferred taxes is based on temporary differences between carrying value and the tax basis of assets and liabilities as well as tax and social contribution losses carry forwards. Deferred tax liabilities are fully recognized. The deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against fiscal current liabilities and when the deferred income tax assets and liabilities are related to income taxes recorded by the same taxation authority on the same taxable entity.

### **z) Capital**

The Company periodically practices the repurchase of shares to remain in treasury for future sale or cancellation. These shares are recorded in a specific account as reduction of stockholders' equity at acquisition value and kept at cost value. These programs are approved by the Board with a term and quantities by determined type of shares.

Incremental costs directly attributable to the issue of new shares or options are demonstrated in Stockholders' equity as a deduction from the amount raised, net of taxes.

### **aa) Noncontrolling stockholders' interests**

The Company treats transactions with noncontrolling stockholders' interests as transactions with equity owners of the Group. For purchases of noncontrolling stockholders' interests, the difference between any consideration paid and the portion acquired of the carrying value of net assets of the subsidiary is recorded in stockholders' equity. Gains or losses, on disposals of noncontrolling stockholders' interest, are also recorded in stockholders' equity.

When the Company ceases to hold control or significant influence, any retained interest in the entity is remeasured to its fair value,

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with the change in carrying amount recognized in the income statement. Furthermore, any amounts previously recognized in Gain/ (loss) from operations with noncontrolling stockholders relating to that entity are accounted for as if the Group had directly sold the related assets or liabilities. This means that the amounts previously recognized in Gain/ (loss) from operations with noncontrolling stockholders are reclassified in income.

**bb) Revenue recognition**

Revenue is recognized when Vale transfers to its customers all significant risks and rewards of ownership of the product sold and services rendered. Revenue excludes any applicable sales taxes and is recognized at the fair value of the consideration received or receivable to the extent that it is probable that economic benefits will flow to Vale and the revenues and costs can be reliably measured.

In most instances sales revenue is recognized when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises. However, when the model negotiated with the customer is transferring risks and benefits of the product in shipment, revenue is recognized at the time.

In some cases, the sale price is determined on a provisional basis at the date of sale as the final selling price is subject to escalation clauses in contracts up to the date of final pricing. Revenue from the sale of provisionally priced is recognized when risks and rewards of ownership are transferred to the customer and revenue can be measured reliably. At this date, the amount of revenue to be recognized are estimated based on the forward price of product sold.

Amounts billed to customers for shipping correspond to products sold by the Company are recognized as revenue when that is responsible for shipping. Shipping costs are recognized as operating costs.

**cc) Government grants and support**

Government grants and support are accounted for when the Company complies with reasonable security conditions set by the government related to grants and support received. The Company records via the Statement of Income, as reductions in taxes or spending according to the nature of the item, through the distribution of results in the Statement of Income, retained earnings in stockholders' equity.

**dd) Basic and diluted earnings per share**

Basic earnings per share are calculated by dividing the income attributable to stockholders of the Company, deducted from the remuneration of holders of equity securities, at the weighted average number of shares outstanding (total shares less treasury shares).

Diluted earnings per share are calculated by adjusting the weighted average number of shares outstanding to assume conversion of all diluted potential shares. Vale does not have mandatory convertible securities that generate the effect of dilution on earning per share.

**dd) Interest on stockholder's equity (Dividends)**

Vale is permitted to distribute interest attributable to stockholders' equity. The calculation is based on the stockholders' equity amounts as stated in the statutory accounting records and the interest rate applied may not exceed the long-term interest rate (TJLP) determined by the Brazilian Central Bank. Also, such interest may not exceed 50% of net income for the year or 50% of retained earnings plus revenue reserves as determined by Brazilian corporate law.

The benefit to Vale, as opposed to making a dividend payment, is a reduction in our income tax burden because this interest charge is tax deductible in Brazil. Income tax of 15% is withheld on behalf of the stockholders relative to the interest distribution. Under Brazilian law, interest attributed to stockholders' equity is considered as part of the annual minimum mandatory dividend (Note 24-f). This notional interest distribution is treated for accounting purposes as a deduction from stockholders' equity in a manner similar to a dividend and the tax credit recorded in income.

**3. Critical Accounting Estimates and Assumptions**

The preparation of financial statements requires the use of certain critical accounting estimates and also the exercise of judgments by management of the Company.

These estimates are based on the best knowledge existing in each period. Changes in facts and circumstances may lead to the revision of the estimates, because those actual future results may differ from estimates.

The significant estimates and assumptions used by management in preparing these financial statements are presented as such:

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**a) Mineral reserves and mine useful life**

The estimates of proved reserves and probable reserves are regularly evaluated and updated. The proved and probable reserves are determined using generally accepted geological estimates. The calculation of reserves requires the Company to take positions on expected future conditions that are highly uncertain, including future ore prices, exchange rates, inflation rates, mining technology, availability of permits and production costs. Changes in some of these assumptions could have a significant impact on proved reserves and probable reserves recorded.

The estimated volume of mineral reserves is used as basis for the calculation of depletion of the mines, and also for the estimated useful life which is a major factor to quantify the provision for asset retirement obligation and environmental rehabilitation of mines. Any change to the estimates of the volume of mine reserves and the useful life of assets may have significant impact on charges for depreciation, depletion and amortization recognized in the financial statements as cost of goods sold. Changes in estimated useful life of the mines could cause significant impact on the estimates of environmental provision and impairment analysis.

**b) Asset Retirement**

The provision made by the Company refers basically to the cost of mine closure, upon the completion of mining activities and removal of assets related to mine. The provision is set up initially by recording long-term liabilities with a counter entry to property, plant and equipment. The long-term liabilities are subsequently carried at amortize cost, considering the original discount rate with changes registered against the income of the period, as interest expenses. The asset is depreciated on a straight line by useful life of the main asset, and recorded against income.

The Company considers the accounting estimates related to closure costs of a mine as a critical accounting policy because they involve significant values for the provision and are estimated using several assumptions, such as interest rate, inflation, useful life of the asset considering the current state of closure and the projected date of depletion of each mine. The estimates are reviewed annually.

**c) Deferred income tax and social contribution**

The Company recognizes the effects of deferred taxes arising from tax losses and temporary differences on its consolidated and Parent Company's financial statements. It recognizes impairment where it believes that tax credits are not fully recoverable in the future.



The determination of the provision for income taxes or deferred income tax, assets and liabilities, and any impairment on tax credits requires estimates by the Company. For each future credit tax, the Company assesses the probability that part or all of the tax assets may not be recovered. The impairment made with respect to accumulated tax losses depends on the assessment of the Company on the probability of the generation of future taxable profits based on production and sales planning, commodity prices, operational costs, restructuring plans, reclamation costs and planned capital costs.

**d) Litigation loss**

Provisions are recorded when the possibility of loss is considered probable by our legal department and legal advisors regarding legal processes and contingent liabilities.

The provisions are recorded when the amount of loss can be reasonably estimated. By their nature, contingencies will be resolved when one or more future event occurs or fails to occur. Typically, the occurrence of such events does not depend on our performance, which complicates the realization of precise estimates about the date on which such events are verified.

Assessing such liabilities, particularly in the uncertain Brazilian legal environment and other jurisdictions, involves the exercise of significant estimates and judgments of management regarding the results of future events.

**e) Post retirement benefits for employees**

The amount recognized and disclosed depend on a number of factors that are determined based on actuarial calculations using several assumptions in order to determine costs, liabilities, among others. One of the assumptions used in determining the amounts to be recorded in accounting is the discount rate. Any changes to these assumptions will affect the amount accounted.

The Company, together with external actuaries, reviews at the end of each year, the assumptions that should be used for the following year. These premises are used for upgrades and estimated of fair value of assets and liabilities, costs and expenses and

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determination of future values of estimated cash outflows, which are recorded in the plan obligations.

**f) Impairment**

The Company tests impairment of tangible and intangible assets segregated by cash-generating units, usually using discounted cash flow that depends on several estimates, which are influenced by market conditions prevailing at the time the impairment test, is performed.

**g) Fair Value of derivatives and others financial instruments**

Fair value of financial instruments not traded in active market is determined by using valuation techniques. Vale uses its own judgment to choose the various methods and assumptions and set which are based on market conditions, at the end of the year.

The analysis of the impacts, if actual results were different from management's estimate, is presented in note 25(c) sensitivity analysis.

**4. Accounting Pronouncements**

The Company prepared its consolidated financial statements under IFRS based on the pronouncements issued by the IASB. The pronouncements issued by the IASB, with adoption required for the years ending after December 31, 2012 will not be adopted by the Company in advance.

**Pronouncements, interpretations or updates issued by the IASB for adoption after December 31, 2012**

**Investment Entities** - In October 2012 the IASB issued an update statement to IFRS 10 - Consolidated Financial Statements, IFRS 12 - Disclosure of Interests in other Entities and IAS 27 - Separate Financial Statements, which, among other rules, defines the concept of entity investment and introduces an exception to the consolidation of subsidiaries for specific investment entities. The adoption of the updates will be applied from January 1, 2014 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Consolidated Financial Statements, Joint Arrangements and Disclosure of Interests in Other Entities: Transition Guidance** - In June 2012 the IASB issued an update statement to IFRS 10 - Consolidated Financial Statements, IFRS 11 - Joint Arrangements and IFRS 12 - Disclosure Of Interests In Other Entities, which, among other rules, clarifies issues on the date of adoption of IFRS 10 and aspects relating to the presentation of comparative information of IFRS 11 and IFRS 12. The adoption of the updates will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Annual Improvements to IFRSs** - In May 2012 the IASB issued updates consolidated annual for the year 2012. The updates represent changes not urgent, but necessary, to general pronouncements. The pronouncements were affected: IFRS 1 - First-time Adoption of International Financial Reporting Standards, IAS 1 - Presentation of Financial Statements, IAS 16 - Property, Plant and Equipment, IAS 32 - Financial Instruments: Presentation and IAS 34 - Interim Financial Reporting. The adoption of the updates will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**Offsetting Financial Assets and Financial Liabilities** - In December 2011 the IASB issued an update statement to IAS 32 - Financial Instruments: Presentation updated guide to applying this pronouncement about the recognition of financial assets and liabilities on a gross and net. The adoption of required updates will be applied from January 1, 2014.

**Mandatory Effective Date and Transition Disclosures** - In December 2011 the IASB issued an update statement to IFRS 9 - Financial Instruments and IFRS 7 - Financial Instruments: Disclosures postponing the date of initial adoption of IFRS 9 and IFRS 7 updates have occurred in January 1, 2013 to January 1, 2015. Vale does not expect this change to take material impact on its financial statements.

**IFRIC 20 - Stripping Costs in the Production Phase of a Surface Mine** - In October 2011 the IASB issued IFRIC 20 which defines rules for the measurement and recognition of the costs of stripping of surface mine in production. The adoption of this interpretation will be applied from January 1, 2013 and Vale does not expect this interpretation produce relevant impacts on its financial statements.

**IAS 19 - Employee Benefits** - In June 2011 the IASB remitted the standard IAS 19 on employee benefits. Among the amendments, with the most significant highlight: (i) the exclusion of the possibility of using the corridor method - which allowed the actuarial gains and losses up to a maximum of 10% of the present value of the defined benefit obligation or Fair value of plan assets, whichever is higher, would be allocated to income over the average remaining working lives of the employees participating in the plan, (ii) the full recognition of actuarial gains and losses in Other Comprehensive Income and (iii) the financial revenue and expenditure plan shall be recognized on a net basis in the discount rate. The adoption of this standard will be required from 1 June

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2013 and we are analyzing potential impacts regarding this update on our financial statements.

**IFRS 10 - Consolidated Financial Statements** - In May 2011 the IASB issued IFRS 10, which, among other changes, creates a specific statement to the consolidated financial statements, determines that the jointly-controlled companies will no longer be consolidated accounts for the aspects of the definition of control and significant influence and eliminates conflicts between this standard, IAS 28 and IAS 27. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IAS 28 - Investments in Associates and Joint Ventures** - In May 2011 the IASB remitted the standard IAS 28 on investment related companies, which among other changes, equates the jointly-controlled companies and affiliates determines that investment in both is measured by equity method. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IAS 27 - Separate Financial Statements** - In May 2011 the IASB remitted the standard IAS 27 on separate financial statements, which remains the only regulating separate statements and reflects updates introduced by IFRS 10 and IAS 28 remitted, which are the relevant separate statements. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those changes produce significant impacts on its financial statements.

**IFRS 11 - Joint Arrangements** - In May 2011 the IASB issued IFRS 11, standard pronouncement on contracts together, which regulates the measurement, recognition and presentation of contracts and operating agreements together, specifically for cases where no constituting entities. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 12 - Disclosure of Interests in Other Entities** - In May 2011 the IASB issued IFRS 12 on the pronouncement investments in entities that in general, determine the accounting treatment for investments in other entities, making references to IFRS 10, IFRS 11, IAS 28 remitted and IAS 27 remitted. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 13 - Fair Value Measurement** - In May 2011 the IASB issued IFRS 13 pronouncement on fair value measurements which defines the fair value measurement applied in all cases where it is required and presents specific rules for the disclosure of fair value. The adoption of this standard will be applied from January 1, 2013 and Vale does not expect those upgrades produce significant impacts on its financial statements.

**IFRS 9 - Financial Instruments** - In October 2010 the IASB issued IFRS 9 pronouncement that, among other things, amends and simplifies the criteria for recognizing and measuring financial assets and financial liabilities and some contracts to buy and sell non-financial assets. After update in December 2011, the adoption of the statement will be required from January 1, 2015 and is still worth analyzing potential impacts regarding this update on its financial statements.

## **5. Risk Management**

Vale considers that an effective risk management is a key objective to support its growth plan, strategic planning and financial flexibility. Therefore, Vale has developed its risk management strategy in order to provide an integrated approach of the risks the company is exposed to. To do that, Vale evaluates not only the impact in the results of the business caused by variables traded in financial markets (market risk), but also the risk from counterparties obligations (credit risk), those relating to inadequate or failed internal processes, people, systems or external events (operational risk), those arising from liquidity risk, among others.

### **a) Risk management policy**

The Board of Directors established a risk management policy in order to support the company's growth plan, strategic planning and business continuity, to improve its capital structure and assets management, to ensure flexibility and strength in financial management and to strengthen its corporate governance practices.

The corporate risk management policy determines that Vale should measure and monitor regularly its corporate risk on a consolidated approach in order to guarantee that the overall risk level of the Company remains aligned with the guidelines defined by the Board of Directors and the Executive Board.

The Executive Risk Management Committee, created by the Board of Directors, is responsible for supporting the Executive Board in the risk assessments and for issuing opinion regarding the Company's risk management. It's also responsible for the supervision and revision of the principles and instruments of corporate risk management.

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The Executive Board is responsible for the approval of the policy deployment into norms, rules and responsibilities and for reporting to the Board of Directors about such procedures.

The risk management norms and instructions complement the corporate risk management policy and define practices, processes, controls, roles and responsibilities in the Company regarding risk management.

The Company may, when necessary, allocate specific risk limits to management activities, including but not limited to, market risk limit, corporate and sovereign credit limit, in accordance with the acceptable corporate risk limit.

**b) Liquidity risk management**

The liquidity risk arises from the possibility that Vale might not perform its obligations on due dates, as well as face difficulties to meet its cash requirements due to market liquidity constraints.

To mitigate such risk, Vale has a revolving credit facility to assist the short term liquidity management and to enable more efficiency in cash management, being consistent with the strategic focus on cost of capital reduction. The revolving credit facility available today was acquired from a syndicate of several global commercial banks.

**c) Credit risk management**

Vale's credit risk arises from potential negative impacts in its cash flows due to uncertainty in the ability of counterparties to meet their contractual obligations. To manage that risk, Vale has procedures and processes, such as the controlling of credit limits, the obligation of exposure diversification through several counterparties and the monitoring of the portfolio's credit risk.

Vale's counterparties can be divided into three main categories: the customers, responsible by obligations regarding receivables from payment term sales; financial institutions with whom Vale keeps its cash investments or negotiates derivatives transactions; and suppliers of equipment, products and services in the case of payments in advance.



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- **Commercial Credit Risk Management**

For the commercial credit exposure, which arises from sales to final customers, the risk management department, in accordance with the current delegation level, approves or request the approval of credit risk limits for each counterpart. Besides that, the Executive Board sets annually global commercial credit risk limits for the customer´s portfolio. The approved global limit and the working capital cost inbuilt on this limit are monitored on a monthly basis.

Vale attributes an internal credit risk rating for each counterpart using its own quantitative methodology for credit risk analysis, based on three main sources of information: i) Expected Default Frequency (EDF) provided by KMV (Moody´s); ii) credit ratings from the main international credit agencies; iii) customer financial statements from which financial ratios are built.

On 31 December 2012, 83% of accounts receivable due to Vale commercial sales had low or insignificant risk, 14% had moderate risk and only 3% high risk.

Whenever considered necessary, the quantitative credit risk analysis is complemented by a qualitative analysis which takes into consideration the payment history of that counterpart, its commercial relationship with Vale and the customer´s strategic position in its economic sector, among others variables.

Based on the counterpart´s credit risk or based on Vale´s consolidated credit risk profile, risk mitigation strategies are used to minimize the Company´s credit risk in order to meet the acceptable level of risk approved by the Executive Board. The main credit risk mitigation strategies used by the Company are credit insurance, mortgage, letter of credit and corporate guarantees, among others.

Vale has a well-diversified accounts receivable portfolio from a geographical standpoint, being China, Europe, Brazil and Japan the regions with more significant exposures. According to each region, different guarantees can be used to enhance the credit quality of the receivables.

Vale controls its account receivables portfolio through Credit and Cash Collection committees, in which representatives from risk management, cash collection and commercial departments monitor periodically each counterpart´s position. Finally, Vale has an automatic control that blocks additional sales to customers in default.



- **Treasury Credit Risk Management**

The management of exposure arising from cash investments and derivatives instruments is realized through the following procedures: annual approval by the Executive Board of the credit limits by counterparty, controls of portfolio diversification, counterparties' credit spread variations and the treasury portfolio overall credit risk. There is also a monitoring of all positions, exposure versus limit control and periodic report to the Executive Risk Management Committee.

The calculation of the exposure to a counterparty that has several derivative transactions with Vale is considered the sum of exposures of each derivative acquired with this counterparty. The exposure for each derivative is defined as the future value calculated within the life of the derivative, considering the variation of the market risk factors that affect the value of the derivative instrument.

Vale also assess the creditworthiness of its counterparties in treasury operations following an internal methodology similar to commercial credit risk management that aims to define a default probability for each counterparty.

Depending on the counterparty's nature (banks, insurance companies, countries or corporations), different inputs will be considered: i) expected default probability given by KMV; ii) CDS (Credit Default Swaps) and bond market spreads; iii) credit ratings defined by the main international rating agencies; iv) financial statements data and indicators analysis.

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**d) Market risk management**

Vale is exposed to the behavior of various market risk factors that can impact its cash flow. The assessment of this potential impact arising from the volatility of risk factors and their correlations is performed periodically to support the decision making process and the growth strategy of the Company, ensure its financial flexibility and monitor the volatility of future cash flows.

When necessary, market risk mitigation strategies are evaluated and implemented in line with these objectives. Some strategies may incorporate financial instruments, including derivatives. The portfolios of the financial instruments are monitored on a monthly basis, enabling financial results surveillance and its impact on cash flow, and ensuring strategies adherence to the proposed objectives.

Considering the nature of Vale's business and operations, the main market risk factors which the Company is exposed to are:

- Interest rates;
- Foreign exchange;
- Product prices and input costs.
  
- **Foreign exchange and interest rate risk**

The company's cash flow is subjected to volatility of several currencies, once its product prices are predominantly indexed to US dollar, while most of the costs, disbursements and investments are indexed to other currencies, mainly Brazilian real and Canadian dollar.

In order to reduce the potential impact that arises from this currency mismatch, derivatives instruments can be used as a risk mitigation strategy.

In the case of cash flow foreign exchange protection regarding revenues, costs, disbursements and investments, the main risk mitigation strategies used are forwards and swaps.

Vale implemented hedge transactions to protect its cash flow against the market risks that arises from its debt obligations - mainly currency volatility. We use swap transactions to convert debt linked to Brazilian real and Euros into US dollar that have similar - or sometimes shorter - settlement dates than the final maturity of the debt instruments. Their notional amounts are similar to the principal and interest payments, subjected to liquidity market conditions.

Swaps with shorter settlement dates are renegotiated through time so that their final maturity matches - or becomes closer - to the debts` final maturity. At each settlement date, the results of the swap transactions partially offset the impact of the foreign exchange rate in Vale`s obligations, contributing to stabilize the cash disbursements in US dollar.

In the case of debt instruments denominated in Brazilian real, in the event of an appreciation (or depreciation) of the Brazilian Real against the US Dollar, the negative (or positive) impact on Vale`s debt service (interest and/or principal payment) measured in US dollars will be partially offset by the positive (or negative) effect from the swaps, regardless of the US\$/R\$ exchange rate on the payment date. The same rationale is applicable to debts denominated in other currencies and their respective swaps.

Vale has also exposure to interest rates risks over loans and financings. The US Dollar floating rate debt in the portfolio consists mainly of loans including export pre-payments, commercial banks and multilateral organizations loans. In general, such debt instruments are indexed to the LIBOR (London Interbank Offer Rate in US dollar). Considering the impact of interest rate volatility on the cash flow, Vale observes the potential natural hedges effects between US Dollar floating rates and commodities prices in the decision process of acquiring financial instruments.

- **Risk of product and Input prices**

Vale is also exposed to market risks regarding commodities prices and input volatilities. In accordance with risk management policy, risk mitigation strategies involving commodities can be used to adjust the cash flow risk profile and reduce Vale`s cash flow volatility. For this kind of risk mitigation strategy, Vale uses predominantly forwards, futures or zero-cost collars.

**e) Operational risk management**

The operational risk management is the structured approach that Vale uses to manage uncertainty related to possible inadequate or failure in internal processes, people, systems and external events.

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Thus, the operational risk mitigation is performed by creating new controls and improving the existing ones, new mitigation plans, as well as the risk transferring through insurance. Therefore, the Company seeks to have a clear view of its major risks, of the best cost-benefit mitigation plans and of the controls in place, monitoring the potential impact of operational risk and allocating capital efficiently.

**f) Capital Management**

The Company's policy aims, to manage its capital, to seek a structure that will ensure the continuity of your business in the long term. Within this perspective, the Company has been able to deliver value to stockholders through dividend payments and capital gain, and at the same time maintain a debt profile suitable for its activities, with an amortization well distributed over the years, on average 10 years, thus avoiding a concentration in one specific period.

**g) Insurance**

Vale hires several types of insurance, such as operational risks insurance, civil responsibility, engineering risks insurance (projects), life insurance policy for their employees, among others. The coverage of these policies is similar to the ones used in general by the mining industry and is contracted in line with the objectives defined by the Company, with the corporate risk management policy and the limitation imposed by the insurance and reinsurance global market.

Insurance management is performed with the support of existing insurance committees in the various operational areas of the Company. Among the management instruments, Vale uses captive reinsurance companies that allows to contract insurances on a competitive basis as well as direct access to key international markets of insurance and reinsurance.

**6. Acquisitions and Divestitures**

**a) Belvedere Coal Project**

In 2012, Vale concluded the purchase option on additional 24.5% participation in the Belvedere Coal Project owned by Aquila Resources Limited (Aquila) in the amount of AUD150 million (US\$156).

The acquisition is subject to approvals from the government of Queensland, Australia. As a result of this transaction, Vale will increase its participation in Belvedere to 100%. Additionally, Vale agreed to pay AUD20 million (US\$21) to end litigations and disputes relating to the Belvedere with Aquila.

The project is still in stage of development and, consequently, subject to approval of the Board of Directors of Vale. At the end of transaction, Vale will have paid US\$338 for 100% of Belvedere.

**b) Fertilizer Business**

In 2010, through our wholly owned subsidiary Mineração Naque S.A. ( Naque ), we acquired 78.92% of the total capital (being 99.83% of the voting capital) of Vale Fertilizantes S.A. ( Vale Fertilizantes ) and 100% of the total capital of Vale Fosfatados S.A. In 2011 and beginning of 2012, we concluded several transactions including a public offer to acquire the free float of Vale Fertilizantes and the subsequent delisting of its shares which resulted in the Company owning of 100% of the its capital.

The purchase consideration of the business combination effected in 2010, when control was obtained, amounted to US\$5,795. The purchase price allocation exercise was concluded in 2011 and generated a deferred tax liability on the fair value adjustments, determined based on the temporary differences between the accounting basis of those assets and liabilities at fair values, substantially represented by Property Plant and Equipment, and their tax basis represented by the historical carrying values at the acquired entity. Pursuant to current Brazilian tax regulations, goodwill generated in connection with a business combination as well as the fair values of assets and liabilities acquired are only tax deductible post a legal merger between the acquirer and the acquiree.

In June 2012, we have decided to legally merge Naque and Vale Fertilizantes. As a result, the carrying amounts of acquired assets and liabilities accounted for at Naque s consolidated financial statements, represented by their amortized fair values from acquisition date, became their tax basis.

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Therefore, upon concluding the merger, there are no longer differences between tax basis and carrying amounts of the net assets acquired, and consequently there is no longer deferred tax liability amount to be recognized. The outstanding balance of the initially recognized deferred tax liability (accounted for in connection with the purchase accounting) totaling US\$ 1,236 was entirely recycled through P&L for the year ended December 31, 2012, in connection with the legal merger of Vale Fertilizantes into Naque. In addition, Naque was then renamed as Vale Fertilizantes S.A.

**c) Sale of coal**

In June 2012, we have concluded the sale of our thermal coal operations in Colombia to CPC S.A.S., an affiliate of Colombian Natural Resources S.A.S. ( CNR ).

The thermal coal operations in Colombia constitute a fully-integrated mine-railway-port system consisting of a coal mine and a coal deposit; a coal port facility; and an equity participation in a railway connecting the coal mines to the port.

The loss on this transaction, of US\$355 was recorded in the income statement in the line Gain (loss) on sale of assets

**d) Acquisition of EBM shares**

Continuing the process of optimization its corporate structure, during the second quarter 2012 Vale acquired additional 10.46% of Empreendimentos Brasileiros de Mineração S. A. ( EBM ), whose main asset is the participation in Minerações Brasileiras Reunidas S. A. ( MBR ), which owns mines sites Itabirito, Vargem Grande and Paraopeba. As a result of the acquisition, we increased our share of the capital of EBM to 96.7% and of MBR to 98.3%, and the amount of US\$62 are recognized as a result from operations with non-controlling interest in Stockholders Equity .

**e) Manganese and ferroalloys**

In October 2012, we have concluded the sale of the manganese ferroalloys operations in Europe to subsidiaries of Glencore International Plc., a company listed on the London and Hong Kong Stock Exchanges, for US\$ 160 in cash, subject to the fulfillment of certain precedent conditions. We recognized a loss of US\$ 22 presented in our statement of income as gain (loss) on sale of assets .

