

Vale S.A.  
Form 6-K  
February 26, 2015  
[Table of Contents](#)

**United States**  
**Securities and Exchange Commission**

Washington, D.C. 20549

**FORM 6-K**

**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 2015**

**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.)

Edgar Filing: Vale S.A. - Form 6-K

(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- .)

---

Table of Contents

Table of Contents:

Press Release

Signature Page

---

Table of Contents

BM&F BOVESPA: VALE3, VALE5

NYSE: VALE, VALE.P

HKEx: 6210, 6230

EURONEXT PARIS: VALE3, VALE5

LATIBEX: XVALO, XVALP

[www.vale.com](http://www.vale.com)

[rio@vale.com](mailto:rio@vale.com)

Investor Relations Department

Rogério T. Nogueira

André Figueiredo

Carla Albano Miller

Fernando Mascarenhas

Andrea Gutman

Bruno Siqueira

## Edgar Filing: Vale S.A. - Form 6-K

Claudia Rodrigues

Marcio Loures Penna

Mariano Szachtman

Tel: (55 21) 3814-4540

### VALE S PERFORMANCE IN 2014

Rio de Janeiro, February 26, 2015 In 2014 Vale S.A. (Vale) achieved several production records, further reduced expenses by US\$ 1.218 billion(1), completed eight capital projects, reduced capital expenditures by another US\$ 2.254 billion(2), negotiated a key partnership for our coal operation in Mozambique and still paid US\$ 4.2 billion in dividends while preserving a healthy capital structure.

#### **2014 was a year of sound performance despite the challenges brought by declining commodity prices**

- Annual production records in iron ore, copper and gold and the highest annual production in nickel since 2008:
- Iron ore supply of 331.6 Mt(3), including Vale sourced production record of 319.2 Mt(4), mainly due to the record production in Carajás of 119.7 Mt.
- Nickel production of 275,000 t, the highest annual production since 2008.
- Copper production record of 379,700 t, with ramp-up in Salobo to 98,000 t of production.
- Gold production record of 321,000 oz.
- Record sales volumes of iron ore and pellets (313.6 Mt) and gold (351,000 oz), and the highest sales volume of nickel (272,000 t) since 2008.
- Reduction of US\$ 1.218(1) billion in expenses across all businesses in 2014.
- SG&A(5) decreased by US\$ 234 million (21.1%).
- Pre-operating and stoppage expenses(5) decreased significantly by US\$ 747 million (45.9% reduction) from US\$ 1.628 billion in 2013 down to US\$ 881 million in 2014.

## Edgar Filing: Vale S.A. - Form 6-K

- Adjusted EBITDA of US\$ 13.353 billion in 2014, a decrease of 40.8% from the US\$ 22.560 billion in 2013, mainly due to lower commodity prices which negatively impacted adjusted EBITDA by US\$ 10.580 billion in 2014.
- Base metals adjusted EBITDA totaled US\$ 2.521 billion in 2014, an increase of 53.8% when compared to 2013 with higher nickel prices and volumes of both copper and nickel more than offsetting the weaker price scenario for copper in 2014.
- Fertilizers adjusted EBITDA improved from -US\$ 54 million in 2013 to US\$ 278 million in 2014, despite lower sales volumes and prices.
- Underlying earnings of US\$ 4.419 billion in 2014 excluding one-time effects of (i) foreign exchange and monetary losses (-US\$ 2.200 billion), (ii) impairment of assets (-US\$ 1.152 billion), (iii) currency and interest rate swap losses (-US\$ 683 million), (iv) mark-to-market of shareholder debentures (-US\$ 315 million) and (v) relinquishment

---

(1) Excluding depreciation and amortization and the one-off effect of the goldstream transaction in 1Q13 of US\$ 244 million.

(2) Including US\$ 602 million in capex for VLI in 2013.

(3) Excluding Samarco's attributable production and including third party ores.

(4) Excluding Samarco's attributable production.

(5) Net of depreciation.

Table of Contents

of land associated with the renewal of PTVI's contract of work (CoW) in Indonesia (-US\$ 167 million), among others.

- Reduction of US\$ 2.254 billion in capex from US\$ 14.233 billion in 2013(6) to US\$ 11.979 billion in 2014, marking the fourth consecutive year of capex reductions.
- Improvement in Health and Safety indicators with Total Recordable Injury Frequency Rate (TRIFR) falling from 2.6 to 2.3(7).

**4Q14 was a quarter marked by production records, low prices and non-recurring effects on EBITDA and earnings**

- Quarterly production records in:
  - Iron ore output in Carajás of 34.9 Mt.
  - Total iron ore production of 83.0 Mt, a record for a fourth quarter.
  - Pellet production of 11.6 Mt, a record for a fourth quarter.
  - Nickel production of 73,600 t.
  - Copper production of 105,400 t, with ramp-up in Salobo to 31,600 t.
  - Gold production of 93,600 oz.
- Adjusted EBITDA of US\$ 2.187 billion in 4Q14 was negatively impacted by one-off costs and expenses of (i) US\$ 98 million related to the write-down of thermal coal inventory, (ii) US\$ 90 million due to the write-down of ICMS tax credits, (iii) US\$ 107 million due to provision for current and long term environmental obligations and (iv) US\$ 48 million of inventory adjustments and the opening of N4WS at Carajás. Excluding these one-off effects, the adjusted EBITDA would have been US\$ 2.530 billion in 4Q14.

**2014 was also a year of important accomplishments for paving the road towards strong free cash flow generation**

- Granting of the operating license to expand the N4WS mine pit located in Carajás, supporting our iron ore production plan for 2015 and 2016.

## Edgar Filing: Vale S.A. - Form 6-K

- Completion of eight projects on time and on budget (Tubarão VIII, Serra Leste, the distribution center in Malaysia, Vargem Grande, the 5th line of Brucutu, Salobo II, Nacala and Long Harbour).
- Investment Agreement with Mitsui, whereby Mitsui will own 15% of Vale's stake in Vale Moçambique and 50% of Vale's stake in Nacala with an expected impact of US\$ 3.7 billion in terms of capex avoidance and cash inflow.
- Renegotiation of an extension of PTVI's CoW and mining concession until 2045.

For 2015 we have optimized and revised down our capex plan and are intensifying our corporate simplification and cost cutting efforts, while accelerating the divestment and partnership initiatives to unlock value and build the foundations for strong free cash flow generation by 2017 onwards.

---

(6) Including US\$ 602 million in capex for VLI in 2013.

(7) Per million hours worked.



Table of Contents**SELECTED FINANCIAL INDICATORS**

| <b>US\$ million</b>   | <b>2014</b> | <b>2013(1)</b> | <b>2012</b> | <b>2011</b> | <b>2010</b> |
|---|-------------|----------------|-------------|-------------|-------------|
| Gross operating revenues  | 38,236      | 47,486         | 48,753      | 62,345      | 46,481      |
| Net operating revenues  | 37,539      | 46,767         | 47,694      | 60,946      | 45,293      |
| Adjusted EBIT   | 8,497       | 17,576         | 14,430      | 28,748      | 21,695      |
| Adjusted EBIT margin (%)  | 22.6        | 37.6           | 30.3        | 47.2        | 47.9        |
| Adjusted EBITDA   | 13,353      | 22,560         | 19,178      | 33,730      | 26,116      |
| Adjusted EBITDA margin (%)  | 35.6        | 48.2           | 40.2        | 55.3        | 57.7        |
| Net income  | 657         | 584            | 5,197       | 22,652      | 17,453      |
| Underlying earnings   | 4,419       | 12,269         | 10,365      | 23,015      | 17,289      |
| Underlying earnings per share on a fully diluted basis (US\$ / share) | 0.86        | 2.38           | 2.03        | 4.39        | 3.26        |
| Total gross debt  | 28,807      | 29,655         | 30,546      | 23,143      | 25,343      |
| Cash and cash equivalent  | 4,122       | 5,324          | 6,078       | 3,531       | 9,377       |
| Total Net Debt  | 24,685      | 24,331         | 24,468      | 19,612      | 15,966      |
| Total gross debt / adjusted EBITDA (x)                                | 2.2         | 1.3            | 1.6         | 0.7         | 1.0         |
| Capital expenditures (excluding R&D and acquisitions)                 | 11,979      | 14,233         | 16,196      | 16,252      | 11,569      |

(1) Throughout this report, 2013 figures were adjusted to the sale of VLI, with the exception of capital expenditures.

| <b>US\$ million</b>   | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> |
|---|-------------|-------------|-------------|
| Gross operating revenues  | 9,226       | 9,249       | 13,273      |
| Net operating revenues  | 9,072       | 9,062       | 13,125      |
| Adjusted EBIT   | 856         | 1,625       | 5,046       |
| Adjusted EBIT margin (%)  | 9.4         | 17.9        | 38.4        |
| Adjusted EBITDA   | 2,187       | 3,004       | 6,639       |
| Adjusted EBITDA margin (%)  | 24.1        | 33.1        | 50.6        |
| Net income (loss)   | (1,849)     | (1,437)     | (6,451)     |
| Underlying earnings   | (251)       | 666         | 3,218       |
| Underlying earnings per share on a fully diluted basis (US\$ / share) | (0.05)      | 0.13        | 0.62        |

Except where otherwise indicated the operational and financial information in this release is based on the consolidated figures in accordance with IFRS and, with the exception of information on investments and behavior of markets, quarterly financial statements are reviewed by the company's independent auditors. The main subsidiaries that are consolidated are the following: Compañía Minera Miski Mayo S.A.C., Mineração Corumbaense Reunida S.A., PT Vale Indonesia Tbk (formerly International Nickel Indonesia Tbk), Salobo Metais S.A, Vale Australia Pty Ltd., Vale International Holdings GMBH, Vale Canada Limited (formely Vale Inco Limited), Vale Fertilizantes S.A., Vale International S.A., Vale Manganês S.A., Vale Moçambique S.A., Vale Nouvelle-Calédonie SAS, Vale Oman Pelletizing Company LLC and Vale Shipping Holding PTE Ltd..

Table of Contents

OPERATING REVENUES

**Annual performance**

In 2014, gross operating revenues totaled US\$ 38.236 billion, a decrease of 19.5% when compared with 2013. The decrease was primarily a result of lower iron ore sales prices (US\$ 9.210 billion) and lower pellets sales prices (US\$ 1.139 billion), which were partly offset for the most part by higher iron ore sales volumes (US\$ 543 million) and higher pellets sales volumes (US\$ 405 million).

The share of our ferrous minerals business – iron ore, pellets, manganese ore and ferroalloys – in gross operating revenues decreased from 74.3% in 2013 to 68.4%. Base metals increased its share in gross revenues from 15.4% in 2013 to 20.1% in 2014, mainly due to the improvement in nickel sales volumes and prices, while fertilizers grew its share from 6.3% in 2013 to 6.8% in 2014. Coal decreased to 1.9%, from 2.1% in 2013, mainly as a result of lower sales prices.

Asia represented 51.2% of total gross revenues in 2014 and China alone represented 33.1%. The Americas share increased to 26.3%, due to higher sales volumes in Brazil, which represented 17.3% of sales. Europe's share decreased slightly to 17.5%. Gross revenues from sales to the Middle East were 3.3% in 2014. The rest of the world contributed with 1.6% in 2014.

**Quarterly performance**

Gross operating revenues in 4Q14 were US\$ 9.226 billion, slightly below 3Q14. The decrease in sales prices was mainly due to iron ore (US\$ 493 million), pellets (US\$ 187 million) and nickel prices (US\$ 166 million), which was partly offset by higher sales volumes of iron ore (US\$ 787 million) and pellets (US\$ 139 million).

The share of our ferrous minerals business in gross operating revenues increased to 67.3% from 64.2% in 3Q14, mainly due to the improvement in iron ore and pellets sales volumes. Base metals decreased its share in gross revenues from 23.0% in 3Q14 to 21.1% in 4Q14 and fertilizers decreased its share from 8.1% in 3Q14 to 6.6% in 4Q14, while coal maintained its share at 2.2%.

In 4Q14, sales to Asia over total sales increased to 52.0%, from 49.2% in 3Q14, while the shares of sales to the Americas, Europe and the Middle East decreased. Sales to the Americas represented 26.1% of total sales, to Europe 16.9%, the Middle East 3.1%, while the rest of the world contributed with 1.9%.

Sales to China represented 33.5% of total gross revenues in 4Q14, Brazil 17.8%, Japan 9.2%, Germany 4.8%, Canada 3.9%, South Korea 3.3% and United States 3.1%.

**GROSS OPERATING REVENUE BY DESTINATION**

| US\$ million             | 4Q14         | 3Q14         | 4Q13          | 2014          | %            | 2013          | %            |
|--------------------------|--------------|--------------|---------------|---------------|--------------|---------------|--------------|
| <b>North America</b>     | <b>642</b>   | <b>746</b>   | <b>610</b>    | <b>2,771</b>  | <b>7.2</b>   | <b>2,383</b>  | <b>5.0</b>   |
| <b>South America</b>     | <b>1,769</b> | <b>1,903</b> | <b>1,731</b>  | <b>7,308</b>  | <b>19.1</b>  | <b>7,685</b>  | <b>16.2</b>  |
| Brazil                   | 1,645        | 1,744        | 1,571         | 6,624         | 17.3         | 6,909         | 14.5         |
| Others                   | 124          | 159          | 160           | 684           | 1.8          | 776           | 1.6          |
| <b>Asia</b>              | <b>4,798</b> | <b>4,551</b> | <b>7,868</b>  | <b>19,590</b> | <b>51.2</b>  | <b>26,558</b> | <b>55.9</b>  |
| China                    | 3,091        | 2,799        | 5,687         | 12,657        | 33.1         | 18,920        | 39.8         |
| Japan                    | 848          | 904          | 1,163         | 3,627         | 9.5          | 4,035         | 8.5          |
| Others                   | 859          | 849          | 1,018         | 3,306         | 8.6          | 3,602         | 7.6          |
| <b>Europe</b>            | <b>1,556</b> | <b>1,582</b> | <b>2,432</b>  | <b>6,697</b>  | <b>17.5</b>  | <b>8,762</b>  | <b>18.5</b>  |
| Germany                  | 442          | 516          | 920           | 2,111         | 5.5          | 3,285         | 6.9          |
| Italy                    | 130          | 226          | 271           | 849           | 2.2          | 1,055         | 2.2          |
| Others                   | 985          | 841          | 1,241         | 3,737         | 9.8          | 4,422         | 9.3          |
| <b>Middle East</b>       | <b>288</b>   | <b>359</b>   | <b>458</b>    | <b>1,266</b>  | <b>3.3</b>   | <b>1,494</b>  | <b>3.1</b>   |
| <b>Rest of the World</b> | <b>173</b>   | <b>108</b>   | <b>174</b>    | <b>605</b>    | <b>1.6</b>   | <b>605</b>    | <b>1.3</b>   |
| <b>Total</b>             | <b>9,226</b> | <b>9,249</b> | <b>13,273</b> | <b>38,236</b> | <b>100.0</b> | <b>47,486</b> | <b>100.0</b> |

Table of Contents**GROSS OPERATING REVENUE BY BUSINESS AREAS**

| US\$ million                | 4Q14         | 3Q14         | 4Q13          | 2014          | %            | 2013          | %            |
|-----------------------------|--------------|--------------|---------------|---------------|--------------|---------------|--------------|
| <b>Ferrous minerals</b>     | <b>6,213</b> | <b>5,935</b> | <b>10,177</b> | <b>26,140</b> | <b>68.4</b>  | <b>35,271</b> | <b>74.3</b>  |
| Iron ore fines              | 4,593        | 4,287        | 8,237         | 19,439        | 50.8         | 28,129        | 59.2         |
| ROM                         | 42           | 54           | 77            | 233           | 0.6          | 300           | 0.6          |
| Pellets                     | 1,308        | 1,356        | 1,677         | 5,424         | 14.2         | 6,158         | 13.0         |
| Manganese ore               | 92           | 50           | 99            | 226           | 0.6          | 333           | 0.7          |
| Ferroalloys                 | 51           | 47           | 62            | 218           | 0.6          | 239           | 0.5          |
| Others                      | 127          | 141          | 25            | 600           | 1.6          | 113           | 0.2          |
| <b>Coal</b>                 | <b>201</b>   | <b>201</b>   | <b>333</b>    | <b>739</b>    | <b>1.9</b>   | <b>1,010</b>  | <b>2.1</b>   |
| Metallurgical coal          | 181          | 184          | 304           | 661           | 1.7          | 951           | 2.0          |
| Thermal coal                | 20           | 17           | 29            | 78            | 0.2          | 59            | 0.1          |
| <b>Base metals</b>          | <b>1,948</b> | <b>2,129</b> | <b>1,897</b>  | <b>7,694</b>  | <b>20.1</b>  | <b>7,299</b>  | <b>15.4</b>  |
| Nickel                      | 1,064        | 1,288        | 957           | 4,468         | 11.7         | 3,889         | 8.2          |
| Copper                      | 556          | 579          | 647           | 2,122         | 5.5          | 2,367         | 5.0          |
| PGMs                        | 152          | 141          | 132           | 564           | 1.5          | 477           | 1.0          |
| Gold                        | 115          | 116          | 118           | 418           | 1.1          | 398           | 0.8          |
| Silver                      | 11           | 4            | 11            | 37            | 0.1          | 43            | 0.1          |
| Others                      | 50           | 1            | 32            | 85            | 0.2          | 125           | 0.3          |
| <b>Fertilizer nutrients</b> | <b>607</b>   | <b>747</b>   | <b>591</b>    | <b>2,585</b>  | <b>6.8</b>   | <b>2,977</b>  | <b>6.3</b>   |
| Potash                      | 45           | 47           | 50            | 169           | 0.4          | 222           | 0.5          |
| Phosphates                  | 432          | 560          | 423           | 1,904         | 5.0          | 2,120         | 4.5          |
| Nitrogen                    | 108          | 109          | 95            | 411           | 1.1          | 543           | 1.1          |
| Others                      | 22           | 31           | 23            | 101           | 0.3          | 92            | 0.2          |
| <b>Others</b>               | <b>257</b>   | <b>237</b>   | <b>275</b>    | <b>1,078</b>  | <b>2.8</b>   | <b>925</b>    | <b>1.9</b>   |
| <b>Total</b>                | <b>9,226</b> | <b>9,249</b> | <b>13,273</b> | <b>38,236</b> | <b>100.0</b> | <b>47,486</b> | <b>100.0</b> |

## COSTS AND EXPENSES

**Cost of Goods Sold (COGS)****Annual performance**

COGS amounted to US\$ 25.064 billion in 2014, recording an increase of US\$ 819 million when compared to the US\$ 24.245 billion in 2013, mainly as a result of higher volumes. Ferrous minerals costs increased by US\$ 1.371 billion (10.2%), mainly as a result of increased sales volumes (7.9%), while base metals decreased by US\$ 35 million, coal by US\$ 130 million and fertilizers by US\$ 304 million.

Cost performance will be analyzed in further detail in the **Performance of the Business Segments** section.

**Quarterly performance**

COGS(8) totaled US\$ 6.892 billion in 4Q14, an increase of US\$ 391 million when compared to the US\$ 6.501 billion recorded in 3Q14. Ferrous minerals costs increased by US\$ 508 million and base metals increased by US\$ 95 million, while coal decreased by US\$ 30 million and fertilizers decreased by US\$ 170 million.

As with the yearly performance, increased costs in 4Q14 were also influenced by higher sales volumes sold in the period. Further details on cost performance are provided in the [Performance of the Business Segments](#) section.

---

(8) COGS currency exposure in 4Q14 was made up as follows: 52% Brazilian Reais, 34% US dollar, 11% Canadian dollar, 1% Australian dollar and 2% other currencies.

Table of Contents**COGS BY BUSINESS**

| US\$ million                | 4Q14         | 3Q14         | 4Q13         | 2014          | %            | 2013          | %            |
|-----------------------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|
| Ferrous minerals            | 4,278        | 3,770        | 3,866        | 14,800        | 59.0         | 13,429        | 55.4         |
| Base metals                 | 1,718        | 1,623        | 1,583        | 6,181         | 24.7         | 6,215         | 25.6         |
| Coal                        | 285          | 315          | 416          | 1,191         | 4.8          | 1,321         | 5.4          |
| Fertilizers                 | 492          | 662          | 559          | 2,273         | 9.1          | 2,577         | 10.6         |
| Other products              | 119          | 130          | 234          | 619           | 2.5          | 701           | 2.9          |
| <b>Total COGS</b>           | <b>6,892</b> | <b>6,501</b> | <b>6,658</b> | <b>25,064</b> | <b>100.0</b> | <b>24,245</b> | <b>100.0</b> |
| Depreciation                | 1,122        | 992          | 995          | 3,857         |              | 3,725         |              |
| <b>COGS ex-depreciation</b> | <b>5,770</b> | <b>5,509</b> | <b>5,663</b> | <b>21,207</b> |              | <b>20,520</b> |              |

**Expenses****Annual performance**

Expenses decreased by US\$ 968 million in 2014, to US\$ 3.978 billion from US\$ 4.946 billion in 2013, mainly due to lower pre-operating and stoppage, SG&A and research and development expenditures (R&D), which were partially offset by higher expenses in other areas. Excluding depreciation (US\$ 431 million), total expenses amounted to US\$ 3.547 billion in 2014, a decrease of US\$ 1.218 billion when compared to the US\$ 4.765 billion in 2013, after excluding the one-off impact of the goldstream transaction in 1Q13 (US\$ 244 million).

SG&A decreased by 15.6%, down to US\$ 1.099 billion in 2014, from US\$ 1.302 billion in 2013. After excluding the effect of depreciation, SG&A decreased by 21.1%, to US\$ 876 million in 2014, from US\$ 1.110 billion in 2013. This decrease was mainly due to the revision of contracted services and simplification of our organizational structure, which led to reduced third-party services (-US\$ 137 million) and personnel expenses (-US\$ 64 million).

R&D expenditures decreased by 8.4%, down to US\$ 734 million in 2014, from US\$ 801 million in 2013, as our research focus shifted from greenfield to brownfield exploration and productivity-focused research. The large majority of R&D expenses were focused on iron ore and pellets (US\$ 329 million) and base metals (US\$ 143 million).

