Vale S.A.
Form 6-K
May 31, 2012

United States

Securities and Exchange Commission

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16

of the

Securities Exchange Act of 1934

For the month of

May 2012

Vale S.A.

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

(Address of principal executive office)

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

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

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

(Check One) Yes o No x

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

(Check One) Yes o No x

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

(Check One) Yes o No x

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

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Reference Form - 2011

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Item 1

1.1. Stament and Identification of the Responsible Individual

Name of the individual responsible for the content of the Reference Form	**Murilo Pinto Ferreira**
Position of responsible individual	Executive Director

Name of the individual responsible for the content of the Reference Form	**Tito Botelho Martins Junior**
Position of responsible individual	CFO and Director of Investor Relations

The above-mentioned directors stated that:

a. They have reviewed the Reference Form;

b. All the information contained in the Reference Form complies with Instruction CVM No. 480, in particular Articles 14 through 19;

c. All the information contained therein is an accurate, precise and complete representation of the economic and financial situation of the issuer and of the risks inherent to its activities and the securities issued by it.

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Item 2

2.1/2.2 Identification and remuneration of Auditors:

Does it have auditor?	YES
CVM (Securities Commission) Code	287-9
Type of Auditor	Domestic
Name/Corporate name	PricewaterhouseCoopers Auditores Independentes
CPF/CNPJ	61.562.112/0002-01
Period of provision of services	07/24/2009
Description of the service contracted	Provision of professional services for auditing the annual report from Vale, its subsidiaries, and controlled companies, both for domestic and international purposes, comfort letters for issuance of debts and equities at the Brazilian and international market, certification of internal controls in order to comply with Section 404 of Sarbanes-Oxley Act of 2002; provision of services related to the audit, and tax services related to legal requirements.
Total amount of the remuneration of independent auditors itemized per service	In the fiscal year ended December 31, 2011, independent auditors received fees in a total of R$ 22,017 thousand for the provision of services to Vale and its affiliates. Financial audit: R$ 17,790 thousand Sarbanes-Oxley Act Audit: R$ 2,978 thousand Audit-related services: R$ 826 thousand Tax services: R$ 153 thousand Non-audit related services: R$ 270 thousand Total of services R$ 22,017 thousand
Justification for replacement	
Reason submitted by the auditor in case of disagreement of the issuer justification	

Name of the supervisor responsible	Period of provision of service	CPE	Address
Marcos Donizete Panassol	07/24/2009	063.702.238-67	Rua da Candelaria, 65/ 11,14,15 andares, Centro, Rio de Janeiro, RJ, Brasil, CEP 20091-020 Email: marcos.panassol@br.pwc.com Telephone: 3232-6112

2.3 Other relevant information

Vale has developed and formalized specific rules and procedures for pre-approval of engagements for their independent external auditors in order to avoid conflict of interest or loss of independence and objectivity by the already mentioned independent external auditors.

According to the Regulation for Contracting of Services for Independent Audit, Advisory Services and Other Services Unrelated to Audit Provided by External Auditors, approved by the Supervisory Board, with the aim of reconciling the legal precepts and regulations for Brazil and America, the following general principles have been established for the preservation of independence of external auditors: (a) the auditor should not perform tasks which the administration of the Company should carry out, (b) the auditor should not audit their own work, (c) the auditor must not carry out advocacy activities for the Company. Under this regulation, in line with best corporate governance practices, all services provided by the independent auditors of Vale are pre-approved by the Supervisory Board.

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Item 3

3.1 Consolidated Financial Information

(Reais)	Fiscal Year (12/31/2011)	Fiscal Year (12/31/2010)	Fiscal year (12/31/2009)
Shareholders equity	146,690,367,000.00	116,326,864,000.00	100,295,227,000.00
Total Assets	241,783,112,000.00	214,662,114,000.00	177,738,189,000.00
Realized Net Revenue/Temporary Revenue/Insurance Premium	103,195,407,000.00	83,225,006,000.00	48,496,566,000.00
Gross Income	62,706,537,000.00	49,468,940,000.00	20,746,174,000.00
Net Income	37,400,224,000.00	30,421,492,000.00	10,504,879,000.00
Number of Shares, excluding treasury (units)	5,097,293,079	5,218,279,135	5,212,724,297
Asset Value of Share (in R$/unit)	28.78	22.290000	19.240000
Earnings per Share	7.21	5.762450	1.966140

3.2 Non-Accounting measurements

a. value of non-accounting measurements

The Company uses EBITDA as a non-accounting measurement. In 2011, the EBITDA of the Company was established in the amount of R$ 53,138,951 thousand, while in 2010 and 2009 these amounts were R$ 46,378,648 thousand (forty-six billion, three hundred and seventy eight million and six hundred and forty-eight thousand reais) and R$ 18,619,085 thousand (eighteen billion, six hundred and nineteen million, eighty-five thousand reais), respectively.

b. reconciliations between amounts reported and the values of audited financial statements

In R$ thousands	2011	2010	2009
Operating profit - EBIT	**53,138,951**	**40,490,339**	**13,173,034**
Depreciation / Amortization of goodwill	6,932,472	5,741,372	5,446,951
Reduction in recoverable value of intangible assets			
	62,563,595	**46,378,649**	**18,619,085**
Dividends received	84,079	146,938	21,318
EBITDA (LAJIDA)	60,155,502	**46,378,649**	**18,641,303**
Depreciation / Amortization of goodwill	(6,932,472)	(5,741,372)	(5,446,951)
Dividends received	(84,079)	(146,938)	(21,318)
Reduction in recoverable value of intangible assets			
Corporate results	(51,527)	(48,081)	98,697
Proceeds from sale of investment			93,139
Net financial income	(6,622,546)	(2,763,399)	2,094,497

Income and social contribution	(9,064,654)	(7,035,659)	(4,954,488)
Minority interests			
Net income	37,400,224	**30,421,492**	**10,504,879**

c. why the Company believes that this measurement is more appropriate for a correct understanding of its financial situation and results of operations

EBITDA is a measure of the company s cash generation, aiming to assist the assessment by the Administration of the performance of operations. The analysis of operating results through EBITDA

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has the benefit of canceling the effect of non-operating gains or losses generated by financial transactions or the effect of taxes.

The consolidated cash generation measured by EBITDA (earnings before financial results, income from corporate interests, income tax and social contributions, depreciation, depletion and amortization, and plus dividends received) is not a BR GAAP/IFRS measurement and does not represent cash flow for the periods presented and therefore should not be considered as an alternative to net income (loss), as an isolated indicator of operating performance or as an alternative to cash flow as a source of liquidity. The EBITDA definition used by Vale may not be comparable with EBITDA, by definition, for other companies.

3.3 Events subsequent to the latest financial statements

Vale does not provide guidance in the form of quantitative predictions about its future financial performance. The Company seeks to disseminate as much information about its vision of the various markets where it operates, guidelines, and implementation strategies in order to provide investors in the capital markets a basis for the formation of expectations about its performance in the medium and long term.

The financial statements for the year ended December 31, 2011 were issued and filed with the CVM on February 16, 2012. Below is a description of subsequent events, which were included in the financial statements in compliance with the rules in IAS 24, approved by CVMº 593/09: On January 4, 2012, Vale issued US$ 1 billion in notes due in 2022 sold at a price equal to 98.804% of the principal value and coupon of 4.375% a year, payable every six months by the subsidiary Vale Overseas Limited.

3.4 Policy for allocation of results

	Fiscal Year Ended December 31		
	2011	**2010**	**2009**
a. Rules on retention of profits	**Statutory Rule:** According to Article 43 of the Bylaws, there should be a consideration in the proposal for distribution of profits of the formation of (i) Exhaust Reserve, to be constituted in the form of tax legislation, and (ii) Investment Reserve for the purpose of ensuring the maintenance and development of activities that constitute the main object of the company, in an amount not exceeding 50% (fifty percent) of net income distributable up to the maximum capital of the company.		
	Practice adopted by the Company: Of the total of R$ 37,813,724,944.02, R$ 25,864,899,330.53 (68.4%) were destined to a Reserve for expansion / investment and R$ 995,844,040.58 (2.6%) for the Tax Incentive Reserve. Of the total reserve for the expansion / investment, 50% was allocated based on statutory authorization and 18.4% was destined for the	**Practice adopted by the Company:** Of the total R$ 36,073,218,330.41, R$ 23,468,768,237.73 (65.1%) destined to a Reserve for expansion / investment and R$ 1,022,135,742.36 (2.8%) for the Tax Incentive Reserve. Of the total for the Reserve expansion / investment, 50% was sent based on statutory	**Practice adopted by the Company:** Of the total of R$ 10,287,467,859.00, R$ 6,653,281,672.35 (64.7%) was destined to a Reserve for Tax Incentives and R$ 119,652,582.99 (1.16%) (Fiscal Incentive Reserve. Of the total for the Reserve expansion / investment, 50% was based on statutory authorization and 14.7% was

	reserve based on the capital budget approved at the AGM.	authorization, and 15.1% was destined for the reserve based on the capital budget approved by the AGM.	destined for the reserve based on the capital budget approved by the AGM.

b. Arrangements for distribution of dividends	**Statutory Rule:** According to Article 44 of the bylaws, at least 25% (twenty five percent) of annual net profits, adjusted according to the law, will be provided for the payment of dividends.

Pursuant to Art. 5, §5 of the bylaws, the holders of preferred shares of Class A and special class, shall have their right to participate in the dividend to be distributed and calculated as per Chapter VII of the Bylaws, according to the following criterion:

(a) Priority in the reception of dividends corresponding to (i) 3% (three per cent) at least of the net asset value of the share, calculated based on the financial statements analyzed that served as reference for the payment of dividends or (ii) 6% (six per cent) calculated on the part of the capital to which that class of share belongs, whichever is the greatest of these.

(b) Right to participate in the distributed incomes, under equal conditions with common shares, after

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	them, guaranteeing a dividend equal to the priority minimum set up pursuant to a above.		
	Practice adopted by the Company: 25% of annual net income was allocated to the payment of dividends	**Practice adopted by the Company:** 27% of annual net income was allocated to the payment of dividends	**Practice adopted by the Company:** 31% of annual net income was allocated to the payment of dividends
c. Frequency of dividend distribution	In accordance with the Dividend Policy adopted by Vale, payments are made semiannually in the months of April and October.		
d. Restrictions to dividend distribution	n/a	n/a	n/a

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3.5 Distributions of dividends and retention of net income.

(Reais)	Fiscal Year Ended December 31, 2011	Fiscal Year Ended December 31, 2010	Fiscal Year Ended December 31, 2009
Adjusted net income for dividend payments	34,927,194,656.24	33,247,421,671.53	9,655,367,895.00
Percentage of dividend over the adjusted net profit	26.000000	29.000000	31.000000
Rate of return in relation to equity	26.00	31.000000	11.000000
Dividend distributed	9,062,863,757.00	9,778,653,433.00	3,002,086,223.00
Net income retained	0.00	0.00	0.00
Date of approval of the retention			

Net income retained		Amount	Payment date	Amount	Payment date	Amount	Payment date
Interest on Capital							
Common		1,367,141,895.00	04/30/2012	1,952,075,334	04/29/2011	57,865,446.00	10/31/2009
Common				1,029,923,339	10/30/2010		
Preferred	Preferred Class A	839,958,722.00	04/30/2012	1,221,924,666	04/29/2011	36,937,363.00	10/31/2009
Preferred	Preferred Class A			644,693,233	10/30/2010		
Preferred	Preferred Class A			656,354,000	01/31/2011		
Common				1,013,746,000	01/31/2011		
Common				1,027,145,878.00	01/31/2011	1,341,608,462.00	04/30/2010
Preferred	Preferred Class A			642,954,122.00	01/31/2011	856,391,538.00	04/30/2010
Common				2,004,928,273.00	10/31/2011	436,223,763.00	10/30/2010
Preferred	Preferred Class A			1,255,008,588.00	10/31/2011	273,059,651.00	10/30/2010
Others							
Preferred	Preferred Class A						
Common							
Mandatory Dividend							
Common		2,999,720,322.00	08/26/2011				
Common		1,239,392,442.00	10/31/2011				
Preferred	Preferred Class A	1,858,179,678.00	08/26/2011				
Preferred	Preferred Class A	761,470,697.00	10/31/2011				

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3.6 Statement of Dividends on account of retained earnings or reserves

Dividends distributed to (in R$ thousands):	2011	Fiscal Year Ended December 31 2010	2009
Retained Earnings			
Constituted Reserves		513,050	370,507

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3.7 Debt

Fiscal year	Total amount of the debt (of any nature)	Type of index	Debt Index	Description and reason for the use of another index of indebtedness
12/31/02011	95,091,000,000.00	Debt ratio	64.8	
	0.00	Other indexes	0.9	Gross debt/EBITDA. Gross debt is the sum of Loans and short-term debt, Portion of the stock of long-term loans and Loans and long-term financing. EBITDA (EBITDA) is calculated as described in section 3.2.b of this reference form. The debt ratio Gross Debt / EBITDA shows the approximate time necessary for a company to pay all its debt with its cash flow. Vale adopts the debt ratio gross debt / EBITDA and interest coverage ratio EBITDA / Interest expenses. These indexes are widely used by the market (rating agencies and financial institutions) and serve as a benchmark to assess the financial situation of Vale.

Fiscal year	Total amount of the debt (of any nature)	Type of index	Debt Index	Description and reason for the use of another index of indebtedness
12/31/2011	0.00	Other indexes	30.21	EBITDA/Interest expenses. The EBITDA (LAJIDA) is calculated as described in section 3.2.b of this reference form. Interest expenses include the sum of all the capitalized or accrued interest, paid or not, at any given time, which is a result of the debt of the beneficiary.

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	The interest coverage ratio (EBITDA / Interest expenses) is used to determine the ability of business to generate cash flow to service its debt
	Vale adopts the debt ratio gross debt / EBITDA and interest coverage ratio EBITDA / Interest expenses. These indexes are widely used by the market (rating agencies and financial institutions) and serve as a benchmark to assess the financial situation of Vale.

3.8 Obligations according to the nature and maturity date:

Fiscal year (12/31/2010)

Type of debt	Less than 1 year (R$)	Between 1 and 3 years (R$)	Between 3 and 5 years (R$)	Over 5 years (R$)	Total (R$)
Collateral	129,517,668.00	340,616,051.00	422,700,537.00	1,009,616,927.00	1,902,451,183.00
Floating Guarantee	0.00	0.00	0.00	0.00	0.00
Unsecured obligations	22,095,482,332.00	8,721,383,949.00	5,323,299,463.00	57,048,383,073.00	93,188,548,817.00
Total	22,225,000,000.00	9,062,000,000.00	5,746,000,000.00	58,058,000,000.00	95,091,000,000.00

Note: The value shown at 3.7 and 3.8 does not represent the level of indebtedness of the Company, but represents the total of the obligations based on the addition of the outstanding and non-outstanding liabilities.

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3.9 Other information that the Company deems relevant

There is no other relevant information related to item 3 that is not presented above.

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Item 4

4.1 - Description of risk factors

Risks relating to the Company

The mining sector is highly exposed to the cyclicality of global economic activities and requires significant capital investments.

The mining sector is primarily a supplier of industrial raw material. Industrial production tends to be the most cyclical and volatile component of global economic activities, affecting the demand for minerals and metals. At the same time, investment in mining requires a substantial amount of funds, in order to replenish the reserves, expand the production capacity, build infrastructure and preserve the environment. The sensitivity to the industrial production, along with the need for significant long-term capital investments, are important sources of risks to the financial performance and growth prospects of Vale and the mining industry in general.

The Company may not be able to adjust the volume of production in time or cost-effectively in response to changes in demand. .

In periods of high demand, Vale s capacity to rapidly increase production is limited, which may make it impossible to meet the demand for its products. Moreover, the Company may be unable to complete green area projects and expansions in time to take advantage of the increased demand for iron ore. When demand exceeds its production capacity, the Company may meet customer s excess demand by purchasing iron ore, iron ore pellets or nickel from its joint ventures or unrelated parties and resell them, which would increase its costs and reduce its operating margins. If it is unable to meet customer s excess demand this way, Vale could lose customers. In addition, operating close to full capacity may expose the Company to higher costs, including demurrage fees due to capacity restraints in its logistics systems.