The manganese ferroalloys operations in Europe consist of: (a) 100% of Vale Manganèse France SAS, located in Dunkirk, France; and (b) 100% of Vale Manganese Norway AS, located in Mo I Rana, Norway.

**f) Participation of Vale Oman Pelletizing**

In October 2012, Vale sold 30% of participation in Vale Oman Pelletizing LLC for the Oman Oil Company, wholly owned subsidiary of the Government of the Sultanate of Oman, for US\$71. We recognized a gain of US\$63 recorded in equity.

**7 Cash and Cash Equivalents**

|                        | Year ended December 31, |              |              |
|------------------------|-------------------------|--------------|--------------|
|                        | 2012                    | 2011         | 2010         |
| Cash and bank accounts | 1,194                   | 945          | 560          |
| Short-term investments | 4,638                   | 2,586        | 7,024        |
|                        | <b>5,832</b>            | <b>3,531</b> | <b>7,584</b> |

Cash and cash equivalents includes cash values, demand deposits, and financial investments with insignificant risk of changes in value, being part Brazilian Reais indexed to the Brazilian Interbank Interest rate ( DI Rate or CDI ) and those denominated in US Dollars are mainly in time deposits, with the original maturities of less than three months.

The increase in cash equivalents during the 2012, is mainly related to the cash provided by operating activities and the notes issued during 2012 (Note 17).

Table of Contents**8 Short-term investment**

|               | 2012 | Year ended December 31,<br>2011 | 2010  |
|---------------|------|---------------------------------|-------|
| Time deposits | 246  |                                 | 1,793 |

This includes the financial investments in low risk investments with a maturity of between 91 and 360 days, classified as a financial asset fair value through profit or loss held to maturity (Note 23).

**9 - Accounts Receivables**

|  | 2012         | Year ended December 31,<br>2011 | 2010         |
|--|--------------|---------------------------------|--------------|
| Denominated in Brazilian Reais                     | 849          | 1,228                           | 1,227        |
| Denominated in other currencies, mainly US Dollars | 6,060        | 7,382                           | 7,102        |
|  | <b>6,909</b> | <b>8,610</b>                    | <b>8,329</b> |
| Allowance for doubtful accounts                    | (114)        | (105)                           | (118)        |
|  | <b>6,795</b> | <b>8,505</b>                    | <b>8,211</b> |

Accounts receivables related to the steel industry market represent 71.26% and 67.9%, of receivables on December 31, 2012 and December 31, 2011, respectively.

No one customer represents over 10% of receivables or revenues.

The loss estimates for credit losses recorded in income as at December 31, 2012 and December 31, 2011 totaled US\$ 34, US\$ 2, respectively. Write offs as at December 31, 2012, and December 31, 2011 totaled US\$16 and US\$ 1, respectively.

**10 - Inventories**



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|   | Year ended December 31, |              |              |
|---|-------------------------|--------------|--------------|
|   | 2012                    | 2011         | 2010         |
| <b>Inventories of products</b>                      |                         |              |              |
| Finished  | 2,244                   | 2,598        | 1,786        |
| In process  | 1,353                   | 1,377        | 968          |
|   | <b>3,597</b>            | <b>3,975</b> | <b>2,754</b> |
| Inventories of spare parts and maintenance supplies | 1,455                   | 1,276        | 1,544        |
| <b>Total</b>  | <b>5,052</b>            | <b>5,251</b> | <b>4,298</b> |

On December 31, 2012, 2011 and 2010 inventory balances include a provision for adjustment to market value of nickel, in the amount of US\$ 0, US\$ 14 and US\$ 0, respectively, and manganese in the amount of US\$ 3, US\$ 9 and US\$ 0 respectively, and copper in the amount of US\$ 3, US\$ 0 and US\$ 0 respectively

|   | Year ended December 31, |              |              |
|---|-------------------------|--------------|--------------|
|   | 2012                    | 2011         | 2010         |
| <b>Changes in the inventory</b>   |                         |              |              |
| <b>Beginning of the year</b>  | <b>3,975</b>            | <b>2,754</b> | <b>2,238</b> |
| Addition  | 22,221                  | 23,737       | 17,950       |
| Transfer on maintenance supplies  | 4,262                   | 3,758        | 3,036        |
| Sale  | (26,483)                | (25,371)     | (20,420)     |
| Inventory adjustment  | (38)                    | (604)        | (152)        |
| Cumulative translation adjustments  | (340)                   | (299)        | 102          |
| <b>End of period</b>  | <b>3,597</b>            | <b>3,975</b> | <b>2,754</b> |
| <b>Beginning of the year changes in the inventory of consumable materials</b> | <b>1,276</b>            | <b>1,544</b> | <b>959</b>   |
| Addition  | 4,550                   | 3,635        | 3,578        |
| Consumption   | (4,262)                 | (3,758)      | (3,036)      |
| Cumulative translation adjustments  | (109)                   | (145)        | 43           |
| <b>End of the period</b>  | <b>1,455</b>            | <b>1,276</b> | <b>1,544</b> |

Table of Contents**11 - Non-current assets and liabilities held for sale**

In December 2012, Vale Executed an agreement with Petróleo Brasileiro S.A. (Petrobras) to sell Araucária, a Brazilian operation for the production of nitrogens, located in Araucária, Paraná, for US\$234. The purchase price will be paid by Petrobras through installments accrued quarterly, indexed to the Brazilian Interbank Interest rate (CDI), in amounts equivalent to the royalties due by Vale for the lease of potash assets at Taquari-Vassouras and Carnalita project.

The major classes of assets and liabilities reclassified as held for sales as at 31 December, 2012 are as follows.

|  | DECEMBER 31, 2012 |
|--|-------------------|
| <b>Assets held for sale</b>                        |                   |
| Accounts receivable                                | 14                |
| Recoverable taxes                                  | 20                |
| Inventories  | 20                |
| Property, plant and equipment                      | 389               |
| Other  | 14                |
| <b>Total</b>                                       | <b>457</b>        |
| <b>Liabilities related to assets held for sale</b> |                   |
| Supplies   | 12                |
| Deferred income tax                                | 110               |
| Others   | 38                |
| <b>Total</b>                                       | <b>160</b>        |

**12 Recoverable Taxes**

Recoverable taxes are stated at net value of any realized loss and are classified by the estimated time for realization:

|  | Year ended December 31, |              |              |
|--|-------------------------|--------------|--------------|
|  | 2012                    | 2011         | 2010         |
| Income tax                             | 1,160                   | 814          | 459          |
| Value-added tax                        | 1,023                   | 997          | 484          |
| PIS COFINS                             | 670                     |              |              |
| Others Brazilian Federal Contributions | 65                      | 1,006        | 1,021        |
| <b>Total</b>                           | <b>2,918</b>            | <b>2,817</b> | <b>1,964</b> |

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| Current      | 2,260        | 2,230        | 1,603        |
| Non-current  | 658          | 587          | 361          |
| <b>Total</b> | <b>2,918</b> | <b>2,817</b> | <b>1,964</b> |

**13 Investments**

|   | Year ended December 31, |              |              |
|---|-------------------------|--------------|--------------|
|   | 2012                    | 2011         | 2010         |
| <b>Changes in Investments beginning of the year</b> | <b>8,013</b>            | <b>4,394</b> | <b>4,465</b> |
| Additions   | 466                     | 4,321        | 164          |
| Disposals   | (32)                    | (17)         |              |
| Cumulative translation adjustment                   | (216)                   | (686)        | (153)        |
| Equity  | 645                     | 1,138        | 997          |
| Equity Adjustment                                   | 35                      | (1)          | 6            |
| Dividends declared                                  | (587)                   | (1,136)      | (1,085)      |
| Impairment  | (1,941)                 |              |              |
| <b>Balance on ended of year</b>                     | <b>6,384</b>            | <b>8,013</b> | <b>4,394</b> |

Table of Contents**Investments in affiliated Companies, joint ventures and others investments** (continued)

| Bulk Material  | December 31, 2012                      |       |            | Net income (loss)<br>of the year | Investment   |              |              | Equity in earnings (losses) of investee adjusted |              |            | Dividends Received |            |            |
|--|--|-------|------------|----------------------------------|--------------|--------------|--------------|--|--------------|------------|--------------------|------------|------------|
|  | Participation in capital (%)<br>Voting | Total | Net equity |                                  | 2012         | 2011         | 2010         | 2012   | 2011         | 2010       | 2012               | 2011       | 2010       |
| <b>Iron ore and pellets</b>  |  |       |            |                                  |              |              |              |  |              |            |                    |            |            |
| Companhia<br>Nipo-Brasileira de<br>Pelotização -<br>NIBRASCO (1)       | 51.11                                  | 51.00 | 349        | 42                               | 178          | 199          | 199          | 22   | 45           | 48         | 26                 | 22         | 3          |
| Companhia<br>Hispano-Brasileira de<br>Pelotização -<br>HISPANOBRÁS (1) | 51.00                                  | 50.89 | 205        | 74                               | 104          | 115          | 128          | 38   | 19           | 40         | 36                 | 20         |            |
| Companhia<br>Coreano-Brasileira de<br>Pelotização -<br>KOBRASCO (1)    | 50.00                                  | 50.00 | 214        | 52                               | 107          | 112          | 125          | 26   | 32           | 43         | 20                 | 32         | 11         |
| Companhia<br>Ítalo-Brasileira de<br>Pelotização -<br>ITABRASCO (1)     | 51.00                                  | 50.90 | 125        | 17                               | 64           | 80           | 86           | 8  | 47           | 18         | 18                 | 38         | 25         |
| Minas da Serra Geral<br>S.A. - MSG                                     | 50.00                                  | 50.00 | 53         | 8                                | 26           | 29           | 36           | 2  | 3            | 6          |                    |            |            |
| Samarco Mineração<br>S.A.  | 50.00                                  | 50.00 | 1,260      | 1,291                            | 630          | 399          | 406          | 645  | 881          | 808        | 179                | 812        | 950        |
| Baovale Mineração<br>S.A. - BAOVALE                                    | 50.00                                  | 50.00 | 55         | 12                               | 28           | 35           | 31           | 6  | 8            | 4          | 1                  |            |            |
| Zhuhai YPM Pellet e<br>Co, Ltd - ZHUHAI                                | 25.00                                  | 25.00 | 93         | 3                                | 23           | 23           | 25           | 1  |              | 9          |                    |            |            |
| Tecnored<br>Desenvolvimento<br>Tecnológico S.A.                        | 49.21                                  | 49.21 | 74         | (47)                             | 38           | 48           | 40           | (20)   | (7)          | (10)       |                    |            |            |
|  |  |       |            |                                  | <b>1,198</b> | <b>1,040</b> | <b>1,076</b> | <b>728</b>                                       | <b>1,028</b> | <b>966</b> | <b>280</b>         | <b>924</b> | <b>989</b> |
| <b>Coal</b>  |  |       |            |                                  |              |              |              |  |              |            |                    |            |            |
| Henan Longyu Co Ltd  | 25.00                                  | 25.00 | 1,365      | 234                              | 341          | 282          | 250          | 59   | 85           | 76         | 60                 |            | 83         |
| Shandong Yankuang<br>International Company<br>Ltd                      | 25.00                                  | 25.00 | (239)      | (62)                             | (60)         | (43)         | (27)         | (16)   | (15)         | (19)       |                    |            |            |
|  |  |       |            |                                  | <b>281</b>   | <b>239</b>   | <b>223</b>   | <b>43</b>  | <b>70</b>    | <b>57</b>  | <b>60</b>          |            | <b>83</b>  |
| <b>Base Metals</b>   |  |       |            |                                  |              |              |              |  |              |            |                    |            |            |
| <b>Bauxite</b>   |  |       |            |                                  |              |              |              |  |              |            |                    |            |            |
| Mineração Rio do<br>Norte S.A. - MRN                                   | 40.00                                  | 40.00 | 339        | 51                               | 136          | 133          | 142          | 20   | 8            | (2)        | 7                  |            | 10         |
|  |  |       |            |                                  | <b>136</b>   | <b>133</b>   | <b>142</b>   | <b>20</b>  | <b>8</b>     | <b>(2)</b> | <b>7</b>           |            | <b>10</b>  |
| <b>Copper</b>  |  |       |            |                                  |              |              |              |  |              |            |                    |            |            |

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|  |       |       |       |       |              |              |              |              |              |             |            |              |
|--|-------|-------|-------|-------|--------------|--------------|--------------|--------------|--------------|-------------|------------|--------------|
| <b>Teal Minerals</b>                       |       |       |       |       |              |              |              |              |              |             |            |              |
| Incorporated                               | 50.00 | 50.00 | 505   | (9)   | 252          | 234          | 90           | (5)          | (6)          | (10)        |            |              |
|  |       |       |       |       | <b>252</b>   | <b>234</b>   | <b>90</b>    | <b>(5)</b>   | <b>(6)</b>   | <b>(10)</b> |            |              |
| <b>Nickel</b>                              |       |       |       |       |              |              |              |              |              |             |            |              |
| Heron Resources Inc                        |       |       |       |       |              |              |              |              |              |             |            |              |
| (3)  |       |       |       |       | 6            | 6            | 7            |              |              |             |            |              |
| Korea Nickel Corp                          | 25.00 | 25.00 | 96    |       | 24           | 4            | 11           |              |              |             | 2          |              |
| Others (3)                                 |       |       |       |       | 1            | 1            | 5            |              |              |             |            |              |
|  |       |       |       |       | <b>31</b>    | <b>11</b>    | <b>23</b>    |              |              |             | <b>2</b>   |              |
| <b>Aluminium</b>                           |       |       |       |       |              |              |              |              |              |             |            |              |
| Norsk Hydro ASA (4)                        |       |       |       |       |              |              |              |              |              |             |            |              |
|  |       |       |       |       | 2,237        | 3,227        |              | (35)         | 99           | 47          | 52         |              |
|  |       |       |       |       | <b>2,237</b> | <b>3,227</b> |              | <b>(35)</b>  | <b>99</b>    | <b>47</b>   | <b>52</b>  |              |
| <b>Logistic</b>                            |       |       |       |       |              |              |              |              |              |             |            |              |
| LOG-IN Logística                           |       |       |       |       |              |              |              |              |              |             |            |              |
| Intermodal S.A.                            | 31.33 | 31.33 | 281   | (29)  | 94           | 114          | 135          | (10)         | (7)          | 4           |            |              |
| MRS Logística S.A.                         | 46.75 | 47.59 | 1,231 | 259   | 586          | 551          | 511          | 122          | 132          | 90          | 57         | 55           |
|  |       |       |       |       | <b>680</b>   | <b>665</b>   | <b>646</b>   | <b>112</b>   | <b>125</b>   | <b>94</b>   | <b>57</b>  | <b>55</b>    |
|  |       |       |       |       |              |              |              |              |              |             |            | <b>72</b>    |
|  |       |       |       |       |              |              |              |              |              |             |            | <b>72</b>    |
| <b>Others</b>                              |       |       |       |       |              |              |              |              |              |             |            |              |
| <b>Steel</b>                               |       |       |       |       |              |              |              |              |              |             |            |              |
| California Steel                           |       |       |       |       |              |              |              |              |              |             |            |              |
| Industries Inc - CSI                       | 50.00 | 50.00 | 334   | 31    | 167          | 161          | 155          | 16           | 14           | 12          | 9          | 7            |
| CSP- Companhia                             |       |       |       |       |              |              |              |              |              |             |            |              |
| Siderurgica do PECEM                       | 50.00 | 50.00 | 998   | (13)  | 499          | 267          | 18           | (7)          | (3)          |             |            |              |
| THYSSENKRUPP                               |       |       |       |       |              |              |              |              |              |             |            |              |
| CSA Companhia                              |       |       |       |       |              |              |              |              |              |             |            |              |
| Siderúrgica do                             |       |       |       |       |              |              |              |              |              |             |            |              |
| Atlântico                                  | 26.87 | 26.87 | 5,273 | (628) | 534          | 1,607        | 1,840        | (169)        | (177)        | (85)        |            |              |
|  |       |       |       |       | <b>1,200</b> | <b>2,035</b> | <b>2,013</b> | <b>(160)</b> | <b>(166)</b> | <b>(73)</b> | <b>9</b>   | <b>7</b>     |
|  |       |       |       |       |              |              |              |              |              |             |            | <b>7</b>     |
| <b>Other affiliates and joint ventures</b> |       |       |       |       |              |              |              |              |              |             |            |              |
| Norte Energia S.A.                         |       |       |       |       |              |              |              |              |              |             |            |              |
|  | 9.00  | 9.00  | 1,335 | (23)  | 120          | 75           |              | (2)          |              |             |            |              |
| Vale Soluções em                           |       |       |       |       |              |              |              |              |              |             |            |              |
| Energia S.A.                               |       |       |       |       |              |              |              |              |              |             |            |              |
|  | 53.13 | 53.13 | 134   | (266) | 71           | 145          | 115          | (58)         | (16)         | (33)        |            |              |
| Others                                     |       |       |       |       |              |              |              |              |              |             |            |              |
|  |       |       |       |       | 178          | 209          | 66           | 2            | (4)          | (4)         |            |              |
|  |       |       |       |       | <b>369</b>   | <b>429</b>   | <b>181</b>   | <b>(58)</b>  | <b>(20)</b>  | <b>(37)</b> |            |              |
| <b>Total</b>                               |       |       |       |       | <b>6,384</b> | <b>8,013</b> | <b>4,394</b> | <b>645</b>   | <b>1,138</b> | <b>997</b>  | <b>460</b> | <b>1,038</b> |
|  |       |       |       |       |              |              |              |              |              |             |            | <b>1,161</b> |

(1) Although Vale held a majority of the voting interest of investees accounted for under the equity method, existing veto rights held by noncontrolling shareholders.

(2) Investment includes goodwill of US\$ 53 in December 31, 2012 and US\$58 in December, 2011.

(3) Available for sale.

(4) Investment at market value as at December, accounted for under the equity method until September. We recognized an impairment charge on this investment (Note 16a.).

Table of Contents**14 - Intangible**

|                                   | 2012          |                | Year ended December 31, 2011 |               |                | 2010           |               |                | Net Intangible |
|-----------------------------------|---------------|----------------|------------------------------|---------------|----------------|----------------|---------------|----------------|----------------|
|                                   | Cost          | Amortization   | Net Intangible               | Cost          | Amortization   | Net Intangible | Cost          | Amortization   |                |
| <b>Indefinite useful lifetime</b> |               |                |                              |               |                |                |               |                |                |
| Goodwill                          | 4,603         |                | 4,603                        | 4,812         |                | 4,812          | 5,194         |                | 5,194          |
| <b>Finite useful lifetime</b>     |               |                |                              |               |                |                |               |                |                |
| Concession and sub concession     | 5,375         | (1,618)        | 3,757                        | 5,351         | (1,506)        | 3,845          | 5,671         | (1,762)        | 3,909          |
| Right to use                      | 358           | (56)           | 302                          | 606           | (43)           | 563            | 661           | (29)           | 632            |
| Others                            | 1,225         | (676)          | 549                          | 900           | (599)          | 301            | 879           | (514)          | 365            |
|                                   | <b>6,958</b>  | <b>(2,350)</b> | <b>4,608</b>                 | <b>6,857</b>  | <b>(2,148)</b> | <b>4,709</b>   | <b>7,211</b>  | <b>(2,305)</b> | <b>4,906</b>   |
| <b>Total</b>                      | <b>11,561</b> | <b>(2,350)</b> | <b>9,211</b>                 | <b>11,669</b> | <b>(2,148)</b> | <b>9,521</b>   | <b>12,405</b> | <b>(2,305)</b> | <b>10,100</b>  |

The useful life of the concessions and sub-concessions are detailed in Note 29d.

|  | Goodwill     | Concessions and sub concessions | Right to use | Others     | Total         |
|--|--------------|---------------------------------|--------------|------------|---------------|
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>4,124</b> | <b>3,571</b>                    | <b>727</b>   | <b>334</b> | <b>8,756</b>  |
| Addition through acquisition                     | 793          | 756                             | 4            | 178        | 1,731         |
| Disposal   |              | (358)                           | (15)         | (156)      | (529)         |
| Amortization                                     |              | (219)                           | (115)        | (6)        | (340)         |
| Translation adjustment                           | 277          | 159                             | 31           | 15         | 482           |
| <b>Balance as of December 31, 2010</b>           | <b>5,194</b> | <b>3,909</b>                    | <b>632</b>   | <b>365</b> | <b>10,100</b> |
| Addition through acquisition                     |              | 803                             |              | 179        | 982           |
| Disposal   |              | (49)                            |              | (1)        | (50)          |
| Amortization                                     |              | (520)                           | (15)         | (111)      | (646)         |
| Translation adjustment                           | (382)        | (444)                           | (54)         | 15         | (865)         |
| Others   |              | 146                             |              | (146)      |               |
| <b>Balance as of December 31, 2011</b>           | <b>4,812</b> | <b>3,845</b>                    | <b>563</b>   | <b>301</b> | <b>9,521</b>  |
| Addition through acquisition                     |              | 534                             |              | 420        | 954           |
| Write off by transfer as assets held for sale    |              | (9)                             | (232)        |            | (241)         |
| Amortization                                     |              | (273)                           | (10)         | (134)      | (417)         |
| Translation adjustment                           | (209)        | (340)                           | (19)         | (38)       | (606)         |
| <b>Balance as of December 31, 2012</b>           | <b>4,603</b> | <b>3,757</b>                    | <b>302</b>   | <b>549</b> | <b>9,211</b>  |

The rights of use refers basically to the contract entered into with non-controlling stockholders under which Vale has the rights over the Empreendimentos Brasileiros de Mineração S.A. shares (owner of the shares of MBR) and intangible identified in business combination of Vale Canada. The amortization of the right to use will expires in 2037 and Vale Canada's intangible will end in September 2046.

## 15 - Property, plant and equipment

|                           | Year ended December 31, |                 |                |                |                 |                |               |                 |                |
|---------------------------|-------------------------|-----------------|----------------|----------------|-----------------|----------------|---------------|-----------------|----------------|
|                           | 2012                    |                 |                | 2011           |                 |                | 2010          |                 |                |
|                           | Cost                    | Amortization    | Net Intangible | Cost           | Amortization    | Net Intangible | Cost          | Amortization    | Net Intangible |
| Land                      | 676                     |                 | 676            | 695            |                 | 695            | 356           |                 | 356            |
| Building                  | 7,710                   | (1,617)         | 6,093          | 8,058          | (1,925)         | 6,133          | 5,959         | (1,087)         | 4,872          |
| Facilities                | 16,320                  | (4,564)         | 11,756         | 14,835         | (3,695)         | 11,140         | 21,033        | (5,971)         | 15,062         |
| Computer equipment        | 985                     | (609)           | 376            | 1,208          | (842)           | 366            | 755           | (492)           | 263            |
| Mineral assets            | 23,705                  | (4,838)         | 18,867         | 22,949         | (4,410)         | 18,539         | 28,553        | (4,150)         | 24,403         |
| Others                    | 26,754                  | (8,576)         | 18,178         | 27,471         | (7,839)         | 19,632         | 13,026        | (3,726)         | 9,300          |
| Constructions in progress | 28,936                  |                 | 28,936         | 25,837         |                 | 25,837         | 21,759        |                 | 21,759         |
| <b>Total</b>              | <b>105,086</b>          | <b>(20,204)</b> | <b>84,882</b>  | <b>101,053</b> | <b>(18,711)</b> | <b>82,342</b>  | <b>91,441</b> | <b>(15,426)</b> | <b>76,015</b>  |

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|  | Land       | Building     | Facilities    | Computer equipment | Mineral assets | Others        | Constructions in progress | Total         |
|--|------------|--------------|---------------|--------------------|----------------|---------------|---------------------------|---------------|
| <b>Costs</b>                                 |            |              |               |                    |                |               |                           |               |
| <b>Balance as of January 1°, 2010</b>        | <b>274</b> | <b>2,970</b> | <b>9,455</b>  | <b>21</b>          | <b>16,629</b>  | <b>13,676</b> | <b>17,857</b>             | <b>60,882</b> |
| Acquisitions                                 |            |              |               |                    |                |               | 12,493                    | 12,493        |
| Disposals                                    | (1)        | (114)        | (292)         | (19)               | (103)          | (66)          | (508)                     | (1,103)       |
| Depreciation and amortization                |            | (294)        | (999)         | (194)              | (146)          | (1,181)       |                           | (2,814)       |
| Translation adjustment                       | 13         | (15)         | 2,574         | (2)                | 1,206          | 639           | 2,142                     | 6,557         |
| Transfers                                    | 70         | 2,325        | 4,324         | 457                | 6,817          | (3,768)       | (10,225)                  |               |
| <b>Balance as of December 31, 2010</b>       | <b>356</b> | <b>4,872</b> | <b>15,062</b> | <b>263</b>         | <b>24,403</b>  | <b>9,300</b>  | <b>21,759</b>             | <b>76,015</b> |
| Acquisitions                                 |            |              |               |                    |                |               | 13,596                    | 13,596        |
| Disposals                                    |            | (38)         | (13)          | (1)                | (22)           | (42)          | (114)                     | (230)         |
| Depreciation and amortization                |            | (118)        | (492)         | (75)               | (150)          | (1,769)       |                           | (2,604)       |
| Translation adjustment                       | (84)       | (735)        | (2,777)       | (38)               | (1,697)        | 1,960         | (1,064)                   | (4,435)       |
| Transfers                                    | 441        | 2,134        | (640)         | 217                | (3,995)        | 10,183        | (8,340)                   |               |
| <b>Balance as of December 31, 2011</b>       | <b>713</b> | <b>6,115</b> | <b>11,140</b> | <b>366</b>         | <b>18,539</b>  | <b>19,632</b> | <b>25,837</b>             | <b>82,342</b> |
| Acquisitions                                 |            |              |               |                    |                |               | 16,888                    | 16,888        |
| Disposals                                    | (1)        | (63)         | (49)          | (9)                | (57)           | (353)         | (562)                     | (1,094)       |
| Transfer to non-current assets held for sale |            | (25)         | (33)          |                    | (2)            | (940)         | (12)                      | (1,012)       |
| Impairment                                   |            | (1,083)      | (269)         | (1)                | (522)          | (1,381)       | (818)                     | (4,074)       |
| Depreciation and amortization                |            | (320)        | (921)         | (92)               | (808)          | (1,932)       |                           | (4,073)       |
| Translation adjustment                       | (161)      | (238)        | (1,090)       | 136                | (177)          | (902)         | (1,663)                   | (4,095)       |
| Transfers                                    | 125        | 1,707        | 2,978         | (24)               | 1,894          | 4,061         | (10,741)                  |               |
| <b>Balance as of December 31, 2012</b>       | <b>676</b> | <b>6,093</b> | <b>11,756</b> | <b>376</b>         | <b>18,867</b>  | <b>18,185</b> | <b>28,929</b>             | <b>84,882</b> |

The depreciation period, allocated to production cost and expense, amounted to Year ended December 31, 2012 and December 31, 2011 was US\$216 and US\$223 in consolidated.

