

Companhia Vale do Rio Doce  
Form 20-F  
May 13, 2008

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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 20-F**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended: December 31, 2007**

**Commission file number: 001-15030**

**COMPANHIA VALE DO RIO DOCE**

*(Exact name of Registrant as specified in its charter)*

**Federative Republic of Brazil**

*(Jurisdiction of incorporation or organization)*

Fabio de Oliveira Barbosa, Chief Financial Officer

fax: +55 21 3814 8820

**Avenida Graça Aranha, No. 26**

**20030-900 Rio de Janeiro, RJ, Brazil**

*(Address of principal executive offices)*

**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
Preferred class A shares of Vale, no par value per share	New York Stock Exchange*
American Depositary Shares (evidenced by American depositary receipts), each representing one preferred class A share of Vale	New York Stock Exchange
Common shares of Vale, no par value per share	New York Stock Exchange*
American Depositary Shares (evidenced by American depositary receipts), each representing one common share of Vale	New York Stock Exchange
6.875% Guaranteed Notes due 2036, issued by Vale Overseas	New York Stock Exchange
8.250% Guaranteed Notes due 2034, issued by Vale Overseas	New York Stock Exchange
6.250% Guaranteed Notes due 2017, issued by Vale Overseas	New York Stock Exchange
6.250% Guaranteed Notes due 2016, issued by Vale Overseas	New York Stock Exchange
5.500% Mandatorily Convertible Guaranteed Notes due 2010, series RIOP, issued by Vale Capital	New York Stock Exchange
5.500% Mandatorily Convertible Guaranteed Notes due 2010, series RIO, issued by Vale Capital	New York Stock Exchange

\* Shares are not listed for trading, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the New York Stock

Exchange.

**Securities registered or to be registered pursuant to Section 12(g) of the Act: None**  
**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None**  
**The number of outstanding shares of each class of stock of Vale as of December 31, 2007 was:**

2,999,797,716 common shares, no par value per share  
1,919,516,400 preferred class A shares, no par value per share  
12 golden shares, no par value per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board   
 Other

If  Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

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**PRESENTATION OF FINANCIAL INFORMATION**

We have prepared our financial statements appearing in this annual report in accordance with generally accepted accounting principles in the United States (U.S. GAAP), which differ in certain respects from accounting practices adopted in Brazil (Brazilian GAAP). Brazilian GAAP is determined by the requirements of Law No. 6,404, dated December 15, 1976, as amended, which we refer to as the Brazilian Corporation Law, and the rules and regulations of the Brazilian Securities Commission (*Comissão de Valores Mobiliários*), or CVM.

We also publish Brazilian GAAP financial statements and use them for reports to Brazilian shareholders, CVM filings, determining dividend payments and determining our tax liability. In December 2007, significant changes were made to the Brazilian Corporate Law to permit Brazilian GAAP to converge with International Financial Reporting Standards ( IFRS ). The changes will take effect for the fiscal year ended December 31, 2008. The impact on the BR GAAP income statement could include: a change in the means of calculating and amortizing goodwill, the recognition of exchange variations by foreign subsidiaries, the accounting for joint ventures and affiliates, and related tax effects. Detailed regulation outlining the impact on BR GAAP and transition requirements is not yet available.

Our financial statements and the other financial information appearing in this annual report have been translated from Brazilian reais into U.S. dollars on the basis explained in Note 3 to our financial statements, unless we indicate otherwise.

References to *real*, *reais* or R\$ are to Brazilian *reais* (plural) and to the Brazilian *real* (singular), the official currency of Brazil. References to U.S. dollars or US\$ are to United States dollars.

Unless otherwise specified, we use metric units.

References to Vale are to Companhia Vale do Rio Doce. References to us or we are to Vale and, except where the context otherwise requires, its consolidated subsidiaries. References to Inco are to Inco Limited, which we acquired in October 2006. We changed Inco's name to Vale Inco Limited ( Vale Inco ) in November 2007.

References to our ADSs or American Depositary Shares include both our common American Depositary Shares (our common ADSs), each of which represents one common share of Vale, and our preferred American Depositary Shares (our preferred ADSs), each of which represents one preferred class A share of Vale. American Depositary Shares are represented by American depositary receipts (ADRs) issued by the depository.

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**FORWARD-LOOKING STATEMENTS**

This annual report contains statements that may constitute forward-looking statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Many of those forward-looking statements can be identified by the use of forward-looking words such as anticipate, believe, could, expect, should, plan, intend, estimate and potential, among others. Those statements appear in a number of places and include statements regarding our intent, belief or current expectations with respect to:

our direction and future operation;

the implementation of our principal operating strategies, including our potential participation in privatization, acquisition or joint venture transactions or other investment opportunities;

our acquisition or divestiture plans;

the implementation of our financing strategy and capital expenditure plans;

the exploration of mineral reserves and development of mining facilities;

the depletion and exhaustion of mines and mineral reserves;

trends in commodity prices and demand for commodities;

the future impact of competition and regulation;

the declaration or payment of dividends;

industry trends, including the direction of prices and expected levels of supply and demand;

other factors or trends affecting our financial condition or results of operations; and

the factors discussed under *Item 3. Key information Risk factors*.

We caution you that forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of various factors. These risks and uncertainties include factors relating to (a) the countries in which we operate, especially Brazil and Canada, (b) the global economy, (c) the financial markets, (d) the iron ore and nickel businesses and their dependence on the global steel industry, which is cyclical in nature, and (e) the highly competitive industries in which we operate. For additional information on factors that could cause our actual results to differ from expectations reflected in forward-looking statements, see *Item 3. Key information Risk factors*. Forward-looking statements speak only as of the date they are made, and we do not undertake any obligation to update them in light of new information or future developments. All forward-looking statements attributed to us or a person acting on our behalf are expressly qualified in their entirety by this cautionary statement, and you should not place undue reliance on any forward-looking statement.



**Table of Contents****PART I****Item 1. Identity of directors, senior management and advisors**

Not applicable.

**Item 2. Offer statistics and expected timetable**

Not applicable.

**Item 3. Key information****SELECTED FINANCIAL DATA**

The tables below present selected consolidated financial information as of and for the periods indicated. You should read this information together with our consolidated financial statements appearing in this annual report.

**Statement of income data**

	<b>For the year ended December 31,</b>				
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
	(US\$million)				
Net operating revenues	US\$ 5,350	US\$ 8,066	US\$ 12,792	US\$ 19,651	US\$ 32,242
Cost of products and services	(3,128)	(4,081)	(6,229)	(10,147)	(16,463)
Selling, general and administrative expenses	(265)	(452)	(583)	(816)	(1,245)
Research and development	(82)	(153)	(277)	(481)	(733)
Other expenses	(231)	(257)	(271)	(570)	(607)
Operating income	1,644	3,123	5,432	7,637	13,194
Non-operating income (expenses):					
Financial income (expenses)	(249)	(589)	(437)	(1,011)	(1,297)
Foreign exchange and monetary gains, net	242	65	299	529	2,559
Gain on sale of investments	17	404	126	674	777
Subtotal	10	(120)	(12)	192	2,039
Income before income taxes, equity results and minority interests	1,654	3,003	5,420	7,829	15,233
Income taxes charge	(297)	(749)	(880)	(1,432)	(3,201)
Equity in results of affiliates and joint ventures and change in provision for gains on equity investments	306	542	760	710	595
Minority interests	(105)	(223)	(459)	(579)	(802)
Change in accounting practice for asset retirement obligations	(10)				
Net income	US\$ 1,548	US\$ 2,573	US\$ 4,841	US\$ 6,528	US\$ 11,825
Total cash paid to shareholders (1)	US\$ 675	US\$ 787	US\$ 1,300	US\$ 1,300	US\$ 1,875

- (1) Consists of total cash paid to shareholders, whether classified as dividends or interest on shareholders equity, during the period.

**Table of Contents****Basic and diluted earnings per share**

	2003	For the year ended December 31, (1)			2007
		2004	2005	2006	
		(US\$, except as noted)			
Basic and diluted earnings per share:(2)					
Per common share	0.34	0.56	1.05	1.35	2.41
Per preferred share	0.34	0.56	1.05	1.35	2.41
Per common share underlying convertible notes					3.51
Per preferred share underlying convertible notes					3.30
Weighted average number of shares outstanding (in thousands) (3):					
Common shares	2,943,216	2,943,216	2,943,216	2,943,216	2,943,216
Preferred shares	1,662,856	1,662,864	1,662,864	1,908,852	1,889,171
Treasury common shares underlying convertible notes					34,510
Treasury preferred shares underlying convertible notes					18,478
Total	4,606,072	4,606,080	4,606,080	4,852,068	4,885,375
Distributions to shareholders per share (4):					
In US	0.14	0.17	0.28	0.27	0.39
In reais	R\$ 0.41	R\$ 0.49	R\$ 0.67	R\$ 0.58	R\$ 0.74

(1) We carried out two-for-one forward stock splits in September 2007 and in May 2006 and a three-for-one forward stock split in August 2004. Share and per-share amounts for all periods give retroactive effect to all forward

stock splits.

- (2) Diluted earnings per share for 2007 include preferred shares and common shares underlying the mandatorily convertible notes due in 2010, which were issued in June 2007.
- (3) Each common American depositary share represents one common share and each preferred American depositary share represents one preferred share.
- (4) Our distributions to shareholders may be classified as either dividends or interest on shareholders equity. In 2003, all distributions were classified as interest on shareholders equity. In 2004, 2005, 2006 and 2007, part of the distribution was classified as interest on shareholders equity and part as dividends.

**Balance sheet data**

	<b>At December 31,</b>				
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
			(US\$ million)		
Current assets	US\$ 2,474	US\$ 3,890	US\$ 4,775	US\$ 12,940	US\$ 11,380
Property, plant and equipment, net	6,484	9,063	14,166	38,007	54,625
Investments in affiliated companies and joint ventures and other investments	1,034	1,159	1,672	2,353	2,922
Other assets	1,442	1,603	2,031	7,626	7,790
<b>Total assets</b>	<b>US\$ 11,434</b>	<b>US\$ 15,715</b>	<b>US\$ 22,644</b>	<b>US\$ 60,926</b>	<b>US\$ 76,717</b>
Current liabilities	US\$ 2,253	US\$ 2,455	US\$ 3,325	US\$ 7,312	US\$ 10,083
Long-term liabilities (1)	1,201	1,867	2,410	10,008	13,195
Long-term debt (2)	2,767	3,214	3,714	21,122	17,608
<b>Total liabilities</b>	<b>6,221</b>	<b>7,536</b>	<b>9,449</b>	<b>38,442</b>	<b>40,886</b>
Minority interest	329	788	1,218	2,811	2,555
Stockholders' equity:					
Capital stock	2,869	3,209	5,868	8,119	12,306
Additional paid-in capital	498	498	498	498	498
Mandatorily convertible notes common ADSs					1,288
Mandatorily convertible notes preferred ADSs					581
Reserves and retained earnings	1,517	3,684	5,611	11,056	18,603
<b>Total shareholders' equity</b>	<b>4,884</b>	<b>7,391</b>	<b>11,977</b>	<b>19,673</b>	<b>33,276</b>
<b>Total liabilities and shareholders' equity</b>	<b>US\$ 11,434</b>	<b>US\$ 15,715</b>	<b>US\$ 22,644</b>	<b>US\$ 60,926</b>	<b>US\$ 76,717</b>

(1) Excludes long-term debt.

(2) Excludes current portion of long-term debt.

**Table of Contents****RISK FACTORS****Risks relating to our business*****A decline in demand for steel would adversely affect our business.***

Demand for our most important products depends on global demand for steel. Iron ore and iron ore pellets, which together accounted for 44.2% of our 2007 gross revenues, are used to produce carbon steel. Nickel, which accounted for 30.3% of our 2007 gross revenues, is used mainly to produce stainless steel. Demand for steel depends heavily on global economic conditions, but it also depends on a variety of regional and sectoral factors, and demand for stainless steel is partly independent of demand for carbon steel. The prices of different steels and the performance of the global steel industry are highly cyclical, and these business cycles in the steel industry affect demand and prices for our products.

In recent years, growing worldwide demand for carbon steel has led to strong demand and rising prices for iron ore and iron ore pellets. However, in the event of a sustained decline in prices or sales volumes for iron ore and iron ore pellets would have a material adverse effect on our revenues and earnings. Consolidation in the steelmaking industry may lead to backward integration, which could reduce the global seaborne trade of iron ore.

Growing demand for stainless steel has contributed to strong demand and rising prices for nickel, leading to record-high nickel prices in the second quarter of 2007. In response to high prices, producers and consumers of stainless steel have been shifting to stainless steels with lower nickel content. A sustained decline in austenitic stainless steel production, which could potentially result from a technological development that reduces the amount of nickel required in stainless steel, would have a material adverse effect on our revenues from nickel.

***Adverse economic developments in our principal markets, especially China, could reduce demand for our products, leading to lower revenues and profitability.***

The global economy is the primary driver of demand in the global market for minerals and metals. In recent years, China has been the main driver of minerals and metals demand and of our sales increases. In 2007, China represented approximately 49% of the global demand for seaborne iron ore, 24.2% of global demand for nickel, 33% for aluminum and 26.3% for copper.

The percentage of our gross revenues attributable to sales to customers in China was 17.7% in 2007. The percentage of our gross revenues attributable to sales to customers from Asian countries other than China was 23.3% in 2007. The percentage of our gross revenues attributable to sales to European customers was 22.1% in 2007. A weakened global economy or a weakened economy in specific markets where we sell our products, such as China, could reduce demand for our products, leading to lower revenues and profitability.

***The prices of nickel, aluminum and copper, which are actively traded on world commodity exchanges, are subject to significant volatility.***

Nickel, aluminum and copper are sold in an active global market and traded on commodity exchanges, such as the London Metal Exchange and the New York Mercantile Exchange. Prices for these metals are subject to significant fluctuations and are affected by many factors, including actual and expected global macroeconomic and political conditions, levels of supply and demand, the availability and cost of substitutes, inventory, investments by commodity funds and others and actions of participants in the commodity markets. Prices for these metals are more volatile than contractual prices for products such as iron ore, iron ore pellets and metallurgical coal, because they respond more quickly to actual and expected changes in market conditions.

***Increased substitution of primary nickel could adversely affect our nickel business.***

Demand for primary nickel may be negatively impacted by the substitution of primary nickel with other materials in current applications. Scrap nickel competes directly with primary nickel as a source of nickel for use in the production of stainless steel, and the choice between them is largely driven by their relative prices and availability. In 2007, the stainless steel scrap ratio is estimated to have remained unchanged compared to 2006, at 48%. Nickel pig iron, a product developed by Chinese steel and alloy makers that utilizes low-grade lateritic nickel ores, competes with other nickel sources in the production of stainless steel. In 2007, nickel pig iron represented an estimated 6% of world primary nickel supply, compared to 2% in 2006.

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***A reduction of global demand for Brazilian steel or agriculture products could reduce the demand for our logistics services.***

The Brazilian agriculture and steel industries are currently the primary drivers of demand for our logistics services to customers. The percentage of our logistics revenues attributable to these industries was 83.9% in 2007. A reduction in world demand for Brazilian steel or agricultural products could reduce demand for our logistics services and harm the profitability of our logistics business.

***We may not be able to successfully integrate our acquired businesses.***

We have grown our business in part through acquisitions, and some of our future growth may also stem from acquisitions. We may not be able to successfully integrate acquired businesses or generate the cost savings and synergies anticipated, which could negatively affect our financial condition and results of operations.

The mining industry is intensely competitive, and we may have difficulty effectively competing with other mining companies in the future.

Intense competition characterizes the global mining industry. We compete with a large number of mining companies. Some of them possess substantial mineral deposits at locations closer to our principal customers. Competition from other producers may result in our loss of market share and revenues.

***Demand for our products in peak periods may outstrip our production capacity, rendering us unable to satisfy customer demand.***

Our ability to rapidly increase production capacity to satisfy increases in demand for our products is limited. In periods when customer demand exceeds our production capacity, we may meet excess customer demand by reselling iron ore, iron ore pellets or nickel purchased from joint ventures or unrelated parties. If we are unable to satisfy excess customer demand in this way, we may lose customers. We may be unable to complete expansion and greenfield projects in time to take advantage of the current high levels of worldwide demand for iron ore and nickel.

We have been operating at or above full capacity in our iron ore systems since 2003. As a result, disruptions in operations in any part of our integrated systems, or maintenance programs that require more time than expected, could result in lower volumes and lower revenues. In addition, operating at or above full capacity may expose us to higher costs, including demurrage fees due to capacity restraints in our logistics systems.

***Political, economic, regulatory and social conditions in the countries in which we operate or have projects could adversely impact our business and the market price of our securities.***

Our financial performance may be negatively affected by general economic, political, regulatory and social conditions in countries in which we have significant operations or projects, particularly Brazil, Canada, Indonesia, Australia, New Caledonia and Mozambique. Actual or potential political changes and changes in economic policy may undermine investor confidence, result in economic slowdowns and otherwise adversely affect the economic and other conditions under which we operate in ways that could have a material adverse effect on our business. Governments in emerging economies such as Brazil, Indonesia and New Caledonia frequently intervene in the economy and occasionally make substantial changes in policy that could adversely affect exchange rates, inflation, interest rates, rates of taxes or royalties and the economic and regulatory environment in which we operate. In New Caledonia, a planned referendum in 2014 may result in New Caledonia becoming fully independent from France, which could result in significant political and economic changes in New Caledonia and may adversely affect our Goro project. See *Item 4. Information on the company Regulatory matters Mining regulation.*

***Acts by protestors may hamper our mining and logistics operations and projects.***

Protestors have taken actions to disrupt our operations and projects, and they may continue to do so in the future. For example, in New Caledonia, in the past protestors caused physical damage to our Goro project and have impeded the construction of the marine pipeline. Although we vigorously defend ourselves against illegal acts, while supporting the communities living near our operations, future attempts by protestors to harm our operations could adversely affect our business.

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***Our projects are subject to risks that may result in increased costs or delay or prevent their successful implementation.***

We are investing heavily to further increase our production capacity, logistics capabilities and to expand the scope of minerals we produce. Our expansion and mining projects are subject to a number of risks that may adversely affect our growth prospects and profitability, including the following:

We may encounter delays or higher than expected costs in obtaining the necessary equipment or services to build and operate a project.

Our efforts to develop projects according to schedule may be hampered by a lack of infrastructure, including a reliable power supply.

We may fail to obtain, or experience delays or higher than expected costs in obtaining, the required permits to build a project.

Changes in market conditions or regulations may make a project less profitable than expected at the time we initiated work on it.

Adverse mining conditions may delay and hamper our ability to produce the expected quantities of minerals.

Some of our development projects are located in regions where tropical diseases, AIDS, malaria, yellow fever and other contagious diseases are a major public health issue and pose health and safety risks to our employees.

If we are unable to ensure the health and safety of our employees, our business may be adversely affected.

***Our principal shareholder has significant influence over our company.***

At December 31, 2007, Valepar S.A. owned 53.3% of our outstanding common stock and 32.5% of our total outstanding capital. For a description of our ownership structure, see *Item 7. Major shareholders and related party transactions Major shareholders Principal shareholder*. As a result of its share ownership, Valepar can control the outcome of any action requiring shareholder approval, except for the appointment of certain directors and certain members of our fiscal council. Moreover, the Brazilian government owns 12 golden shares granting it limited veto power over certain actions that we could otherwise take. For a detailed description of the Brazilian government's veto power by virtue of its ownership of these golden shares, see *Item 10. Additional information Common shares and preferred shares General*.

***Our governance and compliance processes may fail to prevent regulatory penalties and reputational harm.***

We operate in a global environment, and our activities straddle multiple jurisdictions and complex regulatory frameworks with increased enforcement activities worldwide. Our governance and compliance processes, which include the review of internal control over financial reporting, may not prevent future breaches of law, accounting or governance standards. We may be subject to breaches of our Code of Ethical Conduct, business conduct protocols and instances of fraudulent behavior and dishonesty by our employees, contractors or other agents. Our failure to comply with applicable laws and other standards could subject us to fines, loss of operating licenses and reputational harm.

***Many of our operations depend on joint ventures or consortia, and our business could be adversely affected if our partners fail to observe their commitments.***

We currently operate important parts of our pelletizing, nickel, bauxite, coal and steel businesses through joint ventures with other companies. Important parts of our electricity business are operated through consortia. Our forecasts and plans for these joint ventures and consortia assume that our partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide managerial personnel. If any of our partners fails to observe its commitments, the affected joint venture or consortium may not be able to operate in accordance with its business plans, or we may have to increase the level of our investment to implement these plans. For more information about our joint ventures, see *Item 4. Information on the company Lines of business*.



**Table of Contents*****Our operations depend on authorizations from regulatory agencies in many jurisdictions, and changes in regulations could adversely affect our business.***

Our operations depend on authorizations from and concessions by governmental regulatory agencies of the countries in which we operate, and we are subject to laws and regulations in many jurisdictions that can change at any time. Changes in laws and regulations may require modifications to our technologies and operations and result in unanticipated capital expenditures. For example, in Indonesia, the pending new mining legislation could have a material adverse effect on our PT Inco operations. For details about the authorizations and concessions upon which our operations activities depend, see *Item 4. Information on the company Regulatory matters.*

***Environmental, health and safety regulation may adversely affect our business.***

Our operations often involve the use, handling, disposal and discharge of hazardous materials into the environment or the use of natural resources, and nearly all aspects of our operations and development projects around the world are subject to environmental, health and safety regulation. Such regulation requires us to obtain operating licenses, permits and other approvals and to conduct environmental assessments prior to initiating projects or undertaking significant changes to existing operations. Difficulties in obtaining licenses may lead to construction delays or cost increases, and in some cases may lead us to abandon a project. Environmental regulation also imposes standards and controls on activities relating to mining, exploration, development, production, reclamation, closure, and the refining, distribution and marketing of our products. Such regulation may give rise to significant costs and liabilities. In addition, community activist groups and other stakeholders may increase demands for environmentally-sustainable development, which could entail significant costs and reduce our profitability.

Environmental regulation in many countries in which we operate has become stricter in recent years, and it is possible that more regulation or more aggressive enforcement of existing regulations will adversely affect us by imposing restrictions on our activities, creating new requirements for the issuance or renewal of environmental licenses, raising our costs or requiring us to engage in expensive reclamation efforts. For example, in Brazil, environmental protection laws restrict our ability to expand operations without undertaking extensive conservation efforts. They also impose fees on development in protected areas, and many Brazilian states are considering implementing water usage fees, while one state, São Paulo, in which we do not have any operations is already charging water usage fees. In Canada, we may be required to conduct investigations or undertake remediation efforts in connection with elevated levels of metals in the soils near our Canadian facilities, which may involve significant expenditures. In addition, compliance with sulphur dioxide emissions limits could have an adverse impact on nickel production levels to the extent we are required to operate our facilities at reduced levels to comply with such limits or are unable to bank or trade sufficient emission allowances in emissions trading markets. For more information on environmental, health and safety regulation applicable to our operations, see *Item 4. Information on the company Regulatory matters Environmental regulation* and *Item 8. Financial information Legal proceedings.*

***Our reserve estimates may materially differ from mineral quantities that we may be able to actually recover; our estimates of mine life may prove inaccurate; and market price fluctuations and changes in operating and capital costs may render certain ore reserves uneconomical to mine.***

Our reported ore reserves are estimated quantities of ore and minerals that we have determined can be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including many factors beyond our control. Reserve engineering involves estimating deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. As a result, no assurance can be given that the indicated amount of ore will be recovered or that it will be recovered at the rates we anticipate. Estimates of different engineers may vary, and results of our mining and production subsequent to the date of an estimate may lead to revision of estimates. Reserve estimates and estimates of mine life may require revision based on actual production experience and other factors. For example, fluctuations in the market prices of minerals and metals, reduced recovery rates or increased operating and capital costs due to inflation, exchange rates or other factors may render proven and probable reserves uneconomic to exploit and may ultimately result in a restatement of reserves.



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***We may not be able to replenish our reserves, which could adversely affect our mining prospects.***

We engage in mineral exploration, which is highly speculative in nature, involves many risks and frequently is nonproductive. Our exploration programs, which involve significant capital expenditures, may fail to result in the expansion or replacement of reserves depleted by current production. If we do not develop new reserves, we will not be able to sustain our current level of production beyond the remaining lives of our existing mines.

***Even if we discover mineral deposits, we remain subject to drilling and production risks, which could adversely affect the mining process.***

Once mineral deposits are discovered, it can take a number of years from the initial phases of drilling until production is possible, during which the economic feasibility of production may change. Substantial time and expenditures are required to:

establish mineral reserves through drilling;

determine appropriate mining and metallurgical processes for optimizing the recovery of metal contained in ore;

obtain environmental and other licenses;

construct mining, processing facilities and infrastructure required for greenfield properties; and

obtain the ore or extract the metals from the ore.

If a project proves not to be economically feasible by the time we are able to exploit it, we may incur substantial write-offs. In addition, potential changes or complications involving metallurgical and other technological processes arising during the life of a project may result in cost overruns that may render the project not economically feasible.

***We face rising extraction costs over time as reserves deplete.***

Reserves are gradually depleted in the ordinary course of a given mining operation. As mining progresses, distances to the primary crusher and to waste deposits become longer, pits become steeper and underground operations become deeper. As a result, over time, we usually experience rising unit extraction costs with respect to each mine. Several of our mines have been operating for long periods, and we will likely experience rising extraction costs per unit in the future at these operations.

***We face shortages of equipment, services and skilled personnel.***

The mining industry faces worldwide shortages of mining and construction equipment, spare parts, contractors and other skilled personnel as a result of high demand for minerals and metals and the large number of projects under development. We are experiencing longer lead-times for mining equipment and problems with the quality of contracted engineering, construction and maintenance services. We are competing with other mining companies for highly skilled executives and staff with relevant industry and technical experience, and we may not be able to attract and retain such people. These shortages could negatively impact our operations, resulting in higher production costs, production interruptions, higher inventory costs, project delays and potentially lower production and revenues.

***Labor disputes have disrupted our operations, and such disputes could recur.***

A substantial number of our employees, and some of the employees of our subcontractors, are represented by labor unions and are covered by collective bargaining or other labor agreements, which are subject to periodic renegotiation. Renegotiation may become more difficult, as labor unions seek wage increases based on the higher prices and increased profits in the mining and metals industries. Strikes or work stoppages have occurred recently in Canada and Indonesia and could reoccur in connection with negotiations of new labor agreements or during other periods for other reasons. Moreover, we could be adversely affected by labor disruptions involving unrelated parties who may provide us with goods or services. Strikes and other labor disruptions at any of our operations could adversely affect the operation of facilities and the timing of completion and the cost of our capital projects.

**Table of Contents*****Higher energy costs or energy shortages would adversely affect our business.***

To fulfill our energy needs, we depend on oil by-products, which represented 49.4% of total energy needs in 2007 in TOE (tons of oil equivalent), natural gas (11.5% on the same basis), coal (3.8% on the same basis) and electricity (35.3% on the same basis). Fuel costs, which represented 8.5% of our cost of goods sold in 2007, are a major component of our total costs in our logistics, iron ore pellets and nickel businesses and indirectly affect numerous other areas of our business, including our mining and alumina businesses. Fuel prices increased by 17.9% in 2007. Increases in oil and gas prices adversely affect margins in our logistics, mining, iron ore pellets, finished nickel and alumina businesses.

Electricity costs are a significant component of the cost of our production, representing 5.3% of our total cost of goods sold in 2007. If we are unable to secure reliable access to electric energy at acceptable prices, we may be forced to curtail production or may experience higher production costs, either of which would adversely affect our results of operations. We currently generate 24.5% of our worldwide electricity needs from our own hydroelectric power plants and we are developing hydroelectric and thermal power plants and engaging in natural gas exploration programs in order to increase the amount of energy we produce and reduce our future exposure to price and supply volatility of energy.

Electricity shortages have occurred in Brazil in the past and could reoccur in the future, and there can be no assurance that the Brazilian government's policies will succeed in encouraging growth in generation capacity. Future shortages, and government efforts to respond to or prevent shortages, may adversely impact the cost or supply of electricity for our Brazilian aluminum and ferroalloy operations. Changes in the laws, regulations or governmental policies regarding the power sector or concession requirements could reduce our expected returns from our investments in power generation. See *Item 4. Information on the company Regulatory matters Electric energy regulation.*

Through our subsidiary PT Inco in Indonesia, we process lateritic nickel ores, which is energy-intensive. Although PT Inco currently generates a majority of the electricity for its operations from its own hydroelectric power plants, hydrological factors, such as low rainfalls, could adversely affect electricity production at PT Inco's plants in the future, which could significantly increase the risk of higher costs. For more information on the regulations governing energy production, see *Item 4. Information on the company Regulatory matters Electric energy regulation.*

***Price volatility of the currencies in which we conduct operations relative to the U.S. dollar could adversely affect our financial condition and results of operations.***

We are affected by fluctuations in the prices of the currencies in which we conduct operations relative to the U.S. dollar. A substantial portion of our revenues and debt is denominated in U.S. dollars, and changes in exchange rates may result in losses or gains on our net U.S. dollar-denominated indebtedness and accounts payable. In 2007, 2006 and 2005, changes in exchange rates produced net foreign exchange gains of US\$1.639 billion, US\$452 million and US\$227 million, respectively. In addition, the price volatility of the Brazilian *real*, the Canadian dollar, the Indonesian rupiah and other currencies against the U.S. dollar affect our results since most of our costs of goods sold are denominated in currencies other than the U.S. dollar, principally the *real* (56.6% in 2007) and the Canadian dollar (23.3% in 2007), while our revenues are mostly U.S. dollar-denominated. Currency fluctuations are expected to continue to affect our financial income, expense and cash flow generation.

Significant volatility in currency prices may also result in disruption of countries' foreign exchange markets and may limit our ability to transfer or to convert such currencies into U.S. dollars and other currencies for the purpose of making timely payments of interest and principal on our indebtedness. The governments of countries in which we operate may institute restrictive exchange rate policies in the future.

***Investor perceptions of risk in Brazil and other emerging market economies may undermine our ability to finance our operations at an acceptable cost or reduce the trading price of our securities.***

Although our acquisition of Inco in October 2006 significantly expanded the proportion of our non-Brazilian operations, our largest operations, corporate headquarters and senior management continue to be located in Brazil, which investors generally consider an emerging market. Economic crises in one or more emerging market countries may produce a contagion that reduces overall investor appetite for securities of emerging market issuers. Past economic crises in emerging markets, such as in Southeast Asia, Russia and Argentina, have resulted in significant

outflows of U.S. dollars from Brazil and caused Brazilian companies to face higher costs for raising funds, both domestically and abroad, and have effectively impeded access to international capital markets for extended periods.

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We cannot assure you that global capital markets will remain open to Brazilian companies or that prevailing interest rates in these markets will be advantageous to us. In addition, future financial crises in emerging market countries may have a negative impact on the Brazilian markets, which could adversely affect the trading price of our securities.

***Our market risk management strategy may not be effective.***

We are exposed to traditional market risks such as volatility in interest rates, exchange rates and commodity prices. We earn most of our revenues in U.S. dollars, but incur a substantial portion of our costs and expenses in currencies other than the U.S. dollar. The exchange rates for such currencies are very volatile. In order to manage market prices and rates exposure, our board of directors has established an enterprise risk management policy and a risk management committee. See *Item 11. Quantitative and qualitative disclosures about market risk*. Our strategy may not be successful in managing risk exposure, and we may fail to identify correlations between the various market risks to which we are subject. In addition, to the extent we choose to hedge our commodity price exposure, we may limit the upside benefits that we would otherwise experience if commodities prices were to increase.

***We may not have adequate insurance coverage for some business risks.***

Our businesses are generally subject to a number of risks and hazards, including:  
industrial accidents;

railroad accidents;

port accidents;

labor disputes;

slope or pit-wall failures, cave-ins or rock falls;

environmental hazards;

electricity stoppages;

equipment or vessel failures;

severe weather and other natural phenomena such as seismic events;

unavailability or late delivery of materials, supplies or equipment;

unexpected ground, grade or water conditions; and

unusual or unexpected geological formations or pressures.

These occurrences could result in damage to, or destruction of, mineral properties, production facilities, logistics facilities, equipment or vessels. They could also result in personal injury or death, environmental damage, waste of resources or intermediate products, delays or interruption in mining, production or transportation activities, monetary losses and possible legal liability. The insurance we maintain against risks that are typical in our business may not provide adequate coverage. Insurance against some risks (including liabilities for environmental pollution or certain hazards or interruption of certain business activities) may not be available at a reasonable cost, or at all. As a result, accidents or other negative developments involving our mining, production or transportation facilities could have a material adverse effect on our operations.

**Risks relating to the American Depositary Shares**

***If ADR holders exchange ADSs for the underlying shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.***

The Brazilian custodian for the shares underlying our ADSs will obtain an electronic registration from the Central Bank to entitle it to remit U.S. dollars abroad for payments of dividends and other distributions relating to the shares underlying our ADSs or upon the disposition of the underlying shares. If an ADR holder decides to exchange its ADRs for the underlying shares, it will be entitled to continue to rely, for five business days from the date of exchange, on the custodian's electronic registration.

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Thereafter, an ADR holder may not be able to obtain and remit U.S. dollars abroad upon the disposition of, or distributions relating to, the underlying shares unless it obtains its own electronic registration by registering the investment in the underlying shares under Resolution No. 2,689 of the National Monetary Council, which permits qualifying institutional foreign investors to buy and sell securities on the São Paulo stock exchange, or BOVESPA. For more information regarding these exchange controls, see *Item 10. Additional information Exchange controls and other limitations affecting security holders*. If an ADR holder attempts to obtain its own electronic registration, it may incur expenses or suffer delays in the application process, which could delay the receipt of dividends or distributions relating to the underlying shares or the return of capital in a timely manner. We cannot assure ADR holders that the custodian's electronic registration or any certificate of foreign capital registration obtained by them will not be affected by future legislative changes, or that additional restrictions applicable to ADR holders, the disposition of the underlying shares or the repatriation of the proceeds from disposition will not be imposed in the future.

***ADR holders may be unable to exercise preemptive rights relating to the shares underlying their ADSs.***

ADR holders that are residents of the United States may not be able to exercise preemptive rights, or exercise other types of rights, with respect to the underlying shares. The ability of ADR holders to exercise preemptive rights is not assured unless a registration statement is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement relating to preemptive rights with respect to the underlying shares or to undertake steps that may be needed to make exemptions from registration available, and we cannot assure ADR holders that we will file any registration statement or take such steps. If a registration statement is not filed and an exemption from registration does not exist, the depositary for our ADRs will attempt to sell the preemptive rights, and you will be entitled to receive the proceeds of the sale. However, the preemptive rights will expire if the depositary cannot sell them. For a more complete description of preemptive rights with respect to the underlying shares, see *Item 10. Additional information Common shares and preferred shares Preemptive rights*.

***ADR holders may encounter difficulties in the exercise of voting rights.***

ADR holders do not have the rights of shareholders. They have only the contractual rights set forth for their benefit under the deposit agreements. ADR holders are not permitted to attend shareholders' meetings, and they may only vote by providing instructions to the depositary. In the event that we fail to provide the depositary with voting materials on a timely basis, or the depositary does not provide sufficient time for ADR holders to submit voting instructions, ADR holders will not be able to vote. With respect to ADSs for which instructions are not received, the depositary may, subject to certain limitations, grant a proxy to a person designated by us.

ADR holders may be disadvantaged by the fact that the Brazilian securities markets are not as highly regulated and supervised as the securities markets in the United States or in certain other jurisdictions. In addition, rules and policies against self-dealing and regarding the preservation of minority shareholder interests may be less well-developed and enforced in Brazil than in the United States. For example, when compared to Delaware corporate law, Brazilian corporate law and practice has less detailed and well-established rules and judicial precedents relating to the review of management decisions against duty of care and duty of loyalty standards in the context of corporate restructurings, transactions with related parties, and sale-of-business transactions. Moreover, shareholders in Brazilian companies ordinarily do not have standing to bring a class-action lawsuit.

As a foreign private issuer, we are not required to follow many of the corporate governance rules that apply to U.S. domestic issuers with securities listed on the New York Stock Exchange, and we are not subject to the U.S. proxy rules. For more information concerning our corporate governance policies, see *Item 6. Directors, senior management and employees* and *Item 10. Additional Information Memorandum and Articles of Association*.

**Item 4. Information on the company****BUSINESS OVERVIEW****General**

We are the second-largest metals and mining company in the world and the largest in the Americas, based on market capitalization. We are the world's largest producer of iron ore and iron ore pellets and the world's second-largest producer of nickel and kaolin. We are also one of the world's largest producers of manganese ore and ferroalloys. We also produce bauxite, alumina, aluminum, copper, coal, cobalt, precious metals, potash and other products. To support



our growth strategy, we are actively engaged in mineral exploration efforts in 21 countries around the globe. We operate large logistics systems in Brazil, including railroads, maritime terminals and a port, which are integrated with our mining operations. Directly and through affiliates and joint ventures, we have investments in the energy and steel businesses.

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The following table presents the breakdown of our total gross revenues attributable to each of our main lines of business, each of which is described following the table.

	<b>Year ended December 31,</b>			
	<b>2005</b>	<b>2006</b>	<b>2006 (1)</b>	<b>2007</b>
Ferrous minerals:				
Iron ore	55.2	49.2	39.0	36.0
Iron ore pellets	15.5	9.7	7.7	8.3
Manganese	0.6	0.3	0.2	0.2
Ferroalloys	3.7	2.5	2.0	2.1
Subtotal	75.0%	61.7%	48.9%	46.6%
Non-ferrous minerals:				
Nickel (2)		11.6	25.6	30.3
Aluminum	10.5	11.7	9.3	8.2
Copper	2.9	5.3	7.1	6.0
PGMs (2)		0.4	1.0	1.0
Other precious metals (2)		0.1	0.7	0.3
Other non-ferrous minerals	2.4	1.9	1.6	1.7
Subtotal	15.8%	31.0%	45.3%	47.5%
Coal				0.5%
Logistics	9.1%	6.8%	5.4%	4.6%
Other investments	0.1%	0.5%	0.4%	0.8%
Total	100.0%	100.0%	100.0%	100.0%

(1) Including Vale Inco's 2006 gross revenues prior to the acquisition.

(2) Revenues included in the nickel product segment in our consolidated financial statements.

*Iron ore, iron ore pellets, manganese and ferroalloys.* We operate three systems in Brazil for producing and distributing iron ore. The Northern and the Southeastern Systems are fully integrated, consisting of mines, railroads, a maritime terminal and a port. The Southern System consists of the mines of our subsidiary MBR, the Oeste mines and the Guaíba Island and Itaguaí maritime terminals. We operate nine pellet-producing facilities in Brazil, five of which are joint ventures. We also have a 50% stake in a joint venture that owns two pelletizing plants in Brazil and a 25% stake in a pellet company in China. We conduct our manganese mining operations in Brazil, at the parent company level and through our subsidiary Urucum. We produce several types of manganese ferroalloys through subsidiaries in Brazil, France and Norway.

*Nickel.* Our principal nickel mines and processing operations are carried out by our subsidiary Vale Inco, with mining operations in Canada and Indonesia. We operate or have interests in nickel refining facilities in the United Kingdom, Japan, Taiwan, South Korea and China.

*Aluminum.* We are engaged in bauxite mining, alumina refining, and aluminum metal smelting. In Brazil, we own a bauxite mine and an alumina refinery, both of which we are currently expanding. We also own two aluminum smelters in Brazil. We have a 40% interest in Mineração Rio do Norte S.A. ( MRN ), a bauxite producer, operations of which are also located in Brazil.

*Copper.* We have copper mining operations in Brazil and Canada. In Brazil, we produce copper concentrates at Sossego in Carajás, in the state of Pará. In Canada, we produce copper concentrate, copper anode and copper cathode in conjunction with our nickel mining operations at Sudbury and Voisey's Bay.

*PGMs.* We produce platinum-group metals as by-products of our nickel mining and processing operations in Canada. The PGMs are concentrated at our Port Colborne facilities, in the Province of Ontario, Canada, and refined at our precious metals refinery in Acton, England.

*Other precious metals.* We produce gold and silver as by-products of our nickel mining and processing operations in Canada. Some of these precious metals are upgraded at our facilities in Port Colborne, Ontario, and all are refined by unrelated parties in Canada.

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*Other non-ferrous minerals.* We are the world's second-largest producer of kaolin for the paper industry and Brazil's sole producer of potash. We produce cobalt as a by-product of our nickel mining and processing operations in Canada and refine it at our Port Colborne facilities.

*Coal.* In April 2007, we acquired 100% of AMCI Holdings Australia Pty and formally renamed it Vale Australia Holdings ( Vale Australia ). Vale Australia operates coal assets in Australia through wholly-owned subsidiaries and unincorporated joint ventures. We also have minority interests in Chinese coal and coke producers.

*Logistics.* We are a leading provider of logistics services in Brazil, with railroads, maritime terminals and a port. Two of our three iron ore systems incorporate an integrated railroad network linked to automated port and terminal facilities, which provide rail transportation for our mining products, general cargo and passengers, bulk terminal storage, and ship loading services for our mining operations and for customers. We also have a 31.3% interest in Log-In Logística Intermodal S.A., or Log-In, which provides container-based logistics services.

*Other investments.* We have investments in two steel companies and three joint ventures to produce steel slabs in Brazil. We also have investments in power generation plants.

Vale's legal and commercial name is Companhia Vale do Rio Doce. In November 2007, we launched a global brand unification project under the name Vale, which is aimed at communicating our transformation into a global mining company with a diversified portfolio of products.