In contrast, operating at significant idle capacity in periods of weak demand may expose Vale to higher unit production costs since a significant portion of its cost structure is fixed in the short-term due to the high capital intensity of mining operations. In addition, efforts to reduce costs during periods of weak demand may be limited by previous labor regulations and labor and federal agreements.

Concessions, authorizations, licenses and permits are subject to expiration, restriction or renewal and to various other risks and uncertainties.

Some of Vale s mining concessions are subject to fixed expiration dates and can only be renewed for a limited number of times, for limited periods. In addition to mining concessions, Company may obtain various authorizations, licenses and permits from government and regulatory agencies regarding the operation of the company s mines, which may be subject to fixed due dates or to periodic reviews or renewals. Although the company expects renewals to be granted when and as requested, there is no guarantee that such renewals will be granted as usual, as well as there is no guarantee that new conditions will not be imposed in this regard. Mining concession fees may substantially increase over time in comparison with the original issuance of each operating license. If that is the case, the company s business objectives can be affected by the costs of maintenance or renewal of its mining concessions. Thus, it is necessary to continually assess the mineral potential of each mining concession, especially at the time of renewal, in order to determine if maintenance costs of mining concessions are justified by the results of future operations, and thus be able to let some concessions expire. There are no guarantees that such concessions will be granted under terms favorable to the Company, as well as there are no guarantees as to its expected future mining or operation goals.

In many jurisdictions where the company has exploration projects, it may be required to return to the government a certain portion of the area covered by the operating license as a condition for obtaining a mining concession. This retrocession obligation may lead to a substantial loss of part of the mineral deposit originally identified in its feasibility studies.

The Company s projects are subject to risks that may result in increased costs or delay in their implementation.

The company is investing to maintain and increase its production and logistics capacity, as well as to expand the scope of the minerals it produces. Its projects are subject to various risks that may adversely affect its growth and profitability prospects, including:

It may have to deal with delays or costs higher than expected in order to obtain the necessary equipment or services and to implement new technologies to build and operate a project.

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

Suppliers and contractors may not comply with their obligations to the Company.

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The Company may experience unexpected weather conditions or other force majeure events.

The Company may fail to obtain, experience a delay or have higher than expected costs in obtaining the necessary permits and licenses for building a project.

Changes in market conditions or regulations may make the project less profitable than expected at the time its operation begins.

There may be accidents or incidents during project implementation.

It may be difficult to find appropriate skilled professionals.

Operational problems may materially and negatively affect the company s business and financial performance.

An inefficient project management and operational incidents may lead to the suspension or reduction of the company s operations, causing an overall decrease of productivity. An inefficient project management can mean that the company is not able to continuously develop its activities. Operational incidents may result in important failures in plant and machinery. There are no guarantees that project management will be efficient or that other operational problems will not occur. Any damage to the company s projects or delays in its operations caused by inefficient project management or operational incidents may materially and negatively affect its business and operating results.

The company s business is subject to various operational risks that can adversely affect the results of its operations, such as:

It may experience unexpected weather conditions or other force majeure events.

Adverse mining conditions may delay or hinder its ability to produce the expected amount of minerals and to meet the specifications required by customers.

There may be accidents or incidents during the business operations, involving its mines, plants, railways, ports and vessels.

There may be delays or disruptions in the transportation of its products, including railways, ports and vessels.

Some of its development projects are located in regions where tropical diseases, AIDS and other communicable diseases represent a major public health issue and pose risks to the health and safety of its employees. If the company cannot ensure the health and safety of its employees, its operations may be adversely affected.

Labor disputes may disrupt its operations from time to time.

The company s business may be negatively affected if its counterparties fail to meet their obligations.

Customers, suppliers, contractors and other counterparties may not perform the existing contracts and obligations, which may have an adverse impact on the Company s operations and financial results. The ability of its suppliers and customers to meet their obligations may be adversely affected in times of financial stress or economic recession. Suppliers are also subject to capacity constraints in times of high demand, which may affect their ability to meet their obligations.

The company currently operates and has projects related to important parts of its pelletizing, bauxite, nickel, coal, copper and steel businesses through joint ventures with other companies. Important parts of its investments in power and its oil and gas projects are operated through consortia. Its forecasts and plans for these joint ventures and consortia assume that its partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide skilled and competent management personnel. If any of its 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 the Company may have to increase the level of its investment to implement these plans.

The company s business is subject to environment, health and safety incidents or accidents.

The company has operations involving the use, handling, elimination and disposal of hazardous materials into the environment and the use of natural resources. Besides, the mining sector is generally subject to significant risks and hazards, including the imminent risk of fire or explosion, gas leak, leak of pollutants or other hazardous materials, incidents involving rock slides in underground mining operations, incidents involving mobile equipment or machinery, etc. These may be caused by accidents or violation of operational standards, resulting in a significant incident, including damage or destruction of minerals or production facilities, injury or death of employees, damages to the environment, production delays, financial losses and possible legal liabilities. Vale has rules on health, safety and environment in place to minimize the risk of such incidents or accidents. Despite its rules, policies and controls, its operations remain subject to incidents or accidents that may adversely affect its business or reputation.

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The frequency of natural disasters has increased and can cause serious damages to the company s operations and projects in countries where it operates and/or may have a negative impact on its sales to countries adversely affected by such disasters.

The frequency of natural disasters such as windstorms, floods, earthquakes and tsunamis has increased worldwide and can adversely affect the company s operations and projects in countries where it operates, as well as it can generate a reduction in sales to countries negatively affected by such disasters which include, among other factors, energy surcharge and destruction of industrial facilities and infrastructure. Furthermore, although the physical impacts of climate change on its businesses still are highly uncertain, the company may experience changes in rainfall patterns, water shortages, rising sea levels, increased intensity of storms and floods as a result of climate change, which can adversely affect its operations. On January 11, 2012, the company determined that a force majeure event had occurred in several of its iron ore sales agreements due to high rainfall in the Brazilian states of Minas Gerais, Rio de Janeiro and Espírito Santo, creating serious challenges to the operations of its Southeastern and Southern Systems. The force majeure event was solved on January 23, 2012.

The company may not have an adequate insurance coverage for certain business risks.

The company s businesses are generally subject to numerous risks and uncertainties that could result in damage or destruction of mineral properties, facilities and equipment. The Company s insurance against risks that are typical in such business may not provide adequate coverage. Risk insurance (including liability for environmental pollution or certain hazards or interruptions of certain business activities) may not be available at a reasonable cost. As a result, accidents and other negative events involving its mining, production or logistics facilities may have an adverse effect on its operations.

The Company reserve estimates may materially differ from the mineral quantities that it may be able to actually recover; its 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.

Reported ore reserves are estimated quantities the Company determines to 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 factors beyond Company control. Reserve reporting 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 anticipated by the Company. Estimates may vary, and results of mining and production subsequent to the date of an estimate may lead to revisions of estimates. Reserve estimates and estimates of mine life may require revisions 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 uneconomical to exploit and may ultimately result in a restatement of reserves. This reformulation can affect the rates of depreciation and amortization and cause a negative impact on the Company s financial performance

The Company may not be able to replenish its reserves, which could adversely affect its mining prospects.

The Company is engaged in mineral exploration, which is highly speculative in nature, involves several risks and is frequently non-productive. Its exploration programs, which involve significant capital expenditures, may fail to result in the expansion or replenishment of reserves depleted by current production. If the Company fails to develop new reserves, it will not be able to sustain its current level of production beyond the remaining lives of its existing mines.

Even if the company finds mineral deposits, it shall remain subject to the risks of exploration and production, which may adversely affect the mining process.

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

- Establish mineral reserves through exploration,
- Determine appropriate mining and metallurgical processes for optimizing the recovery of metal contained in ore;
- Obtain environmental and other licenses;
- Construct the necessary mining and processing facilities and create the infrastructure required for greenfield properties; and
- Obtain the ore or extract the minerals from the ore.

If a project proves not to be economically feasible by the time the Company is able to explore it, it may sustain significant damages and be compelled to make reductions. 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.

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The Company faces rising extraction costs over time as reserves deplete.

Reserves are gradually depleted in the ordinary course of a 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, the company usually needs to increase the cost of extraction of the unit related to each mine. Many of its mines have been operated for extended periods of time and it is likely that extraction costs per unit shall increase in these operations in particular.

Labor disputes may disrupt the company s operations from time to time.

The company has a considerable number of employees and some of subcontractors employees are represented by unions and are covered by collective bargaining agreements or other labor agreements that are subject to periodic negotiation. Negotiation may become more difficult in times of higher prices and consequently higher profits in mining and metallurgy, as unions claim increases in salaries and other forms of extra payments.

Strikes and other labor disruptions in any of the company s activities could adversely affect the operation of its facilities, the completion period and the cost of main projects. For more information on labor relations, go to the item *Management and Employees-Employees*. Moreover, they may be adversely affected by work stoppages involving unrelated parties that provide goods or services to the company.

The company may face shortages of equipment, services and skilled personnel.

The mining sector has faced global shortage of mining and construction equipment, spare parts, contractors and other skilled personnel during periods of high demand for minerals and metals and intensive development of mining projects. The company may experience longer periods in relation to mining equipment and problems with the quality of outsourced engineering, construction and maintenance services. The company competes with other mining companies in relation to the acquisition of a highly skilled managers and staff with relevant technical and mining expertise, and may not be able to attract and retain such people. Shortages at peak periods can cause a negative impact on its operations, resulting in higher production and costs regarding capital expenditures, production disruptions, higher inventory costs, project delays and possible reduction in production and revenue.

Higher costs of energy or energy shortages may adversely affect the company s business.

Energy costs are a significant component of the company s production cost, representing 13.4% of the total cost of goods sold in 2011. To meet its energy demand, the company depends on the following resources: Oil byproducts which accounted for 37% of all energy needs in 2011, electricity (21%), coal (19%), natural gas (15%) and other sources of energy (8%), using amounts converted to tons of oil equivalent (TOE).

Expenses with fuel accounted for 9.3% of its cost with goods sold in 2011. Increases in oil and gas prices negatively affect profit margins regarding its logistics services, mining business, and iron ore and nickel pelletizing.

Expenses with electricity accounted for 4.1% of its total cost of goods sold in 2011. If the company cannot ensure safe access to electricity at affordable prices, it may be forced to reduce production or may experience higher production costs, both of which can adversely affect its operating results. The company faces the risk of energy shortages in countries where it has operations and projects, due to excessive demand or adverse weather conditions such as floods or droughts.

Electricity shortages have occurred worldwide, and there is no guarantee that growth in capacity of power generation in countries where the company operates is sufficient to meet increased consumption in the future. Future shortages and government efforts to respond to or prevent shortages may have a negative impact on the cost or supply of electricity to the company s operations. Through its affiliate PT Vale Indonesia Tbk (PTVI) (formerly known as PT International Nickel Indonesia Tbk), the company processes nickel laterite ores using a pyrometallurgical process that requires a lot of energy. Although PTVI currently generates most of the electricity needed for its operations using its own hydroelectric power plants, low precipitation and other hydrological factors may adversely affect energy production in PTVI s plants in the future, which may significantly increase the risks of higher costs or reduction in volume production.

Price volatility regarding U.S. dollars - of currencies in which the company conducts its operations could adversely affect its financial condition and operating results.

A substantial portion of the company s revenues and debt is expressed in U.S. dollars, and exchange rate fluctuations can result in (i) gains or losses regarding its net debt expressed in U.S. dollars and accounts receivable and (ii) gains or losses in fair value regarding its currency derivatives used to stabilize its cash flow in U.S. dollars. In 2011, the company had monetary losses in the amount of US$ 1,380 billion while, in 2010, it had monetary profits of US$ 102 million; in 2009, its monetary profits were of US$ 665 million. Moreover, the price volatility of the Brazilian real, Canadian dollar, Australian dollar, Indonesian rupiah and other currencies against the U.S. dollar affects the company s results, since most of its goods are sold in currencies other than US dollar, primarily Real (59% in 2011) and Canadian dollars (15% in 2011), while its revenue is mainly expressed in US dollars. The company expects that currency fluctuations will continue to affect its revenues, expenses and cash flow.

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The significant volatility in currency prices may also result in the interruption of foreign exchange markets and may limit the company s ability to transfer or exchange certain currencies into US dollars and other currencies for the purpose of making payments of interest and principal on its debts within the terms set. Central banks and governments of countries where the company operates may impose restrictive foreign exchange policies in the future and levy taxes on foreign exchange transactions.

The integration between the Company and acquisition goals that are an important part of the Company s strategies may be more difficult than anticipated.

The company may not able to successfully integrate its acquired businesses. The company has partially increased its business through acquisitions and some of its future growth may depend on them. The integration of acquisition targets may take longer than expected and the costs related to acquisition assets integration may be higher than expected. Besides, if the focus in this process, following acquisitions, impacts the performance of its existing business, the company s results and operations may be adversely affected. Completed acquisitions may not result in increased revenues, cost economy or operational benefits as initially expected at the time of conception. Acquisitions may lead to substantial costs as a result, for example, of inconsistent standards, checks, procedures and policies between the Company and acquisition goals, which may adversely affect its financial condition and the results of operations. Additionally, management focus may be deviated from ordinary responsibilities to integration-related issues.

The company is involved in several lawsuits that may adversely affect its business, if rulings are not favorable to the Company.

The company is involved in several lawsuits in which plaintiffs claim substantial amounts of money. Although the company is vigorously contesting the claims, the outcome of these lawsuits is uncertain and may result in obligations that may materially and negatively affect its business and the value of its shares, ADSs and HDSs. Moreover, under Brazilian law, a taxpayer who wishes to require a tax review in court should normally post a bond or security in the amount of the claimed revision in order to suspend collection. In some tax claims, the company may be required to provide collateral or some form of security to the court and, depending on the nature, value and scope of such collateral or security, this can cause a significant impact on its business. For more information, see item 4.3 of the Reference Form.

Company s governance processes and compliance with its obligations may fail to avoid regulatory fines and damages to its reputation.

The company operates in a global environment and its activities extend across multiple jurisdictions and complex regulatory structures with an increase in its legal obligations around the world. Its governance process and compliance with obligations, which include analysis of internal controls through financial reports, may not be able to avoid future violations of the law and accounting and governance standards. The company may be subject to violations of its Code of Ethical Conduct, business conduct protocols and fraudulent behavior and dishonesty by its employees, contractors and other agents. Failure by the company to comply with applicable laws and other rules can result in fines, loss of operating licenses and damages to its reputation.

It may be difficult for investors to comply with any judgment rendered outside Brazil against the Company or any of its affiliates.

Company investors can be located in jurisdictions outside Brazil and may file claims against the Company or board members or officers with courts within their jurisdictions. The company is a Brazilian company and most of its officers and board members are Brazilian residents. Most of its assets and the assets of its officers and board members will be probably located in jurisdictions other than the jurisdictions of its investors. The investors may find it impossible to issue summons or to serve notices against the Company or its officers or board members resident outside their jurisdictions. Additionally, foreign judicial orders are enforceable in Brazilian courts, without reconsidering the merits provided that they are previously confirmed by the Brazilian Superior Court of Justice, which confirmation will be granted as long as such judgment: (a) meets all the formal requirements to be enforced pursuant to the legislation in force in the country where it was rendered; (b) has been rendered by a competent court after due process against the company or after sufficient evidence of contempt of court by the company, pursuant to the legislation in force; (c) is not subject to appeal; (d) has been authenticated by the Brazilian consulate in the country where it was rendered and is accompanied by a sworn translation into Portuguese; and (e) is not contrary to the sovereignty of Brazil, its public policy or morality. Therefore, investors may not obtain a favorable decision in judicial processes against the Company or its officers or board members related to judgments passed by courts in their jurisdictions on the basis of the legislation in force in those jurisdictions.

Rules on sea transportation of iron ore fines may affect the Company s operations.