The net property, plant and equipments given in guarantees for judicial claims in December 31, 2012 and 2011 correspond to US\$ 96 and US\$ 97, respectively.

**16 - Impairment**



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In 2012 we identified evidence of impairment in relation to certain investments and property, plant and equipment in our nickel, aluminum, coal and other cash generating units. The following impairment charges were recorded:

| Product  | Cash-generating unit     | December 31, 2012 |                    | Impairment charge |
|--|--------------------------|-------------------|--------------------|-------------------|
|  |                          | Carrying amount   | Recoverable amount |                   |
| <b>Investment in affiliates and joint ventures</b> |                          |                   |                    |                   |
| Aluminum   | Norsk Hydro ASA          | 3,212             | 2,237              | 975               |
| Steel  | Thyssenkrupp CSA         | 936               | 353                | 583               |
| Energy   | Vale Soluções de Energia | 100               | 17                 | 83                |
|  |                          | <b>4,248</b>      | <b>2,607</b>       | <b>1,641</b>      |
| <b>Property, plant and equipment</b>               |                          |                   |                    |                   |
| Nickel   | Onça Puma                | 3,779             | 930                | 2,849             |
| Coal   | Australia                | 1,619             | 590                | 1,029             |
| Other  |                          | 185               | 40                 | 145               |
|  |                          | <b>5,583</b>      | <b>1,560</b>       | <b>4,023</b>      |
|  |                          | <b>9,831</b>      | <b>4,167</b>       | <b>5,664</b>      |

a) **Investment**

• **Investment in Norsk Hydro ASA**

The Company holds 22% stake in the affiliated Norsk Hydro ASA ( Norsk Hydro ), which is accounted for the equity method.

The volatility of aluminum prices and uncertainties about the European economy contributed to a reduction in the traded market value of Norsk Hydro.

The Company assessed that the reduction of the market value of Norsk Hydro as other than temporary and thus recognized an impairment charge in this affiliated, adjusting the book value for its fair value.

At December 31, 2012 Norsk Hydro s shares at the close of trading were quoted at US\$ 4.99 per share resulting in a value of US\$ 2,237.

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- **Investment in Thyssenkrupp CSA**

We recorded an impairment charge against the carrying value of our 26.87% interest in Thyssenkrupp CSA to reflect a reduction in the investment recoverable amount. The fair value based on future cash flow and does not take into account the inherent value of our rights as the exclusive suppliers of ore to the mill which comprise an integral component of our investment strategy.

- **Investment in Vale Soluções de Energia**

Changes in the investment strategy of the Company have altered the expected cash flows from operations of our joint venture Vale Soluções de Energia.

The carrying value for VSE was ascertained from the new cash flow projections from financial budgets recently approved by management for the joint venture.

**b) Propert plant and equipment**

- **Onça Puma nickel assets**

Problems with the two furnaces in the Onça Puma project have led to the total stoppage of its iron-nickel operations since June 2012. After reviewing the case, Vale decided to rebuild one of the furnaces and plans to resume operations in the fourth quarter of 2013. Given this event and the current market environment for iron-nickel, the carrying value of Onça Puma's assets required an adjustment for impairment to reflect its fair value.

The recoverable amount of Onça Puma's assets, once we determined these would not be recovered through undiscounted cash flows, was ascertained by determining their value from discounted cash flow projections based on financial budgets approved by management for the life of the mine. The projected cash flow was adjusted to reflect the effects of the quantities sold at the commodity futures prices and on the expected demand for the product.

The key assumptions used by management to calculate the impairment are the sales values of the commodities and the discount rate, reflecting the volatile nature of the business.

The discount rates applied to the future cash flow forecasts represent an estimate of the rate the market would apply to comply with the risk of the assets under valuation, Vale weighted average cost of capital is used as a basic point for determining the discount rates, with appropriate adjustments for the risk profile of the countries in which the individual reporting unit operate.

- **Coal assets in Australia**

Increasing costs, falling market prices, reduced production levels and financially unfavorable regulatory changes were identified in the coal sector, leading us to carry out impairment tests.

The recoverable amount for the Australian assets was ascertained by determining through the calculation of value from discounted cash flow projections based on financial budgets approved by management for the life of the mine. The projected cash flow was adjusted to reflect the effects of the quantities sold at the commodity futures prices and on the expected demand for the product.

The key assumptions used by management to calculate the impairment of coal assets in Australia are the commodities prices and the discount rate, reflecting the volatile nature of the business.

- **Others**

Changes in the Company's strategy have altered the expected cash flows from some of our other operations, such as of oil and gas and other projects.

The recoverable amount of these assets was ascertained from the new cash flow projections from financial budgets recently revised and approved by management.

- c) **Goodwill and intangible assets of indefinite life**

The goodwill arose from the process of acquisition of part of our business mainly represented by of iron ore and pellets (US\$1,987), nickel (US\$1,854) and fertilizer (US\$652).

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The annual impairment review resulted in no impairment charge both for 2012 and 2011. For impairment testing purpose, we used a specific discount rate by asset, which consider a premium for country and business segment risk, ranging from 7.8% to 8.6%.

The key assumption to which the discounted cash flow is more sensitive is the sales prices and production cost.

Table of Contents**17 - Loans and Financing****a) Short-term debts**

|                 | 2012 | Year ended December 31, |  | 2010 |
|-----------------|------|-------------------------|--|------|
|                 |      | 2011                    |  |      |
| Working capital |      | 22                      |  | 139  |
|                 |      | 22                      |  | 139  |

Financings raised in the short term for export, denominated in U.S. dollars with an average interest rate on December 31, 2011 and 2010 of 1.81% p.a. and 2% p.a., respectively.

There was no short-term borrowings outstanding on December 31, 2012.

**b) Long-term debt**

|  | Current Liabilities |              | Year ended December 31, |               | Noncurrent liabilities |               |
|--|---------------------|--------------|-------------------------|---------------|------------------------|---------------|
|  | 2012                | 2011         | 2010                    | 2012          | 2011                   | 2010          |
| <b>Long-term contracts abroad</b>                    |                     |              |                         |               |                        |               |
| Loans and financing in:                              |                     |              |                         |               |                        |               |
| United States dollars                                | 604                 | 496          | 2,384                   | 3,380         | 2,693                  | 2,530         |
| Others currencies                                    | 14                  | 9            | 20                      | 261           | 52                     | 219           |
| Fixed rates  |                     |              |                         |               |                        |               |
| Notes indexed in United States dollars (fixed rates) | 124                 | 410          |                         | 13,457        | 10,073                 | 10,242        |
| Euro   |                     |              |                         | 1,979         | 970                    | 1,003         |
| Perpetual notes                                      |                     |              |                         |               |                        | 78            |
| Accrued charges                                      | 324                 | 221          | 233                     |               |                        |               |
|  | <b>1,066</b>        | <b>1,136</b> | <b>2,637</b>            | <b>19,077</b> | <b>13,788</b>          | <b>14,072</b> |
| <b>Long-term contracts in Brazil</b>                 |                     |              |                         |               |                        |               |
| Indexed to TJLP, TR, IGP-M e CDI                     | 175                 | 247          | 76                      | 6,066         | 5,245                  | 3,891         |
| Basket of currencies                                 | 2                   |              | 1                       | 10            |                        | 125           |
| Loans in United States dollars                       | 170                 |              | 1                       | 1,267         |                        | 738           |
| Non-convertible debentures into shares               | 1,957               |              |                         | 379           | 2,505                  | 2,767         |
| Accrued charges                                      | 101                 | 112          | 110                     |               |                        |               |

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|       |       |       |        |        |        |
|-------|-------|-------|--------|--------|--------|
| 2,405 | 359   | 188   | 7,722  | 7,750  | 7,521  |
| 3,471 | 1,495 | 2,825 | 26,799 | 21,538 | 21,593 |

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The long-term portion as at December 31, 2012 has maturity in the following years:

|              |               |
|--------------|---------------|
| 2014         | 1,371         |
| 2015         | 1,203         |
| 2016         | 1,884         |
| 2017 onwards | 22,341        |
|              | <b>26,799</b> |

In December 31, 2012, the annual interest rates incident on the long-term debts was as follows:

|                  |               |
|------------------|---------------|
| Up to 3%         | 5,443         |
| 3,1% to 5% (*)   | 5,691         |
| 5,1% to 7%       | 12,396        |
| 7,1% to 9% (**)  | 4,921         |
| 9,1% to 11% (**) | 1,338         |
| Over 11% (**)    | 481           |
|                  | <b>30,270</b> |

(\*) Includes Eurobonds. For this operation we have entered into derivative transactions at a cost of 4.51% per year in US dollars.

(\*\*) Includes non-convertible debentures and other Brazilian Real denominated debt that bear interest at the CDI and Brazilian Government Long-term Interest Rates ( TJLP ) plus a spread. For these operations, we have entered into derivative transactions to mitigate our exposure to the floating rate debt denominated in Brazilian Real, totaling US\$ 8,227 of which US\$ 7,890 has an original interest rate above 5.1% per year. The average cost of debts not denominated in U.S. Dollars after derivatives contracting is 3.16% per year in US dollars.

| Non Convertible Debentures | Quantity as of December 31, 2012 |             | Maturity          | Interest          | December 31, 2012 | Balance           |                   |
|----------------------------|----------------------------------|-------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                            | Issued                           | Outstanding |                   |                   |                   | December 31, 2011 | December 31, 2010 |
| 2nd Series                 | 400,000                          | 400,000     | November 20, 2013 | 100% CDI + 0.25%  | 1,973             | 2,167             | 2,429             |
| Tranche B - Salobo         | 5                                | 5           | No date           | 6.5% p.a + IGP-DI | 379               | 364               | 367               |
|                            |                                  |             |                   |                   | <b>2,352</b>      | <b>2,531</b>      | <b>2,531</b>      |
| Short-term portion         |                                  |             |                   |                   | 1,957             |                   |                   |
| Long-term portion          |                                  |             |                   |                   | 379               | 2,505             | 2,767             |
| Accrued charges            |                                  |             |                   |                   | 16                | 26                | 29                |
|                            |                                  |             |                   |                   | <b>2,352</b>      | <b>2,531</b>      | <b>2,531</b>      |

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In October 2012, Vale issued a R\$ 2.5 billion (US\$ 1.2 billion) export credit note to a Brazilian commercial bank that will mature in 2022. As of December 31, 2012, we had withdrawn the total amount of this facility.

In September 2012, Vale entered into a R\$3.9 billion financing agreement (US\$ 1.9 billion) with Banco Nacional de Desenvolvimento Econômico Social ( BNDES ) to finance the implementation of the CLN 150 Mtpy project, which will increase Vale's Northern System railway estimate nominal capacity to approximately 150 million tons per year.. As of December 31, 2012, we had drawn R\$ 2.1 billion (US\$ 1 billion) under this facility.

In September 2012, Vale issued US\$ 1.5 billion notes due 2042. The notes were issued at a price of 99.198% of the principal amount and will bear a coupon of 5.625% per year, payable semi-annually.

In August 2012, Vale International entered into a bilateral Pre-export Financing Agreement with a commercial bank in an amount of US\$ 150 maturing in five years from its disbursement date. As of December 31, 2012, Vale International withdrew the total amount of this facility.

On July 10, 2012 we issued 750 million, equivalent to US\$ 919, euro-denominated notes due 2023. These notes will bear a coupon of 3.75% per year, payable annually, at a price of 99.608% of the principal amount.

In April 2012, through our wholly-owned subsidiary Vale Overseas Limited, we received the amount related to the issue of US\$ 1,250 notes due 2022 that were priced in March 101.345% of the principal amount. The notes will bear a coupon of 4.375% per year, payable semi-annually and will be consolidated with, and form a single series with, Vale Overseas's US\$ 1 billion 4.375% notes due 2022 issued on January 2012. Those notes issued in January, 2012 were issued at price of 98.804% of the principal amount.

All the securities issued through our 100% finance subsidiary Vale Overseas Limited, are fully and unconditionally guaranteed by Vale.



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## c) Credit Lines

| Financial Institution   | Contractual<br>Currency | Date of<br>agreement | Available until | Total amount<br>available | Credit line<br>Amounts drawn at December 31, |       |      |
|---|-------------------------|----------------------|-----------------|---------------------------|--|-------|------|
|   |                         |                      |                 |                           | 2012   | 2011  | 2010 |
| <b>Revolving Credit Lines</b>                                     |                         |                      |                 |                           |  |       |      |
| Revolving Credit Facility - Vale/ Vale International/ Vale Canada | US\$                    | April 2011           | 5 years         | 3,000                     |  |       |      |
| <b>Credit Lines</b>   |                         |                      |                 |                           |  |       |      |
| Nippon Export and investment Insurance ( Nexi )                   | US\$                    | May 2008*(a)         | 5 years **      | 2,000                     | 300  | 300   | 150  |
| Japan Bank for International Cooperation ( JBIC )                 | US\$                    | May 2008*(b)         | 5 years **      | 3,000                     |  |       |      |
| Banco Nacional de Desenvolvimento Econômico Social ( BNDES )      | R\$                     | April 2008*(c)       | 5 years **      | 3,572                     | 1,753  | 1,368 | 941  |
| <b>Loans</b>  |                         |                      |                 |                           |  |       |      |
| Export-Import Bank of China e Bank of China Limited               | US\$                    | September 2010(d)    | 13 years        | 1,229                     | 837  | 467   | 291  |
| Export Development Canada ( EDC )                                 | US\$                    | October 2010(e)      | 10 years        | 1,000                     | 975  | 500   | 250  |
| Korean Trade Insurance Corporation ( K-Sure )                     | US\$                    | August 2011(f)       | 12 years        | 528                       | 409  | 161   |      |
| Banco Nacional de Desenvolvimento Econômico Social ( BNDES )      |                         |                      |                 |                           |  |       |      |
| Vale Fertilizantes  | R\$                     | November 2009(g)     | 9 years         | 20                        | 20   | 18    | 18   |
| PSI 4.50%   | R\$                     | June 2010(h)         | 10 years        | 379                       | 343  | 258   | 100  |
| Vale Fertilizantes  | R\$                     | October 2010(i)      | 8 years         | 121                       | 110  | 109   | 91   |
| PSI 5.50%   | R\$                     | March 2011(j)        | 10 years        | 50                        | 43   | 43    |      |
| CLN 150   | R\$                     | September 2012(k)    | 10 years        | 1,900                     | 1,032  |       |      |
| Vale Fertilizantes  | R\$                     | October 2012(l)      | 6 years         | 44                        | 44   |       |      |
| PSI 2.50%   | R\$                     | December 2012(m)     | 10 years        | 89                        |  |       |      |

\* Memorandum of Understanding ( MOU ) signature date

\*\* The availability for application of projects is 5 years.

(a) Mining projects, logistics and energy generation. Vale through its subsidiary PT Vale Indonesia Tbk (PTVI) applied in the amount of US\$ 300 million for the financing of the construction of the hydroelectric plant of Karebbe, Indonesia and withdrew totally.

(b) Mining projects, logistics and energy generation.

(c) Credit Lines to finance projects.

(d) Acquisition of twelve large ore carriers from Chinese shipyards.

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- (e) Financing investments in Canada and Canadian exports.
- (f) Acquisition of five large ore carriers and two capesize bulkers from two Korean shipyards. The maturity period is counted from each vessel delivery.
- (g) Gypsum storage in Uberaba plant.
- (h) Acquisition of domestic equipments.
- (i) Expansion of production capacity of phosphoric and sulfuric acids at Uberaba plant (Phase III).
- (j) Acquisition of domestic equipments.
- (k) Capacitação Logística Norte 150 Project (CLN 150).
- (l) Supplemental resources to expand production capacity of phosphoric and sulfuric acids at Uberaba plant (Phase III).
- (m) Acquisition of wagons by VLI Multimodal.

### **d) Guarantee**

On December 31, 2012, 2011 and 2010, US\$1,450, US\$648 and US\$2 of the total aggregate outstanding debt was secured by property, plant and equipment and receivables, respectively.

### **e) Covenants**

The principal covenants, included in certain financial agreements, require the observance of certain ratios, such as debt to EBITDA and interest coverage. Vale has not identified any events of noncompliance as of December 31, 2012, 2011 and 2010.

Table of Contents**18 - Provision for litigation**

We are involved parties in labor, civil, tax and other ongoing lawsuits and are discussing these issues at an administrative level and in court, and, when applicable, there are supported by judicial deposits. Provisions for losses resulting from these processes are estimated and updated by the Company, supported by the legal opinion of the legal board of the Company and by its external legal consultants.

|  | Tax litigation | Civil litigation | Labor litigation | Environmental litigation | Total of litigation provision |
|--|----------------|------------------|------------------|--------------------------|-------------------------------|
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>489</b>     | <b>582</b>       | <b>657</b>       | <b>35</b>                | <b>1,763</b>                  |
| Additions  | 331            | 58               | 168              | 2                        | 559                           |
| Reversals  | (178)          | (189)            | (27)             |                          | (394)                         |
| Payments   | (15)           | (28)             | (117)            | (1)                      | (161)                         |
| Monetary update                                  | 98             | 64               | 32               | 1                        | 195                           |
| Cumulative translation adjustment                | 21             | 23               | 35               | 2                        | 81                            |
| <b>Balance as of December 31, 2010</b>           | <b>746</b>     | <b>510</b>       | <b>748</b>       | <b>39</b>                | <b>2,043</b>                  |
| Additions  | 41             | 74               | 405              | 7                        | 527                           |
| Reversals  | (82)           | (202)            | (57)             | (10)                     | (351)                         |
| Payments   | (67)           | (79)             | (242)            | (4)                      | (392)                         |
| Monetary update                                  | 64             | (10)             | (10)             | 4                        | 48                            |
| Cumulative translation adjustment                | (48)           | (45)             | (93)             | (3)                      | (189)                         |
| <b>Balance as of December 31, 2011</b>           | <b>654</b>     | <b>248</b>       | <b>751</b>       | <b>33</b>                | <b>1,686</b>                  |
| Additions  | 580            | 82               | 317              | 11                       | 990                           |
| Reversals  | (76)           | (36)             | (224)            | (6)                      | (342)                         |
| Payments   | (155)          | (3)              | (22)             | (2)                      | (182)                         |
| Monetary update                                  | 34             | 16               | (7)              | 2                        | 45                            |
| Cumulative translation adjustment                | (41)           | (20)             | (65)             | (4)                      | (130)                         |
| Transfer of assets available for sale            |                |                  | (2)              |                          | (2)                           |
| <b>Balance as of December 31, 2012</b>           | <b>996</b>     | <b>287</b>       | <b>748</b>       | <b>34</b>                | <b>2,065</b>                  |

**Provisions for tax litigation** - The nature of tax contingencies refer to discussions on the basis of calculation of the Financial Compensation for Exploiting Mineral Resources ( CFEM ) and denials of compensation claims of credits in the settlement of federal taxes in Brazil, and mining taxes in our foreign subsidiaries. The other causes refer to the charges of Additional Port Workers Compensation ( AITP ) and questions about the location for the purpose of incidence of Service Tax ( ISS ).

On September 2012, we has considered as probable the loss related to the deductibility of transportation expenditures in arriving at the amount upon which the CFEM is calculated, increasing the provision of R\$ 1.1 bilhão (US\$542). At the fourth quarter of 2012, we paid R\$301 million (US\$147) of CFEM. On December 31, 2012 the total liability in relation to CFEM was R\$1,060 million (US\$519).

**Provisions for civil litigation** - They are related to the demands that involve contracts between Vale and other group companies with their service providers, requiring differences in values due to alleged losses that have occurred due to various economic plans, other demands are related to accidents, actions damages and still others related to monetary compensation in action vindicatory.

**Provisions for labor and social security litigation** - Consist of lawsuits filed by employees and service providers, questioning parcels arising from the employment relationship. The most recurring objects are payment of overtime, hours *in itinere*, hazard pay and unhealthy. The social security contingencies are also included in this context because arising from parcels of labor, in the case of legal and administrative disputes between the INSS and the Vale/group companies, whose core is the incidence of compulsory social security or not.

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In addition to those provisions, there are judicial deposits. These deposits are the guarantees to the actions required in court. They are monetarily update and reported in noncurrent assets of the Company until it happens the court decision to rescue these deposits by the complainant, unless there is a favorable outcome of the issue to the entity. Judicial deposits are as follows:

|                          | Year ended December 31, |              |              |
|--------------------------|-------------------------|--------------|--------------|
|                          | 2012                    | 2011         | 2010         |
| Tax litigation           | 435                     | 413          | 442          |
| Civil litigation         | 172                     | 151          | 410          |
| Labor litigation         | 903                     | 895          | 874          |
| Environmental litigation | 5                       | 5            | 5            |
| <b>Total</b>             | <b>1,515</b>            | <b>1,464</b> | <b>1,731</b> |

The Company discuss in administrative and judicial levels, legal actions where the expectation of loss is considered possible and understands there is no need to account for a provision.

These possible contingent liabilities are split between tax, civil, labor and social security, and are as follows:

|                          | Year ended December 31, |               |              |
|--------------------------|-------------------------|---------------|--------------|
|                          | 2012                    | 2011          | 2010         |
| Tax litigation           | 16,492                  | 17,967        | 1,713        |
| Civil litigation         | 1,124                   | 1,483         | 1,084        |
| Labor litigation         | 1,728                   | 1,923         | 1,967        |
| Environmental litigation | 1,672                   | 1,076         | 23           |
| <b>Total</b>             | <b>21,016</b>           | <b>22,449</b> | <b>4,787</b> |

The increase in the values of the tax contingencies with a possible estimate of loss refers mainly to discussion relating to recovery of Income Tax and Social Contribution, calculated based on the equity results of foreign subsidiaries.

The Brazilian federal tax authority (*Receita Federal do Brasil*) contends that we should pay those taxes and contributions on the net income of our non-Brazilian subsidiaries and affiliates. The position of the tax authority is based on Article 74 of Brazilian Provisional Measure 2,158-35/2001, a tax regulation issued in 2001 by Brazil's President, and on implementing regulations adopted by the tax authority under Article 74. The tax authority has issued five tax assessments ( *autos de infração* ) against us for payment of US\$5,933 and US\$6,644 at December 31, 2012 and 2011, respectively, in taxes in accordance with Article 74 for the tax years 1996 through 2008, plus interest and penalties of US\$9,277 at December 31, 2012 and US\$9,781 at December 31, 2011, through December 31, 2012 and 2011, amounting to a total of US\$15,210 and US\$16,425, respectively. The decline in the value from December 31, 2011, was caused by the cancellation by the tax authority of the claim related to the exchange variation over the foreign subsidiaries, in amount of US\$815.

**19 - Asset retirement obligation**

The Company uses various judgments and assumptions when measuring the obligations related to the retirement of assets. The accrued amount is not deducted from the potential costs covered by insurance or indemnities, because their recovery is considered uncertain.

Long term interest rates used to discount to present value and update the provision to December 31, 2012, 2011 and 2010 were 5.03%, 5.82% p.a. and 7.96% p.a. respectively. The liability is periodically updated based on these discount rates plus the inflation index (IGPM) for the period.

The movement in the provision for asset retirement obligation is as follows:

|                                    | Year ended December 31, |              |              |
|------------------------------------|-------------------------|--------------|--------------|
|                                    | 2012                    | 2011         | 2010         |
| <b>Balance on begin of year</b>    | <b>1,922</b>            | <b>1,518</b> | <b>1,252</b> |
| Increase expense                   | 170                     | 127          | 127          |
| Liquidation in the current period  | (14)                    | (57)         | (45)         |
| Revisions in estimated cash flows  | 782                     | 420          | 125          |
| Cumulative translation adjustments | (112)                   | (86)         | 59           |
| <b>Balance on end of year</b>      | <b>2,748</b>            | <b>1,922</b> | <b>1,518</b> |
| Current                            | 70                      | 73           | 75           |
| Non-current                        | 2,678                   | 1,849        | 1,443        |
| <b>Total</b>                       | <b>2,748</b>            | <b>1,922</b> | <b>1,518</b> |

Table of Contents**20 - Deferred Income Tax and Social Contribution**

We analyze the potential tax impact associated with undistributed earnings of each our subsidiaries and affiliates. For those subsidiaries in which undistributed earnings are intended to be reinvested indefinitely, no deferred tax is recognized. Undistributed earnings of foreign consolidated subsidiaries and affiliates for which no deferred income tax has been recognized for possible future remittances to the parent company totaled approximately US\$ 26,800 on December 31, 2012, US\$ 26,300 on December 31, 2011 and US\$ 26,708 at December 31, 2010. These amounts are considered to be permanently reinvested in the Company's international business. It is not practicable to determine the amount of the unrecognized deferred tax liability associated with these amounts. If we did determine to repatriate these earnings, there would be methods available to us, each with different tax consequences. There would also be uncertainty as to timing and amount, if any, of foreign tax credits that would be available, as the calculation of the available foreign tax credit is dependent upon the timing of the repatriation and projections of significant future uncertain events. The wide range of potential outcomes that could result due to these factors, among others, makes it impracticable to calculate the amount of tax that hypothetically would be recognized on these earnings if they were repatriated.

