Vale S.A.
Form 6-K
July 29, 2011

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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
July 2011
Vale S.A.

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(Address of principal executive office)

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

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(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 o No þ

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(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 o No þ

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

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2Q11
A SUPERB PERFORMANCE
Performance of Vale in 2Q11

Rio de Janeiro, July 28, 2011 Vale S.A. (Vale) reports a superb performance in the second quarter of 2011 (2Q11), which reflects our superior asset quality in a global environment of strong demand and high prices of minerals and metals.

Our 2Q11 operational and financial performance demonstrates a significant improvement when compared to the previous quarter, and has generated a positive momentum. Given the normalization of our existing operations and the successful ramp up of projects recently delivered against a backdrop of benign seasonal and cyclical factors, we are positioned to obtain even further improvements in Vale s performance.

Revenues and cash generation reached all-time high levels, while operating income, operating margin and net earnings were the highest for a second quarter.

The strong cash generation allows Vale to deal successfully with the trilemma faced by growth companies, which is to satisfy simultaneously the demand for financing investment opportunities, maintain a sound balance sheet and return excess free cash flow to shareholders.

The commitment to discipline in capital allocation and shareholder value creation was evidenced once again by decisions made up to now to return to shareholders a record amount of cash in 2011. The Board of Directors has approved a buyback program of up US$ 3.0 billion to be concluded until November 25th, 2011. In addition to the US$ 3.0 billion already paid in 1H11 and a minimum of US$ 2.0 billion to be approved and paid in October, we announced today a proposal by Vale s Executive Directors to the Board of Directors to distribute US$ 3.0 billion as an additional dividend. By the same token, our senior management decided for the termination of a deal to acquire African copper assets.

As a consequence of a Brazilian court decision in a case related to the exemption of Social Contribution tax (*Contribuição Social sobre o Lucro Liquido*), at a rate of 9% on earnings generated from exports, on July 29, 2011, Vale will make a payment of R$ 5.83 billion, equivalent to approximately US$ 3.8 billion, corresponding to the tax obligation due. There will be no impact on net earnings as the value of the tax payment was already provisioned in our books.

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The main highlights of Vale s performance in 2Q11 were:

Record operating revenues of US$ 15.345 billion in 2Q11, the highest quarterly result in Vale s history.

Operating income, as measured by adjusted EBIT[1] (earnings before interest and taxes) [(a)], reached US$ 7.747 billion, being the highest for a second quarter.

EBIT margin reached 51.7%, up from 48.9%, in 1Q11, the highest for a second quarter.

Net earnings of US$ 6.452 billion, equal to US$ 1.22 per share on a fully diluted basis, 74.1% higher than 2Q10, a record figure for a second quarter.

Record cash generation, as measured by adjusted EBITDA[(b)] (earnings before interest, taxes, depreciation and amortization) of US$ 9.069 billion. The last 12-month adjusted EBITDA of US$ 35.929 billion also reached a new all-time high mark.

Record sales of bulk materials iron ore, pellets, manganese, ferroalloys and metallurgical and thermal coal of US$ 11.681 billion in 2Q11, 22.7% above 1Q11.

Investments reached US$ 4.0 billion, with US$ 3.1 billion spent on project execution and R&D.

Large cash holdings of US$ 13.2 billion, supporting a healthy balance sheet with low debt leverage, measured by total debt/LTM adjusted EBITDA, equal to 0.68x, and long average debt maturity, of 9.8 years.

[1] Throughout this report, for 2Q11 comparison purposes, adjusted EBIT, adjusted EBIT margin and adjusted EBITDA figures for 1Q11 exclude the non-recurring gain from the transfer of aluminum assets in 1Q11.