Pre-operating and stoppage expenses decreased by a total of 41.5%, down to US\$ 1.088 billion in 2014, from US\$ 1.859 billion in 2013. Pre-operating expenses decreased by 18.5%, down to US\$ 1.003 billion in 2014, from US\$ 1.231 billion in 2013. Stoppage expenses decreased by 86.5%, down to US\$ 85 million in 2014 from US\$ 628 million in 2013, as a result of lower expenses associated with the Rio Colorado Project (PRC) (-US\$ 359 million) and Onça Puma (-US\$ 120 million) in 2014 when compared to 2013.

Other expenses, excluding the one-off impact of the goldstream transaction in 1Q13 (US\$ 244 million), decreased by 13.9%, to US\$ 1.057 billion in 2014, from US\$ 1.228 billion in 2013.

## Quarterly performance

Total expenses increased by 41.5% quarter-on-quarter, to US\$ 1.324 billion in 4Q14 from US\$ 936 million in 3Q14, and decreased by 6.8% year-on-year, from US\$ 1.421 billion in 4Q13. This quarter was particularly affected by higher than usual expenses related to the write-down of thermal coal inventory, the write-down of ICMS tax credits and provisions for environmental obligations.

SG&A increased by 11.7% quarter-on-quarter, to US\$ 306 million in 4Q14 from US\$ 274 million in 3Q14, and decreased by 9.7% year-on-year, from US\$ 339 million in 4Q13. Increases in SG&A expenses compared to the 3Q14 were driven by higher personnel costs (US\$ 10 million), rents and taxes (US\$ 7 million) and selling expenses (US\$ 6 million). SG&A in the fourth quarter is usually higher mainly as a result of salary adjustments based on the labor agreements settled with our Brazilian employees during this time of the year.

R&D expenses increased by 21.1% quarter-on-quarter, to US\$ 235 million in 4Q14 from US\$ 194 million in 3Q14, and decreased by 13.6% year-on-year, from US\$ 272 million in 4Q13. R&D expenses were mostly focused on iron ore and

Table of Contents

pellets (US\$ 117 million) and base metals (US\$ 45 million). The peak in R&D expenses in 4Q14 is not an upward trend, being in accordance with the usual seasonality for these expenses.

Pre-operating and stoppage expenses increased by 2.8% quarter-on-quarter, to US\$ 292 million in 4Q14 from US\$ 284 million in 3Q14, and decreased by 38.3% year-on-year, from US\$ 473 million in 4Q13.

(i) Pre-operating expenses decreased by 5.5% quarter-on-quarter, down to US\$ 258 million in 4Q14 from US\$ 273 million in 3Q14, as a result of lower pre-operating expenses in Malaysia (-US\$ 16 million) and S11D (-US\$ 7 million).

(ii) Stoppage expenses increased by US\$ 23 million in 4Q14, to US\$ 34 million in 4Q14 from US\$ 11 million in 3Q14, mainly driven by higher expenses with Rio Colorado Project. These increased expenses stem from the effects of asset sales in 3Q14 along with the closing of the civil constructor contract and assets write-off.

Other operating expenses increased quarter-on-quarter to US\$ 491 million in 4Q14, from US\$ 184 million in 3Q14 and US\$ 337 million in 4Q13, mainly as a result of the one-off expenses concentrated in 4Q14:

(i) US\$ 107 million related to provisions for current and long term environmental obligations;

(ii) US\$ 98 million for one-off expenses related to the write-down of thermal coal inventory; and,

(iii) US\$ 90 million due to the write-down of ICMS tax credits.

**EXPENSES**

| US\$ million                    | 4Q14       | 3Q14       | 4Q13       | 2014         | %           | 2013         | %           |
|---------------------------------|------------|------------|------------|--------------|-------------|--------------|-------------|
| <b>SG&amp;A ex-depreciation</b> | <b>247</b> | <b>206</b> | <b>289</b> | <b>876</b>   |             | <b>1,110</b> |             |
| <b>SG&amp;A</b>                 | <b>306</b> | <b>274</b> | <b>339</b> | <b>1,099</b> | <b>27.6</b> | <b>1,302</b> | <b>26.3</b> |
| <b>Administrative</b>           | <b>292</b> | <b>266</b> | <b>328</b> | <b>1,019</b> | <b>25.6</b> | <b>1,203</b> | <b>24.3</b> |
| Personnel                       | 118        | 108        | 112        | 436          | 11.0        | 500          | 10.1        |
| Services                        | 53         | 51         | 109        | 196          | 4.9         | 333          | 6.7         |
| Depreciation                    | 59         | 68         | 50         | 223          | 5.6         | 192          | 3.9         |
| Others                          | 62         | 39         | 46         | 164          | 4.1         | 167          | 3.4         |
| <b>Selling</b>                  | <b>14</b>  | <b>8</b>   | <b>11</b>  | <b>80</b>    | <b>2.0</b>  | <b>99</b>    | <b>2.0</b>  |



Edgar Filing: Vale S.A. - Form 6-K

|   |              |            |              |              |             |              |             |
|---|--------------|------------|--------------|--------------|-------------|--------------|-------------|
| <b>R&amp;D</b>                                    | <b>235</b>   | <b>194</b> | <b>272</b>   | <b>734</b>   | <b>18.5</b> | <b>801</b>   | <b>16.2</b> |
| <b>Pre-operating and<br/>stoppage expenses(1)</b> | <b>292</b>   | <b>284</b> | <b>473</b>   | <b>1,088</b> | <b>27.4</b> | <b>1,859</b> | <b>37.6</b> |
| VNC   | 141          | 137        | 167          | 549          | 13.8        | 606          | 12.3        |
| Rio Colorado                                      | 17           | (5)        | 102          | 22           | 0.6         | 398          | 8.0         |
| Long Harbour                                      | 42           | 36         | 65           | 125          | 3.1         | 209          | 4.2         |
| Onça Puma   |              |            | 22           |              |             | 120          | 2.4         |
| Others  | 92           | 116        | 117          | 392          | 9.9         | 526          | 10.6        |
| <b>Other operating expenses</b>                   | <b>491</b>   | <b>184</b> | <b>337</b>   | <b>1,057</b> | <b>26.6</b> | <b>984</b>   | <b>19.9</b> |
| <b>Total Expenses(2)</b>                          | <b>1,324</b> | <b>936</b> | <b>1,421</b> | <b>3,978</b> |             | <b>4,946</b> |             |
| Depreciation                                      | 120          | 127        | 99           | 431          |             | 425          |             |
| <b>Expenses ex-depreciation(2)</b>                | <b>1,204</b> | <b>809</b> | <b>1,322</b> | <b>3,547</b> |             | <b>4,521</b> |             |

(1) Includes US\$ 61 million of depreciation charges in 4Q14, US\$ 59 million in 3Q14 and US\$ 49 million in 4Q13, totaling US\$ 207 million in 2014 and US\$ 231 million in 2013.

(2) Does not include gain/loss on sale of assets

**COSTS AND EXPENSES**

| US\$ million                              | 4Q14         | 3Q14         | 4Q13         | 2014          | 2013          |
|---|--------------|--------------|--------------|---------------|---------------|
| Costs                                     | 6,892        | 6,501        | 6,658        | 25,064        | 24,245        |
| Expenses                                  | 1,324        | 936          | 1,421        | 3,978         | 4,946         |
| <b>Total costs and expenses</b>           | <b>8,216</b> | <b>7,437</b> | <b>8,079</b> | <b>29,042</b> | <b>29,191</b> |
| Depreciation                              | 1,242        | 1,119        | 1,094        | 4,288         | 4,150         |
| <b>Costs and expenses ex-depreciation</b> | <b>6,974</b> | <b>6,318</b> | <b>6,985</b> | <b>24,754</b> | <b>25,041</b> |

Table of Contents

ADJUSTED EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION AND AMORTIZATION

**Annual performance**

Adjusted EBITDA reached US\$ 13.353 billion in 2014, showing a decrease of 40.8% from the US\$ 22.560 billion(9) in 2013. The decrease in adjusted EBITDA was mainly due to lower commodity prices (-US\$ 10.580 billion) and lower dividends received from non-consolidated affiliated companies (-US\$ 266 million), which were partially offset by lower costs(10) (US\$ 362 million) together with a reduction in administrative, sales and other expenses (US\$ 907 million) and higher sales volumes (US\$ 315 million).

Operating income, measured by adjusted EBIT, was US\$ 8.497 billion in 2014, 51.7% lower than the US\$ 17.576 billion in the previous year. Adjusted EBIT margin decreased to 22.6% in 2014 versus 37.6% in 2013.

**Quarterly performance**

Adjusted EBITDA was US\$ 2.187 billion in 4Q14, 27.2% lower than in 3Q14. The negative impact of lower prices (-US\$ 773 million) and lower dividends received from non-consolidated affiliated companies (-US\$ 171 million) in conjunction with higher administrative, sales and other expenses (-US\$ 354 million) and costs (-US\$ 127 million(11)) were the main factors underlying the decrease in adjusted EBITDA, which was partly mitigated by the positive effects of higher sales volumes (US\$ 329 million) and exchange rate variations (US\$ 320 million).

Adjusted EBITDA in 4Q14 was negatively impacted by one-off expenses of (i) US\$ 98 million related to the write-down of thermal coal inventory, (ii) US\$ 90 million due to the write-down of ICMS tax credits, (iii) US\$ 107 million due to provision for current and long term environmental obligations and (iv) US\$ 48 million of inventory adjustments and the opening of N4WS at Carajás. Excluding these one-off effects, the adjusted EBITDA would have been US\$ 2.530 billion in 4Q14.

Adjusted EBIT was US\$ 856 million in 4Q14, being US\$ 769 million lower than in 3Q14. Adjusted EBIT margin was 9.4% in 4Q14.

**ADJUSTED EBITDA**

| US\$ million             | 4Q14    | 3Q14    | 4Q13    | 2014     | 2013     |
|--------------------------|---------|---------|---------|----------|----------|
| Gross operating revenues | 9,226   | 9,249   | 13,273  | 38,236   | 47,486   |
| Net operating revenues   | 9,072   | 9,062   | 13,125  | 37,539   | 46,767   |
| COGS                     | (6,892) | (6,501) | (6,658) | (25,064) | (24,245) |
| SG&A                     | (306)   | (274)   | (339)   | (1,099)  | (1,302)  |
| Research and development | (235)   | (194)   | (272)   | (734)    | (801)    |

Edgar Filing: Vale S.A. - Form 6-K

|  |              |              |              |               |               |
|--|--------------|--------------|--------------|---------------|---------------|
| Pre-operating and stoppage expenses    | (292)        | (284)        | (473)        | (1,088)       | (1,859)       |
| Other operational expenses             | (491)        | (184)        | (337)        | (1,057)       | (984)         |
| <b>Adjusted EBIT</b>                   | <b>856</b>   | <b>1,625</b> | <b>5,046</b> | <b>8,497</b>  | <b>17,576</b> |
| Depreciation, amortization & depletion | 1,242        | 1,119        | 1,094        | 4,288         | 4,150         |
| Dividends received                     | 89           | 260          | 499          | 568           | 834           |
| <b>Adjusted EBITDA</b>                 | <b>2,187</b> | <b>3,004</b> | <b>6,639</b> | <b>13,353</b> | <b>22,560</b> |

---

(9) 2013 figures were adjusted to the sale of VLI.

(10) COGS without the effect of volume

(11) COGS without the effect of volume and exchange rates

Table of Contents**ADJUSTED EBITDA BY BUSINESS AREA**

| US\$ million         | 4Q14         | 3Q14         | 4Q13         | 2014          | 2013          |
|----------------------|--------------|--------------|--------------|---------------|---------------|
| Ferrous minerals     | 1,702        | 2,411        | 6,654        | 11,321        | 21,543        |
| Coal                 | (204)        | (149)        | (82)         | (669)         | (455)         |
| Base metals          | 582          | 781          | 243          | 2,521         | 1,639         |
| Fertilizer nutrients | 75           | 96           | (105)        | 278           | (54)          |
| Others               | 32           | (135)        | (71)         | (98)          | (113)         |
| <b>Total</b>         | <b>2,187</b> | <b>3,004</b> | <b>6,639</b> | <b>13,353</b> | <b>22,560</b> |

## NET INCOME

**Annual performance**

Net income was US\$ 657 million in 2014 against US\$ 584 million in 2013. Underlying earnings amounted to US\$ 4.419 billion after excluding the following one-off effects: (i) foreign exchange and monetary losses (-US\$ 2.200 billion)(12); (ii) impairment of assets (-US\$ 1.152 billion) and related tax credit impairment (-US\$ 57 million); (iii) currency and interest rate swap losses (-US\$ 683 million); (iv) mark-to-market of shareholder debentures (-US\$ 315 million); (v) relinquishment of land associated with the renewal of PTVI's CoW in Indonesia (-US\$ 167 million); (vi) foreign exchange losses on equity results (-US\$ 159 million); (vii) fair value on financial instruments (-US\$ 115 million); (viii) losses on sale of investments (-US\$ 61 million); and (ix) tax adjustments (US\$ 1.147 billion).

Net financial results were a loss of US\$ 6.069 billion in 2014, against a loss of US\$ 8.332 billion in 2013. The main components of net financial results include: (i) financial expenses (-US\$ 2.936 billion); (ii) financial revenues (US\$ 401 million); (iii) foreign exchange and monetary losses (-US\$ 2.200 billion); and (iv) losses on derivatives (-US\$ 1.334 billion), of which US\$ 683 million due to the currency swap losses and US\$ 614 million due to the bunker oil hedge (including the loss of US\$ 363 million related to the mark-to-market of the 2015 open hedge positions). Part of the bunker oil hedge qualifies for hedge accounting and therefore its mark-to-market variation is recognized in comprehensive income, not having an impact on our financial results, unless it is settled within the period. Further details on the impact of the bunker oil hedge can be found in the box [The impact of freight on Vale's financial performance](#).

**Quarterly performance**

In 4Q14, there was a loss of US\$ 1.849 billion against a loss of US\$ 1.437 billion in 3Q14. Underlying earnings accrued a loss of US\$ 251 million after excluding the following one-off effects: (i) foreign exchange and monetary losses (-US\$ 1.257 billion)(13); (ii) currency and interest rate swap losses (-US\$ 524 million); (iii) impairment of assets (-US\$ 378 million) and related tax credit impairment (US\$ 70 million); (iv) relinquishment of land associated with the renewal of PTVI's CoW in Indonesia (-US\$ 167 million); (v) fair value on financial instruments (US\$ 17 million); (vi) mark-to-market of shareholder debentures (US\$ 62 million); and (vii) tax adjustments (US\$ 579 million).

## Edgar Filing: Vale S.A. - Form 6-K

The impairments recognized in 4Q14 were: (i) US\$ 1.053 billion related to the overall fertilizers assets in Brazil due to worsened market conditions; (ii) US\$ 635 million in Simandou, complementing the impairment of US\$ 500 million booked in 2Q14, as the discussions with the Government of Guinea did not progress as expected and the uncertainties increased regarding the recognition of, and the compensation for, Vale's investments in the country; (iii) US\$ 238 million at VNC, as the ramp-up process has taken longer than expected; and (iv) US\$ 69 million related to Australian coal assets as a result of Isaac Plains and Integra Coal mines being put under care and maintenance. In 4Q14, we also booked an impairment reversal of US\$ 1.617 billion at Onça Puma, out of the original impairment of US\$ 2.849 billion recorded in 4Q12, as operations resumed production successfully.

---

(12) As result of the BRL depreciation of 13.4% against the USD in 2014 and its impact on Vale's net debt position in US dollars.

(13) As result of the BRL depreciation of 8.4% against the USD in 4Q14 and its impact on Vale's net debt position in US dollars. For more information please see the box "Effects of currency price volatility on Vale's financial performance" .

Table of Contents**ASSETS**

| US\$ million                    | Book Value before<br>impairments | Impairments<br>in 4Q14 | Total<br>impairments<br>in 2014 | Book Value after<br>impairments<br>Dec 31, 2014 |
|---------------------------------|----------------------------------|------------------------|---------------------------------|---|
| Fertilizers assets in Brazil(1) | 4,514                            | 1,053                  | 1,053                           | 3,461   |
| Simandou                        | 1,135                            | 635                    | 1,135                           |   |
| VNC                             | 5,674                            | 238                    | 238                             | 5,436   |
| Australian coal assets          | 480                              | 69                     | 343                             | 137   |
| Onça Puma                       | 845                              | (1,617)                | (1,617)                         | 2,462   |
| <b>Total</b>                    | <b>12,648</b>                    | <b>378</b>             | <b>1,152</b>                    | <b>11,496</b>                                   |

(1) Including intangible assets.

Net financial results were a loss of US\$ 2.791 billion in 4Q14, compared to a loss of US\$ 3.368 billion in 3Q14. The main components of net financial results include: (i) financial expenses (-US\$ 502 million), (ii) financial revenues (US\$ 55 million), (iii) foreign exchange and monetary losses (-US\$ 1.257 billion) and (iv) losses on derivatives (-US\$ 1.087 billion), of which a loss of US\$ 524 million due to currency swap losses and US\$ 563 million due to the bunker oil hedge (including the loss of US\$ 363 million related to the mark-to-market of the 2015 open hedge positions). Further details on the impact of the bunker oil hedge can be found in the box *The impact of freight on Vale's financial performance*.

**EFFECTS OF CURRENCY PRICE VOLATILITY ON VALE'S FINANCIAL PERFORMANCE**

In 4Q14, the BRL depreciated 8.4% against the USD from BRL 2.45/ USD as of September 30th, 2014 to BRL 2.66/ USD as of December 31st, 2014. On a quarterly average, the depreciation of the BRL was 11.8%, from BRL 2.27/USD in 3Q14 to BRL 2.54/USD in 4Q14.

Although Vale reports its financial performance in USD, the BRL depreciation impacts its results since the functional currency of Vale's parent company, Vale S. A., is the BRL.

The depreciation of the BRL against the USD and other currencies produced mainly non-cash impacts on our earnings before taxes in 4Q14 driven by:

(i) The impact on net financial liabilities – USD denominated debt minus accounts receivable in USD – which amounted to a loss of US\$ 1.257 billion in 4Q14, recorded in the financial statements as Foreign exchange rate and monetary variations.

(ii) The impact on forward and swaps derivatives that are used to minimize the volatility of our cash flow in USD. In 4Q14, the fair value variations of the currency swaps from BRL and other currencies to USD caused one-off losses of US\$ 524 million.

Additionally, the BRL depreciation produces positive impacts on our cash flow, as in 4Q14 most of our revenues were USD-denominated, while our COGS were 52% in BRL, 34% in USD and 11% in Canadian dollars (CAD) and about 62% of our capital expenditures were in BRL. The depreciation of BRL and other currencies in 4Q14 reduced our COGS by US\$ 397 million.

**Equity income from affiliated companies**

Equity income from affiliated companies totaled US\$ 31 million in 4Q14, lower than the US\$ 35 million in the previous quarter. The main contributors to equity income were MRS (US\$ 21 million), the leased pelletizing companies in Tubarão (US\$ 40 million), VLI (US\$ 16 million), CSP (US\$ 7 million) and Samarco (US\$ 7 million). In

Table of Contents

4Q14, the equity income from Samarco continued to decrease on a quarterly basis due to the impact of the BRL depreciation against the USD in its debt. Results from energy (-US\$ 52 million) and the base metals business (-US\$ 10 million) partially reduced the equity income.

**UNDERLYING EARNINGS**

| US\$ million  | 4Q14           | 3Q14           | 4Q13           | 2014         | 2013          |
|---|----------------|----------------|----------------|--------------|---------------|
| <b>Underlying earnings</b>                                  | <b>(251)</b>   | <b>666</b>     | <b>3,218</b>   | <b>4,419</b> | <b>12,269</b> |
| <b>Items excluded from basic earnings</b>                   |                |                |                |              |               |
| Impairment on assets  | (378)          |                | (2,298)        | (1,152)      | (2,298)       |
| Gain (loss) on sale of assets                               |                |                | (366)          |              | (424)         |
| COW agreement - Indonesia                                   | (167)          |                |                | (167)        |               |
| Shareholders debentures                                     | 62             | (87)           | (16)           | (315)        | (381)         |
| Foreign exchange and monetary variation gains (losses), net | (1,257)        | (1,943)        | (944)          | (2,200)      | (2,940)       |
| Currency and interest rate swaps                            | (524)          | (740)          | (226)          | (683)        | (861)         |
| Fair value on financial instruments                         | 17             | (132)          | 214            | (115)        | 214           |
| Gain (loss) on sale of investments                          |                | (43)           | 41             | (61)         | 41            |
| Foreign exchange gain (loss) on equity results              |                | (159)          |                | (159)        |               |
| Financial expenses - REFIS                                  |                |                | (2,637)        |              | (2,637)       |
| Income taxes - REFIS  |                |                | (3,832)        |              | (3,832)       |
| Other   |                |                | 27             |              | 27            |
| Tax effects of impairment                                   | 70             |                |                | (57)         |               |
| Tax effects of others                                       | 579            | 1,001          | 368            | 1,147        | 1,406         |
| <b>Net Income (loss)</b>                                    | <b>(1,849)</b> | <b>(1,437)</b> | <b>(6,451)</b> | <b>657</b>   | <b>584</b>    |

**FINANCIAL RESULTS**

| US\$ million                             | 4Q14           | 3Q14           | 4Q13           | 2014           | 2013           |
|--|----------------|----------------|----------------|----------------|----------------|
| Gross interest(1)                        | (259)          | (105)          | (359)          | (1,148)        | (1,335)        |
| Tax and labour contingencies             | (22)           | (27)           | (15)           | (91)           | (109)          |
| Others                                   | (56)           | (462)          | (274)          | (1,014)        | (921)          |
| Financial expenses (REFIS)               | (165)          | (175)          | (2,637)        | (683)          | (2,637)        |
| <b>Financial expenses</b>                | <b>(502)</b>   | <b>(769)</b>   | <b>(3,285)</b> | <b>(2,936)</b> | <b>(5,002)</b> |
| Financial income                         | 55             | 171            | 346            | 401            | 643            |
| Derivatives                              | (1,087)        | (827)          | (273)          | (1,334)        | (1,033)        |
| Currency and interest rate swaps         | (524)          | (740)          | (225)          | (683)          | (860)          |
| Others (bunker oil, commodities, etc.)   | (563)          | (87)           | (48)           | (651)          | (173)          |
| Exchange and monetary gain (losses), net | (1,257)        | (1,943)        | (944)          | (2,200)        | (2,940)        |
| <b>Financial result, net</b>             | <b>(2,791)</b> | <b>(3,368)</b> | <b>(4,156)</b> | <b>(6,069)</b> | <b>(8,332)</b> |

(1) The decrease of the gross interest in 3Q14 to US\$ 105 million reflects the capitalization of interest over assets under construction, which was smaller in 2Q14 due to the start-up of the ERP system

**INVESTMENTS**



## Edgar Filing: Vale S.A. - Form 6-K

In 2014, Vale's capital expenditures totaled US\$ 11.979 billion, comprised of US\$ 7.920 billion in project execution and US\$ 4.059 billion in sustaining. This represents a decrease of US\$ 2.254 billion when compared to the US\$ 14.233 billion spent in 2013(14).