A portion of the production takes place in the form of iron ore that is not concentrated. This type of ore is sometimes compared to fines, which are small ore particles. Studies have analyzed whether these ores could begin to behave like a fluid when transported under high moisture conditions, although we have no record of any similar event. This can cause the load to be less stable, presenting potential risks to navigation. Operational risks depend on many factors including the characteristics of the fines, the circumstances in which they are transported and the type of vessel. To manage these risks, the sea transportation industry and insurers generally follow the rules adopted by the International Maritime Solid Bulk Cargoes code (IMSBC), but these rules do not currently address the transport of non-concentrated iron ore fines that the Company produces in the mineral province of Carajás, in its North System. Potential changes to the rules are currently being assessed by the International Maritime Organization (IMO). We believe that the safety of the Company s navigation practices is evidenced by its long history of safe operations, but changes to these rules could require the company to adjust its practices as far as the handling or transportation of the Carajás production is concerned, and these measures could increase costs, require new investments and even limit the volume of exports of iron ore from Carajás.

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Risks relating to Company s controlling shareholder or parent group

The Company controlling shareholder exerts significant influence over Vale and the Brazilian government holds certain veto rights.

On March 31, 2012, Valepar S.A. (Valepar) holds 54.1% of the outstanding common shares and 34.1% of the Company total outstanding capital. As a result of its stock ownership, Valepar can control the outcome of some actions requiring shareholder approval. For a description of the Company s ownership structure and of Valepar shareholders agreement, see item 15 of the Reference Form.

The Brazilian government owns 12 golden shares of Vale, granting limited veto powers over certain Company resolutions such as changes of corporate name, location of main office and corporate purpose relating as these are related to mining activities.

Risks relating to Company s subsidiaries and related companies

The Company has a large number of subsidiaries and related companies (pursuant to item 8.1 in this Reference Form), and many of them are subject to operational and market risks similar to the Company s, which may exert adverse effects on consolidated results.

A significant number of Vale subsidiaries and related companies is subject to risks similar to the ones that the Company is subject to, which may exert a substantial adverse effect on their individual results and may even render it difficult or impossible to distribute dividends to the Company. Besides, potential adverse effects on the results of Vale subsidiaries and related companies may affect its results and even reduce the amount to be distributed to shareholders as dividends.

Risks relating to Company suppliers

For information about risks relating to Company suppliers, please see Risk Factors under The Company face shortages of equipment, services and skilled personnel and Higher energy costs or energy shortages would adversely affect Company business above.

Risks relating to Company customers

Company business could be adversely affected by demand reduction for products manufactured by its customers, including steel (for iron ore and coal operations), stainless steel (for nickel operations), and agricultural commodities (for fertilizer operations).

The demand for iron ore, coal and nickel depends on global demand for steel. Iron ore and iron ore pellets, which together accounted for 71.5% of Company operating revenues in 2011, are used in the production of carbon steel. Nickel, which accounted for 9.5% of Company operating revenues in 2011, is mainly used in the production of stainless and alloy steels. Demand for steel depends heavily on global economic conditions as well as on a series of regional and sectorial factors. The prices of the different types of steel and the performance of the steel industry as a whole are highly cyclical and volatile and these business cycles in this sector affect the demand for and the prices of its products. Besides, the vertical backward integration of the steel industry and the use of scrap could reduce the global transoceanic trade of iron ore.

The demand for fertilizers is affected by global prices of agricultural commodities. A sustained reduction in the price of one or more agricultural commodities could have a negative impact on Vale fertilizer business.

Risks relating to the fields of economy in which the Company operates

The change for indexed iron ore prices based on short-term market references and the ensuing volatility of prices may adversely affect the Company iron ore business.

Vale executed agreements with all its customers in the iron ore sector during the first half of 2010 to annual reference price contracts to contracts with indexed prices to better reflect market parameters. The annual reference system for the iron ore sector was initially replaced by a system, according to which iron ore prices were established every quarter, based on a quarterly average of price indexes corresponding to the period between the end of one month prior to the commencement of the new quarter. Since the last quarter of 2011, the Company has signed agreements with some customers to price its products on a quarterly basis, using the current quarterly average of price indexes, and with other customers, using the monthly price index average. While the new price system defines the price more accurately according to the quality of the product, rewarding its iron ore products with a bonus over the price of standard iron ore, increased volatility based on the impact of quarterly price changes could adversely affect the Company cash flow.

Prices of metals that are actively traded on commodity exchanges, including nickel and copper, are subject to significant volatility.

Nickel and copper are sold in an active global market and traded on commodity exchange markets 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 future global macroeconomic and political conditions, global industrial production, changes in

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supply and demand, availability and cost of substitutes, inventory levels, investments from commodities funds, changes in prices of other commodities and actions of participants in the commodities market.

Prices charged by the Company, including prices of iron ore, nickel and copper, are subject to volatility.

The Company defines iron ore prices according to a variety of pricing options, which generally use spot price indices as a basis for determining prices to customers. Its prices for nickel and copper are based on prices reported for these metals in the commodity exchange markets, such as the London Metal Exchange (LME) and the New York Mercantile Exchange (NYMEX). Company s prices and revenues for these products are therefore volatile and affect its cash flow. World prices for these metals are subject to significant fluctuations and are affected by many factors, including current and future global macroeconomic conditions and global industrial production, levels of supply and demand, availability and cost of substitutes, inventory levels, investments from commodities funds and actions of participants in commodities markets.

Increased availability of alternative nickel sources or substitution of nickel in end use applications may negatively affect the Company nickel business.

Scrap nickel competes directly with primary nickel as a source of nickel to be used for the production of stainless steel and the choice between them is largely driven by their relative prices and availability. In 2011, the stainless steel scrap ratio remained relatively stable compared to 2010, at 43%. Nickel pig iron, a product developed by Chinese steel and alloy makers which uses lateritic nickel ores, competes with other sources of nickel in the production of stainless steel. In 2011, estimated nickel pig iron production increased 67%, representing 16% of global nickel output. Demand for primary nickel may be adversely affected by direct substitution of primary nickel with other materials in current applications. In response to high nickel prices or other factors, producers and consumers of stainless steel may partially shift from the production of stainless steel with high nickel content (series 300) to stainless steel with lower nickel content (series 200) or with no nickel content (series 400), which would adversely affect demand for nickel.

Risks relating to the regulation of the sectors in which the Company operates

Regulatory, political, economic and social conditions in the countries in which the Company has operations or projects could adversely affect its business and the market prices of its securities.

Vale s financial performance may be negatively affected by regulatory, political, economic and social conditions in the countries where the Company has significant operations or projects, mainly in Argentina, Australia, Brazil, Canada, Chile, Colombia, France, Guinea, Indonesia, Liberia, Malawi, Mozambique, New Caledonia, Norway, Oman, United Kingdom, and Zambia.

Company operations rely on authorizations and concessions from governmental regulatory agencies in the countries where the company operates. For further details about the authorizations and concessions that its operations rely on, please refer to item 7 in the Reference Form. The Company is subject to laws and regulations in many jurisdictions that can experience changes at any time, and changes of laws and regulations may require modifications in its technologies and operations and result in unexpected capital expenditures.

Actual or potential political changes and changes in economic policy may undermine investors confidence which could hamper investments and therefore reduce still negatively affect economic and other conditions under which the Company operates, so as to adversely affect its business.

Disagreements with local communities where the Company operates may have a negative impact on its business and reputation.

There may be legal disputes with communities where the Company operates periodically. Although the Company contributes to local communities through taxes, employment and business opportunities and social programs, community expectations are complex and involve multiple stakeholders with different interests. Some of the operations and reserves are located on lands or near lands owned or used by indigenous or aboriginal tribes, or other groups. This indigenous population may have rights to review or participate in the management of natural resources, and the Company negotiates with them in order to minimize the impacts of operations or to have access to their lands.

Disagreements or disputes with local groups, including indigenous or aboriginal tribes, may cause delays or interruptions in operations, adversely affect the Company s reputation or hinder its ability to work in reserves and conduct operations. Protesters have acted to disrupt operations and projects and may continue to do so in future. Although the Company defends itself vigorously against illegal acts and future attempts by protestors to cause harm to its operations could have a material adverse effect on its business.

The Company may experience adverse effects of changes in government policies, including the imposition of new taxes or royalties on mining activities.

Mining is subject to government regulations in the form of specific taxes and royalties, which can have a significant impact on Company operations. In the countries where the Company operates, governments may impose or change existing taxes or royalties, or modify the basis on which they are calculated, in a manner unfavorable to the Company. Governments that have undertaken to create a stable tax and regulatory environment may shorten the duration of these commitments.

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The Company may have its businesses affected by environmental, health and safety regulations, including regulations relating to climate change.

Almost all the aspects of its operations, products, services and projects all over the world are subject to environmental, health and safety laws, which may expose the Company to increased responsibility and costs. These regulations require that the Company obtains environmental licenses, permits and authorizations for its operations and conducts environmental impact assessments in order to obtain approval for its projects and permission to start construction. Besides, all significant changes required in existing operations must also undergo the same procedure. Difficulties to obtain operating licenses may cause construction delays or cost increases and, in some cases, force the Company to postpone or even abandon a project. Environmental regulations also impose rules and control standards on activities relating to research, mining, pelletizing, railway and maritime transportation services, ports, decommissioning, refining, distribution and marketing of products. These regulations may give rise to significant costs and liabilities. Besides, community activist groups and other stakeholders may increase their demands for environmentally sustainable and socially responsible development, which could entail significant cost increases and reduce Company profitability. Private litigation relating to these or other matters may adversely affect the Company financial condition or cause harm to its reputation.

Environmental regulations in many of the countries where Vale operates have become stricter in recent years and more regulations or a more aggressive application of the regulations already in force are likely to adversely affect the Company by imposing restrictions on its activities and products, by establishing new requirements relating to the emission and the renewal of environmental licenses, increasing costs or forcing the Company to get engaged in expensive regeneration ventures.

Concerns over the climate change and efforts to comply with international undertakings could lead governments to impose limits on carbon or carbon taxes and commercial emission schemes applicable to Company operations, which could adversely affect its operating costs or its capital expenditure requirements. For example, the Brazilian government issued a decree under the terms on the carbon emission law (National Climate Change Policy) that foresees specific limits on carbon emissions to be determined in 2012 and gradually deployed ;by 2020, and the Australian government introduced a carbon pricing mechanism that shall come into force in July, 2012.

Risks relating to the foreign countries in which the Company operates

The adverse economic developments in China may cause a negative impact on the Company s revenue, cash flow and profitability.

China has been the main driver of global demand for minerals and metals in recent years. In 2011, Chinese demand represented 63% of global transoceanic demand for iron ore, 43% of global demand for nickel, and 39% of the global demand for copper. The percentage of the Company s operating revenues attributable to sales to consumers in China was 32.4% in 2011. Although China has largely resisted the 2008/2009 recession, the contraction in economic growth in the country may result in lower demand for products, leading to lower revenues, cash flow and profitability. Poor performance of the Chinese real estate sector and higher consumption of carbon steel in China may also cause a negative impact on the Company s results.

Risks relating to Company s ADSs and HDSs (American Depositary Shares and Hong Kong Depositary Shares)

If holders of ADRs or HDSs exchange the ADSs or HDSs, respectively, for underlying shares, they risk losing the ability to remit them abroad in foreign currency.

The custodian of shares underlying the Company s ADSs and HDSs keeps records with the Central Bank of Brazil, entitling him to remit U.S. Dollars abroad by way of payment of dividends and other distributions relating to the shares underlying ADSs and HDSs or to the disposal of the underlying shares. In the event holders of ADRs or HDRs exchange ADSs or HDSs for underlying shares, they shall be entitled to use the custodian s records of US dollars for only five days from the date of exchange. From then on, holders of ADRs or HDRs can no longer hold and remit foreign currency abroad through the sale of underlying shares or distributions regarding such shares, unless they obtain their own registration, pursuant to the terms of Resolution No. 2,689 of the National Monetary Council (CMN), which confers on registered foreign investors the right to buy and sell securities at BMF&BOVESPA. For more information about these exchange controls, see the item on *Additional Information - Exchange controls and other limitations affecting security holders*. If holders of ADRs or HDRs try to obtain a registration, they may incur expenses or suffer delays in the registration process, which may delay the receipt of dividends and other distributions with respect to the underlying shares or capital return in a timely manner.

The Company is unable to assure holders of ADR or HDR that any custodian registration or any registration will not be affected by future legislation modifications or additional restrictions applicable to holders of ADR or HDR, the disposal of underlying shares or the repatriation of the proceeds from disposal.

Holders of ADR and HDR may not be able to exercise their pre-emptive rights relating to shares underlying their ADSs and HDSs.

ADR and HDR may not be able to exercise their preemptive rights or other rights relating to the underlying shares. The ability of HDR and ADR holders to exercise their preemptive rights is not guaranteed, especially if the law applicable in holders jurisdiction (for example, the Securities Act in the United States or the Companies Ordinance in Hong Kong) demands that a registration declaration be effective or that an exemption from registration be available relating to those rights, as is the case in the United States, or for any document enabling preemptive rights to be registered as a prospectus, as is the case in Hong Kong. The

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Company is not bound to make a registration statement in the United States, or make any other record in any other jurisdiction with respect to preemptive or take measures that may be necessary to make exemptions from registration available and cannot ensure to holders that it shall make any registration statement or take such measures. Besides, the Company is not required to extend the preemptive rights to the holders of HDR through the depositary. For a more complete description of preemptive rights with respect to underlying shares, see the item *Additional Information - Memorandum and Articles of Association - Preemptive rights.*

ADR and HDR holders may encounter difficulties to exercise their voting rights.

Holders of ADR or HDR do not hold the same rights as shareholders. They only hold contract rights established in their favor under deposit contracts. ADR and HDR holders are not entitled to take part in shareholders meetings and may only vote by means of instructions delivered to the depositary. . If the Company does not provide the depositary with voting materials in a timely manner, or if the custodian does not provide enough time for holders of ADRs or HDR to submit their voting instructions, HDR and ADR holders shall not be able to vote. With respect to ADSs, if no instruction is received, the depositary may, subject to certain limitations, appoint an attorney designated by the Company.

Legal protections for holders of Company securities differ from one jurisdiction to another and may be inconsistent, unknown or less effective than investors expectations.

Vale is a global company which securities are listed on many markets and which investors are located in many different countries. Investors legal protection systems vary across the world, sometimes in relation to important aspects, and investors must be aware that the protections and remedies available to them, as far as the Company s securities are concerned, may be different from those they are used to in their markets. The company is subject to securities laws applicable in several countries, which provisions and monitoring and enforcement practices are different. The only Corporations Act applicable to the Company is the Brazilian law, with specific and substantial legal rules and procedures. The Company is also subject to corporate governance standards in various jurisdictions in which its securities are listed, but, as a foreign private issuer, the company is not obliged to follow many of the corporate governance rules which apply to domestic issuers in the United States with securities listed on the New York Stock Exchange and is not subject to U.S. proxy rules. Likewise, the company has been granted waivers and exemptions regarding certain requirements provided for in the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (HKEx Listing Rules), in the Codes on Takeovers and Mergers and Share Repurchases and in the Securities and Futures Ordinance of Hong Kong, which are generally applicable to issuers listed in Hong Kong.

4.2 Comments on **expectations for changes in exposure to risk factors**

We constantly analyze the risks that the company is exposed to and which may adversely affect our business, financial situation and results of our operations. We permanently monitor changes in the macro-economic and sectorial scenario which might impact our activities, by tracking the main performance indicators. Our policy is one of continuous focus on financial discipline and conservative cash management. At present we do not identify any scenario which would lead to a reduction or increase in the risks mentioned in in item 4.1 of this Reference Form. .

Please find below the measures taken by the Company to mitigate some of the risk factors presented in Item 4.1 of this Reference Form:

The Company may not be able to adjust the volume of production in time or cost effectively in response to changes in demand.

Vale seeks to continually develop technology solutions for excellence in operational performance.

