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

August 2013

Vale S.A.

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

(Address of principal executive office)

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

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

(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 x

(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 o No x

(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 x

(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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DELIVERING ON THE PROMISES: SUSTAINING COST REDUCTION

VALE S PERFORMANCE IN 2Q13

Rio de Janeiro, August 07, 2013 Vale S.A. (Vale) had a solid financial performance in the second quarter of 2013 (2Q13) amidst an environment of below-trend global economic growth and declining minerals and metals prices. Operating revenues were US$ 11.3 billion, operating income, as measured by adjusted EBIT, reached US$ 3.6 billion, adjusted EBITDA US$ 5.0 billion, and underlying earnings US$ 3.3 billion, US$ 0.64 per share.

Copper, gold and coal production achieved all-time high figures, at 91,300 t(1), 63,000 oz and 2.4 Mt, respectively, while nickel output remained at 65,000 t, its best second quarter since 2Q08. Salobo is ramping up successfully, beginning to generate cash in June.

We are executing our business plan, which provides exposure to a large world-class natural resource base and multiple opportunities for shareholder value creation, underpinned by a greater focus on cost and capital management discipline, financial strength and an efficient logistics infrastructure. In this context, we are concluding important base metals projects, such as Salobo II copper, executing some world-class bulk materials projects, such as Carajás S11D iron ore and Moatize II coal, expanding the logistics network Teluk Rubiah, CLNS 11D and the Nacala Corridor to support our global operations. Simultaneously, we are divesting non-core assets, cutting research and development (R&D) expenditures, operating costs and corporate expenses and maintaining a strong balance sheet.

We have continued to deliver on our promises. The several initiatives under way are producing sequential improvements: total costs and expenses(2) fell by US$ 736 million in 2Q13 versus 2Q12, accumulating a reduction of US$ 1.6 billion in the first half of 2013 (1H13) compared to 1H12 driven by decreases in costs by US$ 845 million (8%), sales, general and administrative (SG&A) expenses by US$ 435 million (42%) and R&D by US$ 324 million (49%)(3).

Supported by the cost cutting efforts, adjusted EBITDA remained steady at US$ 10.2 billion in the first half of this year, declining only US$ 304 million on a year-on-year basis, notwithstanding the US$ 2.1 billion fall in revenues determined mostly by price decreases.

We are strongly committed to persist in our relentless efforts to pursue a cost structure consistent with continuous value creation through the cycles. In addition to our own efforts, the cost performance of 2Q13 was reached with an average Brazilian real (BRL) / US dollar (USD) exchange rate of 2.07 in 2Q13, thus highlighting potential opportunities for further savings, given that the BRL/USD stood at 2.23 at the end of 2Q13.

BM&F BOVESPA: VALE3, VALE5

NYSE: VALE, VALE.P

HKEx: 6210, 6230

EURONEXT PARIS: VALE3, VALE5

LATIBEX: XVALO, XVALP

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IFRS
2Q13

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(1) Mt: million tons, t: ton, oz: troy ounces.

(2) Net of depreciation and loss on sale of assets.

(3) This is an accounting figure, in the investment section of this press release we disclose the amount for research and development computed in accordance with the financial disbursement.

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Iron ore sales were slightly above planned, 61.9 Mt in 2Q13 and 117.6 Mt in 1H13, and in line with 1H12. The average price for our iron ore shipments changed to US$ 99.20 from US$ 111.70 in 1Q13, as we managed to cushion the effect of the fall of the IODEX 62% Fe to US$ 125.95 in 2Q13 from US$ 148.40, given the mix of different pricing mechanisms in our sales portfolio. Revenues were sustained at US$ 6.1 billion and adjusted EBITDA for ferrous minerals kept steady at US$ 4.7 billion, the same level as 1Q13.

Our total debt came to US$ 29.9 billion from US$ 30.2 billion at the end of 1Q13, despite paying US$ 2.25 billion in dividends and investing US$ 3.6 billion in 2Q13, thus contributing to sustain our financial leverage at 1.6 times the adjusted EBITDA for the last twelve-month period, a low level for this stage of the cycle.