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Table 1 SELECTED FINANCIAL INDICATORS

US$ million	**2Q10 (A)**	**1Q11 (B)**	**2Q11 (C)**	**% (C/A)**	**% (C/B)**
Operating revenues	9,930	13,548	15,345	54.5	13.3
Adjusted EBIT	4,630	6,456[1]	7,747	67.3	20.0
Adjusted EBIT margin (%)	47.9	48.9[1]	51.7		
Adjusted EBITDA	5,577	7,663[1]	9,069	62.6	18.3
Net earnings	3,705	6,826	6,452	74.1	(5.5)
Earnings per share fully diluted basis(US$ / share)	0.70	1.29	1.22		
Total debt/ adjusted EBITDA (x)	1.8	0.7	0.7		
ROIC [2](%)	19.6	32.9	34.2		
Capex (excluding acquisitions)	2,375	2,743	4,036	69.9	47.1

1 Excluding the non-recurring gain from the transfer of aluminum assets in 1Q11.

2 ROIC LTM = return on invested capital for last twelve-month period.

US$ million	**1S10 (A)**	**1S11 (B)**	**% (B/A)**
Operating revenues	16,778	28,893	72.2
Adjusted EBIT	6,692	14,203	112.2
Adjusted EBIT margin (%)	41.2	50.4	
Adjusted EBITDA	8,432	16,732	98.4
Net earnings	5,309	13,278	150.1
Capex (excluding acquisitions)	4,533	6,779	49.5
Acquisitions	5,334	221	(95.9)

Except where otherwise indicated the operational and financial information in this release is based on the consolidated figures in accordance with US GAAP 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: Compañia Minera Misky Mayo S.A.C., Ferrovia Centro-Atlântica (FCA), Ferrovia Norte Sul S.A, PT International Nickel Indonesia Tbk, Vale Australia Pty Ltd., Vale Canada Limited (formely Vale Inco Limited), Vale Colômbia Ltd., Mineração Corumbaense Reunida S.A., Vale Fertilizantes S.A., Vale International, Vale Manganês S.A., Vale Manganèse France, Vale Manganese Norway S.A. and Vale Nouvelle Caledonie SAS.

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BUSINESS OUTLOOK

Global economic growth has decelerated, running in the second quarter at an estimated pace below long-term trend. In particular, global industrial production barely increased, showing its lowest growth rate since the start of the recovery from the Great Recession of 2008/2009 twenty-four months ago.

Despite the slowdown in industrial production, minerals and metals prices remained at elevated levels, suffering only modest decreases and rebounding since mid-June. This price performance was due to a combination of three variables: inventories at normal levels, global demand supported by the continuation of strong growth although at a slower pace in Emerging Asia, and a constrained supply.

The performance of industrial output primarily reflected the effects of some drags on economic growth.

The Tohoku earthquake/tsunami has caused a sharp drop in economic activity in Japan and a negative spillover into global manufacturing through a disruption in the global supply chain, which became more visible in the global auto industry.

The food and oil price shocks compressed purchasing power and ultimately household spending.

Companies were surprised by excess inventories resulting from a mismatch earlier this year between rapid output expansion and the sluggish growth of final goods expenditures, and reacted by cutting production.

In addition, the disappointing sales performance and the higher risk perception stimulated by the Euro zone debt stress influenced a corporate retrenchment in labor hiring and capex spending, in spite of rising profitability and powerful cash flows.

In the US, where non-financial companies have been showing record financial performance, the reluctance to invest also seems linked to the lack of government and Congress resolve to address longer term fiscal issues. At the moment, this is a source of serious concern about the future of the US economy, creating uncertainty the real effective US dollar exchange rate reached its lowest point for at least the last three decades and ultimately discouraging investment expenditure. The current debate on the US federal debt ceiling is part of the realization that current taxation and spending plans lead to unsustainable disequilibrium.

We believe that eliminating these drags is key to the global economic outlook. At the same time, moving into 2H11 we see signs of improvement.

The impact on household spending is fading as energy and food prices have stabilized, although at relatively high levels. After the initial plunge in Japanese output and exports, both are rebounding off a low base, meaning that Japan is swinging from a negative to a positive force in global manufacturing growth.