Concessions, authorizations, licenses and permits are subject to expiration, restriction or renewal and to various other risks and uncertainties.

To deal with this challenge, the company seeks to be a sustainable operator always trying to be a catalyst for local development. Specifically on the environmental aspects, the Company has actions to improve efficiency in the licensing processes, such as a greater integration between environment and project development teams, the development of a Guide to Best Practices for Environmental Licensing and Environment, the appointment of teams of highly qualified specialists, a greater interaction with environmental agencies and the creation of an Executive Committee to streamline internal decisions.

Company s projects are subject to risks that may result in increased costs or delays that may jeopardize their successful implementation.

As a measure to mitigate projects risks, Vale invests in training its current employees in the planning and execution of projects, and has taken actions to streamline the environmental licensing that has been the main reason for delays, such as creating a Guide to Best Practices of Environmental Licensing and Environment. Besides, the Company has implemented the dissemination of information and prevention campaigns to improve standards of health and safety of employees.

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Operational problems may materially and negatively affect the company s business and financial performance.

Along with the project development process, the Company has adopted an integrated risk assessment, which anticipates potential problems and allows mitigation plans. The methodological rigor promotes a higher accuracy of estimates, transparency and predictability in project development, as well as it ensures compliance with environmental regulations and health and safety requirements, and minimizes impacts on communities.

The company s business may be negatively affected if its counterparties fail to meet their obligations.

Vale always seeks high level partners and keeps a fair and close relationship over time.

The frequency of natural disasters has increased and can cause serious damages to the company s operations and projects in countries where it operates and/or may have a negative impact on its sales to countries adversely affected by such disasters.

The Company has adopted measures that include business continuity plans that provide immediate responses to protect people, assets and the company s image, alternative solutions to guarantee business continuity and fast recovery for return to normal production flow and monitoring and weather forecast systems. Moreover, the geographical diversification of its assets and sales to different countries and regions collaborate to reduce this risk.

The company may not have an adequate insurance coverage for certain business risks.

For cases where there is a limitation on purchased coverage, the Company uses its captive insurers to absorb some of the risks. In addition, it seeks to maintain a long-term relationship with the insurance and reinsurance market, and in all insurance lines, it works with the diversification of counterparties.

It is important to emphasize that the Company only mitigates part of the risks through insurance policies. It applies the operational risk management methodology to prioritize the risks and, for the most relevant ones, the company develops controls and action plans to mitigate the risks.

The company faces an increase in extraction costs as reserves are reduced.

As for the risks listed above, Vale seeks to have an extensive and high quality asset base in the business in which it operates, without relying solely on certain mines, thereby, diversifying risks. The Company invests heavily in mineral exploration since, with more samples, the estimation risk is reduced. It continuously resupplies its reserve base through new projects to avoid depletion of mines. Moreover, it has a presence in several minerals and geographic locations, which also helps to diversify risks.

Labor disputes may disrupt the company s operations from time to time.

Vale believes that staff is one of its competitive advantages, and seeks to treat all employees in the fairest possible way. Vale promotes a work environment conducive to dialogue, in which all employees are encouraged to share with their colleagues and superiors their concerns of any nature.

The company may face shortages of equipment, services and skilled personnel.

Vale works to increasingly integrate strategic planning, anticipating the demand for equipment and skilled workforce, as well as investing in strategic contracts with suppliers and initiatives to train specialized technicians, engineers and employees engaged in project implementation.

Higher costs of energy or energy shortages may adversely affect the company s business.

In order to mitigate the risk of power outages and/or costs, the Company has developed its power generation assets based on current and projected energy needs of its mining operations in order to reduce their energy costs and minimize the risk of energy supply problems.

Price volatility regarding US dollars - of currencies in which the company conducts its operations could adversely affect its financial condition and operating results.

Vale s cash flow exchange exposure is assessed in conjunction with other market risk exposures - prices of products and supplies and interest rates - and mitigated when deemed necessary to support the growth plan, strategic planning and Vale s business continuity. Various forms of mitigation may be used: financial transactions through the use of derivatives in order to hedge, committed lines of credit guaranteeing liquidity, or any strategic decisions aimed at reducing the risk of cash flow. For more details, see item 5.2 of this Reference Form.

Integration between the Company and acquisition goals that are an important part of the Company s strategies may be more difficult than anticipated.

In order to mitigate the risk of integration, Vale works with a broad management focus on acquisitions and leverages the previously acquired knowledge.

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The company is involved in several lawsuits that may adversely affect its business, if ruling are not favorable to the Company.

Mitigation measures include the use of defenses presented by Vale based on legal opinions, consolidated legal doctrine, as well as in the predominant case law in the Superior Courts. The internal guidance and consultancy work is based on these same guidelines, sticking to the facts presented.

The Company s governance and compliance processes cannot avoid regulatory penalties and damages to its reputation.

Vale has internal controls and mechanisms to detect control failures and obtain information on cases of breach of conduct, especially through the Whistleblower Channel.

Conditions inherent to iron ore sea transportation may affect the Company s operations.

Vale is conducting a research program to further assess the phenomenon of liquefaction and studies to ensure the stability of ships in various situations.

The Company has a large number of subsidiaries and affiliates (as evidenced in item 8.1 of this Reference Form), and many are subject to operational and market risks similar to Vale s own risks, which may have adverse effects on the consolidated results.

Vale applies to its subsidiaries (and encourages the use by its affiliates) rules and standards of excellence used internally, where applicable and respecting the corporate governance of each company, including in respect to risk management practices.

The increased availability of alternative sources of nickel or replacement of nickel on end-use applications may adversely affect the Company s nickel business.

As for the risks listed above, Vale has a diversified portfolio of products and customers that allows risk diversification and, where necessary, to support the growth plan, the strategic planning and the business continuity of Vale, and may take price protective measures (see item 5.2 of this Reference Form).

The Company may be negatively affected by changes in government policies, including by the application of new taxes or royalties on mining activities.

As safety measures, Vale systematically monitors the changes previously mentioned to react quickly, when applicable, participates in discussions with the government through representative bodies of the mining sector and always seeks to operate in the most sustainable possible manner.

Environmental, health and safety regulations, including regulations relating to climate change, may affect the Company s businesses.

Vale operates responsibly in all locations where it is present, respecting the communities and the environment. In order to be globally known as an example of excellence in the management of Health and Safety, Vale has been continually improving its systems.

The adverse economic developments in China may cause a negative impact on the Company s revenue, cash flow and profitability.

The Company mitigates this risk, which is reflected in prices, when deemed necessary to support its growth plan, strategic planning and business continuity.

4.3 - Publicly known and relevant in-court, administrative or arbitration proceedings

(I) Labor

The tables below present an individual description of labor suits relating to the business of the Company and/or its subsidiaries.

Claim n. 01266-2006-012	
Jurisdiction	6ª Panel TST
Instance	3rd Instance
Date of filing	11/27/2006
Parties in the suit	Public Prosecutor for Labor matters (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 520.4 million
Main facts	The Public Prosecutor for Labor matters of Minas Gerais filed a civil suit, on 11/27/06, a public civil action seeking to prevent the outsourcing of operation of machines and equipment used for mining, such as wheel loaders, bulldozers and drills, monitoring and reading of instruments in the tailings dams and waste dumps, and preparation

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	and execution of fire-plan (detonation). On 08/20/09, the ruling was issued (partially favorable) ordering Vale to refrain from outsourcing the services mentioned above, performing such activities, therefore, with its own employees. The Court stated that such services were the main activities of the Company and thus could not be outsourced. On 10/15/2009, Vale filed an appeal against this decision. On 02/22/10, the Superior Regional Labor Court rejected Vale s appeal and partially accepted the appeal filed by the public prosecution office, granting the legal protection sought. On 05/18/10, Vale filed another appeal to the Supreme Labor Court, claiming the violation of article 129, III, of the Federal Constitution, article 83 of the Complementary Law No. 75/93, as well as of divergent case law based on the lack of collective interests authorizing the filing of the public civil action by the prosecution office, which results in the lack of competence of such office and on the lack of right to file such a claim because of the absence of one of its requirements, as provided for in article 267, I and VI and article 295, V, of the Code of Civil Procedure. Vale has also claimed the violation of Article 5, items XXII, LIV and LV, of the Federal Constitution and of Article 899 of the Consolidation of Labor Laws, because of the inapplicability of the mortgage ordered by the Regional Labor Court without an enforcement procedure. Finally, Vale claimed the violation of items II and XIII, of Article 5, and sole paragraph of article 170, both of the Federal Constitution, in view of the violation of the right to freely work, provided that the legal requirements are met; besides, activities performed by service providers are specialized and can be legitimately agreed. On 05/21/10, the Supreme Labor Court granted Vale s injunction request to suspend the summary judgment that ordered the detonation to be handled by its own staff. On 07/09/10, Vale s appeal was dismissed on the grounds that the lower court ruling did not violate any federal law or any predominant case law, against which decision Vale filed an interlocutory appeal on 07/19/10, which seeks the assessment of the mentioned above appeal and that is still pending judgment.
Chances of loss	Probable
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In case of maintenance of the unfavorable decision, Vale is obliged, in Minas Gerais, to refrain from outsource services previously mentioned, having to perform such activities through its own employees; and to provide for the termination of contracts of outsourcing which may have as their purpose such services.
Amount provisioned (if any)	R$ 177.7 million
Notes	There is only one labor claim (file no. 21022011054), filed at the Labor Court of Congonhas by the employee who is on the list attached to the files of the Public Civil Action at stake who claims to be an employee of Vale (still in the discovery phase).

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Claim n. 00685-45.2008.5.08.0114

Court	1ª Federal Court of Parauapebas Pará
Instance	1st Instance (settlement during 1st instance)
Date of filing	07/03/2008
Parties in the suit	Public Prosecutor for Labor matters (plaintiff), Vale and the following companies (defendants): Accentum Manutenção e Serviços Ltda., ALTM S.A Tecnologia e Serviços de Manutenção, Atlântica Serviços Gerais Ltda., BMT- Engenharia Ltda., BRITAP - Britagem Azevedo Ltda., Comau do Brasil Industria e Comercio Ltda., Consorcio Canaã, Consorcio Sossego, Consorcio VFC, Construtora Brasil Novo Ltda., Construtora Camilo e Empreendimentos Ltda., Construtora Mineira de Engenharia Ltda., Construtora Norberto Odebrecht S A, Construtora Queiroz Galvão S/A, CRM Construtora Ltda., D Service Ltda., Dan Hebert S/A, Dinex Engenharia Mineral Ltda., E. S. Neres Transportes ME, 20. EME Serviços Gerais Ltda., Engepar Engenharia Ltda., Flapa Mineração e Incorporação Ltda., Geocret Engenharia e Tecnologia Ltda., Gesman Ltda., Integral Construções e Comercio Ltda., Intertek do Brasil Inspeções Ltda., Julio Simões Transportes e Serviços Ltda., Kaserge Serviços Gerais Ltda., Lubrin Lubrificacao Industrial Ltda., Metso Brasil Industria E Comercio Ltda., MIP Engenharia S/A, MSE-Servicos de Operação, Manutenção e Montagem Ltda., Progeo - Engenharia Ltda., Rio Maguari Serviços e Transportes Rodoviario Ltda., Rip Serviços Industriais S/A, Salosergel Vigilância Ltda., Sital - Sociedade Itacolomi de Engenharia Ltda., Sodexho do Brasil Comercial Ltda., T Q M Service Ltda., U & M Mineração e Construção S/A, and Vessoni Transportes Ltda.
Amounts, goods or rights involved	R$ 108.6 million
Main facts	Vale provides free transportation to employees who live in Paruapebas and in the residential center of Carajás to the mines of Carajás and Sossego. For that reason, the Public Prosecution Office of Pará filed a Public Civil Action against Vale and 42 other service providers, claiming that workplaces are difficult to access and not served by regular public transportation, so Vale and the other companies should be ordered to pay, as overtime, the time spent to go back and forward between Parauapebas and the mines of Carajás and Sossego. On 12/03/10, the first instance decision was published condemning Vale to pay indemnity for damages to the amount of R$ 100 million) and for practicing social dumping (R$ 200 million). Temporary relief was granted so that Vale could determine, immediately, how many hours travelling each of its employees used, with a penalty of a daily fine of R$ 100 thousand per worker if not done, as well as refrain contractors from including on their cost worksheet expenses with hours paid travelling and allied costs. As a result of a request for decisions by Odebrecht, (one of the 42 defendants in this lawsuit), in the Request for Corrective Judgment filed by Vale as a response, the Inspector General of the Supreme Labor Tribunal in Brasilia, on 03/19/10 recognized the allegations and reversed the temporary relief order granted by the local judge, so that Vale and the

	other companies may appeal without having to comply immediately with the sentence passed. VALE, the Public Labor Prosecution Office and Workers Union executed an agreement to settle the claim, which was approved by the Court on 07/20/10. The settlement does not include any of the convictions stated in the Court s decision, namely, the compensation for alleged collective pain and suffering and social dumping. Vale agreed to pay, as working hours, part of the time spent commuting back and forward to work (already implemented). Besides, Vale has already paid the amounts corresponding to the retroactive period defined in the settlement (42 months). In order to fully complying with the settlement, Vale shall engage in two social works: a cultural center and a federal technical school in Parauapebas/PA. The implementation of this part of the settlement is still in progress, and the lawsuit is still active.
Chances of loss	The previous prognosis was of possible loss, considering that the most relevant requests had little chance of being granted by the Court. We reviewed the amounts and we changed the prognosis to probable loss in view of the settlement.
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In the event of acceptance of all the claims submitted, Vale would be compelled to pay: (i) *in itinere* hours for all the employees working at Carajás, Azul and Sossego mines, (ii) *in itinere* hours retroactively to March 2003 and (iii) group moral damages in an amount of R$ 100,000,000.00.
Amount provisioned (if any)	The amount originally allocated to the claim was of R$ 79.5 million. This figure was revised and updated in March 2012 to R$ 47.6 million, considering the effects of the executed settlement. As far as the payment of salaries is concerned, Vale has already fulfilled the obligations defined in the settlement

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approved by the Court with the payment of the retroactive commuting hours. In addition, Vale has been monthly paying its employees the minutes set out in the settlement.

Claim n. 3197.2001.002.17.00-8

Jurisdiction	2nd Labor Court of Vitória - Espírito Santo
Instance	1st Instance
Date of filing	09/19/2001
Parties in the suit	Vale S.A. (defendant) and SINDFER Railroad union of ES and MG (plaintiff)
Amounts, goods or rights involved	Guarantee of the operational activities at the Tubarão Complex.

Main facts

On 09/19/01, the SINDFER union filed a public civil action, whose object was the compliance of areas of the Tubarão Complex with the dictates of NR-10 (safety of premises and services in electricity).

After production of expert evidence, Vale was ordered on 03/19/09 to implement in their operational facilities, located in the State of Espírito Santo, all technical measures for the protection of work against risks by electricity provided for in the NR. The judge granted Vale temporary relief, with a period of six months for compliance, ending 11/19/09, with payment of a daily fine of R$ 100,000.00 for non-compliance.

After rounds of negotiation, and several inspections of areas of the Complex, a legal agreement was signed on 12/17/09 between the parties, establishing a timeline for implementation of technical measures, with a deadline of 12/31/11, which was duly approved by the court on 03/11/10, suspending the suit.

On 01/24/11, SINDFER took part in a meeting with Vale Representatives where the substitution certificate of the previously filed revitalization schedules was signed accepting the new schedules submitted by the Company where the term for revitalization of the Complex was extended until 03/31/12.

In March, the parties agreed to extend the period of adjustment of the Complex to 04/15/2012, and the final inspection was scheduled for 05/07/2012. On 05/07/2012, the parties toured the Complex of Tubarão, and SINDFER acknowledged the fulfillment of the settlement and undertook to submit a report within 20 days. The parties scheduled the works closing meeting for 06/01/2012.