Cash position was shored up by important improvements in working capital resulting from a series of initiatives to increase efficiency and optimize capital management. The number of days of receivables was shortened to 40.1 in 2Q13 against 50.6 in 1Q13. This has contributed to free cash in the amount of US$ 1.3 billion when compared to March 2013. Inventories also fell by US$ 378 million in 2Q13 versus 1Q13.

One important milestone was attained in July with the granting by the Brazilian environmental protection agency (IBAMA) of the installation license (LI) for Carajás S11D, the largest, highest quality and lowest cost world-class iron ore project in the global industry. Given the combination of high quality and low operating costs, S11D has the potential to generate sizable shareholder value even in the face of a scenario of low iron ore prices.

We also reached completion of work on several projects to increase the railway capacity on the Carajás railroad (EFC), an important enabler of production growth for the Additional 40 Mtpy project.

The license to implement S11D, the improving operational performance of base metals on the back of the successful ramp-up of Salobo, and the strong financial performance supported by lower costs and expenses will uniquely position Vale to be amongst the clear winners in the natural resources industry in the years to come.

Financial highlights in 2Q13:

- Operating revenues totaled US$ 11.3 billion, in line with 1Q13. The increase in sales volumes was partially offset by lower prices.

- Income from existing operations, as measured by adjusted EBIT(a) (earnings before interest and taxes), was US$ 3.6 billion, versus US$ 4.2 billion in 1Q13.

- Operating income margin of 32.7%, as measured by adjusted EBIT margin.

- Underlying earnings(g) were US$ 3.3 billion, equal to US$ 0.64 per share on a fully diluted basis, against US$ 3.1 billion in 1Q13, net of the accounting effects of non-cash and/or non-recurring items.

- Cash generation, as measured by adjusted EBITDA(b) (earnings before interest, taxes, depreciation and amortization) of US$ 5.0 billion in 2Q13, against US$ 5.2 billion in the previous quarter.

- Capex excluding acquisitions in 2Q13 equal to US$ 3.6 billion, 9.8% and 16.1% lower than 1Q13 and 2Q12, respectively. R&D expenditures were reduced by US$113 million quarter-on-quarter and US$ 241 million year-on-year.

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• Investments in corporate social responsibility reached US$ 262 million, US$ 214 million of which was for environmental protection and conservation and US$ 48 million for social projects.

• The first tranche of the US$ 4.0 billion minimum dividend for 2013, US$ 2.25 billion, was paid to shareholders on April 30, 2013.

• Maintenance of a strong balance sheet, with low debt leverage, measured by the ratio of total debt to LTM adjusted EBITDA excluding non-recurring items, equal to 1.6x, long average maturity, at 9.9 years, and low average cost, 4.5% per year as of June 30, 201 3.

Table 1 - SELECTED FINANCIAL INDICATORS

US$ million	**2Q13 (A)**	**1Q13 (B)**	**2Q12 (C)**	**% (A/B)**	**% (A/C)**
Operating revenues	11,277	11,201	12,726	0.7	(11.4)
Adjusted EBIT(1)	3,602	4,156	4,339	(13.3)	(17.0)
Adjusted EBIT margin(1) (%)	32.7	38.0	34.8		
Adjusted EBITDA(1)	4,957	5,202	5,497	(4.7)	(9.8)
Underlying earnings(1)	3,287	3,089	4,081	6.4	(19.5)
Underlying earnings per share on a fully diluted basis(1) (US$ / share)	0.64	0.60	0.80	6.4	(20.3)
Total debt/ adjusted LTM EBITDA(1) (x)	1.6	1.6	0.9	1.7	70.7
ROIC (%)	21.9	22.0	31.9		
Capital and R&D expenditures (excluding acquisitions)	3,597	3,987	4,287	(9.8)	(16.1)

(1) Excluding non-recurring and/or non-cash items

US$ million	**1H13 (A)**	**1H12 (B)**	**% (B/A)**
Operating revenues	22,478	24,563	(8.5)
Adjusted EBIT(1)	7,758	8,232	(5.8)
Adjusted EBIT margin(1) (%)	35.3	34.3	
Adjusted EBITDA(1)	10,159	10,463	(2.9)
Underlying earnings(1)	6,376	7,392	(13.7)
Underlying earnings per share on a fully diluted basis(1) (US$ / share)	1.24	1.44	(14.2)
Capital and R&D expenditures (excluding acquisitions)	7,584	7,964	(4.8)