Industrial production in Japan started to recover in April and accelerated into May, and is expected to continue to grow. According to the Reuters Tankan poll, in July there were clear signs of confidence in Japanese companies for the first time since the earthquake, pointing to a moderate but positive growth later in the year. Moreover, companies in other countries that were forced to curtail output are now seeing their supplies restored. As this happens, they can raise output, which gives rise to a positive effect on global industrial production.

The final leg of the recovery from the earthquake is still to come, when the investment in reconstruction of infrastructure, industrial facilities and residential buildings begins to gain momentum.

In Europe the risks of a financial crisis in the short term were minimized by the launching of a financing package for Greece. The European Council announced on July 21 a series of new policy measures for Greece and for the safeguard of financial stability in the Euro zone.

The Greek package and the better terms now offered to Portugal and Ireland involve a substantial transfer of resources from the other Euro Zone members to these countries and materially improve their debt sustainability. New loans from the European Financial Stability Fund (EFSF) to Greece will have a maturity period of between 15 to 30 years, with a 10-year grace period and lending rates of approximately 3.5% per annum. The EFSF lending rates and maturities will be applied also for the existing Greek facility, and for Portugal and Ireland, thus easing their debt burden.

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Simultaneously, the risk of contagion was properly addressed through measures allowing the EFSF to intervene in the secondary bond market and recapitalize the financial institutions of Euro zone members including those from countries not borrowing funds from the EFSF through loans to governments.

The financial sector has indicated its willingness to support Greece on a voluntary basis through a menu of options further strengthening overall sustainability. The Institute of International Finance, the global association of financial institutions, has released on its website a Greek financing offer, with a menu of instruments.

Although an announcement of the enlargement of the size of the EFSF would have been very positive, we believe that the measures approved by Euro area authorities will contribute to a significant reduction of the risks of a global financial crisis. Of course, for the longer term their effectiveness will depend upon compliance with fiscal consolidation plans, the implementation of privatizations processes and measures leading to more flexible labor markets.

In the US, the mobilization of private sector funds on a large scale to finance investments will give a boost to global economic growth but it will depend on the delivery by the government of concrete plans to address the fiscal imbalance.

The end of the inventory cycle is dependent on the recovery of final sales. Asia is leading the expected acceleration in global consumption expenditures. Japanese data delivered impressive gains in 2Q11 and the signs point to continued increase through 3Q. In China real retail sales strengthened in recent months amid a firming up of auto sales, showing an average year-on-year increase of 17.2% in 2Q11.

Chinese growth in 2Q11 remained robust, at an estimated 8.8% on a quarter-on-quarter seasonally adjusted basis against 9.5% year-on-year. Fixed asset investment growth in June was at 25.1% yoy while industrial production expanded to 15.1%.

Despite the jump of consumer price inflation to 6.4% in June, chiefly caused by a rise in pork prices, we see the priority of Chinese leaders to be fostering economic growth, with a large concern about the risk of monetary policy having a significant impact on the real economy. As a consequence, we do not expect further credit tightening.

The global market for iron ore remains tight and we expect it to stay like this at least for the next couple of years. The Platts index for 62% Fe content remained range-bound between US$ 170 to US$ 185 per metric ton over the last few months, demonstrating a strong resilience against the pessimistic expectations on global macroeconomic performance. Chinese iron ore imports reached 334.5 Mt in 1H11, increasing by 8.1% over the same period of last year.

Global steel output on annualized terms reached 1.53 billion metric tons in June 2011 against 1.21 billion at the trough of the recession in June 2009 and 1.42 billion at the eve of the financial crisis in June 2008.

Notwithstanding the credit tightening in China, the property sector, a major driver of steel and iron ore consumption, is performing very well. Sales grew in June by 25.4% on a year-on-year basis up from 18.3% in May, while housing starts increased by 20.9%.