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Chances of loss	Probable
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Any financial impacts have been removed with the execution of a settlement between the parties in 2009, which is being complied with by Vale through the purchase and refurbishing of equipment in order to improve the working conditions in the electric power system of Tubarão. If and only if the schedule set by the parties is not complied with, the parties may risk an embargo on Tubarão Complex activities, as well as the application of a monetary penalty. Taking into account the work already undertaken, the extent and complexity of the operational area of Tubarão and the remote likelihood of an embargo (in view of the settlement), it is not possible to determine the financial impacts.
Amount provisioned (if any)	No amount has been allocated since the claim does not include any request for Vale to pay any amounts to the Union, employees or third parties. The claim refers to investments in the Company s electrical system, in other words, in its own industrial park. So there is no amount to be allocated in case of loss. Besides, a settlement has been executed with Plaintiff which defines the adjustments to be made, as well as the schedule, which is being adequately met, and the term adjustments are being periodically monitored by the parties.

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Claim n. 00329.2006.92020003

Jurisdiction	Labor Court of Maruim - Sergipe
Instance	3rd Instance (TST)
Date of filing	08/18/2006
Parties in the suit	Vale S.A. (defendant) and Union for workers extracting iron, basic and precious metals-Sindimina (plaintiff)
Amounts, goods or rights involved	Guarantee of the operational activities at the potassium chlorate mine in Sergipe.
Main facts	Lawsuit brought by SINDIMINA union in the State of Sergipe on 01/23/11, aiming to improve the suitability of the working conditions of employees in the underground potash mine in Sergipe to bring them up to regulatory standard NR 15, especially as regards the temperature of the mine and noise level. On 02/20/06, the ruling was issued determining the adoption of measures, within 30 days, to improve the cooling of the mine, otherwise the activities would be interrupted until the implementation of such measures, and a daily fine of R$ 100,000 would be applied. A motion for clarification was filed and it was clarified that the 30 day-period should be counted as of the final judgment (res judicata). On 09/25/06, Vale filed an appeal, which was partially granted, on 08/07/07, to exclude the interruption of mine activities and the payment of a daily fine of R$ 100 thousand from the conviction. On 11/29/07, Vale filed an Appeal before the Supreme Labor Court (TST) to demonstrate compliance with the legal standards applicable to the activity, which was received on 03/04/08. On 12/19/12, the mentioned above appeal was judged unfavorably to Vale. On 02/06/12, a motion for clarification was filed by Vale. On 03.28.2012, the motion was dismissed and the decision was published on 04.04.2012.
Chances of loss	Probable
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Any unfavorable decision may risk imposing an obligation to do so, fines and, in the worst case scenario, total or partial closure of the activities of the underground mine for exploitation of Potassium Chlorate/Sergipe, or a monetary penalty for illegal operation. According to the latest RAL (for its acronym in Portuguese for Mining Annual Report), Vale s net income in 2010 resulting from the exploration of the potassium chloride mine

	exploration was of R$ 465.9 million, thus, such is the maximum annual impact if the mine is to be closed. The Company is taking precautionary measures to ward off the effects of any unfavorable decision, through improvements in working conditions.
Amount provisioned (if any)	No amount has been allocated since Plaintiff s claim refers to an obligation to do something (that is, to adapt working conditions to the relevant laws and regulations), with no impact on past and current results. It should be noted that, notwithstanding the outcome of the claim, Vale is already making improvements in the mine conditions. Moreover, the decision provides for the payment of a daily fine if the company continues to develop the mine activities without taking into account the obligation to adapt working conditions to the relevant laws and regulations as provided for in the court ruling. Therefore, the Company will only be subject to a fine (i) when the decision becomes final (res judicata) and (ii) if an expert evidence demonstrates that the measures adopted by the company were not sufficient to adjust the working environment to the court ruling.

(II) Tax

The tables below present a description of individual tax cases considered relevant to the business of the company and/or its subsidiaries. With regard to the processes listed below which challenge the taxation of profits from its affiliates abroad, it is important to notice that tax authorities may issue new tax assessments to ensure the right to collect amounts relative to 2009 and thereafter Additionally, Vale may be compelled to provide guarantees of the amounts involved in the tax assessments in the event of an unfavorable final administrative decision before it can be able to discuss the payment of taxes in Court. However, since the decision issued was favorable to Vale, in May 2012, attributing suspensive effects to the extraordinary appeal and, consequently dismissing the applicability of amounts being questioned, , there is no need to post any bond while such favorable decision is still in force and any new assessment notices shall be issued but no payment shall be required.

Due to some tax exposures involving the companies of the Vale group, the Company has allocated the amount of R$ 1,153 million, of which R$ 561 million are related to overseas companies, R$ 229 million are related to companies which control is shared and R$ 332 million are related to the Brazilian subsidiaries. Besides the processes described in items 4.3 and 4.6 of this Reference Form, Vale is also involved in other tax claims regarding which it has allocated R$ 100 million.

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1) Writ of Mandamus 2003.51.01.002937-0

Jurisdiction	Federal Regional Court of the 2nd Region
Instance	2nd instance
Date of Filing	02/03/2003
Parties in the suit	Vale (Plaintiff) and Federal Tax Authority (Defendant)
Amounts, goods or rights involved	Not applicable
Main facts	In February 2003, Vale filed a Writ of Mandamus to ensure the right not to be subject to income tax and social contribution as far the profits of its subsidiaries and affiliates abroad were concerned, according to the sole paragraph of article 74 of the Provisional Executive Order 2.158-34/2001, and later amendments. Arguments of the Company:(i) section 74 of the Provisional Measure overlooks the treaties against double taxation signed by Brazil; (ii) the National Tax Code forbids the aforementioned taxation as set forth by the Provisional Measure; (iii) even if section 74 of the Provisional Measure were valid, exchange variation should be excluded from the assessment of due taxes; and (iv) the rule IN 213/2002 is illegal and (v) violation of the principle of prior taxation, in the event of taxation prior to December 2001. In February 2003, an injunction request was granted to suspend the collection of the tax credit resulting from the challenged legislation, so that the rules of Law No. 9.532/97 would continue to apply However, in August 2005, a ruling was issued denying the request made in the writ of mandamus as the Court did not accept Vale s arguments After the dismissal of the motion for clarification filed by Vale, the company filed an appeal which was received on 09/29/05 and the collection of the tax credit was suspended. On 03/29/11, the 3rd Specialized Panel of the Federal Regional Court of the 2nd Region (TRF 2nd Region) dismissed the appeal, rejecting the arguments of Vale After reviewing the ruling, published on 05/30/11, Vale has changed the prognosis from remote to possible , as reflected in its financial statements for 06/30/11, filed on 07/28/11. On 06/03/2011, a motion for clarification was filed, pointing out omissions regarding Vale s arguments on the exchange rate variation and on the unconstitutionality of the sole paragraph of article 74 of Provisional Executive Order, in addition to a contradiction relative to the application of treaties to avoid double taxation. The contradiction claimed by Vale is based on the fact that such challenged decision states, at the same time, that Article 7 of the treaties against double taxation prohibits Brazil from taxing profits of affiliates and subsidiaries abroad, that treaties prevail against internal laws and that, however, such provision does not prevent the application of article 74 of the Provisional Executive Order 2158-35/01.

	On 11/28/11, the ruling which judged the motion partially in favor of Vale was published and the exchange rate variation on the amount of foreign investment was excluded, but the other requests were rejected and the suspension of the tax credit collection was cancelled On 12/13/11, Vale filed a Special Appeal at the Superior Court of Justice (STJ) and an Extraordinary Appeal at the Supreme Court of Justice (STF). The Special and Extraordinary Appeals are admitted on 05/07/2012, same day when Vale filed for a Preliminary Order before the Federal Supreme Court requesting attribution of suspensive effects to the Extraordinary Appeal aiming to suspend the application of amounts related to IRPJ and CSLL being discussed. This request was granted preliminarily on May 9, 2012, reason why collections related to profits of affiliates abroad are suspended.
Chances of loss	Possible
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In the event of a final unfavorable decision, regarding all arguments raised by the Company, the Brazilian Tax Authority may collect income taxes and social contributions on profits of subsidiaries and/or affiliates abroad, taking into account the principle of the due process of law in the specific administrative and in-court collection procedures.
Amount provisioned (if any)	Not applicable

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Notes	The unconstitutionality claim (ADI, for its acronym in Portuguese) filed by the Confederação Nacional da Indústria (CNI) challenging the constitutionality of Article 74 of Provisional Executive Order is still pending final judgment by the Supreme Court of Justice and the decision issued in this lawsuit shall be broadly applicable, valid and binding upon all, including government entities. And, on 04/06/11, the Supreme Court of Justice acknowledged the general repercussion of an Extraordinary Appeal regarding the collection of income taxes and social contributions from subsidiaries and affiliates abroad, even when there is no profit distribution to shareholders in Brazil. For this reason, we expect the Supreme Court of Justice to reassess the issue, with new members and a new approach.

1.2) Injunction Request no. 2011.02.01.017919-1 related to the Writ of Mandamus 2003.51.01.002937-0

Court	Federal Regional Court of the 2nd Region
Instance	2nd Instance
Date of filing	12/26/2011
Parties to the claim	Vale (plaintiff) and Federal Government (defendant
Values, assets or rights involved	Not applicable
Main factors	On 12/26/11, an injunction was filed by Vale to suspend, until the judgment of the Special and Extraordinary Appeals filed by the Company in the Writ of Mandamus (item 1), the collection of amounts regarding income taxes and social contributions being discussed. The injunction request was denied and Vale filed an interlocutory appeal, which was dismissed during a trial held on 02/16/12.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	Not applicable. Considering the granting of the injunction related to item 1.4, this discussion is prejudiced as the object no longer applies.
Allocated amount (if any)	None

1.3) Injunction Request no. 18.919 related to the Writ of Mandamus 2003.51.01.002937-0

Court	Superior Court of Justice
Instance	3rd Instance
Date of filing	02/01/2012
Parties to the claim	Vale (plaintiff) and Federal Government (defendant)
Values, assets or rights involved	Not applicable
Main factors	On 02/01/12, an injunction was filed by Vale to suspend, until the judgment of the special appeal filed in the writ

	of mandamus (item 1), the collection of amounts regarding income taxes and social contributions being discussed. On 02/03/12, the injunction request was denied. Vale filed an appeal and 02/16/2012, the Minister Rapporteur caused the decision to be ineffective upon recognizing his impartiality for personal reasons. The case was submitted to the Minister Teori Albino Zavascki and on 03/14/12, the injunction request was granted suspending applicability of amounts being discussed. On 03/28/12, the National Tax Authority filed an interlocutory appeal, for purposes of reverting the preliminary order favorable to Vale, which was granted, by majority of votes, on 05/03/2012. This decision has not yet been published.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, tax credits will not be enforceable immediately as their effectiveness is subject to the final decision to the Injunction filed before the Federal Supreme Court object of item 1.4 below, which decision currently in effect suspends the applicability of amounts for IRPJ and CSLL being discussed.
Allocated amount (if any)	None

1.4) Development of Writ of Mandamus 2003.51.01.002937-0: Injunction no. 3.141

Court	Federal Supreme Court
Instance	3rd Instance
Date of filing	05/07/2012
Parties to the claim	Vale (plaintiff) and Federal Government (defendant)
Values, assets or rights involved	Not applicable
Main factors	On 05/07/12, Vale filed for an Injunction to attribute

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	suspensive effects to the Extraordinary Appeal filed in the Writ of Mandamus (item 1) determining suspension of the applicability of amounts for IRPJ and CSLL being discussed. On 05/09/12, the Federal Supreme Court granted the injunction attributing the suspensive effect to the Extraordinary Appeal, thus suspending the applicability of amounts under discussion. On 05/25/2012, the Union filed an appeal.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, there is a chance to require guarantee for amounts under discussion.
Allocated amount (if any)	None

2) Tax Assessment Notice no. 18471.001243/2007-69

Court	Tax Appeals Administrative Council
Instance	2nd administrative instance
Date of filing	12/10/2007
Parties to the claim	Federal Tax Authority (plaintiff) and Vale (defendant)
Values, assets or rights involved	R$ 992 million, plus penalties and interests amounting to R$ 2.101 million (December 2011)
Main factors	On 11/12/07, Vale was made aware of the Tax Assessment Notice which object is the collection of supposed income tax and social contribution debts levied on the accounting gain regarding the ownership equity of foreign subsidiaries in the 1996 to 2002 base years. On 12/10/07, Vale filed an Impugnation, arguing that such requirements were not valid and that no penalty could be applied because the injunction issued in favor of Vale in the writ of mandamus no. 2003.51.01.002937-0 was still in force (item 1). The Internal Revenue Trial Service (DRJ, for its acronym in Portuguese) judged the impugnation partially against the company. On 08/18/08, a Voluntary Appeal was filed by Vale. The Federal Tax Authority also filed an Appeal regarding the partial reduction of the social contribution collection. At the judgment of these appeals, held on 05/19/10, some of Vale s arguments were not assessed by CARF, as it was deemed that they should be assessed by a Judge. Additionally, the preliminary argument regarding the running of the statute of limitations as far the collections

referring to years 1996 and 1997 presented by Vale were concerned was rejected, the application of a fine against Vale was canceled, and the Appeal from the National Tax Authority was dismissed.

On 09/26/11, Vale filed a Motion for Clarification stating the existence of omissions in the second instance administrative decision. Such motion is still pending judgment.

On 03/10/11, a Special Appeal was presented by the National Tax Authority against the cancelling of the penalty. Later on, Vale submitted its counterarguments together with a Special Appeal regarding the decision that rejected its preliminary argument on the running of the statute of limitation.

On 01/24/12, the Special Major Taxpayer Office (DEMAC, for its acronym in Portuguese), ex officio, interpreting the decision of the Federal Regional Court of the 2nd Region in the writ of mandamus no. 2003.51.01.002937-0 in the sense that there is an overlapping between the discussions in this administrative proceeding and in that writ of mandamus, rejected all administrative appeals and ordered the immediate collection of part of the credits that are currently object of Tax Assessment no. 0015197-06.2012.4.02.5101 (item 2.2).

Vale filed a Writ of Mandamus to reverse the order of DEMAC and ensure the regular development of the administrative process, as well as to request reconsideration at the administrative level. Therefore, this appeal did not even reach the special instance level.

Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ

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	and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the taxes on the accounting gain regarding the ownership equity of foreign subsidiaries discussed under this tax assessment notice may be levied. Any financial impact, however, shall only occur in case of a final unfavorable decision in the in-court collection claim.
Allocated amount (if any)	None

2.1) Writ of mandamus. 0001899-44.2012.4.02.5101 related to the Tax Assessment Notice no. 18471.001243/2007-69

Court	28th Federal Court of Rio de Janeiro
Instance	1st Instance
Date of filing	02/06/2012
Parties to the claim	Vale (plaintiff) and DEMAC (defendant)
Values, assets or rights involved	Not applicable
Main factors	On 02/06/12, Vale filed a Writ of Mandamus to suspend the order of DEMAC and ensure the regular development of the administrative proceeding no. 18471.001243/2007-69. The injunction request was denied, reason why Vale filed a request for reconsideration, which was denied, and a Request for Amendment of Judgment, which is pending judgment. . Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1.4), with consequent suspension of applicability of amounts related to IRPJ and CSLL *being discussed*. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	Not applicable
Allocated amount (if any)	None

2.2) Tax Collection no. 0015197-06.2012.4.02.5101 regarding the Tax Assessment Notice no. 18471.001243/2007-69

Court	5th Tax Collection Court

Instance	1st federal instance
Date of filing	03/13/2012
Parties to the claim	Federal Taxpayer Authority (plaintiff) and Vale (defendant)
Values, assets or rights involved	R$ 1,699,834,929.00 in March 2012 (value already included in the amount of the main administrative process described in item 2 above, added with legal fees)
Main factors	On 03/12/12, the Federal Tax Authority filed a claim to collect income taxes and social contributions presumably due, in view of the order from DEMAC mentioned in item 2 above. On 04/25/12, the Federal Tax Authority filed a petition requesting seizure of dividends to be distributed by Vale on 04/30/12. On 04/26/12, Vale filed a petition challenging the request from the Federal Tax Authority and offering, alternatively, a bank guarantee to secure the debt. On the same day, the court accepted the offering of the guarantee, presented by Vale on 04/27/12. On 05/08/12, the Federal Tax Authority presented a request to block monies through the BACENJUD system that, upon objection by Vale, was rejected due to the result of the injunction object of item 1.4. Vale requested dismissal of the bail previously offered as guarantee of execution, granted by the Court.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the	In the event of any unfavorable outcome related to the Injunction object of item 1.4, Vale may have to present a new guarantee to suspend the applicability of the amounts in question.