(1) Excluding non-recurring and/or non-cash items

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: Compañia Minera Miski Mayo S.A.C., Ferrovia Centro-Atlântica S.A.(FCA), Ferrovia Norte Sul S.A, Mineração Corumbaense Reunida S.A., PT Vale Indonesia Tbk (formerly International Nickel Indonesia Tbk), Sociedad Contractual Minera Tres Valles, 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 Mina do Azul S.A., Vale Moçambique S.A., Vale Nouvelle-Calédonie SAS, Vale Oman Pelletizing

Company LLC and Vale Shipping Holding PTE Ltd..

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OPERATING REVENUES

Operating revenues equaled US$ 11.277 billion, 0.7% above 1Q13. The increase from the previous quarter was mainly due to higher shipments in 2Q13 in all business segments (US$ 1.132 billion), composed of larger volumes of bulk materials (US$ 886 million), base metals (US$ 101 million), fertilizers (US$ 62 million) and general cargo (US$ 83 million). These gains were offset by lower prices (US$ 1.056 billion), mostly driven by bulk materials (US$ 897 million), base metals (US$ 244 million) and fertilizers (US$ 26 million).

The share of bulk materials iron ore, pellets, manganese ore, ferroalloys, metallurgical and thermal coal in operating revenues was 71.2%, in line with the 71.8% in 1Q13. The base metals contribution decreased to 15.1% of total revenues against 16.4% in 1Q13. Fertilizers increased slightly to 7.1% from 6.9% in 1Q13. Logistics services represented 3.8% of total revenues and other products 3.0%.

Shipments to Asia represented 50.1% of total revenues, with a slight decrease from 51.3% in 1Q13. The share of the Americas continued to increase, to 27.4% from 26.1% in 1Q13. Europe accounted for 17.8%, slightly below 18.5% in the previous quarter. The Middle East was 3.3% and the rest of the world, 1.4%.

On a country basis, the share of sales to China amounted to 31.5% of total revenues, Brazil 20.3%, Japan 10.6%, Germany 7.2%, South Korea 3.9% and the United States 3.2%.

Table 2 - OPERATING REVENUE BY BUSINESS AREAS

US$ million	**2Q13**	**%**	**1Q13**	**%**	**2Q12**	**%**
Bulk materials	**8,031**	**71.2**	**8,042**	**71.8**	**9,510**	**74.7**
Ferrous minerals	**7,777**	**69.0**	**7,831**	**69.9**	**9,234**	**72.6**
Iron ore	6,143	54.5	6,219	55.5	7,081	55.6
Pellets	1,498	13.3	1,458	13.0	1,952	15.3
Manganese ore	52	0.5	64	0.6	63	0.5
Ferroalloys	56	0.5	66	0.6	129	1.0
Pellet plant operation services					9	0.1
Others	28	0.2	24	0.2		
Coal	**254**	**2.3**	**211**	**1.9**	**276**	**2.2**
Thermal coal	14	0.1	6	0.1	79	0.6
Metallurgical coal	240	2.1	206	1.8	197	1.5
Base metals	**1,699**	**15.1**	**1,842**	**16.4**	**1,781**	**14.0**
Nickel	983	8.7	1,084	9.7	1,119	8.8
Copper	472	4.2	514	4.6	458	3.6
PGMs	105	0.9	125	1.1	115	0.9
Gold	96	0.8	77	0.7	58	0.5
Silver	11	0.1	11	0.1	15	0.1
Cobalt	19	0.2	18	0.2	16	0.1
Others	14	0.1	14	0.1		
Fertilizer nutrients	**805**	**7.1**	**769**	**6.9**	**923**	**7.3**
Potash	52	0.5	57	0.5	81	0.6

Phosphates	580	5.1	496	4.4	630	4.9
Nitrogen	148	1.3	196	1.8	193	1.5
Others	25	0.2	20	0.2	19	0.1
Logistics services	**430**	**3.8**	**337**	**3.0**	**408**	**3.2**
Railroads	350	3.1	281	2.5	294	2.3
Ports	80	0.7	56	0.5	114	0.9
Others	**312**	**2.8**	**211**	**1.9**	**104**	**0.8**
Total	**11,277**	**100.0**	**11,201**	**100.0**	**12,726**	**100.0**