China s 12th five-year plan for 2011-2015 continues to support the drivers of commodity demand, including iron ore, coal and copper. The social housing program, involving the construction of 36 million units, out of which 10 millions are scheduled to take place in 2011 and another 10 million in 2012, will add strength to the property market and iron ore demand from 2H11 onwards.

Alongside the investment in social housing, we expect the construction of other types of housing to continue to grow rapidly. This is primarily due to the urbanization process China is still a rural country with a level of urbanization similar to Brazil in the mid-1950 s and the demand for reurbanization, which is also an important source of construction investment in the country. Moreover, urbanization and the development of the Central and Western regions of China will involve large investments in infrastructure, another major source of demand for minerals and metals.

On the supply side, the delivery of new iron ore capacity involves huge challenges, with a large potential to cause delays in execution and higher production and investment costs.

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Currently, a major part of capacity expansion is made up of greenfield projects, which require large, complex and expensive investments in infrastructure, generating a surge in capex costs per metric ton in addition to cost increases due to rising prices of equipment, raw materials and services and the depreciation of the US dollar against the currencies of mining countries.

Operating costs have edged up and are expected to continue to do so. In addition to the higher input prices and stronger currencies, high quality iron ore is becoming increasingly scarce around the globe, which contributes to increasing mining and processing costs. This is more pronounced among Chinese miners but it is also an issue in other countries, such as Australia and Brazil.

Thus the combination of opex and capex costs at elevated levels creates a strong requirement for higher prices to sustain minimum investment hurdle rates.

Last but not least, the need for repletion of lost capacity means that a part of global investments in iron ore operations will be destined just to maintain the supply constant and not to increase it.

Nickel prices fared well in face of the fall in 2Q11 of global stainless steel output from the all-time level of 1Q11, the start-up of some ferronickel projects and negative expectations about the global economy. Despite the reduction in stainless steel production, the level reached in 2Q11 8.0 Mt on a seasonally-adjusted basis was still high.

Even at its lowest point in the year to date, the price of nickel at US$ 21,875 per metric ton in June 22, 2011, was slightly higher than the average price for 2010, when global stainless steel production grew at 21%, the highest rate since 1991. Since then, prices have been recovering, hovering around US$ 24,000 over recent weeks.

Simultaneously, inventories at the LME warehouses dropped by 25%, in the sharpest fall of stocks among base metals so far this year.

This scenario reflects a strong demand from non-stainless nickel applications driven by the final demand from various industries, including aerospace, energy, mining, automotive and cement, and pessimism about supply expansion of refined nickel coming from lateritic deposits, which make for the bulk of known nickel resources in the world.

Despite the risks ahead, we expect global industrial production to resume higher growth thus contributing to a stronger demand for minerals and metals. For the medium and long term the strong fundamentals for their markets remain intact.

This outlook makes us optimistic about the performance of Vale. In the short-term the upside comes from the end of issues which constrained the output of iron ore, coal, nickel and copper and the successful ramp up of several projects. On a longer term perspective we see the delivery of new projects from our large project pipeline supported by a strong discipline in capital allocation as the main driver of our operational and financial performance.

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REVENUES

Gross operating revenues totaled US$ 15.345 billion in 2Q11, being the highest figure in Vale s history. They showed an increase of 13.3% over the US$ 13.548 billion in 1Q11 and were 54.5% higher than 2Q10.

Higher sales prices produced a positive effect of US$ 1.344 billion on 2Q11 operating revenues, with bulk materials prices being the main contributor, leading to an increase of US$ 1.477 billion, while the lower prices of base metals had a negative impact, of US$ 190 million. Volume growth added US$ 453 million, mainly due to larger shipments of bulk materials, accounting for a revenue increase of US$ 685 million, whilst the reduction in sales volumes of base metals caused a loss of US$ 334 million.