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Company	
Allocated amount (if any)	None

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3) Notice of Infraction nº 18471.000141/2008-15

Jurisdiction	Administrative Council of Fiscal Resources
Instance	2nd administrative instance
Date of filing	03/28/2008
Parties in the suit	Federal Revenue Secretariat (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 4.076 million, plus penalties and interests amounting to R$ 6.778 million (December 2011)
Main facts	On 02/29/08, Vale became aware of the tax assessment notice which object is the collection of supposed income tax and social contribution debts levied on the accounting gain regarding the ownership equity of foreign subsidiaries in the 2003 to 2006 base years. On 03/28/08, Vale filed an impugnation, arguing that such requirements were not valid and that no penalty could be applied because the injunction issued in favor of Vale in the writ of mandamus no. 2003.51.01.002937-0 was still in force (item 1). The Internal Revenue Trial Service (DRJ, for its acronym in Portuguese) judged the impugnation against the company. On 08/18/08, Vale filed a voluntary appeal, reinforcing the arguments included in its impugnation. At the trial, in 05/19/10, the Tax Appeals Administrative Council (CARF, for its acronym in Portuguese) annulled the first instance decision so that a new administrative decision be given, assessing the applicability of the International Convention to which Brazil is a signatory and which purpose is to avoid double taxation between countries, since this argument was not assessed by DRJ. In light of this decision, in 09/26/11, a motion for clarification was filed by the Federal Tax Authority. At the trial on 10/03/11, CARF partially accepted the motion for clarification only to clarify the omission as to the declaration of nullity of the first instance decision and to ratify the judgment previously delivered. On 12/06/11, the Federal Tax Authority filed a petition alleging that, in view of a supposed acknowledgment that two claims, one at the administrative level and another in Court, were active at the same time, which took place during the judgment of the motion to clarify filed in the writ of mandamus no 2003.51.01.002937-0 (item 1), the decision which annulled the first instance decision would be null and, therefore, the process should be directed to the collection sector of the Federal Tax Authority.

	On 12/22/11, Vale filed a petition alleging that there was no recognition of claim concurrency. Nonetheless, on 01/18/12, the President of the 2nd Chamber of CARF issued a monocratic decision, taking for granted the arguments of the Federal Tax Authority to cancel the judgment which annulled the first instance decision. On 01/25/12, Vale filed a writ of mandamus (item 1.3) alleging the illegality of the above mentioned monocratic decision, and an injunction order was issued to suspend the effects of such decision and determine the regular processing of the administrative claim. In addition, Vale filed an administrative appeal. The Federal Tax Authority filed a claim to suspend the injunction order No. 0009426-51.2012.4.01.0000 and on 03/13/12, a decision was published suspending the effectiveness of the injunction obtained by the Company. Vale filed an interlocutory appeal in order to reverse such decision, which was denied. On 05/08/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority distributed the Tax Assessment to collect amounts under discussion (item 3.2). Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being questioned. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended.
Chances of loss	Possible
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In the event of a final unfavorable decision, the taxes on the accounting gain regarding the ownership equity of foreign subsidiaries discussed under this tax assessment notice may be levied. Any financial impact, however, shall only occur in case of a final

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	unfavorable decision in the in-court collection claim.
Amount provisioned (if any)	None

3.1) Writ of mandamus. 0004826-69.2012.4.01.3400 related to the Tax Assessment Notice no. 18471.000141/2008-15

Court	48th Federal Court of the Federal District
Instance	1st Instance
Date of filing	01/25/2012
Parties to the claim	Vale (plaintiff) and President of the 2nd Chamber of the Tax Appeals Administrative Council (defendant)
Values, assets or rights involved	Not applicable
Main factors	On 01/25/12, Vale filed a writ of mandamus, and on 01/27/12, an injunction order was issued to suspend the effects of the administrative monocratic decision mentioned above and to determine the regular processing of administrative claims no. 18471.000141/2008-15 and 12897.00868/2009-98. The Federal Tax Authority filed a claim to suspend the injunction request no. 0009426-51.2012.4.01.0000 and, on 03/13/12, a decision was issued suspending the validity of the injunction obtained by the Company. Vale filed an interlocutory appeal in order to reverse the decision, which was denied. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being questioned. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	Not applicable
Allocated amount (if any)	None

3.2) Development of Notice of Infraction no. 18471.000141/2008-15: Tax Assessment Notice no. 0023959-11.2012.4.02.5101

Court	7th Tax Collection Court
Instance	1st federal instance
Date of filing	3/13/2012

Parties to the claim	Federal Tax Authority (Plaintiff) and Vale (Defendant)
Values, assets or rights involved	R$ 13,239,898,936.60 in May 2012 (2012 (amount included in the main administrative procedure described in item 3 above))
Main factors	On 05/08/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority filed a tax assessment notice to collect the amounts of IRPJ and CSLL supposedly due, considering the administrative decision mentioned in item 3 above. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL *being questioned*. On May 9, the Federal Supreme Court granted the injunction. For that reason, the applicability of such amounts is suspended.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome related to the Injunction object of item 1.4, Vale may have to present a new guarantee to suspend the applicability of the tax credits in question.
Allocated amount (if any)	None

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4) Notice of Infraction nº 12897.000868/2009-98

Jurisdiction	Federal Revenue Secretariat
Instance	2nd administrative instance
Date of filing	01/11/2010
Parties in the suit	Federal Revenue Secretariat (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 5.742 million, plus penalties and interest amounting to R$ 7.497 million (December 2011)
Main facts	On 12/14/09, Vale became aware of the tax assessment notice which object is the collection of supposed income tax and social contribution debts levied on the accounting gain regarding the ownership equity of foreign subsidiaries in the 2007 base year. On 01/11/10, Vale filed an impugnation, arguing that such requirements were not valid and that no penalty could be applied because the injunction issued in favor of Vale in the writ of mandamus no. 2003.51.01.002937-0 was still in force (item 1). The Internal Revenue Trial Service (DRJ, for its acronym in Portuguese) judged the impugnation against the company. On 07/08/10, Vale filed a voluntary appeal, reinforcing the arguments included in its impugnation. On 11/23/11, CARF decided to send the files back to the first instance so that a new decision would be issued to supplement the previous one, and that the applicability of the Convention to avoid double taxation could be assessed. On 12/06/11, the Federal Tax Authority filed a petition in this administrative proceeding alleging breach of a court decision in view of a supposed recognition of claim concomitance in the injunction described in item 1 above, and requiring the claim to be directed to the Tax Authority collection sector. On 12/22/11, Vale filed a petition alleging that there was no recognition of claim concurrency. The President of the 2nd Chamber of CARF issued a monocratic decision, taking for granted the arguments of the Federal Tax Authority so as to cancel the judgment that annulled the decision on the Voluntary Appeal which ordered the files to be sent to the first instance. On 01/25/12, Vale filed a writ of mandamus (described in item 3.1) alleging the illegality of the monocratic decision, and an injunction order was issued to suspend the effects of such decision and determine the regular processing of the administrative claims. In addition, Vale filed an administrative appeal. The Federal Tax Authority filed a claim to suspend the injunction order No. 0009426-51.2012.4.01.0000 and on

	03/13/12, a decision was published suspending the effectiveness of the injunction obtained by the Company. Vale filed an interlocutory appeal in order to reverse the decision, which was denied. On 05/08/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority distributed the Tax Assessment to collect amounts under discussion (item 4.4) Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended.
Chances of loss	Possible
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In the event of a final unfavorable decision, the taxes on the accounting gain regarding the ownership equity of foreign subsidiaries discussed under this tax assessment notice may be levied. Any financial impact, however, shall only occur in case of a final unfavorable decision in the in-court collection claim.
Amount provisioned (if any)	None

4.1) Writ of mandamus 2011.51.01.005614-9 related to the Tax Assessment Notice no. 12897.000868/2009-98

Court	32nd Federal Court
Instance	1st federal instance
Date of filing	04/29/2011

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Parties to the claim	Vale (Plaintiff) and Federal Tax Authority (Defendant)
Values, assets or rights involved	Amount already included in the value of the main administrative process described in item 4 above.
Main factors	On 03/15/11, Vale received a letter collecting income taxes and social contributions which, according to the Federal Tax Authority, would not be the object of the Voluntary Appeal previously filed by the Company in the administrative procedure. On 03/23/11, Vale filed a petition requesting the cancellation of the collection on the grounds that the claimed values were covered by the Voluntary Appeal previously filed by the Company. On 04/15/11, Vale received a notice from the Federal Tax Authority announcing the maintenance of the collection. On 04/29/11, Vale filed a writ of mandamus combined with an injunction request to suspend the collection, which was rejected. On 05/25/11, an interlocutory appeal was filed against the decision that rejected the request for injunction to suspend the collection. On 07/15/11, the request to suspend the effects of the previous decision was rejected on the grounds that the requirements for that were not fulfilled. Currently, the files are with the Judge for the issuance of the decision. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL *being discussed*. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	Not applicable
Allocated amount (if any)	None

4.2) Tax Collection no. 2011.51.01.518168-2 regarding the Tax Assessment Notice no. 12897.000868/2009-98 dated 1/11/10

Court	9th Tax Collection Court
Instance	1st federal instance
Date of filing	07/08/2011
Parties to the claim	Federal Taxpayer Authority (plaintiff) and Vale (defendant)
Values, assets or rights involved	R$ 30,509,955.86 in December 2011 (value already included in the amount of the main administrative process described in item

	4 above, added with legal fees)
Main factors	On 07/08/11, the Federal Tax Authority filed a claim to collect income taxes and social contributions presumably due, in view of the collection letter mentioned in item 4.1. On 08/29/11, Vale submitted a guarantee regarding the tax collection, which was subsequently and expressly approved by the Federal Tax Authority. On 09/28/11, Vale filed a motion to stay the collection, under No. 2011.51.01.509917-5, requiring the suspension of the collection until the final judgment of the main writ of mandamus filed in 2003 and the cancellation of the Company s Debt Certificate due to a material error, in view of an inconsistency of the amounts indicated therein. These appeals have not yet been objected by the Federal Tax Authority. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the guarantee of this execution may be enforced.

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Allocated amount (if any)	None

4.3) Motion to Stay Collection no. 2011.51.01.509917-5 regarding the Tax Assessment Notice no. 12897.000868/2009-98 dated 01/11/10

Court	9th Tax Collection Court
Instance	1st federal instance
Date of filing	09/28/2011
Parties to the claim	Federal Tax Authority (Defendant) and Vale (Plaintiff)
Values, assets or rights involved	Value already mentioned in item 4.2 above.
Main factors	On 09/28/11, Vale filed a motion to stay the collection, requiring the suspension of the collection until the final judgment of the main writ of mandamus (item 1) filed in 2003 and the cancellation of the Company s Debt Certificate due to a material error, in view of an inconsistency of the amounts indicated therein. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL *being discussed*. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the guarantee may be enforced
Allocated amount (if any)	None

4.4) Development of the Notice of Infraction no. 12897.000868/2009-98: Tax Assessment 0023958-26.2012.4.02.5101

Court	7th Tax Collection Court
Instance	1st federal instance
Date of filing	05/8/2012
Parties to the claim	Federal Tax Authority (Plaintiff) and Vale (Defendant)
Values, assets or rights involved	R$ 16,249,581,365.41 in May 2012 (2012 (amount included in the main administrative procedure described in item 3 above, added with legal fees)
Main factors	

	On 05/08/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority filed a tax assessment notice to collect the amounts of IRPJ and CSLL supposedly due, considering the administrative decision mentioned in item 4 above. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For that reason, applicability of such amounts is suspended.
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome related to the Injunction object of item 1.4, Vale may have to present a guarantee to suspend the applicability of such amounts.
Allocated amount (if any)	None

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5) Notice of Infraction no. 12897.000023/2010-36

Jurisdiction	Federal Revenue Secretariat
Instance	2nd administrative instance
Date of filing	02/12/2010
Parties in the suit	Federal Revenue Secretariat (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 1.604 million, plus penalties and interests amounting to R$ 1.897 million (December 2011)
Main facts	On 01/18/10, Vale became aware of the tax assessment notice which purpose is the collection of alleged income tax and social contribution debts levied on the accounting gain regarding the ownership equity of foreign subsidiaries during the 2008 base year. On 02/12/10, Vale filed an impugnation, arguing that such requirements were not valid and that no penalty could be applied because the injunction issued in favor of Vale in the writ of mandamus no. 2003.51.01.002937-0 was still in force (item 1). The Internal Revenue Trial Service (DRJ, for its acronym in Portuguese) judged the impugnation against the company. On 07/08/10, Vale filed a Voluntary Appeal against the decision which dismissed such impugnation, reinforcing the previously submitted arguments. Such appeal is still pending judgment. On 12/06/11, the Federal Tax Authority filed a petition in this administrative proceeding alleging breach of a court decision in view of a supposed acknowledgment of claim concomitance and requiring the claim to be directed to the Tax Authority collection sector. On 01/17/12, Vale filed a petition alleging that there was no recognition of claim concurrency. The President of the 3rd Chamber of CARF issued an order determining that the claim be directed to the Federal Tax Authority Office of origin. On 03/16/12, Vale received a letter requiring the payments of the amounts *sub judice*. On 05/8/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority distributed the Tax Assessment to collect amounts under discussion (item 5.6) Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal

	Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Chances of loss	Possible
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	In the event of a final unfavorable decision, the taxes on the accounting gain regarding the ownership equity of foreign subsidiaries discussed under this tax assessment notice may be levied. Any financial impact, however, shall only occur in case of a final unfavorable decision in the in-court collection claim.
Amount provisioned (if any)	None

5.1) Writ of mandamus 2010.51.01.017597-3 related to the Tax Assessment Notice no. 12897.000023/2010-36, dated 02/12/10:

Court	Federal Regional Court of the 2nd Region
Instance	2nd Instance
Date of filing	09/28/2010
Parties to the claim	Vale (Plaintiff) and Federal Tax Authority (Defendant)
Values, assets or rights involved	Amount already included in the value of the main administrative process (item 5 above, and legal fees).
Main factors	On 08/19/10, Vale received a letter requesting the payment of income taxes and social contributions which, according to the Federal Tax Authority, would not be the object of the Voluntary Appeal previously filed by the Company in the administrative procedure. On 08/23/10, Vale filed a petition requesting the cancellation of the collection on the grounds that the claimed values were covered by the Voluntary Appeal previously filed by the Company. Given the acceptance of the arguments submitted by Vale, in the

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	sense that there would be calculation errors, the Federal Tax Authority reduced the amount charged and issued a new collection letter, which was received by Vale on 09/06/10. Due to the partial maintenance of the collection, on 09/28/10, Vale filed a writ of mandamus on the grounds that such amounts would still be under discussion at the administrative level. The injunction request was granted to suspend the collection of debts required by the Federal Tax Authority. In view of this decision, the Federal Tax Authority filed an interlocutory appeal in order to reverse the decision regarding the suspension of the collection, which was denied. However, on 12/16/11, an unfavorable judgment was rendered, as the Court deemed that such values would not be the object of the voluntary appeal previously filed by the Company. In view thereof, on 01/09/12, Vale filed an appeal, requiring the reversion of the decision. That appeal is pending judgment by the Federal Regional Court of the 2nd Region. On 01/26/12, two tax collection claims were filed to recover the income tax and social contribution amounts under discussion. Vale had to post a bond to secure the alleged debts and the motions to stay such collection claims (items 5.2 to 5.5 below). Vale filed for injunction (item 1.4) to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	Not applicable
Allocated amount (if any)	None