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Table 3 - OPERATING REVENUE BY DESTINATION

US$ million	2Q13	%	1Q13	%	2Q12	%
North America	**603**	**5.3**	**631**	**5.6**	**686**	**5.4**
USA	360	3.2	316	2.8	410	3.2
Canada	237	2.1	310	2.8	265	2.1
Mexico	5		5		11	0.1
South America	**2,492**	**22.1**	**2,290**	**20.4**	**2,523**	**19.8**
Brazil	2,284	20.3	2,100	18.7	2,312	18.2
Others	209	1.8	191	1.7	212	1.7
Asia	**5,646**	**50.1**	**5,746**	**51.3**	**6,776**	**53.2**
China	3,552	31.5	4,442	39.7	4,346	34.2
Japan	1,196	10.6	498	4.4	1,273	10.0
South Korea	441	3.9	358	3.2	591	4.6
Taiwan	278	2.5	282	2.5	356	2.8
Others	179	1.6	166	1.5	210	1.6
Europe	**2,011**	**17.8**	**2,067**	**18.5**	**2,328**	**18.3**
Germany	807	7.2	681	6.1	744	5.8
France	167	1.5	309	2.8	149	1.2
Netherlands	77	0.7	102	0.9	73	0.6
UK	251	2.2	200	1.8	214	1.7
Italy	301	2.7	283	2.5	498	3.9
Turkey	50	0.4	62	0.6	124	1.0
Spain	89	0.8	81	0.7	108	0.8
Others	269	2.4	349	3.1	418	3.3
Middle East	**368**	**3.3**	**343**	**3.1**	**289**	**2.3**
Rest of the World	**157**	**1.4**	**123**	**1.1**	**124**	**1.0**
Total	**11,277**	**100.0**	**11,201**	**100.0**	**12,726**	**100.0**

COSTS AND EXPENSES

Costs and expenses performed in accordance with our plans and initiatives, aiming to deliver a lower cost structure on a permanent basis to allow for shareholder value creation through the cycles. This year the reduction of costs and expenses has been an important source of improvement to our financial performance. However, as we have stressed on various occasions this is a long process, where persistence and patience are critical factors.

Compared to 2Q12, total costs and expenses, net of depreciation charges, showed a material contraction in 2Q13, with savings of US$ 736 million, whilst costs and expenses in 1H13 were US$ 1.6 billion lower than in 1H12. This performance was achieved notwithstanding the new state mining taxes (TFRM) that impacted costs in 2Q13 (US$ 48 million), amounting to US$ 98 million in 1H13, against a zero impact in the first half of last year.

After adjusting for the effects of higher volumes (US$ 695 million), COGS (cost of goods sold) was down US$ 192 million when compared to 1Q13 with most of the items reducing. Volatility of currency prices helped to decrease COGS by US$ 133 million(4).

Cost of materials 16.3% of COGS was US$ 1.014 billion, up 5.7% against 1Q13. After adjusting for volumes and exchange rate variations, there was a net decrease of US$ 28 million, as a consequence of lower costs with materials for the phosphates operations amounting to US$ 31 million due to the change in product mix.

The cost of purchasing products from third parties amounted to US$ 412 million 6.6% of COGS against US$ 284 million in 1Q13 and US$ 377 million in 2Q12. Purchases of iron ore came to 2.4 Mt, increasing from 1.8 Mt in 1Q13.

We bought 1,600 t of finished and intermediary nickel against 1,300 t in 1Q13 and 6,100 t of copper, versus 7,800 t in 1Q13. The costs of purchasing other products amounted to US$ 185 million in 2Q13. These include mostly precious metals to be processed at the Acton refinery to fill idle capacity.