Sales revenues of bulk materials iron ore, pellets, manganese ore, ferroalloy, metallurgical and thermal coal represented 76.1% of the total operating revenues in 2Q11, increasing from 70.3% in 1Q11.

The share of base metals in total revenues decreased to 14.5% from 17.5%[2] in the previous quarter, fertilizers showed a slight decrease to 5.7% from 5.8%, and logistics services were responsible for a larger share in comparison with 1Q11, 3.1% against 2.4%.

Sales to Asia accounted for 52.1% of total revenues, increasing from 49.6% in 1Q11. This is mainly explained by the rise of China s share to 32.6% from 29.7%. Japan s participation rose to 11.7% from 11.1% in 1Q11. The Americas saw a slight decrease to 25.2% from 27.6% in the last quarter, due to the sale of the aluminum assets, which had Canada as an important market. Europe s participation grew marginally to 20.0% from 19.5%, while the contribution of the rest of the world fell to 2.7%.

On a country basis, China provided the largest share of our revenues with 32.6% in 2Q11, Brazil represented 18.9%, Japan 11.7%, Germany 6.4%, Italy 3.6% and the United States 2.6%.

[2] Excluding revenues originated from the sales of aluminum products in 1Q11.

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Table 2 OPERATING REVENUE BREAKDOWN

US$ million	2Q10	%	1Q11	%	2Q11	%
Bulk materials	**7,497**	**75.5**	**9,519**	**70.3**	**11,681**	**76.1**
Ferrous minerals	**7,312**	**73.6**	**9,365**	**69.1**	**11,425**	**74.5**
Iron ore	5,435	54.7	7,287	53.8	9,102	59.3
Pellets	1,610	16.2	1,869	13.8	2,113	13.8
Manganese ore	89	0.9	43	0.3	51	0.3
Ferroalloys	160	1.6	153	1.1	150	1.0
Pellet plant operation services	8	0.1	9	0.1	9	0.1
Others	10	0.1	4			
Coal	**185**	**1.9**	**154**	**1.1**	**256**	**1.7**
Thermal coal	72	0.7	67	0.5	139	0.9
Metallurgical coal	113	1.1	87	0.6	117	0.8
Base metals	**1,736**	**17.5**	**2,749**	**20.3**	**2,225**	**14.5**
Nickel	820	8.3	1,557	11.5	1,461	9.5
Copper	233	2.3	536	4.0	491	3.2
PGMs	14	0.1	165	1.2	159	1.0
Precious metals	9	0.1	88	0.7	90	0.6
Cobalt	5	0.1	19	0.1	23	0.1
Aluminum	245	2.5	141	1.0		
Alumina	404	4.1	236	1.7		
Bauxite	6	0.1	6			
Fertilizer nutrients	**210**	**2.1**	**787**	**5.8**	**867**	**5.7**
Potash	55	0.6	62	0.5	68	0.4
Phosphates	107	1.1	536	4.0	584	3.8
Nitrogen	35	0.4	172	1.3	194	1.3
Others	13	0.1	17	0.1	21	0.1
Logistics services	**407**	**4.1**	**328**	**2.4**	**476**	**3.1**
Railroads	301	3.0	250	1.8	357	2.3
Ports	106	1.1	78	0.6	119	0.8
Others	**80**	**0.8**	**165**	**1.2**	**96**	**0.6**
Total	**9,930**	**100.0**	**13,548**	**100.0**	**15,345**	**100.0**

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Table 3 OPERATING REVENUE BY DESTINATION