In 4Q14, Vale's capital expenditures amounted to US\$ 3.747 billion, of which US\$ 2.279 billion in project execution and US\$ 1.467 billion in sustaining.

---

(14) Including US\$ 602 million of capex for VLI in 2013.

Table of Contents**INVESTMENTS BY BUSINESS AREA - 4Q14**

| US\$ million         | Projects     | %            | Sustaining capex | %            | Total        | %            |
|----------------------|--------------|--------------|------------------|--------------|--------------|--------------|
| Ferrous minerals     | 1,523        | 66.8         | 802              | 54.7         | 2,325        | 62.1         |
| Coal                 | 510          | 22.4         | 46               | 3.1          | 555          | 14.8         |
| Base metals          | 149          | 6.5          | 443              | 30.2         | 592          | 15.8         |
| Fertilizer nutrients | 27           | 1.2          | 95               | 6.5          | 122          | 3.3          |
| Power generation     | 56           | 2.5          | 3                | 0.2          | 59           | 1.6          |
| Steel                | 15           | 0.6          |                  |              | 15           | 0.4          |
| Others               |              |              | 78               | 5.3          | 78           | 2.1          |
| <b>Total</b>         | <b>2,279</b> | <b>100.0</b> | <b>1,467</b>     | <b>100.0</b> | <b>3,747</b> | <b>100.0</b> |

**Project Execution**

Vale's investments in project execution decreased from US\$ 9.648 billion in 2013(15) to US\$ 7.920 billion in 2014. This decrease of US\$ 1.728 billion in the period is a result of the completion of several projects. Additionally there were savings from scope optimization, efficient project execution and exchange rates.

Out of Vale's investment of US\$ 2.279 billion in 4Q14, ferrous minerals accounted for about 67% of the total and base metals and coal accounted for 29% of the total.

**PROJECT EXECUTION BY BUSINESS AREA**

| US\$ million                       | 4Q14         | 3Q14         | 4Q13         | 2014         | %            | 2013         | %            |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ferrous minerals                   | 1,523        | 1,424        | 1,367        | 4,836        | 61.1         | 4,926        | 51.1         |
| Coal                               | 510          | 677          | 514          | 2,184        | 27.6         | 1,346        | 14.0         |
| Base metals                        | 149          | 77           | 319          | 462          | 5.8          | 1,718        | 17.8         |
| Fertilizer nutrients               | 27           | 14           | 86           | 63           | 0.8          | 780          | 8.1          |
| Logistics services - general cargo |              |              | 78           |              |              | 353          | 3.7          |
| Power generation                   | 56           | 40           | 72           | 155          | 2.0          | 209          | 2.2          |
| Steel                              | 15           | 11           | 11           | 222          | 2.8          | 315          | 3.3          |
| <b>Total</b>                       | <b>2,279</b> | <b>2,243</b> | <b>2,447</b> | <b>7,920</b> | <b>100.0</b> | <b>9,648</b> | <b>100.0</b> |

**Ferrous minerals**

About 92% of the US\$ 1.523 billion invested in ferrous minerals in 4Q14 relates to growth initiatives in iron ore, namely the: (i) Carajás and related infrastructure expansion (US\$ 1.054 billion); (ii) Itabirito projects (US\$ 258 million); and (iii) global distribution network (US\$ 94 million), mainly related to the distribution center in Malaysia.

S11D (including mine, plant and associated logistics – CLN S11D) is advancing as planned and reached 42% of combined physical progress in 4Q14. During the quarter, Vale initiated the electromechanical assembly of the mine and of the long distance conveyor belts and received all the electro-centers for the truckless system. In the logistics infrastructure, 9 out of the 48 duplication segments of the railway were completed in the year. The off-shore berth reached 43% physical progress and the railway spur which links the new S11D mine to the Estrada de Ferro Carajás (EFC) reached 45% completion. When completed, the rail spur with an extension of 101 km, will enable the transportation of all iron ore produced at S11D. The project start-up is scheduled for 2H16.

Capital expenditures for the Itabiritos projects in 4Q14 totaled US\$ 258 million. In the Cauê Itabiritos project, the civil works for the waste thickener were concluded and the grinding substation commissioned.

The Conceição Itabiritos II project achieved physical progress of 94%, initiated testing on the hematite circuit and concluded commissioning and energizing of the secondary and tertiary crushing substations of the hematite. Tie-ins are scheduled for 1Q15 and the start-up for 2Q15.

---

(15) Including US\$ 353 million of capex for VLI in 2013.

Table of Contents

The Vargem Grande project initiated the ramp-up of the iron ore processing plant in 4Q14 and will increase actual production by 10 Mtpy.

**Coal**

In 4Q14, Vale invested US\$ 115 million in the Moatize II project and US\$ 385 million in its associated logistics infra-structure, the Nacala Corridor.

Moatize II completed 79% physical progress, received the first train from the Nacala corridor in the rail loop and concluded the manufacture of the boiler and the structure of the conveyor belts.

In 4Q14 Vale completed the greenfield and the brownfield sections of the railway and successfully transported the first coal cargo all the way from Moatize to Nacala-à-Velha Port. Brownfield section 7, extending for about 500 kilometers, is operational but is still being upgraded. The upgrade of the brownfield sections is scheduled for completion by 3Q15.

All the major licenses required for the development of our projects below are in place.

**DESCRIPTION AND STATUS OF MAIN PROJECTS**

| Project                          | Description   | Capacity    | Status   |
|----------------------------------|---|-------------|--|
|                                  |   | Mtpy        |  |
| <b>Ferrous minerals projects</b> |   |             |  |
| <b>Carajás Serra Sul S11D</b>    | <ul style="list-style-type: none"> <li>• Development of a mine and processing plant, located in the Southern range of Carajás, Pará, Brazil</li> </ul>  | 90          | <ul style="list-style-type: none"> <li>• All electro-centers of the truckless system received on site</li> <li>• Transportation of the modules for the plant area ongoing</li> <li>• Electromechanical assembly services of the mine and the long distance conveyor belts initiated</li> </ul> |
| <b>CLN S11D</b>                  | <ul style="list-style-type: none"> <li>• Duplication of 570 km railway, with construction of rail spur of 101 km</li> <li>• Acquisition of wagons, locomotives, and onshore and offshore expansions at PDM</li> </ul> | 230 (80)(a) | <ul style="list-style-type: none"> <li>• Foundation work on the port expansion ongoing pile driving in the off-shore north berth 43% completed</li> </ul>  |

|                                |  |           |  |
|--------------------------------|--|-----------|--|
|                                | maritime terminal  |           | <ul style="list-style-type: none"> <li>• Onshore expansion 9 of the 48 duplication segments of the railroad delivered in 2014</li> <li>• Railway spur reached 45% physical progress</li> </ul>                     |
| <b>Conceição Itabiritos II</b> | <ul style="list-style-type: none"> <li>• Adaptation of the existing plant to process lower grade itabirites from the Conceição mine, located in the Southeastern System, Minas Gerais, Brazil</li> </ul> | 19 (0)(a) | <ul style="list-style-type: none"> <li>• Commissioning and energizing of the secondary and tertiary crushing substations of the hematite concluded</li> <li>• Testing on the hematite circuit initiated</li> </ul> |
| <b>Cauê Itabiritos</b>         | <ul style="list-style-type: none"> <li>• Adaptation of the plant to process low-grade itabirites from the Minas do Meio, located in the Southeastern System, Minas Gerais, Brazil</li> </ul>             | 24 (4)(a) | <ul style="list-style-type: none"> <li>• Civil construction works for the waste thickener concluded</li> <li>• Commissioning of the grinding substation concluded</li> </ul>                                       |
| <b>CSP(b)</b>                  | <ul style="list-style-type: none"> <li>• Development of a steel slab plant in partnership with Dongkuk and Posco, located in Ceará, Brazil.</li> </ul>   | 1.5       | <ul style="list-style-type: none"> <li>• Ongoing steel structure assembly</li> <li>• Ongoing rail assembly</li> </ul>  |

---

(a) Net additional capacity

(b) Relative to Vale's stake in the project

Table of Contents

| Project                | Description  | Capacity<br>Mtpy | Status  |
|------------------------|--|------------------|---|
| Coal projects          |  |                  |   |
| <b>Moatize II</b>      | <ul style="list-style-type: none"> <li>New pit and duplication of the Moatize CHPP, as well as all related infrastructure, located in Tete, Mozambique</li> </ul>                    | 11               | <ul style="list-style-type: none"> <li>First train from the Nacala corridor in the rail loop received</li> <li>Manufacture of the boiler and structure of the conveyor belts concluded</li> </ul> |
| <b>Nacala corridor</b> | <ul style="list-style-type: none"> <li>Railway and port infrastructure connecting the Moatize site to the Nacala-à-Velha maritime terminal, located in Nacala, Mozambique</li> </ul> | 18               | <ul style="list-style-type: none"> <li>First train loaded with coal traveled through the corridor and was unloaded in the Nacala Port</li> </ul>  |

**PROGRESS INDICATORS(16)**

| Project                        | Capacity<br>Mtpy | Estimated<br>start-up | Executed capex<br>US\$ million |       | Estimated capex<br>US\$ million |          | Physical<br>progress |
|--------------------------------|------------------|-----------------------|--------------------------------|-------|---------------------------------|----------|----------------------|
|                                |                  |                       | 2014                           | Total | 2015                            | Total    |                      |
| Ferrous minerals projects      |                  |                       |                                |       |                                 |          |                      |
| <b>Carajás Serra Sul S11D</b>  | 90               | 2H16                  | 973                            | 3,492 | 1,321                           | 6,878(a) | 56%                  |
| <b>CLN S11D</b>                | 230(80)(c)       | 1H14 to 2H18          | 1,559                          | 2,653 | 2,375                           | 9,484(b) | 32%                  |
| <b>Conceição Itabiritos II</b> | 19(0)(c)         | 1H15                  | 228                            | 863   | 179                             | 1,189    | 94%                  |
| <b>Cauê Itabiritos</b>         | 24(4)(c)         | 2H15                  | 346                            | 686   | 350                             | 1,504    | 78%                  |
| <b>CSP(d)</b>                  | 1.5              | 2H15                  | 182                            | 1,055 | 185                             | 2,570    | 76%                  |

(a) Original capex budget for S11D US\$ 8.089 billion

(b) Original capex budget for CLN S11D US\$ 11.582 billion

(c) Net additional capacity

(d) Relative to Vale's stake in the project

| Project                   | Capacity<br>Mtpy | Estimated<br>start-up | Executed capex<br>US\$ million |       | Estimated capex<br>US\$ million |       | Physical<br>progress |
|---------------------------|------------------|-----------------------|--------------------------------|-------|---------------------------------|-------|----------------------|
|                           |                  |                       | 2014                           | Total | 2015                            | Total |                      |
| Coal projects             |                  |                       |                                |       |                                 |       |                      |
| <b>Moatize II</b>         | 11               | 2H15                  | 570                            | 1,384 | 629                             | 2,068 | 79%                  |
| <b>Nacala corridor(a)</b> | 18               | 2H14                  | 1,584                          | 2,892 | 648                             | 4,444 | 82%                  |

(a) The greenfield sections of the project started up but there are some brownfield sections still being upgraded.

**SUSTAINING CAPEX**

Sustaining capital expenditures amounted to US\$ 4.059 billion in 2014, 11% lower than in 2013(17). On a quarter to quarter basis, Vale's investment increased due to seasonality, however the decrease year over year is representative

---

(16) In this table we do not include pre-operating expenses in the estimated capex for the year, although these expenses are included in the total estimated capex column, in line with our Board of Directors approval process. Moreover, our estimated capex for the year is only revised once a year.

(17) Including US\$ 249 million of capex for VLI in 2013

Table of Contents

of our focus on maintaining discipline on capital allocation. Vale invested US\$ 1.467 billion in 4Q14, of which ferrous minerals accounted for 60% and base metals 30% of the total.

Sustaining capital expenditures for ferrous minerals included: (i) replacement and acquisition of new equipment (US\$ 153 million), (ii) expansion of tailing dams (US\$ 125 million), (iii) operational enhancement (US\$ 63 million) and (iv) improvement in the current standards of health and safety and environmental protection (US\$ 93 million). Maintenance of railways and ports serving our mining operations in Brazil totaled US\$ 203 million.

Sustaining capex in the base metals operations was mainly dedicated to: (i) operations (US\$ 342 million), (ii) expansion of tailing dams (US\$ 31 million) and (iii) improvement in the current standards of health and safety and environmental protection (US\$ 41 million).

In 4Q14, investments in corporate social responsibility reached US\$ 71 million, US\$ 58 million destined for environmental protection and conservation and US\$ 13 million for social projects.

**SUSTAINING CAPEX BY TYPE - 4Q14**

| US\$ million                          | Ferrous Minerals | Coal      | Base Metals | Fertilizer | TOTAL        |
|---------------------------------------|------------------|-----------|-------------|------------|--------------|
| Operations                            | 431              | 29        | 342         | 66         | <b>869</b>   |
| Waste dumps and tailing dams          | 125              |           | 31          | 3          | <b>160</b>   |
| Health and Safety                     | 136              |           | 17          | 17         | <b>170</b>   |
| CSR - Corporate Social Responsibility | 41               | 3         | 25          | 2          | <b>71</b>    |
| Administrative & Others               | 151              | 14        | 28          | 5          | <b>197</b>   |
| <b>Total</b>                          | <b>883</b>       | <b>46</b> | <b>443</b>  | <b>95</b>  | <b>1,467</b> |

**SUSTAINING CAPEX BY BUSINESS AREA**

| US\$ million                       | 4Q14         | 3Q14       | 4Q13         | 2014         | %            | 2013         | %            |
|------------------------------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|
| Ferrous minerals                   | 802          | 511        | 630          | 2,248        | 55.4         | 2,224        | 48.5         |
| Coal                               | 46           | 36         | 68           | 153          | 3.8          | 165          | 3.6          |
| Base metals                        | 443          | 241        | 451          | 1,128        | 27.8         | 1,309        | 28.5         |
| Fertilizer nutrients               | 95           | 80         | 120          | 258          | 6.4          | 378          | 8.2          |
| Logistics services - general cargo |              |            | 45           |              |              | 249          | 5.4          |
| Power generation                   | 3            | 1          | 4            | 5            | 0.1          | 6            | 0.1          |
| Others                             | 78           | 66         | 75           | 267          | 6.6          | 255          | 5.6          |
| <b>Total</b>                       | <b>1,467</b> | <b>933</b> | <b>1,393</b> | <b>4,059</b> | <b>100.0</b> | <b>4,585</b> | <b>100.0</b> |

**PORTFOLIO MANAGEMENT**



## Edgar Filing: Vale S.A. - Form 6-K

In 4Q14, Vale's board of directors approved the merger of Vale's wholly-owned subsidiaries Sociedade de Mineração Constelação de Apolo S.A. and Vale Mina do Azul S.A. with the purpose of simplifying its corporate structure.

Vale concluded the transaction of 44.25% of Fosbrasil's total capital, a producer of purified phosphoric acid in Cajati, São Paulo to ICL Brasil Ltda (ICL) after the completion of precedent conditions, including the approval of the operation by the *Conselho Administrativo de Defesa Econômica* (CADE).

In December 2014, we entered into an investment agreement with Mitsui, through which we will reduce our participation in the Moatize mine to 81% from 95%, and in the Nacala Logistic Corridor to approximately 35%, upon completion of the transaction. The deal will allow us to reduce our direct investment needs in both projects and receive cash back from our investments amounting to US\$ 3.7 billion. The final amount is subject to the size of a project finance under discussion.

### DEBT INDICATORS

Vale maintained a healthy balance sheet with low leverage, high interest coverage, long average maturity and low cost.

Table of Contents

Gross debt was US\$ 28.807 billion as of December 31, 2014, with a decrease of US\$ 559 million from the US\$ 29.366 billion as of September 30, 2014, and a decrease of US\$ 848 million from the US\$ 29.655 billion as of December 31, 2013. Our cash position was US\$ 4.122 billion and net debt US\$ 24.685 billion as of December 31, 2014.

After interest and currency swaps, Vale's gross debt on December 31, 2014, was composed of 35% of floating interest rates and 65% of fixed interest rate-linked debt, and 96% of our debt was denominated in US dollars.

In 2014 we repurchased US\$ 300 million of Vale Inco's bonds due in 2015. Moreover, as of January 2015, we have over US\$ 9 billion in available and committed credit lines while only US\$ 982 million will be maturing throughout the year.

Average debt maturity remained practically stable at 9.1 years. The average cost of debt, after the above mentioned hedge transactions, increased slightly to 4.54% per annum, against 4.50% on September 30, 2014.

Interest coverage, measured by LTM(18) adjusted EBITDA/LTM interest payment ratio, was 8.6x against 11.1x on September 30, 2014.

Debt leverage, measured by gross debt/LTM adjusted EBITDA, was 2.2x as of December 31, 2014. The gross debt/enterprise value (EV) increased to 43.8% on December 31, 2014, against 38.6% in the previous quarter, due to the fall in Vale's market capitalization(19).

**DEBT INDICATORS**

| US\$ million                                    | 4Q14   | 3Q14   | 4Q13   |
|---|--------|--------|--------|
| Total debt                                      | 28,807 | 29,366 | 29,655 |
| Net debt  | 24,685 | 21,034 | 24,331 |
| Total debt / LTM adjusted EBITDA (x)            | 2.2    | 1.6    | 1.3    |
| LTM adjusted EBITDA / LTM interest expenses (x) | 8.6    | 11.1   | 14.7   |
| Total debt / EV (%)                             | 43.8   | 38.6   | 28.6   |

**PERFORMANCE OF THE BUSINESS SEGMENTS**

In 2014, the share of ferrous minerals business in adjusted EBITDA decreased to 84.8% from 95.5% in 2013, while base metals business improved to 18.9% from 7.3% in the previous year and fertilizers business improved to 2.1% from a negative contribution of -0.2% in 2013. Coal business's contribution went from -2.0% in 2013 to -5.0% in 2014.

## Edgar Filing: Vale S.A. - Form 6-K

In 4Q14, the ferrous minerals business contributed with 77.8% to total adjusted EBITDA, followed by the base metals business which contributed with 26.6% to total adjusted EBITDA. The fertilizer business's adjusted EBITDA represented 3.4% of the total, while the coal business contributed negatively, with -9.3% of total adjusted EBITDA.

---

(18) LTM = last twelve months

(19) Market capitalization information based on data from Bloomberg on December 31st, 2014.