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(4) COGS currency exposure in 2Q13 was made up as follows: 54% Brazilian reais, 27% US dollar, 14% Canadian dollars, 3% Australian dollars and 2% other currencies

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Maritime freight costs reached US$ 679 million in 2Q13, which as stated previously are fully accrued as cost of goods sold. The freight costs in the 2Q13 were US$ 76 million above 1Q13 due to different routes used, such as a higher portion of shipments from Corumbá to Asia, and longer queues in the Ponta da Madeira maritime terminal(5).

Other operational costs reached US$ 597 million in line with the US$ 590 million in 1Q13. The TFRM was US$ 48 million in 2Q13, a reduction of US$ 2 million vis-à-vis 1Q13. CFEM, Brazil s federal mining royalty, was US$ 119 million, US$ 14 million higher than 1Q13.

In 2Q13, SG&A expenses fell by 47.3% on a year-on-year basis, a reduction of US$ 291 million. When compared to 1Q13, SG&A expenses diminished 13.4%, with savings of US$ 50 million. R&D expenditures(6) were also curtailed, totaling US$ 158 million, against US$ 359 million in 2Q12 and US$ 176 million in 1Q13.

In 2Q13, we revised the concept of pre-operating, stoppage and idle capacity expenses to pre-operating and stoppage. Pre-operating and stoppage expenses(7) increased to US$ 462 million from US$ 375 million in 1Q13.

Pre-operating expenses were US$ 323 million in 2Q13, reflecting the expenses of VNC (US$ 168 million), Long Harbour (US$ 43 million), S11D (US$ 28 million) and Conceição Itabiritos (US$ 15 million). Once projects ramp up and revenues start to cover costs, pre-operating expenses will be shifted to cost of goods sold. Pre-operating expenses also include costs with oversight of projects in the construction phase, which explains the increasing significance of such expenses for S11 D, for example.

Stoppage expenses reached US$ 139 million in 2Q13, stemming from the suspension of Rio Colorado (US$ 76 million), and the shutdown of pellet plants (US$ 28 million) and Onça Puma (US$ 35 million).

Other operating expenses increased US$ 129 million compared to 1Q13, reaching US$ 263 million in 2Q13. Excluding the one-off effect of the gold streaming transaction, other expenses decreased US$ 115 million in 2Q13. The comparison with 2Q12 is also positive with a decrease of US$ 17 million from US$ 280 million.

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(5) Demurrage charges reached US$ 81 million in 2Q13, against US$100 million in 1Q13. It is worthwhile noting that in the case of chartered vessels working under time-charter contracts demurrage charges are expensed against the cost of maritime freight. In contrast, demurrage charges from voyage-chartered vessels are accounted for in other costs .

(6) This is an accounting figure. In the investment section of this press release we disclose the amount of US$ 155 million for research and development, computed in accordance with the financial disbursement in 2Q13.

(7) Including depreciation.

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Table 4 - COGS AND EXPENSES COGS

US$ million	2Q13	%	1Q13	%	2Q12	%
Outsourced services	**978**	**15.7**	**868**	**15.2**	**1,285**	**19.6**
Cargo freight	305	4.9	248	4.3	323	4.9
Maintenance of equipment and facilities	168	2.7	163	2.8	215	3.3
Operational Services	98	1.6	134	2.3	281	4.3
Others	407	6.5	323	5.7	466	7.1
Material	**1,014**	**16.3**	**959**	**16.8**	**1,091**	**16.7**
Spare parts and maintenance equipment	291	4.7	279	4.9	357	5.5
Inputs	462	7.4	448	7.8	524	8.0
Tires and conveyor belts	56	0.9	134	2.3	55	0.8
Others	205	3.3	98	1.7	154	2.4
Energy	**639**	**10.3**	**621**	**10.9**	**741**	**11.3**
Fuel and gases	490	7.9	461	8.1	527	8.0
Electric energy	149	2.4	160	2.8	213	3.3
Acquisition of products	**412**	**6.6**	**284**	**5.0**	**377**	**5.8**
Iron ore and pellets	110	1.8	66	1.2	221	3.4
Nickel products	117	1.9	118	2.1	85	1.3
Other products	185	3.0	100	1.7	72	1.1
Personnel	**836**	**13.4**	**786**	**13.7**	**909**	**13.9**
Freight	**679**	**10.9**	**603**	**10.5**	**576**	**8.8**
Depreciation and exhaustion	**975**					