Vale is a stock corporation, or *sociedade por ações*, duly organized on January 11, 1943, and existing under the laws of the Federative Republic of Brazil. Vale was privatized in three stages between 1997 and 2002, beginning with the sale by the Brazilian government of a controlling stake in Vale to Valepar in 1997. The last stage of the privatization process took place in 2002, when the Brazilian government sold its remaining minority stake of common shares through a global equity offering. Vale is organized for an unlimited period of time. Its head offices are located at Avenida Graça Aranha, No. 26, 20030-900 Rio de Janeiro, RJ, Brazil, and its telephone number is 55-21-3814-4477.

**Business strategy**

Our mission is to transform mineral resources into prosperity and sustainable development. Our vision is to become the largest mining company in the world and to surpass current standards of excellence in research, development, project implementation and business operations. To this end, we are building on our strengths in iron ore and nickel and increasing our geographical and product diversification and logistics capabilities. We are focusing on organic growth in our core businesses, with a robust long-term strategic planning process. We also regularly review opportunities to make strategic acquisitions. We apply disciplined capital management in order to maximize return on invested capital and total return to shareholders. Below we highlight our major business strategies.

*Maintaining our leadership position in the global iron ore market*

We continue to consolidate our leadership in the global iron ore market. In 2007 and 2006, we had an estimated market share of 32.5% of the total volume traded in the seaborne market. We are committed to maintaining our position in the global iron ore market by strengthening relationships with customers, focusing our product line to capture industry trends, increasing our production capacity in line with demand growth and controlling costs. We believe that our strong relationships with major customers, reinforced through long-term contracts, high quality products and a strong technical marketing strategy, will help us achieve this goal. We have also encouraged steelmakers to develop steel slab plants in Brazil, through minority stakes in joint ventures, in order to create additional demand for our iron ore.

*Achieving leadership in the nickel business*

We are the world's second-largest nickel producer, with large-scale, long-life and low-cost operations, a substantial resource base, advanced technology and a robust growth profile. We believe our greenfield projects at Onça Puma and Vermelho in Brazil and Goro in New Caledonia will further support our leadership position in the nickel market.



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*Expanding our aluminum activities*

We are developing and increasing production capacity in our aluminum operations, focusing on the upstream portion of the production chain and developing low-cost bauxite and alumina projects. We have large, undeveloped high-quality bauxite reserves and opportunities for low-cost expansions in our alumina refinery. We are working on the development of these opportunities. We are also investing in mineral exploration to increase our bauxite resources. Our strategic focus for primary aluminum activities is locating opportunities to participate in smelter operations in countries with low energy costs.

*Developing our copper resources*

We believe that our Brazilian copper projects, which are all situated in the Carajás mineral province, in the Brazilian state of Pará, could be among the most competitive in the world in terms of investment cost per metric ton of ore. We are developing the Salobo project, and we are testing new technology that, if successful, could permit the development of other copper projects in this region. We expect these copper mines to benefit from our infrastructure facilities serving the Northern System. We are also engaged in mineral exploration in several countries to increase our reserve base.

*Investing in coal*

We are pursuing various opportunities to become a large global player in coal businesses. In April 2007, we acquired AMCI Holdings Australia Pty (renamed Vale Australia), which has coal operating assets and a portfolio of exploration projects in Australia. In the past several years, we have invested in two joint ventures in China, and we intend to continue pursuing organic growth in the coal business through the development of the Moatize project in Mozambique, development of more advanced coal exploration projects in Australia and mineral exploration initiatives in several countries.

*Diversification and expansion of our resource base*

We are engaged in an active mineral exploration program, with efforts in 21 countries around the globe. We are mainly seeking new deposits of copper, manganese ore, iron ore, nickel, bauxite, phosphate, potash, coal, uranium, diamond and platinum group metals. Mineral exploration is an important part of our organic growth strategy.

*Enhancing our logistics capacity*

We believe that the quality of our railway assets and our many years of experience as a railroad and port operator, together with the lack of efficient transportation for general cargo in Brazil, position us as a leader in the logistics business in Brazil. We are expanding the capacity of our railroads through the expansion of the Northern and Southern Corridors, the construction of two new railroads, and the purchase of additional locomotives and wagons to serve the increasing needs of our iron ore and other businesses, as well as those of our customers.

*Developing power generation projects*

Energy management and efficient supply have become a priority for us. As a large consumer of electricity, we believe that investing in power generation projects to support our operations will help protect us against volatility in the price of energy, regulatory uncertainties and the risk of energy shortages. Accordingly, we have developed hydroelectric power generation plants in Brazil, Canada and Indonesia, and we are using the electricity from these projects to supply our internal needs. In 2007, we began investing in natural gas exploration in Brazil through consortia. We are seeking to diversify and optimize our energy grid through increased use of thermal coal, renewable fuels and natural gas.

**Significant changes in our business**

The scope of our operations has been affected by acquisitions, by dispositions and by the completion of major investment projects. We summarize below the major acquisitions, divestitures, investment projects and other developments having a significant effect on our financial performance in 2007 and 2008.

**Table of Contents***Global brand unification*

In November 2007, we began using a single global brand, Vale, in all countries where we operate and adopted a new logo. The use of the name Vale and the new logo communicate the evolution, diversification and growth of the company in the past years, which transformed us into a global mining company with a diversified portfolio of products that are present and essential in people's lives. There was no change in Vale's legal name.

*Acquisitions**Conclusion of Inco acquisition*

In January 2007, we completed our acquisition of Inco (renamed Vale Inco), increasing our ownership from 87.73% to 100% and disbursing the final US\$2.053 billion of the acquisition cost.

*Acquisition of AMCI Holdings*

In April 2007, we paid US\$656 million to acquire 100% of AMCI Holdings Australia Pty (renamed Vale Australia). Vale Australia operates coal assets and has exploration projects in Australia.

*Acquisition of remaining interest in MBR*

In May 2007, we increased our ownership of our subsidiary Minerações Brasileiras Reunidas S.A. (MBR ( MBR )), which we consider to have some of the best iron ore assets in the world. We own 49% of MBR directly. The remaining 51% is owned by Empreendimentos Brasileiros de Mineração S.A. (EBM ( EBM )). Before May 2007, we owned 80% of the capital stock of EBM. In these transactions, we purchased an additional 6.25% of EBM's capital stock and entered into a usufruct agreement giving us the benefit of the remaining 13.75% of EBM's capital for the next thirty years. We paid US\$231 million for the shares. For the usufruct agreement, we paid an initial installment of US\$61 million and will pay 29 annual installments of US\$48 million each. This transaction will allow us to benefit from synergies between Vale and MBR and to increase our exposure to the iron ore business.

*Norte-Sul railroad concession*

In October 2007, we won the auction for the subconcession for commercial operation of a 720-kilometer segment of the Norte-Sul railroad in Brazil. Part of the line (225 km) is already operating, and the remaining segments are scheduled to be completed in late 2008 and early 2009. We will pay R\$1.478 billion for the right to operate this stretch for 30 years. In December 2007, we paid the first installment of US\$412 million, equivalent to 50% of the total price of the subconcession. This project will create a new corridor for the transportation of general cargo, mainly for the export of soybeans, rice and corn produced in central-northern Brazil.

*Organic growth*

We have an ambitious program of investments in the organic growth of our businesses. 2008 is the first year in a new five-year plan to invest US\$59 billion in organic growth, which follows a US\$20 billion program for the period 2003-2007. Our main investment projects are summarized under *Capital Expenditures*, and detailed in the discussion of each of our lines of business. The projects that have had the largest impact on our financial performance in 2007 and 2008 are summarized below.

In our iron ore business, several projects have contributed to increased capacity. Since January 2007 we have been operating the Northern System (Carajás) at the level of 100 million metric tons per year, and our board of directors has approved a project for further expansion to 130 million metric tons by 2009. We started operations at the Brucutu mine in September 2006, and it will reach its full capacity of 30 million metric tons during 2008. Fazendão started up in the first quarter of 2008 and will have annual production capacity of 15.8 million metric tons of run-of-mine.

In iron ore pellets, we are building a pellet plant, an iron ore concentration plant and a short iron ore slurry pipeline at Itabiritos. Operations are scheduled to begin in the second half of 2008, with a nominal production capacity of 7 million metric tons per year. We are also increasing production capacity at Samarco, our 50% joint venture with BHP Billiton, by 7.6 million metric tons per year, and operations began in April 2008.

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In our nickel business, operations at Goro, in New Caledonia, are scheduled to begin at the end of 2008 and to ramp up over a three-year period to a nominal annual production capacity of 60,000 metric tons of refined nickel and 4,600 metric tons of cobalt.

In copper, we are developing a hydro-metallurgic plant to produce copper cathode at Sossego, in the Carajás region of the Brazilian state of Pará, with a nominal annual production capacity of 10,000 metric tons of copper. Operations are scheduled to begin in the first half of 2008.

In our aluminum business, we started operations at the Paragominas bauxite mine in Brazil in the first quarter of 2007. The first expansion of Paragominas is scheduled to be completed in the first half of 2008. We are also completing the construction of stages 6 and 7 at our Alunorte alumina facility in Brazil, which will add 1.9 million metric tons to its nominal production capacity and is scheduled to start operating in the second half of 2008.

*Divestitures and asset sales*

In line with our strategy, we have continued to reduce our holdings of non-strategic assets. We summarize below our key dispositions and asset sales since the beginning of 2007.

*Lion Ore.* In July 2007, we sold our minority stake in Lion Ore Mining International, a Canadian nickel business, for US\$105 million.

*Log-In.* In June 2007, we conducted an initial public offering of the common shares of Log-In Logística Intermodal S.A. ( Log-In ), our formerly wholly-owned logistics business. We now own 31.3% of Log-In's voting and total capital stock and are party to an agreement with Mitsui & Co. related to the appointment of board members. Log-In provides container-based logistics services.

*Usiminas.* In the first half of 2007, we sold shares of Usiminas, a publicly traded Brazilian steelmaker, in a public offering for an aggregate of US\$728 million. We continue to own 2.9% of Usiminas' capital stock and to be party to a shareholders' agreement.

*Jubilee Mines.* In the first quarter of 2008, we sold our minority stake in Jubilee Mines, a nickel-producing company in Australia, for US\$130 million.



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**LINES OF BUSINESS**

Our principal lines of business consist of mining and logistics. We also invest in energy to supply part of our consumption. Below is an outline of the information provided in this section:

**1 Ferrous minerals**

*1.1 Iron ore*

- 1.1.1 Operations
- 1.1.2 Production
- 1.1.3 Projects and exploration

*1.2 Iron ore pellets*

- 1.2.1 Operations
- 1.2.2 Production
- 1.2.3 Projects

*1.3 Iron ore and iron ore pellets*

- 1.3.1 Customers, sales and marketing
- 1.3.2 Competition

*1.4 Manganese ore*

*1.5 Ferroalloys*

*1.6 Manganese ore and ferroalloys competition*

**2 Non-ferrous minerals**

*2.1 Nickel*

- 2.1.1 Operations
- 2.1.2 Production
- 2.1.3 Projects and exploration
- 2.1.4 Customers, sales and marketing
- 2.1.5 Competition

*2.2 Aluminum*

- 2.2.1 Bauxite
- 2.2.2 Alumina
- 2.2.3 Aluminum
- 2.2.4 Customers and sales
- 2.2.5 Competition

*2.3 Copper*

- 2.3.1 Operations

- 2.3.2 Production
- 2.3.3 Projects and exploration
- 2.3.4 Customers and sales

*2.4 PGMs and other precious metals*

*2.5 Other non-ferrous minerals*

- 2.5.1 Cobalt
- 2.5.2 Kaolin
- 2.5.3 Potash
- 2.5.4 Projects

**3 Coal**

- 3.1 Operations
- 3.2 Production
- 3.3 Projects and exploration
- 3.4 Customers and sales
- 3.5 Competition

**4 Logistics**

- 4.1 Railroads
- 4.2 Ports and maritime terminals
- 4.3 Shipping
- 4.4 Projects

**5 Other investments**

- 5.1 Steel investments
- 5.2 Energy investments

The following map shows the locations of our operations worldwide.

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**Table of Contents****1 Ferrous minerals**

Our ferrous minerals business segment includes:

iron ore mining;

iron ore pellet production;

manganese ore mining; and

ferroalloy production.

**1.1 Iron ore****1.1.1 Operations iron ore**

We conduct our iron ore business in Brazil, primarily at the parent company level and through our subsidiaries Minerações Brasileiras Reunidas S.A. (MBR) and Urucum Mineração S.A. (Urucum). Our iron ore mining and related operations are concentrated in three systems, the Southeastern System, the Southern System and the Northern System, each with its own transportation capability.

*Southeastern System*

The Southeastern System mines are located in the southeastern state of Minas Gerais, in a region known as the Iron Quadrangle. The iron ore mines are divided into three mining areas: Itabira, Centrais, and Mariana. The ore reserves in the Southeastern System have high ratios of itabirite ore relative to hematite ore. Itabirite ore has iron content of 35% to 60% and requires concentration to achieve shipping grade, which is at least 63.5% average iron content. Hematite has average iron content of approximately 66%. We conduct open-pit mining operations in the Southeastern System. We generally process the run-of-mine by means of standard crushing, classification and concentration steps, producing sinter feed, lump ore and pellet feed in the beneficiation plants located at the mining sites.

We own and operate integrated railroad and terminal networks in the Southeastern System. Our EFVM railroad connects the mines to the Tubarão port in Vitória, in the state of Espírito Santo. The Southeastern System is accessible by road or by spur tracks of the EFVM railroad. For a more detailed description of the networks, see *Logistics*, below. In 2007, we produced 100% of the electric energy consumed in the Southeastern System at our hydroelectric power plants (Igarapava, Porto Estrela, Funil, Candonga, Aimorés, Capim Branco I and Capim Branco II).

*Southern System*

The Southern System mines are located in the state of Minas Gerais and consist of the Oeste mines and the mines of our subsidiary MBR. MBR presently operates three major mining complexes: the Pico complex (comprised of the three mines, with one major plant and three secondary plants); the Vargem Grande complex (comprised of three mines, and one major beneficiation plant); and the Paraopeba complex (comprised of three mines, and each of their beneficiation plants). We use wet beneficiation processes to convert run-of-mine obtained from open-pit mining operations into sinter feed, lump ore and pellet feed, in addition to *hematitinha*, a product used primarily by Brazilian pig-iron producers.

We enter into freight contracts with our affiliate, the MRS Logística S.A. railway company (MRS), to transport our iron ore products at market prices from the mines to our Guaíba Island and Itaguaí maritime terminals in the state of Rio de Janeiro. In 2007, we produced 41% of the electric energy consumed in the Southern System at our hydroelectric power plants Igarapava, Porto Estrela, Funil, Candonga, Aimorés, Capim Branco I, and Capim Branco II.

**Table of Contents***Northern System*

The Northern System mines, located in the Carajás mineral province of the state of Pará, contain some of the largest iron ore deposits in the world. The reserves are divided into northern and southern ranges situated approximately 35 kilometers apart. Since 1983, we have been conducting mining activities in the northern range, which is divided into five main mining bodies. The Northern System has open-pit mines and an ore-processing plant. The mines are located on public lands for which we hold mining concessions.

Because of the high iron content (66.8% on average) of the Northern System deposits, we do not have to operate a concentration plant at Carajás. The beneficiation process consists simply of sizing operations, including screening, hydrocycloning, crushing and filtration. Output from the beneficiation process consists of sinter feed, pellet feed, special fines for direct reduction processes and lump ore.

We operate an integrated railroad and terminal network in the Northern System. After completion of the beneficiation process, our EFC railroad transports the iron ore to the Ponta da Madeira maritime terminal in the state of Maranhão. Our operations in Carajás are accessible by road, air and rail. It obtains all of its electrical power at market prices from regional utilities. To support our Carajás operations, we have housing and other facilities in a nearby township.

**1.1.2 Production iron ore**

Mine	Type	Production for the year ended December 31,			Nominal capacity (1)	Recovery rate (%)
		2005	2006 (million metric tons)	2007		
<b>Southeastern System</b>						
<i>Itabira mines</i>						
Cauê (2)	Open pit	23.5	23.7	24.8	24.6	72.1
Conceição (2)	Open pit	22.2	23.3	21.9	22.0	76.4
<i>Centrais mines</i>						
Água Limpa / Cururu (3)	Open pit	3.9	4.2	4.2	4.0	49.6
Gongo Soco	Open pit	5.7	6.7	6.5	6.1	81.5
Brucutu	Open pit	7.2	7.7	21.9	18.0	76.7
Córrego do Meio	Open pit	0.9				
Andrade (4)	Open pit	1.5	1.4	1.3	1.4	100.0
<i>Mariana mines</i>						
Alegria	Open pit	12.3	12.9	13.5	12.4	72.7
Fábrica Nova (5)	Open pit	7.8	13.2	14.6	15.6	N/A
Fazendão (6)	Open pit	0.8	0.7	3.7		N/A
Timbopeba	Open pit	4.6	2.8	1.3		82.2

Total Southeastern System		90.4	96.6	113.8	104.1	
<b>Southern System</b>						
<i>Oeste mines</i>						
Córrego do Feijão	Open pit	8.1	8.2	9.3	9.3	81.8
Segredo/João Pereira	Open pit	11.5	11.5	11.8	11.8	66.1
<i>MBR System</i>						
<i>Pico Complex</i>						
Pico/Sapicado/Galinheiro	Open pit	14.1	17.1	17.4	17.4	75.4
<i>Vargem Grande Complex</i>						
Tamanduá (7)	Open pit	9.1	10.0	10.2	10.0	81.3
Capitão do Mato (7)	Open pit	9.6	11.4	11.5	11.5	81.3
Abóboras	Open pit	2.5	4.3	6.0	6.1	100.0
<i>Paraopeba Complex</i>						
Jangada	Open pit	4.0	4.8	3.9	4.0	81.0
Capão Xavier	Open pit	11.1	13.5	13.3	13.3	79.5
Mar Azul (8)	Open pit	N/A	3.5	5.9	4.0	96.0
Total Southern System		70.0	84.3	89.3	87.4	
<b>Northern System</b>						
<i>Serra Norte (9)</i>						
N4W	Open pit	21.9	34.3	40.3		89.3
N4E	Open pit	27.2	19.2	15.4		89.3
N5-W	Open pit	8.4	15.2	30.4		89.3
N5E	Open pit	12.7	10.2	5.0		89.3
N5E-N	Open pit	2.4	2.9	0.6		89.3
Total Northern System		72.6	81.8	91.7	100.4	
Urucum	Open pit	1.1	1.4	1.1	0.3	60.0
Total Vale		233.9	264.2	295.9	292.2	

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- (1) These figures represent nominal capacity in 2007, which is equivalent to planned production for 2007.
- (2) The run-of-mine from Minas do Meio is sent to the Cauê and Conceição concentration plants.
- (3) Água Limpa is owned by Baovale, in which Vale owns 100% of the voting shares and 50% of the total shares.
- (4) We lease the Andrade mine from Companhia Siderúrgica Belgo-Mineira pursuant to a 40-year contract.
- (5) Fábrica Nova ore is sent to the Alegria and Timbopeba plants.
- (6) Fazendão ore is sent to the Alegria plant and Samarco.

- (7) Tamanduá and Capitão do Mato ores are processed at the Vargem Grande plant.
- (8) Acquired in the first quarter of 2006.
- (9) All Serra Norte ores are processed at the Carajás plant.

### **1.1.3 Projects and exploration iron ore**

*Fazendão.* We expect this project, located in the Southeastern System, to have annual production capacity of 15.8 million metric tons of run-of-mine, which will be used to feed the Alegria beneficiation plant and Samarco's third pelletizing plant. Our estimated total investment in this project is US\$129 million. The ramp-up process began in the first quarter of 2008.

*Carajás expansion.* This brownfield project, located in the Northern System, will add 30 million metric tons per year to our capacity with the construction of a new composite primary crushing plant, beneficiation and classification units and significant investment in logistics (including car dumpers, stockyards and sideways terminals). Our estimated total investment in this project is US\$2.478 billion. Completion is scheduled for second half of 2009.

*Maquiné-Baú.* We expect this project, located in the Southeastern System, to have annual production capacity of 24 million metric tons. The estimated total cost of the project, which is subject to approval by our board of directors, is US\$2.207 billion. Completion is scheduled for 2011.

*Serra Sul.* This project, located in the Northern System, will be the largest greenfield site in our history and the largest iron ore project in the world. We expect it to have annual production capacity of 90 million metric tons of iron ore. We expect to begin work in 2008, subject to approval by our board of directors, and completion is scheduled for the first half of 2012. Our estimated total investment in this project is US\$10.094 billion.

We are currently engaged in mineral exploration efforts for iron ore deposits in several states in Brazil. We are also seeking iron ore exploration opportunities in Africa, Australia and India.



**Table of Contents****1.2 Iron ore pellets****1.2.1 Operations iron ore pellets**

Directly and through joint ventures, we produce iron ore pellets in Brazil and in China, as set forth in the following table.

Company	Location	Our share of capital		Partners
		Voting (%)	Total	
	<i>Brazil:</i>			
Vale	Tubarão, Fábrica and São Luís	N/A	N/A	N/A
Hispanobras	Tubarão	51.0	50.9	Arcelor Mittal
Itabasco	Tubarão	51.0	50.9	Ilva
Kobrasco	Tubarão	50.0	50.0	Posco
Nibrasco	Tubarão	51.1	51.0	Nippon Steel, Sumitomo, JFE Steel, Kobe Steel, Nisshin Steel, SOJITZ Corp.
Samarco	Germano and Ponta do Ubú	50.0	50.0	BHP Billiton
	<i>China:</i>			
Zhuhai YPM (1)	Zhuhai, Guangdong	25.0	25.0	Zhuyhai Yueyufeng Iron and Steel Co. Ltd Pioneer & Steel Group Co. Ltd.

(1) Zhuhai YPM started operations in January 2008.

In the Tubarão port area, in the Brazilian state of Espírito Santo, we operate our own pelletizing plants, Tubarão I and II, and the plants of our joint ventures Hispanobras, Itabasco, Kobrasco, and Nibrasco. We send iron ore from our Southeastern mines to these plants and use our logistics infrastructure to distribute their final products.

Our São Luís pelletizing plant, located in the Brazilian state of Maranhão, is part of the Northern System. We send Carajás iron ore to this plant and ship its production to customers through our Ponta da Madeira maritime terminal.

The Fábrica pelletizing plant, located in the Brazilian state of Minas Gerais, is part of the Southern System. We send iron ore from the Fábrica mine to this plant and use MRS to transport its production to customers.

Samarco has two operating sites. The Germano unit is in Minas Gerais, close to our Southeastern System, and the Ponta Ubu unit is in Espírito Santo and includes port facilities. Iron ore from Germano is sent to Ponta Ubu using a 396-km pipeline, the longest pipeline in the world for the conveyance of iron ore.

The Zhuhai YPM pelletizing plant, in China, is part of the Yueyufeng Steelmaking Complex, which has port facilities that receive iron ore pellet feed from our mines in Brazil. Zhuhai YPM's main customer is Yueyufeng Iron & Steel YYS, which is also located in the Yueyufeng Steelmaking Complex.

We sell pellet feed to our pelletizing joint ventures at market-based prices. Historically, we have supplied all of the iron ore requirements of our wholly-owned pelletizing plants and our joint ventures, except for Samarco and Zhuhai YPM, to which we supply only a portion of its needs. Of our total 2007 pellet production, 63.6% was blast furnace

pellets, and the remaining 36.4% was direct reduction pellets, which are used in steel mills that use the direct reduction process rather than blast furnace technology.

The following table sets forth information regarding our iron ore sales to our pelletizing joint ventures for the periods indicated.

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	<b>Sales for the year ended December 31,</b>		
	<b>2005</b>	<b>2006</b>	<b>2007</b>
	(million metric tons)		
Hispanobras	4.5	4.9	4.7
Itabrasco	4.1	4.3	4.4
Kobrasco	5.2	5.3	4.4
Nibrasco	7.9	8.0	7.4
Samarco (1)	6.2	7.5	7.1
Zhuhai YPM (2)			
<b>Total</b>	<b>27.7</b>	<b>30.0</b>	<b>28.1</b>

(1) In 2005 we sold 2 million metric tons of concentrate and 4.2 million metric tons of run-of-mine; in 2006 we sold 1.9 million metric tons of concentrate and 5.6 million metric tons of run-of-mine; and in 2007 we sold 1.9 million metric tons of concentrate and 5.2 million metric tons of run-of-mine.

(2) Zhuhai YPM started operations in January 2008.

We use our port and maritime terminals to ship our own and our joint ventures, iron ore pellets, except Samarco, which has its own port facilities.

**1.2.2 Production iron ore pellets**

<b>Company</b>	<b>Production for the year ended</b>			<b>Nominal capacity</b>
	<b>2005</b>	<b>2006</b>	<b>2007</b>	
	December 31,			
	(million metric tons)			
Vale	16.4	14.2	17.6	15.7

GIIC (1)	4.0	1.3		4.0
Hispanobras	4.2	4.5	4.3	3.8
Itabrasco	3.9	4.0	4.0	3.3
Kobrasco	4.9	4.8	5.0	4.3
Nibrasco (2)	9.0	9.1	9.0	8.4
Samarco	13.7	13.9	14.3	14.0
Zhuhai YPM (3)				1.2
Total	56.1	51.8	53.7	53.5

(1) We sold our interest in GIIC in May 2006.

(2) We and Nibrasco signed a 30-year leasing contract for its two pelletizing plants in April 2008.

(3) Zhuhai YPM started operations in January 2008.

### 1.2.3 Projects iron ore pellets

*Itabirito project.* We are building a pellet plant, located in the Brazilian state of Minas Gerais, with annual production capacity of 7 million metric tons. We are also building an iron ore concentration plant and a short iron ore slurry pipeline. The estimated total cost of this project is US\$973 million. Operations are scheduled to begin in the second half of 2008.

*Samarco expansion.* We are increasing annual pellet production capacity at Samarco by 7.6 million metric tons. Operations began in the first half of 2008. Samarco obtained its own financing for the project.

*Tubarão VIII.* We plan to build a new pelletizing plant at our existing seven-plant complex at the port of Tubarão. We expect the plant to have annual production capacity of 7.5 million metric tons. Completion is scheduled for the second half of 2010. The estimated total cost of this project is US\$636 million.

*Oman.* In Oman, at the Sohar industrial complex, we plan to develop a pelletizing plant, a bulk terminal, a distribution center and a deep water port. The plant will have annual nominal production capacity of up to 9 million metric tons of direct reduction pellets. The estimated total cost of this project, which is subject to approval by our board of directors, is US\$546 million. Operations are scheduled to begin in the second half of 2010.

**Table of Contents*****1.3 Iron ore and iron ore pellets*****1.3.1 Customers, sales and marketing iron ore and iron ore pellets**

We use all of our iron ore and iron ore pellets (including our share of joint-venture pellet production) to supply the steel-making industry. Prevailing and expected levels of demand for steel products affect demand for our iron ore and iron ore pellets. Demand for steel products is influenced by many factors, such as expected rates of economic growth.

In 2007, China accounted for 31.9% of our iron ore and iron ore pellets shipments, and Asia as a whole accounted for 47.8%. Europe accounted for 24.6%, followed by Brazil with 19.8%. Sales to the Tubarão pelletizing joint ventures, at which most iron ore is transformed into iron ore pellets and then shipped to other countries, accounted for 6.9% of total shipments in 2007. Our 10 largest customers collectively purchased 134,357 million metric tons of iron ore and pellets from us, representing 45.3% of our 2007 iron ore and pellet shipments and 46.8% of our total iron ore and pellets revenues. With the exception of Arcelor Mittal, which accounted for 12% of our shipments of iron ore and pellets in 2007, no individual customer accounted for more than 10% of our shipments of iron ore and iron ore pellets for any of the three years ended December 31, 2007.

In 2007, the Asian market (primarily China and Japan) and the European market were the primary markets for our blast furnace pellets, while North America, the Middle East and North Africa were the primary markets for our direct reduction pellets.

We strongly emphasize customer service in order to improve our competitiveness. We work with our customers to understand their main objectives and to provide them with iron ore solutions to meet specific customer needs. Using our expertise in mining, agglomeration and iron-making processes, we search for technical solutions that will balance the best use of our world-class mining assets and the satisfaction of our clients. We believe that our ability to provide customers with a total iron ore solution and the quality of our products are very important advantages helping us to improve our competitiveness in relation to competitors who may be more conveniently located geographically. In addition to offering technical assistance to our customers, Vale operates sales support offices in Tokyo, Japan; Seoul, South Korea; Singapore and Shanghai, China, which support the sales made by our international sales subsidiary located in Saint Prex, Switzerland. These offices also allow us to stay in close contact with our customers, monitor their requirements and our contract performance, and ensure that our customers receive timely deliveries.

**1.3.2 Competition iron ore and iron ore pellets**

The global iron ore market is highly competitive, and several large producers operate in this market. The main factors affecting competition are price, quality, range of products offered, reliability, operating costs and shipping costs.

Our biggest competitors in the Asian market are located in Australia and include subsidiaries and affiliates of BHP Billiton PLC and Rio Tinto Ltd. Although the transportation costs of delivering iron ore from Australia to Asian customers are generally lower than ours as a result of Australia's geographical proximity, we believe we remain competitive in the Asian market for two main reasons. First, steel companies generally seek to obtain the types (or blends) of iron ore and iron ore pellets that can produce the intended final product in the most economic and efficient manner. Our iron ore has low impurity levels and other properties that generally lead to lower processing costs. For example, in addition to the high iron content, the alumina content of our iron ore is very low compared to Australian ores, improving productivity in blast furnaces, which is particularly important during periods of high demand. Second, steel companies often develop sales relationships based on a reliable supply of a specific mix of iron ore and iron ore pellets. We have a customer-oriented marketing policy and place specialized personnel in direct contact with our clients to help determine the blend that best suits each particular customer. In terms of reliability, our ownership and operation of logistics facilities in the Northern and Southeastern Systems helps us ensure that our products are delivered on time and at a relatively low cost. We have entered into long-term freight contracts to develop a dedicated shuttle service from Brazil to China, aimed at enhancing our ability to offer our products in the Chinese market at competitive prices and to increase our market share.

In the European market, we are also competitive for the reasons we describe above, as well as the proximity of the Ponta da Madeira and Tubarão port facilities to European customers. Our principal competitors in Europe are:

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Kumba Iron Ore Limited; Luossavaara Kiirunavaara AB LKAB; Société Nationale Industrielle et Minière SNIM; Rio Tinto Ltd; and BHP Billiton.

The Brazilian iron ore market is competitive. There are several small iron ore producers and new companies with developing projects, such as MMX, MHAG, and Bahia Mineração. At the same time, there are integrated steel companies such as CSN and Mannesmann. Usiminas has become partially integrated with the recent acquisition of an iron ore company. Although pricing is relevant, quality and reliability are important competitive factors as well. We believe that our integrated transportation systems, high-quality ore and technical services make us a strong competitor in the Brazilian market. We have been charging Brazilian customers prices lower than the FOB global reference prices due to the lower logistics costs in delivering our products to their facilities.

The global iron ore pellet market is highly competitive, and several large producers operate in this market. The main factors affecting competition are price, quality, range of products offered, reliability, operating costs and shipping costs. Our major competitors are Luossavaara Kiirunavaara AB, Cleveland-Cliffs Inc., Quebec Cartier Mining Co., Iron Ore Company of Canada (a subsidiary of Rio Tinto Ltd) and Gulf Industrial Investment Co.

**1.4 Manganese ore**

We are one of the largest producers of manganese ore for the global seaborne market, with total shipments of 708,000 metric tons of manganese ore in 2007. We conduct our manganese mining operations in Brazil. At the parent company level, we produce manganese ore at the Azul mine in the Carajás mineral province of the state of Pará and at the Morro da Mina mine in the state of Minas Gerais. Through our subsidiary Urucum, we produce manganese ore at a mine in the Pantanal region of the state of Mato Grosso do Sul.

Our mines produce three types of manganese ore products:

metallurgical ore, used primarily for the production of ferroalloys;

natural manganese dioxide, suitable for the manufacture of electrolytic batteries; and

chemical ore, used in several industries for the production of fertilizer, pesticides and animal feed, and used as a pigment in the ceramics industry.

We operate on-site beneficiation plants at our Azul and Urucum mines, which are accessible by road. The Azul and Urucum mines have high-grade ores (at least 40% manganese content), while our Morro da Mina mine has low-grade ores. All of the mines obtain electrical power at market prices from regional electric utilities.

The following table sets forth information about our manganese production.

Mine	Type	Production for the year ended December 31,			Nominal capacity	Recovery rate (%)
		2005	2006	2007		
			(million metric tons)			
Azul (1)	Open Pit	2.2	1.7	0.9	2.5	69.0
Urucum (2)	Underground	0.4	0.4	0.3	0.5	75.0
Morro da Mina	Open Pit	0.3	0.2	0.1	0.3	88.0
Other (3)	Open Pit	0.1	0.0	0.0		
Total		3.0	2.3	1.3	3.3	

(1) Given the need to prioritize iron

ore transportation through the EFC railroad, we shut down the Azul mine from July to December 2007.

- (2) Urucum has entered into a five-year renewable lease agreement with CPFL for its plant in Corumbá, in the Brazilian state of Mato Grosso do Sul.
- (3) Refers to our Bahia mines, at which operations were discontinued in 2005.

We are seeking opportunities for mineral exploration and development of manganese deposits mainly in Africa and Brazil.

### ***1.5 Ferroalloys***

We are one of the largest producers of ferroalloys for the global seaborne market, with total shipments of 488,000 metric tons of ferroalloys in 2007. We produce several types of manganese ferroalloys, such as high carbon and medium carbon ferro-manganese and ferro-silicon manganese. We conduct this business through the following subsidiaries:

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Rio Doce Manganês S.A. ( RDM ) (with five plants in Brazil);

Rio Doce Manganèse Europe ( RDME ) (with one plant in Dunkerque, France);

Rio Doce Manganese Norway AS ( RDMN ) (with one plant in Mo I Rana, Norway); and

Urucum Mineração ( Urucum ) (with one plant in Brazil).

In October 2007, we reactivated three furnaces at an RDM plant (Simões Filho) that had been shut down in January 2006 due to weak demand for ferroalloys. However, the RDME plant in Dunkerque was shut down from August to October 2007 due to technical problems.

The production of ferroalloys consumes significant amounts of electricity, representing 7.7% of our total consumption in 2007. For information on the risks associated with potential energy shortages, see *Item 3. Key Information Risk Factors*.

The following table sets forth information about our ferroalloys production.

Company	Production for the year ended December 31,			Nominal capacity
	2005	2006	2007	
			(thousand metric tons)	
RDM (Brazil) (1)	347	260	288	368
RDME (France)	118	146	103	140
RDMN (Norway)	77	107	129	120
Urucum (2)	22	21	22	20
NES (3)	38	6	N/A	
Total	602	540	542	648

(1) RDM has five plants in Brazil: Santa Rita, Barbacena and Ouro Preto in the state of Minas Gerais; and Simões Filho in the state of Bahia. We sold RDM's São João del-Rei plant in June 2007.

(2) Urucum has one plant in Corumbá in the state of Mato Grosso do Sul.



- (3) We sold our interest in NES (Nova Era Silicon S.A.) in February 2006.

**1.6 Competition manganese ore and ferroalloys**

The markets for manganese ore and ferroalloys are highly competitive. Competition in the manganese ore market takes place in two segments. High-grade manganese ore competes on a global seaborne basis, while low-grade ore competes on a regional basis. For some ferroalloys, high-grade ore is mandatory, while for others high- and low-grade ores are complementary. The main suppliers of high-grade ores are located in South Africa, Gabon and Australia. The main producers of low-grade ores are located in Ukraine, China, Ghana, Kazakhstan, India and Mexico.

The ferroalloy market is characterized by a large number of participants who compete primarily on the basis of price. The principal competitive factors in this market are the costs of manganese ore, electricity and logistics and carbon content. We compete both with stand-alone producers and integrated producers that also mine their own ore. Our competitors are located principally in countries that produce manganese ore or steel.

**Table of Contents****2 Non-ferrous minerals****2.1 Nickel****2.1.1 Operations nickel**

We conduct our nickel operations primarily through our wholly-owned subsidiary Vale Inco and its 61%-owned subsidiary PT Inco. Vale Inco operates two nickel production systems, one in North America and Europe and the other in Asia, as set forth in the following table.

<b>System</b>	<b>Location</b>	<b>Operations</b>
<b>North America &amp; Europe</b>	Canada Sudbury, Ontario	Fully integrated mines, mill, smelter and refinery (producing finished nickel and by-products)
	Canada Thompson, Manitoba	Fully integrated mines, mill, smelter and refinery (producing finished nickel and by-products)
	Canada Voisey's Bay, Newfoundland and Labrador	Mine and mill (producing nickel concentrate and by-products)
	U.K. Clydach, Wales	Stand-alone nickel refinery (producing finished nickel)
<b>Asia</b>	Indonesia Sorowako, Sulawesi (1)	Mining and processing operations (producing nickel matte, an intermediate product)
	Japan Matsuzaka (2)	Stand-alone nickel refinery (producing finished nickel)
	Taiwan Kaoshiung (3)	Stand-alone nickel refinery (producing finished nickel)
	China Dalian, Liaoning (4)	Stand-alone nickel refinery (producing finished nickel)
	China Kunshan, Jiangsu (5)	Processing operation (producing nickel salts)
	South Korea Onsan (6)	Stand-alone nickel refinery (producing finished nickel)

(1) Operations conducted through our 61%-owned subsidiary PT Inco.

(2) Operations conducted through our 67%-owned subsidiary Vale Inco Japan Limited.

(3)

Operations conducted through our 49.9%-owned subsidiary Taiwan Nickel Refining Corporation.

(4) Operations conducted through our 98%-owned subsidiary Inco New Nickel Materials (Dalian) Co. Ltd.

(5) Operations conducted through our 65%-owned subsidiary Jinco Nonferrous Metals Co., Ltd.

(6) Operations conducted through our 25% interest in Korea Nickel Corporation.

*North America & Europe  
Sudbury operations*

Our long-established mines in Sudbury, Ontario, are primarily underground operations with nickel sulphide ore bodies. These ore bodies also contain co-deposits of copper, cobalt, platinum-group metals, gold and silver. We have integrated mining, milling, smelting and refining operations to process ore into finished nickel at Sudbury. We also smelt and refine an intermediate product, nickel concentrate, from our Voisey's Bay operations. We ship a nickel intermediate product, nickel oxide, from our Sudbury smelter to our nickel refineries in Wales, Taiwan, China, Japan and South Korea for processing into finished nickel.

*Thompson operations*

Our long-established mines in Thompson, Manitoba, are primarily underground operations with nickel sulphide ore bodies. The ore bodies also contain co-deposits of copper and cobalt. We have integrated mining, milling, smelting and refining operations to process ore into finished nickel at Thompson. We also smelt and refine an intermediate product, nickel concentrate, from our Voisey's Bay operations.

**Table of Contents***Voisey's Bay operations*

Our Voisey's Bay mine, in Newfoundland and Labrador, is an open-pit operation with the potential for underground operations at a later stage. We mine nickel sulphide ore bodies here, which also contain co-deposits of copper and cobalt. We mill Voisey's Bay ore on site and ship it as an intermediate product (nickel concentrates) primarily to our Sudbury and Thompson operations for final processing (smelting and refining). A portion of our Voisey's Bay nickel concentrate is also toll-smelted and toll-refined by unrelated parties in Europe.

*Clydach operations*

Clydach is a stand-alone nickel refinery in the U.K. that processes a nickel intermediate product, nickel oxide, supplied from our Sudbury operations to produce finished nickel.

*Asia*

Our subsidiary PT Inco operates two open cast mines, Sorowako and Pomalaa, and a related processing facility in Sorowako on the Island of Sulawesi, Indonesia. PT Inco mines nickel laterite saprolite ore and produces an intermediate product (nickel matte), which is shipped primarily to our nickel refinery in Japan. Pursuant to life-of-mine off-take agreements, PT Inco sells 80% of its production to Vale Inco and 20% of its production to Sumitomo Metal Mining Co., Ltd. (Sumitomo). PT Inco is a public company whose shares are traded on the Indonesia Stock Exchange. Vale Inco holds 61% of its shares, Sumitomo holds 20% and the remaining 19% is publicly held.

Our 67%-owned subsidiary, Vale Inco Japan Limited (formerly Inco TNC Limited) operates a refinery in Matsuzaka, which produces intermediate and finished nickel products, primarily using nickel matte sourced from PT Inco. Vale Inco Japan is a private company. The minority interest is held by Sumitomo (13%), Daido Steel Co., Ltd. (9%), Mitsui & Co., Ltd. (7%) and other Japanese companies (5%).

We also operate or have investments in nickel refining operations in Taiwan, China and South Korea, through our 49.9% stake in Taiwan Nickel Refining Corporation (TNRC), our 98% interest in Inco New Nickel Materials (Dalian) Co. Ltd. (INNM) and our 25% stake in Korea Nickel Corporation (KNC). TNRC, INNM and KNC produce finished nickel for the local stainless steel industry in Taiwan, China and South Korea, primarily using intermediate products containing about 75% nickel (in the form of nickel oxide) from Vale Inco Japan and our Sudbury operations.

Our 65%-owned joint venture, Jinco Nonferrous Metals Co., Ltd (Jinco) operates a nickel salts operation in China (Kunshan, province of Jiangsu). Jinco produces nickel sulphate and chloride, which are used in the nickel plating industry.