Table of Contents**SEGMENT INFORMATION 2014, as per footnote of financial statements**

| US\$ million                  | Gross operating revenues | Net operating revenues | Cost(1)         | SG&A and other expenses(1) | R&D(1)       | Pre operating & stoppage(1) | Dividends  | Adj. EBITDA(2) |
|-------------------------------|--------------------------|------------------------|-----------------|----------------------------|--------------|-----------------------------|------------|----------------|
| <b>Ferrous minerals</b>       | <b>26,140</b>            | <b>25,697</b>          | <b>(13,063)</b> | <b>(1,289)</b>             | <b>(329)</b> | <b>(221)</b>                | <b>526</b> | <b>11,321</b>  |
| Iron ore fines                | 19,439                   | 19,301                 | (9,532)         | (1,258)                    | (319)        | (160)                       | 44         | 8,076          |
| ROM                           | 233                      | 215                    | (70)            |                            |              |                             |            | 145            |
| Pellets                       | 5,424                    | 5,263                  | (2,705)         | (21)                       |              | (38)                        | 482        | 2,981          |
| Ferrous alloys and manganese  | 444                      | 392                    | (261)           | (13)                       |              | (23)                        |            | 95             |
| Others ferrous                | 600                      | 526                    | (495)           | 3                          | (10)         |                             |            | 24             |
| <b>Coal</b>                   | <b>739</b>               | <b>739</b>             | <b>(1,071)</b>  | <b>(309)</b>               | <b>(18)</b>  | <b>(38)</b>                 | <b>28</b>  | <b>(669)</b>   |
| <b>Base metals operations</b> | <b>7,694</b>             | <b>7,692</b>           | <b>(4,587)</b>  | <b>89</b>                  | <b>(143)</b> | <b>(530)</b>                |            | <b>2,521</b>   |
| Nickel(3)                     | 6,242                    | 6,241                  | (3,710)         | 101                        | (138)        | (514)                       |            | 1,980          |
| Copper(4)                     | 1,452                    | 1,451                  | (877)           | (12)                       | (5)          | (16)                        |            | 541            |
| <b>Fertilizer nutrients</b>   | <b>2,585</b>             | <b>2,415</b>           | <b>(1,885)</b>  | <b>(95)</b>                | <b>(72)</b>  | <b>(85)</b>                 |            | <b>278</b>     |
| <b>Others</b>                 | <b>1,078</b>             | <b>996</b>             | <b>(601)</b>    | <b>(329)</b>               | <b>(172)</b> | <b>(6)</b>                  | <b>14</b>  | <b>(98)</b>    |
| <b>Total</b>                  | <b>38,236</b>            | <b>37,539</b>          | <b>(21,207)</b> | <b>(1,933)</b>             | <b>(734)</b> | <b>(880)</b>                | <b>568</b> | <b>13,353</b>  |

---

(1) Excluding depreciation and amortization

(2) Excluding non-recurring effects

(3) Including copper and by products from our nickel operations

(4) Including by products from our copper operations

**SEGMENT INFORMATION 4Q14, as per footnote of financial statements**

| US\$ million                  | Gross operating revenues | Net operating revenues | Cost(1)        | SG&A and other expenses(1) | R&D(1)       | Pre operating & stoppage(1) | Dividends | Adj. EBITDA(2) |
|-------------------------------|--------------------------|------------------------|----------------|----------------------------|--------------|-----------------------------|-----------|----------------|
| <b>Ferrous minerals</b>       | <b>6,213</b>             | <b>6,116</b>           | <b>(3,792)</b> | <b>(504)</b>               | <b>(117)</b> | <b>(48)</b>                 | <b>47</b> | <b>1,702</b>   |
| Iron ore fines                | 4,593                    | 4,568                  | (2,831)        | (510)                      | (112)        | (40)                        | 20        | 1,095          |
| ROM                           | 42                       | 42                     | (20)           |                            |              |                             |           | 22             |
| Pellets                       | 1,308                    | 1,270                  | (775)          | 7                          |              | (3)                         | 27        | 526            |
| Ferrous alloys and manganese  | 143                      | 131                    | (77)           | 1                          |              | (5)                         |           | 50             |
| Others ferrous                | 127                      | 105                    | (89)           | (2)                        | (5)          |                             |           | 9              |
| <b>Coal</b>                   | <b>201</b>               | <b>201</b>             | <b>(249)</b>   | <b>(164)</b>               | <b>(10)</b>  | <b>(10)</b>                 | <b>28</b> | <b>(204)</b>   |
| <b>Base metals operations</b> | <b>1,948</b>             | <b>1,953</b>           | <b>(1,205)</b> | <b>15</b>                  | <b>(45)</b>  | <b>(136)</b>                |           | <b>582</b>     |
| Nickel(3)                     | 1,540                    | 1,540                  | (943)          | 32                         | (43)         | (133)                       |           | 453            |
| Copper(4)                     | 407                      | 413                    | (262)          | (17)                       | (2)          | (3)                         |           | 129            |
| <b>Fertilizer nutrients</b>   | <b>607</b>               | <b>569</b>             | <b>(411)</b>   | <b>(29)</b>                | <b>(20)</b>  | <b>(34)</b>                 |           | <b>75</b>      |
| <b>Others</b>                 | <b>257</b>               | <b>233</b>             | <b>(113)</b>   | <b>(56)</b>                | <b>(43)</b>  | <b>(3)</b>                  | <b>14</b> | <b>32</b>      |
| <b>Total</b>                  | <b>9,226</b>             | <b>9,072</b>           | <b>(5,770)</b> | <b>(738)</b>               | <b>(235)</b> | <b>(231)</b>                | <b>89</b> | <b>2,187</b>   |

- 
- (1) Excluding depreciation and amortization
  - (2) Excluding non-recurring effects
  - (3) Including copper and by products from our nickel operations
  - (4) Including by products from our copper operations

Table of Contents

**Ferrous minerals**

**Iron ore**

**Annual performance**

*EBITDA*

Adjusted EBITDA of iron ore fines in 2014 was US\$ 8.076 billion, 52.6% lower than in 2013, mainly as a result of lower sales prices which negatively impacted adjusted EBITDA by US\$ 9.210 billion.

*Sales Revenues and Volume*

Gross sales revenues of iron ore fines, excluding pellets and Run of Mine (ROM), decreased to US\$ 19.439 billion in 2014, 30.9% lower than in 2013. The decrease was a result of lower iron ore sales prices (US\$ 9.210 billion), which were only partially offset by the sales volume increase, which contributed with US\$ 542 million to sales revenues when compared to 2013.

The main factors that contributed to the increase in sales volumes of iron ore fines from the 251.0 Mt in 2013 to 255.9 Mt in 2014 were the annual record production of iron ore (319.2 Mt) and the higher acquisition of iron ore from third parties of 12.2 Mt. ROM sales totaled 14.1 Mt in 2014.

The average realized price of iron ore was US\$ 75.97 per metric ton in 2014, significantly lower than the US\$ 112.05 in 2013.

*Cost and expenses*

Iron ore fines costs totaled US\$ 10.867 billion (or US\$ 9.532 billion net of depreciation) in 2014 against US\$ 10.309 billion in 2013, mostly as a result of higher volumes (US\$ 483 million).

## Edgar Filing: Vale S.A. - Form 6-K

Total cash cost at the port (mine, plant, railroad and port, after royalties) was US\$ 5.716 billion. Cash cost was calculated after deducting from COGS iron ore freight costs of US\$ 3.325 billion, depreciation of US\$ 1.334 billion, iron ore acquired from third parties of US\$ 443 million and one-off effects of US\$ 48 million. Cash cost per metric ton in 2014 was US\$ 23.5/t, slightly higher than the US\$ 23.3/t in 2013.

SG&A<sup>(20)</sup> and other expenses decreased to US\$ 1.258 billion, 0.2% lower than in 2013, despite the one-off effects of US\$ 197 million in other expenses.

Pre-operational expenses<sup>(20)</sup> decreased to US\$ 160 million, 34.4% lower than in 2013 as a result of the start-up of the Plant 2 and CLN projects in Carajás in 2013.

Despite challenging market conditions our adjusted EBITDA margin for iron ore fines (excluding ROM and third party ores) was US\$ 31.8 /t in 2014.

### Quarterly performance

#### *EBITDA*

Adjusted EBITDA for iron ore fines in 4Q14 was US\$ 1.095 billion, US\$ 433 million lower than the US\$ 1.528 billion achieved in 3Q14, mainly due to the decrease in sales prices (US\$ 478 million) and the impact of one-off charges on costs (US\$ 48 million) and on expenses (US\$ 197 million).

These one-off effects for costs refer to: (i) iron ore inventory adjustments (US\$ 22 million), (ii) loss on iron ore inventory at Vale International resulting from foreign exchange variation (US\$ 20 million), and (iii) anticipation of overburden removal in preparation for production volume increases at the N4WS mine in Carajás (US\$ 6 million).

---

(20) Net of depreciation.

Table of Contents

These one-off effects for expenses refer to: (i) the write-down of ICMS tax credits (US\$ 90 million) and (ii) the provisions for current and long term environmental obligations (US\$ 107 million).

*Sales Revenues and Volume*

Gross sales revenues of iron ore fines in 4Q14 were US\$ 4.593 billion, 7.1% higher than in 3Q14 due to higher sales volumes. ROM sales revenues in 4Q14 were US\$ 42 million.

Sales volume of iron ore fines reached 74.6 Mt in 4Q14, 18% higher than in 3Q14 and the highest since 3Q08. ROM sales accounted for a total of 3.6 Mt in 4Q14.

Iron ore own production, excluding Samarco's attributable production and third party ore in 4Q14, was 83.0 Mt, a quarterly production record for a fourth quarter and 1.7 Mt higher than in 4Q13. The good operational performance was supported by the ramp-ups of Plant 2 in Carajás and of Conceição Itabiritos in the Southeastern System.

Total iron ore available for sale was 78.2 Mt after adjusting the 83.0Mt quarterly production for the (i) acquisition of 3.3 Mt of iron ore from third parties, (ii) use of 4.8 Mt of inventories and (iii) the deduction of 12.9 Mt of iron ore fines used for the production of pellets. After deducting sales of ROM of 3.6 Mt, total iron ore fines sales amounted to 74.6 Mt.

On a CFR basis, sales of iron ore fines increased from 36.3 Mt in 3Q14 to 47.9 Mt in 4Q14, representing 64% of all iron ore fines sales in 4Q14. The increase was mainly due to higher sales to China, which are mostly negotiated on a CFR basis.

*Realized Prices*

Iron ore sales in 4Q14 were distributed across three pricing systems: (i) 50% based on the current quarter, monthly and daily spot prices, including provisional price sales that were settled within the quarter; (ii) 37% based on provisional prices with price settlement based on the market price defined on the delivery date, in which case prices had not yet been settled at the end of the quarter; and (iii) 13% linked to past prices (quarter lagged).

Vale's average realized price for iron ore fines (ex-ROM) decreased by US\$ 6.4/t from US\$ 68.0 per metric ton in 3Q14 to US\$ 61.6 in 4Q14. This US\$ 6.4/t decrease was lower than the US\$ 15.9/t decrease in the average Platts IODEX 62% which came from US\$ 90.2 per dry metric ton (CFR China) in 3Q14 down to US\$ 74.3 in 4Q14.



## Edgar Filing: Vale S.A. - Form 6-K

The main reasons for the relatively better performance in Vale's realized price versus the average Platts IODEX in 4Q14 was the lower impact of the provisional pricing system compared to 3Q14 and the increase in CFR sales in the mix.

In 4Q14, iron ore sales of 27.4 Mt, or 37% of Vale's sales mix, were recorded under the provisional pricing system, which was set at the end of 4Q14 at US\$ 72.0/t(21). The final prices of these sales and the required adjustment to sales revenues will be determined and recorded in 1Q15.

Price realization was impacted in 4Q14 as follows:

(i) Provisional prices set at the end of 3Q14 at US\$ 77.8/t, which were later adjusted based on the price of delivery in 4Q14, negatively impacted prices in 4Q14 by US\$ 0.5/t compared to a negative of US\$ 1.4/t in 3Q14.

(ii) Provisional prices set at the end of 4Q14 at US\$ 72.0/t vs. the IODEX average of US\$ 74.3/t in 4Q14, negatively impacted prices in 4Q14 by US\$ 0.8/t compared to a negative impact of US\$ 3.8/t in 3Q14.

(iii) Quarter-lagged contracts priced at US\$ 93.6/t based on the average prices for Jun-Jul-Aug, positively impacted prices in 4Q14 by US\$ 2.3/t compared to a positive impact of US\$ 2.4/t in 3Q14.

Higher CFR sales and the reduction of bunker oil prices positively impacted prices in 4Q14 by US\$ 2.4/t compared to a positive impact of US\$ 0.7/t in 3Q14.

---

(21) The reference for determining the provisional price is SBB Steel Markets Daily forward curve IODEX 62% Fe CFR North China OTC, December 30th, 2014 page 5.

Table of Contents

Bunker oil prices impacted FOB sales prices as the decrease in bunker oil prices contributed to a lower freight deduction to the IODEX CFR reference price used to determine the FOB price.

*Costs and Expenses*

In 4Q14 iron ore fines costs were US\$ 3.194 billion (or US\$ 2.831 billion net of depreciation). After adjusting for the effects of higher volumes (US\$ 552 million) and exchange rates variations (-US\$ 187 million), costs increased by US\$ 54 million when compared to 3Q14. The increase was mainly due to higher maintenance costs(22) (US\$ 106 million) and personnel (US\$ 70 million) which were partly offset by a reduction in the cost of acquisition of third party ores (-US\$ 37 million), lower depreciation (-US\$ 35 million) and lower costs with outsourced services and materials (-US\$ 24 million). One-off effects of: (i) iron ore inventory adjustments, (ii) loss on iron ore inventory at Vale International resulting from foreign exchange variation and (iii) anticipation of overburden removal in preparation for production volume increases at the N4WS mine in Carajás impacted our costs by US\$ 48 million.

The increase in maintenance costs was primarily due to anticipation of maintenance services and elimination of maintenance backlogs to ensure that assets can be fully utilized in preparation for production and transportation volume increases in our systems, especially at the N4WS mine in Carajás. This increase in maintenance costs has already been reversed in January 2015 figures. The increase in personnel costs is associated with the two-year labor agreement settled with our employees in Brazil.

Oil costs in the form of diesel for our operations amounted to US\$ 141 million in 4Q14 against US\$ 123 million in 3Q14. After adjusting for higher volumes (US\$ 20 million) and exchange rates variations (-US\$ 13 million), costs increased by US\$ 11 million when compared to 3Q14. Falling oil prices had a limited positive impact on our fuel costs, since prices of diesel in Brazil are not directly correlated to international oil prices.

Maritime freight costs, which are fully accrued as cost of goods sold, totaled US\$ 1.037 billion in 4Q14, an increase of US\$ 226 million when compared to 3Q14 as a result of (i) the higher share of CFR shipments and (ii) the higher use of indirect routes via FTS and Teluk Rubiah. The reduction in bunker oil prices partially offset the cost increases mentioned above. Vale's iron ore unit freight cost per metric ton was US\$ 21.7/t in 4Q14 when compared to US\$ 22.3/t in 3Q14. For further details, please refer to *The Impact of Freight on Vale's Financial Performance* box on page 24.

The cost of ore acquired from third parties amounted to US\$ 89 million against US\$ 107 million in 3Q14. Purchases of iron ore totaled 3.2 Mt, 0.4 Mt higher than in 3Q14. On a per-ton basis, cost of ore acquired reduced from US\$ 36.5/t in 3Q14 to US\$ 27.7/t in 4Q14.

Other operational costs amounted to US\$ 371 million, decreasing from the US\$ 379 million in 3Q14. In 4Q14, the TFRM(23) was US\$ 55 million compared to US\$ 54 million in 3Q14 and CFEM, Brazil's federal mining royalty, was US\$ 68 million compared to US\$ 77 million in 3Q14.

## Edgar Filing: Vale S.A. - Form 6-K

Total cash cost at the port (mine, plant, railroad and port, after royalties) was US\$ 1.657 billion after deducting depreciation of US\$ 363 million, iron ore acquired from third parties of US\$ 89 million, iron ore freight costs of US\$ 1.037 billion and one-off effects of US\$ 48 million. These one-off effects refer to: (i) iron ore inventory adjustments, (ii) loss on iron ore inventory at Vale International resulting from foreign exchange variation, and (iii) anticipation of overburden removal in preparation for production volume increases at the N4WS mine in Carajás.

Cash cost<sup>(24)</sup> per metric ton of iron ore fines was US\$ 23.2 <sup>(25)</sup> in 4Q14 vs. US\$ 24.7 in 3Q14, a reduction of US\$ 1.5 /t. In addition, January 2015 figures already show a reversal of the backlog maintenance services and costs fell further by more than US\$ 1/t, even before the effects of the January 2015 depreciation of the Brazilian Real.

---

(22) As of the third quarter of 2014 maintenance costs have been reported encompassing outsourced services, materials and personnel costs related to maintenance works.

(23) TRFM - State of Minas Gerais and state of Pará tariff for control, monitoring, and supervision of activities of research, exploration, production, profiting from mineral resources

(24) Excluding ROM and iron ore from third parties.

(25) As per segment reporting notes to the financial statements: US\$ 2.831 billion in costs net of depreciation and amortization, less US\$ 1.037 billion in iron ore freight, US\$ 89 million in iron ore acquired from third parties, and US\$ 48 million in negative one-off effects, over iron ore sales of 78.2 Mt less volume acquired from third parties, 3.2 Mt, and ROM volume sold of 3.6 Mt.

Table of Contents

Iron ore expenses, net of depreciation, amounted to US\$ 662 million in 4Q14, increasing from the US\$ 353 million in 3Q14. SG&A and other expenses increased to US\$ 510 million vs. US\$ 212 million in 3Q14 mainly due to the one-off effects of: (i) provisions for current and long term environmental obligations (US\$ 107 million) and (ii) write-down of ICMS tax credits (US\$ 90 million).

Pre-operating expenses and idle capacity for iron ore amounted to US\$ 40 million, against US\$ 63 million in 3Q14. The reduction is mainly due to the ramp up of the Malaysian operations.

Iron ore pellets

**Annual performance**

Adjusted EBITDA for pellets in 2014 was US\$ 2.981 billion, 27.3% lower than in 2013. The decrease of US\$ 1.118 billion was mainly a result of lower sales prices (US\$ 1.142 billion) and higher costs (US\$ 382 million) which were partially offset by higher sales volumes (US\$ 227 million) and lower expenses (US\$ 193 million).

Gross sales revenues for pellets were US\$ 5.424 billion in 2014, 11.9% lower than in 2013, mainly due to the decrease in sales prices, from US\$ 150.22 per metric ton in 2013 to US\$ 124.17 per metric ton in 2014. Sales prices negatively impacted sales revenues by US\$ 1.139 billion in 2014 in comparison with 2013. Sales volumes increased to 43.682 Mt versus 40.991 Mt in 2013 as a result of the start-up of the Tubarão VIII and the ramp-up of the Oman pellet plants.

Costs for pellets totaled US\$ 2.972 billion in 2014 (or US\$ 2.705 billion net of depreciation). After adjusting for the effects of volumes (US\$ 189 million), costs increased by US\$ 310 million against 2013. This increase is mainly due to higher depreciation cost (US\$ 90 million), higher costs of purchased ore (US\$ 83 million), ramp up of Tubarão VIII pelletizing plant (US\$ 51 million), and due to higher leasing costs (US\$ 199 million), as contracts for the leased pellet plants have price-adjusted fees based on the pellet premiums and production, which both increased in 2014.

**Quarterly performance**

Adjusted EBITDA for pellets in 4Q14 was US\$ 526 million, compared to the US\$ 832 million in 3Q14. The decrease in dividends received from our non-consolidated affiliated companies (-US\$ 209 million), sales prices (-US\$ 177 million) and higher costs (-US\$ 62 million) were partly offset by higher volumes (US\$ 61 million), exchange rate variations (US\$ 60 million) and lower expenses (US\$ 21 million).

Gross sales revenues for pellets in 4Q14 were US\$ 1.308 billion, slightly lower than the US\$ 1.356 billion in 3Q14. The decrease against the previous quarter was due to lower sales prices of US\$ 103.11 per ton vs. US\$ 117.85/t in 3Q14. Sales revenues were offset by higher sales

volumes of 12.686 Mt vs. 11.506 Mt in 3Q14.

In 4Q14, production reached 11.6 Mt, a new record for a fourth quarter, being 1.7% and 11.8% higher than in 3Q14 and in 4Q13, respectively.

Pellet prices decreased by US\$ 14.75/t, from US\$ 117.85 in 3Q14 to US\$ 103.11 per metric ton in 4Q14, whereas the Platt's IODEX iron ore reference price (CFR China) decreased by US\$ 15.9/t in the quarter. The smoother decline in price realization is a result of changes in the sales mix (blast furnace vs. direct reduction pellets) and lower bunker oil prices, which contributed to a lower freight deduction to the IODEX reference price to determine the FOB pellets price.

CFR sales increased from 3.4 Mt in 3Q14 to 3.8 Mt in 4Q14, representing 30% of pellets sales. On a FOB basis, sales of pellets increased from 8.2 Mt in 3Q14 to 8.9 Mt in 4Q14, representing 70% of all pellets sales.

Pellet costs totaled US\$ 867 million (or US\$ 775 million net of depreciation) in 4Q14. Costs increased by US\$ 80 million when compared to 3Q14 after adjusting for the effects of higher volumes (US\$ 85 million) and exchange rates variations (-US\$ 66 million). This increase is mainly due to higher maintenance costs (US\$ 26 million) and higher depreciation costs (US\$ 19 million). Pre-operating and stoppage expenses for pellets were US\$ 3 million in 4Q14 compared to the US\$ 7 million in the previous quarter.

Table of Contents

EBITDA margins for pellets was US\$ 59.0/t in 2014 and US\$ 41.4/t in 4Q14. EBITDA in 4Q14 was based on a realized price of US\$ 100.1/t and included dividends received from the leased pelletizing plants (US\$ 80 million) in Tubarão. Cash costs include costs of iron ore, transformation costs (energy, labour, etc), lease fees for the pelletizing plants and freight.

**PELLETS EBITDA ex-Samarco**

|  | 4Q14         |            | 2014         |            |
|--|--------------|------------|--------------|------------|
|  | US\$ million | US\$ / wmt | US\$ million | US\$ / wmt |
| Gross revenues / realized price  | 1,308        | 103.1      | 5,424        | 124.2      |
| Net revenues / realized price  | 1,270        | 100.1      | 5,263        | 120.5      |
| Dividends received (Leased pelletizing plants) ex-Samarco                    | 27           | 2.1        | 80.0         | 1.8        |
| Cash costs (includes Iron ore, leasing, freight, overhead, energy and other) | (775)        | (61.1)     | (2,705)      | (61.9)     |
| Expenses (SG&A, R&D and other)   | 4            | 0.3        | (59.0)       | (1.4)      |
| EBITDA, ex-Samarco   | 526          | 41.4       | 2,579        | 59.0       |

**Manganese and ferroalloys****Annual performance**

Adjusted EBITDA of manganese and ferroalloys in 2014 was US\$ 95 million, US\$ 64 million lower than in 2013, mainly due to lower prices (US\$ 52 million) and lower volumes (US\$ 39 million) which were partially offset by exchange rates variations (US\$ 26 million) and expenses reductions (US\$ 11 million).

Gross sales revenues for manganese decreased to US\$ 226 million in 2014, down from US\$ 333 million in 2013, due to the effect of lower prices (US\$ 70 million) and lower sales volumes (US\$ 37 million). In 2014, manganese ore production amounted to 2.352 Mt, in line with 2013.

Gross sales revenues for ferroalloys decreased in 2014 to US\$ 218 million from US\$ 239 million in 2013, mainly due to the effect of lower sales volumes (US\$ 42 million) which were partly offset by higher prices (US\$ 21 million). In 2014, the output of ferroalloys was 171,000 t, slightly lower than in 2013.

**Quarterly performance**

Adjusted EBITDA of manganese ore and ferroalloys in 4Q14 was US\$ 50 million, US\$ 38 million higher than the US\$ 12 million in 3Q14, mainly due to higher sales volumes (US\$ 21 million) and lower costs and expenses (US\$ 14 million).

Gross sales revenues for manganese increased to US\$ 92 million from US\$ 50 million in 3Q14 due to higher sales volumes. In 4Q14, production of manganese ore reached 723,000 t, as against 654,000 t in 3Q14 and 638,000 t in 4Q13.

Gross sales revenues for ferroalloys were US\$ 51 million, increasing from US\$ 47 million in 3Q14, due to higher sales volumes. Ferroalloys production of 41,000 t in 4Q14 was in line with 3Q14.

**Market outlook – Iron Ore and Pellets**

In 2014, global economic growth was lower than initially expected despite the strengthening of the US economy. World GDP growth continued to be negatively impacted by a weak economic activity in the euro zone and Japan, and by a deceleration in China.

Table of Contents

GDP growth of 7.4% year-on-year in China was only slightly below the Chinese government's growth target. The slowdown in credit growth heavily impacted investment-driven sectors, especially the real estate one, whereas investments in infrastructure partially compensated this drop. Nonetheless the slowdown in the economy negatively impacted commodities demand, particularly demand for iron ore.