The income of the Company is subject to the common system of taxation applicable to companies in general. The net deferred balances were as follows:

|   | Year ended December 31, |                    |                |
|---|-------------------------|--------------------|----------------|
|   | 2012                    | 2011               | 2010           |
| <b>Recoverable income tax</b>               | <b>1,274</b>            | <b>915</b>         | <b>760</b>     |
| <b>Temporary differences:</b>               |                         |                    |                |
| Pension plan                                | 451                     | 477                | 734            |
| Provision                                   | 574                     | 467                | 567            |
| Impairment of Assets                        | 845                     | 791                | 568            |
| Fair value of financial instruments         | 806                     | 530                | 379            |
| Goodwill linked to property acquired        | (5,030)                 | (6,578)            | (6,928)        |
| Impairment                                  | 1,569                   |                    |                |
| Others                                      | (303)                   | (389)              | (276)          |
| <b>Total</b>                                | <b>186</b>              | <b>(3,787)</b>     | <b>(4,196)</b> |
| Social Contribution                         |                         |                    | (2,145)        |
| <b>Total</b>                                | <b>186</b>              | <b>(3,787)</b>     | <b>(6,341)</b> |
| Assets                                      | 3,981                   | 1,894              | 1,358          |
| Liabilities                                 | (3,795)                 | (5,681)            | (7,699)        |
|   | <b>186</b>              | <b>(3,787)</b>     | <b>(6,341)</b> |
|   | <b>Assets</b>           | <b>Liabilities</b> | <b>Total</b>   |
| <b>Balance as of January 1, 2010</b>        | <b>1,576</b>            | <b>5,394</b>       | <b>(3,818)</b> |
| Net income effect                           | (380)                   | (1,684)            | 1,304          |
| Addition/settlement of temporary difference | 144                     | 318                | (174)          |

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|   |              |              |                |
|---|--------------|--------------|----------------|
| Subsidiary acquisition                      |              | 2,166        | (2,166)        |
| Cumulative translation adjustment           | 56           | 204          | (148)          |
| Tax losses consumption                      | (481)        |              | (481)          |
| Tax losses recognition                      | 443          |              | 443            |
| Deferred social contribution                |              | 1,281        | (1,281)        |
| Other comprehensive income                  |              | 20           | (20)           |
| <b>Balance as of December 31, 2010</b>      | <b>1,358</b> | <b>7,699</b> | <b>(6,341)</b> |
| Net income effect                           | 648          | 372          | 276            |
| Subsidiary acquisition                      |              | 76           | (76)           |
| Cumulative translation adjustment           | (148)        | (332)        | 184            |
| Deferred social contribution                |              | (2,134)      | 2,134          |
| Other comprehensive income                  | 36           |              | 36             |
| <b>Balance as of December 31, 2011</b>      | <b>1,894</b> | <b>5,681</b> | <b>(3,787)</b> |
| Net income effect                           | 632          | (229)        | 860            |
| Addition/settlement of temporary difference | 1,627        |              | 1,627          |
| Subsidiary acquisition                      | (18)         | (214)        | 197            |
| Cumulative translation adjustment           | (146)        | (207)        | 61             |
| Deferred social contribution                |              | (1,236)      | 1,236          |
| Other comprehensive income                  | (8)          |              | (8)            |
| <b>Balance as of December 31, 2012</b>      | <b>3,981</b> | <b>3,795</b> | <b>186</b>     |

The deferred assets and liabilities of income tax and social contribution arising from tax losses, negative social contribution and temporary differences are recognized in the accounts, taking into consideration the analysis of future performance, based on economic and financial projections, prepared based on assumptions internal and macroeconomic, trade and tax scenarios that may suffer changes in the future.



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These temporary differences that will be performed upon the occurrence of the corresponding relevant facts generators have the following expectations:

| Deferred income tax and social contribution | Year ended December 31, |                |                |
|---|-------------------------|----------------|----------------|
|   | 2012                    | 2011           | 2010           |
| To be recovered after than 12 months        | (170)                   | (4,054)        | (6,601)        |
| To be recovered within 12 months            | 356                     | 267            | 260            |
| <b>Total</b>                                | <b>186</b>              | <b>(3,787)</b> | <b>(6,341)</b> |

The income tax in Brazil comprises the taxation on income and social contribution on profit. The composite statutory rate applicable in the period presented is 34%. In other countries where we have operations, we are subject to various rates depending on jurisdiction.

The total amount presented as income tax and social contribution results in the financial statements is reconciled with the rates established by law, as follows:

|   | Year ended December 31, |                |                |
|---|-------------------------|----------------|----------------|
|   | 2012                    | 2011           | 2010           |
| Income before tax and social contribution   | 3,922                   | 27,826         | 21,264         |
| Results of equity investments   | (645)                   | (1,138)        | (997)          |
| Exchange variation - not taxable  | 156                     | 26             | 265            |
|   | <b>3,433</b>            | <b>26,714</b>  | <b>20,532</b>  |
| Income tax and social contribution at statutory rates - 34%                                       | (1,167)                 | (9,083)        | (6,981)        |
| <b>Adjustments that affects the basis of taxes:</b>   |                         |                |                |
| Income tax benefit from interest on stockholders equity   | 1,337                   | 1,655          | 995            |
| Tax incentive   | 204                     | 704            | 642            |
| Results of overseas companies taxed by different rates which differs from the parent company rate | 261                     | 1,365          | 1,673          |
| Constitution of provisions for loss of tax loss carryforwards                                     | (228)                   | (297)          |                |
| Deductible Social Contribution paid   |                         | 506            |                |
| Others  | (47)                    | (121)          | (21)           |
| <b>Income tax and social contribution before impairment</b>                                       | <b>360</b>              | <b>(5,271)</b> | <b>(3,692)</b> |
| Income tax and social contribution on the profit for the year                                     | 1,327                   |                |                |
| <b>Income tax and social contribution on the profit for the year</b>                              | <b>1,687</b>            | <b>(5,271)</b> | <b>(3,692)</b> |

In Brazil, Vale has a tax incentive for the partial reduction of income tax due to the amount equivalent to the portion allocated by tax law to transactions in the North and Northeast regions with iron, railroad, manganese, copper, bauxite, kaolin and potash. The incentive is calculated based on the tax profit of the activity (called operating income), takes into consideration the allocation of operating profit by incentive production levels during the periods specified for each product as grantees, and generally, for 10 years and are in the case of Company expire until 2020. An amount equal to that obtained with the tax saving must be appropriated in a retained earnings reserve account in Stockholders

equity, and may not be distributed as dividends to Stockholders.

Vale benefits from the allocation of part of income tax due to be reinvested in the purchase of equipment in incentive operation, subject to subsequent approval by the regulatory agency in the incentive area of Superintendence for the Development of Amazonia (SUDAM) and the Northeast Development Superintendence (SUDENE). When the reinvestment approved, the tax benefit is also appropriate in retained earnings reserve, which impaired is the distribution as dividends to Stockholders

Vale also has tax incentives related to the production of nickel from Vale New Caledonia (VNC). These incentives include temporary exemptions of the total income tax during the construction phase of the project, and also for a period of 15 years beginning in the first year of commercial production as defined by applicable law, followed by 5 years with refund of 50% of temporary. In addition, VNC is eligible for certain exemptions from indirect taxes such as import tax during the construction phase and throughout the commercial life of the project. Some of these tax benefits, including temporary tax incentives, are subject to an earlier interruption if the project achieves a specified cumulative rate of return. VNC is taxable for a portion of profits starting in the first year that commercial production is reached, as defined by applicable law. So far, there has been no taxable income realized in New Caledonia. Vale also received tax incentives for projects in Mozambique, Oman and Malaysia.

Vale is subject to the revision of income tax by local tax authorities for up to five years in companies operating in Brazil, ten years for operations in Indonesia and up to seven years for companies with operations in Canada.

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**21 Pension plans**

In Brazil, the management of the pension plans of the Company is the responsibility of the Fundação Vale do Rio Doce de Seguridade Social ( Valia ) nonprofit private entity with administrative and financial autonomy.

Certain of the Company's employees, participant in variable contribution defined benefit plan ( *Plano de Benefício Vale Mais e Plano de Benefício VALIAPREV* or the New Plan ), specific coverage for death pension and disability retirement and other defined contributions for programmable benefits. The defined benefit plan is subject to actuarial evaluations. The defined contribution plan represents a fixed amount held on behalf of the participant.

The Company also maintains sponsorship of a pension plan with defined benefit characteristics, covering almost exclusively retirees and their beneficiaries, due to the migration of more than 98% of active employees for the Vale Mais Plan in May 2000. This plan was funded by monthly contributions made by the Company and participants, calculated based on periodic actuarial valuations.

Certain former employees are entitled to payments over and above the normal Valia benefits from a Complementation Bonus plus a post-retirement benefit that covers medical, dental and pharmaceutical assistance.

Vale Fertilizantes and its wholly owned subsidiaries pay eligible employees the FGTS penalty pursuant to an union agreement and provide certain health benefits for retired eligible employees.

The Company also has defined benefit plans and other post-employment benefits administered by other foundations and social security entities benefiting all employees.

Employers' disclosure about pensions and other post retirement benefits on the status of the defined benefit elements of all plans is provided.

We use a measurement date December 31 for our pension and post retirement benefit plans.

## a) Change in benefit obligation

|   | Overfunded pension<br>plans | Underfunded pension<br>plans | Others underfunded<br>pension plans |
|---|-----------------------------|------------------------------|-------------------------------------|
| <b>Benefit obligation as of January 1<sup>o</sup>, 2010</b> | <b>2,725</b>                | <b>4,730</b>                 | <b>1,304</b>                        |
| Benefit initial recognized consolidation                    | 385                         | 12                           | 58                                  |
| Service Cost  | 2                           | 71                           | 26                                  |
| Interest Cost   | 329                         | 360                          | 102                                 |
| Benefits paid/Actual distribution                           | (265)                       | (364)                        | (80)                                |
| Plan amendment  |                             | 20                           | (2)                                 |
| assumptions changes   | 87                          | 55                           | 6                                   |
| Actuarila loss (gain)                                       | 234                         | 202                          | 4                                   |
| Effect of exchange rate changes                             | 126                         | 225                          | 119                                 |
| <b>Benefit obligation as of December 31, 2010</b>           | <b>3,623</b>                | <b>5,311</b>                 | <b>1,537</b>                        |
| Service Cost  | 1                           | 89                           | 30                                  |
| Interest Cost   | 391                         | 378                          | 97                                  |
| Benefits paid/Actual distribution                           | (296)                       | (412)                        | (82)                                |
| Plan amendment  |                             | 2                            | (23)                                |
| Net transfers   |                             | 7                            |                                     |
| assumptions changes   | 141                         | 32                           |                                     |
| Plan settlements  |                             | (26)                         | (8)                                 |
| Actuarila loss (gain)                                       | 99                          | (151)                        | 114                                 |
| Effect of exchange rate changes                             | (406)                       | (279)                        | (82)                                |
| <b>Benefit obligation as of December 31, 2011</b>           | <b>3,553</b>                | <b>4,951</b>                 | <b>1,583</b>                        |
| Service Cost  |                             | 100                          | 34                                  |
| Interest Cost   | 308                         | 374                          | 95                                  |
| Benefits paid/Actual distribution                           | (237)                       | (435)                        | (76)                                |
| Plan amendment  |                             | (2)                          | (35)                                |
| assumptions changes   | (442)                       | 442                          |                                     |
| Plan settlements  |                             | (119)                        | (26)                                |
| Actuarila loss (gain)                                       | 684                         | 798                          | 159                                 |
| Effect of exchange rate changes                             | (299)                       | (121)                        | (24)                                |
| <b>Benefit obligation as of December 31, 2012</b>           | <b>3,567</b>                | <b>5,988</b>                 | <b>1,710</b>                        |

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## ii. Evolution of the fair value of assets

|   | Overfunded pension<br>plans | Underfunded pension<br>plans | Others underfunded<br>pension plans |
|---|-----------------------------|------------------------------|-------------------------------------|
| <b>Fair value of plan assets on January 1<sup>o</sup>, 2010</b> | <b>4,130</b>                | <b>4,095</b>                 | <b>11</b>                           |
| Fair value initial recognized consolidation                     | 451                         | 10                           |                                     |
| Actual return on plan assets                                    | 1,094                       | 541                          | 1                                   |
| Employer contributions  | 2                           | 169                          | 80                                  |
| Benefits paid/ Actual distribution                              | (265)                       | (364)                        | (80)                                |
| Effect of exchange rate changes                                 | 173                         | 193                          | 1                                   |
| <b>Fair value of plan assets on December 31, 2010</b>           | <b>5,585</b>                | <b>4,644</b>                 | <b>13</b>                           |
| Actual return on plan assets                                    | 472                         | 226                          |                                     |
| Employer contributions  | 2                           | 575                          | 82                                  |
| Benefits paid/ Actual distribution                              | (296)                       | (412)                        | (82)                                |
| Plan settlements  |                             | (26)                         | (11)                                |
| Effect of exchange rate changes                                 | (586)                       | (245)                        | (1)                                 |
| <b>Fair value of plan assets on December 31, 2011</b>           | <b>5,177</b>                | <b>4,762</b>                 | <b>1</b>                            |
| Transfers   | (512)                       | 512                          |                                     |
| Actual return on plan assets                                    | 619                         | 528                          |                                     |
| Employer contributions  |                             | 222                          | 76                                  |
| Benefits paid/ Actual distribution                              | (237)                       | (435)                        | (76)                                |
| Plan settlements  |                             | (109)                        |                                     |
| Actuarial gain/(loss)   | (229)                       | 235                          |                                     |
| Effect of exchange rate changes                                 | (407)                       | (109)                        |                                     |
| <b>Fair value of plan assets on December 31, 2012</b>           | <b>4,411</b>                | <b>5,606</b>                 | <b>1</b>                            |

A special contribution was made to the Vale Canada Limited defined underfunded benefit plans of US\$342 during 2011 to secure adequate funding requirements for 2011-2013.

Plan assets managed by Valia on December 31, 2012, 2011 and 2010 include investments in portfolio of our own stock of US\$300, US\$340 and US\$519, investments in debentures US\$57, US\$63 and US\$64 and equity investments from related parties amounting to US\$2, US\$84 and US\$81, respectively. They also include at December 31, 2012, 2011 and 2010, US\$3,882, US\$3,552 and US\$4,150 of Brazilian Federal Government Securities. The Vale Canada Limited pension plan assets at December 31, 2012, 2011 and 2010 included Canadian Government securities amounted to US\$483, US\$653 and US\$436, respectively. The Vale Fertilizantes and Ultrafertil at December 31, 2012 and December 31, 2011 include Brazilian Federal Government in securities of US\$191, US\$149 and US\$158, respectively.

## iii. Reconciliation of assets and liabilities recognized in the Balance Sheet

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|   | December 31, 2012        |                           |                      | December 31, 2011        |                           |                      | December 31, 2010        |                           |                      |
|---|--------------------------|---------------------------|----------------------|--------------------------|---------------------------|----------------------|--------------------------|---------------------------|----------------------|
|   | Overfunded pension plans | Underfunded pension plans | Others pension plans | Overfunded pension plans | Underfunded pension plans | Others pension plans | Overfunded pension plans | Underfunded pension plans | Others pension plans |
| Present value of obligations at end of year                       | (3,567)                  | (5,988)                   | (1,710)              | (3,553)                  | (4,951)                   | (1,583)              | (3,623)                  | (5,311)                   | (1,537)              |
| Fair value of assets at end of year                               | 4,411                    | 5,606                     | 1                    | 5,177                    | 4,762                     | 1                    | 5,585                    | 4,644                     | 13                   |
| Net value of (gains) and losses not recorded in the balance sheet |                          | 246                       | 95                   |                          | (41)                      | 93                   |                          | (34)                      | 34                   |
| Effect of limit of IAS 19, paragraph 65                           | (844)                    |                           |                      | (1,624)                  |                           |                      | (1,962)                  |                           |                      |
| <b>Total</b>  |                          | <b>(136)</b>              | <b>(1,614)</b>       |                          | <b>(230)</b>              | <b>(1,489)</b>       |                          | <b>(701)</b>              | <b>(1,490)</b>       |
| <b>Net actuarial assets/liability accrued</b>                     |                          |                           |                      |                          |                           |                      |                          |                           |                      |
| Non-current assets  |                          | 115                       |                      |                          |                           |                      |                          |                           |                      |
| Current liabilities   |                          | (116)                     | (89)                 |                          | (92)                      | (77)                 |                          | (98)                      | (90)                 |
| Non-current liabilities   |                          | (135)                     | (1,525)              |                          | (138)                     | (1,412)              |                          | (603)                     | (1,400)              |
| <b>Total</b>  |                          | <b>(136)</b>              | <b>(1,614)</b>       |                          | <b>(230)</b>              | <b>(1,489)</b>       |                          | <b>(701)</b>              | <b>(1,490)</b>       |

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iv. **Recorded costs in the Statement of Income**

|   | December 31, 2012        |                           |                                  | December 31, 2011        |                           |                                  | December 31, 2010        |                           |                                  |
|---|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|
|   | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans |
| Current service cost  |                          | 100                       | 34                               | 1                        | 89                        | 30                               | 2                        | 71                        | 26                               |
| Interest on actuarial liabilities                             | 308                      | 381                       | 97                               | 391                      | 378                       | 97                               | 329                      | 360                       | 102                              |
| Expected return on assets                                     | (619)                    | (459)                     |                                  | (656)                    | (383)                     |                                  | (530)                    | (321)                     | (1)                              |
| Amortization and (gains) / losses, net (IAS 19 paragraph 58a) | 913                      | 92                        | 77                               | 14                       | 24                        | (7)                              | 9                        | 18                        | (1)                              |
| Effect of limit described in paragraph 58 (b) in IAS 19       | (602)                    |                           |                                  | 250                      |                           |                                  | 190                      |                           |                                  |
| <b>Total</b>  |                          | <b>114</b>                | <b>208</b>                       |                          | <b>108</b>                | <b>120</b>                       |                          | <b>128</b>                | <b>126</b>                       |

v. **Actuarial and economic assumptions**

All calculations involve future actuarial projections about some parameters, such as: salaries, interest, inflation, the behavior of INSS benefits, mortality, disability, etc.

The economic actuarial assumptions adopted were formulated considering the long-term period for maturity and should therefore be examined in that light. So, in the short term, they may not necessarily be realized.

In the evaluations were adopted the following economic assumptions:

**Brazil**

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|  | December 31, 2012        |                           |                                  | December 31, 2011        |                           |                                  | December 31, 2010        |                           |                                  |
|--|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|
|  | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans |
| Discount rate to determine benefit obligation  | 8.90% p.a.               | 9.04% p.a.                | 9.05% p.a.                       | 10.91%                   | 10.78%                    | 10.90%                           | 11.30%                   | 11.30%                    | 10.30%                           |
| Discount rate to determine net cost            | 8.90% p.a.               | 9.45% p.a.                | 9.40% p.a.                       | 10.78%                   | 11.30%                    | 11.30%                           | 11.30%                   | 11.30%                    | 10.30%                           |
| Expected return on plan assets                 | 12.48% p.a.              | 12.55% p.a.               | N/A                              | 11.91%                   | 10.50%                    | N/A                              | 12.00%                   | 10.50%                    | N/A                              |
| Rate of compensation increase - up to 47 years | 8.15% p.a.               | 8.15% p.a.                | N/A                              | 8.15%                    | N/A                       | N/A                              | 8.15%                    | 8.15%                     | N/A                              |
| Rate of compensation increase - over 47 years  | 5.00% p.a.               | 5.00% p.a.                | N/A                              | 5.00%                    | 5.00%                     | N/A                              | 5.00%                    | 5.00%                     | N/A                              |
| Inflation                                      | 5.00% p.a.               | 5.00% p.a.                | 5.00% p.a.                       | 5.00%                    | 5.00%                     | 5.00%                            | 5.00%                    | 5.00%                     | 5.00%                            |
| Health care cost trend rate                    | N/A                      | N/A                       | 8.15% p.a.                       | N/A                      | 8.15%                     | 8.15%                            | N/A                      | N/A                       | 8.15%                            |

|  | Underfunded pension plans | Others underfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Underfunded pension plans | Others underfunded pension plans |
|--|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|
| Discount rate to determine benefit obligation  | 4.16% p. a.               | 4.20% p. a.                      | 5.08%                     | 5.10%                            | 6.21%                     | 5.44%                            |
| Discount rate to determine net cost            | 5.08% p. a.               | 4.20% p. a.                      | 5.43%                     | 5.43%                            | 6.21%                     | 5.44%                            |
| Expected return on plan assets                 | 6.51% p. a.               | 6.50% p. a.                      | 6.51%                     | 6.50%                            | 7.02%                     | 6.50%                            |
| Rate of compensation increase - up to 47 years | 4.10% p.a.                | 3.00% p.a.                       | 4.10%                     | 3.00%                            | 4.11%                     | 3.58%                            |
| Rate of compensation increase - over 47 years  | 4.10% p.a.                | 3.00% p.a.                       | 4.10%                     | 3.00%                            | 4.11%                     | 3.58%                            |
| Inflation                                      | 2.00% p.a.                | 2.00% p.a.                       | 2.00%                     | 2.00%                            | 2.00%                     | 2.00%                            |
| Health care cost trend rate                    | N/A                       | 7.22% p.a.                       | N/A                       | 7.22%                            | N/A                       | 7.35%                            |
| Ultimate Health care cost trend rate           | N/A                       | 4.49% p.a.                       | N/A                       | 4.49%                            | N/A                       | 4.49%                            |

vi. Data from participants:

|                                       | December 31, 2012        |                           |                                  | December 31, 2011        |                           |                                  | December 31, 2010        |                           |                                  |
|---------------------------------------|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|--------------------------|---------------------------|----------------------------------|
|                                       | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans | Overfunded pension plans | Underfunded pension plans | Others underfunded pension plans |
| <b>Active participants</b>            |                          |                           |                                  |                          |                           |                                  |                          |                           |                                  |
| Number                                | 14                       | 81,324                    | 11,727                           | 202                      | 67,951                    | 74.7                             | 245.0                    | 59.9                      | 68.0                             |
| Average age - years                   | 52                       | 36                        | 40                               | 50                       | 36                        | 35.9                             | 49.8                     | 36.0                      | 36.4                             |
| Average service - years               | 28                       | 7                         | 7                                | 27.2                     | 7.0                       | 7.7                              | 27.1                     | 8.0                       | 8.5                              |
| <b>Terminated vested participants</b> |                          |                           |                                  |                          |                           |                                  |                          |                           |                                  |
| Number                                |                          | 6,519                     |                                  |                          | 5.8                       |                                  |                          | 4.9                       |                                  |
| Average age - years                   |                          | 47                        |                                  |                          | 39.0                      |                                  |                          | 40.0                      |                                  |
| <b>Retirees and beneficiaries</b>     |                          |                           |                                  |                          |                           |                                  |                          |                           |                                  |



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|                        |        |        |        |      |      |      |      |      |      |
|------------------------|--------|--------|--------|------|------|------|------|------|------|
| Number                 | 16,740 | 19,253 | 31,737 | 18.4 | 18.2 | 32.6 | 18.5 | 18.1 | 32.8 |
| Average age -<br>years | 67     | 70     | 68     | 66.3 | 71.0 | 63.7 | 65.6 | 71.0 | 62.5 |

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**vii. Assets of pension plans**

**Brazilian Plans**

The Investment Policy Statements of pension plans sponsored for Brazilian employees are based on a long term macroeconomic scenario and expected returns. An Investment Policy Statement was established for each obligation by following results of a strategic asset allocation study.

Plan asset allocations comply with pension funds local regulation issued by CMN - Conselho Monetário Nacional (CMN Resolution 3,792/09). We are allowed to invest in six different asset classes, defined as Segments by the law, as follows: Fixed Income, Equity, Structured Investments (Alternative Investments and Infra-Structure Projects), International Investments, Real Estate and Loans to Participants in compliance with pre approved policies.

The investment policies aims to achieve adequate diversification, revenue and long-term valuation, through the combination of all asset classes described above to meet their obligations to many plans of the appropriate level of risk.

The pension fund has a risk management process with established policies that intend to identify measure and control all kind of risks faced by our plans, such as: market, liquidity, credit, operational, systemic and legal.

**Foreign plans**

The strategy for each of the pension plans sponsored by Vale Canada is based upon a combination of local practices and the specific characteristics of the pension plans in each country, including the structure of the liabilities, the risk versus reward trade-off between different asset classes and the liquidity required to meet benefit payments.

**viii. Overfunded pension plans**

**Brazilian Plans**

The Defined Benefit Plan (the Old Plan ) has the most part of its assets allocated in fixed income, mainly in Brazilian government bonds (such as TIPS) and corporate long term inflation linked corporate bonds with the objective to reduce the asset-liability volatility. This LDI (Liability Driven Investments) strategy, when considered together with Loans to Participants segment, aims to hedge plan s liabilities against inflation risk and volatility. This plan had an average nominal income of 20% per annum, in the past 12 years. The target allocation for each investment segment or asset class in the following:

|                                      | Year ended December 31, |        |        |
|--------------------------------------|-------------------------|--------|--------|
|                                      | 2012                    | 2011   | 2010   |
| Fixed income investments             | 56.00%                  | 57.00% | 52.00% |
| Variable income investments          | 25.00%                  | 24.00% | 28.00% |
| Structures investments               | 6.00%                   | 6.00%  | 6.00%  |
| Foreign investments                  | 1.00%                   | 1.00%  | 2.00%  |
| Real Estate                          | 8.00%                   | 8.00%  | 7.00%  |
| Operations with participants (loans) | 4.00%                   | 4.00%  | 5.00%  |

The Plano Vale Mais has obligations with characteristics of defined benefit plans and defined contribution plans. Most investments are in fixed income. To reduce the volatility of assets and liabilities from the components of the plot with defined benefit s characteristics, we use Brazilian government bonds indexed to inflation. The target allocation for this strategy is 55% of total assets of this sub plan. Below there are the target allocations for each investment segment or asset class:

|                                      | Year ended December 31, |        |        |
|--------------------------------------|-------------------------|--------|--------|
|                                      | 2012                    | 2011   | 2010   |
| Fixed income investments             | 55.00%                  | 56.00% | 59.00% |
| Variable income investments          | 24.00%                  | 24.00% | 24.00% |
| Structures investments               | 3.50%                   | 3.50%  | 2.00%  |
| Foreign investments                  | 0.50%                   | 0.50%  | 1.00%  |
| Real Estate                          | 7.00%                   | 6.00%  | 4.00%  |
| Operations with participants (loans) | 10.00%                  | 10.00% | 10.00% |

The Defined Contribution Vale Mais component offers four options of asset classes mix that can be chosen by participants. The options are: Fixed Income 100%; 80% Fixed Income and 20% Equities, 65% Fixed Income and 35% Equities and 60% fixed income and 40% equities. Loan to participants is included in the fixed income options. Equities management is done through investment fund that targets Ibovespa index.