*Special Products*

Through our Special Products business unit, we develop, manufacture and sell value-added specialty nickel products, including powders, foams, flakes, oxides and nickel-coated graphite. These products, which are generally sold at a premium over the London Metal Exchange (LME) price, are used for such applications as consumer electronics, rechargeable batteries for consumer and hybrid vehicle use, fuel cells, powder metallurgy, automotive parts, electromagnetic interference shielding for computers and cellular telephones, catalysts and salts, metal injection molding, and hard metal binders. Our Special Products are sold through our global marketing network and produced at our refineries in Sudbury and Clydach. In addition, we have Special Product operations at the following locations:

Mississauga, Ontario, Canada (including research and development facilities);

Wyckoff, New Jersey, USA, through our wholly-owned subsidiary Novamet Specialty Products Corporation;

Sauerlach, Germany, through our wholly-owned subsidiaries Inco GmbH and Alantum GmbH & Co. KG;

Shenyang, Province of Liaoning, China, through our 77%-owned subsidiary Inco Advanced Technology Materials (Shenyang) Co. Ltd.; and

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Dalian, Province of Liaoning, China, through our 76.7%-owned subsidiary Inco Advanced Technology Materials (Dalian) Co., Ltd.

*Recycling operations*

Through our wholly-owned subsidiary The International Metals Reclamation Company, Inc., or INMETCO, in the United States (Ellwood City, Pennsylvania), we process stainless steel waste, end-of-life batteries and other waste products primarily containing nickel, chromium, iron and cadmium. We sell the resulting recovered metals as a remelt alloy ingot to the stainless steel industry.

**2.1.2 Production nickel**

The following table sets forth our annual mine production by operating mine (or on an aggregate basis for PT Inco because it has mining areas rather than mines) and the average percentage grades of certain metals (nickel and copper). For our Sudbury, Thompson and Voisey's Bay operations, the production and average grades represent the mine product delivered to those operations' respective processing plants and do not include adjustments due to beneficiation, smelting or refining. The mine production at PT Inco represents the product from PT Inco's dryer kilns delivered to PT Inco's smelting operations and does not include nickel losses due to smelting. The following table sets forth information about ore production at our nickel mining sites.

		<b>2007</b>	<b>2006</b>	<b>2005</b>
		(thousands of metric tons, except percentages)		
<b>Ontario operating mines</b>				
Copper Cliff North	Production	1,078	1,341	1,264
	% copper	0.92	1.19	1.31
	% nickel	0.84	0.96	1.08
Copper Cliff South	Production	883	879	895
	% copper	1.71	1.94	1.82
	% nickel	1.46	1.63	1.34
Creighton	Production	963	997	980
	% copper	1.62	1.55	1.62
	% nickel	2.08	2.09	2.10
Stobie	Production	2,850	2,808	3,035
	% copper	0.68	0.68	0.79
	% nickel	0.72	0.75	0.86
Garson	Production	692	721	720
	% copper	1.58	1.19	1.09
	% nickel	1.59	1.60	1.67
Coleman	Production	1,408	1,348	1,381
	% copper	2.75	2.40	2.63
	% nickel	1.74	1.65	1.69
Gertrude	Production	12	207	451
	% copper	0.25	0.27	0.31
	% nickel	0.66	0.70	0.81
Total Ontario operations	Production	7,887	8,301	8,726
	% copper	1.39	1.32	1.35
	% nickel	1.25	1.25	1.28
<b>Manitoba operating mines</b>				
Thompson	Production	1,380	1,214	1,326
	% nickel	1.83	2.08	2.01
Birchtree	Production	1,164	1,069	1,105
	% nickel	1.52	1.62	1.59
Total Manitoba operations	Production	2,545	2,283	2,432

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	% nickel	1.69	1.86	1.82
<b>Voisey s Bay operating mines</b>				
Ovoid	Production	2,147	1,507	351
	% copper	2.47	2.22	1.77
	% nickel	3.74	3.77	3.44
Total Voisey s Bay operations	Production	2,147	1,507	351
	% copper	2.47	2.22	1.77
	% nickel	3.74	3.77	3.44
<b>Sulawesi operating mining areas</b>				
Sorowako	Production	4,615	4,459	4,689
	% nickel	2.03	1.95	1.84
Pomalaa	Production	645	685	350
	% nickel	2.30	2.30	2.31
Total Sulawesi operations	Production	5,260	5,144	5,039
	% nickel	2.06	2.00	1.87
		30		

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The following table sets forth information about our finished nickel production.

Mine	Type	Production for the year ended December 31,			Nominal capacity (1)
		2005	2006	2007	
		(thousand metric tons)			
Sudbury (2)	Underground	96.5	93.8	82.7	97.2
Thompson (2)	Underground	48.6	34.9	30.0	35.6
Voisey's Bay (3)	Open pit		35.5	58.9	60.1
Sorowako (4)	Open cast	73.9	70.0	75.8	76.2
External (5)	N/A	0.7	0.7	0.6	0.9
Total (6)		219.8	234.9	247.9	269.9

(1) These figures represent nominal capacity in 2007, which is equivalent to planned production for 2007.

(2) Includes some finished nickel produced by Vale Inco using feeds purchased from unrelated parties. Primary nickel production only (does not include secondary nickel from INMETCO).

(3) Includes finished nickel produced at Vale Inco's Sudbury and Thompson operations, as well as some

finished nickel  
produced by  
unrelated parties  
under  
toll-smelting  
and toll-refining  
arrangements.

(4) We have a 61%  
interest in PT  
Inco, which  
owns the  
Sorowako  
mines, and these  
figures include  
the minority  
interests.

(5) Finished nickel  
processed at our  
Asian  
joint-venture  
facilities using  
feeds purchased  
from unrelated  
parties.

(6) Excludes  
finished nickel  
produced under  
toll-smelting  
and refining  
arrangements  
covering  
purchased  
intermediates  
with unrelated  
parties.  
Unrelated-party  
tolling of  
purchased  
intermediates  
was 16 thousand  
metric tons in  
2005, 16.1  
thousand metric  
tons in 2006 and  
14.2 thousand  
metric tons in  
2007.

### **2.1.3 Projects and exploration    nickel**



*Goro.* Located in New Caledonia (in the South Pacific), Goro has one of the largest deposits of lateritic nickel in the world, and we expect it to have nominal annual production capacity of 60,000 metric tons of nickel in matte and 4,600 metric tons of cobalt. The estimated total investment in Goro is US\$3.212 billion. Operations are scheduled to begin at the end of 2008 and to ramp up over a three-year period, in order to mitigate operational risks.

*Onça Puma.* Onça Puma is a nickel mine built on deposits of nickel laterite (saprolite) in the Brazilian state of Pará. We expect it to reach nominal annual production capacity of 58,000 metric tons of nickel in ferro-nickel, its final product. The total estimated investment in this project is US\$2.297 billion. Operations are scheduled to begin in the first half of 2009.

*Totten.* Totten is a new nickel mine in Sudbury, Ontario. The estimated total cost of Totten is US\$362 million, and completion is scheduled for the first half of 2011. The new mine will have annual production capacity of 8,200 metric tons of nickel, 11,200 metric tons of copper and 82,000 troy ounces of precious metals (platinum, gold and silver).

*Vermelho.* Vermelho is a mine built on deposits of nickel laterite (limonite) in Carajás. We expect it to have nominal annual production capacity of 46,000 metric tons of nickel and 2,800 metric tons of cobalt. The estimated total investment in this project is US\$1.908 billion. Vermelho is scheduled for completion in the first half of 2012.

*Voisey's Bay processing facility.* Pursuant to an agreement with the Government of Newfoundland and Labrador, we are required to construct a commercial nickel processing facility in Newfoundland and Labrador to produce approximately 50,000 metric tons of finished nickel per year together with associated cobalt and copper products. The most recent budget approved by the board for this project was US\$2.177 billion. We are contractually obligated to complete the construction of the facility by the end of 2011. The total investment for this project is subject to board approval.

We are engaged in greenfield exploration for nickel, with several active programs and projects in Australia, Brazil, Canada, China, Guatemala, Indonesia and the Philippines. We are engaged in brownfield exploration for nickel in Canada and Indonesia.

#### **2.1.4 Customers, sales and marketing nickel**

Our customers are broadly distributed on a global basis. In 2007, 60.3% of our total nickel sales were delivered to customers in Asia, 26.5% to North America, 11.6% to Europe, and 1.6% to other locations. We have short-term fixed-volume contracts with customers for the majority of our expected annual nickel sales. These contracts, together with our sales of proprietary and multi-use nickel products, provide stable demand for a significant portion of our annual production.

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Nickel is an exchange-traded metal, listed on the London Metal Exchange ( LME ), and most nickel products are priced according to a discount or premium to the LME price, depending on the nickel product's physical and technical characteristics. Our finished nickel products represent what is known in the industry as primary nickel, meaning nickel produced principally from nickel ores (as opposed to secondary nickel, which is recovered from recycled nickel-containing material). Finished primary nickel products are distinguishable in terms of the following characteristics, which determine the product price level and the suitability for various end-use applications:

nickel content and purity level: (i) nickel pig iron has 1.5 to 6% nickel, (ii) ferro-nickel has 20-40% nickel, (iii) standard LME grade nickel has a minimum of 99.8% nickel and (iv) high purity nickel has a minimum of 99.9% nickel, and the absence of specific elemental impurities;

shape (such as pellets, discs, squares, strips, and foams); and

size.

The principal end-use applications for nickel are:

austenitic stainless steel (60-65% of global nickel consumption);

non-ferrous alloys, alloy steels, and foundry applications (15-20% of global nickel consumption);

nickel plating (10% of global nickel consumption); and

specialty applications, such as batteries, fuel cells, powder metallurgy and automotive parts (5-10% of global nickel consumption).

In 2007, 65% of our sales were made into non-stainless steel applications, compared to the industry average for primary nickel producers of approximately 40%. As a result of our focus on such higher-value segments, our average realized nickel prices have consistently exceeded LME cash nickel prices.

We offer sales and technical support to our customers on a global basis. We have a well-established global marketing network for finished nickel, based at our head office in Toronto, Canada. We also have sales offices in Saddle Brook, New Jersey, and San Antonio, Texas in the United States, in London, England, in Tokyo, Japan, in Hong Kong and Shanghai, China, in Kaohsiung, Taiwan, in Bangkok, Thailand and in Bridgetown, Barbados.

### **2.1.5 Competition nickel**

The global nickel market is highly competitive. We believe that our key competitive strengths include our long-life mines, our low cash costs of production relative to other nickel producers, and sophisticated exploration and processing technologies, specialty products research and development. Our global marketing reach and technical support direct our products to the applications and geographic regions which offer the highest margins for our products.

In 2007, our nickel deliveries represented approximately 20% of global consumption for primary nickel. In addition to us, the largest suppliers in the nickel industry (each with its own integrated facilities, including nickel mining, processing, refining and marketing operations) are MMC Norilsk Nickel, BHP Billiton plc, Xstrata plc and Jinchuan Nonferrous Metals Corporation. Together with us, these companies accounted for about 61% of global finished primary nickel production in 2007. In addition to these five companies, other producers in various countries participate in the nickel industry.

While stainless steel production is a major driver of global nickel demand, stainless steel producers can use nickel products with a wide range of nickel content, including secondary nickel. The choice between primary and secondary nickel is largely based on their relative prices and availability. In recent years, secondary nickel has accounted for about 44-49% of total nickel used for stainless steels, and primary nickel has accounted for about 51-56%. In 2006, a new primary nickel product entered the market, known as nickel pig iron. This is a low-grade nickel product made in China from imported lateritic ores (primarily from the Philippines, Indonesia and New Caledonia) that is suitable primarily for use in stainless steel production. In 2007, nickel pig iron production totaled an estimated 90,000 metric tons, representing 6% of world primary nickel supply.



**Table of Contents****2.2 Aluminum**

We operate our aluminum businesses at the parent company level and through subsidiaries and joint ventures, as set forth in the following table.

Company	Business	Our share of capital		Partners
		Voting (%)	Total	
Vale	Bauxite	N/A	N/A	N/A
Mineração Rio do Norte S.A.( MRN )	Bauxite	40.00	40.00	Abalco, Alcoa, Rio Tinto Alcan, Alcoa World Alumina LLC AWA, BHP Billiton Metais, Companhia Brasileira de Alumínio CBA, Norsk Hydro
Alumina do Norte do Brasil S.A. ( Alunorte )	Alumina	59.02	57.03	Companhia Brasileira de Alumínio CBA JAIC, Mitsui, Mitsubishi, Nippon Amazon -- NAAC, Norsk Hydro
Alumínio Brasileiro S.A. ( Albras )	Aluminum	51.00	51.00	Nippon Amazon - NAAC
Valesul Alumínio S.A. ( Valesul )	Aluminum	100.00	100.00	N/A

**2.2.1 Bauxite**

We conduct our bauxite operations through our joint venture Mineração Rio do Norte S.A. ( MRN ) and at the parent company level.

*MRN.* MRN, which is located in the northern region of the Brazilian state of Pará, is one of the largest bauxite operations in the world, operating four open-pit bauxite mines that produce high quality bauxite. In addition, MRN controls substantial additional high quality bauxite resources. MRN also operates ore beneficiation facilities at its mines, which are connected by rail to a loading terminal and port facilities on the Trombetas River, a tributary of the Amazon River, that can handle vessels of up to 60,000 DWT. MRN owns and operates the rail and the port facilities serving its mines. The MRN mines are accessible by road from the port area and obtain electricity from their own thermal power plant.

*Paragominas mine.* Operations at our Paragominas mine, in the Brazilian state of Pará, began in the first quarter of 2007 to supply Alunorte's expansion. The mine has a nominal annual production capacity of 5.4 million metric tons of wet 12% moisture bauxite, and the bauxite quality is similar to that of MRN. The Paragominas site has a beneficiation plant with milling and a 244-kilometer slurry pipeline.

The following table sets forth information on our bauxite production.

**Production for the year ended**

Mine	Type	December 31,			Nominal capacity	Recovery rate (%)
		2005	2006	2007		
(million metric tons)						
<i>MRN:</i>						
Almeidas	Open pit	9.4	8.4	4.8	N/A	73
Aviso	Open pit	12.5	12.0	14.4	N/A	73
SaracáV	Open pit	2.6	1.6	2.1	N/A	73
Saracá W	Open pit		3.2	3.5	N/A	73
Total MRN(1)		24.5	25.2	24.8	18.3	
<i>Paragominas:</i>						
Miltonia 3	Open pit		0.0	1.9	N/A	70
Total Paragominas			0.0	1.9	5.4	

(1) These figures represent run-of-mine production. MRN's final product production totaled 17.2 million metric tons in 2005, 17.8 million metric tons in 2006 and 18.1 million metric tons in 2007.

We are developing the following bauxite projects:

*Paragominas II.* The start-up of Paragominas II, which is scheduled for the first half of 2008, will expand bauxite nominal production capacity to 9.9 million metric tons per year. The estimated total project cost is US\$196 million. Paragominas II will supply the bauxite necessary for the operations of stages 6 and 7 of Alunorte.

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*Paragominas III.* Paragominas III, which will increase production capacity by 4.95 million metric tons per year, has an estimated cost of US\$416 million. We intend to supply the first stage of the New Alumina Refinery with production from Paragominas III. The project, which is scheduled for completion in the first half of 2011, remains subject to approval by our board of directors.

**2.2.2 Alumina**

We conduct our alumina operations in Brazil, through our subsidiary Alunorte, which produces alumina by refining bauxite supplied by MRN and the Paragominas mine. The Alunorte plant is the largest alumina refinery in the world, with a nominal production capacity of 4.4 million metric tons per year. It has one of the lowest conversion costs in the world (US\$117.6 per metric ton in 2007).

Alunorte sells alumina to our subsidiary Albras, its principal customer, as well as to our subsidiary Valesul and unaffiliated customers. Albras aluminum production facilities are located nearby, in the city of Barcarena in the state of Pará, and Alunorte and Albras share infrastructure and other resources.

The following table sets forth information on our alumina production.

Company	Production for the year ended December 31,			Nominal capacity
	2005	2006	2007	
		(million metric tons)		
Alunorte	2.6	3.9	4.3	4.4

We are developing the following alumina projects:

*Alunorte -stages 6 & 7.* The construction of stages 6 and 7 will add another 1.9 million metric tons to Alunorte's nominal production capacity. The start-up is scheduled for the second half of 2008 and the estimated total cost is US\$846 million.

*New Alumina Refinery.* In July 2007, we signed a memorandum of understanding with the Norwegian aluminum producer Norsk Hydro to construct the New Alumina Refinery, which will be located close to Alunorte's existing refinery. We will have an 80% share of the project and Norsk Hydro will hold the remaining 20%. The plant will be developed in four stages, each with annual production capacity of 1.86 million metric tons of alumina. The first stage of the project is subject to board approval. Its estimated total cost is US\$1.795 billion and completion is scheduled for the first half of 2011.

**2.2.3 Aluminum**

We conduct our aluminum smelting operations in Brazil through our subsidiaries Albras and Valesul.

*Albras.* The Albras smelter, located in Barcarena, in the state of Pará, is one of the largest aluminum plants in the Americas, with a nominal capacity of 445,000 metric tons per year. Albras produces aluminum using alumina supplied by Alunorte. Alunorte supplied 100% of Albras alumina requirements in 2007. Albras produces pure metal ingots.

Aluminum is produced from alumina by means of a continuous electro-chemical process, which requires substantial amounts of electricity. Albras purchases electric power from Eletronorte, a state-owned electric power utility. Eletronorte generates electricity at the Tucuruí hydroelectric power plant located on the Tocantins River. This plant is the sole source of electrical power in the region in the quantities required for Albras operations. Albras consumes approximately one-fifth of the non-peak period output of the Tucuruí plant.

Albras has a 20-year contract, which expires in 2024, with Eletronorte, in which a basic purchase price, in reais per MWh, is indexed to the general market price index, as calculated by *Fundação Getúlio Vargas*, a Brazilian economic research institute. In addition to the basic price, a premium is paid that is linked to the amount by which the price of primary aluminum exceeds US\$1,450 per metric ton on the London Metal Exchange. See *Item 4. Information on the company Regulatory matters Electric energy regulation.*

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*Valesul.* Valesul operates a smelter located in the state of Rio de Janeiro with a nominal capacity of 95,000 metric tons per year. Valesul produces primary aluminum and aluminum alloys in the form of ingots and billets. Valesul produces aluminum using alumina provided by Alunorte, which supplied 54.1% of Valesul's alumina requirements in 2007. Valesul produces foundry alloy ingots and billets.

Valesul currently obtains 85% of its electrical energy requirements from: (a) four wholly-owned small hydroelectric power plants located in the state of Minas Gerais, (b) Aimorés, in the state of Minas Gerais, in which Valesul has a 51% stake as of June 2007, and (c) the Machadinho hydroelectric power plant, in the state of Santa Catarina, in which Valesul has a 8.29% stake. Its remaining electrical energy requirements are obtained from unrelated parties at market prices. Valesul is engaged in litigation regarding the prices charged by an electricity utility in the state of Rio de Janeiro for the transmission of electricity. See *Item 8. Financial information - Legal proceedings.*

The following table sets forth information on our aluminum and aluminum alloys production.

Company	Production for the year ended December 31,			Nominal capacity
	2005	2006	2007	
		(thousand metric tons)		
Albras	446	456	455	445
Valesul (1)	93	95	95	95
Total	539	551	551	540

(1) In 2005, 2006 and 2007, Valesul also recycled 11, 13 and 13 thousand metric tons, respectively, of aluminum scrap from unrelated parties.

**2.2.4 Customers and sales - aluminum**

*Bauxite.* MRN produces bauxite for sale on a take-or-pay basis to the joint venture partners. Excess production may be sold to customers. The joint venture partners pay a price that is determined by a formula linked to the price of aluminum for three-month futures contracts on the London Metal Exchange and to the price of alumina FOB Australia. In 2007, our subsidiary Alunorte purchased 78.7% of its bauxite requirements from MRN. Paragominas sells all of its production to our subsidiary Alunorte, which corresponds to 17.7% of its bauxite requirements in 2007.

*Alumina.* Each Alunorte partner must purchase on a take-or-pay basis all alumina produced by Alunorte in proportion to its respective interest. The partners each pay the same price, which is determined by a formula based on the price of aluminum for three-month futures contracts on the London Metal Exchange. We use a portion of our share of Alunorte's alumina production to supply the Brazilian market (Albras and Valesul), and sell the remainder to customers in other countries, such as Argentina, Canada, Egypt, Norway and the United States.

*Aluminum.* The Albras partners must purchase on a take-or-pay basis all aluminum produced by Albras in proportion to their ownership interests. We generally market our aluminum in the global markets, mainly Asia and Europe, to clients in the aluminum industry. Valesul's aluminum products are sold primarily in the Brazilian market on a spot basis.

**2.2.5 Competition - alumina and aluminum**

*Alumina.* The alumina market is competitive, but small compared to the primary aluminum market, because many of the major aluminum-producing companies have integrated bauxite, alumina and aluminum operations. Competition in the alumina market is based primarily on quality, reliability of supply and price, which is directly related to lower costs. We believe that Alunorte is competitive in the alumina market because of the high quality of its alumina, its advantages in scale and technology, low conversion costs, its efficient port facilities, and the ongoing commitment of its shareholders to purchase a substantial portion of its annual production.

*Aluminum.* The global aluminum market is highly competitive. The world's largest producers are Alcoa, Rusal, Rio Tinto, Norsk Hydro, BHP Billiton and Chalco. As primary aluminum is a commodity, competition in the aluminum market is based primarily on the economics of transportation and the costs of production. We believe that Albras and Valesul are competitive in the aluminum market because of their relatively efficient and accessible port facilities, and their generally prevailing lower costs of production.



**Table of Contents****2.3 Copper****2.3.1 Operations copper**

We conduct our copper operations at the parent-company level in Brazil and through our subsidiary Vale Inco in Canada.

*Brazilian copper operations*

Our Sossego copper mine in Carajás, in the state of Pará, has two main copper ore bodies, Sossego and Sequeirinho. Its annual operating capacity is 14 million metric tons of run-of-mine, averaging 120,000 metric tons of copper contained in concentrate (30% grade) and 104,000 ounces of gold in concentrate. The copper ore is mined by open-pit method, and the run-of-mine is processed by means of standard primary crushing and conveying, SAG milling (a semi-autogenous mill that uses a large rotating drum filled with ore, water and steel grinding balls to transform the ore into a fine slurry), ball milling, copper concentrate flotation, tailings disposal, concentrate thickening, filtration and load out. We truck the concentrate to a storage terminal in Parauapebas and then transport it via the EFC railroad to the Ponta da Madeira maritime terminal in São Luís, in the state of Maranhão.

We constructed an 85-kilometer road to link Sossego to the Carajás air and rail facilities and a power line that allows us to purchase electrical power at market prices. We have a long-term energy supply contract with Eletronorte, a state-owned power generation company.

*Canadian copper operations*

In Canada, we recover copper in conjunction with our nickel operations, principally at Sudbury and Voisey's Bay. At Sudbury, we produce two intermediate copper products: copper concentrate and copper anodes. As we streamline our Sudbury operations to separate nickel and copper production streams, we expect to increase our production of copper concentrate (and proportionately decrease our production of copper anodes). At Sudbury, we also produce electrowon copper cathode as a by-product of our nickel refining operations. At Voisey's Bay, we produce copper concentrates.

**2.3.2 Production copper**

Mine	Type	Production for the year ended December 31,			Nominal capacity (1)
		2005	2006	2007	
(thousand metric tons)					
<i>Brazil:</i>					
Sossego	Open pit	107	117	118	120
<i>Canada:</i>					
Sudbury	Underground	126	109	113	117
Voisey's Bay	Open pit	4	28	42	42
Thompson	Underground	0	1	1	2
External (2)	N/A	0	11	9	10
Total		237	267	284	291

(1) These figures represent nominal capacity in 2007, which is equivalent to planned production for

2007.

- (2) We process copper at our facilities using feed purchased from unrelated parties. For 2005, Sudbury-source production includes such external-source production.

**2.3.3 Projects and exploration copper**

*Hydro-metallurgical plant.* At Sossego, we are building a plant, Usina Hidrometalúrgica de Carajás, to test the application of hydro-metallurgical technology for the industrial-scale processing of more complex copper minerals to produce copper cathode. We will use copper concentrate from our Sossego mine to feed this plant. We expect the plant to have annual production capacity of 10,000 metric tons of copper cathode. Operations are scheduled to begin in the first half of 2008. If proven to

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be efficient, after the estimated 21-month testing period, we believe this technology could be used to process the sulphide ore produced at the mines in the Carajás mineral province at a relatively low cost.

*Papomono.* We are investing in the Papomono project in the Coquimbo region of Chile, which has an estimated nominal production capacity of 18,000 metric tons per year of copper cathode. The estimated total cost of the project is US\$102 million. The completion of this project is scheduled for the second half of 2009.

*Salobo I.* Salobo I is the first phase of development of the Salobo copper deposit in Carajás. Nominal capacity for Salobo I is estimated at 100,000 metric tons per year of copper in concentrate, with 130,000 troy ounces of gold in concentrate per year. The concentrate will be processed using conventional smelting technology. The total estimated cost for this project is US\$1.152 billion. It is scheduled to be completed by the second half of 2010.

*Totten.* The Totten nickel mine in Sudbury, Ontario is expected to produce 11,200 metric tons of copper per year as a co-product. Completion is scheduled for the first half of 2011. The estimated total cost of the project is US\$362 million.

*I18.* This project is estimated to have nominal production capacity of 36,000 metric tons per year of copper cathode. We are awaiting the issuance of the final environmental permit in order to start construction.

We are engaged in copper mineral exploration primarily in Argentina, Chile, Democratic Republic of Congo, Mongolia, Peru, and the Philippines.

**2.3.4 Customers and sales copper**

Copper concentrate from Sossego is sold under medium-term contracts to copper smelters in South America, Europe and Asia. We have a long-term off-take agreement to sell the majority of copper concentrate from Salobo I. Vale Inco has long-term copper supply agreements with Xstrata Copper Canada for the sale of copper anode and copper concentrate. Copper in concentrate from Voisey's Bay is sold under medium-term contracts to customers in Europe. Electrowon copper from Sudbury is sold in North America under short-term sales agreements.

**2.4 PGMs and other precious metals**

As by-products of our Sudbury nickel operations in Canada, we recover significant quantities of platinum-group metals, as well as small quantities of gold and silver. We operate a processing facility in Port Colborne, Ontario, which produces PGMs, gold and silver intermediate products. We have a refinery in Acton, England, where we process our intermediate products, as well as feeds purchased from unrelated parties and toll-refined materials. In 2007, concentrates from our Sudbury operations supplied about 26% of our PGM production. The remaining portion was supplied by feed from unrelated parties (including purchased and toll-refined materials). Vale Inco's global marketing department sells our own PGMs and other precious metals, as well as products from unrelated parties and toll-refined products, on a sales agency basis.

The following table sets forth information on our precious metals production.

Mine (1)	Type	2005	2006	2007	Nominal capacity (2)
		(thousand troy ounces)			
Sudbury:					
Platinum	Underground	174	153	140	161
Palladium	Underground	222	209	191	191
Gold	Underground	81	78	75	75

(1) Production figures exclude precious metals

purchased from  
unrelated parties  
and toll-refined  
materials.

- (2) These figures  
represent  
nominal  
capacity in  
2007, which is  
equivalent to  
planned  
production for  
2007 (except for  
gold, for which  
nominal  
capacity is  
equivalent to  
actual  
production for  
2007).

**Table of Contents****2.5 Other non-ferrous minerals****2.5.1 Cobalt**

We recover significant quantities of cobalt as a by-product of our Canadian nickel operations. In 2007, we produced 1,304 metric tons of refined cobalt metal at our Port Colborne refinery and 728 metric tons of cobalt hydrate at our Thompson nickel operations in Canada. Our remaining cobalt production consisted of 495 metric tons of cobalt contained in intermediate products (such as nickel concentrates). We expect to increase our production of cobalt when we complete our Goro and Vermelho nickel projects, as the nickel laterite ore in these locations contains significant co-deposits of cobalt.

We sell cobalt on a global basis. Our cobalt metal, which is electro-refined at our Port Colborne refinery, has very high purity levels (99.8%) and consequently commands a price premium in the market. Cobalt metal is used in the production of various alloys, particularly for aerospace applications, as well as the manufacture of cobalt-based chemicals. Our cobalt hydrate, which we sell to a single customer, is used by chemical producers to make cobalt-based chemicals.

The following table sets forth information on our cobalt production.

Mine	Type	Production for the year ended December 31,			Nominal capacity (1)
		2005	2006 (metric tons)	2007	
Sudbury (2)	Underground	1,378	665	727	727
Thompson	Underground	282	411	179	286
Voisey s Bay	Open pit	N/A	680	1,239	1,246
External (2)	N/A		221	379	379
Total		1,660	1,977	2,524	2,638

(1) These figures represent nominal capacity in 2007, which is equivalent to planned production for 2007 (except for nominal capacity for Sudbury and external-source production, for which nominal capacity is equivalent to actual production for 2007).

(2) For 2005, Sudbury-sourced production

includes cobalt produced using feeds purchased from unrelated parties. For 2006 and 2007, such external-source production is stated as a separate line item and does not include unrelated-party tolling of feeds purchased from unrelated parties.

### 2.5.2 Kaolin

We conduct our kaolin business in Brazil, through the subsidiaries set forth in the following table:

Company	Location	Our share of capital		Partners
		Voting	Total	
			(%)	
CADAM S.A (CADAM)	Barcarena, Pará	100	61.48	Banco do Brasil and BNDES
Pará Pigmentos S.A. (PPSA)	Barcarena, Pará	85.57	86.17	Mitsubishi Corporation

CADAM and PPSA produce kaolin for paper coating. They also conduct research into other uses for kaolin products in order to develop a more diversified portfolio.

CADAM is located on the border of the states of Pará and Amapá, in the Amazon area in northern Brazil. CADAM's reserves are principally concentrated in the open-pit Morro do Felipe mine, in Vitoria do Jari, in the state of Amapá. The beneficiation plant and private port are situated on the west bank of the Jari River, in Munguba, in the state of Pará.

PPSA operates an open-pit mine, Rio Capim, and a beneficiation plant. These operations are linked to the land and port facilities in Barcarena, via a 180-kilometer pipeline. The beneficiated kaolin is pumped through a slurry pipeline. PPSA produces the following products: Century, Century S, Paraprint, Paraplate and Paralux. They are sold mainly in the European, Asian and North American markets.

The following table sets forth information on our kaolin production.

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Mine	Type	Production for the year ended December 31,		Nominal capacity	Recovery rate (1) (%)
		2006 (thousand metric tons)	2007		
<i>CADAM:</i>					
Morro do Felipe	Open Pit	755	714	844	51.2
<i>PPSA:</i>					
Rio Capim	Open Pit	597	639	672	28.8
Total		1,352	1,354	1,516	

(1) Total recovery rate.

**2.5.3 Potash**

We conduct potash operations in Brazil at the parent company level. We lease the only potash mine in Brazil (in Rosario do Catete, in the state of Sergipe) from Petrobras - Petróleo Brasileiro S.A., the Brazilian state-owned oil company. The lease, signed in 1991, became effective in 1992 for a period of 25 years. All sales from the Taquari-Vassouras mine are to the Brazilian market.

The following table sets forth information on our potash production.

Mine	Type	Production for the year ended December 31,			Nominal capacity	Recovery rate (%)
		2005	2006	2007 (thousand metric tons)		
Taquari-Vassouras	Underground	641	731	671	850	87.5

**2.5.4 Projects - other non-ferrous minerals**

*Bayovar.* This project, in Bayovar, Peru, consists of an open-pit phosphate mine with nominal production capacity of 3.9 million metric tons per year and a maritime terminal. Completion is expected in 2010. The estimated total cost of this project is US\$479 million.

**3 Coal****3.1 Operations - coal**

We produce thermal and metallurgical coal through our subsidiary Vale Australia, which operates coal assets in Australia through wholly-owned companies and unincorporated joint ventures, and we have minority interest in two Chinese companies, as set forth in the following table.

Company	Location	Our share (%)	Partners
Vale Australia			
Integra Coal	Hunter Valley, New South Wales, Australia	61.2	NSC, JFE, Posco, Toyota
Carborough Downs	Bowen Basin, Queensland, Australia	80.0	NSC, JFE, Posco, Tata
Isaac Plains	Bowen Basin, Queensland, Australia	50.0	Aquila

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Broadlea	Bowen Basin, Queensland, Australia	100.0	
Longyu	Henan Province, China	25.0	Yongcheng Coal & Electricity (Group) Co. Ltd., Baosteel and other minority shareholders
Yankuang	Shandong Province, China	25.0	Yankuang Group, Itochu

Henan Longyu Energy Resources Co., Ltd. ( Longyu ) has annual production capacity of 4.2 million metric tons of coal and other related products and Shandong Yankuang International Coking Company Ltd. ( Yankuang ), a metallurgical coke plant has annual production capacity of 2 million metric tons of coke and 200,000 metric tons of methanol.



**Table of Contents****3.2 Production coal**

<b>Joint venture</b>	<b>Mine Type</b>	<b>Production for the year ended December 31, 2007 (1)</b> (thousand metric tons)
<i>Thermal coal:</i>		
Integra Coal (2)	Opencut	255
Isaac Plains (3)	Opencut	171
Broadlea	Opencut	14
Total thermal coal		440
<i>Metallurgical coal:</i>		
Integra Coal (2)	Underground and opencut	1,214
Isaac Plains (3)	Opencut	249
Carborough Downs (4)	Underground	269
Broadlea	Opencut	32
Total metallurgical coal		1,764

- (1) We acquired AMCI HA, the previous owner of these mines, in April 2007. 2007 figures include production from May to December 2007.
- (2) We own 61.2% of Integra Coal and these figures relate to our equity.
- (3) We own 50% of Isaac Plains and these figures relate our equity.
- (4) We own 80% of Carborough Downs and these figures relate to our equity.

Company	Mine Type	Nominal capacity (million metric tons)
Integra Coal (1)	Underground and opencut	2.75
Isaac Plains (2)	Opencut	1.4
Carborough Downs (3)	Underground	3.36
Broadlea	Opencut	0.8
Total		8.31

(1) We own 61.2% of Integra Coal and these figures relate to our equity.

(2) We own 50% of Isaac Plains and these figures relate our equity.

(3) We own 80% of Carborough Downs and these figures relate to our equity.

### 3.3 Projects and exploration – coal

*Moatize.* We have obtained all of the required licenses from the Mozambique government for the construction of the Moatize mine, which will have nominal production capacity of 11 million metric tons per year, of which 8.5 million metric tons per year will be metallurgical coal and 2.5 million metric tons per year will be thermal coal. The estimated total cost of this project is US\$1.398 billion. We are awaiting the conclusion of negotiations involving the railroad transportation and port handling services to start the construction. We estimate that the construction will take 36 months.

*Carborough Downs.* This project will increase the nominal capacity of the Carborough Downs mine to 4.8 million metric tons per year. The longwall operations are scheduled to start in the second half of 2009. Meanwhile, the mine is producing up to 1.0 million metric tons per year via continuous miners in the development of gate roads and inventory of longwall panels. The project requires an estimated total investment of US\$330 million.

We are currently seeking opportunities for greenfield mineral exploration for coal in Australia, Colombia, Mongolia and Mozambique.

### 3.4 Customers and sales – coal

Our coal sales are primarily focused in East Asia. In 2007, 60% of our coal sales were made to Japanese steel mills and power utilities. We also sell coal to customers in South Korea, India, Taiwan, China, Pakistan and Brazil. In 2007, our Chinese coal joint ventures directed their sales mainly to the Chinese domestic market.



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Our Queensland operations commenced production in late 2006. In 2007, we were engaged in trial shipments to a number of different countries. Aided by a strong market for metallurgical coal, we were able to market various types of coal from our Isaac Plains, Carborough Downs and Broadlea mines in a number of target markets.

**3.5 Competition coal**

The global coal industry, which is primarily comprised of the markets for metallurgical coal and thermal coal, is highly competitive. Continued growth in steel demand, especially in Asia, will continue to underpin strong demand for metallurgical coal. With major port (and often rail) constraints in the short term in some of the countries in which major suppliers are located, we expect new metallurgical coal availability to be limited. Given these factors and a number of new coke batteries under development, we expect continued favorable market conditions.

The thermal coal market is the most rapidly growing segment of the global coal industry. The global seaborne thermal coal market has significantly expanded in recent years. Growth in thermal coal demand is closely related to growth in electricity consumption, which will continue to be driven by global economic growth, particularly from emerging markets economies. The cost of fuel is typically the largest variable cost involved in electricity generation and, on an energy basis, coal is currently the cheapest fossil fuel for this purpose.

Competition in the coal industry is based primarily on the economics of production costs, coal quality, and transportation costs. We believe that our operations and project pipeline are competitive, and our key competitive strengths include the strategic geographic location of our current and future supply bases and our production cash costs relative to several other coal producers.

Major participants in the coal seaborne market are Xstrata, BHP Billiton, PT Bumi, Anglo Coal, Drummond, Rio Tinto and Shenhua.

**4 Logistics**

We have developed our logistics business based on the transportation needs of our mining operations, and it also provides transportation services for customers' products and for passengers. We conduct logistics businesses at the parent-company level, through subsidiaries and through joint ventures, as set forth in the following table.

Company	Business	Our share of capital		Partners
		Voting (%)	Total (%)	
Vale	Railroad (EFVM, EFC, FNS), port and maritime terminal operations	N/A	N/A	N/A
FCA	Railroad operations	100%	99.9%	Former employees of Rede Ferroviaria Federal S.A.
MRS	Railroad operations	37.9%	41.5%	CSN, Usiminas and Gerdau
CPBS	Port and maritime terminal operations	100%	100%	N/A
Log-In (1)	Port and maritime terminal operations and shipping activities	31.3%	31.3%	Mitsui &Co. and several institutional investors

(1) An initial public offering of shares of Log-In (previously Navegação Vale do Rio Doce, or Docenave, the majority shareholder of TVV and DCNDB, prior to the merger of

the latter into  
Log-In) was  
conducted in  
June 2007.

#### **4.1 Railroads**

*Vitória a Minas railroad ( EFVM )*. The EFVM railroad links our Southeastern System mines in the Iron Quadrangle region in the Brazilian state of Minas Gerais with the Tubarão Port, in Vitória, in the Brazilian state of Espírito Santo. We operate this 905-kilometer railroad under a 30-year renewable concession, which expires in 2027. The EFVM railroad consists of two lines of track extending for a distance of 601 kilometers to permit continuous railroad travel in opposite directions, and single-track branches of 304 kilometers. Industrial manufacturers are located in this area and major agricultural regions are also accessible to it. The EFVM railroad has a daily capacity of 312,000 metric tons of iron ore. In 2007, the EFVM railroad carried a total of 77.3 billion ntk of iron ore and other cargo, of which 18 billion ntk, or 23%, consisted of cargo transported for customers, including iron ore for Brazilian customers. The EFVM railroad also carried approximately 1.1 million passengers in 2007. In 2007, we had a fleet of 347 locomotives and 19,937 wagons at EFVM.

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The principal cargo of the EFVM railroad consists of:

iron ore and iron ore pellets, carried for us and customers;

steel, coal, pig iron, limestone and other raw materials carried for customers with steel mills located along the railroad;

agricultural products, such as soybeans, soybean meal and fertilizers; and

other general cargo, such as building materials, pulp, fuel and chemical products.

We charge market rates for customer freight, including iron ore pellets originating from joint ventures and other enterprises in which we do not have a 100% equity interest. Market rates vary based on the distance traveled, the type of product transported and the weight of the freight in question, and are regulated by the Brazilian transportation regulatory agency (*Agência Nacional de Transportes Terrestres*, or ANTT).

*Carajás railroad ( EFC )*. We operate the EFC railroad under a 30-year renewable concession, which expires in 2027. This railroad, located in the Northern System, starts at our Carajás iron ore mines in the Brazilian state of Pará, and extends 892 kilometers to our Ponta da Madeira maritime terminal complex facilities located near the São Luís Port in the Brazilian state of Maranhão. The EFC railroad consists of one line of track, with spur tracks and turnouts to permit the passage of trains in opposite directions. The EFC railroad has a daily capacity of 255,000 metric tons of iron ore. In 2007, the EFC railroad carried a total of 84.3 billion ntk of iron ore and other cargo, of which 7.2 billion ntk, or 8% consisted of cargo transported for customers, including iron ore for Brazilian customers. The EFC railroad also carried approximately 353,000 passengers in 2007. The main cargo of the EFC railroad consists of iron ore, principally carried for us. In 2007, we had a fleet of 183 locomotives and 9,901 wagons at EFC. In 2008, we also intend to begin operations of the largest capacity train in Latin America. This train will have 330 cars, measure 3.2 kilometers and weigh 41,900 gross metric tons when loaded.

*Ferrovias Norte-Sul railroad ( FNS )*. In October 2007, we won the auction for the subconcession for commercial operation for 30 years of a 720-kilometer segment of the FNS railroad, in Brazil. Since 1996, we have operated a segment of the FNS, which connects to the EFC railroad, enabling access to the port of Itaqui, in São Luís, where our Ponta da Madeira maritime terminal is located. A 213.2-kilometer extension is currently under construction by the concession owner and is scheduled to be completed in December 2008. A state-owned company is required to complete a new segment of 148.3 kilometers by December 2009. This project will create a new corridor for the transportation of general cargo, mainly for the export of soybeans, rice and corn produced in the center-northern region of Brazil.