Iron ore price dropped by 47% in 2014 as a result of a strong supply in the seaborne market, when demand from China's steel mills was subdued. Lower iron ore prices drove higher cost producers in China and overseas to gradually exit the market. This trend may continue in the short-term and medium-term if the currently challenging market conditions persist leading to a new market equilibrium in the medium to long-term.

China is the world's largest pellet producer with more than 155 Mtpy, of which approximately 80% is owned by integrated steel mills. After mine closures in China, Chinese steel makers started to use more lump as substitute for domestic pellets. As prices of lump increase, demand for local and seaborne pellets is expected to increase as well, supporting high pellet premiums. An increase in Chinese demand and a restrict environmental policy may increase the demand for blast furnace direct charge and significantly impact the current pellets seaborne market of about 125 Mtpy.



Table of Contents

THE IMPACT OF FREIGHT ON VALE'S FINANCIAL PERFORMANCE

Freight rates are impacted by three main variables: (i) supply and demand of vessels, (ii) bunker oil costs and (iii) port disbursements, as explained below:

(i) The short-term supply/demand balance in the shipping market impacts mostly the daily spot hire for vessels (related to spot freight rates), whereas long term chartering contracts are mostly impacted by long-term supply/demand fundamentals as well as the price of building ships and the cost of financing and operating them.

(ii) Bunker oil costs are driven by bunker oil prices, vessels' consumption and transportation routes. Generally, fluctuations in oil prices are the most relevant drivers of bunker oil cost, given the relatively stable mixes of transportation routes and vessel types.

For medium and long term chartering contracts, bunker oil costs are always considered a pass through and, therefore, all these contracts contain a freight rate adjustment based on the variation of the bunker oil prices. In the specific route Tubarão - Qingdao, for instance, each US\$ 100 variation in bunker oil prices results in a variation of about US\$ 2.3/t in the freight costs of a standard Capesize vessel and less for larger vessels such as the Valemaxes, which are more energy efficient.

(iii) Port disbursements are a function of pilots' services costs, tug boats costs, port utilization taxes, anchorage dues, navigation taxes and others, thus being directly impacted by the size of the vessel.

Port disbursements are relatively stable, representing about US\$ 1.1/t for a Capesize vessel on the route Tubarão - Qingdao in 2014.

In Vale's case, the freight costs are not 100% correlated to spot market given that:

(i) Vale has a freight portfolio composed of short term, medium term and long term chartering contracts and its own fleet;

(ii) Freight cost is impacted by changes in route mixes (sales to different geographical areas, direct sales versus sales through distribution centers, etc.);

(iii) Freight cost is also impacted by the time-lag between the fixing date of the spot contract and the recognition of the expenditure in the cost, which is booked at the recording of the sale of the iron ore cargo.

In addition, the cost impact on Vale's freight from bunker oil reductions has an average delay of not less than 30 days, resulting from the time lag between the bunkering date for its own fleet<sup>(26)</sup> or the date established in the chartering contract<sup>(27)</sup> and the recognition of the expenditure in the cost which is booked at the recording of the sale of the iron ore cargo.

Considering all the above mentioned facts and as the most significant reduction in spot freight and bunker oil prices occurred in December 2014, the impact on Vale's freight costs shall be reflected in the coming quarters.

Vale's iron ore revenue is also positively impacted by the reduction in bunker oil prices, according to the same formula referred to in item (ii) of the first paragraph, since the FOB and the domestic sales prices are calculated by deducting the long term freight rate from the IODEX price.

Last but not least, in Vale's specific situation, the total effect of bunker oil prices is further dependent upon the bunker oil hedge taken out by Vale as follows:

(i) The portion of the 2015 hedge related to the bunker oil exposure in the FOB and domestic sales is accounted as financial expenses and is marked-to-market every quarter.

(ii) The hedge for the owned fleet and the chartering contracts' bunker oil exposure is registered as hedge accounting and, therefore, will affect COGS during 2015, according to the actual settlement dates.

---

(26) In the route Brazil-China, vessels are bunkered in Singapore on their way to Brazil (ballast leg) about 30-35 days prior to loading.

(27) The Singapore bunker oil price, published by Platts, is the standard reference for pricing the bunker oil adjustment in the Brazil-China route. The day of determining the bunker oil price reference varies from contract to contract and, for instance, can be based on the Bill of Lading date, or the sailing date from the discharging port, or the date of the actual bunkering operation, or other.

Table of Contents

**IMPACT OF BUNKER OIL PRICES AND HEDGE IN VALE S FINANCIAL PERFORMANCE**

| Freight Type                    | Bunker Oil Price Impact                      | Hedge Accounting | 2015 Bunker oil derivative execution (million tons) | Average Strike Price (US\$/t) | Impact of open derivative positions(28) in 2014 P/L statement               | Impact of open derivative positions in 2015 P/L statement           |
|---------------------------------|--|------------------|---|-------------------------------|---|---|
| Owned Fleet & Long term charter | Impact with time lag                         | Yes              | 1.950<br>(50% of the total exposure)                | 509                           | Nil   | COGS will be stable and defined at the strike price(29).            |
| Spot Charter                    | Already captured in the spot freight rate    | Yes(30)          |   |                               |   |   |
| FOB                             | According to the applicable pricing rule(31) | No               | 2.205<br>(60% of the total exposure)                | 483                           | -US\$ 363 million<br>(marked-to-market at US\$ 318/t in Financial Expenses) | Financial Expenses will vary according to subsequent mark-to-market |

More specifically, the impact of the outstanding hedge positions(28) in Vale s results can be summarized as follows:

(i) Impact on the financial statements related to the trades under Vale s hedge accounting program:

a. In 2014: open hedge positions(28) had no impact in 2014 P&L statement

b. In 2015: hedging results (US\$) will be recognized in costs on a monthly basis according to the settlement of the derivative contract and can be estimated by the following proxy(32): 1,950,000 t \* (Actual bunker oil price - US\$ 509 / t) / 12

(ii) Impact on the financial statements related to the trades that are not under Vale s hedge accounting program:

a. In 2014: a negative impact of US\$ 363 million already recognized in 2014 financial expenses by the mark-to-market of the outstanding derivative positions(28), according to the following formula: 2,205,000 t \* (US\$ 318 / t(33) - US\$ 483 / t)

b. In 2015: financial expenses will be impacted by the variations in the mark-to-market of the outstanding derivative positions by the end of each quarter, according to the following formula: derivative tonnage \* (average of the forward curve price for the quarter - US\$ 318 / t for 1Q15(34))

---

(28) At December 31st, 2014

(29) Variations in the actual bunker oil prices will be offset by the hedge

(30) Vale hedges only the portion of spot freight costs associated with bunker oil consumption. If supply and demand yield a variation in spot freight rates beyond the effect of bunker oil prices, Vale is 100% exposed to such a variation in its spot charters.

(31) The bunker oil price reference used in the pricing formulas for the FOB contracts follows the same time period as the pricing systems associated with the respective sales.

(32) The actual settlement is based on the specific conditions (executed volumes and prices) of each derivative instrument. The above referred proxy assumes the average price of these instruments and evenly spread bunker tonnage throughout the year.

(33) Average of the monthly forward curve as stated in Vale's Financial Statement, under note 24 - Additional information about derivatives financial instruments .

(34) In 4Q14, the average reference price used for marking-to-market was US\$ 318/t, which will be the new reference for marking-to-market the open hedge positions at the end of 1Q15. For calculating the mark-to-market from 2Q15 onwards it shall be considered the price used as a reference in the previous quarter.

Table of Contents**IRON ORE COGS - 2013 x 2014**

| US\$ million  | Variance drivers |            |                  |            | Total<br>Variation 2013<br>x 2014 | 2014          |
|---|------------------|------------|------------------|------------|-----------------------------------|---------------|
|   | 2013             | Volume     | Exchange<br>Rate | Others     |                                   |               |
| Personnel   | 972              | 17         | (79)             | (2)        | (64)                              | 908           |
| Outsourced services and materials                       | 1,800            | 32         | (140)            | (24)       | (133)                             | 1,667         |
| Energy (electricity, fuel & gas)                        | 521              | 9          | (42)             | 89         | 56                                | 578           |
| Acquisition of products                                 | 405              | 8          |                  | 30         | 38                                | 443           |
| Maintenance(1)  | 886              | 16         | (74)             | 439        | 380                               | 1,267         |
| Freight   | 2,974            | 351        |                  |            | 351                               | 3,325         |
| Others  | 1,509            | 27         | (106)            | (86)       | (165)                             | 1,345         |
| <b>Total costs before depreciation and amortization</b> | <b>9,067</b>     | <b>461</b> | <b>(441)</b>     | <b>446</b> | <b>465</b>                        | <b>9,532</b>  |
| Depreciation  | 1,242            | 23         | (74)             | 144        | 93                                | 1,334         |
| <b>Total</b>  | <b>10,309</b>    | <b>483</b> | <b>(516)</b>     | <b>590</b> | <b>558</b>                        | <b>10,867</b> |

(1) As of the third quarter 2014, we are reporting a new COGS item, maintenance costs, due to the introduction of the ERP system. Maintenance costs encompass part of outsourced services, materials and personnel costs related to maintenance work. The comparison of 2013 and 2014 COGS items, especially maintenance and personnel, may not offer appropriate conclusions.

**IRON ORE COGS - 3Q14 x 4Q14**

| US\$ million  | Variance drivers |            |                  |           | Total<br>Variation<br>3Q14 x 4Q14 | 4Q14         |
|---|------------------|------------|------------------|-----------|-----------------------------------|--------------|
|   | 3Q14             | Volume     | Exchange<br>Rate | Others    |                                   |              |
| Personnel   | 201              | 33         | (21)             | 70        | 82                                | 283          |
| Outsourced services and materials                       | 420              | 70         | (38)             | (24)      | 8                                 | 428          |
| Energy (electricity, fuel & gas)                        | 150              | 25         | (16)             | 9         | 18                                | 167          |
| Acquisition of products                                 | 107              | 20         |                  | (37)      | (18)                              | 89           |
| Maintenance   | 335              | 54         | (40)             | 106       | 120                               | 455          |
| Freight   | 811              | 225        |                  |           | 225                               | 1,037        |
| Others  | 379              | 63         | (36)             | (34)      | (8)                               | 371          |
| <b>Total costs before depreciation and amortization</b> | <b>2,403</b>     | <b>490</b> | <b>(152)</b>     | <b>89</b> | <b>427</b>                        | <b>2,831</b> |
| Depreciation  | 372              | 62         | (36)             | (35)      | (9)                               | 363          |
| <b>Total</b>  | <b>2,775</b>     | <b>552</b> | <b>(187)</b>     | <b>54</b> | <b>418</b>                        | <b>3,194</b> |

Table of Contents**IRON ORE CASH COST**

|   | 4Q14         | 3Q14         | 4Q13         | 2014         | 2013         |
|---|--------------|--------------|--------------|--------------|--------------|
| <b>Costs (US\$ million)</b>   |              |              |              |              |              |
| COGS, less depreciation and amortization                                | 2,831        | 2,403        | 2,614        | 9,532        | 9,067        |
| Costs of ore acquired from third parties                                | 89           | 107          | 128          | 443          | 405          |
| Maritime freight costs  | 1,037        | 811          | 974          | 3,325        | 2,974        |
| One-off items   | 48           |              | 79           | 48           | 79           |
| <b>FOB at port costs (ex-ROM and ex-third party ores)</b>               | <b>1,657</b> | <b>1,485</b> | <b>1,433</b> | <b>5,716</b> | <b>5,609</b> |
| Royalties   | 123          | 131          | 185          | 638          | 667          |
| <b>FOB at port costs (ex-ROM, ex-third party ores and ex-royalties)</b> | <b>1,534</b> | <b>1,355</b> | <b>1,248</b> | <b>5,079</b> | <b>4,942</b> |
| <b>Volumes (Mt)</b>   |              |              |              |              |              |
| Total iron ore volume sold  | 78.2         | 66.6         | 73.6         | 270.0        | 264.6        |
| Volume acquired from third parties                                      | 3.2          | 2.9          | 3.8          | 12.2         | 10.6         |
| Total ROM volume sold   | 3.6          | 3.5          | 4.2          | 14.1         | 13.6         |
| <b>Volume sold of Vale's own ore (ex-ROM)</b>                           | <b>71.4</b>  | <b>60.1</b>  | <b>65.6</b>  | <b>243.7</b> | <b>240.4</b> |
| <b>Volume CFR (Mt)</b>  | <b>47.9</b>  | <b>36.3</b>  | <b>37.9</b>  | <b>146.9</b> | <b>127.7</b> |
| <b>Vale's iron ore cash cost (ex-ROM, ex-royalties), FOB (US\$/t)</b>   | <b>21.5</b>  | <b>22.5</b>  | <b>19.0</b>  | <b>20.8</b>  | <b>20.6</b>  |
| <b>Vale's iron ore cash cost (Ex-ROM), FOB (US\$/t)</b>                 | <b>23.2</b>  | <b>24.7</b>  | <b>21.9</b>  | <b>23.5</b>  | <b>23.3</b>  |
| <b>Vale's iron ore unit freight cost (US\$/t)</b>                       | <b>21.7</b>  | <b>22.3</b>  | <b>25.7</b>  | <b>22.6</b>  | <b>23.3</b>  |

**FERROUS MINERALS BUSINESS PERFORMANCE****GROSS OPERATING REVENUE BY PRODUCT**

| US\$ million   | 4Q14         | 3Q14         | 4Q13          | 2014          | 2013          |
|----------------|--------------|--------------|---------------|---------------|---------------|
| Iron ore fines | 4,593        | 4,287        | 8,237         | 19,439        | 28,129        |
| ROM            | 42           | 54           | 77            | 233           | 300           |
| Pellets        | 1,308        | 1,356        | 1,677         | 5,424         | 6,158         |
| Manganese ore  | 92           | 50           | 99            | 226           | 333           |
| Ferroalloys    | 51           | 47           | 62            | 218           | 239           |
| Others         | 127          | 141          | 25            | 600           | 113           |
| <b>Total</b>   | <b>6,213</b> | <b>5,935</b> | <b>10,177</b> | <b>26,140</b> | <b>35,271</b> |

**AVERAGE SALE PRICE**

| US\$/metric ton                     | 4Q14  | 3Q14  | 4Q13   | 2014   | 2013   |
|-------------------------------------|-------|-------|--------|--------|--------|
| Iron ore - Platts's 62% IODEX(1)    | 74.28 | 90.21 | 134.60 | 96.87  | 135.19 |
| Iron ore - Metal Bulletin 65% index | 82.90 | 99.29 | n/a    | 105.82 | n/a    |
| Iron ore fines                      | 61.57 | 68.02 | 118.77 | 75.97  | 112.05 |
| ROM                                 | 11.82 | 15.24 | 18.25  | 16.55  | 22.06  |

Edgar Filing: Vale S.A. - Form 6-K

|                |          |          |          |          |          |
|----------------|----------|----------|----------|----------|----------|
| Pellets        | 103.11   | 117.85   | 150.17   | 124.17   | 150.22   |
| Manganese ore  | 111.11   | 116.01   | 152.54   | 120.28   | 157.37   |
| Ferrous alloys | 1,416.67 | 1,424.24 | 1,265.31 | 1,453.33 | 1,303.92 |

**VOLUME SOLD**

| <b>000 metric tons</b> | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| Iron ore fines         | 74,603      | 63,025      | 69,352      | 255,877     | 251,029     |
| ROM                    | 3,552       | 3,544       | 4,245       | 14,075      | 13,602      |
| Pellets                | 12,686      | 11,506      | 11,167      | 43,682      | 40,991      |
| Manganese ore          | 828         | 431         | 649         | 1,879       | 2,115       |
| Ferrous alloys         | 36          | 33          | 49          | 150         | 183         |

Table of Contents**VOLUME SOLD BY DESTINATION IRON ORE AND PELLETS**

| 000 metric tons          | 4Q14          | 3Q14          | 4Q13          | 2014           | %            | 2013           | %            |
|--------------------------|---------------|---------------|---------------|----------------|--------------|----------------|--------------|
| <b>Americas</b>          | <b>11,590</b> | <b>11,559</b> | <b>11,058</b> | <b>44,071</b>  | <b>14.1</b>  | <b>41,715</b>  | <b>13.6</b>  |
| Brazil                   | 10,078        | 9,929         | 9,764         | 37,623         | 12.0         | 36,084         | 11.8         |
| Others                   | 1,512         | 1,630         | 1,294         | 6,448          | 2.1          | 5,631          | 1.8          |
| <b>Asia</b>              | <b>62,563</b> | <b>51,093</b> | <b>55,687</b> | <b>208,536</b> | <b>66.5</b>  | <b>198,406</b> | <b>64.9</b>  |
| China                    | 46,411        | 38,764        | 40,874        | 156,692        | 50.0         | 145,847        | 47.7         |
| Japan                    | 7,505         | 6,556         | 8,772         | 27,229         | 8.7          | 31,191         | 10.2         |
| Others                   | 8,648         | 5,773         | 6,041         | 24,615         | 7.8          | 21,368         | 7.0          |
| <b>Europe</b>            | <b>13,209</b> | <b>12,353</b> | <b>14,872</b> | <b>49,042</b>  | <b>15.6</b>  | <b>55,012</b>  | <b>18.0</b>  |
| Germany                  | 4,660         | 4,909         | 6,128         | 19,075         | 6.1          | 22,239         | 7.3          |
| France                   | 2,103         | 1,337         | 2,121         | 6,242          | 2.0          | 8,542          | 2.8          |
| Others                   | 6,446         | 6,106         | 6,623         | 23,725         | 7.6          | 24,232         | 7.9          |
| <b>Middle East</b>       | <b>2,337</b>  | <b>2,523</b>  | <b>2,327</b>  | <b>8,694</b>   | <b>2.8</b>   | <b>7,527</b>   | <b>2.5</b>   |
| <b>Rest of the World</b> | <b>1,141</b>  | <b>548</b>    | <b>820</b>    | <b>3,291</b>   | <b>1.0</b>   | <b>2,962</b>   | <b>1.0</b>   |
| <b>Total</b>             | <b>90,841</b> | <b>78,075</b> | <b>84,764</b> | <b>313,634</b> | <b>100.0</b> | <b>305,623</b> | <b>100.0</b> |

**SELECTED FINANCIAL INDICATORS**

| US\$ million                                 | 4Q14    | 3Q14    | 4Q13    | 2014     | 2013     |
|--|---------|---------|---------|----------|----------|
| Net Revenues                                 | 6,116   | 5,823   | 10,079  | 25,697   | 34,792   |
| Costs(2)                                     | (3,792) | (3,288) | (3,416) | (13,063) | (11,849) |
| Expenses(2)                                  | (504)   | (226)   | (291)   | (1,289)  | (1,402)  |
| Pre-operating and stoppage expenses(2)       | (48)    | (75)    | (82)    | (221)    | (387)    |
| R&D expenses                                 | (117)   | (83)    | (112)   | (329)    | (326)    |
| Dividends received                           | 47      | 260     | 476     | 526      | 715      |
| Adjusted EBITDA                              | 1,702   | 2,411   | 6,654   | 11,321   | 21,543   |
| Adjusted EBITDA margin for iron ore (US\$/t) | 14.84   | 24.14   | 75.90   | 31.85    | 68.18    |
| Depreciation and amortization                | (548)   | (534)   | (495)   | (1,930)  | (1,746)  |
| Adjusted EBIT                                | 1,107   | 1,617   | 5,683   | 8,865    | 19,082   |
| Adjusted EBIT margin (%)                     | 18.1    | 27.8    | 56.4    | 34.5     | 54.8     |

---

(1) Iron ore reference price - Platts s 62% IODEX CFR China (US\$/dry metric ton)

(2) Net of depreciation and amortization

**Base Metals****Annual performance***EBITDA*



Base metals adjusted EBITDA totaled US\$ 2.521 billion in 2014, representing an increase of US\$ 882 million, i.e. 53.8% higher than in 2013. Higher nickel prices and volumes of both nickel and copper more than offset the weaker price scenario for copper in 2014.

*Sales revenues and volume*

Gross sales from base metals and their by-products totaled US\$ 7.694 billion in 2014 against US\$ 7.299 billion in 2013. The increase in revenues was mainly driven by higher shipments of nickel (US\$ 190 million) and copper concentrate from our Brazilian operations (US\$ 135 million) along with higher nickel prices (US\$ 393 million), which were partially offset by lower copper prices (-US\$ 311 million).

Nickel production reached 275,000 t, the highest annual production mark since 2008, driven by record site production at PTVI and the excellent ramp-up of Onça Puma. Copper production supported by Salobros ramp-up reached 379,700 t, 9,700 t higher than in 2013 and a new annual record, despite the sale of Tres Valles which

Table of Contents

accounted for 11,000 t in 2013. Gold production reached the record output of 321,000 troy ounces in 2014, with Salobo contributing 49.8% of this total output.

*Costs and expenses*

Base metals COGS(35) were US\$ 6.181 billion (or US\$ 4.587 billion net of depreciation). Costs decreased by US\$ 306 million when compared to 2013, after excluding depreciation and adjusting for higher volumes (US\$ 226 million).

SG&A and other expenses, excluding depreciation, decreased from expenses of US\$ 1 billion in 2013 (due to the positive effect of the gold stream transaction in the 1Q13) to revenue of US\$ 89 million in 2014 (due to insurance receipts of US\$ 276 million). Excluding the positive effect of insurance in 2014 and of the gold streaming transaction in 1Q13, expenses decreased by US\$ 58 million from US\$ 245 million in 2013 to US\$ 187 million in 2014. SG&A expenses totaled US\$ 93 million in 2014, a decrease of US\$ 54 million when compared to 2013.

Pre-operating and stoppage expenses, net of depreciation, totaled US\$ 530 million, US\$ 233 million lower than in 2013, mainly reflecting lower expenses with Onça Puma (US\$ 120 million), Long Harbour (US\$ 77 million) and VNC (US\$ 57 million).

**Quarterly performance**

*EBITDA*

Adjusted EBITDA of base metals decreased by 25.5% to US\$ 582 million in 4Q14 compared to the US\$ 781 million in 3Q14, mainly due to lower prices (US\$ 165 million) and higher expenses (US\$ 83 million), partially offset by the favorable exchange rate effects (US\$ 34 million).