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Assets by category are as follows:

|  | December 31, 2012 |            |            |              | December 31, 2011 |            |            |              | December 31, 2010 |            |            |              |
|--|-------------------|------------|------------|--------------|-------------------|------------|------------|--------------|-------------------|------------|------------|--------------|
|  | Level 1           | Level 2    | Level 3    | Total        | Level 1           | Level 2    | Level 3    | Total        | Level 1           | Level 2    | Level 3    | Total        |
| <b>Assets by category</b>                |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Cash and cash equivalents                |                   |            |            |              |                   |            |            |              | 6                 |            |            | 6            |
| Accounts Receivable                      | 5                 |            |            | 5            | 14                |            |            | 14           | 81                |            |            | 81           |
| Equity securities                        | 1,128             | 1          |            | 1,129        | 1,282             | 78         |            | 1,360        | 1,321             | 75         |            | 1,396        |
| Debt securities -                        |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Corporate bonds                          |                   | 272        |            | 272          |                   | 446        |            | 446          |                   | 420        |            | 420          |
| Debt securities -                        |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Government bonds                         | 1,976             |            |            | 1,976        | 1,844             |            |            | 1,844        | 2,114             |            |            | 2,114        |
| Investments funds - Fixed                |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Income                                   | 1,678             |            |            | 1,678        | 1,540             |            |            | 1,540        | 1,610             |            |            | 1,610        |
| Investments funds -                      |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Equity                                   | 252               |            |            | 252          | 288               |            |            | 288          | 513               |            |            | 513          |
| International investments                | 14                |            |            | 14           | 11                |            |            | 11           | 23                |            |            | 23           |
| Structured investments -                 |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Private Equity funds                     |                   |            | 192        | 192          |                   | 177        |            | 177          |                   |            | 128        | 128          |
| Structured investments -                 |                   |            |            |              |                   |            |            |              |                   |            |            |              |
| Real estate funds                        |                   |            | 8          | 8            |                   | 20         |            | 20           |                   |            | 19         | 19           |
| Real estate                              |                   |            | 458        | 458          |                   | 399        |            | 399          |                   |            | 288        | 288          |
| Loans to participants                    |                   |            | 195        | 195          |                   | 183        |            | 183          |                   |            | 182        | 182          |
| <b>Total</b>                             | <b>5,053</b>      | <b>273</b> | <b>853</b> | <b>6,179</b> | <b>4,979</b>      | <b>524</b> | <b>779</b> | <b>6,282</b> | <b>5,668</b>      | <b>495</b> | <b>617</b> | <b>6,780</b> |
| Funds not related to risk plans          |                   |            |            | (1,768)      |                   |            |            | (1,105)      |                   |            |            | (1,195)      |
| Fair value of plan assets at end of year |                   |            |            | <b>4,411</b> |                   |            |            | <b>5,177</b> |                   |            |            | <b>5,585</b> |

Measurement of overfunded plan assets at fair value with no observable market variables - level 3

|  | Private Equity | Real State Funds | Real State | Loans to     | Total      |
|--|----------------|------------------|------------|--------------|------------|
|  | Funds          |                  |            | Participants |            |
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>87</b>      |                  | <b>224</b> | <b>158</b>   | <b>469</b> |
| Actual return on plan assets                     | (3)            | 1                | 49         | 24           | 71         |
| Initial recognized consolidation                 |                |                  | 22         | 5            | 27         |
| Assets purchases, sales and settlements          | (2)            | (1)              | (24)       | (71)         | (98)       |
| Assets sold during the period                    | 41             |                  | 24         | 59           | 124        |
| Cumulative translation adjustment                | 5              | 1                | 11         | 7            | 24         |
| Transfers in and/ out of Level 3                 |                |                  | 18         | (18)         |            |
| <b>Balance as of December 31, 2010</b>           | <b>128</b>     | <b>19</b>        | <b>288</b> | <b>182</b>   | <b>617</b> |
| Actual return on plan assets                     | (7)            |                  | 79         | 14           | 86         |
| Assets purchases, sales and settlements          | (1)            |                  | (22)       | (71)         | (94)       |
| Assets sold during the period                    | 34             |                  | 101        | 72           | 207        |
| Cumulative translation adjustment                | (16)           | (2)              | (47)       | (14)         | (79)       |
| Transfers in and/ out of Level 3                 | 39             | 3                |            |              | 42         |

|   |            |           |            |            |            |
|---|------------|-----------|------------|------------|------------|
| <b>Balance as of December 31, 2011</b>  | <b>177</b> | <b>20</b> | <b>399</b> | <b>183</b> | <b>779</b> |
| Actual return on plan assets            | 13         | (8)       | 121        | 26         | 152        |
| Assets purchases, sales and settlements | (19)       |           | (31)       | (84)       | (134)      |
| Assets sold during the period           | 75         |           | 27         | 93         | 195        |
| Cumulative translation adjustment       | (15)       | (1)       | (37)       | (17)       | (70)       |
| Transfers in and/ out of Level 3        | (39)       | (3)       | (21)       | (6)        | (69)       |
| <b>Balance as of December 31, 2012</b>  | <b>192</b> | <b>8</b>  | <b>458</b> | <b>195</b> | <b>853</b> |

The return target for private equity assets in 2013 is 11% p.a. for the Old Plan and 11% p.a. for the New Plan. The target allocation is 6% for the Old Plan and 3.5% for the New Plan, ranging between 2% and 10% for the Old Plan and ranging between 1% and 10% for the New Plan. These investments have a longer investment horizon and low liquidity that aim to profit from economic growth, especially in the infrastructure sector of the Brazilian economy. Usually non-liquid assets fair value is similar to the acquisition cost or book value. Some private equity funds, alternatively, apply the following methodologies: discounted cash flows analysis or analysis based on multiples.

The target return for loans to participants in 2013 was 12% p.a. The fair value pricing of these assets includes provisions for non-paid loans, according to the local pension fund regulation.

The target return for real estate assets in 2013 was 12% p.a. The fair value of these assets is near to their carrying value. The pension fund hires companies specialized in real estate valuation that do not act in the market as brokers. All valuation techniques follow the local regulation.

**ix. Underfunded pension plans**

**Brazilian Plans**

The obligation has an exclusive allocation in fixed income. It was also used a LDI (Liability Driven Investments) strategy for this plan. Most of the resources were invested in long term Brazilian government bonds (similar to TIPS) and inflation linked corporate bonds with the objective of minimizing asset-liability volatility and reduce inflation risk. This obligation has an average nominal return of 17% p.a. in local currency in the last 7 years.

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**Foreign plans**

For all pension plans except PT Vale Indonesia tbk, this has resulted in a target asset allocation of 60% in equity investments and 40% in fixed income investments, with all securities being traded in the public markets. Fixed income investments are in domestic bonds for each plan's market and involve a mixture of government and corporate bonds. Equity investments are primarily global in nature and involve a mixture of large, mid and small capitalization companies with a modest explicit investment in domestic equities for each plan. The Canadian plans also use a currency hedging strategy (each developed currency's exposure is 50% hedged) due to the large exposure to foreign securities. For PT Vale Indonesia tbk, the target allocation is 20% equity investment and the remainder in fixed income.

Assets by category are shown below:

|   | December 31, 2012 |              |            |              | December 31, 2011 |              |            |              | December 31, 2010 |              |            |              |
|---|-------------------|--------------|------------|--------------|-------------------|--------------|------------|--------------|-------------------|--------------|------------|--------------|
|   | Level 1           | Level 2      | Level 3    | Total        | Level 1           | Level 2      | Level 3    | Total        | Level 1           | Level 2      | Level 3    | Total        |
| <b>Assets by category</b>                       |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Cash and cash equivalents                       | 55                | 34           |            | 89           | 19                | 24           |            | 43           | 22                | 30           |            | 52           |
| Accounts Receivable                             | 4                 |              |            | 4            | 12                |              |            | 12           | 20                |              |            | 20           |
| Equity securities                               | 1,566             | 19           |            | 1,585        | 1,374             | 6            |            | 1,380        | 1,623             | 5            |            | 1,628        |
| Debt securities -                               |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Corporate bonds                                 |                   | 511          |            | 511          |                   | 373          |            | 373          |                   | 175          |            | 175          |
| debt securities -                               |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Government bonds                                | 509               | 483          |            | 992          | 323               | 627          |            | 950          | 370               | 416          |            | 786          |
| Investments funds - Fixed                       |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Income  | 1,594             | 426          |            | 2,020        | 1,191             | 568          |            | 1,759        | 1,079             | 720          |            | 1,799        |
| Investments funds -                             |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Equity  | 511               | 412          |            | 923          | 325               | 376          |            | 701          | 307               | 346          |            | 653          |
| International investments                       | 4                 |              |            | 4            | 2                 | 2            |            | 4            | 3                 | 3            |            | 6            |
| Structured investments -                        |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Private Equity funds                            |                   |              | 43         | 43           |                   |              | 17         | 17           |                   |              | 15         | 15           |
| Structured investments -                        |                   |              |            |              |                   |              |            |              |                   |              |            |              |
| Real estate funds                               |                   |              |            |              |                   |              | 1          | 1            |                   |              | 1          | 1            |
| Real estate                                     |                   |              | 138        | 138          |                   |              | 83         | 83           |                   |              | 37         | 37           |
| Loans to participants                           |                   |              | 207        | 207          |                   |              | 162        | 162          |                   |              | 151        | 151          |
| <b>Total</b>                                    | <b>4,243</b>      | <b>1,885</b> | <b>388</b> | <b>6,516</b> | <b>3,246</b>      | <b>1,976</b> | <b>263</b> | <b>5,485</b> | <b>3,424</b>      | <b>1,695</b> | <b>204</b> | <b>5,323</b> |
| Funds not related to risk plans                 |                   |              |            | (910)        |                   |              |            | (723)        |                   |              |            | (679)        |
| <b>Fair value of plan assets at end of year</b> |                   |              |            | <b>5,606</b> |                   |              |            | <b>4,762</b> |                   |              |            | <b>4,644</b> |

Measurement of overfunded plan assets at fair value with no observable market variables - level 3

Real State

Total

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|  | Private Equity<br>Funds | Real State<br>Funds | Loans to<br>Participants |            |            |
|--|-------------------------|---------------------|--------------------------|------------|------------|
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>10</b>               |                     | <b>25</b>                | <b>124</b> | <b>159</b> |
| Actual return on plan assets                     | (2)                     |                     | 4                        | 20         | 22         |
| Assets purchases, sales and settlements          |                         |                     | (2)                      | (57)       | (59)       |
| Assets sold during the period                    | 7                       |                     | 10                       | 58         | 75         |
| Cumulative translation adjustment                |                         |                     | 1                        | 6          | 7          |
| Transfers in and/ out of Level 3                 |                         | 1                   | (1)                      |            |            |
| <b>Balance as of December 31, 2010</b>           | <b>15</b>               | <b>1</b>            | <b>37</b>                | <b>151</b> | <b>204</b> |
| Actual return on plan assets                     | (2)                     |                     | 9                        | 31         | 38         |
| Assets purchases, sales and settlements          |                         |                     | (2)                      | (59)       | (61)       |
| Assets sold during the period                    | 6                       |                     | 47                       | 58         | 111        |
| Cumulative translation adjustment                | (2)                     |                     | (8)                      | (19)       | (29)       |
| <b>Balance as of December 31, 2011</b>           | <b>17</b>               | <b>1</b>            | <b>83</b>                | <b>162</b> | <b>263</b> |
| Actual return on plan assets                     | 1                       |                     | 35                       | 27         | 63         |
| Assets purchases, sales and settlements          | (6)                     | (1)                 | (4)                      | (71)       | (82)       |
| Assets sold during the period                    | 34                      |                     | 12                       | 105        | 151        |
| Cumulative translation adjustment                | (3)                     |                     | (9)                      | (16)       | (28)       |
| Transfers in and/ out of Level 3                 |                         |                     | 21                       |            | 21         |
| <b>Balance as of December 31, 2012</b>           | <b>43</b>               |                     | <b>138</b>               | <b>207</b> | <b>388</b> |

**Assets of underfunded other benefits plans abroad**

Underfunded other benefits by asset category:

| Assets by category        | December 31, 2012 |         |         |       | December 31, 2011 |         |         |       | December 31, 2010 |         |         |       |
|---------------------------|-------------------|---------|---------|-------|-------------------|---------|---------|-------|-------------------|---------|---------|-------|
|                           | Level 1           | Level 2 | Level 3 | Total | Level 1           | Level 2 | Level 3 | Total | Level 1           | Level 2 | Level 3 | Total |
| Cash and cash equivalents | 1                 |         |         | 1     | 1                 |         |         | 1     | 13                |         |         | 13    |

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**xi. Disbursement of future cash flow**

Vale expects to disburse in 2012 with pension plans and other benefits, US\$407.

**xii. Sensitivity related to the nominal growth rate of medical costs**

|                                     | Year ended December 31, |       |       |
|-------------------------------------|-------------------------|-------|-------|
|                                     | 2012                    | 2011  | 2010  |
| <b>Present value of obligations</b> |                         |       |       |
| Increase of 1%                      | 360                     | 258   | 213   |
| Decrease of 1%                      | (281)                   | (206) | (172) |
| <b>Interest and service cost</b>    |                         |       |       |
| Increase of 1%                      | 31                      | 22    | 12    |
| Decrease of 1%                      | (19)                    | (18)  | (17)  |

**xiii. Estimated future benefit payments**

The following table presents the expected benefit payments, which reflect future services, as follows:

|                     | Overfunded pension<br>plans | December 31, 2012<br>Underfunded pension<br>plans | Others underfunded<br>pension plans |
|---------------------|-----------------------------|---|-------------------------------------|
| 2013                | 226                         | 565   | 95                                  |
| 2014                | 223                         | 457   | 96                                  |
| 2015                | 219                         | 464   | 99                                  |
| 2016                | 215                         | 472   | 100                                 |
| 2017                | 211                         | 479   | 101                                 |
| 2018 and thereafter | 981                         | 2,398   | 490                                 |

**a) Participation in the results Plan**



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The Company, based in Participation in Results Program ( PPR ) allows defining, monitoring, evaluation and recognition of individual and collective performance of its employees.

The Participation in the Results of the Company for each employee is calculated individually according to the achievement of goals previously established by groups of indicators of the Company, Business Unit, Team and individual. The contribution of each group in the performance scores of employees is discussed and agreed each year, between us and the unions representing their employees.

The Company accrued expenses/costs related to participation in the result as follows:

|                      | 2012       | Year ended December 31,<br>2011 | 2010       |
|----------------------|------------|---------------------------------|------------|
| Operational expenses | 440        | 402                             | 238        |
| Cost of goods sold   | 488        | 494                             | 320        |
| <b>Total</b>         | <b>928</b> | <b>896</b>                      | <b>558</b> |

### c) Long-term compensation plan

Aiming to promote the vision of stockholder, in addition to increasing the ability to retain executives and to strengthen the culture of sustainability performance, Vale has a Long-term Compensation Plan, for some executives of the Company, covering 3-year cycles.

Under the terms of the plan, the participants may allocate a portion of their annual bonus to the plan. Part of the bonus allocated to the plan is used by the executive to purchase preferred stock of Vale, through a financial institution prescribed under market conditions and without any benefit provided by Vale.

The shares purchased by the executive have no restrictions and can according to own criteria of each participant, be sold at any time. However, the shares need to be kept for a period of three years and executives need to keep their employment relationship with the Vale during this period. the participant shall be entitled, in this manner, as long as the shares are not sold and employment relationship is maintained, to receive from the Vale, a payment in cash equivalent to the amount of stock holdings based on market quotations. The total number of stocks linked to the plan on December 31, 2012, 2011 and 2010 was 4,426,046, 3,012,538 and 2,458,627, respectively.

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Additionally, certain executives eligible to long-term incentives have the opportunity to receive at the end of a three years cycle a monetary value equivalent to market value of a determined number of stocks based on an assessment of their careers and performance factors measured as an indicator of total return to the Stockholders.

Liabilities are measured at fair value on the date of each issuance of the report, based on market rates. Compensation costs incurred are recognized by the defined vesting period of three years. On December 31, 2012, 2011 and 2010 we recorded a liability of US\$ 87, US\$ 109 and US\$ 120 respectively, in the Statement of Income.

**23 - Classification of financial instruments**

The classification of financial assets and liabilities is shown in the following tables:

|                                    | December 31, 2012            |  |   |               |
|------------------------------------|------------------------------|--|---|---------------|
|                                    | Loans and<br>receivables (a) | At fair value<br>through profit<br>or loss (b) | Derivatives<br>designated<br>as hedge (c) | Total         |
| <b>Financial assets</b>            |                              |  |   |               |
| <b>Current</b>                     |                              |  |   |               |
| Cash and cash equivalents          | 5,832                        |  |   | 5,832         |
| Short-term investments             |                              | 246  |   | 246           |
| Derivatives at fair value          |                              | 265  | 16  | 281           |
| Accounts receivable from customers | 6,795                        |  |   | 6,795         |
| Related parties                    | 384                          |  |   | 384           |
|                                    | <b>13,011</b>                | <b>511</b>                                     | <b>16</b>                                 | <b>13,538</b> |
| <b>Non current</b>                 |                              |  |   |               |
| Related parties                    | 408                          |  |   | 408           |
| Loans and financing                | 246                          |  |   | 246           |
| Derivatives at fair value          |                              | 40   | 5   | 45            |
|                                    | <b>654</b>                   | <b>40</b>                                      | <b>5</b>                                  | <b>699</b>    |
| <b>Total of Assets</b>             | <b>13,665</b>                | <b>551</b>                                     | <b>21</b>                                 | <b>14,237</b> |
| <b>Financial liabilities</b>       |                              |  |   |               |
| <b>Current</b>                     |                              |  |   |               |
| Suppliers and contractors          | 4,529                        |  |   | 4,529         |
| Derivatives at fair value          |                              | 346  | 1   | 347           |
| Current portion of long-term debt  | 3,471                        |  |   | 3,471         |
| Related parties                    | 207                          |  |   | 207           |
|                                    | <b>8,207</b>                 | <b>346</b>                                     | <b>1</b>                                  | <b>8,554</b>  |
| <b>Non current</b>                 |                              |  |   |               |
| Derivatives at fair value          |                              | 783  |   | 783           |

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|                             |               |              |          |               |
|-----------------------------|---------------|--------------|----------|---------------|
| Loans and financing         | 26,799        |              |          | 26,799        |
| Related parties             | 72            |              |          | 72            |
| Debentures                  |               | 1,653        |          | 1,653         |
|                             | <b>26,871</b> | <b>2,436</b> |          | <b>29,307</b> |
| <b>Total of Liabilities</b> | <b>35,078</b> | <b>2,782</b> | <b>1</b> | <b>37,861</b> |

- 
- (a) Non-derivative financial instruments with determinable cash flow.
  - (b) Financial instruments acquired with the purpose of trading in the short term.
  - (c) See note 25a.

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|                                       | December 31, 2011            |  |   |               |
|---------------------------------------|------------------------------|--|---|---------------|
|                                       | Loans and<br>receivables (a) | At fair value<br>through profit<br>or loss (b) | Derivatives<br>designated<br>as hedge (c) | Total         |
| <b>Financial assets</b>               |                              |  |   |               |
| <b>Current</b>                        |                              |  |   |               |
| Cash and cash equivalents             | 3,531                        |  |   | 3,531         |
| Derivatives at fair value             |                              | 434  | 161                                       | 595           |
| Accounts receivable from customers    | 8,505                        |  |   | 8,505         |
| Related parties                       | 82                           |  |   | 82            |
|                                       | <b>12,118</b>                | <b>434</b>                                     | <b>161</b>                                | <b>12,713</b> |
| <b>Non current</b>                    |                              |  |   |               |
| Related parties                       | 509                          |  |   | 509           |
| Loans and financing                   | 210                          |  |   | 210           |
| Derivatives at fair value             |                              | 60   |   | 60            |
|                                       | <b>719</b>                   | <b>60</b>                                      |   | <b>779</b>    |
| <b>Total of financial assets</b>      | <b>12,837</b>                | <b>494</b>                                     | <b>161</b>                                | <b>13,492</b> |
| <b>Financial liabilities</b>          |                              |  |   |               |
| <b>Current</b>                        |                              |  |   |               |
| Suppliers and contractors             | 4,814                        |  |   | 4,814         |
| Derivatives at fair value             |                              | 59   | 14  | 73            |
| Current portion of long-term debt     | 1,495                        |  |   | 1,495         |
| Loans and financing                   | 22                           |  |   | 22            |
| Related parties                       | 24                           |  |   | 24            |
|                                       | <b>6,355</b>                 | <b>59</b>                                      | <b>14</b>                                 | <b>6,428</b>  |
| <b>Non current</b>                    |                              |  |   |               |
| Derivatives at fair value             |                              | 663  |   | 663           |
| Loans and financing                   | 21,538                       |  |   | 21,538        |
| Related parties                       | 91                           |  |   | 91            |
| Debentures                            |                              | 1,336  |   | 1,336         |
|                                       | <b>21,629</b>                | <b>1,999</b>                                   |   | <b>23,628</b> |
| <b>Total of financial liabilities</b> | <b>27,984</b>                | <b>2,058</b>                                   | <b>14</b>                                 | <b>30,056</b> |

- 
- (a) Non-derivative financial instruments with determinable cash flow.
- (b) Financial instruments acquired with the purpose of trading in the short term.
- (c) See note 25a.

|                         | December 31, 2010            |  |   |       |
|-------------------------|------------------------------|--|---|-------|
|                         | Loans and<br>receivables (a) | At fair value<br>through profit<br>or loss (b) | Derivatives<br>designated<br>as hedge (c) | Total |
| <b>Financial assets</b> |                              |  |   |       |

**Current**

|                                    |               |              |           |               |
|------------------------------------|---------------|--------------|-----------|---------------|
| Cash and cash equivalents          | 7,584         |              |           | 7,584         |
| Short-term investments             |               | 1,793        |           | 1,793         |
| Derivatives at fair value          |               | 32           | 20        | 52            |
| Accounts receivable from customers | 8,211         |              |           | 8,211         |
| Related parties                    | 96            |              |           | 96            |
|                                    | <b>15,891</b> | <b>1,825</b> | <b>20</b> | <b>17,736</b> |

**Non Current**

|                           |               |              |           |               |
|---------------------------|---------------|--------------|-----------|---------------|
| Related parties           | 29            |              |           | 29            |
| Loans and financing       | 164           |              |           | 164           |
| Derivatives at fair value |               | 301          |           | 301           |
|                           | <b>193</b>    | <b>301</b>   |           | <b>494</b>    |
| <b>Total of Assets</b>    | <b>16,084</b> | <b>2,126</b> | <b>20</b> | <b>18,230</b> |

**Financial Liabilities**

**Current**

|                                   |              |           |  |              |
|-----------------------------------|--------------|-----------|--|--------------|
| Suppliers and contractors         | 3,558        |           |  | 3,558        |
| Derivatives at fair value         |              | 35        |  | 35           |
| Current portion of long-term debt | 2,825        |           |  | 2,825        |
| Loans and financing               | 139          |           |  | 139          |
| Related parties                   | 21           |           |  | 21           |
|                                   | <b>6,543</b> | <b>35</b> |  | <b>6,578</b> |

**Non Current**

|                             |               |              |           |               |
|-----------------------------|---------------|--------------|-----------|---------------|
| Derivatives at fair value   |               | 8            | 53        | 61            |
| Loans and financing         | 21,593        |              |           | 21,593        |
| Related parties             | 2             |              |           | 2             |
| Debentures                  |               | 1,284        |           | 1,284         |
|                             | <b>21,595</b> | <b>1,292</b> | <b>53</b> | <b>22,940</b> |
| <b>Total of Liabilities</b> | <b>28,138</b> | <b>1,327</b> | <b>53</b> | <b>29,518</b> |

- 
- (a) Non-derivative financial instruments with determinable cash flow.
- (b) Financial instruments acquired with the purpose of trading in the short term.
- (c) See note 25a.

Table of Contents**23 - Fair Value Estimative**

Due to the short-term cycle, it is assumed that the fair value of cash and cash equivalents balances, short-term investments, accounts receivable and accounts payable are close to their book values. For measurement and determination of fair value, the Company uses various methods including market approaches, income or cost, in order to estimate the value that market participants would use when pricing the asset or liability. The financial assets and liabilities recorded at fair value should be classified and disclosed in accordance with the following levels:

**Level 1** Unadjusted quoted prices on an active, liquid and visible market for identical assets or liabilities that are accessible at the measurement date;

**Level 2** - Quoted prices (adjusted or unadjusted) for identical or similar assets or liabilities on active markets; and

**Level 3** - Assets and liabilities, where quoted prices, do not exist, or where prices or valuation techniques are supported by little or no market activity, unobservable or illiquid.

The tables below present the assets and liabilities of the parent and the consolidated company measured at fair value on December 31, 2012, 2011 and 2010.

|  | December 31, 2012 |            |            | December 31, 2011 |            |            | December 31, 2010 |            |            |
|--|-------------------|------------|------------|-------------------|------------|------------|-------------------|------------|------------|
|  | Level 1           | Level 2    | Total (II) | Level 1           | Level 2    | Total (II) | Level 1           | Level 2    | Total (II) |
| <b>Financial Assets</b>                          |                   |            |            |                   |            |            |                   |            |            |
| <b>Current</b>                                   |                   |            |            |                   |            |            |                   |            |            |
| Derivatives at fair value through profit or loss |                   | 265        | 265        |                   | 434        | 434        | 13                | 19         | 32         |
| Derivatives designated as hedges                 |                   | 16         | 16         |                   | 161        | 161        |                   | 20         | 20         |
|  |                   | <b>281</b> | <b>281</b> |                   | <b>595</b> | <b>595</b> | <b>13</b>         | <b>39</b>  | <b>52</b>  |
| <b>Available-for-sale</b>                        |                   |            |            |                   |            |            |                   |            |            |
| <b>Non-Current</b>                               |                   |            |            |                   |            |            |                   |            |            |
| <b>Derivatives</b>                               |                   |            |            |                   |            |            |                   |            |            |
| Derivatives at fair value through profit or loss |                   | 40         | 40         |                   | 60         | 60         |                   | 301        | 301        |
| Derivatives designated as hedges                 |                   | 5          | 5          |                   |            |            |                   |            |            |
|  |                   | <b>45</b>  | <b>45</b>  |                   | <b>60</b>  | <b>60</b>  |                   | <b>301</b> | <b>301</b> |

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|  |            |              |              |              |              |              |              |
|--|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Total of Assets</b>                           | <b>326</b> | <b>326</b>   | <b>655</b>   | <b>655</b>   | <b>13</b>    | <b>340</b>   | <b>353</b>   |
| <b>Financial Liabilities</b>                     |            |              |              |              |              |              |              |
| <b>Current</b>                                   |            |              |              |              |              |              |              |
| Derivatives                                      |            |              |              |              |              |              |              |
| Derivatives at fair value through profit or loss | 2          | 344          | 346          | 59           | 59           | 12           | 35           |
| Derivatives designated as hedges                 |            | 1            | 1            | 14           | 14           |              |              |
|  | <b>2</b>   | <b>345</b>   | <b>347</b>   | <b>73</b>    | <b>73</b>    | <b>12</b>    | <b>35</b>    |
| <b>Non-Current</b>                               |            |              |              |              |              |              |              |
| Derivatives                                      |            |              |              |              |              |              |              |
| Derivatives at fair value through profit or loss |            | 783          | 783          | 663          | 663          | 8            | 8            |
| Derivatives designated as hedges                 |            |              |              |              |              | 53           | 53           |
| Stockholders' debentures                         |            | 1,653        | 1,653        | 1,336        | 1,336        | 1,284        | 1,284        |
|  |            | <b>2,436</b> | <b>2,436</b> | <b>1,999</b> | <b>1,999</b> | <b>1,345</b> | <b>1,345</b> |
| <b>Total of Liabilities</b>                      | <b>2</b>   | <b>2,781</b> | <b>2,783</b> | <b>2,072</b> | <b>2,072</b> | <b>12</b>    | <b>1,380</b> |

(II) No classification according to the level 3.

a) **Methods and Techniques of Evaluation**

i. **Assets and liabilities at fair value through profits or loss**

Comprise derivatives not designated as hedges and stockholders' debentures.

• **Derivatives designated or not as hedge**

The financial instruments were evaluated by calculating their present value through the use of curves that impact the instrument on the dates of verification. The curves and prices used in the calculation for each group of instruments are detailed in the market curves .