*Ferrovias Centro-Atlântica ( FCA )*. Our subsidiary FCA operates the central-east regional railway network of the Brazilian national railway system under a 30-year renewable concession, which expires in 2026. The central east network has approximately 7,000 kilometers of track extending into the states of Sergipe, Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro and Goiás and Brasília, the Federal District of Brazil. It connects with our EFVM railroad near the cities of Belo Horizonte, in the state of Minas Gerais and Vitória, in the state of Espírito Santo. FCA operates on the same track gauge as our EFVM railroad and provides access to the Santos Port in the state of São Paulo. In 2007, the FCA railroad transported a total of 11.6 billion ntk of cargo for customers. In 2007, we had a fleet of 477 locomotives and 11,794 wagons at FCA.

*MRS Logística S.A. ( MRS )*. The MRS railroad, which transported 52.7 billion ntk in 2007, is 1,674 kilometers long and links the Brazilian states of Rio de Janeiro, São Paulo and Minas Gerais. It is operated under a 30-year renewable concession granted in 1996. Our MRS stake has been the subject of administrative proceedings at the Brazilian agency that regulates ground transportation, ANTT, and the Brazilian antitrust authority, CADE. See *Item 4. Information on the company Regulatory matters Railroad regulation* and *Item 8. Financial information Legal proceedings CADE proceedings*.

**Table of Contents****4.2 Ports and maritime terminals**

We operate a port and six maritime terminals principally as a means to complete the delivery of our iron ore and iron ore pellets to bulk carrier vessels serving the seaborne market. See *Item 4. Information on the company Lines of business Ferrous minerals Operations iron ore pellets*. We also use our port and terminals to handle customers' cargo. In 2007, 9% of the cargo handled by our port and terminals represented cargo handled for customers.

*Tubarão Port.* The Tubarão Port, which covers an area of approximately 18 square kilometers, is located near the Vitória Port in the Brazilian state of Espírito Santo. The iron ore maritime terminal located in this area has two piers. Pier I can accommodate two vessels at a time, one of up to 170,000 DWT on the southern side and one of up to 200,000 DWT on the northern side. Pier II can accommodate one vessel of up to 365,000 DWT at a time, limited at 20 meters draft plus tide. In Pier I there are two ship loaders, which can load up to a combined total of 14,000 metric tons per hour. In Pier II there are two ship loaders that work alternately and can each load up to 16,000 metric tons per hour. In 2007, 101 million metric tons of iron ore and iron ore pellets were shipped through the terminal for us. Praia Mole Terminal, also located in the Tubarão Port, is principally a coal terminal and handled 12 million metric tons in 2007. We operate a grain terminal called Terminal de Produtos Diversos, in the Tubarão area, which handled 6 million metric tons of grains and fertilizers in 2007. We also operate a bulk liquid terminal that handled 1.2 million metric tons in 2007.

*Ponta da Madeira maritime terminal.* The Ponta da Madeira maritime terminal is located near the Itaquí Port in the Brazilian state of Maranhão. The terminal facilities can accommodate three vessels. Pier I can accommodate vessels displacing up to 420,000 DWT. Pier II can accommodate vessels of up to 155,000 DWT. The two berths have a maximum loading rate of 16,000 tons per hour at Pier I and 8,000 tons per hour at Pier II. Pier III has two berths, can accommodate vessels of up to 220,000 DWT and has a maximum loading rate of 8,000 metric tons per hour in each berth. Cargo shipped through our Ponta da Madeira maritime terminal consists principally of our own iron ore production. Other cargo includes manganese ore and copper concentrate produced by us and pig iron and soybeans for unrelated parties. In 2007, 81.2 million metric tons were handled through the terminal for us and 4.7 million metric tons for customers.

*Itaguaí maritime terminal - Cia. Portuária Baía de Sepetiba ( CPBS ).* CPBS is a wholly-owned subsidiary that operates the Itaguaí terminal, in the Sepetiba Port, in the Brazilian state of Rio de Janeiro. Itaguaí's maritime terminal has a pier that allows the loading of ships up to 18.1 meters and up to 230,000 DWT. In 2007, the terminal unloaded approximately 25.2 million metric tons of iron ore. From December 2007 to February 2008, Itaguaí operated with limited capacity as a result of an accident with a ship in the terminal. It resumed operations at full capacity in the last week of February 2008.

*Guaíba Island maritime terminal.* MBR has its own maritime terminal on Guaíba Island in the Sepetiba Bay, in the Brazilian state of Rio de Janeiro. The iron ore terminal has a pier that allows the loading of ships of up to 300,000 DWT. In 2007, the terminal unloaded approximately 43.9 million metric tons of iron ore.

*Inácio Barbosa maritime terminal ( TMIB ).* We operate the Inácio Barbosa maritime terminal, located in the Brazilian state of Sergipe. The terminal is owned by Petrobras. Vale and Petrobras entered into an agreement in December 2002, which allows Vale to operate this terminal for a period of 10 years. In 2007, 1.7 million metric tons of fuel and agricultural and steel products were shipped through TMIB.

*Paul Terminal.* We ceased to operate the Paul Terminal in April 2007, following the expiration of the operating lease.

**4.3 Shipping**

We operate in two distinct shipping areas: seaborne dry bulk shipping and tug boat services.

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The following table sets forth information on the volume of cargo that our seaborne dry bulk shipping service carried for the periods indicated.

Cargo	Cargo volume for the year ended December		
	2005	31, 2006 (thousand metric tons)	2007
Iron ore:			
Vale	1,981	160	1,324
Customers	148	148	
Coal		0	147
Other	2,196	2,243	
Total	4,325	2,551	1,471

We operate three capesize vessels, which have been fully dedicated to perform shuttle services from Brazil to China since May 2007. In May 2007, we entered into long-term freight contracts to develop a dedicated shuttle service from Brazil to China using these vessels. We expect this service to enhance our ability to offer our products in the Chinese market at competitive prices and to increase our market share in China and the global seaborne market.

In late 2006, we restructured our intermodal shipping business, which was conducted through subsidiaries of Docenave. We formally changed Docenave's name to Log-In in early 2007 and subsequently conducted an initial public offering of Log-In's shares in June 2007. Log-In is now listed on the Novo Mercado segment of the BOVESPA. Log-In offers port handling and container transportation services, by sea or rail, as well as container storage. It has a fleet of seven ships for coastal shipping, a container terminal (Terminal Vila Velha, or TVV) and two multimodal terminals. In 2007, Log-In's coastal shipping service transported 79,488 twenty-foot equivalent units (teus), TVV handled 275,737 teus and its express train service moved 44,787 teus.

We also operate a fleet of 24 tug boats (13 owned and 11 chartered) in the ports of Vitória (in the Brazilian state of Espírito Santo), Trombetas (in the Brazilian state of Pará), São Luís (in the Brazilian state of Maranhão) and Aracaju (in the Brazilian state of Sergipe).

**4.4 Projects logistics**

*Northern Corridor and Southern Corridor projects.* We are investing in our railroads and ports in order to increase our logistics capacity in our integrated iron ore systems. We are investing to increase the capacity of the EFC and EFVM railroads and are expanding the capacity of the Ponta da Madeira and Tubarão ports. The estimated total cost of the Northern Corridor project is US\$956 million, and the estimated total cost of the Southern Corridor project is US\$553 million. The conclusion of these projects is scheduled for the first half of 2009.

*Litorânea Sul railroad.* The Litorânea Sul railroad will be 165-kilometers long and will provide access to the port of Ubu in the state of Espírito Santo, to the south of Tubarão, where a new industrial zone is being created and where the Baosteel CSV steel slab plant, a project in which we have invested, will be located. The estimated total cost of this project, which is subject to board approval, is US\$414 million. The conclusion of this project is scheduled for 2011.



**Table of Contents****5 Other investments****5.1 Steel**

Our steel business consists of a pig iron operation conducted through our Ferro-Gusa Carajás unit, in Northern Brazil, and we also have investments in two steel companies, as set forth in the following table. We also have investments in three joint ventures to produce steel slab in Brazil, in order to create additional demand for our iron ore.

Company	Location	Our share of capital		Partners
		Voting (%)	Total	
Vale	Brazil	N/A	N/A	N/A
CSI	California, United States	50	50	JFE Steel
Usiminas	Brazil	5.89	2.9	Nippon, Usiminas employees, Previ, Votorantim, Camargo Correa and others

*Ferro-Gusa Carajás.* Our pig iron operation was conducted through our subsidiary Ferro-Gusa Carajás S.A. ( FGC ) until April 2008, when FGC was merged into Vale. We utilize two conventional mini-blast furnaces to produce approximately 350,000 metric tons of pig iron per year, using iron ore from our Carajás mines in northern Brazil. The charcoal source is exclusively from eucalyptus trees grown in a cultivated forest of 82,000 acres, with the total project encompassing approximately 200,000 acres.

*California Steel Industries.* California Steel Industries ( CSI ) is a flat rolled steel producer located in the United States. CSI produces approximately 1.8 million metric tons of flat steel per year.

*Usiminas.* In the first half of 2007, we sold Usiminas shares in a public offering for an aggregate of US\$728 million. We still own 2.9% of Usiminas total capital stock and are a party to a shareholders agreement. Usiminas is a large producer of steel in the Brazilian states of Minas Gerais and São Paulo. Its production facilities have nominal annual production capacity of 9.5 million metric tons of crude steel.

*Joint ventures for steel slab production*

*ThyssenKrupp-CSA Siderúrgica do Atlântico Ltda.* We have a minority stake in an integrated steel slab plant in the Brazilian state of Rio de Janeiro, which is currently under construction. Our total investment will be US\$420 million, corresponding to a 10% stake in the joint venture. Start-up is scheduled for the first half of 2009.

*Baosteel CSV.* In October 2007, we signed an agreement with Baosteel Group Corporation, the largest steel producer in China, to develop an integrated steel slab plant in Brazil, in the state of Espírito Santo. Start-up of this project, which is subject to board approval, is scheduled for 2012. When the plant is completed, we expect to have a 20% stake in the joint venture. Our total investment has not yet been determined.

*Companhia Siderúrgica de Pecém CSP.* In November 2007, we signed a memorandum of understanding with Dongkuk Steel Mill Co. ( Dongkuk ), one of the largest steel producers in South Korea, for the construction of a steel slab plant in the Brazilian state of Ceará with initial production capacity of 2.5 million metric tons per year with the possibility for expansion to 5 million metric tons per year. In April 2008, we signed a new memorandum of understanding with Dongkuk and JFE Steel Corporation ( JFE ) to conduct a feasibility study to analyze the construction of a larger steel slab plant, with initial production capacity of 5 to 6 million metric tons per year. Depending on the outcome of the feasibility study, JFE will either participate in the project as a majority shareholder or not at all. In the latter case, we and Dongkuk will construct the plant as contemplated in the November memorandum of understanding. This project is subject

to board approval, and our total investment has not yet been determined.

**Table of Contents****5.2 Energy investments***Brazil*

Energy management and efficient supply in Brazil are priorities for us, given the uncertainties associated with changes in the regulatory environment, and the risk of rising electricity prices and electrical energy shortages (as experienced in Brazil in the second half of 2001). We currently have seven hydroelectric power plants in operation and one under construction in Brazil. We plan to use the electricity produced by these projects for our internal needs. In the first quarter of 2007, Capim Branco II began operations, supplying a portion of our electricity consumption needs in southeastern Brazil. As a large consumer of electricity, we expect that investing in power projects will help to reduce costs and protect us against energy price volatility. However, we may experience construction delays in certain generation projects due to environmental and regulatory issues, which may lead to higher costs.

We also hold 43.85% of a consortium that has a concession to build the Santa Isabel hydroelectric power plant on the Araguaia River, Brazil. We continue our efforts to obtain the necessary environmental license to begin its construction.

We are developing the following energy projects in Brazil:

*Barcarena thermal power plant.* In the second half of 2008, we plan to start the construction of a coal-fired thermal power plant in Brazil with capacity of 600 MW. Completion is scheduled for the second half of 2010. The estimated total investment in the project is US\$898 million.

*Estreito hydroelectric power plant.* In the second half of 2007, we started the construction of the Estreito hydroelectric power plant, located on the Tocantins River, on the border of the Brazilian states of Maranhão and Tocantins. The plant will have an installed capacity of 1,087 MW. Completion is targeted for the second half of 2010. We have a 30% stake in the consortium that will build and operate the plant. Our estimated share of the total investment is US\$514 million.

*Natural gas exploration.* In September 2007, we entered into a memorandum of understanding with Shell Brasil Ltda ( Shell ), to jointly evaluate opportunities and develop partnerships in order to meet our energy needs. As a result of this partnership, we are participating in an exploration block in the Espírito Santo basin, off the southeastern coast of Brazil. In November 2007, we acquired for US\$17.5 million the right to explore nine gas exploration blocks in different regions in Brazil, in an auction held by the Brazilian regulatory agency for the oil industry, ANP (*Agência Nacional do Petróleo, Gás Natural e Biocombustíveis*). We intend to use any natural gas discovered to meet our energy needs.

*Canada*

In 2007, our wholly-owned and operated hydroelectric power plants in Sudbury generated 16% of the electricity requirements of our Sudbury operations. The power plants consist of five separate generation stations with an installed generator nameplate capacity of approximately 56 MW. The output of the plants is limited by water availability, as well as constraints imposed by a water management plan regulated by the provincial government. Over the course of 2007, the power system operator distributed electrical energy at the rate of approximately 198 MW to all surface plants and mines in the Sudbury area.

Low-cost energy is available from purchased hydroelectric power at our Thompson operations. Energy requirements for production from our Canadian sulphide ores are generally about one-fifth of the energy required to process lateritic ores.

*Indonesia*

Energy costs are a significant component of our nickel production costs for the processing of lateritic ores at our PT Inco operations in Indonesia. Virtually all of PT Inco's electric furnace power requirements are supplied at low-cost by its two hydroelectric power plants on the Larona River, Larona, generating an average of 165 MW, and Balambano, generating an average of 110 MW. In 2007, PT Inco installed 32 diesel generators in order to supplement its hydroelectric power supply with a source of energy that is not subject to hydrological factors. The new generators have the capacity to provide 32 MW of power.

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We are building the Karebbe hydroelectric power generating plant on the Larona River. Karebbe will be the third hydroelectric power plant built by PT Inco, and it is intended to reduce production costs and make possible the production of 90,718 metric tons per year of nickel in matte. The estimated total cost of Karebbe is US\$252 million, and start-up is scheduled for the first half of 2011.

*New Caledonia*

Goro entered into an electricity supply agreement with the local public provider of electricity (Enercal) in 2004. The provision of electricity under this agreement was due to begin in January 2008, but has since been delayed. This agreement governs the provision of at least 50 MW of power to the Goro project. The term of the agreement is 25 years, with options to renew for five additional five-year terms.

**RESERVES**

**Presentation of information concerning reserves**

The estimates of proven and probable ore reserves at our mines and projects and the estimates of mine life included in this annual report have been prepared by our staff of experienced geologists and engineers or independent consultants and calculated in accordance with the technical definitions required by the U.S. Securities and Exchange Commission, or the SEC. Under the SEC's Industry Guide 7:

Reserves are the part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination.

Proven (measured) reserves are reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, working or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.

Probable (indicated) reserves are reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

We periodically revise our reserve estimates when we have new geological data, economic assumptions or mining plans. During 2008, we are performing an analysis of our reserve estimates for certain projects, which will be reflected in new estimates as of December 31, 2008. Reserve estimates for each operation are for 100% of the operation and assume that we either have or will obtain all of the necessary rights to mine, extract and process ore reserves at each mine. Where we own less than 100% of the operation, reserve estimates have not been adjusted to reflect our ownership interest. For a description of risks relating to reserves and reserve estimates, see *Item 3. Key information Risk factors*.

***Iron ore reserves***

In preparing iron ore reserve data, we used price assumptions that did not exceed the following three-year (2005 to 2007) historical average prices for iron ore:

Iron ore Southeastern System fines (SSF) reference price to Asia: US\$0.6443 per Fe unit

Iron ore Carajás fines (CJF) reference price to Asia: US\$0.6541 per Fe unit

Our iron ore reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing.

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	<b>Iron ore Proven</b>		<b>Southeastern System mines (1) Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>Itabira mines</i>						
Conceição	302.4	53.2	37.7	62.3	340.0	54.2
Minas do Meio	374.7	53.8	179.4	56.1	554.2	54.5
<i>Centrais mines</i>						
Água Limpa / Cururu	19.2	45.2	25.3	45.6	44.5	45.4
Gongo Soco	68.1	65.2	9.0	62.5	77.1	64.9
Brucutu	320.6	52.7	372.0	50.3	692.6	51.4
Baú			37.1	55.7	37.1	55.7
Maquiné	145.2	60.3	133.5	56.2	278.7	58.3
Andrade	109.9	59.6	14.3	54.7	124.2	59.1
<i>Mariana mines</i>						
Alegria	192.5	50.5	56.4	48.2	248.9	50.0
Fábrica Nova	567.7	47.2	323.0	44.1	890.7	46.1
Fazendão	254.5	50.1	94.5	49.7	349.0	50.0
Timbopeba			73.5	55.2	73.5	55.2
<i>Urucum</i>						
Mina de Ferro			59.7	60.9	59.7	60.9
Total Southeastern System	2,354.8	52.3	1,415.4	51.3	3,770.2	51.9

(1) Tonnage is stated in millions of metric tons of wet run-of-mine. Grade is % of Fe. Approximate drill hole spacings used to classify the reserves were: 100m x 100m to proven reserves and 200m x 200m to probable reserves.

<i>Itabira mines</i>	<b>Iron ore</b>	<b>Southeastern System mines</b>		<b>Vale interest (%)</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	

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Conceição	Open pit	1957	2023	100
Minas do Meio	Open pit	1976	2023	100
<i>Centrais mines</i>				100
Água Limpa / Cururu	Open pit	2000	2013	50.0
Gongo Soco	Open pit	2000	2013	100
Brucutu	Open pit	1994	2027	100
Baú	Open pit		2029	100
Maquiné	Open pit		2029	100
Andrade(1)	Open pit	2005	2027	100
<i>Mariana mines</i>				
Alegria	Open pit	2000	2029	100
Fábrica Nova	Open pit	2005	2023	100
Fazendão	Open pit	1976	2032	100
Timbopeba	Open pit	1984	2008	100

(1) We entered into a 40-year contract with Companhia Siderúrgica Belgo-Mineira to lease the Andrade mine.

	Iron ore		Southern System mines (1)		Total	
	Proven Tonnage	Grade	Probable Tonnage	Grade	Tonnage	Grade
<i>Oeste mines</i>						
Córrego do Feijão	35.7	67.0	3.5	63.1	39.2	66.6
Segredo/João Pereira	301.0	50.4	165.0	49.8	466.0	50.2
<i>MBR System</i>						
<i>Pico Complex</i>						
Pico/Sapicado/Ga linheiro	251.0	54.2	341.1	53.9	592.1	54.0
<i>Vargem Grande Complex</i>						
Tamanduá	57.4	66.8	17.6	65.5	75.1	66.5
Capitão do Mato	74.6	66.3	46.7	66.1	121.4	66.2
Abóboras	12.5	66.2	14.0	65.9	26.5	66.1
<i>Paraopeba Complex</i>						
Jangada	41.0	66.5	41.6	66.0	82.6	66.2

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Capão Xavier	79.1	65.8	69.9	65.0	149.0	65.4
Mar Azul			30.2	56.6	30.2	56.6
Total Southern System	852.3	57.1	729.7	56.2	1,582.0	56.7

(1) Tonnage is stated in millions of metric tons of wet run-of-mine. Grade is % of Fe. Approximate drill hole spacings used to classify the reserves were: 100m x 100m to proven reserves and 200m x 200m to probable reserves

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	Iron ore Southern System mines			Vale interest (%)
	Type	Operating since	Projected exhaustion date	
<i>Oeste mines</i>				
Córrego do Feijão	Open pit	2003	2014	100
Segredo/João Pereira <i>MBR System</i> <i>Pico Complex</i>	Open pit	2003	2025	100
Pico/Sapicado/ Galinheiro <i>Vargem Grande Complex</i>	Open pit	1942	2030	100
Tamanduá	Open pit	1993	2016	100
Capitão do Mato	Open pit	1997	2016	100
Abóboras <i>Paraopeba Complex</i>	Open pit	2004	2024	100
Jangada	Open Pit	2001	2017	100
Capão Xavier	Open pit	2004	2021	100
Mar Azul	Open pit	2006	2008	100

	Iron ore Proven		Northern System mines (1) Probable		Total	
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade
<i>Serra Norte</i>						
N4W	430.0	66.4	74.9	66.1	504.8	66.4
N4E	233.3	66.8	168.8	66.6	402.2	66.7
N5-W	59.5	66.5	217.9	66.2	277.4	66.3
N5E	7.9	67.2	29.5	67.2	37.5	67.2
N5E-N	14.9	65.8	10.8	66.1	25.7	65.9
N5S	323.4	67.5	283.7	67.4	607.1	67.5
Serra Leste	55.7	66.2	5.2	66.4	60.9	66.2
Total Northern System	1,124.7	66.8	790.8	66.8	1,915.6	66.8

(1) Tonnage is stated in millions of metric tons of wet run-of-mine.



Grade is % of Fe.  
Approximate drill hole spacings used to classify the reserves are: 100m x 100m to proven reserves and 200m x 200m to probable reserves.

	Iron ore	Northern System mines		Vale interest (%)
	Type	Operating since	Projected exhaustion date	
<i>Serra Norte</i>				
N4W	Open Pit	1994	2020	100
N4E	Open pit	1984	2017	100
N5-W	Open pit	1998	2023	100
N5E	Open pit	1998	2017	100
N5E-N	Open pit	2003	2016	100
N5S	Open pit		2025	100
<i>Serra Leste</i>	Open pit		2039	100

	Iron ore		Total reserves for all systems (1)		Total	
	Proven	Grade	Probable	Grade	Tonnage	Grade
Total Southeastern System	2,354.8	52.3	1,415.4	51.3	3,770.2	51.9
Total Southern System	852.3	57.1	729.7	56.2	1,582.0	56.7
Total Northern System	1,124.7	66.8	790.8	66.8	1,915.6	66.8
Total Vale	4,331.8	57.0	2,935.9	56.7	7,267.8	56.9

(1) Tonnage is stated in millions of metric tons of wet run-of-mine. Grade is % of Fe.



**Table of Contents***Changes in iron ore reserves: 2007 versus 2006*

Our iron ore reserve estimates decreased from 7,619.3 to 7,267.8 million metric tons. The decrease reflects mining production during the year and the build-up of intermediate and buffer ore stocks, which are composed of ore that has been mined out of in situ but has not been fed to the processing plants. These stocks may be partially reclaimed during operations and are not declared as ore reserves.

**Manganese ore reserves**

In preparing manganese reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average price for manganese of US\$145.06 per metric ton (published by Commodities Research Unit). We have adjusted ore reserve estimates for extraction losses and metallurgical recoveries during extraction.

	<b>Manganese ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
Azul			42.0	35.2	42.0	35.2
Urucum			7.4	45.3	7.4	45.3
Morro da Mina	6.0	23.1	3.2	23.0	9.2	23.1
Total	6.0	23.1	52.5	35.9	58.5	34.6

(1) Tonnage is stated in millions of metric tons of wet run-of-mine. Grade is % of Mn.

	<b>Manganese ore mines</b>			<b>Vale interest (%)</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	
Azul	Open pit	1985	2017	100
Urucum	Underground	1976	2020	100
Morro da Mina	Open pit	1902	2030	100

*Changes in manganese ore reserves: 2007 versus 2006*

Our manganese ore reserve estimates decreased from 60.0 to 58.6 million metric tons in 2007, primarily reflecting mining depletion and, to a lesser extent, the build-up of buffer run-of-mine stockpiles, which are mined out of in situ reserves but have not been fed to the plants. These stocks may be partially reclaimed during operations and are not declared as ore reserves.

**Nickel ore reserves**

In preparing nickel reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average LME spot price for nickel of US\$25,337 per metric ton. Our nickel reserve estimates are of in-place material after adjustments for mining depletion and mining losses (or screening and drying in the cases of Sulawesi, Goro and Vermelho) and recoveries, with no adjustments made for metal losses due to processing.

<b>Nickel ore reserves (1)</b>		
<b>Proven</b>	<b>Probable</b>	<b>Total</b>

	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>Canada:</i>						
Sudbury	80.6	1.17	79.7	1.17	160.3	1.17
Thompson	10.5	1.99	13.7	1.68	24.1	1.82
Voisey s Bay	25.5	3.04	3.4	0.66	28.9	2.76
<i>Indonesia(2):</i>						
Sulawesi	80.4	1.80	80.5	1.76	160.9	1.78
<i>New Caledonia(2):</i>						
Goro	96.2	1.34	23.7	2.01	120.0	1.48
<i>Brazil:</i>						
Vermelho	119.3	1.25	4.3	1.29	123.6	1.25
Onça Puma	55.1	1.79	27.6	1.62	82.7	1.73
<b>Total</b>	<b>467.6</b>	<b>1.53</b>	<b>232.9</b>	<b>1.54</b>	<b>700.6</b>	<b>1.53</b>

(1) Tonnage is stated in millions of dry metric tons. Grade is % of nickel.

(2) We have rights to other properties in Indonesia, New Caledonia and in other locations, which have not yet been fully explored.

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	<b>Nickel ore mines</b>			<b>Vale interest</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	<b>(%)</b>
<i>Canada:</i>				
Sudbury	Underground	1885	2044	100
Thompson	Underground	1960	2020	100
Voisey s Bay	Open pit	2005	2019	100
<i>Indonesia:</i>				
Sulawesi	Open cast	1978	2039	61.0
<i>New Caledonia:</i>				
Goro	Open pit		2036	74.0
<i>Brazil:</i>				
Vermelho	Open pit		2050	100
Onça Puma	Open pit		2039	100

*Changes in nickel ore reserves: 2007 versus 2006*

Reserves at our Sudbury operations decreased from 175 to 160.3 million metric tons, after mining depletion, while nickel grades remained similar. The change was essentially due to reclassification of mineral reserves to mineral resources at the non-operating Murray mine, which was partially offset by exploration additions and re-evaluations at our operating mines.

Reserves at our Thompson operations remained stable at 24.1 million metric tons. Mining depletion was partially offset by ore reserve additions resulting from exploration and mine plan re-evaluations. The estimated average nickel grade declined by 4%.

Reserves at our Voisey s Bay operations decreased from 31 to 28.9 million metric tons, primarily due to mining depletion, which was partially offset by a reduction in mining dilution based on life-of-mine plan versus actual mining reconciliation results, which also contributed to a 3% increase in the estimated average nickel grade.

Reserves at Sulawesi decreased from 177 to 160.9 million metric tons, after adjustments for mining depletion of 5 million metric tons and a reclassification of ore reserve to mineral resource categories of 11 million metric tons to meet a revised processing feed plant chemistry target with lower iron content based on 2007 operating results.

Reserves at Goro remain unchanged from 2006 estimates.

Reserves at Vermelho decreased, although the basis to estimate the ore reserve remained constant. In order to align the reporting of laterite ore reserve estimates to be processed by acid leaching with the reporting standards of Vale Inco at its other nickel laterite projects, the tonnage and grade estimates reported in 2006 as run-of-mine are restated in 2007 after drying and screening, resulting in a 50% reduction in tonnage and a 56% increase in nickel grade.

Reserves at Onça Puma increased from 78 to 82.7 million metric tons. The principal factor for this increase was the new modeling method carried out in accordance with the recommendations of an audit conducted in 2006. Nickel metal content in mineral reserves remains similar, as the average grade has decreased by 4% relative from 1.80% to 1.73%.

**Bauxite ore reserves**

In preparing bauxite reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average realized sales price for bauxite of US\$31.49 per metric ton. We have adjusted ore reserve estimates for extraction losses and metallurgical recoveries during extraction.

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	<b>Bauxite ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>MRN</i>						
Almeidas	4.1	50.4			4.1	50.4
Aviso	31.0	51.1			31.0	51.1
Bacaba	7.0	53.1			7.0	53.1
Saracá V	2.8	48.3			2.8	48.3
Saracá W	13.4	50.2			13.4	50.2
Bela Cruz	59.0	52.2	7.8	51.0	66.8	52.1
Cipó	2.1	50.0	4.7	49.8	6.8	49.8
Teófilo	27.9	50.3	5.1	49.2	33.0	50.2
<b>Total MRN</b>	<b>147.3</b>	<b>51.3</b>	<b>17.6</b>	<b>50.2</b>	<b>164.9</b>	<b>51.2</b>
<i>Paragominas</i>						
Miltonia 3	145.8	49.4	55.5	49.4	201.3	49.4
Miltonia 5	95.7	47.3	2.9	47.3	98.6	47.3
<b>Total Paragominas</b>	<b>241.5</b>	<b>48.6</b>	<b>58.4</b>	<b>48.6</b>	<b>299.9</b>	<b>48.7</b>

(1) Tonnage is stated in millions of metric tons of washed product (Bone Dry). Grade is the Al<sub>2</sub>O<sub>3</sub> content in %.

	<b>Bauxite ore mines</b>			<b>Vale interest (%)</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	
<i>MRN</i>				
Almeidas	Open pit	2002	2009	40.0
Aviso	Open pit	2003	2011	40.0
Bacaba	Open pit	2009	2011	40.0
Saracá V	Open pit	1979	2009	40.0
Saracá W	Open pit	2006	2016	40.0
Bela Cruz	Open pit		2019	40.0
Cipó	Open pit		2023	40.0
Teófilo	Open pit		2023	40.0
<i>Paragominas</i>				
Miltonia 3	Open pit	2006	2032	100
Miltonia 5	Open pit		2032	100

*Changes in bauxite ore reserves: 2007 versus 2006*

MRN's bauxite reserves increased from 73.6 to 214.6 million metric tons, primarily due to research and valuation of new mining areas in 2007.

Paragominas' bauxite reserves decreased from 303.6 to 299.9 million metric tons, primarily due to mining depletion.

**Copper ore reserves**

In preparing copper reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average LME spot price for copper of US\$5,853 per metric ton. Our copper reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing.

	<b>Copper ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>Canada:</i>						
Sudbury	80.6	1.29	79.7	1.32	160.3	1.30
Thompson	10.5	0.13	13.7	0.12	24.1	0.12
Voisey's Bay	25.5	1.75	3.4	0.37	28.9	1.59
<i>Brazil:</i>						
Sossego	134.4	0.93	47.4	0.89	181.8	0.92
Salobo	508.2	0.80	420.3	0.74	928.5	0.77
118	53.8	0.94	24	0.74	77.7	0.87
<b>Total</b>	<b>813.4</b>	<b>0.90</b>	<b>588.7</b>	<b>0.81</b>	<b>1,401</b>	<b>0.86</b>

(1) Tonnage is stated in millions of metric tons of dry run-of-mine. Grade is % of copper.

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	<b>Copper ore mines</b>			<b>Vale interest</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	<b>(%)</b>
<i>Canada:</i>				
Sudbury	Underground	1885	2044	100
Thompson	Underground	1960	2017	100
Voisey s Bay	Open pit	2005	2020	100
<i>Brazil:</i>				
Sossego	Open pit	2004	2021	100
Salobo	Open pit		2030	100
118	Open pit		2022	100

*Changes in copper ore reserves: 2007 versus 2006*

Our copper ore reserve estimates for our Canadian operations decreased from 230 to 213 million metric tons, due to lower estimated ore tonnages at Sudbury, Thompson and Voisey s Bay, and for the reasons discussed in connection with nickel reserves above.

Reserves at Sossego decreased from 214.8 to 181.8 million metric tons, primarily reflecting mining depletion, the review of pit optimization with an updated economic model (metal prices and operational costs) and the review of the geo-technical pit model.

Reserves at Salobo increased from 385.3 to 928.5 million metric tons, given the enlargement of Salobo reserve scope for both the Salobo I project, which will have annual production capacity of 12 million metric tons, and Salobo II, which involves the expansion of the Salobo mine to annual production capacity of 24 million metric tons.

Reserves at 118 were unchanged.

**Cobalt ore reserves**

We expect to recover significant quantities of cobalt as a by-product of our Canadian operations and from the Goro and Vermelho projects. Our cobalt reserve estimates are of in-place material after adjustments for mining depletion and mining losses (or screening and drying in the cases of Goro and Vermelho) and recoveries, with no adjustments made for metal losses due to processing.

	<b>Cobalt ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>Canada:</i>						
Sudbury	80.6	0.04	79.7	0.03	160.3	0.04
Voisey s Bay	25.5	0.15	3.4	0.03	28.9	0.14
<i>New Caledonia:</i>						
Goro	96.2	0.12	23.7	0.09	120.0	0.11
<i>Brazil:</i>						
Vermelho	119.3	0.06	4.3	0.07	123.6	0.06
Total	321.6	0.08	111.1	0.04	432.8	0.07

(1) Tonnage is stated in millions of metric tons. Grade is % of cobalt.

**Cobalt ore mines**

<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	<b>Vale interest (%)</b>
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<i>Canada:</i>				
Sudbury	Underground	1885	2044	100
Voisey s Bay	Open pit	2005	2019	100
<i>New Caledonia:</i>				
Goro	Open pit		2036	74.0
<i>Brazil:</i>				
Vermelho	Open pit		2050	100

*Changes in cobalt ore reserves: 2007 versus 2006*

The decrease in our cobalt reserve estimates from 2006 to 2007 was due to lower estimated ore tonnages at Sudbury and Voisey s Bay, to the change in tonnage and grade at Vermelho, and for the reasons discussed in connection with nickel reserves above. Reserves at Goro in 2007 remain unchanged from the 2006 estimates.

**Table of Contents****PGMs and other precious metals reserves**

We expect to recover significant quantities of precious metals as by-products of our Canadian operations and from the Salobo project. Our reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing.

	<b>Precious metals reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
<i>Canada:</i>						
Sudbury						
Platinum	80.6	0.60	79.7	0.90	160.3	0.80
Palladium	80.6	0.70	79.7	1.10	160.3	0.90
Gold	80.6	0.30	79.7	0.40	160.3	0.30
<i>Brazil:</i>						
Sossego						
Gold	134.4	0.30	47.4	0.20	181.8	0.26
Salobo						
Gold	508.2	0.50	420.3	0.40	928.5	0.46
Total Gold	723.2	0.47	547.7	0.44	1,270.6	0.46

(1) Tonnage is stated in millions of dry metric tons. Grade is grams per dry metric ton.

	<b>Precious metals mines</b>			<b>Vale interest (%)</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	
<i>Canada:</i>				
Sudbury	Underground	1885	2044	100
<i>Brazil:</i>				
Sossego	Open pit	2004	2021	100
Salobo	Open pit		2030	100

**Changes in PGMs and other precious metals reserves: 2007 versus 2006**

The decrease in our platinum, palladium and gold reserve estimates from 2006 to 2007 was due to lower estimated ore tonnages at Sudbury for the reasons discussed in connection with nickel reserves above.

**Kaolin ore reserves**

In preparing kaolin reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average realized sales price for kaolin of US\$168.66 per metric ton. Our reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing.

	<b>Kaolin ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Brightness</b>	<b>Tonnage</b>	<b>Brightness</b>	<b>Tonnage</b>	<b>Brightness</b>
Morro do Felipe	10.9	86.7	23.2	86.7	34.1	86.7
Rio Capim	10.7	83.3	18.4	82.1	29.1	82.6
<b>Total</b>	<b>21.6</b>	<b>85.1</b>	<b>41.6</b>	<b>84.7</b>	<b>63.2</b>	<b>84.8</b>

(1) Tonnage is stated in millions of metric tons. Brightness is stated in percentage terms.

	<b>Kaolin ore mines</b>			<b>Vale interest (%)</b>
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	
Morro do Felipe	Open pit	1976	2030	86.2
Rio Capim	Open pit	1996	2022	61.5

**Table of Contents***Changes in kaolin ore reserves: 2007 versus 2006*

The decrease in our kaolin reserve estimates from 67.0 to 63.2 million metric tons was due primarily to depletion and, to a lesser extent, a reduction in estimates to reflect differences between actual recoveries and amounts predicted by our reserves model.

**Potash ore reserves**

In preparing potash reserve data, we used price assumptions that did not exceed the three-year (2005 to 2007) historical average realized sales price for potash of US\$230.66 per metric ton. Our reserve estimates are of in-place material after adjustments for mining depletion and mining losses and recoveries, with no adjustments made for metal losses due to processing.

	<b>Potash ore reserves (1)</b>					
	<b>Proven</b>		<b>Probable</b>		<b>Total</b>	
	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>	<b>Tonnage</b>	<b>Grade</b>
Taquari-Vassouras	5.5	28.0	7.4	28.0	12.9	28.0

(1) Tonnage is stated in millions of dry metric tons. Grade is % of KCl.

	<b>Potash ore mine</b>			
	<b>Type</b>	<b>Operating</b>	<b>Projected</b>	<b>Vale</b>
		<b>since</b>	<b>exhaustion date</b>	<b>interest (%)</b>
Taquari-Vassouras (1)	Underground	1986	2012	100

(1) We have a 25-year lease contract, which was signed in 1991, with Petrobras.

*Changes in potash ore reserves: 2007 versus 2006*

Our potash reserves decreased from 16.6 to 12.9 million metric tons, primarily reflecting mining depletion in 2007.

**Coal reserves**

In preparing coal reserve data, we used price assumptions that did not exceed the following (2005 to 2007) historical average realized sales and benchmarking prices for coal:

Hard metallurgical coal: US\$104.87 per metric ton;

Pulverized coal injection ( PCI ): US\$65.66 per metric ton; and

Thermal coal: US\$53.11 per metric ton.

Our coal reserve estimates are of in-place material after adjustments for mining depletion, in-situ moisture content, anticipated mining losses and dilution, but excluding any adjustment for losses associated with beneficiation of raw coal mined to meet saleable product requirements. Our coal reserve estimates were prepared by the following independent consultants: IMC Mining Solutions Pty Ltd (Hebden Seam), ASEAMCO Pty Ltd (North Opencut), SRK Consulting and Tasman Mining Pty Limited (Carborough Downs), MB Mining Consultants and Hoskings Resource Management (Issac Plains), and Snowden Mining Industry Consultants Pty Ltd (Moatize).

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	Coal ore reserves (1)		Total Tonnage	Total Calorific value
	Proven Tonnage	Probable Tonnage		
<i>Integra Coal</i>				
South Opencut				30.4
	Metallurgical			28.5
	Thermal			
Middle Liddell Seam	Metallurgical			
Hebden Seam	Metallurgical	36.9	36.9	31.5
North Opencut	Metallurgical			30.4
	Thermal	8.7	8.7	28.5
Total Integra Coal		45.6	45.6	
Carborough Downs	Metallurgical PCI	42.0	5.0	47.0
				31.7
Isaac Plains	Metallurgical PCI	18.4	0.6	19.0
	Thermal			27.8
Broadlea	Metallurgical			
Moatize	Metallurgical	422	416	838
	Thermal			32
Total		482.4	512.8	995.2

(1) Tonnage is stated in millions of dry metric tons. Calorific value is stated in Mj/kg and refers to the quality of marketable coal, quoted on a gross air dried basis. Marketable coal quality reported is based on 2007 sales contract specifications, except for Moatize.

<b>Coal mines</b>				
	<b>Type</b>	<b>Operating since</b>	<b>Projected exhaustion date</b>	<b>Vale interest (%)</b>
Integra Coal				
South Opencut	Open pit	1999	2009	61.2
Middle Liddell Seam	Underground	1999	2014	61.2
Hebden Seam	Underground		2023	61.2
North Opencut	Open pit	2008	2014	61.2
Carborough Downs	Underground	2006	2020	80.0
Isaac Plains	Open pit	2006	2016	50.0
Broadlea	Open pit	2006	2011	100
Moatize	Open pit		2046	100

*Changes in coal reserves: 2007 versus 2006*

The year 2007 is the first year for which we have reported coal reserves. We acquired our coal operating assets in 2007 through the acquisition of AMCI Holdings Australia Pty (renamed Vale Australia).

**REGULATORY MATTERS**

In this section, we describe the following:

mining regulation in Australia, Brazil, Canada, Indonesia and New Caledonia;

railroad regulation in Brazil;

electric energy regulation in Australia, Brazil, Canada, Indonesia, and New Caledonia;

environmental regulation in Australia, Brazil, Canada, Indonesia, New Caledonia, the United States, the European Union and others; and

Investment Canada Act undertakings.

**Mining regulation**

***Australia mining regulation***

In Australia, the ownership of minerals has been separated from ownership of the surface of land. The governments of each state and territory have passed legislation appropriating the ownership of all minerals to themselves on behalf of the public. Public ownership of minerals underpins the regulation of the mineral resources industry by legislation at the state level.

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The key features of the regulatory arrangements in each state and territory are the following:

The government owns all minerals (with some minor exceptions), separating rights to minerals from other interests in land;

Exploration and mining activities must be carried out pursuant to a tenement from the state;

Tenements and other licenses are available under mining legislation for purposes incidental to mining including access, storage and some processing activities such as washing and crushing; and

A tenement will only be granted when certain preconditions have been met. Conditions may include:  
posting a security bond to ensure that the site is rehabilitated at the completion of mining operations. Rehabilitation is generally controlled by conditions contained in the tenement and associated environmental authority;

payment of any outstanding rent or royalties;

granting of an environmental authority over the tenement; and

compliance with the requirements of the relevant state mining legislation.

After the grant is made, the tenement will be subject to further conditions for its duration. The state or territory minister may consent to an assignment subject to satisfaction of transfer conditions.

Subject to compliance with native title requirements, once a tenement is granted by the state or territory, the tenement holder will then have an enforceable right to enter upon the land and undertake all works authorized under that grant and by the empowering legislation. This is a right enforceable against all others, including the land title holders or their tenants.

The holder of an exploration or mining tenement must comply with the conditions attached to the grant of the tenement and the regulatory scheme established under the legislation. This may involve significant expenditure, which adds to mining and operating costs. Where a tenement holder fails to comply with the regulatory scheme, it may be liable for financial penalties, prosecution or forfeiture of its tenement.