US$ million	2Q10	%	1Q11	%	2Q11	%
North America	**358**	**3.6**	**962**	**7.1**	**679**	**4.4**
USA	163	1.6	475	3.5	406	2.6
Canada	183	1.8	463	3.4	254	1.7
Mexico	11	0.1	24	0.2	19	0.1
South America	**1,950**	**19.6**	**2,778**	**20.5**	**3,189**	**20.8**
Brazil	1,756	17.7	2,538	18.7	2,904	18.9
Others	194	2.0	240	1.8	285	1.9
Asia	**4,783**	**48.2**	**6,716**	**49.6**	**7,993**	**52.1**
China	2,795	28.1	4,024	29.7	5,005	32.6
Japan	1,072	10.8	1,509	11.1	1,790	11.7
South Korea	316	3.2	428	3.2	626	4.1
Taiwan	269	2.7	323	2.4	299	1.9
Others	331	3.3	433	3.2	273	1.8
Europe	**2,381**	**24.0**	**2,636**	**19.5**	**3,067**	**20.0**
Germany	745	7.5	918	6.8	985	6.4
Belgium	67	0.7	84	0.6	124	0.8
France	93	0.9	147	1.1	258	1.7
UK	358	3.6	357	2.6	395	2.6
Italy	298	3.0	468	3.5	546	3.6
Others	821	8.3	663	4.9	759	4.9
Rest of the World	**458**	**4.6**	**456**	**3.4**	**417**	**2.7**
Total	**9,930**	**100.0**	**13,548**	**100.0**	**15,345**	**100.0**

COSTS

The increase in sales volumes and the depreciation of the US dollar led to higher costs in 2Q11. Excluding the effects of these two factors, our cost of goods sold (COGS) was reduced vis-à-vis 1Q11, highlighting the commitment to cost minimization across the cycles even in the face of pressures arising from tight markets for labor, equipment, parts and inputs. As we mentioned before, these cost pressures are the flipside of a strong global demand for minerals and metals.

As previously disclosed, on February 28, 2011 we concluded a transaction involving our aluminum assets. As a consequence, costs of the aluminum operations were only accounted for in the months of January and February in 1Q11, amounting to 5.2% of our costs, at US$ 286 million.

In order to allow for a proper comparison of COGS on the same basis excluding the effect of aluminum operations we have prepared the following table COGS Reconciliation .

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COGS RECONCILIATION

US$ million	1Q11	2Q11
Outsourced services	**867**	**1,088**
Material	**850**	**909**
Energy	**740**	**719**
Fuel and gases	497	510
Electric energy	243	209
Acquisition of products	**531**	**555**
Iron ore and pellets	336	319
Nickel	144	178
Other products	51	58
Personnel	**671**	**741**
Depreciation and exhaustion	**864**	**890**
Shared Services	**90**	**107**
Others	**677**	**712**
Total	**5,290**	**5,721**

In 2Q11, COGS were up by US$ 431 million on a quarter-on-quarter basis, reaching US$ 5.721 billion. This was primarily due to higher sales volumes, which added US$ 410 million to costs, and depreciation[3] of the US dollar against the currencies of commodity exporting countries, another consequence of the cycle, where Vale has significant operations, such as Brazil, Canada, Australia and Indonesia, contributed with US$ 156 million. The Brazilian real has strengthened 4.3% against the US dollar, against the Canadian dollar 1.8%, the Australian dollar 3.7% and the Indonesian rupiah 3.5%.

Expenditures with outsourced services totaled US$ 1.088 billion 19.0% of COGS against US$ 867 million in 1Q11. The US$ 221 million cost increase was chiefly caused by: (i) higher sales volumes, US$ 88 million; (ii) the increase of the railroad freight prices charged by our affiliated company MRS, covering all of the first semester of the year, US$ 70 million and (iii) the depreciation of the US dollar, US$ 30 million.

Cost of materials 15.9% of COGS was US$ 909 million, up 6.9% against 1Q11. Excluding the effects of higher sales volumes (US$ 58 million) and currency price changes (cost increase of US$ 26 million), costs of materials decreased by US$ 25 million vis-à-vis 1Q11.

Personnel expenses reached US$ 741 million, representing 13.0% of COGS, against US$ 671 million in 1Q11. The exchange rate variation added US$ 20 million. It is worth noting that as a consequence of the expansion of Vale operations, headcount is increasing, entailing higher expenses with personnel. The number of employees rose to 74,076 workers in June 2011 from 70,802 in March 2011[4].