*Sales revenues and volumes*

Nickel gross sales revenues in 4Q14 totaled US\$ 1.064 billion, a decrease of 17.4% when compared to 3Q14, due to the lower average realized price of US\$ 15,420 per metric ton in 4Q14 versus US\$ 18,141 in 3Q14 and also due to lower sales volumes of 69,000 t against 71,000 t in 3Q14.

Production of nickel was 73,600 t in 4Q14, 1,500 t higher than in 3Q14, reaching the best performance ever despite operational issues in the smelter and matte processing at Sudbury in 4Q14.

Copper gross sales revenues were US\$ 556 million in 4Q14, 4.0% lower than in 3Q14, as a result of the lower sales volumes of 95,000 t in 4Q14 against 97,000 t in 3Q14 and also because of the lower sales prices of US\$ 5,842 per metric ton in 4Q14 versus US\$ 5,940 in 3Q14.

Copper output was 105,400 t in 4Q14, 0.6% and 11.4% higher than in 3Q14 and in 4Q13, respectively, reaching a historical production record with the ramp-ups of Salobo I and II.

PGMs (platinum group metals) sales revenues were US\$ 152 million in 4Q14, 7.8% higher than in 3Q14, with sales volumes of 168,000 oz against 128,000 oz in 3Q14.

Gold gross sales amounted to US\$ 115 million in 4Q14, in line with the previous quarter. Sales volumes increased from 60,000 oz in 3Q14 to 76,000 oz in 4Q14 but were offset by lower prices.

*Costs and expenses*

Base metals costs were US\$ 1.718 billion in 4Q14 (or US\$ 1.205 billion net of depreciation). COGS were in line with 3Q14, after excluding depreciation and adjusting for the effects of lower volumes (-US\$ 21 million) and exchange rate variations (-US\$ 34 million).

---

(35) As of third quarter 2014 we are reporting maintenance costs, encompassing maintenance outsourced services, materials and personnel costs related to maintenance works.

Table of Contents

SG&A and other expenses, excluding depreciation, registered revenue of US\$ 15 million in 4Q14 compared to revenue of US\$ 76 million in 3Q14. Revenues were generated by insurance payments of US\$ 116 million(36) in 4Q14 and US\$ 100 million(37) in 3Q14. The decrease in revenues was mainly caused by expenses with SAP implementation (US\$ 15 million) and higher provisions (US\$ 6 million). SG&A expenses totaled US\$ 18 million in 4Q14, a decrease of US\$ 3 million when compared to 3Q14.

Pre-operating and stoppage expenses, net of depreciation, totaled US\$ 136 million, US\$ 9 million higher than in 3Q14, mainly reflecting higher expenses with VNC (US\$ 4 million) and Long Harbour (US\$ 6 million).

*Performance by operation*

Base metals adjusted EBITDA in 4Q14 was negatively impacted by the lower EBITDA at both the Onça Puma and the North Atlantic operations. Details by operations are:

(i) North Atlantic operations EBITDA decreased by US\$ 87 million, amounting to US\$ 435 million in 4Q14 primarily due to lower prices (US\$ 84 million) and reduced volumes sold of North Atlantic sourced nickel (US\$ 56 million) partially offset by the effects of an insurance payment of (US \$105 million).

(ii) PTVI s EBITDA decreased by US\$ 33 million, amounting to US\$ 91 million in 4Q14 mainly as a result of lower prices (US\$ 35 million).

(iii) VNC s EBITDA decreased by US\$ 13 million, amounting to -US\$ 118 million in 4Q14 vs. -US\$ 105 million in 3Q14, mostly driven by lower sales prices which impacted results by US\$ 10 million in 4Q14. Pre-operating expenses were US\$ 141 million in line with the previous quarter. VNC production is still below nameplate capacity and as a result fixed costs associated with producing nickel are impacting the operations EBITDA. Moving forward, unit costs will decrease as VNC continues to ramp-up their production.

(iv) Salobo s EBITDA increased by US\$ 36 million, amounting to US\$ 71 million in 4Q14, mostly as a result of lower unit costs. 3Q14 was negatively impacted by high unit costs (US\$ 35 million) stemming from the tie-in of Salobo II and logistical issues with rail shipments. In 4Q14, production volumes increased 5,700 t with the ramp-up of Salobo I and II. We expect further dilution of fixed costs as Salobo II continues to ramp-up.

(v) Onça Puma generated US\$ 5 million in EBITDA in 4Q14, a decrease of US\$ 137 million when compared to 3Q14 driven by (i) US\$ 100 million of insurance proceeds received in 3Q14, (ii) higher unit cost of US\$ 19 million in 4Q14 due to the maintenance shutdown carried out to repair the refractory in the rotary kiln furnace, (iii) US\$ 10 million due to lower nickel prices in 4Q14 and (iv) US\$ 4 million of lower volumes (approximately 1,000 t) as a result of the abovementioned maintenance.

**BASE METALS - EBITDA BY OPERATION**

| US\$ million                | 4Q14       | 3Q14       | Price Variation | Normalized 3Q14 |
|-----------------------------|------------|------------|-----------------|-----------------|
| North Atlantic operation(1) | 435        | 522        | (84)            | 438             |
| PTVI                        | 91         | 124        | (35)            | 89              |
| VNC                         | (118)      | (105)      | (10)            | (115)           |
| Sossego                     | 58         | 75         | (11)            | 64              |
| Salobo                      | 71         | 35         | (4)             | 31              |
| Onça Puma(2)                | 5          | 142        | (10)            | 132             |
| Other(3)                    | 40         | (12)       | (11)            | (23)            |
| <b>Total</b>                | <b>582</b> | <b>781</b> | <b>(165)</b>    | <b>616</b>      |

---

(1) Includes operations in Canada and in the United Kingdom and the corporate center for base metals.

(2) Includes an insurance payment of US\$ 100 million in 3Q14.

(3) Includes PTVI and VNC offtakes, intercompany sales and purchase of finished nickel.

(36) It includes the Ontario operations (US\$ 105 million), PTVI (US\$ 7 million) and VNC (US\$ 4 million).

(37) It refers to the Onça Puma insurance payment.

Table of Contents**BASE METALS - EBITDA per ton**

| US\$ million                | 4Q14  | 3Q14  |
|-----------------------------|-------|-------|
| North Atlantic operation(1) | 5.764 | 5.912 |
| PTVI                        | 4.483 | 6.359 |
| VNC                         | n/a   | n/a   |
| Sossego                     | 2.191 | 2.602 |
| Salobo                      | 2.240 | 1.695 |
| Onça Puma(2)                | 1.000 | 7.241 |

(1) Includes operations in Canada and in the United Kingdom and the corporate center for base metals.

(2) Excluding the insurance payment of US\$ 100 million in 3Q14.

The start-up of the Long Harbour refinery continues according to plan. All circuits in the flow sheet have been tested and are now operating. The production of nickel rounds will increase during the year to achieve an equivalent rate of 25,000 tpy processing primarily nickel matte. Ongoing installation and commissioning of the facilities needed to process nickel concentrate from the Voisey's Bay mine is continuing. These construction activities are on schedule for completion at the end of 4Q15 when processing of 100% concentrate will commence.

**Market outlook****Nickel**

The averaged LME nickel price was US\$ 15,799/t in 4Q14, a sharp decline over 3Q14 levels. Price was under pressure with both macro-economic and nickel specific drivers. On a macro-economic basis, US dollar strength, falling oil prices, and concerns about Chinese growth rates impacted investor sentiment regarding commodities.

In 2014, the nickel market did not fully reflect the impact of Indonesia's ban on nickel ore exports as this was counterbalanced by China's de-stocking of nickel ore inventories. While Chinese nickel ore imports declined from 71 million tons in 2013 to 48 million tons in 2014, the decline in Nickel Pig Iron production was muted as ore stockpiles of material from Indonesia were used to support NPI production. Going forward, we anticipate reduced stockpiles of high grade ore will result in decreased production of Nickel Pig Iron, leading the market towards a deficit.

LME nickel prices were under pressure as the market focused on the continued increase in LME based inventories. LME stocks increased by 152 thousand tons over the course of the year, ending 2014 at 413 thousand tons of inventory. One of the most likely causes of this increase is a shift of inventory from inside China to outside China as the country de-stocked nickel inventories that were built up in previous years. Illustrating the magnitude of this de-stocking, Chinese net imports of unwrought nickel dropped 80% from 128kt in 2013 to 25kt in 2014. This decrease in net imports occurred while Chinese nickel consumption is estimated to have continued to grow and domestic production decreased.

As we enter 2015, LME prices remain under significant pressure with prices cutting deeply into the cost curve. However, Chinese cathode and NPI prices have held up more firmly and have been trading at a premium to the LME in January. This may signal that the significant de-stocking that occurred in 2014 may be near an end reflecting LME prices trading below the cost structure of the Nickel Pig Iron industry.

## **Copper**

LME copper prices declined 5% in 4Q14 compared to the third quarter, averaging US\$ 6,624/t. In the first month of 2015, we have seen prices fall further to below \$6,000/t. Prices have declined as investors increased short positions with negative macro-economic concerns focusing on a slowing Chinese housing market and the potential impact of cost depreciation with changes in energy prices and foreign exchange. On the other hand, Chinese investment in the power grid is anticipated to stimulate copper consumption growth in the coming months.

LME stocks decreased steadily in the first half of 2014 and stayed at relatively low levels for the balance of the year, ending 2014 with 177 thousand tons. In early 2015, LME stocks had increased to 248 thousand tons by the end of January, reflecting that the first quarter is typically a weak period for physical copper demand along with a prolonged price backwardation. Meanwhile, difficulties in the ramp-up of new copper projects and lower production guidance at

Table of Contents

existing operations are decreasing expectations for supply growth in 2015 and oversupply. As the year progresses, the market is anticipated to tighten as demand picks up.

**BASE METALS COGS - 2013 x 2014**

| US\$ million  | Variance drivers |            |                  |              |             | Total<br>Variation 2013<br>x 2014 | 2014 |
|---|------------------|------------|------------------|--------------|-------------|-----------------------------------|------|
|   | 2013             | Volume     | Exchange<br>Rate | Others       |             |                                   |      |
| Personnel   | 1,242            | 30         | (57)             | (52)         | (79)        | 1,163                             |      |
| Outsourced services and<br>Materials                        | 1,546            | 37         | (71)             | (64)         | (98)        | 1,448                             |      |
| Energy (Electricity, fuel & gas)                            | 618              | 15         | (28)             | (26)         | (39)        | 579                               |      |
| Acquisition of products                                     | 489              | 126        |                  | 60           | 186         | 675                               |      |
| Maintenance   | 508              | 12         | (23)             | (21)         | (32)        | 476                               |      |
| Others  | 263              | 6          | (12)             | (11)         | (17)        | 246                               |      |
| <b>Total costs before depreciation<br/>and amortization</b> | <b>4,665</b>     | <b>226</b> | <b>(192)</b>     | <b>(114)</b> | <b>(78)</b> | <b>4,587</b>                      |      |
| Depreciation  | 1,551            | (9)        | (13)             | 66           | 43          | 1,594                             |      |
| <b>Total</b>  | <b>6,215</b>     | <b>217</b> | <b>(205)</b>     | <b>(48)</b>  | <b>(35)</b> | <b>6,181</b>                      |      |

(1) As of the third quarter 2014, we are reporting a new COGS item: maintenance costs, due to the introduction of the ERP system. Maintenance costs encompass part of outsourced services, materials and personnel costs related to maintenance works. The comparison of 2013 and 2014 COGS items, specially maintenance and personnel, may not offer appropriate conclusions.

**BASE METALS COGS - 3Q14 x 4Q14**

| US\$ million  | Variance drivers |             |                  |            |             | Total<br>Variation<br>3Q14 x 4Q14 | 4Q14 |
|---|------------------|-------------|------------------|------------|-------------|-----------------------------------|------|
|   | 3Q14             | Volume      | Exchange<br>Rate | Others     |             |                                   |      |
| Personnel   | 236              | (10)        | (7)              | 1          | (16)        | 220                               |      |
| Outsourced services and<br>Materials                        | 272              | (11)        | (8)              |            | (19)        | 253                               |      |
| Energy (Electricity, fuel & gas)                            | 171              | (7)         | (5)              |            | (12)        | 159                               |      |
| Acquisition of products                                     | 182              | 23          | 1                |            | 24          | 206                               |      |
| Maintenance   | 274              | (11)        | (11)             | 2          | (20)        | 254                               |      |
| Others  | 122              | (5)         | (4)              |            | (9)         | 113                               |      |
| <b>Total costs before depreciation and<br/>amortization</b> | <b>1,258</b>     | <b>(21)</b> | <b>(34)</b>      | <b>3</b>   | <b>(53)</b> | <b>1,205</b>                      |      |
| Depreciation  | 365              | (37)        | (17)             | 202        | 148         | 513                               |      |
| <b>Total</b>  | <b>1,623</b>     | <b>(58)</b> | <b>(51)</b>      | <b>205</b> | <b>95</b>   | <b>1,718</b>                      |      |

**BASE METALS BUSINESS PERFORMANCE****GROSS OPERATING REVENUE BY PRODUCT**



Edgar Filing: Vale S.A. - Form 6-K

| US\$ million | 4Q14         | 3Q14         | 4Q13         | 2014         | 2013         |
|--------------|--------------|--------------|--------------|--------------|--------------|
| Nickel       | 1,064        | 1,288        | 957          | 4,468        | 3,889        |
| Copper       | 556          | 579          | 647          | 2,122        | 2,367        |
| PGMs         | 152          | 141          | 132          | 564          | 477          |
| Gold         | 115          | 116          | 118          | 418          | 398          |
| Silver       | 11           | 4            | 11           | 37           | 43           |
| Others       | 50           | 1            | 32           | 85           | 125          |
| <b>Total</b> | <b>1,948</b> | <b>2,129</b> | <b>1,897</b> | <b>7,694</b> | <b>7,299</b> |

Table of Contents**AVERAGE SALE PRICE**

| US\$/ metric ton   | 4Q14   | 3Q14   | 4Q13   | 2014   | 2013   |
|--------------------|--------|--------|--------|--------|--------|
| Nickel - LME       | 15,799 | 18,576 | 13,910 | 16,867 | 15,004 |
| Copper - LME       | 6,623  | 6,994  | 7,153  | 6,862  | 7,322  |
| Nickel             | 15,420 | 18,141 | 13,870 | 16,426 | 14,900 |
| Copper             | 5,842  | 5,940  | 6,507  | 6,015  | 6,709  |
| Platinum (US\$/oz) | 1,225  | 1,137  | 1,383  | 1,262  | 1,470  |
| Gold (US\$/oz)     | 1,190  | 1,081  | 1,257  | 1,193  | 1,339  |
| Silver (US\$/oz)   | 14.16  | 15.02  | 18.38  | 19.42  | 20.02  |
| Cobalt (US\$/lb)   | 9.34   | 9.97   | 10.80  | 10.67  | 10.95  |

**VOLUME SOLD**

| 000 metric tons                 | 4Q14  | 3Q14 | 4Q13 | 2014  | 2013  |
|---------------------------------|-------|------|------|-------|-------|
| Nickel operations & by products |       |      |      |       |       |
| Nickel                          | 69    | 71   | 69   | 272   | 261   |
| Copper                          | 37    | 48   | 44   | 156   | 178   |
| Gold ( 000 oz)                  | 20    | 47   | 25   | 103   | 87    |
| Silver ( 000 oz)                | 574   | 160  | 500  | 1,431 | 1,858 |
| PGMs ( 000 oz)                  | 168   | 128  | 144  | 577   | 510   |
| Cobalt (metric ton)             | 1,311 | 637  | 714  | 3,188 | 2,939 |
| Copper operations & by products |       |      |      |       |       |
| Copper                          | 58    | 49   | 55   | 197   | 174   |
| Gold ( 000 oz)                  | 76    | 60   | 69   | 248   | 210   |
| Silver ( 000 oz)                | 182   | 108  | 124  | 458   | 296   |

**SELECTED FINANCIAL INDICATORS**

| US\$ million                           | 4Q14    | 3Q14    | 4Q13    | 2014    | 2013    |
|--|---------|---------|---------|---------|---------|
| Net Revenues                           | 1,953   | 2,122   | 1,897   | 7,692   | 7,286   |
| Costs(1)                               | (1,205) | (1,258) | (1,180) | (4,587) | (4,665) |
| Expenses(1)                            | 15      | 76      | (203)   | 89      | (1)     |
| Pre-operating and stoppage expenses(1) | (136)   | (127)   | (215)   | (530)   | (763)   |
| R&D expenses                           | (45)    | (32)    | (56)    | (143)   | (218)   |
| Adjusted EBITDA                        | 582     | 781     | 243     | 2,521   | 1,639   |
| Depreciation and amortization          | (563)   | (432)   | (450)   | (1,791) | (1,766) |
| Adjusted EBIT                          | 19      | 349     | (207)   | 730     | (127)   |
| Adjusted EBIT margin (%)               | 1.0     | 16.4    | (10.9)  | 9.5     | (1.7)   |

---

(1) Net of depreciation and amortization

**Annual performance**

Adjusted EBITDA for the coal business was negative US\$ 669 million in 2014 against negative US\$ 455 million in 2013. The reduction of US\$ 214 million was mainly due to the softer price environment in the industry (US\$ 199 million).

Gross revenues from the sales of coal products in 2014 were US\$ 739 million, lower than in 2013 mainly due to lower sales prices of metallurgical coal (US\$ 104.37 per ton in 2014 vis-à-vis US\$ 129.34 per ton in 2013). Metallurgical coal sales volumes decreased by 13.9%, reaching 6.330 Mt in 2014 compared to 7.353 Mt in 2013.

Production amounted to 8.6 Mt in 2014, 0.1 Mt lower than in 2013, despite record production at Moatize of 4.9Mt in 2014, 1.1 Mt higher than in 2013. The decrease in production is mainly a result of the worsened performance of Carborough Downs (CD) and the stoppage of the Integra and Isaac Plains coal mines which were put into care and maintenance in 2Q14 and 3Q14, respectively.

Table of Contents

Coal costs net of depreciation totaled US\$ 1.071 billion in 2014, a decrease of US\$ 76 million when compared to 2013. Excluding the effects of lower volumes (-US\$ 73 million), costs showed a decrease of US\$ 3 million when compared to 2013.

In December 2014, we entered into an investment agreement with Mitsui, through which we will reduce our participation in the Moatize mine to 81% from 95%, and in the Nacala Logistic Corridor to approximately 35%, upon completion of the transaction. The deal will allow us to reduce our direct investment needs in both projects and receive cash back from our investments, the amount being subject to the size of a project finance, which is under discussion.

***Annual Performance by operation***

Highlights by operation are:

(i) Adjusted EBITDA for the Australian coal operations was negative US\$ 191 million in 2014 against negative US\$ 98 million in 2013. The reduction of US\$ 93 million was mainly due to the softer price environment in the industry.

(ii) In 2014 Australia's EBITDA was also heavily impacted by the decision to place Integra and Isaac Plains operations under care and maintenance (C&M). This decision led to one-off costs of US\$ 48 million, related to workforce and contract terminations, among others. On the other hand, the decision has avoided the expenditure of US\$ 150 million in sustaining capital from 2H14.

(iii) Both operations are now fully transitioned into C&M, with an expected impact in other operating expenses of US\$ 19 million in 2015, compared with the costs of US\$ 327 million incurred in 2014.

(iv) Australian costs net of depreciation totaled US\$ 517 million in 2014. Excluding the effects of lower volumes (-US\$ 140 million), costs showed an increase of US\$ 9 million when compared to 2013, mainly as a result of the above-mentioned non-recurring costs for placing Integra and Isaac Plains into C&M.

(v) Adjusted EBITDA for the Mozambique coal operations was negative US\$ 507 million in 2014 against negative US\$ 397 million in the previous year. The reduction of US\$ 110 million was mainly due to the softer price environment in the industry (US\$ 68 million) and write down of thermal coal inventory (US\$ 51 million year-on-year).

(vi) Mozambique costs net of depreciation totaled US\$ 555 million in 2014. Excluding the effects of higher volumes (US\$ 67 million), costs showed a reduction of US\$ 11 million when compared to 2013.

### Quarterly performance

In 4Q14, adjusted EBITDA for the coal business was negative US\$ 204 million against negative US\$ 149 million in 3Q14. The decrease of US\$ 55 million from 3Q14 was mainly driven by higher one-off expenses (US\$ 98 million) related to the write-down of thermal coal inventory, which were partly mitigated by a reduction in costs (US\$ 36 million).

Gross revenues from metallurgical coal decreased to US\$ 181 million in 4Q14, against US\$ 184 million in 3Q14, due to lower sales prices (US\$ 3 million). The average realized price was US\$ 99.72 per metric ton in 4Q14 versus US\$ 101.21 per metric ton in 3Q14. Gross revenues from sales of thermal coal in 4Q14 increased to US\$ 20 million from US\$ 17 million in 3Q14, mainly due to the higher realized prices (US\$ 2 million).

Coal costs net of depreciation amounted to US\$ 249 million in 4Q14, a decrease of US\$ 34 million when compared to 3Q14. After adjusting for the effects of higher volumes (US\$ 11 million) and the positive impact of the Australian Dollar depreciation (-US\$ 9 million), costs were down by US\$ 36 million.

Coal expenses net of depreciation increased from US\$ 51 million in 3Q14 to US\$ 164 million in 4Q14, primarily due to an increase of US\$ 101 million in other operating expenses, which encompasses the above-mentioned write-down of

Table of Contents

thermal coal inventory. Pre-operating expenses for coal decreased from US\$ 11 million in 3Q14 to US\$ 10 million in 4Q14.

***Quarterly Performance by operation***

Highlights by operation are:

(i) Adjusted EBITDA for the Australian operations was negative US\$ 14 million in 4Q14 against negative US\$ 27 million in 3Q14. The increase of US\$ 13 million from the previous quarter was mainly driven by the stoppage of the Integra coal mine.

(ii) Australian costs net of depreciation amounted to US\$ 79 million in 4Q14, a decrease of US\$ 41 million when compared to 3Q14. After adjusting for the effects of lower volumes (-US\$ 22 million) and exchange rate variations (-US\$ 9 million), costs were down by US\$ 9 million.