Although the conditions included in tenements and the regulations governing them may be subject to change or amendment by the state or territory in certain circumstances, it is rare for this to occur unilaterally and without prior notice or negotiation.

All Australian states and territories require that statutory royalties be paid for minerals taken from the land. The amount of royalty, the method of calculation and the minerals covered differ from jurisdiction to jurisdiction. While there are some flat-rate royalties, others involve complicated calculations taking into account the market value of the mineral and an index price set by the jurisdiction.

We own a combination of 430 exploration or mining tenements in Australia.

Mining rights in Australia may also be subject to native title. Native title describes the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs as recognized by the laws of Australia. Native title does not equate to our common understanding of title to land in the sense of ownership of land and may consist of different rights and interests. Examples include the right to access land, hunt, gather and fish, conduct ceremonies, camp; and have possession, use, occupation and enjoyment of the land.

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***Brazil mining regulation***

Under the Brazilian Constitution, all mineral resources in Brazil belong to the Brazilian government. The Brazilian Constitution requires that mining companies incorporate in accordance with Brazilian law. The Brazilian Constitution and Mining Code impose on mining companies various regulatory restrictions relating to, among other things:

the manner in which mineral deposits are exploited;

the health and safety of workers and the safety of residential areas located near mining operations;

the protection and restoration of the environment;

the prevention of pollution; and

the support of local communities where mines are located.

Mining companies in Brazil can only prospect and mine for mineral resources pursuant to prospecting authorizations or mining concessions granted by the National Mineral Production Department (*Departamento Nacional de Produção Mineral*), or DNPM, an agency of the Ministry of Mines and Energy of the Brazilian government. DNPM grants prospecting authorizations to a requesting party for an initial period of three years. These authorizations are renewable at DNPM's discretion for another period of one to three years, provided that the requesting party is able to show that the renewal is necessary for proper conclusion of prospecting activities. On-site prospecting activities must start within 60 days of official publication of the issuance of a prospecting authorization. Upon completion of prospecting activities and geological exploration at the site, the grantee must submit a final report to DNPM. If the geological exploration reveals the existence of a mineral deposit that is economically exploitable, the grantee has one year (which DNPM may extend) from approval of the report by DNPM to apply for a mining concession or to transfer its right to apply for a mining concession to an unrelated party. When a mining concession is granted, the holder of the concession must begin on-site mining activities within six months. DNPM grants mining concessions for an indeterminate period of time lasting until the exhaustion of the mineral deposit. Extracted minerals that are specified in the concession belong to the holder of the concession. With the prior approval of DNPM, the holder of a mining concession can transfer it to an unrelated party that is qualified to own concessions. In some cases, mining concessions are challenged by unrelated parties. We own a combination of 4,342 prospecting authorizations or mining concessions covering approximately 16 million hectares.

The Brazilian government charges us a royalty known as the CFEM (*Compensação Financeira pela Exploração de Recursos Minerais*) on the revenues from the sale of minerals we extract, net of taxes, insurance costs and costs of transportation. The current annual rates we pay on our products are listed below.

iron ore, kaolin, copper, nickel, fertilizers and other minerals: 2%;

bauxite, potash and manganese ore: 3%; and

gold: 1%.

The Mining Code and ancillary mining laws and regulations also impose other financial obligations. For example, mining companies must compensate landowners for the damages and loss of income caused by the use and occupation of the land (either for exploitation or exploration) and must also share with the landowners the results of the exploration based on 50% of the CFEM. Mining companies must also compensate the government for damages caused to public lands. A substantial majority of our mines and mining concessions are on lands owned by us or on public lands for which we hold mining concessions.

We are currently engaged in a series of administrative and other legal proceedings alleging that we have failed to pay the proper amount of CFEM. In addition, we are discussing with DNPM the applicable rate for potash. See *Item 8. Financial information Legal proceedings CFEM-related proceedings*.

***Canada mining regulation***



At our Sudbury operations, we hold mining rights, surface rights, licenses of occupation and mining claims granted to us by the Province of Ontario. Mining rights are rights to exploit and extract minerals on, in or under the land, and surface rights are rights to use the surface of the land. Mining rights and surface rights may be either owned or leased. Mining rights and surface rights that are owned remain in effect so long as we own the land to which the rights apply.

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Mining rights and surface rights that are leased remain in effect for the term of the lease, either 10 or 21 years. Licenses of occupation allow the holder to use licensed land in the manner specified in each license, including the right to dig, excavate and remove ores and minerals from and under the land. Mining claims are rights to explore the land covered by the claim.

We own a combination of mining and surface rights covering 86,159 hectares. We lease a combination of mining and surface rights covering 14,166 hectares of land leased from the Province of Ontario. We do not expect any problems in obtaining renewals of these leases since the only requirement for renewal is payment of a nominal renewal fee. The next lease due for renewal expires in 2010.

We currently hold mining licenses of occupation covering 2,934 hectares in Ontario. We also hold mineral claims covering 1,610 hectares in Ontario and hold a co-owned interest in mineral claims covering an additional 7,010 hectares.

At our Sudbury operations, all properties that contain proven and probable ore reserves are on lands owned by us, with the exception of a portion of ore reserves under Kelly Lake, which is under a 21-year mining lease from the Province of Ontario and which can be accessed from the Copper Cliff South Mine.

The permission of the government of the Province of Ontario is required for us to export from Canada intermediate products derived from our Sudbury ores. In December 2005, the Ontario government granted us permission to continue to export intermediate nickel products to our nickel refinery in Clydach, Wales until December 31, 2015. In December 2005, the Ontario government granted us permission to continue to export semi-refined PGMs concentrate to our precious metals refinery in Acton, England until December 31, 2015. In June 2007, the Ontario government also granted us permission to ship copper anodes, copper concentrate and MK copper concentrate offshore for further processing until June 27, 2012. We are not aware of any reason at this time that would prevent us from reaching an agreement with the Province of Ontario to extend these permits for additional periods upon their expiration.

At our Thompson operations, our landholdings or mining rights consist of order-in-council leases ( OIC Leases ), mineral leases and mining claims. OIC Leases were negotiated as part of an agreement entered into in 1956 between Vale Inco and the Province of Manitoba covering the development of the Thompson nickel deposits. We currently hold a total of 2,947 OIC Leases, 29 of which are held by Mystery Lake Nickel Mines Limited, which is owned 82.6% by Vale Inco and 17.4% by Newmont Exploration of Canada and the remainder of which are held by Vale Inco. OIC Leases entitle the lessee to explore for, and mine, all minerals in the subsurface (except hydrocarbons, industrial minerals and superficial deposits that are not incidental to the mining, milling, smelting and refining processes). OIC Leases provide for an initial 21-year term and two subsequent guaranteed renewals of 21 years each, for a total guaranteed lease period of 63 years. Subsequent lease renewals beyond the three guaranteed 21-year terms, can be granted at the discretion of the Province of Manitoba. All of our current OIC Leases have now been renewed twice (each is in its third guaranteed 21-year term) and remain in effect through the 2022-2024 period.

Mineral leases are issued by the Province of Manitoba and convey (i) the exclusive right to the minerals (other than quarry minerals) that occur on or under the land covered by the lease and (ii) access rights to erect buildings and structures (including shafts) to mine within the limits of the lease. The duration of mineral leases is 21 years, and they are renewable at the discretion of the province's Minister of Science, Technology, Energy and Mines. We hold six mineral leases that cover 4,151.21 hectares in the Thompson nickel belt. These mineral leases remain in effect until April 1, 2013.

We also hold 37 mining claims, a right issued by the Province of Manitoba under provincial legislation, which conveys to the holder exclusive rights to the minerals (other than quarry minerals) that occur on or under the land covered by the claim and access rights to explore for and develop minerals owned by the Province. A mining claim does not, however, entitle the holder to extract minerals from the land covered by the claim. In order to extract minerals from the land covered by a mining claim, the holder must obtain a mineral lease from the Province of Manitoba.

With respect to our Voisey's Bay operations, we hold a mining lease, surface lease, mining licenses and mineral claims. All of the current estimated proven and probable ore reserves at Voisey's Bay are located on lands covered by the mining lease, which has a duration of 25 years. The mining lease confers the exclusive right to extract minerals and carry out mineral exploration, mining operations or mining processing and development in, on or under the lands,

or part of the lands, covered by the lease so long as we continue to meet the terms and conditions of an agreement entered into in September 2002 between Vale Inco and the Government of Newfoundland and Labrador.

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Under the terms of the mining lease, production cannot exceed on average 2.2 million metric tons of ore annually for the first 10 years of mining operations and on average 5.5 million metric tons of ore annually thereafter. The mining lease is subject to an order issued by the provincial government requiring us to complete primary production (smelting, processing or refining) in the Province of Newfoundland and Labrador of all minerals extracted under the lease. However, the government has also issued an order allowing us to export nickel concentrates containing up to 355,000 metric tons of contained nickel until we have completed the construction of a nickel processing facility in the Province. This mining lease can be renewed for further 10-year terms so long as we have been in compliance with the terms of the lease and have applied for such renewal at least three months prior to the expiration of the then current lease.

In conjunction with the mining lease for Voisey's Bay, we hold a surface lease entitling us to use certain lands necessary for our mining operations. Like the mining lease, the surface lease came into effect on September 30, 2002 for a period of 25 years, and may be renewed for further 10-year terms. We also hold 1,978 mineral claims, which have been grouped into mineral licenses. The mineral licenses expire in 2009 and can be renewed for a further 5-year period. A mineral license is required to explore a parcel of land.

Pursuant to the terms of an option agreement between Vale Inco and International Royalty Corporation, a royalty is payable to International Royalty Corporation on a quarterly basis on the proceeds received by Vale Inco on the sale of its production, equal to 3% of net smelter returns from mining production from Vale Inco's properties on the mainland portion of Newfoundland and Labrador, including the Voisey's Bay mine, and a 3% gross royalty (also payable quarterly) is assessed on the gross value of any raw diamonds or gemstones recovered from these properties. To date, there have been no raw diamonds or gemstones recovered from these properties.

***Indonesia mining regulation***

PT Inco's operations in Indonesia are conducted pursuant to a Contract of Work with the Indonesian government, which expires in 2025. The Contract of Work gives PT Inco the exclusive right to mine nickel and nickel-containing minerals in certain areas on the Island of Sulawesi and to process and export the nickel and associated minerals recovered from those areas. In exchange, PT Inco pays a royalty fee on, among other items, its nickel production on the concession area and has made certain other commitments. Currently, we are not aware of any information indicating that we would not be able to reach an agreement extending or renewing our mining rights before the Contract of Work's expiry date. Inability to extend or renew the Contract of Work or secure a right-to-mine past 2025 could reduce PT Inco's estimated ore reserves and mineral resources and adversely affect PT Inco's long-term mining plans.

Under the Contract of Work, PT Inco undertook to construct, subject to economic and technical feasibility, two additional production plants in Sulawesi, one in Pomalaa and another in Bahodopi. In satisfaction of PT Inco's undertaking with respect to the Pomalaa area, PT Inco entered into a Cooperative Resources Agreement with PT Antam Tbk. (PT Antam), under which PT Inco delivers to that company about one million wet metric tons of ore annually. If PT Antam terminated this agreement, PT Inco might be required to find an alternative solution to ensure compliance. However, PT Inco expects that this agreement will remain in force.

With respect to the plant at Bahodopi, in early 2008, PT Inco presented a proposal to Indonesia's Department of Energy and Mineral Resources (DEMRE) to construct a new processing plant at Sorowako in lieu of PT Inco's undertaking in the Contract of Work to construct a processing plant at Bahodopi. An independent study conducted in 2007 concluded that it is not economically feasible under current circumstances to build a processing plant at Bahodopi. The Sorowako plant would have production capacity of approximately 22,000 metric tons of nickel product. Ore from Bahodopi and Sorowako would be combined to feed Sorowako's existing processing facility. PT Inco would continue its exploration program at Bahodopi and continue to study options for developing a processing facility there. Acceptance of the proposal is subject to feasibility studies, the consent of the DEMRE, agreements with the Indonesian and local governments and securing necessary permits. The proposal would require a significant capital investment and any decision to proceed will require the approval of the board of directors and board of commissioners of PT Inco. If, for any reason, PT Inco were unable to comply with its undertakings, we could be subject to administrative sanctions.



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In 2004, the Indonesian Government issued certain forestry regulations. Pursuant to these regulations, the Indonesian Minister of Forestry requested that PT Inco apply for permits to use forestry land located within the Contract of Work area. Although we had previously taken the position that the terms of the Contract of Work provided us with all authorizations needed to conduct mining activities within this area, we recently decided to apply for permits to use certain forestry land located within the Contract of Work area on the understanding that our rights under our Contract of Work would be respected.

***New Caledonia mining regulation***

Concessions in New Caledonia generally represent long-term permits (usually 75-year terms, with some having longer or perpetual terms) granted for mining large deposits which entitle the holder to the exclusive right to exploit, extract and mine. A concession applies to one or several minerals defined by the granting decision along with its geographical location. The granting of a concession is based on the delineation of an exploitable ore body made during exploration activities conducted pursuant to exploration permits. Surface rights, which are rights to use surfaces on or outside mining permits for mining-related activities, can be granted independently of mineral rights.

Our 74%-owned subsidiary, Goro Nickel, currently holds 67 mining concessions in the Massif du Sud in New Caledonia, covering 20,277 hectares and authorizing the mining of nickel, cobalt, chrome, iron ore and manganese. Our Goro project covers 6,571 hectares within eight of these mining concessions, of which four are perpetual in term, two are renewable prior to their expiry in 2016 and one is renewable prior to its expiry date in 2051. Goro Nickel holds 41 surface rights, including surfaces of other owners and an additional free land of the domain. A subsidiary of Vale Inco, Tiébaghi Nickel, holds an additional eight mining concessions outside the Goro project area, in a mining domain called Tiebaghi.

In order to mine the concessions it holds (once the construction of the facilities are complete), Goro Nickel must declare its intention to the authorities and describe its technical plan. Goro Nickel has submitted an application for a new operating permit based on the project's revised configuration. The fact that Goro Nickel does not currently have an operating permit does not currently impact development because the operating permit does not cover construction. We anticipate that the permit will be granted in the first half of 2008.

The enactment of a new mining law may occur as part of the Noumea Accord between New Caledonia and France. New Caledonia is an overseas territorial community (*collectivité territoriale*) of France with significant autonomy except in the areas of foreign relations, defense, judicial, currency and certain other related areas. The Noumea Accord sets forth a process and timetable for increasing the autonomy of New Caledonia over the coming years, with a referendum to be held by 2014 on whether New Caledonia should become fully independent from France. Although we do not believe that these developments will have an adverse effect on the Goro project, there can be no assurances in this regard.

**Railroad regulation*****Brazil railroad regulation***

The Brazilian Ministry of Transportation and the transportation regulatory agency (*Agência Nacional de Transportes Terrestres*), or ANTT, regulate and supervise the policies of the railroad transportation sector. The federal government may grant private companies concessions for the construction, operation or commercial development of railroads.

Railroad concession contracts granted by the federal government impose certain shareholder ownership limitations. The concession contract for FCA limits shareholder ownership to 20% of the voting capital of the concessionaire, unless such limit is waived by ANTT. We own 99.9% of FCA, which ANTT has authorized. The 20% ownership limitation does not apply to our EFVM and EFC railroads. ANTT also sets different tariff limits for railroad services for each of the concessionaires and each of the different products transported. So long as these limits are respected, the actual prices charged can be negotiated directly with the users of such services.

The MRS concession contract provides that each shareholder can only own up to 20% of the voting capital of the concessionaire, unless otherwise permitted by ANTT. As a result of our acquisitions of CAEMI and Ferteco in 2003, our share in the voting capital of MRS surpassed this threshold. As a result, Vale waived its voting and veto rights with respect to MRS shares in accordance with a 2006 ANTT resolution. We continue to have some voting rights through the shareholdings of a subsidiary.



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Our railroad concession contracts have a duration of 30 years and are renewable. The FCA and MRS concessions expire in 2026, and the concessions for EFC and EFVM expire in 2027.

In October 2007, we won the auction for the subconcession for commercial operation for 30 years of a 720-kilometer segment of the FNS railroad, in Brazil.

**Electric energy regulation*****Australia electric energy regulation***

Australian electricity supply has historically been regulated on an individual state and territory basis, but the electricity market is in a process of moving toward federal-based regulation. The National Electricity Market ( NEM ) (a wholesale electricity pool market) commenced in 1998. The NEM jurisdictions are Queensland, New South Wales, the Australian Capital Territory, Victoria, South Australia and Tasmania. Each of these states and territories are connected electrically, although the interconnectors between states in some cases remain limited. West Australia and the Northern Territory are not connected to the NEM jurisdictions electrically (generally due to the vast distance between the east and west coasts of Australia). West Australia has recently developed its own wholesale electricity market, which is similar to the NEM but with some key differences.

Monopoly transmission and distribution assets are subject to regulated pricing (generally revenue cap regulation). Each of these assets were previously regulated by state and territory regulators but have gradually been moved to the jurisdiction of the national regulatory agency, the Australian Energy Regulator.

All electricity customers are able to choose their electricity retailer. States and territories regulate aspects of electricity supply to consumers, but they are presently engaged in a process intended to make energy regulation across states and territories more uniform.

The new Federal Labor Government has recently announced the introduction of a National Emissions Trading Scheme (ETS). Although the details of the ETS have not yet been formalized, the ETS will be a cap and trade scheme and is expected to be introduced between 2010 and 2012. From 2008, large users of energy are required to report their consumption and greenhouse gas emissions.

***Brazil electric energy regulation***

The power industry in Brazil is regulated by the Ministry of Mines and Energy and the regulatory agency ANEEL. The role of ANEEL is to implement and enforce policies and regulations designated by the Ministry of Mines and Energy and aimed at organizing and regulating the electricity sector and power companies. ANEEL is responsible for ensuring an efficient and economical energy market through regulation, enforcement, as well as monitoring prices and the operational efficiency of power companies.

Under the law governing the electricity sector, concessions grant exclusive rights to generate and transmit or to distribute electricity in a particular area for a period of time that should be sufficient for the concessionaire to recover its investment. The concessions for power generation before December 11, 2003 were granted for up to 35 years and are renewable at the Federal Government's discretion for an additional period of up to 20 years. Concessions granted after December 11, 2003 are granted for up to 35 years, without the possibility of renewal. Concessionaires (distributors) are required to supply electricity for public services, on a continuing basis, in sufficient quantity and within approved standards of quality.

All of our concessions for power generation in Brazil were granted before December 11, 2003. The next concession to expire has an expiration date in 2028.

Given the hydrologic and integrated nature of the Brazilian electricity generation matrix, Decree No. 2655/1998 created the *Mecanismo de Realocação de Energia* (Energy Reallocation Mechanism), known as MRE, a mechanism for sharing hydrological risk, and consequently reducing generation volatility among all generators. In order to implement the MRE, ANEEL designates a level of energy production, known as Assured Energy, for each generator that may be reviewed every five years. Assured Energy is calculated in accordance with a statistical model based on average rainfalls in the relevant region, water flows of rivers and water levels in each plant's reservoir over a multi-year time frame.



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Each generator is allowed to enter into contracts to sell up to 100% of its Assured Energy. To the extent a generator has signed contracts for the sale of its Assured Energy, and as long as MRE members, as a whole, are able to meet MRE Assured Energy levels, it receives payments based on these contractual terms, regardless of its level of actual generation. If all MRE members meet their contracted energy and there is a surplus of energy remaining, the net regional surplus generation is allocated among generators in different regions and this energy surplus may be sold in the wholesale market.

All contracts for wholesale energy purchases and sales are currently recorded in the wholesale market, the *Câmara de Comercialização de Energia Elétrica*, or the CCEE. The CCEE is a nonprofit private entity subject to the authorization, regulation and supervision of ANEEL, and is responsible for operating the wholesale energy market and for ensuring that energy transactions in the short-term market are settled and cleared in an efficient manner. The CCEE is primarily designed to effect the settlement of differences between the amount of energy contracted under bilateral contracts of the several market agents (generators, distributors, traders and large consumers), and the amount of energy actually consumed and produced. The settlement is done in accordance with the CCEE spot prices, which are expressed in R\$/MWh and are calculated for each settlement period for each sub-market.

Under Law No. 10,848/2004 and the regulations promulgated pursuant to it, jurisdiction of certain regulatory areas is under the Ministry of Mines and Energy rather than ANEEL. Under this law, all consumers of electricity, including large consumers, such as Vale, must contract the totality of their energy needs through contracts. This law creates two parallel markets for energy: a regulated market, in which distributors enter into supply contracts with regulated customers, subject to regulated prices, and an unregulated market, in which *consumidores livres*, or free consumers, enter into contracts with independent power producers at prevailing market prices. Regulated consumers may migrate to the unregulated market, but only after the termination of their long-term contracts. Self-generators of energy, such as Vale, are required to provide a pre-determined percentage of their generated energy from concessions acquired after 2004 to the regulated market for distributors acquisition.

Changes in the regulatory environment could adversely impact our energy investments. Valesul is currently engaged in litigation regarding the rates that Light charges Valesul for the transmission of electricity. See *Item 8. Financial information Legal proceedings*.

**Canada electric energy regulation**

Our wholly-owned and operated hydroelectric power plants in Canada are located in Sudbury, Ontario.

The power industry in Ontario is regulated by the Ontario Energy Board (the OEB). The OEB is responsible for setting just and reasonable rates, as well as the licensing of all participants in the electricity sector in Ontario.

Under the legislative framework in Ontario, we are considered to be a generator, transmitter, distributor and retailer of electricity in Ontario. Pursuant to the Definitions and Exemptions Regulations under the Electricity Act (Ontario) and the Ontario Energy Board Act, we are exempt from many of the regulatory requirements related to the electricity industry in Ontario as they pertain to our hydroelectric power plants, including rate regulation, licensing requirements, regulatory codes of conduct and financial record-keeping. In order to maintain our exemption under these rules, we must, among other things, ensure that any price that is charged for transmitting or distributing electricity is no greater than the reasonable costs associated with transmission or distribution.

**Indonesia electric energy regulation**

PT Inco's existing hydroelectric power plants were constructed and are operated pursuant to a 1975 decree of the Indonesian government. These facilities generate the majority of PT Inco's electricity requirements. The 1975 decree gives the government the right to acquire PT Inco's hydroelectric power plants upon two years' notice to PT Inco. No such notice has been given by the government. If this right were to be exercised, the decree provides that the hydroelectric power plants would be acquired by the government at their depreciated value, subject to the government providing PT Inco with sufficient electricity to meet its operating requirements, at a rate based on cost plus a normal profit margin, for the remaining term of PT Inco's Contract of Work. The new hydroelectric dam that is to be constructed as part of PT Inco's latest expansion program is also expected to be subject to this decree.

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***New Caledonia electric energy regulation***

Goro entered into an electricity supply agreement with the local public provider of electricity (Enercal) in 2004. The provision of electricity under this agreement was due to begin in January 2008, but has since been delayed. This agreement governs the provision of at least 50 MW of power to the Goro project. The term of the agreement is 25 years, with options to renew for five additional five-year terms.

**Environmental regulation**

Environmental legislation is becoming stricter worldwide, which could lead to greater costs for environmental compliance, for instance if we are required to modify installations, develop new procedures or purchase new equipment.

***Australia environmental regulation***

Environmental regulation in Australia occurs through legislation at the federal, state and territory levels and, to a limited extent, the common law. For constitutional reasons, most environmental regulation occurs at the state level and affects operations conducted within that state. Environmental laws impact our Australian operations, principally by regulating:

the emission or discharge of pollutants from our facilities;

the remediation and/or cleanup of any contamination;

the storage of hazardous substances;

the management, storage and disposal of waste and hazardous substances; and

the emission of noise and odor.

There is a range of offenses for breaches of these environmental laws. Penalties range from substantial fines and jail terms to warning notices. Other consequences include payment of compensation, suspension or revocation of a license, or an order to control, prevent or lessen the environmental harm caused by an offense. Directors and managers can, in some instances, be personally liable for the offenses.

***Brazil environmental regulation***

Federal, state and municipal legislation contain provisions for the control and protection of the environment in Brazil. These laws govern the use of natural resources, the reclamation and restoration of mined areas, the control of atmospheric emissions, the treatment of industrial effluents, as well as the use, handling and final disposal of hazardous materials and the control of water resources.

In order to conduct our mining, energy generation and industrial activities, we must prepare environmental impact assessments and submit them to authorities that oversee the granting of environmental permits. We seek to comply with all legal requirements and to achieve good relationships with interested parties, especially communities located near our operations. Our environmental management system is designed to provide a systematic approach to environmental issues.

Under Brazilian Federal Law No. 9,605/1998, non-compliance with environmental laws and regulations can result in criminal penalties, such as imprisonment and other restrictions for individuals (including directors, officers and managers of companies), and fines and the mandatory rendering of public services by companies. Administrative penalties range from warnings and fines to the suspension of corporate activities, and may also include the loss or reduction of incentives, or the cancellation or interruption of credit facilities granted by governmental institutions.

*Issuance of environmental licenses.* We must obtain environmental licenses in order to build, develop, expand and operate facilities that use natural resources or may pollute the environment. License validities can vary from one to ten years, and have to be renewed for the life of the undertaking. We seek to obtain the legally required licenses for each of our facilities and activities.

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In some cases, this process requires a significant amount of time for the preparation of comprehensive environmental reports and their evaluation, as well as for the establishment of appropriate programs for environmental education of communities residing in areas affected by the proposed projects. We enter into agreements with the appropriate federal and state governmental environmental authorities with respect to facilities whenever environmental non-compliance is detected in order to make these facilities compliant.

*Environmental compensation.* A federal environmental law (No. 9,985/2000) requires payment of environmental compensation to state and federal authorities, in order to create and maintain conservation areas, in the amount of at least 0.5% of the total investment of any venture with a material environmental impact. This law authorizes state governments to promulgate regulations setting forth a state-specific rate. There are a number of uncertainties regarding the application of this law, including the rate that will be applied by the state governments and the basis for valuing investments. The Confederação Nacional das Indústrias, of which we are a member, has instituted a constitutional challenge to the federal law, and the Supreme Court of Brazil has meanwhile ruled that such compensation is constitutional, but not the investment percentage rate. The compensation from now on is to be calculated based on the degree of environmental impact and the state governments have been ordered to conform their legislation by removing any percentage and establishing new criteria.

*Forest legal protection.* Economic development in rural areas is regulated under the Brazilian Forest Code, and there are a number of uncertainties regarding its scope and application. In order to develop projects in areas such as the Amazon basin, we must maintain a certain amount of land undeveloped for environmental conservation. We have a number of projects in areas that are subject to the Forest Code. We currently have enough land to allocate to conservation but, as our operations expand, we may have to acquire additional land to maintain the necessary percentage of undeveloped land. We expect to be able to acquire any additional land needed to comply with the law. We have operations in the Mata Atlântica forest, which is protected under the Brazilian constitution and specific laws aimed at ensuring its sustainable development. Certain laws require us to set aside land in the Mata Atlântica for preservation that is equivalent in area and ecological characteristics to any land that we use for mining activities in the forest. Also, mining activities in certain areas are restricted depending on the stage of vegetation growth.

*Prevention and environmental control measures.* Our environmental policies also aim to prevent, control and reduce the environmental impact caused by our business operations. We have invested US\$187 million in environment-related projects in 2007.

*Water use.* We are intensive water users in various states with hydrological resources that vary from very high water availability in the Amazon region to scarcity in the northeast of Brazil. The Hydrological Resources Management System implemented throughout Vale includes evaluation of the availability of water in the areas where we operate and programs to rationalize and control water use. We continually monitor new water legislation and regulations and take particular interest in requirements adopted under the National Policy of Hydrological Resources, which defines the conditions for obtaining water use grants and the fees applicable to that use and for effluents disposal.

*Environmental control systems.* As a mining company, air emissions control is one of our main objectives. Control equipment and systems, such as stockpiles and road water aspersion and use of chemical dust suppressants or installation of filters and electrostatic precipitators at our facilities are complemented by comprehensive monitoring systems and control software. Besides achievement of legal compliance, air quality in the installations and its effects in the neighboring communities are continuously evaluated and we make necessary investments for air quality improvement.

With respect to improvements in water quality, we strive to treat and control the pollutants disposed into the sea and local rivers or other water sources and also use extensive water recycling in our operations. We are researching new processes and technologies for the improvement of water use and recycling and treatment. Through our comprehensive waste management system, we aim to achieve greater control of the generation and disposal of our waste, to develop opportunities to reuse, recycle and to reduce waste.

Our mine decommissioning manual describes a complete set of directives, including technical practices and procedures to be followed during mine closures. The manual outlines procedures for the rehabilitation and monitoring of degraded areas, the main steps and sequence to be followed during closure, and any liabilities that may result after

mine closure.

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The manual also provides standardized basic criteria and procedures, based on the directives of the CVM and the SEC (FAS 143), for cost evaluation, the establishment of current budgets, future decommissioning and reclamation (see Note 3 to our consolidated financial statements).

The mines water and tailings storage dams and sterile deposits are classified according to a risk matrix involving all the parameters related to construction, operation and safety monitoring. A comprehensive audit program has been established, which evaluates the stability of all those structures and provides the inputs for the development of corrective or preventative action plans when necessary.

Our environmental program also includes reforestation projects, which are intended to protect the soil against erosion and to create buffers between our activities and communities in the surrounding areas. We partner with universities and governmental research entities to conduct extensive research to develop procedures for reforestation, soil protection using native species of the managed regions and for the improvement of the growth and growth rate of seedlings. Comprehensive fauna and flora investigations are performed as an ongoing activity, mainly in the Carajás region, to comprehend and avoid the environmental risks involved in investing in potentially sensitive areas.

We also participate in the maintenance and preservation of Brazilian forests and lands located in federally-designated conservation areas, known as Conservation Units. Additionally, in the last 25 years we have also provided support to the indigenous communities in the areas of education, health, infrastructure development and technical assistance with the aim of enhancing life quality and self-sustainability of these communities.

*Subterraneous development.* A Brazilian environmental decree restricts the development of subterraneous areas, which are deemed to be part of Brazil's cultural patrimony. The restriction contains a very broad definition of the term cave, which could encompass areas where we conduct our mining operations.

**Canada environmental regulation**

Vale Inco's operations in Canada are subject to numerous environmental laws and regulations relating to air emissions, water discharges, soils, recycling and waste management, decommissioning and reclamation, and employee health and safety, among other areas.

*SO<sub>2</sub> and CEPA metals emissions reduction.* Our Sudbury smelting operations are subject to legislation of the Ontario government requiring Vale Inco to significantly reduce its emissions of sulphur dioxide (SO<sub>2</sub>). In 2007, SO<sub>2</sub> emissions from our Sudbury operations were 150,311 metric tons, meeting the required limits. In 2007, we were required to comply with a reduced emissions limit of 175,000 metric tons (previously 265,000 metric tons) and to reduce SO<sub>2</sub> ground level concentrations from the previous limit of 0.50 ppm to 0.34 ppm. From 2008 to 2014, emissions limits could be reduced below 175,000 metric tons depending on actual production rates over a three-year rolling period. In 2015, the limit will fall to 66,000 metric tons for SO<sub>2</sub>.

Based on our life of business plan, our production in Sudbury can be maintained well beyond the 2015 timeline. Our Sudbury operations achieved the 2007 limits as a result of the installation in 2006 of fluid bed roaster off-gas scrubbing technology at our Sudbury smelter. We believe that this technology, together with our ability to bank and purchase emission allowances as permitted by the 2005 legislation, should allow us to meet the limits in effect until 2014 without seriously affecting production rates at our Sudbury operations or requiring significant additional capital expenditures. Compliance with the 2015 limit will require significant capital expenditures, estimates of which are included in our five-year capital plan. We are currently investigating various technologies in order to meet the 2015 limit.

Emissions from our Thompson smelting operations are also regulated under Manitoba legislation limiting SO<sub>2</sub> emissions to 23,000 metric tons per month and 220,000 metric tons per calendar year. In 2007, emissions from our Thompson operations were within these limits, at 192,325 metric tons for the year.

We also expect that the Canadian federal government will legislate emissions limits before 2015. In April 2006, the federal government, through the Environment Canada department, encouraged base metal smelters and refineries to voluntarily prepare Pollution Prevention Plans, addressing limit targets for SO<sub>2</sub> and other toxic metals. Following discussions with Environment Canada, the target limits for 2015 for our Sudbury operations were set at 66,000 metric tons for SO<sub>2</sub>, matching the Ontario government requirements, 864 metric tons

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for particulate and a 90% reduction of the CEPA toxic metals (nickel, lead, arsenic and cadmium) from the 1988 baseline. For Manitoba, the limit targets for 2015 are 22,800 metric tons for SO<sub>2</sub>, 198 metric tons for particulate and a 90% reduction of the CEPA toxic metals from the 1988 baseline. These target levels are lower than the current emission limits and we will not be able to meet these targets without making significant capital expenditures, and compliance with these targets could adversely affect our production levels, financial results and cash flow particularly for our Thompson operations.

*Sudbury and Port Colborne soils.* Vale Inco has been working with regulatory authorities and other interested parties to evaluate elevated levels of nickel and other metals in soils in the vicinity of our processing facilities in Sudbury and Port Colborne, Ontario that may be related to the historical emission of windblown metal-containing particulates. Vale Inco voluntarily agreed to conduct detailed risk assessments in Port Colborne and soil remediation has been conducted there. Any efforts we are required to undertake to investigate or remediate these matters may involve significant expenditures. Given the existence of various legal appeals and scientific and medical studies underway, it is not possible to predict the effect these studies and actions could have on our business, results of operation or financial condition.

*Smelter emissions.* In 2010, a regulation promulgated by the Ontario government (called Air Pollution Regulation Local Air Quality ) will take effect with respect to base metal smelters. This regulation incorporates existing air quality standards, but the Ontario Ministry of the Environment plans to revise many of these standards on an ongoing basis for priority contaminants, which include nickel, lead, cadmium, arsenic and others. A new standard for lead and cadmium was issued in 2006. Our five-year capital plan includes estimates for these changes. We are currently evaluating what process modifications may be requested for compliance. We expect the Ministry of the Environment to release its proposed new standard for nickel in 2008.

*Canadian regulations for greenhouse gases and Air Pollutants.* In April 2007, the Canadian Government announced the Regulatory Framework for Industrial Air Emissions, proposing intensity targets for greenhouse gases and regulated emission targets for certain air pollutants. Compliance to the greenhouse gas targets will require investment in our Canadian operations and/or the purchase of carbon allowances or offsets through a proposed Canadian Carbon Emissions Trading System. Compliance to the proposed regulatory targets for air pollutants will be similar to the requirements in progress through the previously discussed Pollution Prevention Plan. However, at this stage in the legislative process, we do not know what additional operating or capital expenditures will be required to comply with enacted amendments or what effect they will have on our business, financial results or cash flow from operations.

On March 10, 2008, the Canadian government released the greenhouse gas intensity targets for industry. Vale's Canadian facilities will be required to reduce greenhouse gas intensities from smelting and refining operations by 18% by 2010 and 2% per year between 2010 and 2020 using 2006 as the base year.

*Canadian Environmental Protection Act.* Pursuant to the Canadian Environmental Protection Act ( CEPA ), in 2006 the government categorized approximately 23,000 chemical substances in terms of two criteria: (a) persistence, bioaccumulation, and inherent toxicity to the environment; and (b) high hazard to humans with a high likelihood of exposure to individuals in Canada. For substances that meet either or both criteria for categorization, screening or detailed assessments must be undertaken, and if deemed necessary, risk management measures may be required. In late 2006, the government began a study of 200 high-priority chemical substances. Cobalt and cobalt chloride are among these chemicals and specific studies with respect to them could begin in early 2009. We cannot predict what impact the CEPA data challenge will have on our business, financial results or cash flow from operations.

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*Silica (Canada and United States).* In 2006, the American Conference of Governmental Industrial Hygienists (ACGIH) adopted new exposure limits for silica. In Thompson and Voisey's Bay, the ACGIH values are legally binding. The new limits are half the value of the previous limits and represent a significant challenge for compliance requiring significant operational resources. Workplace exposures are being managed with procedural improvements to limit airborne dust generation, ventilation on conveyance systems and the use of respiratory protection devices. In addition, we are investing in upgrading the ventilation in the laboratory at the Voisey's Bay site and to install ventilation in the new 1-D Lower ore body development project at Thompson. It is not clear at this time what impact, including potential future compensation claims, the new limits will have on our financial results.

**Indonesia environmental regulation**

PT Inco's operations are subject to environmental regulations and permits issued by the Indonesian government. PT Inco's environmental, health and safety policy includes a commitment to meet or exceed these requirements. In the past, PT Inco's operations were not in compliance with dust emissions limits.

In 2007, PT Inco completed the final stage of its US\$62 million capital project to bring all of its electric furnaces well within the government-mandated dust emissions levels. PT Inco is currently implementing an SO<sub>2</sub> program that is aimed at ensuring compliance with stack discharge limits. This plan, which has been approved by the Indonesian government, includes monitoring and engineering assessments of available mitigation technologies.

In 2007, PT Inco's site remained in compliance with regulations concerning suspended solids in runoff water and virtually all metals levels. However, during storms it has been difficult to comply with a new discharge regulation for nickel mining and processing activities, released by the Ministry of the Environment in September 2007. This lowered the acceptable level of Chromium 6 from 0.5 milligrams per litre to 0.1 milligrams per litre. A detailed engineering study is underway to optimize site water management and ensure a high level of confidence going forward regarding compliance with this new regulation.

We are in compliance with government standards for soluble nickel.

**New Caledonia environmental regulation**

Our Goro project is subject to French and New Caledonian environmental regulations. Environmental baseline monitoring, particularly for the marine environment, continued in 2007. We continue to be in negotiations with the New Caledonian government to obtain an operating permit for the Goro project. In preparation for the operation phase, a new tree nursery capable of producing over 260,000 seedlings was constructed and will begin operations in 2008. We expect to increase the nursery capacity to 1 million seedlings in 2013.

**United States environmental regulation**

*Clean Air Act.* Nickel compounds are among the chemicals or chemical groups regulated as hazardous air pollutants (HAPs) under the U.S. Clean Air Act. Pursuant to this legislation, the EPA has been promulgating stringent technology-based standards for controlling emissions of HAPs from designated major source categories. This process will continue in the future and ultimately may include the promulgation of additional risk-based standards. Some of these standards may limit emissions of nickel and its compounds, most likely through limits on overall emissions of particulate matter. While it does not appear that the major source HAP control program will target emissions at nickel producing or using industries, it is possible that some nickel-emitting sources may ultimately be covered by such standards. We are unable to predict what capital expenditures or increases in operating costs Vale Inco or its customers may incur if that proves to be the case.

Our INMETCO recycling plant received a Notice of Violation from the Pennsylvania Department of Environmental Protection for exceeding the particulate concentration limit, violating Title V of the Operating Permit and PA Code 127.444. A capital project to install a baghouse on the furnace discharge is being initiated to address the non-compliance.

**European Union environmental regulation**

*REACH.* In October 2003, the European Commission adopted draft legislation intended to consolidate and streamline a range of EU Directives and Member State Regulations. The new European Chemicals Policy, known as REACH (the acronym for Registration, Evaluation, and Authorisation of Chemicals), which came into force on June 1, 2007, establishes an all-encompassing system for the management of both new and existing chemicals that are manufactured in or imported into the EU.





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The definition of chemicals is very broad and includes metals, alloys and all metal-containing compounds; it covers feeds and isolated intermediates as well as products.

Under REACH, manufacturers and importers will be required to register all new substances (in annual quantities greater than 1 metric ton) prior to their entry into the European market. There is a phase-in period for registering existing substances based on volume and hazard. In addition, the uses of certain substances deemed to be of very high concern, possibly including some nickel and cobalt substances, will be potential candidates for an authorization process. The authorization application must include an analysis of possible substitutes and, if suitable substitutes are deemed available, a substitution plan. If suitable substitutes are not available, information on relevant research and development activities must be provided, as appropriate. Even if substitutes are available, authorization may still be granted if a robust socioeconomic case can be made for retaining that specific use. The details of how the authorization process will work in practice remain to be determined.

REACH requires manufacturers and importers not only to obtain a large body of hazard data for their substances but also, if dealing with the same substance, to exchange certain information. Vale Inco has joined with other companies that produce and sell nickel, cobalt and precious metal products to create a number of consortia to manage the registration of similar products within the prescribed timescale. We have also formed a consortium with other manganese producers in order to share resources and cooperate towards complying with REACH requirements.

*Comprehensive legislative review and risk assessment.* EU Regulation 793/93 (EEC), a regulation covering the evaluation of the risks of and controls for existing substances, includes five nickel substances (nickel sulphate, nickel chloride, nickel nitrate, nickel carbonate and nickel metal) as targets. The Danish Environmental Protection Agency (the Danish EPA) has been appointed the principal agency for conducting risk assessments on these substances. The Human Health risk assessment was completed in early 2006 and the Danish EPA released a draft risk reduction strategy in late 2006. The main recommendation is a review of the occupational exposure limits for various nickel species. The environmental risk assessment for nickel is expected to be released in 2008.

The nickel industry (through an industry association, the Nickel Institute) is currently in discussions with the EU regarding the potential classification of various nickel compounds under the Dangerous Substances Directive.