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The pricing method used in the case of European options is the Black & Scholes model. In this model, the fair value of the derivative is a function of volatility and price of the underlying asset, the exercise price of the option, the interest rate and period to maturity. In the case of options when the income is a function of the average price of the underlying asset over a period of life of the option, called Asian, we use the model of Turnbull & Wakeman. In this model, besides the factors that influence the option price in the Black-Scholes model, is considered the forming period of the average price.

In the case of swaps, both the present value of the active tip and the passive tip are estimated by discounting cash flows by the interest rate of the currency in which the swap is denominated. The difference between the present value of active tip and passive tip of swap generates its fair value.

In the case of swaps tied to TJLP Long-Term Interest Rate , the calculation of fair value considers the TJLP constant, that is, projections of future cash flows in Brazilian real are made considering the last TJLP disclosed.

Contracts for the purchase or sale of products, inputs and costs of selling with future settlement are priced using the forward curves for each product. Typically, these curves are obtained in the stock exchange where the products are traded, such as the London Metals Exchange (LME), the COMEX (Commodity Exchange) or other providers of market prices. When there is no price for the desired maturity, Vale uses interpolation between the available maturities.

• **Stockholders Debentures**

Comprise the debentures issued on behalf of the privatization process (see note 29(b)), whose fair values are measured based on market approach, and its reference prices are available on the secondary market.

i. **Assets available-for-sales**

Comprise the assets that are not held-to-maturity, for strategic reasons. Comprise investments that are valued based on quoted prices in active markets where available or internal assessments based on expected future cash flows of the assets.

b) **Fair value measurement compared to book value**



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For the loans allocated in the level 1, the evaluation method used to estimate the fair value of debt is the market approach to the contracts listed on the secondary market. And for the loans allocated in the level 2, the fair value for both fixed-indexed rate debt and floating rate is determined from the discounted cash flow using the future values of the Libor rate and the curve of Vale's Bonds (income approach).

The fair values and carrying amounts of non-current loans (net of interest) are shown in the table below:

|                              | December 31, 2012 |                    |           | Carrying amount | December 31, 2011 |                    |           | Carrying amount | December 31, 2010 |                    |           | Carrying amount |
|------------------------------|-------------------|--------------------|-----------|-----------------|-------------------|--------------------|-----------|-----------------|-------------------|--------------------|-----------|-----------------|
|                              | Level 1           | Fair value Level 2 | Total (a) |                 | Level 1           | Fair value Level 2 | Total (a) |                 | Level 1           | Fair value Level 2 | Total (a) |                 |
| <b>Financial assets</b>      |                   |                    |           |                 |                   |                    |           |                 |                   |                    |           |                 |
| Time deposits                |                   |                    |           |                 |                   |                    |           |                 |                   | 1,793              | 1,793     | 1,793           |
| <b>Financial liabilities</b> |                   |                    |           |                 |                   |                    |           |                 |                   |                    |           |                 |
| Loans (long term) (b)        | 25,817            | 6,907              | 32,724    | 29,845          | (18,181)          | (6,131)            | (24,312)  | (22,700)        | (19,730)          | (5,534)            | (25,264)  | (24,071)        |
| Perpetual notes (c)          |                   | 72                 | 72        | 72              |                   | (80)               | (80)      | (80)            |                   |                    |           |                 |

(a) No classification according to the level 3.

(b) Net interest of US\$ 425, US\$ 333 and US\$ 347 on December 31, 2012, 2011 and 2010, respectively.

(c) Classified on Related parties (Non-current liabilities).

Table of Contents**24. Stockholders Equity****a) Capital**

The Stockholders Equity is represented by common and preferred non-redeemable shares without par value. Preferred shares have the same rights as common shares, with the exception of voting for election of members of the Board of Directors. The Board of Directors may, regardless of changes to bylaws, issuing new shares (authorized capital), including the capitalization of profits and reserves to the extent authorized.

In December 31 2012, the capital was US\$60,578 corresponding to 5,365,304,100 (3,256,724,482 common and 2,108,579,618 preferred) shares with no par value.

| Stockholders  | December 31, 2012    |                      | Total                |
|---|----------------------|----------------------|----------------------|
|   | ON                   | PNA                  |                      |
| Valepar S.A.  | 1,716,435,045        | 20,340,000           | 1,736,775,045        |
| Brazilian Government (Golden Share)                 |                      | 12                   | 12                   |
| Foreign investors - ADRs                            | 678,752,292          | 740,850,726          | 1,419,603,018        |
| FMP - FGTS  | 93,278,145           |                      | 93,278,145           |
| PIBB - BNDES  | 1,921,106            | 2,859,336            | 4,780,442            |
| BNDESPar  | 206,378,881          | 67,342,071           | 273,720,952          |
| Foreign institutional investors in the local market | 251,342,812          | 442,520,400          | 693,863,212          |
| Institutional investors                             | 181,510,919          | 366,954,770          | 548,465,689          |
| Retail investors in the country                     | 56,033,800           | 326,854,611          | 382,888,411          |
| Treasure stock in the country                       | 71,071,482           | 140,857,692          | 211,929,174          |
| <b>Total</b>  | <b>3,256,724,482</b> | <b>2,108,579,618</b> | <b>5,365,304,100</b> |

**b) Revenue reserves**

The values of the retained earnings are distributed as:

|  | Investments reserve | Legal reserve | Tax incentive reserve | Total of undistributed revenue reserves |
|--|---------------------|---------------|-----------------------|---|
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>25,939</b>       | <b>2,238</b>  | <b>121</b>            | <b>28,298</b>                           |
| Capitalization of reserves                       | (1,461)             |               | (79)                  | (1,540)                                 |

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|  |               |              |              |               |
|--|---------------|--------------|--------------|---------------|
| Additional remuneration to securities  | (308)         |              |              | (308)         |
| Allocation of income                   | 13,380        | 1,029        | 582          | 14,991        |
| Cumulative translation adjustments     | 1,872         | 154          | 37           | 2,063         |
| <b>Balance as of December 31, 2010</b> | <b>39,422</b> | <b>3,421</b> | <b>661</b>   | <b>43,504</b> |
| Capitalization of reserves             | (12,240)      |              | (142)        | (12,382)      |
| Allocation of income                   | 13,846        | 1,012        | 533          | 15,391        |
| Cumulative translation adjustments     | (4,266)       | (370)        | (71)         | (4,707)       |
| <b>Balance as of December 31, 2011</b> | <b>36,762</b> | <b>4,063</b> | <b>981</b>   | <b>41,806</b> |
| Allocation of income                   | 303           | 423          | 465          | 1,191         |
| Cumulative translation adjustments     | (3,264)       | (504)        | (256)        | (4,024)       |
| <b>Balance as of December 31, 2012</b> | <b>33,801</b> | <b>3,982</b> | <b>1,190</b> | <b>38,973</b> |

Investment reserve aims to ensure the maintenance and development for activities that comprise the Company's purpose in an amount not exceeding 50% of net income.

Legal reserve is a requirement for all Brazilian Public Company and represents ownership of 5% of annual net income based on Brazilian law, up to 20% of the capital.

Tax incentive reserve resulting from the option to designate a portion of the income tax for investments in projects approved by the Brazilian Government as well as tax incentives (Note 20).

c) **Resources linked to the future mandatory conversion in shares**

In June 2012, the convertible notes series VALE and VALE.P-2012 were converted into ADS and represent an aggregate of 15,839,592 common shares and 40,241,968 preferred class A shares. The Conversion was made using 56,081,560 treasury stocks held by the Company. The difference between the book value of the treasury stocks R\$ 2.079.018 and the total amount received R\$ 2.128.536 was recognized in the stockholder's equity, with no profit or loss impact.

Table of Contents**d) Treasury stocks**

In November 2011, as part of the buy-back program approved in June 2011, we concluded the acquisitions of 39,536,080 common shares, at an average price of US\$ 26.25 per share, and 81,451,900 preferred shares, at an average price of US\$ 24.09 per share (including shares of each class in the form of ADR), for a total aggregate purchase price of US\$ 3,000. The repurchased shares represent 3.1% of the free float of common shares, and 4.24% of the free float of preferred shares, outstanding before the launch of the program. The shares acquired will be held in treasury for cancellation.

In December 31, 2012, there are 2111,929,174 treasury stocks, in the amount of US\$ 4,477, as follows

| Quantity of shares                               | Classes of shares  |                   | Amount (thousands of reais) |
|--|--------------------|-------------------|-----------------------------|
|  | Common             | Preferred         | Total                       |
| <b>Balance as of January 1<sup>o</sup>, 2010</b> | <b>77,581,904</b>  | <b>74,997,899</b> | <b>152,579,803</b>          |
| Addition   | 48,197,700         | 21,682,700        | 69,880,400                  |
| Reduction  | (26,130,033)       | (49,305,205)      | (75,435,238)                |
| <b>Balance as of December 31, 2010</b>           | <b>99,649,571</b>  | <b>47,375,394</b> | <b>147,024,965</b>          |
| Addition   | 81,451,900         | 39,536,080        | 120,987,980                 |
| Reduction  | (1,657)            | (267)             | (1,924)                     |
| <b>Balance as of December 31, 2011</b>           | <b>181,099,814</b> | <b>86,911,207</b> | <b>268,011,021</b>          |
| Reduction  | (40,242,122)       | (15,839,725)      | (56,081,847)                |
| <b>Balance as of December 31, 2012</b>           | <b>140,857,692</b> | <b>71,071,482</b> | <b>211,929,174</b>          |

| Unit acquisition cost | Year ended as of December 31, 2012 |           |
|-----------------------|------------------------------------|-----------|
|                       | Common                             | Preferred |
| Low                   | 10.27                              | 7.17      |
| Average               | 18.40                              | 19.18     |
| High                  | 28.05                              | 24.27     |

| Average quoted market price | Year ended as of December 31, |       |       |
|-----------------------------|-------------------------------|-------|-------|
|                             | 2012                          | 2011  | 2010  |
| Common                      | 19.37                         | 26.26 | 16.66 |
| Preferred                   | 18.84                         | 24.11 | 18.72 |

**e) Basic and diluted earnings per share**

The value of basic earnings per shares and diluted were calculated as follows:

|   | 2012             | Year ended December 31,<br>2011 | 2010             |
|---|------------------|---------------------------------|------------------|
| <b>Net income from continuing operations attributable to the Company's stockholders</b> |                  |                                 |                  |
| Discontinued operations, net of tax   | 5,116            | 22,788                          | 17,257           |
| <b>Net income attributable to the Company's stockholders</b>                            |                  |                                 | (125)            |
|   | <b>5,116</b>     | <b>22,788</b>                   | <b>17,132</b>    |
| <b>Basic and diluted earnings per share:</b>  |                  |                                 |                  |
| Income available to preferred stockholders  | 1,953            | 8,816                           | 6,719            |
| Income available to common stockholders   | 3,163            | 13,972                          | 10,413           |
| <b>Total</b>  | <b>5,116</b>     | <b>22,788</b>                   | <b>17,132</b>    |
| Weighted average number of shares outstanding (thousands of shares)                     |                  |                                 |                  |
| - preferred shares  | 1,933,491        | 2,031,315                       | 2,083,068        |
| Weighted average number of shares outstanding (thousands of shares)                     |                  |                                 |                  |
| - common shares   | 3,172,179        | 3,215,479                       | 3,228,439        |
| <b>Total</b>  | <b>5,105,670</b> | <b>5,246,794</b>                | <b>5,311,507</b> |
| <b>Basic earnings per preferred and common share</b>                                    |                  |                                 |                  |
| For continued operation   | 0.99             | 4.34                            | 3.25             |
| for discontinued operation  | 0.99             |                                 | (0.02)           |
| <b>Diluted earnings per preferred and common share</b>                                  |                  |                                 |                  |
| For continued operation   | 0.99             | 4.34                            | 3.25             |
| for discontinued operation  | 0.99             |                                 | (0.02)           |

Table of Contentsf) **Remuneration of stockholders**

|   | <b>Remuneration attributed to Stockholders</b> |   |
|---|--|---|
|   | <b>Total amount</b>                            | <b>Amount per<br/>outstanding common<br/>or preferred share</b> |
| <b>Amount paid in 2010 regarding 2009</b> |  |   |
| First installment - April                 | 1,250  | 0.239797835   |
| Second installment - October              | 1,250  | 0.239542495   |
| Additional remuneration - October         | 500  | 0.095816998   |
| <b>Amount paid in 2011 regarding 2010</b> |  |   |
| First installment - April                 | 2,000  | 0.383268113   |
| Additional remuneration - August          | 3,000  | 0.576780063   |
| Second installment - August               | 2,000  | 0.389166668   |
| Additional remuneration - October         | 1,000  | 0.194583334   |
| <b>Amount paid in 2012 regarding 2011</b> |  |   |
| First installment - April                 | 3,000  | 0.588547644   |
| Second installment - October              | 3,000  | 0.582142779   |

The following, proposal for allocation of 2012 stockholders remuneration:

|  |              |
|--|--------------|
| <b>Net income</b>  | <b>5,956</b> |
| Legal reserve  | (267)        |
| Tax incentive reserve  | (292)        |
| <b>Adjusted net income</b>   | <b>5,397</b> |
| <b>Dividends:</b>  |              |
| Mandatory minimum - 25% (R\$ 0,232159874 per outstanding share as dividends)   | 1,196        |
| <b>Statutory dividend on preferred shares:</b>                                 |              |
| 3% of stockholders equity (R\$ 0,477840007 per outstanding share as dividends) | 940          |
| 6% of capital (R\$ 0,439814769 per outstanding share as dividends)             | 866          |
| <b>Remuneration:</b>   |              |
| Interest on capital anticipated in April 2012                                  | 1,731        |
| Interest on capital anticipated in October 2012                                | 1,334        |
| Interim dividends in October 2012  | 1,676        |
| <b>Remuneration to stockholders</b>  | <b>4,741</b> |

Table of Contents**25. Derivatives****a) Effects of Derivatives on the Statement of Financial Position**

|  | Assets            |             |                   |             |                   |             | Liabilities       |             |                   |             |                   |             |
|--|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|
|  | December 31, 2012 |             | December 31, 2011 |             | December 31, 2010 |             | December 31, 2012 |             | December 31, 2011 |             | December 31, 2010 |             |
|  | Current           | Non-current | Current           | Non-current | Current           | Non-current | Current           | Non-current | Current           | Non-current | Current           | Non-current |
| <b>Derivatives not designated as hedge</b>       |                   |             |                   |             |                   |             |                   |             |                   |             |                   |             |
| <b>Foreign exchange and interest rate risk</b>   |                   |             |                   |             |                   |             |                   |             |                   |             |                   |             |
| CDI & TJLP vs. US\$ fixed and floating rate swap | 249               | 1           | 410               | 60          |                   | 300         | 340               | 700         | 49                | 590         |                   |             |
| EURO floating rate vs. US\$ fixed rate swap      |                   |             |                   |             | 1                 |             |                   |             |                   |             |                   |             |
| US\$ floating rate vs. US\$ fixed rate swap      |                   |             |                   |             |                   |             |                   |             |                   |             | 4                 |             |
| Eurobonds Swap                                   |                   | 39          |                   |             |                   |             | 4                 | 18          | 4                 | 32          |                   | 8           |
| Treasury future                                  |                   |             | 19                |             |                   | 1           |                   |             | 5                 | 41          |                   |             |
| AUD floating rate vs. Fixed USD rate swap        |                   |             |                   |             | 2                 |             |                   |             |                   |             |                   |             |
| Pre dollar swap                                  | 16                |             |                   |             |                   |             |                   | 63          |                   |             |                   |             |
|  | <b>265</b>        | <b>40</b>   | <b>429</b>        | <b>60</b>   | <b>3</b>          | <b>301</b>  | <b>344</b>        | <b>781</b>  | <b>58</b>         | <b>663</b>  | <b>4</b>          | <b>8</b>    |
| <b>Commodities price risk</b>                    |                   |             |                   |             |                   |             |                   |             |                   |             |                   |             |
| Nickel:  |                   |             |                   |             |                   |             |                   |             |                   |             |                   |             |
| Fixed price program                              |                   |             | 1                 |             | 13                |             | 2                 |             | 1                 |             | 12                |             |
|  |                   |             |                   |             |                   |             |                   |             |                   |             | 15                |             |

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|  |            |           |            |           |           |            |            |            |           |            |           |    |           |
|--|------------|-----------|------------|-----------|-----------|------------|------------|------------|-----------|------------|-----------|----|-----------|
| Purchase program                       |            |           |            |           |           |            |            |            |           |            |           |    |           |
| Maritime Freight                       |            |           |            |           |           |            |            |            |           |            |           |    |           |
| Hiring Protection Program              |            |           |            |           |           |            |            |            |           |            |           |    | 2         |
| Bunker Oil Hedge                       |            | 4         |            | 16        |           |            |            |            |           |            |           |    |           |
| Coal                                   |            |           |            |           |           |            |            |            |           |            |           |    | 2         |
|  |            | <b>5</b>  |            | <b>29</b> |           |            | <b>2</b>   |            | <b>1</b>  |            |           |    | <b>31</b> |
| <b>Embedded derivatives</b>            |            |           |            |           |           |            |            |            |           |            |           |    |           |
| Gas                                    |            |           |            |           |           |            |            |            |           |            |           |    | 2         |
|  |            |           |            |           |           |            |            |            |           |            |           |    | 2         |
| <b>Derivatives designated as hedge</b> |            |           |            |           |           |            |            |            |           |            |           |    |           |
| Bunker Oil Hedge                       |            |           |            |           |           |            |            |            |           |            |           |    | 1         |
| Strategic Nickel                       | 13         |           | 161        |           |           |            |            |            |           |            |           | 14 | 53        |
| Foreign exchange cash flow hedge       |            |           |            |           |           |            |            |            |           |            |           |    |           |
| Aluminum                               |            | 3         | 5          |           |           |            |            |            |           |            |           |    | 20        |
|  | <b>16</b>  | <b>5</b>  | <b>161</b> |           | <b>20</b> |            | <b>1</b>   |            | <b>14</b> |            |           |    | <b>53</b> |
| <b>Total</b>                           | <b>281</b> | <b>45</b> | <b>595</b> | <b>60</b> | <b>52</b> | <b>301</b> | <b>347</b> | <b>783</b> | <b>73</b> | <b>663</b> | <b>35</b> |    | <b>61</b> |



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## b) Effects of derivatives in the statement of income

|  | Amount of gain or(loss) recognized as financial<br>income (expense) |             |             | Financial settlement (inflows)/ Outflows |              |                | Amount of gain or (loss) recognized in OCI |      |      |
|--|---|-------------|-------------|--|--------------|----------------|--|------|------|
|  | Year ended December 31,   |             |             | Year ended December 31,                  |              |                | Year ended December 31,                    |      |      |
|  | 2012  | 2011        | 2010        | 2012                                     | 2011         | 2010           | 2012                                       | 2011 | 2010 |
| <b>Derivatives not<br/>designated as hedge</b>         |   |             |             |  |              |                |  |      |      |
| <b>Foreign exchange<br/>and interest rate<br/>risk</b> |   |             |             |  |              |                |  |      |      |
| CDI & TJLP vs.<br>US\$ fixed and<br>floating rate swap | (315)   | (92)        | 451         | (325)                                    | (337)        | (956)          |  |      |      |
| EURO floating rate<br>vs. US\$ fixed rate<br>swap      |   |             | (1)         |  |              | 1              |  |      |      |
| US\$ floating rate vs.<br>US\$ fixed rate swap         |   |             | (2)         |  | 4            | 3              |  |      |      |
| Eurobonds Swap   | 50  | (30)        | (5)         | 4  | 1            | (1)            |  |      |      |
| Swap Convertibles                                      |   |             | 37          |  |              | (37)           |  |      |      |
| US\$ fixed rate vs.<br>CDI swap                        |   | 69          |             |  | (68)         |                |  |      |      |
| South African randes<br>forward                        |   | (8)         |             |  | 8            |                |  |      |      |
| Treasury future  | 9   | (12)        |             | (3)                                      | 6            |                |  |      |      |
| AUD floating rate vs.<br>Fixed USD rate swap           |   |             | 3           |  | (2)          | (9)            |  |      |      |
| Pre dollar swap  | (7)   | (23)        | 4           | (19)                                     | (1)          | (2)            |  |      |      |
|  | <b>(263)</b>  | <b>(96)</b> | <b>487</b>  | <b>(343)</b>                             | <b>(389)</b> | <b>(1,001)</b> |  |      |      |
| <b>Commodities price<br/>risk</b>                      |   |             |             |  |              |                |  |      |      |
| Nickel:  |   |             |             |  |              |                |  |      |      |
| Fixed price program                                    | (1)   | 39          | 4           | 2  | (41)         | (7)            |  |      |      |
| Strategic program                                      |   | 15          | (87)        |  |              | 105            |  |      |      |
| Copper:  |   | 1           |             |  |              |                |  |      |      |
| Maritime Freight<br>Hiring                             |   |             |             |  |              |                |  |      |      |
| Protection Program                                     |   |             | (5)         |  | 2            | (24)           |  |      |      |
| Bunker Oil Hedge                                       | 1   | 37          | 4           | (5)                                      | (48)         | (34)           |  |      |      |
| Aluminum   |   |             |             |  | 7            | 16             |  |      |      |
| Coal   |   |             | (4)         |  | 2            | 3              |  |      |      |
|  |   | <b>92</b>   | <b>(88)</b> | <b>(3)</b>                               | <b>(78)</b>  | <b>59</b>      |  |      |      |
| <b>Embedded<br/>derivatives</b>                        |   |             |             |  |              |                |  |      |      |
| Gas  | (2)   |             |             |  |              |                |  |      |      |
| Energy - Aluminum<br>options                           |   | (7)         | (51)        |  |              |                |  |      |      |
|  | <b>(2)</b>  | <b>(7)</b>  | <b>(51)</b> |  |              |                |  |      |      |
| <b>Derivatives<br/>designated as hedge</b>             |   |             |             |  |              |                |  |      |      |

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|                                  |              |           |            |              |              |                |              |            |
|----------------------------------|--------------|-----------|------------|--------------|--------------|----------------|--------------|------------|
| Bunker Oil Hedge                 |              |           | (1)        | 47           | (1)          |                |              |            |
| Strategic Nickel                 | 172          | 49        | (1)        | (172)        | (48)         |                | (149)        | 184        |
| Foreign exchange cash flow hedge | (27)         | 37        | 284        | 26           | (50)         | (330)          | 29           | (60)       |
| Aluminum                         |              |           |            |              |              |                |              | 5          |
|                                  | <b>145</b>   | <b>86</b> | <b>283</b> | <b>(147)</b> | <b>(98)</b>  | <b>(283)</b>   | <b>(121)</b> | <b>129</b> |
| <b>Total</b>                     | <b>(120)</b> | <b>75</b> | <b>631</b> | <b>(493)</b> | <b>(565)</b> | <b>(1,225)</b> | <b>(121)</b> | <b>25</b>  |

The maturities dates of the consolidated financial instruments are as follows:

|              | <b>Maturities dates</b> |
|--------------|-------------------------|
| Moedas/Juros | Janeiro 2023            |
| Gás          | Abril 2016              |
| Niquel       | Abril 2013              |
| Cobre        | Abril 2013              |

Table of Contents**Sensitivity analysis for Derivatives Instruments (all amounts in US\$ million)****Sensitivity analysis - Foreign Exchange and Interest Rate Derivative Positions***Amounts in US\$ million*

| <b>Program</b>  | <b>Instrument</b>  | <b>Risk</b>                                    | <b>Fair Value</b>                         | <b>Scenario I</b> | <b>Scenario II</b> | <b>Scenario III</b> | <b>Scenario IV</b> |       |
|---|--|--|---|-------------------|--------------------|---------------------|--------------------|-------|
| Protection program for the Real denominated debt indexed to CDI | CDI vs. USD fixed rate swap                                      | USD/BRL fluctuation                            |   | (1.158)           | 1.158              | (2.317)             | 2.317              |       |
|   |  | USD interest rate inside Brazil variation      | (523)                                     | (38)              | 37                 | (77)                | 72                 |       |
|   |  | Brazilian interest rate fluctuation            |   | (9)               | 8                  | (18)                | 15                 |       |
|   |  | USD Libor variation                            |   | (0)               | 0                  | (1)                 | 1                  |       |
|   |  | <b>Protected Items - Real denominated debt</b> | <b>USD/BRL fluctuation</b>                | <b>n.a.</b>       |                    |                     |                    |       |
|   | Protection program for the Real denominated debt indexed to TJLP | TJLP vs. USD fixed rate swap                   | USD/BRL fluctuation                       |                   | (607)              | 607                 | (1.214)            | 1.214 |
|   |  |  | USD interest rate inside Brazil variation | (184)             | (44)               | 42                  | (91)               | 82    |
|   |  |  | Brazilian interest rate fluctuation       |                   | (127)              | 140                 | (242)              | 296   |
|   |  |  | TJLP interest rate fluctuation            |                   | (94)               | 93                  | (189)              | 190   |
|   |  |  | USD Libor variation                       |                   | 0                  | 0                   | 0                  | 0     |
| TJLP vs. USD floating rate swap                                 |  | USD/BRL fluctuation                            |   | (81)              | 81                 | (162)               | 162                |       |
|   |  | USD interest rate inside Brazil variation      | (42)                                      | (7)               | 6                  | (14)                | 12                 |       |
|   |  | Brazilian interest rate fluctuation            |   | (16)              | 18                 | (31)                | 39                 |       |
|   |  | TJLP interest rate fluctuation                 |   | (12)              | 12                 | (25)                | 25                 |       |
|   |  | USD Libor variation                            |   | (3)               | 3                  | (6)                 | 6                  |       |
| <b>Protected Items - Real denominated debt</b>                  | <b>USD/BRL fluctuation</b>                                       | <b>n.a.</b>                                    |   |                   |                    |                     |                    |       |
| Protection program for the Real denominated fixed rate debt     | BRL fixed rate vs. USD   | USD/BRL fluctuation                            |   | (101)             | 101                | (203)               | 203                |       |
|   |  | USD interest rate inside Brazil variation      | (47)                                      | (5)               | 5                  | (11)                | 10                 |       |
|   |  | Brazilian interest rate fluctuation            |   | (17)              | 19                 | (33)                | 39                 |       |
|   |  | <b>Protected Items - Real denominated debt</b> | <b>USD/BRL fluctuation</b>                | <b>n.a.</b>       |                    |                     |                    |       |