(iii) Adjusted EBITDA for the Mozambique operations was negative US\$ 218 million in 4Q14 against negative US\$ 123 million in 3Q14. The drop of US\$ 95 million from the previous quarter was mainly driven by higher one-off expenses (US\$ 98 million) related to the write down of thermal coal inventory.

(iv) Mozambique costs net of depreciation amounted to US\$ 170 million in 4Q14, an increase of US\$ 7 million when compared to 3Q14. After adjusting for the effects of higher volumes (US\$ 33 million), costs were down by US\$ 26 million.

**Market Outlook - Metallurgical coal**

Prices for metallurgical coal have remained relatively flat since April 2014. Particularly in 4Q14, spot prices for the premium hard coking coal were flat quarter-on-quarter at around US\$ 110/t FOB Australia, whereas prices for PCI remained at US\$ 89/t.

Despite some shutdowns announced during the year and the slowdown of higher cost producers, total supply grew particularly due to strong volumes coming from Australian mines. The still mild drop in volumes from higher cost producers, who despite closing still had inventories to release, kept prices steady at low levels.

Meanwhile, Chinese imported metallurgical coal demand was 17% lower than in 2013 with 62 Mt of imports. Chinese domestic coal production was also down 2.5% year-on-year. Both steel and coal demand have been weighed down by domestic overcapacity, tighter environmental regulations and a subdued property market. As a result, Japan is back as the largest seaborne metallurgical coal importer, with demand growing

## Edgar Filing: Vale S.A. - Form 6-K

by about 7% in 2014. Demand from India – the third largest seaborne importer – is estimated to have grown the most at 17% y-o-y given the renewed business and consumer confidence since the Modi government came to office.

Looking forward, we expect the coal market to remain oversupplied in 2015. Despite production cutbacks in North America and Australia, which will probably become more effective throughout the year, the decrease in volumes will continue be offset by new supply coming from new/expansion projects in Australia and Mozambique. These additional volumes are being supported by lower production costs due to depressed international oil prices and depreciated currencies in producers' countries compared to the US dollar. From the demand side, the Chinese property market will probably remain lackluster in 2015, weakening overall consumption growth. That said, we expect coal prices to remain weak throughout the year.

### COAL BUSINESS PERFORMANCE

#### GROSS OPERATING REVENUE BY PRODUCT

| US\$ million       | 4Q14       | 3Q14       | 4Q13       | 2014       | 2013         |
|--------------------|------------|------------|------------|------------|--------------|
| Metallurgical coal | 181        | 184        | 304        | 661        | 951          |
| Thermal coal       | 20         | 17         | 29         | 78         | 59           |
| <b>Total</b>       | <b>201</b> | <b>201</b> | <b>333</b> | <b>739</b> | <b>1,010</b> |

Table of Contents**AVERAGE SALE PRICE**

| US\$/ metric ton   | 4Q14  | 3Q14   | 4Q13   | 2014   | 2013   |
|--------------------|-------|--------|--------|--------|--------|
| Metallurgical coal | 99.72 | 101.21 | 122.80 | 104.37 | 129.34 |
| Thermal coal       | 64.52 | 58.02  | 74.68  | 67.65  | 81.17  |

**VOLUME SOLD**

| '000 metric tons   | 4Q14         | 3Q14         | 4Q13         | 2014         | 2013         |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| Metallurgical coal | 1,815        | 1,818        | 2,478        | 6,330        | 7,353        |
| Thermal coal       | 310          | 293          | 391          | 1,152        | 726          |
| <b>Total</b>       | <b>2,125</b> | <b>2,111</b> | <b>2,869</b> | <b>7,482</b> | <b>8,079</b> |

**SELECTED FINANCIAL INDICATORS**

| US\$ million                           | 4Q14    | 3Q14   | 4Q13   | 2014    | 2013    |
|--|---------|--------|--------|---------|---------|
| Net Revenues                           | 201     | 201    | 334    | 739     | 1,010   |
| Costs(1)                               | (249)   | (283)  | (375)  | (1,071) | (1,147) |
| Expenses(1)                            | (164)   | (51)   | (3)    | (309)   | (262)   |
| Pre-operating and stoppage expenses(1) | (10)    | (11)   | (26)   | (38)    | (47)    |
| R&D expenses                           | (10)    | (5)    | (12)   | (18)    | (49)    |
| Adjusted EBITDA                        | (204)   | (149)  | (82)   | (669)   | (455)   |
| Depreciation and amortization          | (36)    | (31)   | (42)   | (120)   | (173)   |
| Adjusted EBIT                          | (268)   | (180)  | (124)  | (817)   | (668)   |
| Adjusted EBIT margin (%)               | (133.3) | (89.6) | (37.1) | (110.6) | (66.1)  |

---

(1) Net of depreciation and amortization

**Fertilizer nutrients****Annual performance**

Adjusted EBITDA for the fertilizer business increased to US\$ 278 million in 2014 from -US\$ 54 million in 2013. The increase of US\$ 332 million from 2013 was mainly driven by the decrease in pre-operating and stoppage expenses in the Rio Colorado Project (US\$ 376 million), and costs reduction(38) (US\$ 193 million), which were partly offset by lower sales prices (US\$ 270 million).



## Edgar Filing: Vale S.A. - Form 6-K

Potash gross sales revenues reached US\$ 169 million in 2014, 23.9% lower than in 2013, due to lower sales volumes and prices. The volume sold of 475,000 t was lower than the 531,000 t sold in 2013. Production of potash totaled 492,000 t in 2014, the same level as last year.

Despite the higher phosphate products sales volumes in 2014 (4.4%), gross sales revenues totaled US\$ 1.904 billion, US\$ 216 million lower than in 2013, due to lower sales prices (-14.0%). The volume sold of 7.9 Mt was higher than the 7.6 Mt sold in 2013, mainly driven by greater production in Bayóvar.

Nitrogen fertilizers gross sales revenues reached US\$ 411 million in 2014, a decrease of US\$ 132 million in comparison to 2013, as a result of lower sales volumes (-23.6%). The decrease in sales volumes was mainly driven by the sale of the Araucaria Operation on June 1st, 2013 and the consequent stoppage of its urea production (-219,000 t).

Fertilizer costs were US\$ 2.273 billion in 2014 (or US\$ 1.885 billion net of depreciation), US\$ 304 million lower than in 2013. After excluding the effects of lower volumes (-US\$ 121 million), costs were down by US\$ 183 million, reflecting the result of cost saving initiatives (US\$ 27 million), lower ammonia/sulfur prices (US\$ 27 million) and exchange rate variations (US\$ 129 million).

Fertilizer expenses net of depreciation decreased to US\$ 95 million in 2014 from US\$ 197 million in 2013, mainly due to exchange rate variations (US\$ 18 million), saving initiatives (US\$ 26 million) and one-off effects in 2013 (US\$ 37 million), such as the write down of ICMS tax credits and the mark-to-market of carbon credits. Pre-operating and

---

(38) COGS without the effect of volume.

Table of Contents

stoppage expenses totaled US\$ 85 million in 2014, US\$ 343 million lower than in 2013, as a result of lower pre operating and stoppage expenses in the Rio Colorado Project.

**Quarterly performance**

Adjusted EBITDA for the fertilizer business decreased to US\$ 75 million in 4Q14 from US\$ 96 million in 3Q14. The decrease of US\$ 21 million from 3Q14 was mainly driven by lower sales volumes (US\$ 31 million) and higher stoppage expenses (US\$ 26 million), which were partly offset by the exchange rate variation in COGS (US\$ 34 million).

Despite increases in potash sale prices of 4.5%, potash gross sales revenues was US\$ 45 million in 4Q14, 4% lower than in 3Q14, due to lower sales volumes. Following the usual market seasonality, the volume sold of 121,000 t was 11,000 t lower than in 3Q14. Potash production totaled 147,000 t in 4Q14, 5.0% higher than in 3Q14, as a result of the resumption of production after corrective maintenance carried out on the conveyor belts in 3Q14. Output was 16.4% higher than in the same period of last year due to a maintenance stoppage which occurred in 4Q13.

Phosphate products gross sales revenues totaled US\$ 432 million in 4Q14, US\$ 128 million lower than in 3Q14 due to lower sales volumes (-14.2%). The lower sales volume was already expected in accordance with market seasonality.

Nitrogen fertilizers gross sales revenues reached US\$ 108 million in 4Q14, almost in line with the 3Q14 figures (US\$ 109 million), as a result of higher prices (3.7%) and lower sales volumes (-4.4%). The main impact on sales volumes was a maintenance stoppage affecting ammonia production.

Fertilizer costs were US\$ 492 million in 4Q14 (or US\$ 411 million net of depreciation), US\$ 170 million lower than in 3Q14. After excluding the effect of lower volumes (-US\$ 137 million) and exchange rate variations (-US\$ 44 million), costs increased by US\$ 11 million, mainly reflecting higher ammonia and sulfur purchase prices.

Stoppage expenses totaled US\$ 34 million in 4Q14, US\$ 26 million higher than in 3Q14, as a result of an increase in the Rio Colorado Project (PRC) expenses (US\$ 22 million) and expenses related to scheduled maintenance stoppages (US\$ 4 million). PRC registered US\$ 17 million of stoppage expenses in 4Q14, against -US\$ 5 million in the previous quarter as a result of asset sales. The main variations in 4Q14 were related to the closing of the civil construction contract (US\$ 5 million), asset write-offs (US\$ 5 million) and the write down of tax credits (US\$ 3 million).

**Market outlook**

In 4Q14 demand for fertilizers continued to improve slightly as Latin American countries prepared themselves for the crop season. Overall supply continued mostly stable. Despite the supporting fundamentals, fertilizers prices had limited upside in 4Q14 mainly impacted by bumper

crops in the US and Brazil.

Phosphate rock and phosphoric acid prices have demonstrated signs of recovery, primarily due to a higher Indian demand and the closing of China's export window, when the country raised export tariffs on fertilizers to ensure the needs of local agricultural producers.

Potash prices also rose slightly due to an improved seasonal demand. In the months ahead, prices may be positively impacted by supply constraints caused by a flood in one of Uralkali's mines. In Brazil, potash demand was weaker than expected despite the approaching of the second planting season.

In the nitrogen market, political turmoil in the Black Sea region, involving Russia and Ukraine, was still adding pressure mostly to nitrogen fertilizer prices in the beginning of 4Q14. The reduced supply led ammonia prices to peak at US\$ 655 /t CFR Tampa in November, and average price to increase by 19% quarter-on-quarter in 4Q14.

Overall, fertilizer demand in the international market has been stable with some growth perspective in the short term as the planting season restarts in India, China, Europe and Brazil with the second harvest. Lower agricultural commodities prices in the international market may not impact Brazilian farmers so negatively given that the ratio of grain prices vs. fertilizer costs remains attractive, supported by the upside of depreciated exchange rates. With the constraints in supply still to be solved, it is expected that fertilizer prices will continue to improve in 1Q15.

Table of Contents**FERTILIZERS COGS - 2013 x 2014**

| US\$ million  | 2013         | Volume       | Variance drivers |             | Total<br>Variation 2013<br>x 2014 | 2014         |
|---|--------------|--------------|------------------|-------------|-----------------------------------|--------------|
|   |              |              | Exchange<br>Rate | Others      |                                   |              |
| Personnel   | 334          | (17)         | (25)             | 3           | (39)                              | 295          |
| Outsourced services and<br>Materials                            | 1,276        | (67)         | (45)             | (81)        | (193)                             | 1,083        |
| Energy (Electricity, fuel &<br>gas)                             | 325          | (23)         | (14)             | (5)         | (42)                              | 283          |
| Acquisition of products   | 13           | (1)          | (1)              | (2)         | (4)                               | 9            |
| Maintenance   | 72           | (3)          | (6)              | 18          | 9                                 | 81           |
| Others  | 169          | (1)          | (10)             | (24)        | (35)                              | 134          |
| <b>Total costs before<br/>depreciation and<br/>amortization</b> | <b>2,190</b> | <b>(112)</b> | <b>(102)</b>     | <b>(92)</b> | <b>(306)</b>                      | <b>1,885</b> |
| Depreciation  | 387          | (8)          | (27)             | 37          | 2                                 | 389          |
| <b>Total</b>  | <b>2,577</b> | <b>(121)</b> | <b>(129)</b>     | <b>(54)</b> | <b>(304)</b>                      | <b>2,273</b> |

**FERTILIZERS COGS - 3Q14 x 4Q14**

| US\$ million  | 3Q14       | Volume       | Variance drivers |           | Total<br>Variation<br>3Q14 x 4Q14 | 4Q14       |
|---|------------|--------------|------------------|-----------|-----------------------------------|------------|
|   |            |              | Exchange<br>Rate | Others    |                                   |            |
| Personnel   | 82         | (8)          | (8)              | 2         | (14)                              | 68         |
| Outsourced services and<br>Materials                            | 330        | (90)         | (16)             | 6         | (100)                             | 230        |
| Energy (Electricity, fuel &<br>gas)                             | 81         | (10)         | (4)              | (5)       | (19)                              | 62         |
| Acquisition of products   | 2          | (1)          | (1)              |           | (1)                               | 1          |
| Maintenance   | 25         | (10)         | (2)              |           | (12)                              | 13         |
| Others  | 33         | (1)          | (3)              | 8         | 4                                 | 37         |
| <b>Total costs before<br/>depreciation and<br/>amortization</b> | <b>554</b> | <b>(120)</b> | <b>(34)</b>      | <b>11</b> | <b>(143)</b>                      | <b>411</b> |
| Depreciation  | 108        | (17)         | (10)             |           | (27)                              | 81         |
| <b>Total</b>  | <b>662</b> | <b>(137)</b> | <b>(44)</b>      | <b>11</b> | <b>(170)</b>                      | <b>492</b> |

**FERTILIZER NUTRIENTS BUSINESS PERFORMANCE****GROSS OPERATING REVENUE BY PRODUCT**

| US\$ million | 4Q14 | 3Q14 | 4Q13 | 2014  | 2013  |
|--------------|------|------|------|-------|-------|
| Potash       | 45   | 47   | 50   | 169   | 222   |
| Phosphates   | 432  | 560  | 423  | 1,904 | 2,120 |

Edgar Filing: Vale S.A. - Form 6-K

|              |            |            |            |              |              |
|--------------|------------|------------|------------|--------------|--------------|
| Nitrogen     | 108        | 109        | 95         | 411          | 543          |
| Others       | 22         | 31         | 23         | 101          | 92           |
| <b>Total</b> | <b>607</b> | <b>747</b> | <b>591</b> | <b>2,585</b> | <b>2,977</b> |

**AVERAGE SALE PRICE**

| US\$/ metric ton | 4Q14   | 3Q14   | 4Q13   | 2014   | 2013   |
|------------------|--------|--------|--------|--------|--------|
| Potash           | 371.90 | 356.06 | 354.61 | 355.79 | 417.32 |
| Phosphates       |        |        |        |        |        |
| MAP              | 550.70 | 553.75 | 516.73 | 542.44 | 571.86 |
| TSP              | 448.41 | 445.40 | 425.00 | 428.98 | 472.51 |
| SSP              | 217.14 | 218.83 | 221.05 | 212.61 | 271.88 |
| DCP              | 584.94 | 617.71 | 612.73 | 591.51 | 611.54 |
| Phosphate rock   | 88.77  | 68.87  | 77.34  | 70.88  | 90.68  |
| Nitrogen         | 627.91 | 605.56 | 552.33 | 604.41 | 610.27 |

Table of Contents**VOLUME SOLD**

| <b>000 metric tons</b> | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| Potash                 | 121         | 132         | 141         | 475         | 531         |
| Phosphates             |             |             |             |             |             |
| MAP                    | 249         | 287         | 269         | 1,040       | 1,133       |
| TSP                    | 112         | 246         | 128         | 749         | 681         |
| SSP                    | 367         | 685         | 380         | 2,091       | 1,969       |
| DCP                    | 118         | 122         | 110         | 493         | 461         |
| Phosphate rock         | 935         | 726         | 918         | 3,259       | 3,154       |
| Others phosphates      | 71          | 93          | 36          | 271         | 177         |
| Nitrogen               | 172         | 180         | 172         | 680         | 890         |

**SELECTED FINANCIAL INDICATORS**

| <b>US\$ million</b>                    | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|--|-------------|-------------|-------------|-------------|-------------|
| Net Revenues                           | 569         | 699         | 559         | 2,415       | 2,814       |
| Costs(1)                               | (411)       | (554)       | (467)       | (1,885)     | (2,190)     |
| Expenses(1)                            | (29)        | (25)        | (69)        | (95)        | (197)       |
| Pre-operating and stoppage expenses(1) | (34)        | (8)         | (99)        | (85)        | (428)       |
| R&D expenses                           | (20)        | (16)        | (29)        | (72)        | (53)        |
| Adjusted EBITDA                        | 75          | 96          | (105)       | 278         | (54)        |
| Depreciation and amortization          | (88)        | (115)       | (101)       | (419)       | (431)       |
| Adjusted EBIT                          | (13)        | (19)        | (206)       | (141)       | (485)       |
| Adjusted EBIT margin (%)               | (2.3)       | (2.7)       | (36.9)      | (5.8)       | (17.2)      |

---

(1) Net of depreciation and amortization

**FINANCIAL INDICATORS OF NON-CONSOLIDATED COMPANIES**

For selected financial indicators of the main non-consolidated companies, see our quarterly financial statements on [www.vale.com/Investors/Quarterly results and reports/Financial statements](http://www.vale.com/Investors/Quarterly%20results%20and%20reports/Financial%20statements) - Vale

**CONFERENCE CALL AND WEBCAST**

Vale will host two conference calls and webcasts on Thursday, February 26th. The first, in Portuguese (without translation), will begin at 10:00 a.m. Rio de Janeiro time. The second, in English, at 12:00 p.m. Rio de Janeiro time, 10:00 a.m. US Eastern Standard Time, 3:00 p.m. British Standard Time, and 11:00 p.m. Hong Kong time.

## Edgar Filing: Vale S.A. - Form 6-K

Dial in to conference calls/webcasts:

In Portuguese:

Participants from Brazil: (55 11) 3193-1001 / (55 11) 2820-4001

Participants from the US: (1 888) 700-0802

Participants from other countries: (1 786) 924-6977

Access code: VALE

In English:

Participants from Brazil: (55 11) 3193-1001 / (55 11) 2820-4001

Participants from USA: (1 866) 262-4553

Participants from other countries: (1 412) 317-6029

Access code: VALE

Instructions for participation will be available on the website: [www.vale.com/Investors](http://www.vale.com/Investors). A recording will be available on Vale's website for 90 days as of February 26th, 2015.

Table of Contents

## ANNEX 1 SIMPLIFIED FINANCIAL STATEMENTS

## INCOME STATEMENT

| US\$ million  | 4Q14           | 3Q14           | 4Q13           | 2014          | 2013          |
|---|----------------|----------------|----------------|---------------|---------------|
| <b>Gross operating revenues</b>   | <b>9,226</b>   | <b>9,249</b>   | <b>13,273</b>  | <b>38,236</b> | <b>47,486</b> |
| Taxes   | (154)          | (187)          | (148)          | (697)         | (719)         |
| <b>Net operating revenue</b>  | <b>9,072</b>   | <b>9,062</b>   | <b>13,125</b>  | <b>37,539</b> | <b>46,767</b> |
| Cost of goods sold  | (6,892)        | (6,501)        | (6,658)        | (25,064)      | (24,245)      |
| <b>Gross profit</b>   | <b>2,180</b>   | <b>2,561</b>   | <b>6,467</b>   | <b>12,475</b> | <b>22,522</b> |
| Gross margin (%)  | 24.0           | 28.3           | 49.3           | 33.2          | 48.2          |
| Selling, general and administrative expenses  | (306)          | (274)          | (339)          | (1,099)       | (1,302)       |
| Research and development expenses   | (235)          | (194)          | (272)          | (734)         | (801)         |
| Pre-operating and stoppage expenses   | (292)          | (284)          | (473)          | (1,088)       | (1,859)       |
| Other operational expenses  | (491)          | (184)          | (337)          | (1,057)       | (984)         |
| Gain (loss) from sale of assets   | (167)          |                | (215)          | (167)         | (215)         |
| Impairment of non-current assets  | (378)          |                | (2,298)        | (1,152)       | (2,298)       |
| <b>Operating profit</b>   | <b>311</b>     | <b>1,625</b>   | <b>2,533</b>   | <b>7,178</b>  | <b>15,063</b> |
| Financial revenues  | 55             | 171            | 346            | 401           | 643           |
| Financial expenses  | (502)          | (769)          | (3,285)        | (2,936)       | (5,002)       |
| Gains (losses) on derivatives, net  | (1,087)        | (827)          | (273)          | (1,334)       | (1,033)       |
| Monetary and exchange variation   | (1,257)        | (1,943)        | (944)          | (2,200)       | (2,940)       |
| Equity income   | 31             | 35             | 116            | 505           | 469           |
| Results on sale or write-off of investments from associates and joint ventures        | 31             | (43)           | 41             | (30)          | 41            |
| Impairment on investments from associates and joint ventures                          | (31)           |                |                | (31)          |               |
| <b>Income (loss) before taxes</b>   | <b>(2,449)</b> | <b>(1,751)</b> | <b>(1,466)</b> | <b>1,553</b>  | <b>7,241</b>  |
| Current tax   | 363            | 65             | (5,027)        | (1,051)       | (7,786)       |
| Deferred tax  | 106            | 258            | (50)           | (149)         | 953           |
| <b>Net Earnings (loss) from continuing operations</b>                                 | <b>(1,980)</b> | <b>(1,428)</b> | <b>(6,543)</b> | <b>353</b>    | <b>408</b>    |
| Loss attributable to noncontrolling interest  | 131            | (9)            | 37             | 304           | 178           |
| Gain (loss) from discontinued operations  |                |                | 55             |               | (2)           |
| <b>Net earnings (attributable to the Company's stockholders)</b>                      | <b>(1,849)</b> | <b>(1,437)</b> | <b>(6,451)</b> | <b>657</b>    | <b>584</b>    |
| Earnings (loss) per share (attributable to the Company's stockholders - US\$)         | (0.36)         | (0.28)         | (1.26)         | 0.13          | 0.11          |
| Diluted earnings (loss) per share (attributable to the Company's stockholders - US\$) | (0.36)         | (0.28)         | (1.26)         | 0.13          | 0.11          |