5.2) Tax Collection no. 0011487-75.2012.4.02.5101 regarding the Tax Assessment Notice no. 12897.000023/2010-36 dated 02/12/10

Court	1st Tax Collection Court
Instance	1st federal instance
Date of filing	01/26/2012
Parties to the claim	Federal Taxpayer Authority (plaintiff) and Vale (defendant)
Values, assets or rights involved	R$ 19,759,947.34 in March 2012 (value already included in the amount of the main administrative process described in item 5 above, added with legal fees)

Main factors	On 01/26/12, the Federal Tax Authority filed a claim to collect income taxes and social contributions presumably due, in view of the collection letter mentioned in item 5.1. On 02/02/12, Vale posted a bond to secure the tax collection claim and on 02/6/12, the Court accepted such bond. Vale filed for injunction (item 1.4) to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the guarantee of this execution may be enforced.
Allocated amount (if any)	None

5.3) Motion to Stay Collection no. 0013552-43.2012.4.02.5101 regarding the Tax Assessment Notice no. 12897.000023/2010-36 dated 02/12/10

Court	1st Tax Collection Court of Rio de Janeiro
Instance	1st federal instance
Date of filing	03/8/2012
Parties to the claim	Federal Tax Authority (Defendant) and Vale (Plaintiff)

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Values, assets or rights involved	Value already mentioned in item 5.2 above.
Main factors	On 03/8/12, Vale filed a motion to stay the collection claim. Vale filed for injunction (item 1.4) to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the guarantee of this execution may be enforced.
Allocated amount (if any)	None

5.4) Tax Collection no. 0011476-46.2012.4.02.5101 regarding the Tax Assessment Notice no. 12897.000023/2010-36 dated 02/12/10

Court	4th Tax Collection Court of Rio de Janeiro
Instance	1st federal instance
Date of filing	01/26/2012
Parties to the claim	Federal Taxpayer Authority (plaintiff) and Vale (defendant)
Values, assets or rights involved	R$ 54,851,397.67 in March 2012 (value already included in the amount of the main administrative process described in item 5 above, added with legal fees)
Main factors	On 01/26/12, the Federal Tax Authority filed a claim to collect income tax presumably due, in view of the collection letter mentioned in item 5.1. On 02/02/12, Vale posted a bond to secure the entire debt. On 05/07/2012, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority requested the seizure of R$ 55,498,599.31 through the BACENJUD system filed a petition requesting to block monies to guarantee the execution through the Bacenjud

	system, granted by the Court. Vale filed a request for amendment of judgment against this decision. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the deposit that guarantees this execution may be converted into revenue to the Union.
Allocated amount (if any)	None

5.5) Motion to Stay Collection no. 0013553-28.2012.4.02.5101 regarding the Tax Assessment Notice no. 12897.000023/2010-36 dated 02/12/10

Court	1st Tax Collection Court
Instance	1st federal instance
Date of filing	03/8/2012
Parties to the claim	Federal Tax Authority (Defendant) and Vale (Plaintiff)
Values, assets or rights involved	Value already mentioned in item 5.4 above.
Main factors	On 03/8/12, Vale filed a motion to stay the collection claim. Vale filed for injunction to attribute a suspensive

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	effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. For this reason, the applicability of such amounts is suspended
Probability of loss	Possible
Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome, the deposit that guarantees this execution may be converted into revenue to the Union.
Allocated amount (if any)	None

5.6) Development of Notice of Infraction no. 12897.000023/2010-36: Tax Assessment Notice no. 0023974-77.2012.4.02.5101

Court	1st Tax Collection Court
Instance	1st federal instance
Date of filing	05/8/2012
Parties to the claim	Federal Tax Authority (Plaintiff) and Vale (Defendant)
Values, assets or rights involved	R$ 4,231,837,405.90 in May 2012 (amount included in the main administrative procedure described in item 5 above, added with legal fees)
Main factors	On 05/08/12, although the decision granting the injunction related to item 1.3 has yet to be published and despite of the effective suspensive effect of the preliminary order granted by the STJ, the Federal Tax Authority filed a tax assessment notice to collect the amounts of IRPJ and CSLL supposedly due, considering the administrative decision mentioned in item 5 above. Vale filed for injunction to attribute a suspensive effect to the extraordinary appeal filed in the writ of mandamus (item 1), with consequent suspension of applicability of amounts related to IRPJ and CSLL being discussed. On May 9, the Federal Supreme Court granted the injunction. The Tax Authority filed a request to block and seize monies through the BACENJUD system. In view of the decision by the Federal Supreme Court presented in the records by Vale, the Court suspended this assessment and issued an order for summoning.
Probability of loss	Possible

Analysis of impact in case of loss/Reasons for the importance of the claim to the Company	In the event of any unfavorable outcome related to the Injunction object of item 1.4, Vale may have to present a new guarantee to suspend the applicability of the amounts in question. In the event of any unfavorable outcome, the new guarantee may be converted into payment to the Federal Tax Authority
Allocated amount (if any)	None

(III) Civil

The tables below present a description of individual civil nature processes considered relevant to the business of the company and/or its subsidiaries.

Claim no. 0063023-34.2008.8.19.0001

Jurisdiction	41st Civil Court of the Court of Justice of Rio de Janeiro
Instance	1st Instance
Date of filing	03.17.2008
Parties in the suit	Vale (plaintiff) and Movimento dos Sem Terra MST (defendant)
Amounts, goods or rights involved	Protection of the company s assets and guarantee of its operations
Main facts	Vale filed a common suit with a request for anticipated relief obliging the defendant to cease attacks, violent acts or incitements which cause the operational stoppage of the company by the MST. Relief was granted, as soon as the case was judged in the year 2008, establishing that the MST must refrain from such acts.
Chances of loss	Remote

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Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	The lawsuit was initiated in order to ensure the protection of the assets of the company and its operational activities. A possible unfavorable decision can increase the exposure of the company to MST attacks.
Amount provisioned (if any)	None.

Claim no. 0015963-69.2006.4025101

Jurisdiction	30th Court of the Federal Court of Rio de Janeiro
Instance	1st Instance
Date of filing	08.18.2006
Parties in the suit	Federal Rail Network (Rede Ferroviária Federal S.A.), succeeded by the Federal Union (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 3.0 billion
Main facts	The plaintiff filed a claim for reparation from the Company to receive contractual amounts, damages, lost profits, among other amounts, for alleged breach of contractual obligations on the part of Vale. The contract concluded between the parties involved railway transposition in the city of Belo Horizonte. Under a partial settlement, the construction costs of the new segment will be offset against the damages claimed by Plaintiff, which will reduce the amount the Company shall pay if the claim is judged in favor of the Federal Government.
Chances of loss	Remote
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Any unfavorable decision could generate a financial loss for the company, in the light of the amounts involved.
Amount provisioned (if any)	None

Claim no. 0009362-71.1997.4.02.5001

Jurisdiction	5th Panel of TRF 2nd Region
Instance	2nd Instance
Date of filing	11.10.1997
Parties in the suit	Federal Public Prosecutor Espírito Santo (plaintiff) and Federal Union, Gerdau, Açominas S.A., Companhia Siderúrgica de Tubarão, Usinas Siderúrgicas de Minas Gerais S.A., Vale, Odacir Klein, Luis Andre Rico Vicente, Jorge Eduardo Brada Donato, José Armando Figueiredo Campos, Rinaldo Campos Soares, João Jackson Amaral, Claudio José Anchieta de Carvalho Borges, Ivo Costa Serra and Companhia Docas do Espírito Santo - CODESA (defendants)

Amounts, goods or rights involved	Incalculable amount application for annulment of the concession contract for use of port terminals for the Tubarão Complex.
Main facts	This is a Public Civil Action which aims to annul the authorization by which Vale and some of the other defendants operate the Port Terminal at Praia Mole, in the State of Espírito Santo. In November 2007, after 10 years of conducting the proceedings, Vale obtains a favorable decision judging the requests to be without foundation and recognizing the validity of contracts of accession that allow exploitation of port terminals located in Praia Mole. The Federal Public Prosecutor appealed on 01.04.08 and the lawsuit awaits judgment in the Federal Regional Tribunal.
Chances of loss (probable, possible, remote)	Remote
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Incalculable amount
Amount provisioned (if any)	None

(IV) Environmental

The tables below present a description of individual environmental nature processes considered relevant to the business of the company and/or its subsidiaries.

Claim no. 0317.02.002974-8

Jurisdiction	2nd Civil Court of Itabira - Minas Gerais
Instance	1st Instance
Date of filing	09.26.1996
Parties in the suit	Town Hall of Itabira (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 2.686 billion
Main facts	The municipality of Itabira seeks compensation for expenses that it alleges to have incurred with public services rendered as a consequence of Vale s mining activities. The case was suspended, pending judgment of a writ filed

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	by Vale to be used in this lawsuit, so that favorable evidence produced in another lawsuit could be used. Although the writ has been judged against Vale, the case continues to be suspended because the court in the first degree has not yet received from the Court of Justice of Minas Gerais information on the writ. After this communication, the lawsuit may resume its normal course.
Chances of loss	Total amount divided into possible loss (15%) and remote loss (85%).
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Any unfavorable decision in the lawsuit would generate financial losses for the Company.
Amount provisioned (if any)	None.

Claim no. 0317.02.007032-0

Jurisdiction	1st Civil Court of Itabira - Minas Gerais
Instance	1st Instance
Date of filing	08.22.1996
Parties in the suit	Town Hall of Itabira (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	R$ 3.111 billion
Main facts	State in which the plaintiff claims that the operations of the iron mines in Itabira caused environmental and social damage and requires the restoration of the site and the implementation of environmental programs in the region. Expert witnesses were used in this case, and the report issued jointly by IBAMA and FEAM was favorable to Vale. Nevertheless, the Municipality requested the production of new expert evidence, which was accepted by the judge. The final outcome of this case is awaited.
Chances of loss	Total amount divided into possible loss (7%) and remote loss (85%).
Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	Any unfavorable decision in the lawsuit would generate financial losses for the Company.
Amount provisioned (if any)	None.

4.4 In-court, administrative or arbitration proceedings that are not confidential involving managers, former managers, controllers, former controllers or investors

Claim no. 12707 (PAS CVM 14/2005)

Jurisdiction	Appeals Council of the National Financial System CRSFN

Instance	2nd Instance
Date of filing	08.23.2005
Parties in the suit	This suit was initiated by CVM, as a result of a complaint from the investment club of SUDFER Railway Workers, minority shareholder of MRS Logística S.A. (MRS), against: Vale (successor of Ferteco Mineração S.A.); Companhia Siderúrgica Nacional - CSN; Minerações Brasileiras Reunidas S/A - MBR; and the directors of MRS who were involved from 1998 to 2002, namely: Alberto Régis Távora, Andreas Walter Brehm, Chequer Hanna Bou-Habib, Delson de Miranda Tolentino, Estela Maria Praça de Almeida, Henrique Ache Pillar, Hugo Serrado Stoffel, Georg Josef Schmid, Godofredo Mendes Vianna. Guilherme F. Escalhão, Inácio Clemente da Silva, João Paulo do Amaral Braga, Joaquim de Souza Gomes, José Paulo de Oliveira Alves, Julio César Pinto, Julio Fontana Neto, Klaus Helmut Schweizer, Lauro H. Campos Rezende, Luiz Antonio Bonagura, Marcus Jurandir de A. Tabasco, Marianne Von Lachmann, Mauro Rolf Fernandes Knudsen, Oscar Augusto de Camargo Filho, Otávio de Garcia Lazcano, Pablo Javier Q. Bruggemann, Rinaldo Campos Soares, Roberto Gottschalk, Valter Luis de Sousa and Wanderlei Viçoso Fagundes.
Amounts, goods or rights involved	Assessment of possible irregularities related to tariff model of MRS between 1998 and 2002.
Main facts	The lawsuit was initiated by CVM to verify (I) the conduct of MRS directors for alleged tariff mismanagement, characterized by undervalued tariffs for the benefit of captive customers or owners; and (ii) the conduct of the MRS shareholders for contracts signed directly with MRS on allegedly non-equitable terms. The suit was judged by the CVM on 05.05.2009, which acquitted all those involved. At the end of 2009, CVM filed an appeal (No. 12707) at CRFSN, which was received on 11/04/2009. That appeal is still pending judgment and it was directed, on 11/09/2009, to PGFN/CAF, for the issuance of an opinion.
Chances of loss	Remote.
Analysis of impact in the case of	The eventual reversal of the decision at the first instance can result in the

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losing the suit/ Reasons for importance for the Company	application of a warning or fine for the company.
Amount provisioned (if any)	None.

Claim no. 005530-40.2007.8.19.0001

Jurisdiction	Prosecution in progress before 48th Civil Court of the Justice Court of Rio de Janeiro. Special Recourse under way before 3rd Panel of STJ and Extraordinary Recourse still not delivered to STF.
Instance	3rd Instance
Date of filing	05.09.2007
Parties in the suit	Petros (plaintiff) and Vale (defendant)
Amounts, goods or rights involved	Vale was requested to make an escrow deposit as payment on 03.08.2010 in the amount of R$ 346,773,910.20, due to the temporary collection claim filed by Petros. Although no final decision has been rendered yet, on 08.23.2011, Petros withdrew the amount deposited in escrow upon the presentation, on that same date, of a guarantee letter issued by Banco Bradesco in the amount of R$ 497.0 million.
Main facts	Petros claims receipt of purges made because of inflation arising from the economic plans called Plano Verão and Plano Collor on amounts paid under forward contracts for buying and selling gold concluded with Vale from 1988. Contracts under discussion in this brief were paid up and settled by Petros at that time. However, Petros started legal proceedings aimed at applying the decision on a matter taken in the STJ for savings accounts books, to contracts concluded with Vale. Vale maintains that the inflationary adjustments are not due; however, all decisions have been unfavorable to the company. Currently the original process is in the implementation stage, but the decision is not yet firm. Vale has a Special Recourse filed with STJ, which was rejected by the Turma on a unanimous basis. Even if this decision can still be reversed, Vale was determined to pay R$ 346,773,910.20 claimed by PETROS in the lawsuit. If the decision is reversed, Vale shall be entitled to recover that amount by enforcing the bank guarantee provided by Petros. There also is an Extraordinary Appeal to be processed and judged by the Supreme Court. There is also a Special Recourse to be dealt with and decided by STF.
Chances of loss (probable, possible, remote)	Probable
Analysis of impact in the case of losing the suit	If a decision unfavorable to Vale becomes final (res judicata), the Company shall not have to pay anything else taking into account the escrow deposit of R$ 346,773,910.20 mentioned above. Additionally, such a decision can open a precedent for similar judgments in other cases where future contracts for sale of gold are

	in dispute (total of 11 cases, including this one. For more details see item 4.6 of this Reference Form).
Amount provisioned (if any)	No amount has been allocated given the escrow deposit made by Vale, which was withdrawn by Petros, upon the presentation of bank guarantee.