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| <b>Protected Items - Real denominated debt</b>                                      |  |                            |             |              |              |              |              |
|---|--|----------------------------|-------------|--------------|--------------|--------------|--------------|
| Protection Program for the Euro denominated debt                                    | EUR fixed rate vs. USD fixed rate swap         | USD/BRL fluctuation        |             | (4)          | 4            | (8)          | 8            |
|   |  | EUR/USD fluctuation        | 17          | (380)        | 380          | (760)        | 760          |
|   |  | EUR Libor variation        |             | (24)         | 26           | (47)         | 54           |
|   |  | USD Libor variation        |             | (28)         | 26           | (59)         | 50           |
|   | <b>Protected Items - Euro denominated debt</b> | <b>EUR/USD fluctuation</b> | <b>n.a.</b> | <b>380</b>   | <b>(380)</b> | <b>760</b>   | <b>(760)</b> |
| <b>Foreign Exchange hedging program for disbursements in Canadian dollars (CAD)</b> |  |                            |             |              |              |              |              |
| CAD Forward   | CAD Forward                                    | USD/BRL fluctuation        |             | (2)          | 2            | (4)          | 4            |
|   |  | CAD/USD fluctuation        | 8           | (334)        | 334          | (668)        | 668          |
|   |  | CAD Libor variation        |             | (6)          | 6            | (12)         | 12           |
|   |  | USD Libor variation        |             | (2)          | 2            | (3)          | 3            |
| <b>Protected Items - Disbursement in Canadian dollars</b>                           | <b>CAD/USD fluctuation</b>                     | <b>n.a.</b>                | <b>334</b>  | <b>(334)</b> | <b>668</b>   | <b>(668)</b> |              |

**Sensitivity analysis - Commodity Derivative Positions**

*Amounts in US\$ million*

|   |  |   |                                 |             |              |            |              |
|---|--|---|---------------------------------|-------------|--------------|------------|--------------|
| Nickel purchase protection program                                    | Sale of nickel future/forward contracts  | Nickel price fluctuation  |                                 | (1)         | 1            | (2)        | 2            |
|   |  | Libor USD fluctuation   | 0                               | 0           | 0            | 0          | 0            |
|   |  | USD/BRL fluctuation   |                                 | 0           | 0            | 0          | 0            |
|   |  | <b>Protected Item: Part of Vale's revenues linked to Nickel price</b> | <b>Nickel price fluctuation</b> | <b>n.a.</b> | <b>1</b>     | <b>(1)</b> | <b>2</b>     |
|   | Copper Scrap Purchase Protection Program | Sale of copper future/forward contracts                               | Copper price fluctuation        |             | (0,9)        | 0,9        | (1,7)        |
| Libor USD fluctuation   |  |   | 0,01                            | 0           | 0            | 0          | 0            |
| BRL/USD fluctuation   |  |   |                                 | 0           | 0            | 0          | 0            |
| <b>Protected Item: Part of Vale's revenues linked to Copper price</b> |  | <b>Copper price fluctuation</b>                                       | <b>n.a.</b>                     | <b>0,9</b>  | <b>(0,9)</b> | <b>1,7</b> | <b>(1,7)</b> |

**Sensitivity analysis - Embedded Derivative Positions**

*Amounts in US\$ million*

|   |  |                          |       |      |    |      |    |
|---|--|--------------------------|-------|------|----|------|----|
| Embedded derivatives - Raw material purchase (Nickel)               | Embedded derivatives - Raw material purchase | Nickel price fluctuation |       | (11) | 11 | (21) | 21 |
|   |  | BRL/USD fluctuation      | 1,0   | 0    | 0  | 0    | 0  |
| Embedded derivatives - Raw material purchase (Copper)               | Embedded derivatives - Raw material purchase | Copper price fluctuation |       | (14) | 14 | (29) | 29 |
|   |  | BRL/USD fluctuation      | 0,4   | 0    | 0  | 0    | 0  |
| Embedded derivatives - Gas purchase for Pelletizing Company in Oman | Embedded derivatives - Gas purchase          | Pellet price fluctuation |       | (3)  | 2  | (9)  | 2  |
|   |  | BRL/USD fluctuation      | (2,3) | (1)  | 1  | (1)  | 1  |

Sensitivity analysis

Debt and Cash Investments

Amounts in US\$ million

|                  |                         |                     |      |    |      |    |
|------------------|-------------------------|---------------------|------|----|------|----|
| Funding          | Debt denominated in BRL | No fluctuation      |      |    |      |    |
| Cash Investments | Cash denominated in BRL | No fluctuation      |      |    |      |    |
| Cash Investments | Cash denominated in EUR | EUR/BRL fluctuation | (17) | 17 | (34) | 34 |
| Cash Investments | Cash denominated in GBP | GBP/BRL fluctuation | (3)  | 3  | (6)  | 6  |

Table of Contents**26 - Information by Business Segment and Consolidated Revenues by Geographic Area**

The information presented to the Executive Board with the respective performance of each segment are usually derived from the accounting records maintained in accordance with the best accounting practices, with some reallocation between segments.

**a) Results by segment**

|  | Year ended as of December 31, 2012 |                |              |              |                | Total         |
|--|------------------------------------|----------------|--------------|--------------|----------------|---------------|
|  | Bulk Materials                     | Basic Metals   | Fertilizers  | Logistic     | Others         |               |
| <b>Results</b>   |                                    |                |              |              |                |               |
| Net revenues   | 35,126                             | 7,131          | 3,570        | 1,387        | 480            | 47,694        |
| Cost and expenses  | (17,692)                           | (6,563)        | (2,940)      | (1,346)      | (1,011)        | (29,552)      |
| Loss on sale of assets                                   | (377)                              |                | (129)        |              |                | (506)         |
| Impairment on assets                                     | (1,029)                            | (2,848)        |              |              | (146)          | (4,023)       |
| Depreciation, depletion and amortization                 | (1,899)                            | (1,647)        | (463)        | (238)        | (41)           | (4,288)       |
| <b>Operating income</b>                                  | <b>14,129</b>                      | <b>(3,927)</b> | <b>38</b>    | <b>(197)</b> | <b>(718)</b>   | <b>9,325</b>  |
| Financial result   | (4,209)                            | 194            | (46)         | (60)         | 14             | (4,107)       |
| Equity results from associates and joint ventures        | 771                                | (20)           |              | 112          | (218)          | 645           |
| Income taxes   | (337)                              | 75             | 1,206        | (18)         | 268            | 1,194         |
| Impairment on investment                                 |                                    | (975)          |              |              | (966)          | (1,941)       |
| Noncontrolling interests                                 | 65                                 | 207            | (54)         |              | 39             | 257           |
| <b>Income attributable to the company's stockholders</b> | <b>10,419</b>                      | <b>(4,446)</b> | <b>1,144</b> | <b>(163)</b> | <b>(1,581)</b> | <b>5,373</b>  |
| <b>Sales classified by geographic area:</b>              |                                    |                |              |              |                |               |
| America, except United States                            | 715                                | 996            | 60           | 36           | 16             | 1,823         |
| United States of America                                 | 108                                | 1,137          | 53           |              | 36             | 1,334         |
| Europe   | 5,834                              | 2,194          | 148          |              | 23             | 8,199         |
| Middle East/Africa/Oceania                               | 1,550                              | 96             | 7            |              |                | 1,653         |
| Japan  | 4,202                              | 722            |              |              | 7              | 4,931         |
| China  | 16,743                             | 895            |              |              |                | 17,638        |
| Asia, except Japan and China                             | 2,947                              | 1,009          | 91           |              | 2              | 4,049         |
| Brazil   | 3,027                              | 82             | 3,211        | 1,351        | 396            | 8,067         |
| <b>Net revenue</b>                                       | <b>35,126</b>                      | <b>7,131</b>   | <b>3,570</b> | <b>1,387</b> | <b>480</b>     | <b>47,694</b> |

Year ended as of December 31, 2011

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|  | Bulk Materials | Basic Metals | Fertilizers  | Logistic     | Others         | Total         |
|--|----------------|--------------|--------------|--------------|----------------|---------------|
| <b>Results</b>   |                |              |              |              |                |               |
| Net revenues   | 46,088         | 9,599        | 3,322        | 1,456        | 481            | 60,946        |
| Cost and expenses  | (16,255)       | (6,745)      | (2,632)      | (1,318)      | (1,285)        | (28,235)      |
| Gain on sale of assets                                   |                | 1,494        |              |              |                | 1,494         |
| Depreciation, depletion and amortization                 | (1,669)        | (1,572)      | (458)        | (229)        | (16)           | (3,944)       |
| <b>Operating income</b>                                  | <b>28,164</b>  | <b>2,776</b> | <b>232</b>   | <b>(91)</b>  | <b>(820)</b>   | <b>30,261</b> |
| Financial result   | (3,240)        | 21           | (70)         | (200)        | (84)           | (3,573)       |
| Equity results from associates and joint ventures        | 1,098          | 101          |              | 125          | (186)          | 1,138         |
| Income taxes   | (4,205)        | (948)        | (109)        | (9)          |                | (5,271)       |
| Noncontrolling interests                                 | 105            | 88           | (31)         |              | 71             | 233           |
| <b>Income attributable to the Company's stockholders</b> | <b>21,922</b>  | <b>2,038</b> | <b>22</b>    | <b>(175)</b> | <b>(1,019)</b> | <b>22,788</b> |
| <b>Sales classified by geographic area:</b>              |                |              |              |              |                |               |
| America, except United States                            | 1,181          | 1,380        | 44           |              | 21             | 2,626         |
| United States of America                                 | 98             | 1,571        | 1            |              | 2              | 1,672         |
| Europe   | 8,815          | 2,456        | 153          |              | 62             | 11,486        |
| Middle East/Africa/Oceania                               | 1,767          | 150          | 1            |              | 1              | 1,919         |
| Japan  | 5,987          | 1,243        |              |              | 8              | 7,238         |
| China  | 20,086         | 1,235        |              |              | 99             | 21,420        |
| Asia, except Japan and China                             | 3,640          | 1,394        | 35           |              | 1              | 5,070         |
| Brazil   | 4,514          | 170          | 3,088        | 1,456        | 287            | 9,515         |
| <b>Net revenue</b>                                       | <b>46,088</b>  | <b>9,599</b> | <b>3,322</b> | <b>1,456</b> | <b>481</b>     | <b>60,946</b> |

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|  | Year ended as of December 31, 2010 |              |              |              |                | Total         |
|--|------------------------------------|--------------|--------------|--------------|----------------|---------------|
|  | Bulk Materials                     | Basic Metals | Fertilizers  | Logistic     | Others         |               |
| <b>Results</b>   |                                    |              |              |              |                |               |
| Net revenues   | 35,513                             | 8,139        | 1,739        | 1,235        | 403            | 47,029        |
| Cost and expenses  | (12,624)                           | (5,888)      | (1,563)      | (890)        | (264)          | (21,229)      |
| Research and development                                 | (289)                              | (277)        | (72)         | (75)         | (165)          | (878)         |
| Depreciation, depletion and amortization                 | (1,368)                            | (1,359)      | (200)        | (146)        | (19)           | (3,092)       |
| <b>Operating income</b>                                  | <b>21,232</b>                      | <b>615</b>   | <b>(96)</b>  | <b>124</b>   | <b>(45)</b>    | <b>21,830</b> |
| Financial result   | (525)                              | (78)         | 25           | (27)         | (958)          | (1,563)       |
| Discontinued operations, net of tax                      |                                    | (125)        |              |              |                | (125)         |
| Equity results from associates                           | 1,023                              | (10)         |              | 94           | (110)          | 997           |
| Income taxes   | (3,974)                            | 250          | (10)         | 15           | 27             | (3,692)       |
| Noncontrolling interests                                 | 4                                  | (209)        | 19           |              | (4)            | (190)         |
| <b>Income attributable to the company's stockholders</b> | <b>17,760</b>                      | <b>443</b>   | <b>(62)</b>  | <b>206</b>   | <b>(1,090)</b> | <b>17,257</b> |
| <b>Sales classified by geographic area:</b>              |                                    |              |              |              |                |               |
| America, except United States                            | 823                                | 1,170        | 32           | 12           | 4              | 2,041         |
| United States of America                                 | 77                                 | 740          |              |              | 15             | 832           |
| Europe   | 6,833                              | 2,067        | 4            |              | 44             | 8,948         |
| Middle East/Africa/Oceania                               | 1,569                              | 217          | 11           |              |                | 1,797         |
| Japan  | 3,859                              | 1,371        |              |              | 10             | 5,240         |
| China  | 16,088                             | 923          |              |              | 24             | 17,035        |
| Asia, except Japan and China                             | 2,712                              | 1,445        | 8            |              | 9              | 4,174         |
| Brazil   | 3,552                              | 206          | 1,684        | 1,223        | 297            | 6,962         |
| <b>Net revenue</b>                                       | <b>35,513</b>                      | <b>8,139</b> | <b>1,739</b> | <b>1,235</b> | <b>403</b>     | <b>47,029</b> |



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|                               | Year ended in December 31, 2012 |                   |                          |                                   |                  |  |                |                  |  |  |            |
|-------------------------------|---------------------------------|-------------------|--------------------------|-----------------------------------|------------------|--|----------------|------------------|--|--|------------|
|                               | Net revenues                    | Cost and expenses | Research and development | Pre operation and idle capacities | Operating profit | Depreciation, depletion and amortization | Impairment     | Operating income | Property, plant and equipment and intangible | Additions to property, plant and equipment | Investment |
| <b>Bulk Material</b>          |                                 |                   |                          |                                   |                  |  |                |                  |  |  |            |
| Iron ore                      | 26,931                          | (12,473)          | (617)                    |                                   | 13,841           | (1,421)                                  |                | 12,420           | 35,135                                       | 7,691                                      |            |
| Pellets                       | 6,560                           | (2,387)           |                          | (321)                             | 3,852            | (235)                                    |                | 3,617            | 2,019  | 383  | 1          |
| Manganese and ferroalloys     | 543                             | (353)             |                          |                                   | 190              | (45)                                     |                | 145              | 302  | 177  |            |
| Coal                          | 1,092                           | (1,398)           | (115)                    | (28)                              | (449)            | (198)                                    | (1,029)        | (1,676)          | 3,616  | 1,082                                      |            |
|                               | <b>35,126</b>                   | <b>(16,611)</b>   | <b>(732)</b>             | <b>(349)</b>                      | <b>17,434</b>    | <b>(1,899)</b>                           | <b>(1,029)</b> | <b>14,506</b>    | <b>41,072</b>                                | <b>9,333</b>                               | <b>1</b>   |
| <b>Base Metals</b>            |                                 |                   |                          |                                   |                  |  |                |                  |  |  |            |
| Nickel and other products (a) | 5,975                           | (4,142)           | (299)                    | (1,029)                           | 505              | (1,508)                                  | (2,848)        | (3,851)          | 30,474                                       | 2,792                                      |            |
| Copper (b)                    | 1,156                           | (876)             | (96)                     | (121)                             | 63               | (139)                                    |                | (76)             | 4,536  | 819  |            |
| Aluminum products             |                                 |                   |                          |                                   |                  |  |                |                  |  |  | 2          |
|                               | <b>7,131</b>                    | <b>(5,018)</b>    | <b>(395)</b>             | <b>(1,150)</b>                    | <b>568</b>       | <b>(1,647)</b>                           | <b>(2,848)</b> | <b>(3,927)</b>   | <b>35,010</b>                                | <b>3,611</b>                               | <b>2</b>   |
| <b>Fertilizers</b>            |                                 |                   |                          |                                   |                  |  |                |                  |  |  |            |
| Potash                        | 290                             | (171)             | (73)                     |                                   | 46               | (23)                                     |                | 23               | 2,209  | 1,333                                      |            |
| Phosphates                    | 2,507                           | (1,947)           | (36)                     | (93)                              | 431              | (331)                                    |                | 100              | 8,209  | 293  |            |
| Nitrogen                      | 699                             | (620)             |                          |                                   | 79               | (109)                                    |                | (30)             |  | 40   |            |
| Others fertilizers products   | 74                              |                   |                          |                                   | 74               |  |                | 74               | 331  | 12   |            |
|                               | <b>3,570</b>                    | <b>(2,738)</b>    | <b>(109)</b>             | <b>(93)</b>                       | <b>630</b>       | <b>(463)</b>                             |                | <b>167</b>       | <b>10,749</b>                                | <b>1,678</b>                               |            |
| <b>Logistics</b>              |                                 |                   |                          |                                   |                  |  |                |                  |  |  |            |
| Railroads                     | 936                             | (1,012)           | (12)                     |                                   | (88)             | (182)                                    |                | (270)            | 2,370  | 455  |            |
| Ports                         | 451                             | (322)             |                          |                                   | 129              | (56)                                     |                | 73               | 602  | 94   |            |
| Ships                         |                                 |                   |                          |                                   |                  |  |                |                  | 2,353  | 213  |            |
|                               | <b>1,387</b>                    | <b>(1,334)</b>    | <b>(12)</b>              |                                   | <b>41</b>        | <b>(238)</b>                             |                | <b>(197)</b>     | <b>5,325</b>                                 | <b>762</b>                                 |            |
| <b>Others</b>                 | 480                             | (781)             | (230)                    |                                   | (531)            | (41)                                     | (146)          | (718)            | 1,937  | 393  | 1          |
| <b>Loss on sale of assets</b> |                                 |                   |                          |                                   |                  |  |                |                  |  |  |            |
|                               |                                 | (506)             |                          |                                   | (506)            |  |                | (506)            |  |  | 6          |
|                               | <b>47,694</b>                   | <b>(26,988)</b>   | <b>(1,478)</b>           | <b>(1,592)</b>                    | <b>17,636</b>    | <b>(4,288)</b>                           | <b>(4,023)</b> | <b>9,325</b>     | <b>94,093</b>                                | <b>15,777</b>                              | <b>7</b>   |

(a) Includes nickel co-products and by-products (Copper, precious metals, cobalt and others).

(b) Includes copper concentrate.



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|                               | Year ended December 31, 2011 |                   |                          |                                 |                  |  |                  |  |  |    |
|-------------------------------|------------------------------|-------------------|--------------------------|---------------------------------|------------------|--|------------------|--|--|----|
|                               | Net revenues                 | Cost and expenses | Research and development | Pre operation and idle capacity | Operating profit | Depreciation, depletion and amortization | Operating income | Property, plant, equipment and intangible assets | Additions to property, plant and equipment | In |
| <b>Bulk Material</b>          |                              |                   |                          |                                 |                  |  |                  |  |  |    |
| Iron ore                      | 36,416                       | (10,471)          | (497)                    |                                 | 25,448           | (1,240)                                  | 24,208           | 31,027   | 7,409                                      |    |
| Pellets                       | 7,938                        | (3,209)           |                          | (106)                           | 4,623            | (196)                                    | 4,427            | 2,841  | 624  |    |
| Manganese and ferroalloys     | 676                          | (594)             |                          |                                 | 82               | (69)                                     | 13               | 337  | 177  |    |
| Coal                          | 1,058                        | (1,125)           | (152)                    | (101)                           | (320)            | (164)                                    | (484)            | 4,081  | 1,141                                      |    |
|                               | <b>46,088</b>                | <b>(14,543)</b>   | <b>(649)</b>             | <b>(207)</b>                    | <b>29,833</b>    | <b>(1,669)</b>                           | <b>28,164</b>    | <b>38,286</b>                                    | <b>9,351</b>                               |    |
| <b>Base Metals</b>            |                              |                   |                          |                                 |                  |  |                  |  |  |    |
| Nickel and other products (a) | 8,118                        | (4,338)           | (254)                    | (976)                           | 2,550            | (1,487)                                  | 1,063            | 31,455   | 2,637                                      |    |
| Copper (b)                    | 1,103                        | (702)             | (159)                    | (12)                            | 230              | (84)                                     | 146              | 4,178  | 1,226                                      |    |
| Aluminum products             | 378                          | (304)             |                          |                                 | 74               | (1)                                      | 73               |  | 16   |    |
|                               | <b>9,599</b>                 | <b>(3,943)</b>    | <b>(413)</b>             | <b>(988)</b>                    | <b>2,854</b>     | <b>(1,572)</b>                           | <b>1,282</b>     | <b>35,633</b>                                    | <b>3,879</b>                               |    |
| <b>Fertilizers</b>            |                              |                   |                          |                                 |                  |  |                  |  |  |    |
| Potash                        | 273                          | (239)             | (50)                     | (26)                            | (42)             | (45)                                     | (87)             | 1,982  | 532  |    |
| Phosphates                    | 2,300                        | (1,634)           | (54)                     | (72)                            | 540              | (297)                                    | 243              | 6,363  | 316  |    |
| Nitrogen                      | 679                          | (557)             |                          |                                 | 122              | (116)                                    | 6                | 1,337  | 180  |    |
| Others fertilizers products   | 70                           |                   |                          |                                 | 70               |  | 70               | 364  |  |    |
|                               | <b>3,322</b>                 | <b>(2,228)</b>    | <b>(104)</b>             | <b>(98)</b>                     | <b>690</b>       | <b>(458)</b>                             | <b>232</b>       | <b>10,046</b>                                    | <b>1,028</b>                               |    |
| <b>Logistics</b>              |                              |                   |                          |                                 |                  |  |                  |  |  |    |
| Railroads                     | 1,043                        | (882)             | (121)                    |                                 | 40               | (179)                                    | (139)            | 2,249  | 213  |    |
| Ports                         | 413                          | (315)             |                          |                                 | 98               | (50)                                     | 48               | 946  | 347  |    |
| Ships                         |                              |                   |                          |                                 |                  |  |                  | 2,485  | 308  |    |
|                               | <b>1,456</b>                 | <b>(1,076)</b>    | <b>(121)</b>             |                                 | <b>138</b>       | <b>(229)</b>                             | <b>(91)</b>      | <b>5,680</b>                                     | <b>868</b>                                 |    |
| <b>Others</b>                 |                              |                   |                          |                                 |                  |  |                  |  |  |    |
|                               | 481                          | (898)             | (387)                    |                                 | (804)            | (16)                                     | (820)            | 2,218  | 949  |    |
| <b>Loss on sale of assets</b> |                              |                   |                          |                                 |                  |  |                  |  |  |    |
|                               |                              | 1,494             |                          |                                 | 1,494            |  | 1,494            |  |  |    |
|                               | <b>60,946</b>                | <b>(18,227)</b>   | <b>(1,674)</b>           | <b>(1,293)</b>                  | <b>34,205</b>    | <b>(3,944)</b>                           | <b>30,261</b>    | <b>91,863</b>                                    | <b>16,075</b>                              |    |

(a) Includes nickel co-products and by-products (Copper, precious metals, cobalt and others).

(b) Includes copper concentrate.



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|                               | Year ended December 31, 2010 |                   |                          |                                 |                  |  |                  |  |  |            |
|-------------------------------|------------------------------|-------------------|--------------------------|---------------------------------|------------------|--|------------------|--|--|------------|
|                               | Net revenues                 | Cost and expenses | Research and development | Pre operation and idle capacity | Operating profit | Depreciation, depletion and amortization | Operating income | Property, plant, equipment and intangible assets | Additions to property, plant and equipment | Investment |
| <b>Bulk Material</b>          |                              |                   |                          |                                 |                  |  |                  |  |  |            |
| Iron ore                      | 27,754                       | (8,856)           | (226)                    | (18)                            | 18,654           | (1,139)                                  | 17,515           | 31,662   | 4,015                                      | 10         |
| Pellets                       | 6,136                        | (2,510)           |                          | (5)                             | 3,621            | (110)                                    | 3,511            | 2,567  | 353  | 9          |
| manganese and Ferroalloys     | 853                          | (442)             |                          |                                 | 411              | (36)                                     | 375              | 330  | 28   |            |
| Coal                          | 770                          | (684)             | (63)                     | (109)                           | (86)             | (83)                                     | (169)            | 3,020  | 499  | 2          |
|                               | <b>35,513</b>                | <b>(12,492)</b>   | <b>(289)</b>             | <b>(132)</b>                    | <b>22,600</b>    | <b>(1,368)</b>                           | <b>21,232</b>    | <b>37,579</b>                                    | <b>4,895</b>                               | <b>1,2</b> |
| <b>Base Metals</b>            |                              |                   |                          |                                 |                  |  |                  |  |  |            |
| Nickel and other products (a) |                              |                   |                          |                                 |                  |  |                  |  |  |            |
|                               | 4,712                        | (2,330)           | (171)                    | (934)                           | 1,277            | (1,145)                                  | 132              | 29,026   | 1,880                                      |            |
| Copper (b)                    | 905                          | (475)             | (95)                     | (51)                            | 284              | (87)                                     | 197              | 3,545  | 1,072                                      | 9          |
| Aluminum products             | 2,522                        | (2,098)           | (11)                     |                                 | 413              | (127)                                    | 286              | 395  | 342  | 14         |
|                               | <b>8,139</b>                 | <b>(4,903)</b>    | <b>(277)</b>             | <b>(985)</b>                    | <b>1,974</b>     | <b>(1,359)</b>                           | <b>615</b>       | <b>32,966</b>                                    | <b>3,294</b>                               | <b>24</b>  |
| <b>Fertilizers</b>            |                              |                   |                          |                                 |                  |  |                  |  |  |            |
| Potash                        | 269                          | (213)             | (56)                     |                                 |                  | (29)                                     | (29)             | 1,664  | 355  |            |
| Phosphates                    | 1,164                        | (1,054)           | (16)                     |                                 | 94               | (121)                                    | (27)             | 7,612  | 438  |            |
| Nitrogen                      | 294                          | (285)             |                          |                                 | 9                | (50)                                     | (41)             | 809  | 47   |            |
| Others fertilizers products   | 12                           | (11)              |                          |                                 | 1                |  | 1                | 146  | 3  |            |
|                               | <b>1,739</b>                 | <b>(1,563)</b>    | <b>(72)</b>              |                                 | <b>104</b>       | <b>(200)</b>                             | <b>(96)</b>      | <b>10,231</b>                                    | <b>843</b>                                 |            |
| <b>Logistics</b>              |                              |                   |                          |                                 |                  |  |                  |  |  |            |
| Railroads                     | 924                          | (641)             | (75)                     |                                 | 208              | (123)                                    | 85               | 2,348  | 160  | 5          |
| Ports                         | 306                          | (236)             |                          |                                 | 70               | (23)                                     | 47               | 301  | 36   |            |
| Ships                         | 5                            | (13)              |                          |                                 | (8)              |  | (8)              | 747  | 747  | 1          |
|                               | <b>1,235</b>                 | <b>(890)</b>      | <b>(75)</b>              |                                 | <b>270</b>       | <b>(146)</b>                             | <b>124</b>       | <b>3,396</b>                                     | <b>943</b>                                 | <b>6</b>   |
| <b>Others</b>                 | 403                          | (264)             | (165)                    |                                 | (26)             | (19)                                     | (45)             | 1,943  | 2,672                                      | 2,2        |
|                               | <b>47,029</b>                | <b>(20,112)</b>   | <b>(878)</b>             | <b>(1,117)</b>                  | <b>24,922</b>    | <b>(3,092)</b>                           | <b>21,830</b>    | <b>86,115</b>                                    | <b>12,647</b>                              | <b>4,3</b> |

(a) Includes nickel co-products and by-products (Copper, precious metals, cobalt and others).

(b) Includes copper concentrate.