**International environmental regulation**

*ISO and OHSAS certifications.* Our environmental management system is based on the International Organization for Standardization (ISO) standard 14001. We have ISO 14001 certificates covering:

iron ore and pelletizing operations (Alegria, Timbopeba, Água Limpa, Fábrica Nova, Fazendão, Cauê, Conceição, Córrego do Feijão, Brucutu, Morro da Mina, Gongo Soco, Fábrica, Mutuca, Tamanduá, Capitão do Mato, Pico, Capão Xavier, Jangada, Aboboras, Mar Azul and Carajás mines and Fábrica and Tubarão pelletizing plants);

manganese and ferroalloys plants (Azul and Morro da Mina mines, RDME and RDMN);

nickel operations (Clydach Refinery, Vale Inco Japan Limited, Jinco Nonferrous Metal, IATM Dalian & Shenyang and Taiwan Nickel Refining Corporation);

precious metals operations (Acton Refinery);

port operations (Tubarão port and Itaguaí maritime terminal);

aluminum operations (Alunorte, Albrás and Valesul); and

kaolin production facilities (PPSA and CADAM).

Samarco and MRN are also certified under this standard. We also have obtained OHSAS 18001 certificates for the MBR system, Clydach refinery, Acton refinery, as well as the operations of our IATM Dalian & Shenyang and Jinco Nonferrous Metals Co. subsidiaries.

*Harmonization of classification and labeling of chemicals.* The Globally Harmonized System ( GHS ) is a global hazard classification and compatible labeling system for chemicals promulgated by the International Labour Organization. Although adoption of the GHS by individual countries is voluntary, the Plan of Implementation of the World Summit on Sustainable Development encourages countries to implement the GHS as soon as possible with a view to having the system fully operational by 2008.

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Japan has implemented the GHS, while the United States has been enforcing the GHS for transportation purposes since January 2008. Other countries will implement the GHS over the next several years. We do not believe that the adoption of the GHS will have a material impact on our results of operations or financial condition.

**Investment Canada Act undertakings**

We made a number of undertakings to the Canadian Minister of Industry in connection with his approval in 2006 of our acquisition of Inco. We believe we are substantially in compliance with these undertakings, which are briefly described below.

*Creation of a Canada-based global nickel business.* We committed to locate the headquarters of our global nickel business in Toronto, Ontario and gave Vale Inco a mandate to expand its business as a global leader in the nickel industry. In furtherance of this mandate, we have transferred management responsibility for our interest in existing and future nickel projects to Vale Inco, including our interest in the Onça Puma and Vermelho projects in Brazil. We also undertook not to carry out any layoffs at Canadian operating facilities for at least three years from the date of the acquisition, and to maintain, for an agreed period, aggregate employment at such facilities at no less than 85% of the aggregate employment level as of the date on which the acquisition of Inco occurred.

*Acceleration of Voisey's Bay development project.* We undertook to fully support the Voisey's Bay development project and have expressed our desire to accelerate its implementation.

*Enhanced investments in Vale Inco's long-term future.* To help strengthen Vale Inco's position as a leader in the global nickel mining business and contribute to ensuring the long-term viability of Vale Inco's operations in Sudbury and Thompson, we undertook to increase Canadian expenditures in a number of areas, including mine exploration and research and development, for a three-year period from the date of the acquisition.

*Corporate social responsibility.* We undertook to increase spending on employee programs in Canada for a three-year period from the date of the acquisition. We also undertook to increase spending on environmental compliance programs in Canada over that same period.

*Continuing contributions to communities.* We undertook to maintain Vale Inco's involvement and commitment to the growth of Ontario's mining cluster, including its membership in the Mineral Industry Cluster Council. We agreed to respect all agreements entered into by Vale Inco with provincial governments, local governments, labor unions and aboriginal groups, including the Labrador Inuit Association and the Innu Nation, in Canada. We also undertook to honor all commitments made by Vale Inco with regard to the funding of educational institutions in Canada, including commitments made with respect to the Centre for Excellence in Mining Innovation at Laurentian University in Sudbury, Ontario.

Each of the undertakings made by us to the Canadian Minister of Industry is subject to the Investment Canada Act, Guidelines Administrative Procedures, Monitoring of Investments. Among other things, these guidelines state that performance is judged in the context of overall results and that an investor who is unable to fulfill a commitment will not be held accountable where such inability is a result of factors clearly beyond its control.

**CAPITAL EXPENDITURES**

During 2007, Vale made capital expenditures and other investments of US\$11.004 billion, of which US\$5.423 billion was on organic growth, composed of US\$4.682 billion on projects and US\$741 million on research and development, while US\$2.202 billion was invested in maintaining existing business, and US\$3.379 billion in acquisitions. Total capital expenditures in 2007, excluding spending on acquisitions and other investments were US\$7.625 billion. This information on capital expenditures includes research and development expenditures, which are treated as a current expense for accounting purposes. See Note 3 to our consolidated financial statements herein.

In October 2007, our board of directors approved an investment budget for 2008 of US\$11 billion, the largest annual investment program in our history (compared to expenditures of US\$7.625 billion in 2007). This does not include the cost of any acquisitions. The 2008 budget is part of a five-year, US\$59 billion strategic investment program that involves expenditures that are almost three times larger than the US\$20.082 billion invested, excluding acquisitions, during the five-year period ended in December 31, 2007.

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Of the total 2008 budget, 76.7%, or US\$8.436 billion, will be allocated to expenditures for organic growth, of which a total of US\$7.552 billion has been budgeted for more than 30 projects and US\$884 million has been budgeted for research and development, of which US\$349 million will be invested in mineral exploration. The remaining US\$2.563 billion will be allocated to investments to support existing operations.

The following table summarizes the breakdown of our capital expenditures in 2006 and 2007 and our investment budget in 2008 by major business area.

	<b>2006</b>		<b>2007</b>		<b>2008 budget</b>	
	(US\$ million)	(% of total)	(US\$ million)	(% of total)	(US\$ million)	(% of total)
Ferrous minerals	US\$ 1,994	9.7%	US\$ 1,748	15.9	US\$ 3,251	29.6%
Non-ferrous minerals	787	3.8	3,129	28.4	3,618	32.9
Aluminum	850	4.1	859	7.8	755	6.9
Logistics	649	3.1	977	8.9	1,870	17.0
Coal	83	0.4	169	1.5	390	3.5
Energy	92	0.4	165	1.5	470	4.3
Steel			279	2.5	81	0.7
Other	435	2.1	298	2.7	565	5.1
Acquisitions	15,738	76.3	3,379	30.7		
<b>Total</b>	<b>US\$ 20,628</b>	<b>100%</b>	<b>US\$ 11,004</b>	<b>100%</b>	<b>US\$ 11,000</b>	<b>100%</b>

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The following table describes our expenditures for our main investment projects in 2007 and our budgeted expenditures for projects in 2008, together with estimated total expenditures for each project. All figures in the table are presented on a cash basis. For a description of the status of each of the projects in the table, see *Lines of business*.

Business area	Project	Actual	Budgeted		
		2007	2008	Total Capex (1)	
(US\$ million)					
<b>Ferrous minerals and logistics</b>	Carajás iron ore mine	74	1,165	2,478	
	Fazendão iron ore mine	104	50	129	
	Serra Sul iron ore mine		145	10,094	
	Maquiné-Baú iron ore mine		11	2,207	
	Itabiritos pelletizing plant	542	341	973	
	Tubarão VIII pelletizing plant	0.5	95	636	
	Oman pelletizing plant	0.6	82	546	
	Northern Corridor	267	334	956	
	Southern Corridor	54	379	553	
	Litorânea Sul railroad		43	414	
	<b>Non-ferrous</b>	Onça Puma nickel mine	537	581	2,297(2)
		Goro nickel mine	1,125	723	3,212
		Totten nickel and copper mine	33	66	362
Voisey's Bay nickel refinery		30	110	2,177	
Vermelho nickel mine		62	91	1,908	
Salobo copper mine		54	387	1,152(2)	
Papomono copper mine			48	102(2)	
Bayovar phosphate mine			48	479	
Paragominas II bauxite mine		107	61	196	
Paragominas III bauxite mine			30	416	
Alunorte: stages 6 & 7 - alumina refinery		491	382	846	
<b>Coal</b>		New Alumina Refinery		88	1,795
		Moatize coal mine		97	1,398
	Carborough Downs coal mine	5	96	330(2)	
<b>Energy</b>	Barcarena thermal power plant	66	188	898	
	Estreito hydroelectric power plant	38	165	514	
	Karebbe hydroelectric power plant	13	49	252	

(1) Estimated total capex cost for

each project.

- (2) Projects were revised and approved by the board of directors after October 2007, when the 2008 capex budget was announced. The revised capex budget reflects the variation in the exchange rates and increased capex following the completion of detailed engineering studies.

**Item 4A. Unresolved staff comments**

None.

**Item 5. Operating and financial review and prospects**

**OVERVIEW**

The year 2007 was our fifth consecutive year of record growth in revenues, operating income and net income. The main highlights of Vale's performance in 2007 were:

Record sales volumes of iron ore and pellets (296 million metric tons), copper (300,000 metric tons), alumina (3.253 million metric tons) and aluminum (562,000 metric tons).

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Gross operating revenue of US\$33.115 billion, a 62.6% increase over 2006.

Net income of US\$11.825 billion, an 81.1% increase over 2006. The increase in net income was driven primarily by a 72.8% increase in operating income, reflecting a 64.1% increase in net operating revenue, and an increase in non-operating income of US\$1.847 billion, due primarily to higher foreign exchange and monetary gains.

Investment, excluding acquisitions, of US\$7.625 billion, the highest in the global mining and metals industry in 2007.

Investment in corporate social responsibility of US\$ 652 million, of which US\$401 million was allocated to environmental preservation and US\$251 million to social projects.

Our growth in 2007 reflected three primary factors. First, we benefited from a broader portfolio of assets and the globalization of our operations following the acquisition of Inco. In 2007, US\$11.880 billion of net operating revenue was attributable to a full year of consolidation of Vale Inco. Second, we experienced strong demand and rising prices for our principal products driven principally by continued strong demand from China and expanded demand from our other markets in Asia and Europe. Finally, we maintained high production levels, supported by new projects coming on stream, operation at full capacity at most of our units, and productivity gains.

*Demand*

*Demand for iron ore and pellets*

Demand for our iron ore and iron ore pellets is a function of the global demand for steel, which is, in turn, strongly influenced by world industrial production. In recent years, we have experienced a significant increase in demand, particularly from China. Global demand for steel has been growing since 2002, and the global demand for iron ore grew at an annual average rate of 9.6% between 2002 and 2007. In China, where we have been the largest single supplier of iron ore since 2006, we expect the demand for imported iron ore to remain strong through the end of this decade, pressuring the global supply.

Demand for iron ore and iron ore pellets exceeded our production capacity throughout 2007, and we expect the same to occur in 2008. We continue to invest to increase capacity, and our programmed iron ore production for 2008 is higher than in 2007, but we continue to face excess demand. We expect to continue meeting some of this demand by purchasing iron ore from third parties for resale to our customers. In 2007, we purchased 8.3 million metric tons of iron ore and 11.7 million metric tons of pellets from third parties.

*Demand for nickel*

Strong growth in emerging markets, particularly in China, continues to drive demand growth for nickel. In 2007, Chinese nickel demand increased an estimated 90,000 metric tons, or 36% higher than in 2006, and stainless steel output expanded to 7.5 million metric tons, or 41% higher than in 2006.

Volatility in global stainless steel production continues to drive nickel price volatility. In response to rising nickel prices, global stainless steel production in 2007 shifted towards the production of stainless steels with lower nickel content. In addition, an inventory adjustment cycle followed the sharp 21% increase in 2006 of global austenitic stainless steel output. As a result, 2007 production of austenitic stainless steel fell an estimated 7%, and the demand for primary nickel decreased by 2%. Meanwhile, nickel demand for many non-stainless steel applications - non-ferrous alloys, alloy steels, foundry, batteries and others - remained solid.

Despite the cyclical dynamics of the stainless steel industry, we continue to have a positive long-term outlook for nickel. Per capita consumption of stainless steel in high-growth emerging market economies is still low, and the potential for growth in nickel demand arising from non-stainless steel applications is significant.

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*Demand for aluminum*

The global demand for aluminum has been growing significantly. Between 2002 and 2007 it is estimated to have increased at an annual average rate of 7.7%. China has been the primary driver of demand expansion. We expect global demand to continue to expand at a fast pace over the next few years.

*Demand for copper*

In recent years, growth in copper demand has been driven primarily by Chinese imports. In 2007, the copper market was affected by a tight supply of concentrates and refined metal. Supply is anticipated to remain limited as exchange inventories are low, miners are already producing at full capacity and significant increases in global mine capacity are not expected in the short term.

*Demand for coal*

Coal prices have increased steadily over the past six years, but current high prices may decline significantly in response to economic conditions. However, we expect continued growth in steel demand, especially in Asia, to underpin strong demand for metallurgical coal. With major port (and often rail) constraints in the short term in Australia, Canada and the United States, we expect new metallurgical coal capacity to be limited. Given these factors and a number of new coke batteries under development, we expect continued favorable market conditions.

The thermal coal market is the most rapidly growing segment of the global coal industry. It is largely a seaborne market, having significantly expanded in recent years. Growth in thermal coal demand is closely related to growth in electricity consumption, which will continue to be driven by global economic growth and particularly economy growth in emerging markets. The cost of fuel is typically the largest variable cost involved in electricity generation and, on an energy basis, coal is currently the cheapest fossil fuel for electricity generation.

*Demand for transportation services*

Demand for our transportation services in Brazil is primarily driven by growth in the Brazilian economy, mainly in the agricultural and steel sectors. Demand for rail transportation grew more slowly in 2005 and 2006 due to stagnation of Brazilian grain exports and lower Brazilian steel production, but these industries began to recover in 2007.

*Production capacity*

Capacity expansions are a key factor influencing our revenues. We continue to invest in increasing capacity at a large number of facilities. Completed projects that had a significant effect on 2007 results included the following:

The expansion of production capacity at Carajás. Since January 2007 we have been operating the Northern System (Carajás) at the level of 100 million metric tons per year. In 2007 we produced 91.7 million metric tons of iron ore in Carajás, compared to 81.8 million metric tons in 2006.

Production at our Brucutu iron ore mine amounted to 22 million metric tons in 2007, compared to 7.7 million metric tons in 2006, and is expected to reach 30 million metric tons in 2008.

Production at Alunorte amounted to 4.3 million metric tons in 2007, following the completion of an expansion project in the first quarter of 2006 that was designed to increase its nominal capacity from 2.4 to 4.4 million metric tons per year.

In addition to the above projects, the following major projects will affect our results in 2008:

The start-up of Goro, which will have production capacity of 60,000 metric tons per year of nickel in matte and 4,600 metric tons per year of cobalt, is scheduled to be completed by the end of 2008.

The completion of the second phase of the expansion of Paragominas will increase its production capacity to 9.9 million metric tons of bauxite per year.

The expansion of Alunorte's production capacity by a further 1.9 million metric tons, which is scheduled to be completed in the second half of 2008.



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The completion of the Itabirito pellet plant, with annual production capacity of 7 million metric tons, in the second half of 2008, and the increase of annual pellet production capacity at Samarco by 7.6 million metric tons in the first half of 2008.

See *Item 4. Information on the Company Capital Expenditures* for more information concerning the projects we currently have under way to increase capacity.

*Prices*

The following table sets forth our average realized prices for our principal products for each of the years indicated.

	<b>Year ended December 31,</b>		
	<b>2005</b>	<b>2006</b>	<b>2007</b>
	(US\$ per metric ton, except where indicated)		
Iron ore	32.63	40.00	45.33
Pellets	70.79	75.21	78.62
Manganese	84.90	70.60	107.34
Ferroalloys	846.88	886.97	1,311.48
Nickel (1)		31,981.53	37,442.28
Copper (2)	3,274.71	6,380.84	6,611.27
Kaolin	145.32	164.78	195.88
Potash	232.81	195.09	264.09
Platinum (US\$/oz) (1)		1,115.59	1,314.25
Cobalt (US\$/lb) (1)		14.93	24.56
Aluminum	1,841.16	2,558.76	2,784.70
Alumina	290.48	343.99	338.76
Bauxite	28.36	30.46	36.08

(1) For 2006, the average realized price represents only the last quarter of the year.

(2) For 2005, the average realized price represents only copper in concentrate; for 2006, copper in concentrate from our Brazilian operations for the full year and copper from Vale Inco only for the last quarter; and for 2007, all copper products,

including  
copper in  
concentrate.

*Ores and metals*

*Iron ore.* Our iron ore sales are made pursuant to long-term supply contracts, which provide for annual price adjustments. Cyclical changes in the global demand for steel products affect sales prices and volumes in the world iron ore market. Different factors influence price differences in US-dollar per metric ton terms among the various types of iron ore, such as the iron content of specific ore deposits, the various beneficiation and purifying processes required to produce the desired final product, particle size, moisture content and the type and concentration of contaminants (such as phosphorus, alumina and manganese ore) in the ore. Fines, lump ore and pellets typically command different prices. We generally conduct annual price negotiations beginning in November of each year. Because of the wide variety of iron ore and pellet quality and physical characteristics, together with the structure of the market, iron ore and pellets are not priced like commodities, and no futures market has developed. We do not hedge our exposure to iron ore price volatility.

Our 2007 reference prices for iron ore fines were 9.5% higher, on average, than in 2006, and prices for iron ore pellets increased by 5.28%. These price increases took effect in April 2007 for the majority of our customers, and they had a significant positive effect on our 2007 gross revenues.

Our 2008 reference prices for iron ore fines are 65% higher than in 2007. Due to its superior quality, Carajás (Northern System) iron ore fines will have a premium of US\$0.0619 per dry metric ton Fe unit over the 2008 reference price for fines from the Southeastern and Southern Systems. Prices for blast furnace and direct reduction iron ore pellets from the Tubarão plant will be 86.67% higher than in 2007.

*Nickel.* Prices for our nickel products generally reflect prices at the LME, the principal terminal market for primary nickel in the world. Nickel prices depend principally on the balance between demand for nickel products in the marketplace relative to the supply available from us and our competitors, including the supply of similar primary metals materials in various producer, merchant and consumer inventories, inventories of secondary or scrap materials containing nickel and other metals in usable or recyclable form, and supplies of other materials which may be substituted for nickel. Over the long term, a particularly important determinant of price will be the costs associated with bringing additional nickel supply to market to meet overall nickel demand.

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Our nickel price realizations tend to lag LME cash nickel price movements, due primarily to the terms of our contractual sales arrangements with certain customers. We realize a premium over prevailing LME cash prices for our finished nickel products.

With moderated nickel demand resulting from the stainless steel de-stocking cycle and continued supply growth, especially from alternative producers such as nickel pig iron producers, the nickel market shifted into surplus in the second half of 2007 and prices declined as a result. Nickel pig iron cash costs, currently representing the marginal cost in the industry, remained relatively high in 2007 as freight, coke, and energy costs rose and the Chinese renminbi strengthened during the year.

*Aluminum.* Aluminum is sold in an active world market where prices are determined by reference to prices prevailing on terminal markets, such as the LME and the New York Mercantile Exchange, or NYMEX, at the time of delivery. In 2007, the price of aluminum increased 8.8% over 2006 prices to more than US\$2,800 per metric ton, due to expectations of power costs and production problems in South Africa and China. In the short term, we expect power shortages to contribute to a sharp cost increase and to higher prices for aluminum.

We are engaged in the production and sale of bauxite, alumina and aluminum primarily through several subsidiaries and joint ventures. All are fully consolidated except for MRN, which is accounted for by the equity method. The basic arrangements are as follows:

Our sales of aluminum (from our subsidiaries Valesul and Albras) are made at prices based on LME or NYMEX prices. Our sales of bauxite (from our affiliate MRN) and alumina (from our subsidiary Alunorte) are in each case determined by a formula linked to the price of aluminum for three-month futures contracts in the LME and to the price of alumina FOB Australia.

*Manganese ore and ferroalloys.* Manganese ore and ferroalloy prices are influenced by trends in the carbon steel market.

Manganese ore prices used to be negotiated on an annual basis using prices settled in the Japanese market as a benchmark. However, due to changes in market dynamics, negotiations are now held mainly on a spot or quarterly basis. In 2007, manganese ore prices soared in response to tight supply attributable to industry consolidation and logistics constraints, and growing demand from the carbon steel industry.

Ferroalloy prices are settled on a quarterly basis and are influenced by not only market dynamics, but also the prices of the main production inputs, such as manganese ore, power and coke. In 2007, the prices of medium and high carbon manganese alloys were much higher than peaks in previous cycles. During the second half of 2007, ferroalloy prices rose sharply, driven by higher production costs, higher commercial barriers to Chinese exports and occasional production disruptions.

Our average realized manganese ore and ferroalloy prices increased 52% and 47.9%, respectively, in 2007.

*Copper.* We sell our copper in an active world market where prices are determined on the basis of (i) prices of copper metal on terminal markets, such as the LME and the Commodity Exchange (COMEX), and (ii) in the case of intermediate products such as copper concentrate and copper anode, treatment and refining charges negotiated with each customer. World copper prices on the LME increased 6.2% in 2007 over 2006, after increasing 42.8% in 2006 over 2005. These increases reflected increased global demand, primarily from China, and tight supply as indicated by the low level of market inventories.

*Logistics.* We earn our logistics revenues primarily from fees charged to customers for the transportation of cargo via our railroads, port and ships. Most of these revenues are earned by our railways, and nearly all of our logistics revenues are denominated in *reais* and subject to adjustments for changes in fuel prices. Prices in the Brazilian railroad market are subject to maximum levels set by the Brazilian regulatory authorities, but they primarily reflect competition with the trucking industry.

**Table of Contents***Acquisitions and divestitures*

We have made a number of significant acquisitions and divestitures that have affected our results in recent years, of which the acquisition of Inco has had the biggest impact in our 2006 and 2007 results, as shown in the following table. For more information, see *Item 4. Information on the company Business overview Significant changes in our business.*

	Year ended December 31, 2006		Year ended December 31, 2007	
	Total Vale	Attributable to Vale Inco	Total Vale	Attributable to Vale Inco
	(US\$ million)			
Gross revenues	US\$20,363	US\$2,802	US\$33,115	US\$ 11,880
Operating costs and expenses	10,147	2,230	16,463	6,533
Operating income	7,637	411	13,194	4,875

The operating costs of Vale Inco in 2006 and 2007 were affected by purchase accounting adjustments in accordance with SFAS 141 and SFAS 142. Under these standards, the acquired company's assets, including inventories, are adjusted to their fair value at the time of acquisition. When the inventories are sold, the cost of goods sold reflects this fair value rather than the production cost. Applying these principles, the market value of Vale Inco's inventories at the time of acquisition was adjusted upward by an aggregate of US\$2.008 billion of which US\$946 million was recognized in 2006 and US\$1.062 billion in 2007.

*Currency price changes*

Our results are affected by currency price changes, primarily because most of our revenues are denominated in U.S. dollars, while most of our costs of goods sold are denominated in other currencies, principally the *real* (56.6% in 2007) and the Canadian dollar (23.3%). The acquisition of Inco significantly diversified the currency composition of our operating costs, and our results are now less driven by the value of the *real* than before. In addition to the effect on operating margins, currency exchange rates affect us because most of our debt is denominated in U.S. dollars while our functional currency is the *real*.

In recent years, the weakness of the U.S. dollar has had an adverse effect on our operating margins. On the other hand, it has resulted in foreign exchange gains on our U.S. dollar-denominated indebtedness, which we recognize because the *real* is our functional currency. In 2007, the average exchange rate for one U.S. dollar for the year was R\$1.9483, compared to R\$2.1771 during 2006, representing an 11.7% increase in the average value of the *real* for the year. From year-end 2006 to year-end 2007, the U.S. dollar depreciated by 17.2% against the *real*, compared to depreciation of 8.7% during 2006.

*Operating expenses*

Our principal operating expenses consist of cost of goods sold, selling, general and administrative expenses and research and development expenses.

*Cost of goods sold.* Our cost of goods sold consists principally of costs of purchased products for processing or resale, such as iron ore, iron ore pellets, nickel and aluminum products, services (especially ore and waste removal, transportation and maintenance), materials, such as components for railroad and mining equipment, energy (fuel and electric energy), personnel and depreciation and depletion. As described above, in 2006 and 2007 our cost of goods sold also reflect the non-cash effect of purchase accounting adjustments in connection with our acquisition of Inco.

*Selling, general and administrative expenses.* Our selling, general and administrative expenses consist principally of personnel expense, sales expense and depreciation.

*Research and development expenses.* Our research and development expenses consist primarily of investments related to mineral exploration and studies for the development of projects, which are recorded as expenses until the economic viability of related mining activities is established.

**Table of Contents****RESULTS OF OPERATIONS 2007 COMPARED TO 2006***Revenues*

Our gross operating revenues rose to US\$33.115 billion in 2007, a 62.6% increase over 2006. Our net operating revenues increased 64.1% to US\$32.242 billion in 2007. The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated:

	Year ended December 31,		% change
	2006 (US\$ million)	2007 (US\$ million)	
Ferrous minerals:			
Iron ore	US\$ 10,027	US\$ 11,908	18.8%
Iron ore pellets	1,979	2,738	38.4
Manganese	55	77	40.0
Ferroalloys	508	711	40.0
Subtotal	12,569	15,434	22.8
Non-ferrous minerals:			
Nickel and other products (1)	2,802	11,789	320.7
Potash	143	178	24.5
Kaolin	218	238	9.2
Copper concentrate (2)	779	802	3.0
Subtotal	3,942	13,007	230.0
Aluminum	2,381	2,722	14.3
Total minerals and metals	16,511	28,441	72.3
Logistic services	1,376	1,525	10.8
Other products and services (3)	95	427	349.5
Gross revenues	20,363	33,115	62.6
Value-added tax	(712)	(873)	22.6
Net operating revenues	US\$ 19,651	US\$ 32,242	64.1%

(1) Includes copper, precious metals, cobalt and other by-products produced by Vale Inco.

(2) Does not include copper produced by Vale Inco.

(3) Including coal.

*Iron ore.* Gross revenues from iron ore increased by 18.8%, driven primarily by a 13.3% increase in average selling prices and a 4.8% increase in the volume of iron ore sold. The price increases resulted from a 9.5% increase in 2007 reference prices for iron ore fines, effective as of April 2007 for the majority of our customers, and a 19% increase in 2006 reference prices for iron ore fines, effective as of April 2006 for the majority of our customers. The increase in volumes sold was made possible by the expansion of production capacity at our Carajás mine in January 2007 and the ramp-up of our Brucutu mine. These production increases more than offset the negative impact of heavy rain during the first quarter, which slowed production in the mines and caused rail transportation disruptions in the Southeastern System.

*Iron ore pellets.* Gross revenues from iron ore pellets increased by 38.4% in 2007. Total volumes sold in 2007 were 32.8% higher than in 2006, primarily reflecting the commencement of operations at São Luís after a temporary shutdown in 2006. The 4.5% average price increase resulted from a 5.28% increase in 2007 reference prices for blast furnace and direct reduction pellets, effective as of April 2007 for the majority of our customers, and a 3% reduction in 2006 reference prices blast furnace and direct reduction pellets, effective as of April 2006 for the majority of our customers.

*Manganese ore.* Gross revenues from manganese ore increased by 40%, reflecting a 52% increase in average selling prices and 9.1% decrease in volume. The decrease in volume was due to a temporary shutdown of our Azul mine from July to December 2007 in order to allow the rail lines that serve to transport our iron ore.

*Ferroalloys.* Gross revenues from ferroalloys increased by 40.0% due to a 47.9% increase in average selling prices, which was partially offset by a 6.5% decrease in volume largely as a result of furnace repairs at our plant in France.

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*Nickel and other products.* In 2007, revenues from nickel and other products were US\$11.789 billion, compared to US\$2.802 billion in 2006, when we consolidated Vale Inco for only the last quarter of the year.

*Potash.* Gross revenues from sales of potash increased by 24.5%, driven by a 35.4% increase in average selling prices and an 8% decline in volume, reflecting problems with mining equipment in the first half of 2007 and lower grade of potash we mined.

*Kaolin.* Gross revenues from sales of kaolin increased by 9.2%, due principally to a 18.9% increase in average selling prices. Volume decreased by 8.2% due to problems with machinery.

*Copper concentrate.* Gross revenues from sales of copper concentrate increased by 3%, from US\$779 million in 2006 to US\$802 million in 2007, due to a 4.7% increase in average selling prices.

*Aluminum.* Gross revenues from aluminum business increased by 14.3%. This reflected the following factors:

A 26.2% increase in gross revenues from sales of aluminum, from US\$1.244 billion in 2006 to US\$1.570 billion in 2007, mainly driven by an 8.8% rise in average selling prices. Volume increased by 15.9%, primarily due to the consolidation of Valesul, which began in July 2006.

Stable gross revenues from sales of alumina at US\$1.102 billion in 2007, compared to US\$1.108 billion in 2006. Both average selling prices and volume sold remained stable.

A 69% increase in gross revenues from sales of bauxite, from US\$29 million in 2006 to US\$49 million in 2007. Volume increased by 42.6%, reflecting MRN's increased volume available for sale to unaffiliated customers, given the start-up of our Paragominas mine. Average selling prices increased by 18.5% due to higher LME prices for aluminum, the reference price for our bauxite sales.

*Logistics services.* Gross revenues from logistics services increased by 10.8%. The increase reflects the appreciation of the *real*, since our prices are generally denominated in *reais*, as well as price increases in *reais*. In particular:

Revenues from railroad transportation increased by 20.7%, from US\$1.011 billion in 2006 to US\$1.220 billion in 2007. Average prices increased by 16.1% and volume shipped increased by 3.9%.

Revenues from port operations increased by 2.3%, from US\$261 million in 2006 to US\$267 million in 2007. Average prices increased by 7.4%, while volume decreased by 4.4%.

Revenues from shipping decreased by 63.5%, from US\$104 million in 2006 to US\$38 million in 2007, due to the sale of our controlling interest in Log-In, which is no longer consolidated.

*Other products and services.* Gross revenues from other products and services increased from US\$95 million in 2006 to US\$427 million in 2007, primarily reflecting sales of coal following our acquisition of AMCI Holdings Australia Pty.

**Operating costs and expenses**

The acquisition of Vale Inco had a major impact on our operating costs and expenses (US\$2.230 billion in 2006 and US\$6.533 billion in 2007) due to the consolidation of its operations and the accounting effect of the business combination, as explained under *-Overview Acquisitions and Divestitures*. Moreover, like other mining and metals companies, we are currently experiencing higher prices for equipment, replacement parts, energy, inputs and services. The depreciation of the U.S. dollar has increased these pressures, because of our costs denominated in other currencies. The following table summarizes our operating costs and expenses for the periods indicated.

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	Year ended December 31,			Amount of variation attributable to	% change without Vale
	2006	2007	% change	Vale Inco (US\$ million)	Inco
	(US\$ million)				
Cost of ores and metals	US\$ 7,946	US\$ 13,628	71.5%	US\$ 4,303	24.1%
Cost of logistic services	777	853	9.8		9.8
Cost of aluminum products	1,355	1,705	25.8		25.8
Others	69	277	301.4		301.4
Cost of goods sold	10,147	16,463	62.2	4,303	25.4
Selling, general and administrative expenses	816	1,245	52.6	175	33.6
Research and development	481	733	52.4	132	27.1
Other costs and expense	570	607	6.5	3	6.7
Total operating costs and expenses	US\$ 12,014	US\$ 19,048	58.5%	4,613	25.2%

**Cost of goods sold**

The following table summarizes the components of our cost of goods sold for the periods indicated.

	Year ended December 31,			Amount of variation attributable to	% change without Vale
	2006	2007	% change	Vale Inco (US\$ million)	Inco
	(US\$ million)				
Outsourced services	US\$ 2,056	US\$ 2,628	27.8%	450	6.3%
Materials costs	1,584	2,313	46.0	425	21.0
Energy					
Fuel	912	1,406	54.2	250	29.8
Electric energy	623	878	40.9	112	23.9
Subtotal	1,535	2,284	48.8	362	27.4
Acquisition of iron ore and pellets	758	976	28.8		28.8
Acquisition of other products					
Nickel	482	1,522	215.8	1,040	
Aluminum	336	288	(14.3)		(14.3)
Other	97	86	(11.3)		(11.3)
Subtotal	915	2,872	213.9	1,040	(13.6)
Personnel	917	1,873	104.3	781	24.9
Depreciation and depletion	899	2,049	127.9	802	44.9



Inventory adjustment	946	1,062	12.3	116	
Others	537	1,382	157.4	327	39.2
Total	US\$ 10,147	US\$ 16,463	62.2%	4,303	25.4%

Our total cost of goods sold increased by 62.2% from 2006 to 2007. This increase resulted primarily from the following factors:

*Impact of Vale Inco.* Of the total increase in our cost of goods sold, US\$4.303 billion represents the difference between Vale Inco's costs for the portion after the acquisition became effective. As described above, part of its costs (US\$1.062 billion in 2007 and US\$946 million in 2006) related to the recognition of the final purchase accounting adjustments concluded in 2007, relating to the value of Vale Inco inventories.

*Impact of depreciation of the U.S. dollar.* Because most of our costs and expenses are denominated in currencies other than the U.S. dollar, the depreciation of the U.S. dollar led to higher costs as expressed in that currency. For example, the average value of the *real* against the U.S. dollar for the year was 11.7% higher in 2007 than in 2006, which accounted for US\$677 million of the increase, excluding Vale Inco.

*Outsourced services.* Vale Inco accounted for US\$450 million of outsourced services. Excluding Vale Inco, outsourced services costs increased by 6.3% in 2007 due to higher volumes and the depreciation of the U.S. dollar against the *real*, partially offset by a decrease in outsourcing contracts for ore and waste removal.

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*Material costs.* Vale Inco accounted for US\$425 million of material costs. Excluding Vale Inco, material costs increased by 21% in 2007, primarily reflecting higher volumes, price increase and the depreciation of the U.S. dollar against other currencies.

*Acquisition of iron ore and iron ore pellets.* Cost of iron ore and iron ore pellets purchased from other mining companies increased 28.8%. We purchased 11.7 million metric tons of pellets from third parties in 2007, an increase of 31.5% compared to 8.9 million metric tons purchased in 2006. This, and the effect of increased price, were partly offset by an 18.6% decrease in the volume of iron ore purchased from third-party suppliers, to 8.3 million metric tons in 2007 compared to 10.2 million metric tons in 2006.

*Acquisition of other products.* Acquisition of nickel products, which includes nickel concentrates for processing under tolling contracts, intermediary products and finished nickel, totaled US\$1.522 billion in 2007.

*Energy costs.* Vale Inco accounted for US\$362 million of energy costs. Excluding Vale Inco, energy costs increased by 27.4% in 2007. The increase in electricity costs primarily reflects 8% higher electricity prices for aluminum production under the Albras electricity contract, which links a portion of the price to the LME price for aluminum, while the increase in fuel costs was driven by higher production and the depreciation of the U.S. dollar.

*Personnel costs.* Vale Inco accounted for US\$781 million of personnel costs. Excluding Vale Inco, personnel costs increased by 24.9%, reflecting an increase in the number of our employees because of the growth of our operations and the return to in-house solutions for some services such as ore and waste removal at our iron ore mines, and the impact of the 2007 wage increases.

*Other costs.* The increase of US\$845 million is mainly due to payments of royalties and the consolidation of Taiwan Nickel Refining Company ( TNRC ) beginning in the fourth quarter of 2007. We have a 49.9% stake of TNRC, but since we are the only supplier of nickel feed to TNRC, we consolidated it in accordance with Interpretation 46, Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51 (FIN 46), issued in January 2003 and revised in December 2003 (FIN 46-R) by the Financial Accounting Standard Board.

***Selling, general and administrative expenses***

Selling, general and administrative expenses increased by 52.6%. Vale Inco accounted for US\$142 million in selling, general and administrative expenses. Excluding the impact of Vale Inco, selling, general and administrative expenses increased by US\$287 million, as a result of higher selling expenses due to the increase in sales volume, advertising (including US\$74 million related to the launch of the Vale brand) and the appreciation of the other currencies against the U.S. dollar.

***Research and development expenses***

Research and development expenses increased by 52.4%. Of the US\$252 million increase, US\$96 million was attributable to Vale Inco. The remainder of the increase primarily reflects an increase in mineral exploration and project studies in several regions, including South America, Asia, Africa and Australia.

***Operating income by segment***

The following table provides information concerning our operating income by segment and as a percentage of revenues for the periods indicated.

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	Year ended December 31,		2007	
	2006			
	Segment operating income		Segment operating income (loss)	
	(loss)	(% of net operating revenues)	(loss)	(% of net operating revenues)
	(US\$ million)		(US\$ million)	
<b>Ferrous minerals</b>				
Iron ore	US\$ 5,168	53.0%	US\$ 6,325	54.4%
Pellets	630	33.3	659	25.3
Manganese ore	(49)		(9)	
Ferroalloys	3	0.6	182	28.0
<b>Non-ferrous minerals</b>				
Nickel and other products	411	14.7	4,785	40.6
Potash	28	20.7	37	22.0
Kaolin			(32)	
Copper concentrate	464	61.1	252	32.6
<b>Aluminum</b>				
Alumina and bauxite	294	26.0	160	13.9
Aluminum	631	51.9	668	44.3
<b>Logistics</b>				
Railroads	274	32.9	297	29.1
Ports	64	29.5	22	10.0
Ships	(6)		(12)	
<b>Others</b>				
	(275)		(140)	
<b>Total</b>	<b>US\$ 7,637</b>	<b>38.9%</b>	<b>US\$ 13,194</b>	<b>40.9%</b>

Our operating income increased as a percentage of net operating revenues from 38.9% in 2006 to 40.9% in 2007. This increase was driven primarily by increases in the margins on our iron ore, nickel, ferroalloys and potash businesses, which, together with the impact of consolidating Vale Inco and its operating margin of 40.6%, more than offset lower margins in our iron ore pellets, copper, alumina, aluminum and port businesses.

The increase in margins in our iron ore business primarily reflects higher average selling prices, which more than offset the impact of the appreciation of the *real* against the U.S. dollar, higher research and development expenditures and higher depreciation charges due to the expansion of our asset base.

The increased operating margin for nickel and other products reflects in part the impact of the purchase accounting adjustments relating to inventories described above, which adversely affected margins in 2006 to a much greater degree than in 2007. This will not affect our results in 2008.

The margin declines in the alumina, aluminum and port operations segments resulted primarily from price increases of significant inputs such as electricity, oil, coking coal and pitch, a decrease in the average selling price of alumina, and the appreciation of the *real* against the U.S. dollar.

The margin declines in the copper concentrate segment resulted primarily from higher costs due to lower copper grades and the appreciation of the *real* against the U.S. dollar.

The significant margin increases in the ferroalloys segment are due to higher average prices.

*Non-operating income (expenses)*

The following table details our net non-operating income (expenses) for the periods indicated.

	<b>Year ended December 31,</b>	
	<b>2006</b>	<b>2007</b>
	(US\$ million)	
Financial income	US\$ 327	US\$ 295
Financial expenses	(1,338)	(1,592)
Foreign exchange and monetary gains, net	529	2,559
Gain on sale of investments	674	777
Non-operating income	US\$ 192	US\$ 2,039

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We had net non-operating revenues of US\$2.039 billion in 2007, compared to net non-operating revenues of US\$192 million in 2006. This change primarily reflects:

Higher exchange gains due to the higher average level of net U.S. dollar-denominated liabilities resulting from the Inco acquisition combined with the depreciation of the U.S. dollar.

A decrease in financial income, due mainly to lower average cash balances.

An increase in financial expenses, principally due to the increase in average debt resulting from the Inco acquisition. This was largely offset by a gain of US\$925 million in derivative transactions that we entered into, including a swap of *real*-denominated debt into U.S. dollar (gain of US\$791 million) and a swap hedging some of our personnel costs from *reais* into dollars (gain of US\$127 million).

US\$777 million gain on sale of investments in 2007, including the sale of our interests in Usiminas (US\$456 million gain), Log-In (US\$238 million gain) and Lion Ore Mining (US\$80 million gain).

*Income taxes*

In 2007, we recorded net income tax expense of US\$3.201 billion, compared to US\$1.432 billion in 2006. The effective tax rate on our pretax income was 21% in 2007 and 18.3% in 2006. Our effective tax rate is lower than the statutory rate because (i) income of some non-Brazilian subsidiaries is subject to lower rates of tax, (ii) we are entitled under Brazilian law to deduct the amount of our distributions to shareholders that we classify for tax purposes as interest on shareholders' equity and (iii) we benefit from tax incentives applicable to our earnings on production in certain regions of Brazil.

*Affiliates and joint ventures*

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments resulted in a gain of US\$595 million in 2007, compared to a gain of US\$710 million in 2006. The following table summarizes the composition of our equity in results of affiliates and joint ventures for the periods indicated.

	<b>Year ended December 31,</b>	
	<b>2006</b>	<b>2007</b>
	(US\$ million)	
Equity in results of affiliates and joint ventures:		
Ferrous minerals	US\$ 312	US\$ 301
Logistics	95	125
Aluminum	76	84
Steel	201	30
Nickel		9
Coal	26	46
Total equity in results of affiliates and joint ventures and provisions for losses	US\$ 710	US\$ 595

The change from 2006 to 2007 primarily reflected dispositions, and in particular the reduction of our interest in Usiminas in 2007 and the sale of GIIC in 2006. This was partially offset by higher results in logistics due to better performance at MRS Logística.

**RESULTS OF OPERATIONS 2006 COMPARED TO 2005***Revenues*

Our gross operating revenues rose to US\$20.363 billion in 2006, a 51.9% increase over 2005. Our net operating revenues increased 53.6% to US\$19.651 billion in 2006. The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated.