In 2Q11, expenses with energy consumption accounted for 12.6% of COGS. They amounted to US$ 719 million, showing a decrease of 2.8% when compared to the previous quarter. Costs of electricity consumption of US$ 209 million declined by 14.0% vis-à-vis 1Q11, while those of fuel and gases increased by 2.6%, reaching US$ 510 million.

Higher sales together with the depreciation of the US dollar raised energy costs by US$ 57 million, which was more than offset by the combined effect of lower electric energy costs, US$ 34 million, and a decrease of US$ 26 million in natural gas prices, used in the pelletizing process.

The cost of purchasing products from third parties amounted to US$ 555 million 9.7% of COGS against US$ 531 million in 1Q11.

The purchase of iron ore and pellets amounted to US$ 319 million, against US$ 336 million in the previous quarter. The volume of iron ore bought from smaller miners was 2.2 million metric tons (Mt) in 2Q11 compared to 2.0 Mt in 1Q11. The acquisition of pellets from our joint ventures amounted to 960,000 metric tons in this quarter, an increase of 340,000 metric tons.

[3] COGS currency exposure in 2Q11 was made up as follow: 66% Brazilian real, 14% in US dollar, 14% in Canadian dollar, 1% in Indonesian rupiah and 5% in other currencies.

[4] The March number of employees was adjusted to exclude 1,173 employees that worked for our aluminum operations.

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US GAAP ***2Q11***

Expenditures with the purchase of nickel products rose to US$ 178 million from US$ 144 million in 1Q11 impacted by the higher volumes, from 3,200 t to 5,400 t in 2Q11, as a result of Vale s strategy to buy finished nickel to honor contracts because of the problems with the Copper Cliff smelter in Sudbury.

Costs with shared services increased by US$ 17 million and reached US$ 107 million in 2Q11, continuing to be affected by the rental of new hardware equipment.

Other operational costs reached US$ 712 million against US$ 677 million in 1Q11. The US$ 35 million increase was mainly influenced by the higher demurrage costs (US$ 33 million).

Sales, general and administrative expenses (SG&A) totaled US$ 434 million in 2Q11, US$ 15 million above 1Q11. The increase of SG&A expenses was primarily caused by a rise in personnel services (US$ 25 million), which was offset by a decrease in sales expenses (US$ 10 million).

Research and development (R&D), which reflects our investment in creating long-term growth opportunities, amounted to US$ 363 million, US$ 21 million higher than 1Q11[5].

Other operational expenses reached US$ 724 million, against US$ 420 million in 1Q11, mostly due to the increase of US$ 213 million in pre-operating and start-up related expenses, which reached US$ 345 million in 2Q11. This result was determined mainly by the expansion in VNC start-up expenses, to US$ 203 million from US$ 102 million in 1Q11, and in pre-operating costs related to Onça Puma, to US$ 105 million from US$ 17 million in the previous quarter. Besides the pre-operating and start up costs, we recognized US$ 79 million of contingencies in 2Q11.

Table 4 COGS BREAKDOWN

US$ million	**2Q10**	**%**	**1Q11**	**%**	**2Q11**	**%**
Outsourced services	**637**	**15.5**	**909**	**16.3**	**1,088**	**19.0**
Cargo freight	213	5.2	246	4.4	333	5.8
Maintenance of equipments and facilities	149	3.6	180	3.2	193	3.4
Operational Services	151	3.7	178	3.2	210	3.7
Others	124	3.0	305	5.5	352	6.2
Material	**675**	**16.4**	**937**	**16.8**	**909**	**15.9**
Spare parts and maintenance equipment	301	7.3	342	6.1	381	6.7
Inputs	232	5.6	396	7.1	338	5.9
Tires and conveyor belts	42	1.0	39	0.7		