Table of Contents**27 - Cost of Goods Sold and Services Rendered, and Sales and Administrative Expenses by Nature, Other Operational Expenses (incomes), net****The costs of goods sold and services rendered**

| Cost of goods sold and services rendered | Year ended December 31, |               |               |
|--|-------------------------|---------------|---------------|
|  | 2012                    | 2011          | 2010          |
| Personnel                                | 3,545                   | 3,138         | 2,133         |
| Material                                 | 4,262                   | 3,758         | 3,036         |
| Fuel oil and gas                         | 2,070                   | 2,181         | 1,931         |
| Outsourcing services                     | 4,770                   | 4,244         | 2,826         |
| Energy                                   | 866                     | 968           | 1,252         |
| Acquisition of products                  | 1,367                   | 2,274         | 1,671         |
| Depreciation and depletion               | 3,896                   | 2,555         | 2,654         |
| Freight                                  | 2,801                   | 2,251         | 1,736         |
| Others                                   | 2,905                   | 4,002         | 3,181         |
| <b>Total</b>                             | <b>26,483</b>           | <b>25,371</b> | <b>20,420</b> |

**Selling and administrative expenses**

| Selling and Administrative expenses              | Year ended December 31, |              |              |
|--|-------------------------|--------------|--------------|
|  | 2012                    | 2011         | 2010         |
| Personnel  | 806                     | 717          | 444          |
| Services (consulting, infrastructure and others) | 489                     | 527          | 347          |
| Advertising and publicity                        | 101                     | 88           | 113          |
| Depreciation                                     | 240                     | 211          | 231          |
| Travel expenses                                  | 65                      | 60           | 28           |
| Taxes and rents                                  | 28                      | 46           | 51           |
| Incentive  |                         | 94           | 77           |
| Others   | 223                     | 246          | 130          |
| Sales  | 288                     | 335          | 275          |
| <b>Total</b>                                     | <b>2,240</b>            | <b>2,324</b> | <b>1,696</b> |

**Others operational expenses (incomes), net, including research and development**

| Others operational expenses (income), net, including research and development | Year ended December 31, |      |      |
|---|-------------------------|------|------|
|   | 2012                    | 2011 | 2010 |
|   |                         |      |      |

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|  |              |              |              |
|--|--------------|--------------|--------------|
| Provision for contingency                          | 694          | 284          | 141          |
| Provision for loss with taxes credits (ICMS)       | 238          | 50           | 122          |
| Provision for variable remuneration                | 440          | 402          | 238          |
| Vale do Rio Doce Foundation - FVRD                 | 37           | 123          | 55           |
| Provision for disposal of materials/inventories    | 128          | 49           | 108          |
| Pre operational, plant stoppages and idle capacity | 1,592        | 1,293        | 1,117        |
| Damage cost  | 65           |              |              |
| Research and development                           | 1,478        | 1,674        | 878          |
| Others   | 445          | 609          | 424          |
| <b>Total</b>                                       | <b>5,117</b> | <b>4,484</b> | <b>3,083</b> |

Table of Contents**28 - Financial result**

The financial results occurred in the periods, recorded by nature and competence, are as follows:

|  | 2012           | Year ended December 31,<br>2011 | 2010           |
|--|----------------|---------------------------------|----------------|
| <b>Financial expenses</b>                    |                |                                 |                |
| Interest                                     | (1,251)        | (1,388)                         | (1,186)        |
| Labor, tax and civil contingencies           | (78)           | (41)                            | (161)          |
| Derivatives                                  | (648)          | (172)                           | (156)          |
| Monetary and exchange rate variation (a)     | (2,647)        | (2,584)                         | (354)          |
| Stockholders debentures                      | (466)          | (222)                           | (492)          |
| Financial taxes                              | (17)           | (26)                            | (77)           |
| Others                                       | (602)          | (1,047)                         | (912)          |
|  | <b>(5,709)</b> | <b>(5,480)</b>                  | <b>(3,338)</b> |
| <b>Financial income</b>                      |                |                                 |                |
| Related parties                              |                |                                 |                |
| Derivatives                                  | 528            | 247                             | 787            |
| Monetary and exchange rate variation (b)     | 673            | 942                             | 698            |
| Others                                       | 401            | 718                             | 290            |
|  | <b>1,602</b>   | <b>1,907</b>                    | <b>1,775</b>   |
| <b>Financial results, net</b>                | <b>(4,107)</b> | <b>(3,573)</b>                  | <b>(1,563)</b> |
| <b>Summary of Monetary and exchange rate</b> |                |                                 |                |
| Cash and cash equivalents                    | 32             | (7)                             | (139)          |
| Loans and financing                          | (1,625)        | (2,577)                         | 698            |
| Related parties                              | 11             |                                 |                |
| Others                                       | (392)          | 942                             | (215)          |
| <b>Net (a + b)</b>                           | <b>(1,974)</b> | <b>(1,642)</b>                  | <b>344</b>     |

**29. Commitments****a) Nickel project New Caledonia**

In regards to the construction and installation of our nickel plant in New Caledonia, we have provided guarantees in respect of our financing arrangements which are outlined below.



In connection with the Girardin Act tax - advantaged lease financing arrangement sponsored by the French government, we provided guarantees to BNP Paribas for the benefit of the tax investors regarding certain payments due from VNC, associated with the Girardin Act lease financing. Consistent with our commitments, the assets are substantially complete as of December 31, 2012. We also committed that assets associated with the Girardin Act lease financing would operate for a five year period from then on and meet specified production criteria which remain consistent with our current plans, accordingly. We believe the likelihood of the guarantee being called upon is remote.

In October 2012, we entered into an agreement with Sumic, a stockholder in VNC, whereby Sumic agreed to a dilution in their interest in VNC from 21% to 14.5%. Sumic originally had a put option to sell to us the shares they own of VNC if the defined cost of the initial nickel project, as measured by funding provided to VNC, in natural currencies and converted to U.S. dollars at specified rates of exchange, exceeded US\$4.6 billion and an agreement could not be reached on how to proceed with the project. On May 27, 2010 the threshold was reached and the put option discussion and decision period was extended to July 31, 2012. As a result of the October 2012 agreement, the trigger on the put option has been changed from a cost threshold to a production threshold. The possibility to exercise the put option has been deferred to the first quarter of 2015.

In addition, in the course of our operations we have provided letters of credit and guarantees in the amount of US\$820 million that are associated with items such as environment reclamation, asset retirement obligation commitments, insurance, electricity commitments, post-retirement benefits, community service commitments and import and export duties.

In the course of our operations, we are subject to routine claims and litigation incidental to our business and various environmental proceedings. With respect to the environmental proceedings currently pending or threatened against us, they include (1) claims for personal injuries, (2) enforcement actions and (3) alleged violations of, including exceeding regulatory limits relating to discharges under, certain environmental or similar laws and regulations applicable to our operations. We believe that the ultimate resolution of such proceedings, claims, and litigation will not significantly impair our operations or have material adverse effect on our financial position or results of operations.

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**b) Participative Debentures**

At the time of its privatization in 1997, Vale issued debentures to then-existing stockholders, including the Brazilian Government. The debentures terms were set to ensure that our pre-privatization stockholders would participate in potential future benefits that might be obtained from exploiting our mineral resources.

A total of 388,559,056 debentures were issued at a par value of R\$ 0.01 (one cent), whose value will be restated in accordance with the variation in the General Market Price Index (IGP-M), as set forth in the Issue Deed. In December 31, 2012, 2011 and 2010 the total amount of these debentures was US\$ 1,653, US\$1,336 and US\$1,284, respectively.

The debenture holders have the right to receive premiums, paid semiannually, equivalent to a percentage of net revenues from specific mine resources as set forth in the indenture.

In October 2012 we paid second semester remuneration in the amount of US\$ 4. In April 2012 we paid first semester remuneration on these debentures in the amount of US\$ 6.

**c) Operating lease**

• **Pelletize Operations**

Vale has operating lease agreements with its joint ventures Nibrasco, Itabasco, and Kobrasco, in which Vale leases its pelletizing plants. These operating lease agreements have duration between 3 and 10 years, renewable.

In July 2012 the Company entered into an operating lease agreement with its joint venture Hispanobrás. The contract has duration of 3 years, renewable.

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The table below shows the future minimum annual payments, and required non-cancelable operating lease for the four pellet plants (Hispanobrás, Nibrasco, and Itabrasco Kobrasco), for the date of December 31, 2012.

|  |            |
|--|------------|
| 2013                                   | 74         |
| 2014                                   | 78         |
| 2015                                   | 76         |
| 2016                                   | 74         |
| 2017 thereafter                        | 51         |
| <b>Total minimum payments required</b> | <b>353</b> |

The total amount of operational leasing expenses on pelletizing operations on 31 December 2012, 2011 and 2010 were US\$205, US\$349 and US\$365, respectively.

- **Railroad operations**

Company operates railroads through lease contract. This lease contract has a term of 30 years and may be renewed for another 30 years. The lease contract is classified as operating leases because Vale does not take risks and benefits incidental to ownership of the asset, but only committed to pay rent assets. At the end of the lease agreement the leased assets will be returned to the lessor. In most cases, the Company's management expects that in the normal course of business, leases will be renewed.

|  |              |
|--|--------------|
| 2013                                   | 85           |
| 2014                                   | 85           |
| 2015                                   | 85           |
| 2016                                   | 85           |
| 2017 thereafter                        | 845          |
| <b>Total minimum payments required</b> | <b>1,185</b> |

The total amount of operational leasing expenses on railroad operations on 31 December 2012, 2011 and 2010 were US\$89, US\$87 and US\$90, respectively.

Table of Contents**d) Concession Contracts and Sub-concession****1. Rail companies**

The Company and certain group companies entered into with the Union, through the Ministry of Transport, concession agreements for exploration and development of public rail transport of cargo and leasing of assets for the provision of such services. The accounting records of grants and sub-concessions are presented in note 13.

| <b>Railroad</b>                        | <b>End of the concession period</b> |
|--|-------------------------------------|
| Vitória a Minas e Carajás (direta) (*) | June 2027                           |
| Carajás (direta) (*)                   | June 2027                           |
| Malha Centro-Leste (indireta via FCA)  | August 2026                         |
| Malha Sudeste (indireta via MRS)       | December 2026                       |
| Ferrovias Norte Sul S.A. (FNS)         | December 2037                       |

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(\*) Concessions is not onerous.

The grant shall be terminated with the completion of one of the following events: termination of the contract term, expropriation, forfeiture, cancellation, annulment or dissolution and bankruptcy of the concessionaire.

The concessions, sub-concessions and leasing of the subsidiaries companies are recorded in the concept of operational lease and present the following:

|                         | <b>FNS</b> | <b>FCA</b> | <b>MRS</b> |
|-------------------------|------------|------------|------------|
| Total number of plots   | 3          | 112        | 118        |
| Periodicity of payments | (a)        | Quarterly  | Quarterly  |
| Update index            | IGP-DI FGV | IGP-DI FGV | IGP-DI FGV |
| Plots paid              | (b)        | 54         | 58         |
| Plots updated value     |            |            |            |
| Concession              |            | 2          | 3          |
| Leasing                 |            | 31         | 48         |

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(a) In accordance with the delivery of each stretch of the railway

(b) Two plots have been paid. The third plot had just 80% paid; the 20% they left is to cover existing railroad disputes.

**ii. Port**

The Company has specialized port terminals, as follows:

| <b>Terminals</b>                                     | <b>Location</b>  | <b>End of the concession period</b> |
|--|------------------|-------------------------------------|
| Terminal of Tubarão, Praia Mole e Granéis Líquidos   | Vitória - ES     | 2020                                |
| Terminal of Produtos Diversos                        | Vitória - ES     | 2020                                |
| Terminal of Vila Velha                               | Vila Velha - ES  | 2023                                |
| Terminal Marítimo de Ponta da Madeira - Pfer I e III | S. Luiz - MA     | 2018                                |
| Terminal Marítimo de Ponta da Madeira - Pfer II      | S. Luiz - MA     | 2010(a)                             |
| Terminal Marítimo Inácio Barbosa                     | Acarajú - SE     | 2012                                |
| Terminal of Ore Exportation- Porto de Itaguaí        | Itaguaí - RJ     | 2021                                |
| Terminal Marítimo da Ilha Guaíba - TIG - Mangaratiba | Mangaratiba - RJ | 2018                                |

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(a) The extension of the duration for 36 months until the date that of a new price bidding

**e) Guarantee issued to affiliates**

The Associate Norte Energia acquired in 2012 a credit line from BNDES, Caixa Economica Federal and Banco BTG Pactual in order to finance his investments in energy in the totaling up to R\$22.5 billion (US\$11.01 billion). About this facility, Vale, like other stockholders, is committed to providing a corporate guarantee on the amount withdrawn, limited to his participation of 9% in the entity.

Until December 31, 2012, Vale guarantee on the value drawn the amount of R\$282 (US\$126).

On January 2, 2013 (Subsequent Events) Norte Energia withdrawn of another installment of your loan, increasing the amount guaranteed by Vale for R\$188 (US\$92) to R\$470 (US\$218).

Table of Contents**30 - Related parties**

Transactions with related parties are made by the Company in a strictly commutative manner, observing the price and usual market conditions and therefore do not generate any undue benefit to their counterparties or loss to the Company.

In the normal course of operations, Vale contracts rights and obligations with related parties (subsidiaries, associated companies, jointly controlled entities and Stockholders), derived from operations of sale and purchase of products and services, leasing of assets, sale of raw material, so as rail transport services, with prices agreed between the parties and also mutual transactions.

The balances of these related party transactions and their effect on financial statements may be identified as follows:

|                                       | December 31, 2012 |             | December 31, 2011 |             | December 31, 2010 |             |
|---------------------------------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|
|                                       | Assets            | Liabilities | Assets            | Liabilities | Assets            | Liabilities |
| <b>Current assets</b>                 |                   |             |                   |             |                   |             |
| Accounts receivable                   | 134               |             | 288               |             | 435               |             |
| Loans and advances to related parties | 384               |             | 82                |             | 96                |             |
| <b>Non-current assets</b>             |                   |             |                   |             |                   |             |
| Loans and advances to related parties | 408               |             | 509               |             | 29                |             |
| <b>Current liabilities</b>            |                   |             |                   |             |                   |             |
| Suppliers                             |                   | 146         |                   | 280         |                   | 538         |
| Loans from related parties            |                   | 207         |                   | 24          |                   | 21          |
| <b>Non-current liabilities</b>        |                   |             |                   |             |                   |             |
| Long-term debt                        |                   | 72          |                   | 91          |                   | 2           |
|                                       | <b>926</b>        | <b>425</b>  | <b>879</b>        | <b>395</b>  | <b>560</b>        | <b>561</b>  |

|   | December 31, 2012 |         | December 31, 2011 |         | December 31, 2010 |         |
|---|-------------------|---------|-------------------|---------|-------------------|---------|
|   | Income            | Expense | Income            | Expense | Income            | Expense |
| <b>Affiliated Companies and Joint Ventures</b>            |                   |         |                   |         |                   |         |
| Companhia Nipo-Brasileira de Pelotização - Nibrasco       |                   | 80      |                   | 151     |                   | 149     |
| Samarco Mineração AS                                      | 371               |         | 511               |         | 448               |         |
| Companhia Ítalo-Brasileira de Pelotização - ITABRASCO     |                   | 32      |                   | 150     |                   | 50      |
| Companhia Hispano-Brasileira de Pelotização - HISPANOBRÁS | 266               | 265     | 729               | 521     | 462               | 513     |
| Companhia Coreano-Brasileira de Pelotização - KOBRASCO    |                   | 70      |                   | 98      |                   | 117     |
| Mineração Rio Norte AS                                    |                   |         |                   |         |                   | 156     |

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|                  |            |              |              |              |            |              |
|------------------|------------|--------------|--------------|--------------|------------|--------------|
| MRS Logística AS | 14         | 702          | 16           | 759          | 16         | 561          |
| Others           | 142        | 101          | 103          | 53           | 17         | 18           |
|                  | <b>793</b> | <b>1,250</b> | <b>1,359</b> | <b>1,732</b> | <b>943</b> | <b>1,564</b> |

|  | December 31, 2012 |              | December 31, 2011 |              | December 31, 2010 |              |
|--|-------------------|--------------|-------------------|--------------|-------------------|--------------|
|  | Income            | Expense      | Income            | Expense      | Income            | Expense      |
| Sales/Cost of iron ore and pellets       | 624               | 469          | 1,337             | 952          | 910               | 785          |
| Revenues/ expense from logistic services | 14                | 706          | 16                | 759          | 23                | 603          |
| Sales/ Cost of aluminum products         |                   |              |                   | 18           |                   | 156          |
| Financial income/expenses                | 14                | 7            | 6                 | 3            | 10                | 20           |
| Others                                   | 141               | 69           |                   |              |                   |              |
|  | <b>793</b>        | <b>1,251</b> | <b>1,359</b>      | <b>1,732</b> | <b>943</b>        | <b>1,564</b> |

|                                  | Statement of financial position |              |              | Statement of income |            |            |
|----------------------------------|---------------------------------|--------------|--------------|---------------------|------------|------------|
|                                  | 2012                            | 2011         | 2010         | 2012                | 2011       | 2010       |
| <b>Cash and Cash equivalents</b> |                                 |              |              |                     |            |            |
| Brasdesco                        | 33                              | 16           | 574          |                     | 73         | 5          |
| <b>Loan payable</b>              |                                 |              |              |                     |            |            |
| BNDES                            | 3,951                           | 2,954        | 2,172        | 41                  | 138        | 121        |
| BNDES Par                        | 825                             | 902          | 739          | 14                  | 57         | 26         |
|                                  | <b>4,809</b>                    | <b>3,872</b> | <b>3,485</b> | <b>55</b>           | <b>268</b> | <b>152</b> |

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Remuneration of key management personnel:

|                                | Year ended December 31, |            |           |
|--------------------------------|-------------------------|------------|-----------|
|                                | 2012                    | 2011       | 2010      |
| <b>Short-term benefits</b>     | <b>36</b>               | <b>49</b>  | <b>32</b> |
| Wages or pro-labor             | 11                      | 11         | 10        |
| Direct and indirect benefits   | 11                      | 21         | 10        |
| Bonus                          | 14                      | 17         | 12        |
| <b>Long-term benefits:</b>     | <b>11</b>               | <b>13</b>  | <b>17</b> |
| Based on stock                 | 11                      | 13         | 17        |
| <b>Termination of position</b> | <b>9</b>                | <b>54</b>  | <b>2</b>  |
|                                | <b>56</b>               | <b>116</b> | <b>51</b> |

**31. US GAAP Reconciliation**

Although not required, in order to provide additional information to the users of our financial statement, we disclose below the reconciliation between the consolidated statement of financial position and the consolidated Statement of Income under US GAAP and IFRS:

|  | USGAAP         | December 31, 2012<br>Adjustments | IFRS GAAP      |
|--|----------------|----------------------------------|----------------|
| <b>Assets</b>                              |                |                                  |                |
| <b>Current assets</b>                      |                |                                  |                |
| Cash and cash equivalents                  | 5,832          |                                  | 5,832          |
| Others                                     | 17,065         | (371)(a)                         | 16,694         |
|  | <b>22,897</b>  | <b>371</b>                       | <b>22,526</b>  |
| <b>Non-current assets</b>                  |                |                                  |                |
| Investments                                | 6,492          | (108)(b)                         | 6,384          |
| Property, plant and equipment, net         | 91,766         | 2,327(c)                         | 94,093         |
| Others                                     | 10,323         | (2,706)(d)                       | 7,617          |
|  | <b>108,581</b> | <b>(487)</b>                     | <b>108,094</b> |
| <b>Total assets</b>                        | <b>131,478</b> | <b>(858)</b>                     | <b>130,620</b> |
| <b>Liabilities and stockholders equity</b> |                |                                  |                |
| <b>Current</b>                             |                |                                  |                |
| Accounts payable                           | 4,529          |                                  | 4,529          |
| Loans and finances                         | 3,468          | 3(e)                             | 3,471          |
| Others                                     | 4,588          | (26)(f)                          | 4,562          |
|  | <b>12,585</b>  | <b>(23)</b>                      | <b>12,562</b>  |



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| <b>Non-current</b>                               |                |                |                |
|--|----------------|----------------|----------------|
| Loans and finances                               | 26,799         | (e)            | 26,799         |
| Deferred income tax and social contribution      | 3,538          | 257(g)         | 3,795          |
| Others   | 12,680         | (1,375)(h)     | 11,305         |
|  | <b>43,017</b>  | <b>(1,118)</b> | <b>41,899</b>  |
| <b>Stockholders equity</b>                       |                |                |                |
| Capital stock                                    | 37,559         | 17,438(i)      | 54,997         |
| Noncontrolling interests                         | 1,635          | (47)(i)        | 1,588          |
| Others   | 36,682         | (17,108)(i)    | 19,574         |
|  | <b>75,876</b>  | <b>283</b>     | <b>76,159</b>  |
| <b>Total liabilities and Stockholders equity</b> | <b>131,478</b> | <b>(858)</b>   | <b>130,620</b> |

- 
- (a) Reclassification of deferred Income tax for non-current in accordance with IFRS (US\$356), assets held for sale (US\$22) and financial assets available for sale, which under USGAAP is recognized as investment \$7;
- (b) Difference between on noncontrolled entities recognized by equity method;
- (c) Difference between the book value and fair value of the MBR, recognized as goodwill on old BRGAAP, and reclassification of goodwill from other assets (USGAAP) to intangible assets (IFRS);
- (d) In USGAAP we record goodwill of subsidiaries, assets of pension plans (plans overfunded) and deferred income on GAAP differences;
- (e) Difference of Operating and finance lease recognized as old BRGAAP;
- (f) Differences between IFRS and US GAAP on pension plan, liabilities directly associated with assets held for sale and mandatory convertible notes;
- (g) Difference between US GAAP and IFRS relating to deferred income taxes;
- (h) Difference between US GAAP and IFRS relating to pension plan, asset retirement obligations and deferred income tax on these adjustments;
- (i) Difference between US GAAP and IFRS relating to translation adjustment of current and historical currency.

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|  | USGAAP          | December 31, 2012<br>Adjustments | IFRS GAAP       |
|--|-----------------|----------------------------------|-----------------|
| Net revenue  | 47,694          |                                  | 47,694          |
| Cost   | (26,591)        | 108(a)                           | (26,483)        |
| <b>Gross operating profit</b>                                | <b>21,103</b>   | <b>108</b>                       | <b>21,211</b>   |
| Operational expenses   | (11,880)        | (6)(b)                           | (11,886)        |
| Financial expenses   | (3,801)         | (306)(c)                         | (4,107)         |
| Equity results   | 640             | 5(d)                             | 645             |
| Impairment on Investments                                    | (1,640)         | (300)(d)                         | (1,941)         |
|  | <b>(16,682)</b> | <b>(607)</b>                     | <b>(17,271)</b> |
| <b>Earnings before taxes</b>                                 | <b>4,421</b>    | <b>(099)</b>                     | <b>3,922</b>    |
| Current and deferred income tax and social contribution, net | 833             | 361(e)                           | 4,094           |
| <b>Net income of the year</b>                                | <b>5,254</b>    | <b>(138)</b>                     | <b>5,106</b>    |
| <b>Loss attributable to noncontrolling interests</b>         | <b>(257)</b>    |                                  | <b>(257)</b>    |
| <b>Net income attributable to shareholders</b>               | <b>5,514</b>    | <b>(138)</b>                     | <b>5,373</b>    |

(a) Amortization of the difference between the book value and fair value of the MBR in USGAAP (US\$153) and pension plan and ARO at Vale Canada (US\$ 4 and US\$41);

(b) Adjustment of pension plan and ARO at Vale Canada \$ 10 and profit and sale of Araucária assets (US\$16);

(c) Adjustment of pension plan surplus at Vale and Vale Fertilizantes;

(d) Difference between IFRS and US GAAP on investments;

(e) Difference between US GAAP and IFRS resulting from deferred income taxes end difference GAAP;

(f) Difference between US GAAP and IFRS resulting GAAP.

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**32 - Board of Directors, Fiscal Council, Advisory committees and Executive Officers**

**Board of Directors**

Dan Antônio Marinho Conrado

**Chairman**

Mário da Silveira Teixeira Júnior

**Vice-President**

Fuminobu Kawashima

José Mauro Mettrau Carneiro da Cunha

Luciano Galvão Coutinho

Marcel Juvinião Barros

Nelson Henrique Barbosa Filho

Oscar Augusto de Camargo Filho

Paulo Soares de Souza

Renato da Cruz Gomes

Robson Rocha

**Alternate**

Deli Soares Pereira

Eduardo de Oliveira Rodrigues Filho

Eustáquio Wagner Guimarães Gomes

Hajime Tonoki

Luiz Carlos de Freitas

Luiz Maurício Leuzinger

Marco Geovanne Tobias da Silva

Paulo Sergio Moreira da Fonseca

Raimundo Nonato Alves Amorim

Sandro Kohler Marcondes

**Advisory Committees of the Board of Directors**

**Controlling Committee**

Luiz Carlos de Freitas

Paulo Ricardo Ultra Soares

Paulo Roberto Ferreira de Medeiros

**Executive Development Committee**

José Ricardo Sasseron

Luiz Maurício Leuzinger

Oscar Augusto de Camargo Filho

**Governance and Sustainability Committee**

Gilmar Dalilo Cezar Wanderley

Renato da Cruz Gomes

Ricardo Simonsen

**Fiscal Council**

Marcelo Amaral Moraes

**Chairman**

Aníbal Moreira dos Santos

Antonio Henrique Pinheiro Silveira

Arnaldo José Vollet

**Alternate**

Cícero da Silva

Oswaldo Mário Pêgo de Amorim Azevedo

Paulo Fontoura Valle

**Executive Officers**

Murilo Pinto de Oliveira Ferreira

**President & CEO**

Vânia Lucia Chaves Somavilla

**Executive Director, HR, Health & Safety, Sustainability and Energy**

Luciano Siani Pires

**Chief Financial Officer**

Roger Allan Downey

**Executive Director, Fertilizers and Coal**

José Carlos Martins

**Executive Director, Ferrous and Strategy**

Galib Abrahão Chaim

**Executive Director, Capital Projects Implementation**

Humberto Ramos de Freitas

**Executive Director, Logistics and Mineral Research**

**Strategic Committee**

Murilo Pinto de Oliveira Ferreira  
Dan Antônio Marinho Conrado  
Luciano Galvão Coutinho  
Mário da Silveira Teixeira Júnior  
Oscar Augusto de Camargo Filho

Gerd Peter Poppinga  
**Executive Director, Base Metals and IT**

Marcelo Botelho Rodrigues  
**Global Controller Director**

**Finance Committee**

Luciano Siani Pires  
Eduardo de Oliveira Rodrigues Filho  
Luciana Freitas Rodrigues  
Luiz Maurício Leuzinger

Marcus Vinicius Dias Severini  
**Chief Officer of Accounting and Control Department**

Vera Lucia de Almeida Pereira Elias  
**Chief Accountant**  
**CRC-RJ - 043059/O-8**

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**Signatures**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Vale S.A.  
(Registrant)

Date: February 28, 2013

By:

/s/ Roberto Castello Branco  
Roberto Castello Branco  
Director of Investor Relations