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	Year ended December 31,		% Change
	2005	2006	
	(US\$ million)		
Iron ore and iron ore pellets			
Iron ore	US\$ 7,396	US\$ 10,027	35.6%
Iron ore pellets	2,083	1,979	(5.0)
Subtotal	9,479	12,006	26.7
Nickel and other products (1)		2,802	100.0
Manganese and Ferroalloys	571	563	(1.4)
Potash	149	143	(4.0)
Kaolin	177	218	23.2
Copper concentrate (2)	391	779	99.2
Minerals and metals	10,767	16,511	53.3
Revenues from logistic services	1,216	1,376	13.2
Aluminum	1,408	2,381	69.1
Other products and services	14	95	578.6
Gross revenues	13,405	20,363	51.9
Value-added tax	(613)	(712)	16.2
Net operating revenues	US\$ 12,792	US\$ 19,651	53.6%

(1) Includes copper, precious metals, cobalt and other by-products produced by Vale Inco.

(2) Does not include copper produced by Vale Inco.

*Iron ore.* Gross revenues from iron ore increased by 35.6%, driven primarily by a 22.7% increase in average selling prices and a 10.6% increase in shipments of iron ore. The price increases resulted from agreements with major steelmakers in May 2006 under which our reference prices for iron ore increased by an average of 19%. This price increase, which was retroactive to January for most customers in Europe and to April for most customers in Asia, began to favorably affect our gross revenues in the latter half of the second quarter of 2006. The increase in shipments was made possible by higher production at our existing mines, the expansion of our Carajás mine, the startup of our Fábrica Nova mine in April 2005 and production from MBR's Mar Azul mine, which we acquired in the first quarter of 2006. Our Brucutu mine began operations in the third quarter of 2006, further increasing our production capacity.

*Iron ore pellets.* Gross revenues from iron ore pellets decreased by 5%. Total shipments in 2006 of 25,354 million metric tons were 11% lower than in 2005, primarily reflecting our decision to temporarily shut down our São Luís pellet plant from March until July 2006 in response to lower demand resulting from steel production cuts in Europe and North America. Reflecting the lower demand for iron ore pellets, we agreed to a 3% cut in the reference price for

blast furnace and direct reduction iron ore pellets in our negotiations with major steelmakers in May 2006, which began to have an impact on gross revenues in the latter part of the second quarter of 2006. Despite this reduction in reference prices, average selling prices for 2006 were 6.8% higher in 2006 than in 2005. As described above, we reached agreements with major steelmakers under which prices for blast furnace and direct reduction iron ore pellets from our Tubarão and São Luís plants will increase by 5.28% over 2006.

*Nickel and other products.* We acquired Inco in the second half of October 2006, and our 2006 results include one quarter of its operations. Nickel and other products sold by Vale Inco accounted for revenues of US\$2.802 billion in 2006.

*Manganese ore and ferroalloys.* Gross revenues from sales of manganese ore and ferroalloys decreased by 1.4%. Because of lower market prices for ferroalloys, we have reduced production since 2005. See *Item 5. Operating and financial review and prospects Overview Prices Manganese ore and ferroalloys.*

Gross revenues from ferroalloys increased by 2.8%, from US\$494 million in 2005 to US\$508 million in 2006, due to a 4.7% increase in average selling prices partially offset by an 1.3% decrease in volume.

Gross revenues from manganese ore decreased by 28.6%, from US\$77 million in 2005 to US\$55 million in 2006, reflecting a 16.8% decrease in average selling prices and a 14.1% decrease in volume.



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*Potash.* Gross revenues from sales of potash decreased by 4%, from US\$149 million in 2005 to US\$143 million in 2006. The decrease was driven by a 16.2% decrease in average selling prices. Sales volume increased by 14.5%, reflecting a full year of operation at higher capacity of the Taquari-Vassouras mine.

*Kaolin.* Gross revenues from sales of kaolin increased by 23.2%, from US\$177 million in 2005 to US\$218 million in 2006 due principally to a 13.4% increase in average selling prices. Volume increased by 8.6%.

*Logistics services.* Gross revenues from logistics services increased by 13.2%. The increase reflects the appreciation of the *real*, since our prices are generally denominated in *reais*, as well as price increases in *reais*. In particular:

Revenues from railroad transportation increased by 14.8%, from US\$881 million in 2005 to US\$1.011 billion in 2006. Average prices increased by 14.2%. Volume shipped remained stable.

Revenues from port operations increased by 13.5%, from US\$230 million in 2005 to US\$261 million in 2006. Average prices increased by 17.1%. Volume decreased by 3.1%.

Revenues from shipping remained stable, at US\$105 million in 2005 and US\$104 million in 2006.

*Aluminum products.* Gross revenues from aluminum products increased by 69.1%. The main drivers were:

A 51.2% increase in gross revenues from sales of aluminum, from US\$823 million in 2005 to US\$1.244 billion in 2006. This increase was mainly driven by a 39% rise in average selling prices, reflecting strong worldwide demand for aluminum. Volume increased by 8.5%, primarily due to the consolidation of Valesul beginning in July 2006.

A 108.7% increase in gross revenues from sales of alumina, from US\$531 million in 2005 to US\$1.108 billion in 2006. The increase in alumina gross revenues resulted from a 76.2% increase in sales volume, reflecting the startup of Stages 4 and 5 of Alunorte's Barcarena refinery in the first quarter of 2006. These expansion projects increased our annual production capacity from 2.5 million metric tons to 4.4 million metric tons. The growth in alumina production more than offset the accounting impact of eliminating sales of alumina by Alunorte to Valesul upon its consolidation beginning in July 2006. Higher LME prices for aluminum, the reference price for our alumina sales, drove an 18.4% increase in average selling prices.

Gross revenues from sales of bauxite decreased by 46.3%, from US\$54 million in 2005 to US\$29 million in 2006. Volume decreased by 50%, reflecting higher consumption of bauxite by our Alunorte subsidiary, which reduced the amount of bauxite available for sale to customers. This was partly offset by a 7.4% increase in average selling prices due to higher LME prices for aluminum, the reference price for our bauxite sales.

*Copper.* Gross revenues from sales of copper almost doubled, due to an 85.7% increase in average selling prices and a 7.3% increase in sales volume. This reflects sales of copper concentrate from our Brazilian operations but not sales of copper from our Vale Inco operations, which are included in nickel and other products.

*Other products and services.* Gross revenues from other products and services increased from US\$14 million in 2005 to US\$95 million in 2006, primarily reflecting a coal shipment realized in the first quarter of 2006 and sales of pig iron.

*Operating costs and expenses*

Like other mining and metals companies, we are currently experiencing high prices for equipment, replacement parts, energy, raw materials and services. The appreciation of the *real* against the U.S. dollar has increased these pressures, because of our costs denominated in *reais*. The following table summarizes our operating costs and expenses for the periods indicated.

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	Year ended December 31,		% Change
	2005	2006	
	(US\$ million)		
Cost of ores and metals	US\$ 4,620	US\$ 7,946	72.0
Cost of logistic services	705	777	10.2
Cost of aluminum	893	1,355	51.7
Others	11	69	527.3
Cost of goods sold	6,229	10,147	62.9
Selling, general and administrative expenses	583	816	40.0
Research and development	277	481	73.6
Other costs and expense	271	570	110.3
Total operating costs and expenses	US\$ 7,360	US\$ 12,014	63.2

*Cost of goods sold*

The following table summarizes the components of our cost of goods sold for the periods indicated.

	Year ended December, 2006			% Change
	Total	Vale Inco	2005	
	(US\$ million)			
Outsourced services	US\$ 2,056	132	US\$ 1,483	38.6
Materials costs	1,584	128	1,126	40.7
Energy				
Fuel	912	91	630	44.8
Electric energy	623	31	456	36.6
Subtotal	1,535	122	1,086	41.3
Acquisition of iron ore and iron ore pellets	758		761	(0.4)
Acquisition of other products				
Nickel	482	482		
Aluminum	336		299	12.4
Other	97	32	33	193.9
Subtotal	915	514	332	175.6
Personnel	917	210	514	78.4
Depreciation and depletion	899	124	585	53.7
Inventory adjustment	946	946		
Others	537	54	342	57.0
Total	US\$ 10,147	US\$ 2,230	US\$ 6,229	62.9%

Our total cost of goods sold increased by 62.9%. This increase resulted primarily from the following factors:

*Impact of Inco acquisition.* Vale Inco operations in the fourth quarter of 2006 contributed total cost of goods sold of US\$2.230 billion. As described above, US\$946 million of this amount relates to purchase accounting adjustments under SFAS 141 and 142 that required us to mark to market the inventories of Inco upon acquisition. The excess of the market price over the production cost of these inventories is included in cost of goods sold when the inventories are sold. We expect to incur a further US\$1.062 billion in increased cost of goods sold in 2007 related to the remaining inventories.

*Impact of appreciation of the real.* The average value of the *real* increased 11.8% against the U.S. dollar in 2006 compared to 2005. Because the majority of our costs and expenses are denominated in *reais*, this led to increased U.S. dollar costs.

*Outsourced services.* Outsourced services costs increased by 38.6% in 2006. Of the US\$573 million increase, US\$132 million was attributable to Vale Inco. The remaining US\$441 million increase was driven primarily by the appreciation of the *real* and higher rail freight costs due to higher iron ore production at our MBR subsidiary, which uses the MRS railway to transport its iron ore to the port. The higher outsourced services costs also reflect increased waste material removal at our mines and higher costs for maintenance services.

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*Material costs.* Material costs increased by 40.7% in 2006. Of the US\$573 million increase, Vale Inco accounted for US\$128 million. The remaining US\$330 million increase primarily reflected higher volumes and the appreciation of the *real* against the U.S. dollar.

*Acquisition of iron ore and iron ore pellets.* Cost of iron ore and iron ore pellets purchased from other mining companies remained stable, as price increases more than offset declines in metric tons purchased. Iron ore purchased from third-party suppliers in 2006 decreased by 33.8% to 10.2 million metric tons in 2006 compared to 15.4 million metric tons purchased in 2005. We purchased 8.9 million metric tons of iron ore pellets from third-parties in 2006, a decrease of 7.1% compared to 9.7 million metric tons purchased in 2005.

*Acquisition of other products.* Acquisition of other products increased by US\$583 million in 2006, of which US\$514 million was attributable to Vale Inco. The remaining US\$69 million was driven primarily by higher purchases of bauxite from third parties by Alunorte to supply the expanded operation of Alunorte's Barcarena alumina refinery. We expect customers' bauxite purchases to decline following the start-up of the Paragominas mine in 2007.

*Energy costs.* Energy costs increased by 41.3% in 2006. Of the US\$449 million increase, US\$122 million was attributable to Vale Inco. Electricity costs increased by US\$167 million, of which US\$31 million was attributable to Vale Inco. The remaining increase in electricity costs primarily reflects 31.1% higher electricity prices for aluminum production, driven by the Albras electricity contract, under which a portion of the price is indexed to the LME price for aluminum, and by the consolidation of Valesul, which pays higher prices for its supply of electricity. The volume of electricity consumed also increased by 17.6%. Fuel costs increased by US\$282 million, of which Vale Inco accounted for US\$91 million. The remaining US\$191 million increase was driven by higher production, the appreciation of the *real* and higher prices.

*Personnel costs.* Personnel costs increased by 78.4%. Of the US\$403 million increase, US\$210 million was attributable to Vale Inco. The remainder of the increase reflects the impact in 2006 of salary increases agreed in July 2005, an increase in the number of our employees as a result of our expansion projects and our consolidation of Valesul, the appreciation of the *real* against the U.S. dollar, and the payment of a special bonus to employees in August 2006. In July 2006, we agreed on a 3% wage increase that took effect in January 2007.

*Selling, general and administrative expenses*

Selling, general and administrative expenses increased by 40%. Of the US\$233 million increase, US\$62 million was attributable to Vale Inco. The remainder of the increase resulted primarily from higher selling expenses due to the increase in sales volume, an annual increase in the salary of administrative employees and the appreciation of the *real* against the U.S. dollar.

*Research and development expenses*

Research and development expenses increased by 73.6%. Of the US\$204 million increase, US\$39 million was attributable to Vale Inco. The remainder of the increase primarily reflects an increase in mineral exploration and project studies in several regions, including South America, Asia, Africa and Australia. The increase also includes US\$25 million of expenses relating to the construction of a hydrometallurgical plant for processing copper.

*Other costs and expenses*

Other costs and expenses more than doubled. The US\$299 million increase was primarily attributable to a US\$171 million provision for mine closure and other environmental remediation matters, resulting from a comprehensive review.

**Table of Contents***Operating income by segment*

The following table provides information concerning our operating income by segment and as a percentage of revenues for the periods indicated.

	Year ended December 31,			
	2005		2006	
	Segment operating income (loss)	(% of net operating revenues)	Segment operating income (loss)	(% of net operating revenues)
	(US\$ million)		(US\$ million)	
<b>Ferrous minerals</b>				
Iron ore	US\$ 4,085	57.0%	US\$ 5,168	53.0%
Iron ore pellets	661	33.0	630	33.3
Manganese ore	(11)		(49)	
Ferroalloys	83	18.6	3	0.6
<b>Non-ferrous minerals</b>				
Nickel and other products			411	14.6
Potash	44	31.9	28	20.7
Kaolin	(26)			
Copper concentrate	146	38.1	464	61.1
<b>Aluminum</b>				
Alumina	37	7.3	294	26.7
Aluminum	395	48.3	631	51.9
Bauxite	5	9.3		
<b>Logistics</b>				
Railroads	173	23.5	274	32.9
Ports	65	33.2	64	29.5
Ships	(7)		(6)	
<b>Others</b>	(218)		(275)	
<b>Total</b>	<b>US\$ 5,432</b>	<b>42.5%</b>	<b>US\$ 7,637</b>	<b>38.9%</b>

Our operating income decreased as a percentage of net operating revenues from 42.5% in 2005 to 38.9% in 2006.

This decrease was driven primarily by decreases in the margins on our iron ore, manganese, ferroalloys and potash businesses, which, together with the impact of consolidating Inco and its operating margin of 14.6%, more than offset higher margins in our copper, alumina and aluminum businesses.

The decrease in margins in our iron ore business primarily reflects the impact of the appreciation of the *real* against the U.S. dollar, higher research and development expenditures, higher depreciation charges due to the expansion of our asset base and higher freight and other outsourced services costs. Together, these factors more than offset the impact of higher average selling prices.

Revenues and operating margins increased in our copper, alumina and aluminum businesses. In each of these segments, higher prices more than offset the production cost increases described above.

The significant margin declines in the manganese and ferroalloys segments are due to lower market prices for these products and the higher production costs described above.

The margin decline in the potash segment is due to the lower potash prices noted above and higher production costs due primarily to the appreciation of the *real* against the U.S. dollar.

The operating margin for nickel and other products reflects in part the impact of the purchase accounting adjustments relating to inventories described above.

**Table of Contents***Non-operating income (expenses)*

The following table details our net non-operating income (expenses) for the periods indicated.

	<b>Year ended December 31,</b>	
	<b>2005</b>	<b>2006</b>
	(US\$ million)	
Financial income	US\$ 123	US\$ 327
Financial expenses	(560)	(1,338)
Foreign exchange and monetary gains (losses) net	299	529
Gain on sale of investments	126	674
Non-operating income (expenses)	US\$ (12)	US\$ 192

We had net non-operating revenues of US\$192 million in 2006, compared to net non-operating expenses of US\$12 million in 2005. This change primarily reflects:

Higher exchange rate gains on our net U.S. dollar-denominated liabilities caused by the exchange rate variation of Vale Inco's debt.

An increase in financial income, due mainly to higher interest rates and higher average cash balances.

An increase in financial expenses, principally due to a significant increase in average debt incurred in connection with the Inco acquisition.

A US\$674 million gain on sales of investments in 2006, from the sale of our interest in Siderar (US\$96 million gain), Usiminas (US\$175 million gain), GIIC (US\$338 million gain), Nova Era Silicon (US\$9 million gain) and Gerdau (US\$56 million gain), compared to gains in 2005 related to the sale of the Quebec-Cartier Mining Company (US\$126 million gain).

*Income taxes*

In 2006, we recorded a net income tax expense of US\$1.432 billion, compared to US\$880 million in 2005. The effective tax rate on our pretax income was 18.3% in 2006 and 16.2% in 2005. Our effective tax rate is lower than the statutory rate because (i) income of some non-Brazilian subsidiaries is subject to lower rates of tax, (ii) we are entitled to deduct the amount of our distributions that we classify for tax purposes as interest on shareholders' equity and (iii) we benefit from tax incentives applicable to our earnings on production in particular regions of Brazil.

*Affiliates and joint ventures*

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments resulted in a gain of US\$710 million in 2006, compared to a gain of US\$760 million in 2005.

The following table summarizes the composition of our equity in results of affiliates and joint ventures for the periods indicated.

	<b>Year ended December 31,</b>	
	<b>2005</b>	<b>2006</b>
	(US\$ million)	
Equity in results of affiliates and joint ventures:		
Ferrous minerals	US\$ 435	US\$ 312
Logistics	54	95
Aluminum products	65	76
Steel	197	201
Coal	9	26
Total equity in results of affiliates and joint ventures and provisions for losses	US\$ 760	US\$ 710

The change from 2005 to 2006 primarily reflected lower results in ferrous minerals because of the sale of GIIC and higher results in logistics because of better performance at MRS Logistica.



**Table of Contents****LIQUIDITY AND CAPITAL RESOURCES***Overview*

In the ordinary course of business, our principal funding requirements are for capital expenditures, dividend payments and repayment of debt. We have historically met these requirements by using cash generated from operating activities and through borrowings. We believe these sources of funds, together with our cash and cash equivalents on hand, will continue to be adequate to meet our anticipated capital requirements. In 2008, we expect our major cash needs to include repayment of US\$1.249 billion of maturing long-term debt, budgeted capital expenditures of US\$11.000 billion, and announced minimum dividend payments for 2008 of US\$2.500 billion. We expect to meet these cash needs primarily through operating cash flow.

We also regularly review acquisition and investment opportunities, and when suitable opportunities arise we make selected acquisitions and investments to implement our business strategy. We may fund these investments with internally generated funds or with borrowings, supplemented in some cases by dispositions. The acquisition of Inco resulted in a substantial increase in our indebtedness in 2006, and in 2007 we reduced debt, using cash from operations and from asset dispositions, and refinanced to extend our maturity profile. At December 31, 2007, we had US\$18.857 billion of long-term debt outstanding, compared with US\$21.833 billion at the end of 2006. We prepaid US\$4.730 billion of debt during 2007.

*Sources of funds*

Our principal sources of funds are operating cash flow and borrowings. Our operating activities generated cash flows of US\$11.012 billion in 2007. We also generated a total of US\$1.042 billion in cash through disposals of businesses and investments in 2007, primarily Log-In and Usiminas.

We believe we are well positioned to make additional borrowings because of our strong cash generation and the favorable maturity profile of our debt, which are reflected in our investment grade rating. We maintained our investment grade rating despite the increase in our debt resulting from the acquisition of Inco, and we are currently rated at BBB (Standard & Poor's), Baa3 (Moody's), BBB high (Dominion) and BBB- (Fitch).

At December 31, 2007, we had available committed revolving credit lines totaling US\$1.900 billion, of which US\$1.150 billion was granted to CVRD International and the balance to Vale Inco. As of December 31, 2007, neither CVRD International nor Vale Inco had drawn any amounts under these facilities, and US\$88 million of letters of credit were issued and outstanding pursuant Vale Inco's facility. In April 2008, we entered into a contract for a committed credit facility with BNDES for R\$7.3 billion.

We also raised US\$1.880 billion in 2007 by selling notes that will convert to equity upon maturity in 2010. Our wholly-owned subsidiary Vale Capital Limited issued mandatorily convertible notes in two series, both due June 15, 2010. Our total proceeds were US\$1.869 billion, net of commissions. The Series RIO notes (US\$1.296 billion principal amount) are mandatorily convertible into ADSs representing an aggregate maximum of 56,582,040 common shares. The Series RIO P notes (US\$584 million principal amount) are mandatorily convertible into ADSs representing an aggregate maximum of 30,295,456 preferred class A shares. Both series can convert before maturity under specified circumstances. The conversion rate for both series will depend on the market price of the ADSs on the conversion date.

*Uses of funds**Acquisitions*

In 2007, we used cash of US\$2.926 billion, net of cash acquired, to acquire subsidiaries. The largest components of this amount were for the acquisition of the remaining shares of Vale Inco (US\$2.029 billion), the acquisition of Vale Australia (US\$645 million), the acquisition of the remaining 18% interest in Ferro Gusa Carajás S.A. (US\$20 million), and the acquisition of an additional 6.25% stake of Empreendimentos Brasileiros de Mineração S.A. EBM (EBM) (US\$231 million). We also entered into a usufruct agreement giving us the benefit of the remaining 13.75% of EBM's capital for the next thirty years and paid an initial installment of US\$61 million.

**Table of Contents***Capital expenditures*

Capital expenditures amounted to US\$6.975 billion in 2007. In 2008, we have budgeted US\$11.000 billion for capital expenditures. This amount includes expenditures on projects as well as expenditures for maintenance and exploration. For more information about the specific projects for which we have budgeted funds, *see Item 4.*

*Information on the Company Capital Expenditures.*

*Dividends*

We paid total dividends (including distributions classified for tax purposes as interest on shareholders' equity) of US\$1.875 billion in 2007. The announced minimum dividend amount for 2008 is US\$2.500 billion. The first installment of this dividend was approved by our board of directors in the amount of US\$1.250 billion and was paid on April 30, 2008. *See Item 8. Financial information Distributions.*

*Debt*

At December 31, 2007, we had an aggregate outstanding debt of US\$19.030 billion, consisting of short-term debt of US\$1.422 billion (including US\$1.249 billion in current portion of long-term debt), and long-term debt (excluding current portion) of US\$17.608 billion. At December 31, 2007, US\$584 million of our debt was secured by liens on some of our assets. At December 31, 2007, the average debt maturity was 10.7 years, compared with 8.36 years in 2006.

Our short-term debt consists primarily of U.S. dollar-denominated trade financing, mainly in the form of export prepayments and export sales advances with foreign and Brazilian financial institutions.

Our major categories of long-term indebtedness are as follows. The amounts given below include the current portion of long-term debt and exclude accrued charges.

*U.S. dollar-denominated loans and financing (US\$6.139 billion at December 31, 2007).* These loans include export financing lines, import finance from export credit agencies, and loans from commercial banks and multilateral organizations. The largest facility is a pre-export financing facility, secured by future receivables from export sales, that was originally entered into in the amount of US\$6.000 billion as part of the refinancing of the Inco acquisition debt. The outstanding amount at December 31, 2007 was US\$3.900 billion.

*U.S. dollar-denominated fixed rate notes (US\$6.680 billion at December 31, 2007).* We have issued several series of fixed rate debt securities through our finance subsidiary Vale Overseas Limited with a Vale guarantee.

*U.S. dollar-denominated loans secured by future export receivables (US\$258 million at December 31, 2007).* We have a US\$550 million securitization program based on existing and future receivables generated by our subsidiary CVRD Overseas Ltd from exports of iron ore and pellets to six of our customers in Europe, Asia and the United States.

*Reais-denominated non-convertible debentures (US\$3.340 billion at December 31, 2007).* In November 2006, we issued non-convertible debentures in the amount of approximately US\$2.600 billion, in two series, with four and seven-year maturities. The first series, approximately US\$700 million, matures in 2010 and bears interest at 101.75% of the accumulated variation of the Brazilian CDI (interbank certificate of deposit) interest rate. The second series, approximately US\$1.900 billion, matures in 2013 and bears interest at the Brazilian CDI interest rate plus 0.25% per year.

*Perpetual notes (US\$87 million at December 31, 2007).* We have issued perpetual notes that are exchangeable for 48.000 billion preferred shares of MRN. Interest is payable on the notes in an amount equal to dividends paid on the underlying preferred shares.

*Other domestic debt. (US\$1.744 billion at December 31, 2007).* We have several Brazilian loans, principally from BNDES and commercial banks, most of which are linked to Brazilian floating rates.

Some of our long-term debt instruments contain financial covenants. Our principal covenants require us to maintain certain ratios, such as debt to equity, net debt to EBITDA and interest coverage. We were in full compliance

with our financial covenants as of December 31, 2007, and we believe that our existing covenants will not significantly restrict our ability to borrow additional funds as needed to meet our capital requirements.

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We believe we will be able to operate within the terms of our financial covenants for the foreseeable future. None of these covenants directly restricts our ability to pay dividends on equity securities at the parent company level.

**SHAREHOLDER DEBENTURES**

At the time of the first stage of our privatization in 1997, we issued shareholder revenue interests known in Brazil as debentures participativas to our then-existing shareholders. The terms of the debentures were established to ensure that our pre-privatization shareholders, including the Brazilian government, would participate alongside us in potential future financial benefits that we derive from exploiting certain mineral resources that were not taken into account in determining the minimum purchase price of our shares in the privatization. In accordance with the debentures deed, holders have the right to receive semiannual payments equal to an agreed percentage of our net revenues (revenues less value-added tax, transport fee and insurance expenses related to the trading of the products) from certain identified mineral resources that we owned at the time of the privatization, to the extent that we exceed defined thresholds of sales volume relating to certain mineral resources, and from the sale of mineral rights that we owned at that time. Our obligation to make payments to the holders will cease when the relevant mineral resources are exhausted. Based on current production levels and estimates for new projects, we began payments relating to copper resources in 2004 and expect to start payments relating to iron ore resources beginning in 2014 for the Northern System and 2019 for the Southeastern system, and payments related to other mineral resources at the end of the current decade.

The total payments made under the shareholder debentures amounted to US\$5 million in 2005 and US\$6 million in 2006. In 2007 we made total payments under the shareholder debentures in the amount of US\$11 million. See Note 19 to our consolidated financial statements for a description of the terms of the debentures.

**CONTRACTUAL OBLIGATIONS**

The following table summarizes our long-term debt, short-term debt, operating lease obligations, purchase obligations and MRN take-or-pay obligations at December 31, 2007. This table excludes other obligations that we may have, including pension obligations, deferred tax liabilities and contingent obligations arising from uncertain tax positions, all of which are discussed in the notes to our consolidated financial statements.

	Total	Payments due by period			
		Less than 1 Year	2009-2010 (US\$ million)	2011-2012	Thereafter
Long-term debt	US\$ 18,857	US\$ 1,249	US\$ 2,705	US\$ 3,863	US\$ 11,040
Short-term debt	167	167			
Interest payments (1)	13,730	1,339	2,599	2,017	7,775
Operating lease obligations	1,136	62	124	124	826
Ferrovias Norte Sul S.A. subconcession	420	210	210		
Purchase obligations (2)	12,692	3,497	2,123	1,324	5,748
Take-or-pay obligation (MRN) (3)	520	269	251		
Total	US\$ 47,522	US\$ 6,793	US\$ 8,012	US\$ 7,328	US\$ 25,389

(1) Consists of estimated future payments of interest on our loans, financings and

debentures, calculated based on interest rates and foreign exchange rates applicable at December 31, 2007 and assuming (i) that all amortization payments and payments at maturity on our loans, financings and debentures will be made on their scheduled payments dates, and (ii) that our perpetual bonds are redeemed on the first permitted redemption date.

- (2) Amounts, including for purchases of iron ore from mining companies located in Brazil, are based on 2007 prices.
- (3) Our subsidiary Alunorte is committed under a take-or-pay agreement to purchase bauxite from MRN at a price that is determined by a formula based on prevailing

world prices of aluminum. The values in the table are based on year-end 2007 prices.

#### **OFF-BALANCE SHEET ARRANGEMENTS**

At December 31, 2007, our off-balance sheet arrangements consisted primarily of the following. See Note 19 to our consolidated financial statements for more information.

At December 31, 2007, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of less than US\$1 million denominated in U.S. dollars. We expect no losses to arise as a result of these guarantees. We have made fee charges for extending these guarantees in the case of Samarco.

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Sumic Nickel Netherlands B.V. ( Sumic ), a 21% shareholder of Goro, has a put option to sell to Vale Inco 25%, 50%, or 100% of its shares of Goro. The put option can be exercised if the cost of the Goro project exceeds US\$4.2 billion at projected exchange rates and an agreement cannot be reached on how to proceed with the project.

We provided a guarantee to cover potential termination payments under an energy supply agreement for the Goro project. The amount of any termination payment depends on a number of factors, including the date of any termination. The maximum amount of any termination payment would be Euro 145 million, and the amount decreases over the term of the agreement.

In connection with the Girardin tax-advantaged lease financing, we provided certain guarantees on behalf of Goro pursuant to which we guaranteed payments due from Goro of up to a maximum amount of US\$100 million in connection with an indemnity. We also provided an additional guarantee covering the payments due from Goro of (a) amounts exceeding the maximum amount in connection with the indemnity and (b) certain other amounts payable by Goro under a lease agreement covering certain assets.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

We believe that the following are our critical accounting policies. We consider an accounting policy to be critical if it is important to our financial condition and results of operations and requires significant judgments and estimates on the part of our management. For a summary of all of our significant accounting policies, see Note 3 to our consolidated financial statements.

*Mineral reserves and useful life of mines*

We regularly evaluate and update our estimates of proven and probable mineral reserves. Our proven and probable mineral reserves are determined using generally accepted estimation techniques. Calculating our reserves requires us to make assumptions about future conditions that are highly uncertain, including future ore prices, foreign currency exchange rates, inflation rates, mining technology, availability of permits and production costs. Changes in some or all of these assumptions could have a significant impact on our recorded proven and probable reserves.

One of the ways we make our ore reserve estimates is to determine the mine closure dates used in recording the fair value of our asset retirement obligations for environmental and site reclamation costs and the periods over which we amortize our mining assets. Any change in our estimates of total expected future mine or asset lives could have an impact on the depreciation, depletion and amortization charges recorded in our consolidated financial statements under cost of goods sold. Changes in the estimated lives of our mines could also significantly impact our estimates of environmental and site reclamation costs, which are described in greater detail below.

*Environmental and site reclamation costs*

Expenditures relating to ongoing compliance with environmental regulations are charged against earnings or capitalized as appropriate. These ongoing programs are designed to minimize the environmental impact of our activities.

SFAS 143, Accounting for Asset Retirement Obligations, requires that we recognize a liability for the fair value of our estimated asset retirement obligations in the period in which they are incurred, if a reasonable estimate can be made. We consider the accounting estimates related to reclamation and closure costs to be critical accounting estimates because:

we will not incur most of these costs for a number of years, requiring us to make estimates over a long period;

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reclamation and closure laws and regulations could change in the future or circumstances affecting our operations could change, either of which could result in significant changes to our current plans;

calculating the fair value of our asset retirement obligations in accordance with SFAS 143 requires us to assign probabilities to projected cash flows, to make long-term assumptions about inflation rates, to determine our credit-adjusted risk-free interest rates and to determine market risk premiums that are appropriate for our operations; and

given the significance of these factors in the determination of our estimated environmental and site reclamation costs, changes in any or all of these estimates could have a material impact on net income. In particular, given the long periods over which many of these charges are discounted to present value, changes in our assumptions about credit-adjusted risk-free interest rates could have a significant impact on the size of our provision.

Our Environmental Department defines the rules and procedures that should be used to evaluate our asset retirement obligations. The future costs of retirement of all of our mines and sites are reviewed annually, considering the actual stage of exhaustion and the projected exhaustion date of each mine and site. The future estimated retirement costs are discounted to present value using a credit-adjusted risk-free interest rate. At December 31, 2007, we estimated the fair value of our aggregate total asset retirement obligations to be US\$975 million.

### *Impairment of long-lived assets and goodwill*

We have made acquisitions that included a significant amount of goodwill, as well as fair valuations of intangible and tangible assets. Under generally accepted accounting principles, except for goodwill and indefinite-life intangible assets, all long-lived assets, including these acquired assets, are amortized over their estimated useful lives, and are tested to determine if they are recoverable from operating earnings on an undiscounted cash flow basis over their useful lives whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment review include the following:

- significant underperformance relating to expected historical or projected future operating results of entities or business units;

- significant changes in the manner in which we use the acquired assets or our overall business strategy; or

- significant negative industry or economic trends.

When we determine that the carrying value of definite-life intangible assets and long-lived assets may not be recoverable based upon verification of one or more of the above indicators of impairment, we measure any impairment loss based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model.

Beginning in 2002 we ceased to amortize the goodwill balance that existed at December 31, 2001. We are required to assign goodwill to reporting units and test each reporting unit's goodwill for impairment at least annually, and whenever circumstances indicating that recognized goodwill may not be fully recovered are identified. We perform goodwill impairment tests on September 30 of each year. In the first step of the test we compare a reporting unit's fair value with its carrying amount to identify any potential goodwill impairment loss. If the carrying amount of a reporting unit exceeds the unit's fair value, we must carry out the second step of the impairment test to measure the amount, if any, of the unit's goodwill impairment loss. Goodwill arising from a business combination with a continuing non-controlling interest must be tested for impairment by using an approach that is consistent with the approach that the entity used to measure the non-controlling interest at the acquisition date. For equity investees we determine annually whether there is an other-than-temporary decline in the fair value of the investment.

### *Purchase price allocation*

As of January 3, 2007, we had acquired 100% of Vale Inco. We use the purchase method to account for our business combination transactions, which requires that we reasonably determine the fair value of the identifiable assets and liabilities of acquired companies individually, in order to determine the amount of goodwill to be recognized as an intangible asset. Upon the acquisition of assets, which include rights to mine reserves of natural



resources, the establishment of values for these assets includes the placing of fair values on purchased reserves, which are classified in the balance sheet as property, plant and equipment.

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With respect to Vale Inco, the preliminary purchase price allocations based on the fair values of acquired assets and liabilities were based on management's preliminary internal valuation estimates. Such allocations were finalized in the second quarter of 2007, based on valuation and other studies, performed by us with the assistance of outside valuation specialists. The differences between the preliminary and final allocations are discussed in Note 7 to our financial statements.

*Derivatives and hedging activity*

SFAS 133, Accounting for Derivative Financial Instruments and Hedging Activities, as amended by SFAS 137, SFAS 138 and SFAS 149, requires that we recognize all derivative financial instruments as either assets or liabilities on our balance sheet and measure such instruments at fair value. Changes in the fair value of derivatives are recorded in each period in current earnings or in other comprehensive income (outside net income), in the latter case depending on whether a transaction is designated as an effective cash flow hedge. Fair value adjustments to our derivatives were recorded in current net income, unless designated as cash flow hedges. We designated certain derivative instruments as cash flow hedges, as permitted under SFAS 133, of which the corresponding unrealized fair value adjustments were recognized directly to shareholders' equity. In 2007, we recorded to the income statement an unrealized gain of US\$917 million in relation to fair value adjustments on derivative instruments and US\$29 million to other comprehensive income in relation to derivative instruments designated as cash flow hedges.

*Income taxes*

In accordance with SFAS 109, Accounting for Income Taxes, we recognize deferred tax effects of tax losses carryforward and temporary differences in our consolidated financial statements. We record a valuation allowance when we believe that it is more likely than not that tax assets will not be fully recoverable in the future.

When we prepare our consolidated financial statements, we estimate our income taxes based on regulations in the various jurisdictions where we conduct business. This requires us to estimate our actual current tax exposure and to assess temporary differences that result from deferring treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which we show on our consolidated balance sheet. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income. To the extent we believe that recovery is not likely, we establish a valuation allowance. When we establish a valuation allowance or increase this allowance in an accounting period, we record a tax expense in our statement of income. When we reduce the valuation allowance, we record a tax benefit in our statement of income.

Determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance to be recorded against our net deferred tax assets requires significant management judgment and estimates and assumptions about matters that are highly uncertain. For each income tax asset, we evaluate the likelihood of whether some portion or all of the asset will not be realized. The valuation allowance made in relation to accumulated tax losses carryforward depends on our assessment of the probability of generation of future taxable profits within the legal entity in which the related deferred tax asset is recorded based on our production and sales plans, selling prices, operating costs, environmental costs, group restructuring plans for subsidiaries and site reclamation costs and planned capital costs.

Effective January 1, 2007, we adopted the provisions of FIN 48, Accounting for Uncertainty in Income Taxes—an Interpretation of FASB Statement No. 109, which clarifies the accounting for uncertain income tax benefit positions by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. FIN 48 also provides guidance on the recognition of previously recognized income tax items, measurement, classification, interest and penalties, accounting in interim periods and financial statement disclosure. Under FIN 48, we recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the tax position. The amount of the tax benefit recognized in our financial statements from such positions is the largest amount that has a greater than 50% likelihood of being upheld upon final resolution.

Due to our size and the number of tax jurisdictions in which we conduct our global business operations, we are subject to income tax audits on a regular basis. As a result, we have tax reserves allocated to potential tax obligations around the world.



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We believe we have sufficiently provided for all audit exposures and assessments. Settlements of these audits or the expiration of the statute of limitations on the assessment of income taxes for any tax year may result in an increase or reduction of future tax positions.

*Contingencies*

We disclose material contingent liabilities unless the possibility of any loss arising is considered remote, and material contingent assets where the inflow of economic benefits is probable. We discuss our material contingencies in Note 19 to our financial statements.

We account for contingencies in accordance with SFAS 5, *Accounting for Contingencies*, which requires that we record an estimated loss from a loss contingency when information available prior to issuance of our financial statements indicates that it is probable that a future event will confirm that an asset has been impaired or a liability has been incurred at the date of the financial statements, and the amount of the loss can be reasonably estimated. In particular, given the uncertain nature of Brazilian tax legislation, the assessment of potential tax liabilities requires significant management judgment. By their nature contingencies will only be resolved when one or more future events occur or fail to occur and typically those events will occur a number of years in the future. Assessing such liabilities, particularly in the uncertain Brazilian legal environment, inherently involves the exercise of significant management judgment and estimates of the outcome of future events.

The provision for contingencies at December 31, 2007, totaling US\$2.453 billion, consists of provisions of US\$519 million, US\$311 million, US\$1.605 billion and US\$18 million for labor, civil, tax and other claims, respectively.

*Employee post-retirement benefits*

We sponsor a defined benefit pension plan covering some of our retirees. We account for these benefits in accordance with SFAS No. 132 *Employers' Disclosure about Pensions and Other Postretirement Benefits* and SFAS No. 158 *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans*, as amended.

The determination of the amount of our obligations for pension benefits depends on certain actuarial assumptions. These assumptions are described in Note 18 to our consolidated financial statements and include, among others, the expected long-term rate of return on plan assets and increases in salaries. In accordance with U.S. GAAP, actual results that differ from our assumptions and are not a component of net benefit costs for the year are recorded in other comprehensive income (loss).

**Item 6. Directors, senior management and employees****BOARD OF DIRECTORS****Overview**

Our board of directors, sets general guidelines and policies for our business and monitors the implementation of those guidelines and policies by our executive officers. The board of directors holds regularly scheduled meetings on a monthly basis and holds additional meetings when called by its chairman, vice-chairman or any two directors. Decisions of the board of directors require a quorum of a majority of the directors and are taken by majority vote.

Under the Brazilian Corporation Law, the board of directors must have at least three members. Each director and his or her respective alternate are elected at a general shareholders' meeting and are subject to removal at any time. Our bylaws state that the board of directors consists of eleven members and eleven alternates. Our employees have the right to appoint one director and an alternate. Under the Brazilian Corporation Law, members of the board of directors must be shareholders of Vale. Members of the board of directors are elected for two-year terms and can be re-elected. Each alternate director serves on behalf of a specific board member. In the absence of the director for whom an alternate director is acting, that alternate director may attend and vote at meetings of the board of directors.

Nine of our 11 current directors and nine of our current alternate directors were appointed to their positions by Valepar, our principal shareholder, pursuant to Valepar's shareholders' agreement and the provisions of the Brazilian Corporation Law. For a description of the procedures under which our directors are elected, see *Item 10*.

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*Additional information Memorandum and Articles of Incorporation Common shares and preferred shares General.* For a description of Valepar's shareholders' agreement, see *Item 7. Major shareholders and related party transactions Major shareholders Principal shareholder.*

**Directors of Vale**

The following table lists the current members of the board of directors. All of our directors, except for Luciano Galvão Coutinho, were elected or re-elected, as the case may be, at our annual shareholders' meeting in April 2007. Mr. Luciano Galvão Coutinho was elected in August 2007, and replaced Mr. Demian Fiocca, who was elected at the April shareholders' meeting, but did not assume office. The terms of all of our directors will expire in 2009. The alternate position corresponding to Mr. Francisco Augusto da Costa e Silva is vacant.

	<b>Year first elected</b>	<b>Position</b>	<b>Age</b>
Sérgio Ricardo Silva Rosa (1)	2003	Chairman	48
Mário da Silveira Teixeira Júnior (1)	2003	Vice-Chairman	62
José Ricardo Sasseron (1)	2007	Director	52
Jorge Luiz Pacheco (1)	2003	Director	53
Sandro Kohler Marcondes (1)	2007	Director	44
Renato da Cruz Gomes (1)	2001	Director	55
Masami Iijima (2)	2008	Director	57
Oscar Augusto de Camargo Filho (1)	2003	Director	70
Luciano Galvão Coutinho (1)	2007	Director	61
João Batista Cavaglieri (4)	2007	Director	52
Francisco Augusto da Costa e Silva (3)	2005	Director	59

(1) Appointed by Valepar and approved at the shareholders meeting.

(2) Nominated by the board of directors in April 2008 to substitute Hiroshi Tada, who resigned in March 2008. The nomination of Mr. Iijima will be confirmed by shareholders in the first general shareholders meeting following the annual shareholders

meeting held on  
April 29, 2008.

- (3) Nominated by  
Vale's  
non-controlling  
shareholders in  
2005 and  
reappointed in  
2007.
- (4) Appointed by  
our employees  
and approved at  
the shareholders  
meeting.