## EQUITY INCOME (LOSS) BY BUSINESS SEGMENT

| US\$ million     | 4Q14 | 3Q14 | 4Q13 | 2014 | %      | 2013  | %      |
|------------------|------|------|------|------|--------|-------|--------|
| Ferrous minerals | 70   | 96   | 168  | 617  | 122.2  | 627   | 133.7  |
| Coal             | 5    | 7    | 5    | 32   | 6.3    | 29    | 6.2    |
| Base metals      | (10) | (13) | (9)  | (36) | (7.1)  | (26)  | (5.5)  |
| Logistics        | 16   | 13   |      | 48   | 9.5    | (1)   | (0.2)  |
| Steel            | (3)  | (60) | (46) | (92) | (18.2) | (148) | (31.6) |



Edgar Filing: Vale S.A. - Form 6-K

|              |           |           |            |            |              |            |              |
|--------------|-----------|-----------|------------|------------|--------------|------------|--------------|
| Others       | (47)      | (8)       | (2)        | (64)       | (12.7)       | (12)       | (2.6)        |
| <b>Total</b> | <b>31</b> | <b>35</b> | <b>116</b> | <b>505</b> | <b>100.0</b> | <b>469</b> | <b>100.0</b> |

40

---

Table of Contents**BALANCE SHEET**

| US\$ million  | 31/12/2014     | 30/09/2014     | 31/12/2013     |
|---|----------------|----------------|----------------|
| <b>Assets</b>   |                |                |                |
| <b>Current assets</b>   | <b>20,234</b>  | <b>21,267</b>  | <b>24,377</b>  |
| Cash and cash equivalents   | 3,974          | 7,882          | 5,321          |
| Financial investments   | 148            | 450            | 3              |
| Derivative financial instruments  | 166            | 144            | 201            |
| Accounts receivable   | 3,275          | 3,359          | 5,703          |
| Related parties   | 579            | 286            | 261            |
| Inventories   | 4,501          | 4,826          | 4,125          |
| Prepaid income taxes  | 1,581          | 1,122          | 2,375          |
| Recoverable taxes   | 1,700          | 1,836          | 1,579          |
| Advances to suppliers   | 96             | 148            | 125            |
| Others  | 574            | 604            | 918            |
| Non-current assets held for sale and discontinued operation                                       | 3,640          | 610            | 3,766          |
| <b>Non-current assets</b>   | <b>7,180</b>   | <b>8,653</b>   | <b>8,100</b>   |
| Related parties   | 35             | 186            | 108            |
| Loans and financing agreements receivable   | 229            | 246            | 241            |
| Judicial deposits   | 1,269          | 1,512          | 1,490          |
| Recoverable income taxes  | 478            | 428            | 384            |
| Deferred income taxes   | 3,976          | 4,305          | 4,523          |
| Recoverable taxes   | 401            | 392            | 285            |
| Derivative financial instruments  | 87             | 116            | 140            |
| Deposit on incentive and reinvestment   | 68             | 65             | 191            |
| Others  | 637            | 1,403          | 738            |
| Fixed assets  | 89,075         | 92,927         | 92,120         |
| <b>Total assets</b>   | <b>116,489</b> | <b>122,847</b> | <b>124,597</b> |
| <b>Liabilities</b>  |                |                |                |
| <b>Current liabilities</b>  | <b>10,737</b>  | <b>10,395</b>  | <b>9,612</b>   |
| Suppliers and contractors   | 4,354          | 4,067          | 3,772          |
| Payroll and related charges   | 1,163          | 1,189          | 1,386          |
| Derivative financial instruments  | 1,416          | 696            | 238            |
| Loans and financing   | 1,419          | 2,041          | 1,775          |
| Related parties   | 306            | 130            | 205            |
| Income taxes settlement program   | 457            | 483            | 470            |
| Taxes payable and royalties   | 550            | 607            | 327            |
| Provision for income taxes  | 353            | 354            | 378            |
| Employee postretirement obligations   | 67             | 97             | 97             |
| Asset retirement obligations  | 136            | 143            | 96             |
| Others  | 405            | 588            | 420            |
| Liabilities directly associated with non-current assets held for sale and discontinued operations | 111            |                | 448            |
| <b>Non-current liabilities</b>  | <b>49,431</b>  | <b>49,068</b>  | <b>50,049</b>  |
| Derivative financial instruments  | 1,610          | 1,308          | 1,492          |
| Loans and financing   | 27,388         | 27,245         | 27,670         |
| Related parties   | 109            | 112            | 5              |
| Employee postretirement obligations   | 2,236          | 1,980          | 2,198          |
| Provisions for litigation   | 1,282          | 1,362          | 1,276          |
| Income taxes settlement program   | 5,863          | 6,320          | 6,507          |
| Deferred income taxes   | 3,341          | 3,255          | 3,228          |
| Asset retirement obligations  | 3,233          | 2,554          | 2,548          |
| Participative stockholders' debentures  | 1,726          | 2,013          | 1,775          |
| Redeemable noncontrolling interest  | 243            | 255            | 276            |

Edgar Filing: Vale S.A. - Form 6-K

|  |                |                |                |
|--|----------------|----------------|----------------|
| Goldstream transaction                           | 1,323          | 1,451          | 1,497          |
| Others   | 1,077          | 1,213          | 1,577          |
| <b>Total liabilities</b>                         | <b>60,168</b>  | <b>59,463</b>  | <b>59,661</b>  |
| <b>Stockholders equity</b>                       | <b>56,321</b>  | <b>63,384</b>  | <b>64,936</b>  |
| <b>Total liabilities and stockholders equity</b> | <b>116,489</b> | <b>122,847</b> | <b>124,597</b> |

Table of Contents**CASH FLOW**

| US\$ million  | 4Q14         | 3Q14         | 4Q13         | 2014          | 2013          |
|---|--------------|--------------|--------------|---------------|---------------|
| <b>Cash flows from operating activities:</b>  |              |              |              |               |               |
| Net income (loss)   | (1,980)      | (1,428)      | (6,486)      | 353           | 408           |
| <b>Adjustments to reconcile net income with cash provided by operating activities:</b>                      |              |              |              |               |               |
| Depreciation, depletion and amortization  | 1,242        | 1,119        | 978          | 4,288         | 4,150         |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments | (31)         | (35)         | (116)        | (505)         | (469)         |
| Loss on measurement or sales of non-current assets  | 167          |              | 459          | 167           | 215           |
| Deferred income taxes   | (106)        | (258)        | 71           | 149           | (953)         |
| Impairment  | 409          |              | 2,298        | 1,183         | 2,298         |
| Loss on sale of property, plant and equipment   | 61           | 30           | 66           | 91            | 96            |
| Gain on sale of assets  | (31)         | 43           | (99)         | 30            | (41)          |
| Exchange and monetary losses  | 874          | 870          | (55)         | 1,270         | 724           |
| Net unrealized derivative losses  | 769          | 863          | (120)        | 1,155         | 791           |
| Debtentures   | (31)         | 56           | 13           | 315           | 368           |
| Others  | 315          | 43           | (2)          | 347           | 74            |
| <b>Decrease (increase) in assets:</b>   |              |              |              |               |               |
| Accounts receivable   | 107          | 645          | (227)        | 2,546         | 608           |
| Inventories   | (63)         | 128          | 275          | (535)         | 346           |
| Recoverable taxes   | (693)        | (474)        | (2,242)      | 11            | (2,405)       |
| Others  | 176          | 444          | (252)        | 738           | (132)         |
| <b>Increase (decrease) in liabilities:</b>  |              |              |              |               |               |
| Suppliers   | 503          | 418          | (75)         | 1,013         | (124)         |
| Payroll and related charges   | 53           | 259          | 249          | (77)          | 59            |
| Income tax  | (52)         | (45)         | (162)        | 113           | 843           |
| Goldstream transaction  |              |              |              |               | 1,319         |
| Income taxes - settlement program   | 44           | 51           | 7,030        | 188           | 7,030         |
| Others  | (545)        | 213          | (185)        | (33)          | (663)         |
| <b>Net cash provided by operating activities from current operations</b>                                    | <b>1,188</b> | <b>2,942</b> | <b>1,418</b> | <b>12,807</b> | <b>14,542</b> |
| Net cash used in operating activities from discontinued operations  |              |              | 250          |               | 250           |
| <b>Net cash provided by operating activities</b>  | <b>1,188</b> | <b>2,942</b> | <b>1,668</b> | <b>12,807</b> | <b>14,792</b> |
| <b>Cash flows from investing activities:</b>  |              |              |              |               |               |
| Short term investments  | 301          | (450)        | 76           | (148)         | 357           |
| Loans and advances receivable   | 1            | 295          | 43           | 364           | (17)          |
| Guarantees and deposits   | 164          | (57)         | (73)         | 59            | (147)         |
| Additions to investments  | (24)         | (23)         | (27)         | (244)         | (378)         |
| Additions to property, plant and equipment  | (3,449)      | (3,269)      | (3,032)      | (11,813)      | (13,105)      |
| Dividends received  | 89           | 260          | 499          | 568           | 834           |
| Proceeds from disposals of investment   |              | 929          | 1,935        | 1,246         | 2,030         |
| Proceeds from gold stream transaction   |              |              |              |               | 581           |
| Net cash used in investing activities from current operations   | (2,918)      | (2,315)      | (579)        | (9,968)       | (9,845)       |
| Net cash used in investing activities from discontinued operations  |              |              | (763)        |               | (763)         |
| Net cash used in investing activities   | (2,918)      | (2,315)      | (1,342)      | (9,968)       | (10,608)      |
| <b>Cash flows from financing activities:</b>  |              |              |              |               |               |

Edgar Filing: Vale S.A. - Form 6-K

|  |         |       |         |         |         |
|--|---------|-------|---------|---------|---------|
| Loans and financing - Additions                                    | 962     | 718   | 1,981   | 2,341   | 3,310   |
| Loans and financing - Repayments                                   | (842)   | (563) | (1,869) | (1,936) | (3,347) |
| Interest attributed to shareholders                                | (2,100) |       | (2,250) | (4,200) | (4,500) |
| Dividends to minority interest                                     | (55)    | (11)  | (10)    | (66)    | (20)    |
| Net cash used in financing activities from current operations      | (2,035) | 144   | (2,148) | (3,861) | (4,557) |
| Net cash used in financing activities from discontinued operations |         |       | 87      |         | 87      |
| Net cash used in financing activities                              | (2,035) | 144   | (2,061) | (3,861) | (4,470) |
| Increase (decrease) in cash and cash equivalents                   | (3,765) | 771   | (1,735) | (1,022) | (286)   |
| Effect of exchange rate changes on cash and cash equivalents       | (143)   | 46    | (65)    | (325)   | (225)   |
| Cash and cash equivalents, beginning of period                     | 7,882   | 7,065 | 7,121   | 5,321   | 5,832   |
| Cash and cash equivalents, end of period                           | 3,974   | 7,882 | 5,321   | 3,974   | 5,321   |
| <b>Supplemental information</b>                                    |         |       |         |         |         |
| <b>Cash paid during the period for:</b>                            |         |       |         |         |         |
| Interest on loans and financing                                    | (324)   | (438) | (375)   | (1,560) | (1,535) |
| Income tax   | (197)   | (81)  | (811)   | (504)   | (2,405) |
| Income taxes-settlement program                                    | (111)   | (136) | (2,594) | (494)   | (2,594) |
| <b>Non-cash transactions:</b>                                      |         |       |         |         |         |
| Interest capitalized   | 184     | 211   | 30      | 588     | 235     |
| Costs of assets retirement obligations                             | 842     |       | 190     | 842     | 190     |

Table of Contents

## ANNEX 2 VOLUMES SOLD, PRICES AND MARGINS

**VOLUME SOLD - MINERALS AND METALS**

| <b>000 metric tons</b> | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| Iron ore fines         | 74,603      | 63,025      | 69,352      | 255,877     | 251,029     |
| ROM                    | 3,552       | 3,544       | 4,245       | 14,075      | 13,602      |
| Pellets                | 12,686      | 11,506      | 11,167      | 43,682      | 40,991      |
| Manganese ore          | 828         | 431         | 649         | 1,879       | 2,115       |
| Ferroalloys            | 36          | 33          | 49          | 150         | 183         |
| Thermal coal           | 310         | 293         | 391         | 1,152       | 726         |
| Metallurgical coal     | 1,815       | 1,818       | 2,478       | 6,330       | 7,353       |
| Nickel                 | 69          | 71          | 69          | 272         | 261         |
| Copper                 | 95          | 97          | 99          | 353         | 353         |
| Gold ( 000 oz)         | 97          | 107         | 94          | 351         | 297         |
| Silver ( 000 oz)       | 757         | 268         | 625         | 1,889       | 2,154       |
| PGMs ( 000 oz)         | 168         | 128         | 144         | 577         | 510         |
| Cobalt (metric ton)    | 1,311       | 637         | 714         | 3,188       | 2,939       |
| Potash                 | 121         | 132         | 141         | 475         | 531         |
| Phosphates             |             |             |             |             |             |
| MAP                    | 249         | 287         | 269         | 1,040       | 1,133       |
| TSP                    | 112         | 246         | 128         | 749         | 681         |
| SSP                    | 367         | 685         | 380         | 2,091       | 1,969       |
| DCP                    | 118         | 122         | 110         | 493         | 461         |
| Phosphate rock         | 935         | 726         | 918         | 3,259       | 3,154       |
| Others phosphates      | 71          | 93          | 36          | 271         | 177         |
| Nitrogen               | 172         | 180         | 172         | 680         | 890         |

**AVERAGE SALE PRICES**

| <b>US\$/ton</b>    | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| Iron ore fines     | 61.57       | 68.02       | 118.77      | 75.97       | 112.05      |
| ROM                | 11.82       | 15.24       | 18.25       | 16.55       | 22.06       |
| Pellets            | 103.11      | 117.85      | 150.17      | 124.17      | 150.22      |
| Manganese ore      | 111.11      | 116.01      | 152.54      | 120.28      | 157.37      |
| Ferroalloys        | 1,416.67    | 1,424.24    | 1,265.31    | 1,453.33    | 1,303.92    |
| Thermal coal       | 64.52       | 58.02       | 74.68       | 67.65       | 81.17       |
| Metallurgical coal | 99.72       | 101.21      | 122.80      | 104.37      | 129.34      |
| Nickel             | 15,420.29   | 18,140.85   | 13,869.57   | 16,426.47   | 14,900.24   |
| Copper             | 5,842.10    | 5,939.50    | 6,506.62    | 6,015.47    | 6,709.18    |
| Platinum (US\$/oz) | 1,224.87    | 1,137.42    | 1,383.14    | 1,261.87    | 1,469.78    |
| Gold (US\$/oz)     | 1,189.96    | 1,081.20    | 1,256.74    | 1,192.51    | 1,339.37    |
| Silver (US\$/oz)   | 14.16       | 15.02       | 18.38       | 19.42       | 20.02       |
| Cobalt (US\$/lb)   | 9.34        | 9.97        | 10.80       | 10.67       | 10.95       |
| Potash             | 371.90      | 356.06      | 354.61      | 355.79      | 417.32      |
| Phosphates         |             |             |             |             |             |
| MAP                | 550.70      | 553.75      | 516.73      | 542.44      | 571.86      |
| TSP                | 448.41      | 445.40      | 425.00      | 428.98      | 472.51      |

Edgar Filing: Vale S.A. - Form 6-K

|                |        |        |        |        |        |
|----------------|--------|--------|--------|--------|--------|
| SSP            | 217.14 | 218.83 | 221.05 | 212.61 | 271.88 |
| DCP            | 584.94 | 617.71 | 612.73 | 591.51 | 611.54 |
| Phosphate rock | 88.77  | 68.87  | 77.34  | 70.88  | 90.68  |
| Nitrogen       | 627.91 | 605.56 | 552.33 | 604.41 | 610.27 |

Table of Contents**OPERATING MARGIN BY SEGMENT (EBIT ADJUSTED MARGIN)**

| <i>%</i>             | <b>4Q14</b> | <b>3Q14</b> | <b>4Q13</b> | <b>2014</b> | <b>2013</b> |
|----------------------|-------------|-------------|-------------|-------------|-------------|
| Ferrous minerals     | 18.1        | 27.8        | 56.4        | 34.5        | 54.8        |
| Coal                 | (133.3)     | (89.6)      | (37.1)      | (110.6)     | (66.1)      |
| Base metals          | 1.0         | 16.4        | (10.9)      | 9.5         | (1.7)       |
| Fertilizer nutrients | (2.3)       | (2.7)       | (36.9)      | (5.8)       | (17.2)      |
| <b>Total(1)</b>      | <b>9.4</b>  | <b>17.9</b> | <b>38.4</b> | <b>22.6</b> | <b>37.6</b> |

---

(1) excluding non-recurring effects



Table of Contents

## ANNEX 3 RECONCILIATION OF IFRS and NON-GAAP INFORMATION

**(a) Adjusted EBIT(1)**

| US\$ million                        | 4Q14       | 3Q14         | 4Q13         | 2014         | 2013          |
|-------------------------------------|------------|--------------|--------------|--------------|---------------|
| Net operating revenues              | 9,072      | 9,062        | 13,125       | 37,539       | 46,767        |
| COGS                                | (6,892)    | (6,501)      | (6,658)      | (25,064)     | (24,245)      |
| SG&A                                | (306)      | (274)        | (339)        | (1,099)      | (1,302)       |
| Research and development            | (235)      | (194)        | (272)        | (734)        | (801)         |
| Pre-operating and stoppage expenses | (292)      | (284)        | (473)        | (1,088)      | (1,859)       |
| Other operational expenses          | (491)      | (184)        | (337)        | (1,057)      | (984)         |
| <b>Adjusted EBIT</b>                | <b>856</b> | <b>1,625</b> | <b>5,046</b> | <b>8,497</b> | <b>17,576</b> |

---

(1) Excluding non-recurring effects.

**(b) Adjusted EBITDA**

EBITDA defines profit or loss before interest, tax, depreciation and amortization. Vale uses the term adjusted EBITDA to reflect exclusion of gains and/or losses on sale of assets, non-recurring expenses and the inclusion of dividends received from non-consolidated affiliates. However our adjusted EBITDA is not the measure defined as EBITDA under IFRS, and may possibly not be comparable with indicators with the same name reported by other companies. Adjusted EBITDA should not be considered as a substitute for operational profit or as a better measure of liquidity than operational cash flow, which are calculated in accordance with IFRS. Vale provides its adjusted EBITDA to give additional information about its capacity to pay debt, carry out investments and cover working capital needs. The following table shows the reconciliation between adjusted EBITDA and operational cash flow, in accordance with its statement of changes in financial position:

**RECONCILIATION BETWEEN ADJUSTED EBITDA AND OPERATIONAL CASH FLOW**

| US\$ million                       | 4Q14         | 3Q14         | 4Q13         | 2014          | 2013          |
|------------------------------------|--------------|--------------|--------------|---------------|---------------|
| Operational cash flow              | 1,188        | 2,942        | 1,668        | 12,807        | 14,792        |
| Income tax                         | (363)        | (65)         | 5,039        | 1,051         | 7,786         |
| FX and monetary losses             | (874)        | (870)        | (183)        | (1,270)       | (724)         |
| Financial expenses                 | 2,824        | 3,709        | 4,357        | 6,476         | 8,290         |
| Net working capital                | 470          | (1,630)      | (4,416)      | (3,660)       | (6,881)       |
| Dividends received                 | 89           | 260          | 499          | 568           | 834           |
| Other                              | (1,283)      | (1,342)      | (109)        | (2,755)       | (1,322)       |
| Adjustment for non-recurring items | 136          |              | (215)        | 136           | (215)         |
| <b>Adjusted EBITDA</b>             | <b>2,187</b> | <b>3,004</b> | <b>6,639</b> | <b>13,353</b> | <b>22,560</b> |

**(c) Net debt**

**RECONCILIATION BETWEEN Total debt AND NET DEBT**

| US\$ million              | 4Q14   | 3Q14   | 4Q13   | 2014   | 2013   |
|---------------------------|--------|--------|--------|--------|--------|
| Total debt                | 28,807 | 29,366 | 29,655 | 28,807 | 29,655 |
| Cash and cash equivalents | 4,122  | 8,332  | 5,324  | 4,122  | 5,324  |
| Net debt                  | 24,685 | 21,034 | 24,331 | 24,685 | 24,331 |

**(d) Total debt / LTM Adjusted EBITDA**

| US\$ million                               | 4Q14 | 3Q14 | 4Q13 | 2014 | 2013 |
|--|------|------|------|------|------|
| Total debt / LTM Adjusted EBITDA (x)       | 2.2  | 1.6  | 1.3  | 2.2  | 1.3  |
| Total debt / LTM operational cash flow (x) | 2.2  | 2.3  | 2.0  | 2.2  | 2.0  |

**(e) Total debt / Enterprise value**

| US\$ million                  | 4Q14 | 3Q14 | 4Q13 | 2014 | 2013 |
|-------------------------------|------|------|------|------|------|
| Total debt / EV (%)           | 43.8 | 38.6 | 28.6 | 43.8 | 28.6 |
| Total debt / total assets (%) | 24.7 | 23.9 | 23.8 | 24.7 | 23.8 |

Enterprise value = Market capitalization + Net debt

**(f) LTM Adjusted EBITDA / LTM interest payments**

| US\$ million                                       | 4Q14 | 3Q14 | 4Q13 | 2014 | 2013 |
|--|------|------|------|------|------|
| LTM adjusted EBITDA / LTM interest payments (x)    | 8.6  | 11.1 | 14.7 | 8.6  | 14.7 |
| LTM operational profit / LTM interest payments (x) | 4.7  | 5.8  | 9.8  | 4.7  | 9.8  |

Table of Contents

This press release may include statements that present Vale's expectations about future events or results. All statements, when based upon expectations about the future and not on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; and (e) global competition in the markets in which Vale operates. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM), the French Autorité des Marchés Financiers (AMF), and The Stock Exchange of Hong Kong Limited, and in particular the factors discussed under "Forward-Looking Statements" and "Risk Factors" in Vale's annual report on Form 20-F.

Table of Contents

**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 26, 2015

By: /s/ Rogerio T. Nogueira  
Rogerio T. Nogueira  
Director of Investor Relations

---