The following table lists the alternate members of the board of directors.

	<b>Year first elected</b>	<b>Position</b>	<b>Age</b>
Sérgio Ricardo Lopes de Farias (1)	2005	Alternate Director	43
Luiz Carlos de Freitas (1)	2007	Alternate Director	55
Rita de Cássia Paz Andrade Robles (1)	2005	Alternate Director	41
Luiz Mariano de Campos (1)	2007	Alternate Director	66
José Mauro Guahyba de Almeida (1)	2005	Alternate Director	63
João Moisés de Oliveira (1)	2000	Alternate Director	63
Hidehiro Takahashi (1)	2005	Alternate Director	52
Wanderlei Viçoso Fagundes (1)	2003	Alternate Director	62
Caio Marcelo de Medeiros Melo (1)	2007	Alternate Director	35
Paulo Soares de Souza (2)	2007	Alternate Director	44

- (1) Appointed by  
Valepar and  
approved at the  
shareholders  
meeting.
- (2) Appointed by  
our employees  
and approved at  
the shareholders  
meeting.

Below is a summary of the business experience, areas of expertise, and principal outside business interests of our current directors.

*Sérgio Ricardo Silva Rosa.* Mr. Rosa joined our board of directors in April 2003 and was designated as Chairman in May 2003. Mr. Rosa is currently the chief executive officer of PREVI – Caixa de Previdência dos Funcionários do Banco do Brasil, or Previ, where he has been an executive officer since 2000. He is also a director of Valepar and chief executive officer of Litel Participações S.A. Mr. Rosa has been a director of Brasil Telecom Participações since December 2000, and of Sauípe S.A. since May 2001. Prior to joining Previ, Mr. Rosa served as President of the Confederação Nacional dos Bancários from June 1994 to May 2000. From January 1995 to December 1996, Mr. Rosa was an alderman of the municipality of São Paulo. He received his degree in journalism from Universidade de São

Paulo.

*Mário da Silveira Teixeira Júnior.* Mr. Teixeira joined our board of directors in May 2003. In July 1971, Mr. Teixeira joined Bradesco S.A. Corretora de Títulos e Valores Mobiliários, where he served as an executive officer from March 1983 to January 1984, when he was appointed as head department officer of Banco Bradesco S.A. In 1992 he became managing officer, in 1998 vice-president and from March 1999 until July

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2001 he was a member of the board of directors. From July 2001 to March 2002, Mr. Teixeira was CEO of Bradespar and, in March 2002, he returned to the board of directors of Banco Bradesco S.A. In addition, he is a director of Valepar, VBC Participações S.A., VBC Energia S.A., Companhia Paulista de Força e Luz CPFL, CPFL Energia S.A., CPFL Geração de Energia S.A., Companhia Piratininga de Força e Luz, Vice-chairman of the board of directors of Banco Bradesco S.A., non-voting member of the Managing Board of Banco Espírito Santo S.A., located in Lisbon, Portugal, and Vice-chairman of the board of directors of BES Investimento do Brasil S.A. Banco de Investimento. He also served as Vice-President of ANBID Associação Nacional dos Bancos de Investimento, member of the Management Board of ABRASCA Associação Brasileira das Companhias Abertas, and director of Companhia Siderúrgica Nacional CSN, Latasa S.A., Globo Cabo S.A., São Paulo Alpargatas S.A. and Tigre S.A. Tubos e Conexões. Mr. Teixeira received a degree in civil engineering and business administration from Mackenzie Presbyterian University, São Paulo.

*José Ricardo Sasseron.* Mr. Sasseron joined our board of directors in April 2007. Mr. Sasseron began his career in 1980 at Banco do Brasil. From 1996 to 1998, he was chairman of the fiscal council of Previ. In 2001, he was a member of the *Conselho de Gestão e Previdência Complementar* (CGPC) and was president of the *Associação Nacional dos Participantes de Fundo de Pensão* (ANAPAR). From 2005 to 2007, he was chairman of the board of directors of Sauípe S.A., and in 2004 he returned to Previ, where he was a member of the *Conselho Deliberativo* until 2006. Mr. Sasseron is currently an officer of Previ. He received his bachelor's degree in history from the Universidade de São Paulo.

*Jorge Luiz Pacheco.* Mr. Pacheco joined our board of directors in April 2003. Mr. Pacheco has been manager of strategic investments at Previ since December 2000, and prior to this time worked at Banco do Brasil S.A. since 1973. He has also served as a director of Valepar and a director of Litel, and has held an officer position in the fiscal council of Companhia Siderúrgica Belgo-Mineira. He received his degree in economics from Faculdade de Ciências Econômicas FCPE Cândido Mendes/RJ, and post-graduate degrees in finance and business management from IBMEC/RJ.

*Sandro Kohler Marcondes.* Mr. Marcondes joined our board of directors in April 2007. He is currently an officer of Banco do Brasil, where he has worked in various capacities both in Brazil and abroad since 1982. Since 2005, he has been an officer of BB Leasing, Banco do Brasil Securities in New York, BB Securities in London and BB Tur. Mr. Marcondes received his bachelor's degree in business administration from the Universidade Estadual de Guarapuava and a master's degree from the Fundação Getulio Vargas in São Paulo.

*Renato da Cruz Gomes.* Mr. Gomes joined our board of directors in April 2001. Mr. Gomes has been an executive officer of Bradespar S.A. since 2000. From 1976 through 2000, Mr. Gomes held a variety of positions within BNDES and has participated on the boards of directors of many companies, in the last 15 years, namely Aracruz, Iochpe Maxión, Bahia Sul, Globo Cabo and Latasa. He was also a member of the advisory board of Fator Sinergia Fundo de Investimento de Valores Mobiliários em Ações and the investment committee of Bradesco Templeton Value and Liquidity Fund. Mr. Gomes has been an executive officer of Valepar since April 2001 and is a member of Valepar's board of directors. He received his degree in engineering from Universidade Federal do Estado do Rio de Janeiro UFRJ, and his post-graduate degree in management development from SDE.

*Masami Iijima.* Mr. Iijima joined our board of directors in April 2008. Since April 1974, Mr. Iijima has served in a variety of positions at Mitsui & Co. UK Plc. and Mitsui & Co. Ltd., where he is currently the Executive Managing Officer. Mr. Iijima received a degree in business administration from Yokohoma National University, in Japan.

*Oscar Augusto de Camargo Filho.* Mr. Camargo Filho joined our board of directors in October 2003. He is currently a partner of CWA Consultoria Empresarial. From 1999 to 2003, Mr. Camargo Filho served as chairman of the board of directors of MRS Logística. From 1973 to 2003, he held various positions with CAEMI, including CEO and member of its board of directors. From 1963 until 1973, he held a variety of positions within Motores Perkins S.A., including commercial officer and sales and services manager. He received his law degree from Faculdade de Direito at the Universidade de São Paulo.

*João Batista Cavaglieri.* Mr. Cavaglieri joined the board of directors in April 2007. Since 1990, Mr. Cavaglieri has been a union leader, and in 1996 he became president of the Espírito Santo and Minas Gerais





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Railway Employees Union, which represents the employees living in Vitória and along Estrada de Ferro Vitória-Minas (EFVM).

*Francisco Augusto da Costa e Silva.* Mr. Costa e Silva joined our board of directors in April 2005. He is also a partner of Bocater, Camargo, Costa e Silva Advogados Associados, a law firm in Rio de Janeiro. Mr. Costa e Silva also serves as a director of Banco do Brasil S.A., Comitê de Ética de Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais (APIMEC), and the development committee of Pontifícia Universidade Católica do Rio de Janeiro (PUC/RJ). He started his career at Banco Nacional do Desenvolvimento Econômico e Social BNDES, where he held a variety of positions, including executive officer. Previously, he served on the board of directors of several companies and entities namely Solpart Participações S.A., Aracruz Celulose S.A., PISA Papel de Imprensa S.A., Fundação de Assistência e Previdência Social do BNDES FAPES and Rio de Janeiro Stock Exchange BVRJ. Mr. Costa e Silva also served as President of the CVM and of the Council of Securities Regulators of the Americas COSRA, joined Comissão da Moeda e do Crédito COMOC and the Supplemental Pension Plan Council and served on the executive committee of the International Organization of Securities Commissions - IOSCO. Mr. Costa e Silva received his law degree from Universidade do Estado da Guanabara, currently Universidade do Estado do Rio de Janeiro UERJ, and his MBA degree from COPPEAD, at Universidade Federal do Rio de Janeiro UFRJ.

*Luciano Galvão Coutinho.* Mr. Coutinho joined our board of directors in 2007. He is also the president of BNDES. He holds a Ph.D. in economics from Cornell University and is an invited professor at the University of Campinas. Specialist in international and industrial economics, he has written and edited several books and articles, which have been published in Brazil and abroad. In 1994, Mr. Coutinho coordinated a Study on the Competitiveness of Brazilian Industry, which entailed an extensive mapping of the Brazilian industrial sector by almost one hundred specialists. He was executive secretary of the Ministry of Science and Technology from 1985 to 1988, where he participated in the restructuring of the Ministry and in the design of policies relating to complex areas such as biotechnology, information technology, chemistry, mechanics and new materials. Born in Pernambuco, Mr. Coutinho holds an undergraduate degree in economics from the University of São Paulo, where he received the award Gastão Vidigal for best economics student. He holds a masters degree in economics from the Economic Research Institute of the University of São Paulo. Mr. Coutinho has been a visiting professor at the University of São Paulo, the University of Paris XIII, the University of Texas and the Ortega y Gasset Institute. Before assuming the presidency of BNDES, Mr. Coutinho was a partner of LCA Consultores, where he provided expert advice on antitrust, international trade and economics.

**EXECUTIVE OFFICERS****Overview**

The executive officers are our legal representatives and are responsible for day-to-day operations and the implementation of the general policies and guidelines set forth by the board of directors. Our bylaws provide for a minimum of six and a maximum of eleven executive officers. The board of directors appoints executive officers for two-year terms and may remove them at any time. According to the Brazilian Corporation Law, executive officers must be Brazilian residents. The executive officers hold regularly scheduled meetings on a weekly basis and hold additional meetings when called by any executive officer.

**Executive officers**

The following table lists our current executive officers. The term of each of our executive officers expires in 2009.

	<b>Year of appointment</b>	<b>Position</b>	<b>Age</b>
Roger Agnelli	2001	Chief Executive Officer	49
Fabio de Oliveira Barbosa	2002	Chief Financial Officer	47
José Carlos Martins	2004	Executive Officer (Ferrous Minerals)	58
Murilo de Oliveira Ferreira	2005	Executive Officer (Nickel, Marketing & Sales of Copper)	54

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Eduardo de Salles Bartolomeo	2006	Aluminum) Executive Officer (Logistics)	44
Carla Grasso	2001	Executive Officer (Human Resources & Corporate Services)	46
Tito Botelho Martins	2006	Executive Officer (Non Ferrous Minerals & Energy)	45
Demian Fiocca	2007	Executive Officer (Management & Sustainability)	39

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We have summarized below the experience, areas of expertise, and principal outside business interests of our current executive officers.

*Roger Agnelli.* Mr. Agnelli was appointed CEO and president of Vale in July 2001. Prior to his appointment, he was the chairman of Vale's board of directors from May 2000 until July 2001. Mr. Agnelli developed his professional career at the Bradesco financial group, the largest bank in Brazil, from 1981 to 2001, where he became executive director of Bank Bradesco in 1998, remaining in that office until 2000. Due to his activities in the areas of investment, mergers & acquisitions and asset management, he was director of UGB and Vice-President of ANBID - Brazil's National Association of Investment Banks. Mr. Agnelli was also President and CEO of Bradesco from March 2000 to July 2001 and a member of the board of directors of several major companies in Brazil and abroad, such as Companhia Paulista de Força e Luz, Companhia Siderúrgica Nacional (CSN), Latas de Alumínio-LATASA, VBC Energia, Brasmotor, Mahle Metal Leve, Rio Grande Energia, Suzano Petroquímica, Serra da Mesa Energia, Duke Energy and of PETROBRAS. From 2003 until 2007, he was a member of the Economic and Social Development Council (CDES), an advisory body of the President of Brazil. He is presently a member of the International Investment Council, formed to advise the President of South Africa, Dr. Thabo Mbeki, and of the International Advisory Investment Council to the President of the Republic of Mozambique, Dr. Armando Guebuza. Mr. Roger Agnelli also is the vice-president of the Center of Industries of the States of Rio de Janeiro, a member of the board of directors of Asea BrownBoveri (ABB) and of Spectra Energy and member of the International Advisory Committee of New York Exchange (NYSE). Mr. Agnelli has a degree in economics from the Fundação Armando Álvares Penteado, in São Paulo, Brazil.

*Fabio de Oliveira Barbosa.* Mr. Barbosa was appointed as our chief financial officer and investor relations director in May 2002. Prior to that, Mr. Barbosa served as a member of our board of directors from April 2000 to March 2002. Prior to joining us, Mr. Barbosa has served as secretary of the National Treasury at the Ministry of Finance since July 1999, after having held the position of assistant secretary in the previous years. From 1992 to 1995, he served as advisor to the executive board of the World Bank, in Washington D.C. At the Ministry of the Economic and Finance he was Deputy and Head of the Fiscal Policy Unit from 1990 to 1992. He was an Economic Advisor and head of the Economics Analysis Unit, both at the Ministry of Planning, from 1988 to 1990. Mr. Barbosa held a variety positions at the Ministry of Industry and Commerce, the Paraná State Development Institute, the Ministry of Labor and the Institute for applied Economic Research (IPEA). He was also the chairman of the Board of Director of CAEMI, Banco do Estado de São Paulo S/A, and also a Board Member of Banco do Brasil S/A, Caixa Econômica Federal, Companhia Siderúrgica de Tubarão and Telecomunicações de São Paulo (TELESP). He holds a degree in Economics from the Federal University in the State of Minas Gerais (UFMG) and a Master degree (A.b.D.) in Economics from the Brasilia University (UNB). He attended several educational programs at INSEAD, IMD, MIT and attended a specialized course in Financial Programming and Policy at the International Monetary Fund.

*José Carlos Martins.* Mr. Martins was appointed as an executive officer of our ferrous minerals division in April 2005, and he was originally appointed as an executive officer of holdings, energy and business development in April 2004. He has over 30 years of experience in the metals industry. He was an officer and president of Aços Villares from 1986 to 1996 and chief managing officer of the steel area at CSN, from 1997 to 1999. In 1999, Mr. Martins became President of Latasa, one of the largest aluminum can producers in Latin America. Upon the purchase of Latasa by Rexam, a United Kingdom company, in 2003, he became president and CEO of Rexam's South American beverage can division, Rexam Beverage Can South America. Mr. Martins has a B.A. degree in Economics from Pontifícia Universidade Católica de São Paulo.

*Murilo de Oliveira Ferreira.* Mr. Ferreira was appointed Vale Inco's President and Chief Executive Officer in January 2007 and continues to serve as an executive officer of Vale. He oversees the Company's nickel business, as well as marketing and sales of copper and aluminum products. He previously served as an executive officer of our holdings, energy and business development areas. He joined us in 1977 and has vast experience in several areas of Vale, particularly aluminum and ferroalloys. In 1998 he was appointed executive officer of commerce and finance at Vale do Rio Doce Alumínio S.A. - ALUVALE, a holding company of Vale that was merged into Vale in December 2003. Mr. Ferreira was the CEO of Alumínio Brasileiro S.A.- ALBRAS. Aside from being the Director of the Department of Aluminum since December 2003, Mr. Ferreira is also a member of the board of directors of MRN

Mineração Rio do Norte S.A., Valesul Alumínio S.A. and Alumina do Norte do Brasil S.A. ALUNORTE. Mr. Ferreira has a B.A. degree from Escola de Administração de Empresas, Fundação Getulio Vargas (FGV), and an MBA from EBAP-FGV.

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*Eduardo de Salles Bartolomeo.* Mr. Bartolomeo was appointed as an executive officer of our logistics division in December 2006. Previously, Mr. Bartolomeo served as logistics operations department officer from January 2004 to July 2006. Thereafter, Mr. Bartolomeo worked as Chief Executive Officer of PETROFLEX from August to December 2006. He started his career at COSIPA - Cia. Siderúrgica Paulista as a trainee in 1988 and was promoted to head officer of the slab conditioning and conversion department, in 1989, where he stayed until 1991. From 1994 to 2003, Mr. Bartolomeo worked for AMBEV - Cia. De Bebidas das Américas, where he held a variety of positions, including regional plant officer. Mr. Bartolomeo obtained a metallurgical engineering degree from the Universidade Federal Fluminense - UFF and an MBA from the Catholic University of Leuven, Belgium.

*Carla Grasso.* Ms. Grasso was appointed as an executive officer of the human resources and corporate services area in October 2001. From December 1997 to October 2001, Ms. Grasso served as the personnel, management and IT officer to Vale's Corporate Centre. Before joining Vale, she acted as secretary of the Brazilian supplementary social security office, from January 1994 to November 1997; as advisor to the Ministry of Social Security, from December 1992 to December 1993; as deputy coordinator of fiscal policy at the Ministry of Finance, from October to December 1992; as finance advisor and coordinator of the Macroeconomics and Social areas of the Brazilian Presidency office, from March 1990 to October 1992; as advisor to the Ministry of Planning, from November 1988 to March 1990; and as advisor to the Presidency of Sebrae - Serviço Brasileiro de Apoio à Pequena e Média Empresa, from January to November 1988. In 1997, she was appointed as an executive officer of Fundação Vale do Rio Doce de Habitação e Desenvolvimento Social. Ms. Grasso has both a B.A. degree in Economics and an M.A. in Economics from UnB.

*Tito Botelho Martins.* Mr. Martins was appointed as Vale's executive officer for corporate affairs and energy in April 2006 and for non-ferrous minerals and energy in May 2008, where he had already served as the Managing Director of the Corporate Finance Department from August 1999 to September 2003. Previously, from 1985 to 1999, he held different positions in Vale's financial areas. Mr. Martins was also the CEO of CAEMI Mining and Metallurgy Corp. and CEO and chairman of MBR Minerações Brasileiras Reunidas from 2003 to 2006. As a result of his expertise in the fields of administration and finance, Mr. Martins became a member of the board of directors of several corporations both in Brazil and abroad. Among them, it is worth mentioning Vale Foundation, FCA Railways, Samarco Mining Co., Ferrobahn Railways, Açominas Steel Co., Gulf Industrial Investment Company (GIIC) in Bahrain, Itabasco and Hispanobras. Mr. Martins holds a Bachelor's degree in Economics from the Federal University of Minas Gerais (UFMG) and a Master's degree in Management from the Federal University of Rio de Janeiro (IEAD). He has attended other executive education programs at INSEAD (France) and at the Kellogg School of Management of the Northwestern University (USA).

*Demian Fiocca.* Mr. Fiocca was appointed Executive Officer of Information Technology and Management of Vale in August 2007 and for management and sustainability in May 2008. He received his undergraduate and masters degrees in economics from the University of São Paulo and completed an executive training program through IESE (Instituto de Estudos Superiores) at Harvard. Mr. Fiocca was president of BNDES from April 2006 to April 2007 and was vice-president from December 2004 to March 2006, during which time he was primarily responsible for information technology and security, infrastructure and basic inputs. Mr. Fiocca was the head of the economics committee of the Ministry of Planning, Budget and Management in 2004 and the head of the Division of International Affairs in 2003. Between 2000 and 2003, he was head of economics at Grupo Telefônica and a member of the committee responsible for its economic strategy in Brazil. In 2003, he became the advisor to the president of Telefônica in his role as advisor to the Conselho de Desenvolvimento Econômico e Social. As chief economist of HSBC Bank in Brazil from 1998 to 2000, Mr. Fiocca managed the economic department and was responsible for the analysis of economies and markets as well as the publication of the bank's bulletins on economics research. Mr. Fiocca is the author of *A Oferta de Moeda na Macroeconomia Keynesiana* (The Money Supply in Keynesian Macroeconomics) and of several other articles on economics. From 1994 to 1998, Mr. Fiocca was a writer and editor of *Folha de São Paulo*, for which he authored a weekly column in the Money section for two years. He carried out research activities at the Institute for Economic, Social and Political Studies (Instituto de Estudos Econômicos, Sociais e Políticos) of São Paulo between 1992 and 1994, including the coordination of a study commissioned by the Inter-American Development Bank on the process of regional integration in Mercosur. Mr. Fiocca represented

BNDES as member of the Board of Directors of Valepar from 2005 to April 2007.

**Table of Contents****FISCAL COUNCIL**

Under the Brazilian Corporation Law, corporations may have a fiscal council, a corporate body whose members are elected by shareholders and are independent of our management and external auditors. The primary responsibility of the fiscal council under the Brazilian Corporation Law is to monitor management's activities and review the financial statements, reporting its findings to the shareholders. We have established a permanent fiscal council, which may have from three to five members. In addition, Vale's bylaws have empowered our fiscal council to take responsibility for additional matters as described below.

In compliance with the listed company audit committee rules of the NYSE and the SEC, effective July 31, 2005, we have designated and empowered our fiscal council to perform the role of the audit committee in reliance on the exemption set forth in Exchange Act Rule 10A-3(c)(3). This measure was undertaken pursuant to an amendment to our bylaws approved by the shareholders on July 19, 2005. Our board of directors has determined that Mr. Aníbal Moreira dos Santos is a financial expert.

Under our bylaws, our fiscal council is responsible for establishing procedures for the receipt, retention and treatment of any complaints related to accounting, controls and audit issues, as well as procedures for the confidential, anonymous submission of concerns regarding such matters; recommending and assisting our board of directors in the appointment, establishment of compensation and dismissal of the independent auditors; pre-approving the services to be rendered by our independent auditors; and overseeing the work performed by the external auditors, with powers to suspend the payment of compensation to the independent auditors and to resolve disagreements between management and the auditors regarding financial reporting.

The members of our fiscal council must meet applicable eligibility requirements under the Brazilian Corporation Law. A member of our fiscal council cannot (i) hold office as a member of the board of directors, fiscal council or advisory committee of any company that competes with Vale or otherwise has conflicting interests with Vale, unless compliance with this requirement is expressly waived by a decision taken by the shareholders in a shareholders meeting, (ii) be an employee or member of the management of Vale or its subsidiaries and affiliates, or (iii) be a spouse or relative within the third degree by affinity or consanguinity of an officer or director of Vale.

On April 29, 2008, the shareholders elected the current members of the fiscal council and their respective alternates. The members of the fiscal council are elected for one-year terms. Holders of preferred class A shares, including the golden shares, may elect one member of the fiscal council and the respective alternate. Minority holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the fiscal council and the respective alternate. The terms of the members of the fiscal council expire at the next annual shareholders' meeting following their election.

The following table lists the current members of the fiscal council.

	<b>First year of appointment</b>
Bernard Appy (1)	2006
Antônio José Figueiredo Ferreira (2)	2008
Marcelo Amaral Moraes (2)	2004
Aníbal Moreira dos Santos (2)	2005

(1) Appointed by the preferred shareholders.

(2) Appointed by Valepar.

The following table lists the alternate members of the fiscal council.



	<b>First year of appointment</b>
Marcus Pereira Aucélio (1)	2008
Marcos Coimbra (2)	2006
Oswaldo Mário Pêgo de Amorim Azevedo (2)	2004
Vacant	

(1) Appointed by  
the preferred  
shareholders.

(2) Appointed by  
Valepar.

We have summarized below the experience, areas of expertise, and principal outside business interests of the current members of our fiscal council.

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*Bernard Appy.* Mr. Appy was elected as a member of the fiscal council of Vale in April 2006. Since April 2006 he holds the office of Deputy Minister of the Ministry of Finance of Brazil, which he previously held from January 2003 to May 2005. From May 2005 to March 2006, he held the position of Secretary for Economic Policies at the Ministry of Finance of Brazil. Since 1997, Mr. Appy is a member of faculty of the Economics Department of the School of Business, Economics and Accounting of Pontifícia Universidade Católica de São Paulo - PUC-SP. From 1995 to 2002, he was a partner of LCA Consultores Ltda., a consulting firm in economics. Mr. Appy received a B.A. in Economics from the Universidade de São Paulo - USP, and concluded M.A. classes in Economics at Universidade Estadual de Campinas -UNICAMP.

*Antônio José de Figueiredo Ferreira.* Mr. Ferreira was elected as a member of Vale's fiscal council in April 2008. From July 2005 until April 2008, he was chairman of Vale's Accounting Committee, and from May 2005 until June 2005, he was chairman of Vale's Audit Committee. Mr. Ferreira worked at Banco do Brasil for 32 years, where he held positions in the Audit and Information Technology areas. Thereafter, from 1996 until May 2007, Mr. Ferreira acted as Internal Audit Chief of Caixa de Previdência dos Funcionários do Banco do Brasil - PREVI. Mr. Ferreira received a B.A. in Mechanics Engineering from the Universidade de São Paulo ( USP ), and in Law from the Universidade Federal do Rio de Janeiro ( UFRJ ). He also concluded an MBA in Internal Audit at Universidade de São Paulo ( USP ) and in Finance and Corporate Law at Fundação Getulio Vargas do Rio de Janeiro ( FGV-Rio ). Mr. Ferreira has also concluded an MBA in Management and Private Pension Programs from the Wharton School of the University of Pennsylvania.

*Marcelo Amaral Moraes.* Since 2004, Mr. Moraes has served as a member of the fiscal council of Vale. He joined Darby Stratus in August 2006 as the officer responsible for the development of Darby Brazil Mezzanine Fund. Prior to joining Darby, Mr. Moraes worked at Bradespar S.A. as an Investment Manager for six years. From 1995 to 2000, he worked in the mergers and acquisitions and capital markets departments of Banco Bozano, Simonsen. In 2004, he was an alternate member of the board of directors of Net Serviços S.A., and in 2003, he was an alternate member of the board of directors of Vale. Mr. Moraes has a B.A. in Economics from Universidade Federal do Rio de Janeiro - UFRJ, and a MBA from COPPEAD, also at UFRJ.

*Aníbal Moreira dos Santos.* Since 2005, Mr. Santos has served as a member of the fiscal council of Vale. He was an executive officer of Caemi Canada Inc., Caemi Canada Investments Inc., CMM Overseas, Ltd., Caemi International Holdings BV and Caemi International Investments NV, subsidiaries of CAEMI, from 1998 to 2003, when he retired. From 1983 to 2003, he was chief accounting officer of CAEMI. From 1999 to 2003, he was a member of the fiscal council of CADAM S.A., and he was an alternate member of the board of directors of MBR and Empreendimentos Brasileiros de Mineração S.A. - EBM from 1998 to 2003. Mr. Santos is an accountant with a degree from Escola Técnica de Comércio da Fundação Getúlio Vargas.

**ADVISORY COMMITTEES****Advisory committees**

Our bylaws establish the following technical and advisory committees to the board of directors:

*The Executive Development Committee* is responsible for reporting on general human resources policies, analyzing and reporting on the adequacy of compensation levels for our executive officers, proposing and updating guidelines for evaluating the performance of our executive officers, and reporting on policies relating to health and safety.

*The Strategy Committee* is responsible for reviewing and making recommendations to the board of directors concerning: the strategic guidelines and plan submitted annually to the board by our executive officers, the company's annual and multi-annual investment budgets, investment or divestiture opportunities submitted by executive officers, and mergers and acquisitions.

*The Finance Committee* is responsible for reviewing and making recommendations to the board of directors concerning: our financial policies and the internal financial control systems, compatibility between the level of distributions to shareholders and the parameters established in the annual budget, and the consistency between our general dividend policy and capital structure.



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*The Accounting Committee* is responsible for: making nominating an employee to be responsible for internal auditing of the company, reporting on auditing policies and the execution of the company's annual auditing plan, tracking the results of the company's internal auditing, and identifying, prioritizing, and submitting recommendations to the executive officers, and analyzing and making recommendations with regard to our annual report and financial statements.

*The Governance and Sustainability Committee* is responsible for: evaluating and recommending improvements to the effectiveness of our corporate governance practices and the functioning of our board of directors, recommending improvements to the code of ethical conduct and our management system in order to avoid conflicts of interests between the company and its shareholders or management, issuing reports on potential conflicts of interest between the company and its shareholders or management, and reporting on policies relating to corporate responsibility, such as environmental and social responsibility.

**COMPENSATION OF DIRECTORS, EXECUTIVE OFFICERS, FISCAL COUNCIL MEMBERS  
AND ADVISORY COMMITTEES**

**General**

Under our bylaws, our shareholders are responsible for establishing the aggregate compensation we pay to the members of our board of directors and our executive officers. Our shareholders determine this annual aggregate compensation at the general shareholders' meeting each year. In order to establish aggregate director and officer compensation, our shareholders usually take into account various factors, which range from attributes, experience and skills of our directors and executive officers to the recent performance of our operations. Once aggregate compensation is established, the members of our board of directors are then responsible for distributing such aggregate compensation in compliance with our bylaws among the directors and executive officers, in the latter case, at the recommendation of the chief executive officer. The Executive Development Committee of our board of directors makes recommendations to the board concerning the annual aggregate compensation of the executive officers. In addition to fixed compensation, our executive officers are also eligible for bonuses and incentive payments.

For the year ended December 31, 2007, we paid US\$24.2 million in aggregate to the executive officers, of which US\$8.3 million was fixed compensation and US\$15.9 million was variable compensation and benefits in kind granted, and US\$0.8 million in aggregate to the members of our board of directors for services in all capacities, all of which was fixed compensation. The amounts accrued to provide pension, retirement or similar benefits for our executive officers was US\$0.7 million. There is no similar benefits payment for the members of our board of directors.

As of April 30, 2008, the total number of common shares owned by our directors and executive officers was 166,922, and the total number of preferred class A shares owned by our directors and executive officers was 888,504. None of our directors or executive officers beneficially owns one percent or more of any class of our shares.

**Fiscal council**

During 2007, the monthly amount we paid to each of the members of the fiscal council was US\$4,800 excluding benefits. We paid an aggregate of US\$346,000 to members of the fiscal council in 2007. In addition, the members of the fiscal council are reimbursed for travel expenses related to the performance of their functions.

**Advisory committees**

We paid an aggregate of US\$136,735 to members of Vale's advisory committees in 2007. In addition, the members of Vale's advisory committees are reimbursed for travel expenses related to the performance of their functions.

**Table of Contents****EMPLOYEES****General**

The following table sets forth the number of our employees by category as of the dates indicated.

	<b>At December 31, (1)</b>		
	<b>2005</b>	<b>2006</b>	<b>2007</b>
Ferrous minerals	19,152	21,143	21,700
Logistics	11,265	10,661	11,679
Non-ferrous minerals	5,524	18,126	20,955
Administrative	2,619	2,716	2,709
<b>Total</b>	<b>38,560</b>	<b>52,646(2)</b>	<b>57,043(3)</b>

(1) Vale's organizational structure was changed in 2007 and the categories in the table represent the reorganized business areas. 2005 and 2006 figures have been adjusted in accordance with the reorganized structure.

(2) The increase in the number of employees in 2006 relative to 2005 was mainly due to the acquisition of our subsidiary Vale Inco in October 2006. Of the additional 14,086 employees, 12,047 were employees of Inco Limited who are now

Vale Inco employees and considered part of Vale's non-ferrous minerals group.

- (3) The increase in the number of employees in 2007 relative to 2006 was mainly due to organic growth and the strategic decision to move in-house certain previously outsourced services.

#### **Labor relations**

We negotiate wages and benefits with a large number of unions worldwide that represent our employees. We generally have good relations with our employees and their unions, although we experienced strikes and work stoppages at our Voisey's Bay operations as recently as September 2006, at our Sudbury operations as recently as April 2007 and at our Indonesian operations as recently as November 2007. We have collective agreements with unionized employees at our Brazilian, Canadian, Indonesian, New Caledonian and U.K. operations.

#### **Wages and benefits**

Wages and benefits for Vale and its subsidiaries are generally established on a company-by-company basis. Vale establishes its wage and benefits programs for Vale and its subsidiaries other than Vale Inco in periodic negotiations with its unions. In November 2007, Vale reached a two-year agreement with the Brazilian unions, which is valid until November 2009. A salary increase of 7% was implemented in November 2007, and another salary increase of 7% will be implemented in November 2008 for our employees in Brazil. The provisions of Vale's collective bargaining agreements with its unions also apply to Vale's non-union employees. Vale Inco establishes wages and benefits for unionized employees through collective agreements. For non-unionized employees, Vale Inco establishes its annual wage program in January of each year for all locations other than the U.K., which establishes its annual wage program in August. Vale and its subsidiaries provide their employees and their dependents with other benefits, including supplementary medical assistance.

#### **Pension plans**

Employees of Vale and most of its Brazilian subsidiaries are eligible to participate in pension plans managed by Fundação Vale do Rio Doce de Seguridade Social (Valia). Sponsored by Vale and such subsidiaries, Valia is a closed, nonprofit, complementary social security foundation with financial and administrative autonomy. Substantially all of the participants in plans held by Valia are participants in a new plan Valia implemented in May 2000. The new plan is primarily a defined contribution plan with a defined benefit feature relating to service prior to May 2000. Valia also holds the old plan which is a defined benefit plan, with benefits based on years of service, salary and social security benefits. This plan covers retired participants and their beneficiaries, as well as a relatively small number of employees that declined to transfer from the old plan to the new plan when it was established in May 2000. Employees of Albras, Alunorte participate in different pension plans maintained by Bradesco Vida e Previdência S.A. Vale Inco sponsors defined benefit pension plans principally in Canada, the United States, the United Kingdom and Indonesia. Each of the jurisdictions in which these plans are located has legislation and regulations which, among other statutory requirements, cover the minimum contributions to be made to these plans to meet their potential

liabilities as calculated in accordance with such legislation and regulations. Vale Inco's subsidiary, Vale Inco Newfoundland & Labrador Limited, has a defined contribution pension plan. In addition, Vale Inco provides supplemental retirement benefits arrangements for eligible employees.

**Table of Contents****Performance-based compensation**

All Vale parent-company employees receive incentive compensation each year in an amount based on the performance of Vale, the performance of the employee's department and the performance of the individual employee. Similar incentive compensation arrangements are in place in other companies within the Vale group.

Certain Vale employees also receive annual cash bonuses based on individual and corporate performance, as well as deferred bonuses with vesting periods of three years based on Vale's performance as measured by total shareholder return relative to a group of peer companies over the vesting period. In 2008, qualifying management personnel are eligible to participate in a bonus program tied to share ownership. Under the program, an employee may elect to invest part of his 2007 bonus in Vale shares. If the employee continues to be employed by us and to hold all the shares, after three years the employee will receive an additional bonus payment sufficient to purchase for his account, in the open market, a number of additional shares equal to the number of shares the employee purchased under the program in 2008. 883 employees elected to participate in the program.

**Item 7. Major shareholders and related party transactions****MAJOR SHAREHOLDERS****Overview**

*Major Vale Shareholders.* The following table sets forth certain information regarding beneficial ownership of our common and preferred class A shares as of April 30, 2008, by each person we know to be the beneficial owner of more than 5% of any class of our outstanding capital stock, and by all directors and executive officers as a group.

	<b>Shares owned</b>	<b>% of Class</b>
<b>Common Shares</b>		
Valepar (1)	1,568,588,532	53.30%
BNDESPAR (2)	201,157,719	6.80
Directors and executive officers as a group	166,922	*
<b>Preferred Class A Shares (3)</b>		
Directors and executive officers as a group	888,504	*
Black Rock, Inc. (4)	108,649,266	5.66%
<b>Golden Shares</b>		
Brazilian government	12	100.00%

- (1) See the following table for more information on Valepar's shareholders. Because each of the shareholders of Valepar has the right to veto the transfer by Valepar of any shares it holds in Vale, each of the Valepar shareholders may be deemed a beneficial owner of the entire Valepar stake



under the rules of the SEC. In general, a person who has or shares voting power or investment power with respect to securities is treated as a beneficial owner of those securities. This does not imply that the person has the economic or other benefits of ownership.

- (2) Excludes common shares owned directly by Valepar, in which BNDESPAR has an ownership interest.
- (3) The Brazilian government (National Treasury) owns, through Fundo Garantidor das Parcerias Público-Privadas, 60,904,092 preferred class A shares, representing 3.2% of the outstanding preferred class A shares, and BNDESPAR owns 1,457,339 preferred class A shares, representing 0.1% of the outstanding preferred class A shares.

(4)

Based on the most recent publicly available information (September 2007), Black Rock owns 105,054,614 preferred shares in the form of ADSs and holds the remaining 3,594,652 preferred shares directly.

(\*) Represents less than 1% of the outstanding shares of the class.

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*Valepar shareholders.* The tables below set forth information as of April 30, 2008 regarding share ownership of the common shares of Valepar and Litel Participações S.A.

	<b>Number of Valepar common shares owned</b>	<b>Percent of Valepar common shares owned</b>
<b>Valepar</b>		
Litel Participações S.A (1)	637,443,857	49.00%
Eletron S.A.	380,708	0.03
Bradespar S.A. (2)	275,965,821	21.21
Mitsui & Co. Ltd.	237,328,059	18.24
BNDESPAR	149,787,385	11.51
Total	1,300,905,830	100.00%

(1) Litel owns 200,864,272 preferred Class B shares of Valepar, which represents 71.41% of the preferred shares. Litela, an affiliate of Litel, owns 80,416,931 preferred Class B shares of Valepar, which represents 28.59% of the preferred shares.

(2) Bradespar is controlled by a control group consisting of Cidade de Deus Cia. Comercial Participações, Fundação Bradesco, NCF Participações S.A. and Nova Cidade de Deus

Participações  
S.A.

	<b>Number of Litel common shares owned</b>	<b>Percent of Litel common shares owned</b>
<b>Litel Participações S.A.</b>		
BB Carteira Ativa 0 (1)	202,753,508	73.59%
Carteira Ativa II (1)	53,388,025	19.38%
BB Renda Fixa IV (1)	19,371,990	7.03%
Others	822	
Directors and executive officers as a group	4	
<b>Total</b>	<b>275,514,349</b>	<b>100.00%</b>

- (1) Each of BB Carteira Ativa 0, Carteira Ativa II and BB Renda Fixa IV is a Brazilian investment fund. BB Carteira Ativa 0 is 100% owned by Previ. Carteira Ativa II is 59.36% owned by Funcef, 35.8% owned by Petros and 4.84% owned by Fundação Cesp. BB Renda Fixa IV is 100% owned by Previ. Each of Previ, Petros, Funcef and Fundação Cesp is a Brazilian pension fund.

*Brazilian Government holdings.* In 1997, we were privatized by the Brazilian government, which sold its controlling share to Valepar. The National Treasury and BNDES, the state-owned development bank, subsequently sold additional shares in 2002. Currently, BNDESPAR, a wholly-owned subsidiary of BNDES, owns common shares representing 6.8% of our outstanding common shares and 0.1% of our outstanding preferred class A shares. The Brazilian government now owns 3.2% of our outstanding preferred class A shares (not counting shares held by BNDESPAR), and 12 golden shares of Vale, which give it veto powers over certain actions that we could propose to

take. For a detailed description of the veto powers granted to the Brazilian government by virtue of its ownership of the golden shares, see *Item 10. Additional information Common shares and preferred shares General*.

**Principal shareholder**

Our principal shareholder is Valepar. The shareholders of Valepar have entered into a shareholders agreement, ending in 2017. This agreement:

grants rights of first refusal on any transfer of Valepar shares and preemptive rights on any new issue of Valepar shares;

prohibits the direct acquisition of Vale shares by Valepar's shareholders unless authorized by the other shareholders;

prohibits encumbrances on Valepar shares (other than in connection with financing our acquisition);

requires each party generally to retain control of its special purpose company holding its interest in shares of Valepar, unless the rights of first refusal mentioned above are observed;

allocates Valepar's and our board seats;

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commits the Valepar shareholders to support a dividend policy by Vale of 50% distribution of Vale's net profit for each fiscal year, unless the Valepar shareholders commit to support a different dividend policy for a given year;

provides for the maintenance by Vale of a capital structure that does not exceed specified debt to equity thresholds;

requires the Valepar shareholders to vote their indirectly held Vale shares and to cause their representatives on Vale's board of directors to vote only in accordance with decisions made at Valepar pre-meetings held prior to meetings of Vale's board of directors or shareholders; and

establishes supermajority voting requirements for certain significant actions relating to Valepar or to us.

Pursuant to the Valepar shareholders' agreement, holders of at least 75% of the Valepar common shares must agree to enable Valepar to support any of the following matters:

any amendment of Vale's bylaws;

any increase of Vale's capital stock by share subscription, creation of a new class of shares, change in the characteristics of the existing shares or any capital reduction of Vale;

any issuance of any debentures of Vale, whether convertible into shares of Vale, participation certificates upon compensation, call options or any other security of Vale;

any determination of issuance price for any new shares of capital stock or other security of Vale;

any amalgamation, spin-off or merger to which Vale is a party, as well as any change to Vale's corporate form;

any dissolution, receivership, bankruptcy or any other voluntary act for financial reorganization or any suspension thereof;

the election and replacement of Vale's board of directors, including the chairman of the board, and any officer of Vale;

the disposal or acquisition of equity participation in any other company by Vale, as well as the acquisition of any shares of capital stock of Vale or Valepar;

the participation by Vale in a group of companies or in a consortium of any kind;

the execution of distribution, investment, sales exportation, technology transfer, trademark license, patent exploration, license to use and lease agreements, to which Vale will be a party;

the approval and amendment of Vale's business plan;

the determination of the compensation of the directors of Vale, as well as the duties of the board;

any profit sharing among the administrators of Vale;

the determination of the compensation of Vale's officers;

any change in the