Claim no. 0079940-46.2010.4.01.3800

Jurisdiction	18th Federal Court of Belo Horizonte Minas Gerais
Instance	1st Instance
Date of filing	02.18.2004
Parties in the suit	Transger S/A(plaintiff) and Ferrovia Centro Atlântica S/A, Mineração Tacumã Ltda, KRJ Participações S/A, CPP Participações S/A, Carmo Administração e Participações Ltda, Fundação Vale do Rio Doce de Seguridade Social - Valia and Companhia Siderúrgica Nacional - CSN (defendants)
Amounts, goods or rights involved	Incalculable Request for annulment of the General Meeting.
Main facts	The plaintiff brought a lawsuit requesting compensation and annulment of the General Meeting authorizing the capital increase of Ferrovia Centro-Atlântica S.A. (FCA) in early 2003 on the grounds of alleged practice of abusive acts by FCA s controlling group. The request was initially judged well founded, but the judgment was reversed by the Court of Justice of Minas Gerais, which annulled all the judicial proceedings instituted up to then and therefore determined the production of new expert evidence. During the preparation of the new expert evidence, the National Agency of Land Carriage (ANTT, according to the initials in Portuguese) stated its interest in participating in the case and, for this reason, the jurisdiction in this procedure was transferred to the Federal Justice of Minas Gerais. The

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	judge of the 18th Federal Court of Belo Horizonte issued a decision recognizing the jurisdiction of the Federal Courts to judge the case because of ANTT s interest in the maintenance of the concession and accurateness of the administrative act. ANTT was allowed to intervene as an assistant. In view thereof, ANTT requested to examine the files for 15 days and CSN filed an interlocutory appeal, which was rejected by the Court of the 1st Region based on the illegitimacy of such party. The Judge of the 18th Federal Court of Belo Horizonte received FCA s motion not to accept the expert Nelson Ferreira Santos based on his possible impartiality and ordered his summoning to comment on the content of the allegations. The expert required to examine the files to learn about the facts, but did not provide any clarification. Afterwards, ANTT was allowed to examine the records, but did not make any comments yet.
Chances of loss (probable, possible, remote)	Possible
Analysis of impact in the case of losing the suit	Incalculable amount
Amount provisioned (if any)	None

Procedure No. 0529364272010.8.13.0145

Jurisdiction	7th Civil Court of Juiz de Fora/MG
Instance	1st Instance
Date of filing	August 2010
Parties in the suit	SUDFER (plaintiff), and MRS Logística S.A., Companhia Siderúrgica Nacional S.A., Minerações Brasileiras Reunidas S.A., Usiminas Usinas Siderúrgicas de Minas Gerais, Gerdau S.A. and Vale S.A. (defendants)
Amounts, goods or rights involved	Incalculable
Main facts	Plaintiff asserts that MRS Logística adopted a tariff policy aiming to favor its controlling group, specifically the defendants ; a complaint was even filed before CVM, which through the appointed Committee of Inquiry- acknowledged that the complaint filed by Clube SUDFER on the irregularities of the group was true.. Plaintiff requested: 1) Temporary relief determining that the Defendants hire with a subsidiary on equal terms, taking into consideration the maximum allowable tariff; 2) To order the Defendants to pay any and all direct material damages imposed on MRS Logística until the improper practice has been stopped, due to the unfair reduction of the profits of the company, due to the non-payment of dividends, and due to the payment of less dividends in view of the reduced tariffs charged to the controlling group. In January 2011, the defendants filed their pleas. Main proceedings will be suspended until judgment of dismissal for

	lack of jurisdiction also filed by the defendants is passed, thus, aiming at determining in the mining trial, if the court is competent to hear the case or whether in fact the competent forum is Rio de Janeiro. The motions were received by the Court of Justice of the State of Minas Gerais. We are waiting for the decision to be final (res judicata) and for the files to be sent to the Court of Justice of the State of Rio de Janeiro.
Chances of loss (probable, possible, remote)	Possible
Analysis of impact in the case of losing the suit	Any unfavorable decision in the lawsuit would generate financial losses for the Company and would damage its image.
Amount provisioned (if any)	None

Procedure No. 0497166342010.8.13.0145

Jurisdiction	8th Civil Court of Juiz de Fora Minas Gerais
Instance	1st Instance
Date of filing	August 2010.
Parties in the suit	SUDFER (plaintiff) and Júlio Fontana Neto, Henrique Aché Pillar, José Paulo de Oliveira Alves, Pablo Javier de La Quintana Bruggemann, Lauro Henrique Campos Rezende, Wanderlei Viçoso Fagundes, Hugo Serrado Stoffel, Guilherme Frederico Escalhão, Delson de Miranda Tolentino, Marcus Jurandir de Araújo Tambasco, Chequer Hanna Bou-Habib, Roberto Gottschalk, Joaquim de Souza Gomes, Luiz Antônio Bonaguara, Companhia Siderúrgica Nacional S.A.,

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	Minerações Brasileiras Reunidas S.A., Usiminas Usinas Siderúrgicas de Minas Gerais, Gerdau S.A., and Vale S.A. (defendant)
Amounts, goods or rights involved	Incalculable
Main facts	Plaintiff requires payment for moral damage based on the fact that the image of Clube SUDFERwas enormously damaged for 9 years, and that said company did not receive dividends, and thus, was in pre-insolvency status. Plaintiff also requires shares to be sold under same conditions as it had the right to purchase at the time of the 2nd offer of shares made by MRS Logística, besides the loss of earnings by the dividends not received. MBR, such as Vale, is one of the defendants because it is the controlling shareholder of MRS. Given the great number of defendants, not all of them have been summoned; therefore, the parties do not have a legal period yet to file their pleas. However, on 03.15.2012, Vale, MBR and the managers (CHEQUER HANNA BOU-HABIB, GUILHERME FREDERICO ESCALHÃO, HUGO SERRADO STOFFEL and ROBERTO GOTTSCHALK) spontaneously submitted their arguments, as agreed by the defendants.
Chances of loss (probable, possible, remote)	Possible
Analysis of impact in the case of losing the suit	Any unfavorable decision in the lawsuit would generate financial losses for the Company and would damage its image.
Amount provisioned (if any)	None

4.5 Relevant confidential claims

Not applicable. Vale is not a party in any relevant and sensitive cases.

4.6 Publicly known and relevant repeated or related in-court, administrative or arbitration proceedings

(i) Labor

This item 4.6 of the Reference Form includes the amount allocated in relation to repeated or related claims. Given the size of the company, the number of employees and service providers and the number of labor claims, only those repetitive processes that represent more than 5% (five percent) of all claims filed against the company were taken into account, namely: joint liability (15%), overtime (10%), additional amounts due to unhealthy or risky work environments (8%), fines (7%) and commuting hours (5%). In addition to the procedures outlined in items above, the group s controlling company is also involved in some claims regarding labor issues, which amount to R$ 141 million that are allocated. Moreover, some of its direct and indirect subsidiaries and companies under shared control in Brazil are involved in labor claims which amount to R$ 205 million allocated in the respective companies.

Fact and/or legal cause	The more recurring objects are responsibility, subsidiary/joint liability, overtime, additional payment for hazardous/unhealthy conditions, hours *in itinere* and *penalty*.
Amounts involved	R$ 4.1 billion
Amount provisioned (if any)	R$ 688.8 million
Company practice or that of subsidiary which caused the contingency	Difference of interpretation given by the company, employees and unions to various facts, legal and regulatory instruments concerning the issues above.

(ii) Tax

Fact and/or legal cause	Discussion about the taxable base for the calculation of the Financial Compensation for Exploring Mineral Resources CFEM (for its acronym in Portuguese)
Amounts involved	R$ 5,640 billion (in December 2011) for various collections of CFEM.
Amount provisioned (if any)	R$ 283 million (in December 2011)
Company practice or that of subsidiary which caused the contingency	Vale is involved in many administrative and in-court proceedings in which the collection of CFEM is discussed. Such claims result from tax assessments by the National Department of Mineral Production DNPM, an independent government agency under the control of the Ministry of Mines and Energy and involve discussions on the difference in values resulting from tax deductions and travel expenses, arbitration and prescription term for collection, incidence of CFEM on pellets and on the revenue of Company subsidiaries abroad. In order to revise the CFEM taxable base amounts, the Federal Government created, in 2011, a working group with representatives from Vale and DNPM.

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	Vale deems such charges to be illegal, and despite the favorable and unfavorable decisions already issued in many cases, there is still no final decision on the merits, nor any precedent set in our courts.
Fact and/or legal cause	Collection of State VAT (ICMS) on interstate transfer of ore.
Amounts involved	Principal amount (ICMS): R$ 146,713,503.00 Single Fine: R$ 838,362,880.00 Revalidation fines and interest: R$ 219,885,913.00 Total amount: R$ 204,962,296.00 (amounts in December 2011)
Amount provisioned (if any)	None
Company practice or that of subsidiary which caused the contingency	Adoption of the ICMS taxable base for iron ore transportation from MG to ES different from the taxable base used by the tax authorities.

(iii) Civil

Fact and/or legal cause	Eleven pension funds claim receipt of purges made because of inflation arising from economic plans called Plano Verão and Plano Collor on amounts paid amounts paid under forward contracts for buying and selling gold concluded with Vale from 1988. Considering the facts that have occurred in 2011 in the case Petros - reported in item 4.4 (Case No. 005530-40.2007.8.19.0001) which is the most relevant of the eleven cases, financially speaking, claims related to the gold purchase and sale agreements will no longer be included in future reports. More specifically, in the Petros case, Vale was determined to pay R$ 346,773,910.20 requested and withdrawn by PETROS, upon the posting of a bond.
Amounts involved	R$ 130.4 million (approximate value, excluding the Petros case)
Amount provisioned (if any)	R$ 3.6 million (approximate value. Please note the cancelling of the amount allocation in the Petros case) reported in item 4.4 (Process no. 005530-40.2007.8.19.0001) due to the payment made by Vale and collected by Petros, upon presentation of the letter of guarantee. In other cases, the provision was written-off due to regular development of processes.
Company practice or that of subsidiary which caused the contingency	The contingency has been generated according to the edition of economic plans called Plano Verão and Plano Collor, both created by the Federal Government between 1989 and 1991. The contracts in discussion around these were all paid and given as settled by the plaintiffs at the time. However the plaintiffs started legal proceedings aimed at applying the decision on a matter judged in the STJ for savings accounts books, to contracts concluded with Vale. Vale maintains that repayment of inflationary purges is not due.

4.7 Other significant contingencies

Vale claims that the Swiss tax authorities shall apply corporate income tax exemption to its subsidiary Vale International. The basic exemption is of 60% of the corporate income tax due, and may be of 80%, if certain conditions related to the hiring employees and the making of investments are met. Vale believes that such conditions were met; however the Swiss federal tax authorities dispute such understanding in relation to the assessment periods from 2006 to 2009. The tax authorities of the Canton of Vaud initially accepted the arguments of Vale, having changed their position after the federal authorities challenged the application of the 80% tax exemption. In March 2012, the tax authorities of the Canton of Vaud issued a tax notice against Vale International amounting to CHF212 million (equivalent to US$ 233 million), claiming that the conditions for the additional 20% exemption had not been met. The Company believes that such additional notification is not justified and Vale International challenged it before the Swiss courts.

4.8 Rules of the country of origin and of the country in which the securities are held in custody

Not applicable to the Company, as it is not a foreign issuer.

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5.1 Description of the main market risks

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

- product and inputs prices;
- exchange rates;
- interest rates.

Risk of product and inputs prices

Vale is exposed to market risks related to price volatility for commodities and inputs. The Company s main products are: iron ore and pellets, nickel, copper products, fertilizers and coal.

For more information on the risk of product prices, see item 4.1 in this Reference Form.

Exchange risk and interest rate

Company s cash flow is subject to the volatility of various currencies, since the prices of its products are mostly indexed to the U.S. dollar, while significant portion of costs, expenses and investments are indexed to other currencies, mainly the Brazilian real and Canadian dollar.

Vale is also exposed to interest rates on loans and financing. The debts linked to floating interest rates in U.S. dollar consist mainly in loans including pre-payment of exports operations, and loans at commercial banks and multilateral organizations. In general, these debts are indexed to Libor (*London Interbank Offered Rate*). While considering the effects of interest rate volatility onto cash flow, Vale considers the possible effect of natural hedge between fluctuations in US interest rates and prices of commodities in the decision making process for financial investments.

For more information about risks on exchange and interest rates, see item 4.1 in this Reference Form.

5.2 Description of the policy for management of market risks

Vale understands that risk management is essential to support its growth plan, strategic planning and financial flexibility. Therefore, Vale has developed its risk management strategy with the objective of providing an integrated view of risks to which it is exposed. To do this, it not only assesses the impact of variables negotiated in the financial market on business results (market risk), but also the risk from the obligations assumed by third parties to the Company (credit risk), those inherent to inappropriate and deficient internal processes, personnel, systems or external events (operational risk), and those arising out of liquidity risk and others.

Vale s Board of Directors established a policy of corporate risk management for purposes of supporting the growth plan, the strategic planning, and continuity of company businesses, strengthening its capital structure and asset management, ensuring flexibility and solidity in financial management, as well as strengthening corporate governance practices.

The policies of corporate risk management determine that Vale should measure and monitor its corporate risk in a consolidated manner, for purposes of ensuring that the total level of corporate risk is aligned with guidelines set by the Board of Directors and the Executive Directors.

a. Risks for which protection is sought

Vale is exposed to the behavior of several market risk factors that could impact its cash flow. Assessment of this potential impact, arising out of the volatility of risk factors and its correlations, is performed periodically to support the decision making process, the Company growth strategy, ensuring financial flexibility and monitoring volatility of future cash flows.

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b. Asset protection strategy (hedge)

Integrated risk management, which incorporates the various types of risk, as well as the relations between the various market risk factors (correlations), seeks to assess the impact that variations in market risk factors would have on Company cash flow, considering natural hedges present in the company portfolio.

In line with the risk management policy, commodities-related risk mitigation strategies may also be used to adequate the risk profile and reduce the cash flow volatility. For these mitigation strategies, the company mainly uses forwards, future, or zero-coast collars operations.

In the case of cash flow exchange hedge involving income, costs, expenses and investments, the main risk mitigation strategies are currency and swap operations.

Swap operations are used to mitigate risks arising out of debt instruments that mature on similar dates or, in some cases, earlier - than debt final maturity date. Their amounts are similar to the payment of interest and principal, according to market liquidity risks.

Swap operations that mature earlier than debts final maturity are renegotiated through time in order to have matching or close - maturity dates. Therefore, on the settlement date, the swap results will compensate part of the Exchange rate variation on Vale obligations, helping to stabilize the cash flow.

In the case of debt instruments denominated in reais, if there is real (R$) increase (decrease) before the North-American dollar (US$), the negative (positive) impact in Vale s debt service (interest and/or principal payment), in North-American dollars, will be partially offset by the positive (negative) effect from the swap operation, regardless of the US$/R$ Exchange rate on the date of payment. The same reasoning is applicable to debts denominated in other currencies and their respective swap operations.

c. Instruments used for asset protection (hedge)

Protection programs and hedge programs employed by Vale, and their objectives include:

- Protection program of loans and financing in reais, indexed to CDI: In order to reduce the volatility of the cash flow, swap transactions have been made in order to convert the cash flow of debt, indexed to the CDI to U.S. dollars, in loans and financing contracts. In these operations, Vale pays fixed and / or floating rates (Libor) in U.S. dollars and receives remuneration linked to the CDI.

- Protection program of loans and financing in reais, indexed to TJLP: In order to reduce the volatility of the cash flow, swap transactions have been made in order to convert the cash flow of debt indexed to the TJLP(1) to U.S. dollars, in loans and financing contracts with BNDES. In these operations, Vale pays fixed and/or floating rates (Libor) in U.S. dollars and receives remuneration linked to the TJLP.

- Protection program of loans and financing in reais with fixed rates: In order to reduce the volatility of the cash flow, swap transactions have been made in order to convert the cash flow of debt denominated in reais at fixed rate to US dollars in loans contracts with BNDES. In these operations, Vale pays fixed rates in U.S. dollars and receives fixed rates in reais.

- Currency cash flow hedge: In order to reduce the volatility of the cash flow, swap transactions were made to mitigate the exchange rate exposure originated by the currency mismatch between revenues in U.S. dollars and costs of investments in reais.

- Protection Program for loans and financing in Euros: In order to reduce the volatility of the cash flow, a swap transaction was made to convert the cash flow of debts in euros and/or indexed debts into Euribor for U.S. dollars and/or indexed to the Libor Rate. In this operation, Vale receives fixed and/or floating rates in Euros and pays compensation linked to fixed and/or floating rates in US dollars.

- Protection program for loans and financing subject to floating rate in U.S. dollars: In 2004, in order to reduce the volatility of cash flow, a swap transaction was made to convert the cash flow of a unionized debt issued by Vale Canadá Ltd, a subsidiary of Vale. The initial face value was US$ 200 million, indexed at a floating rate (Libor) for fixed rates. In the protection transaction, Vale paid a fixed rate to the counterpart and received a remuneration linked to the floating rate (Libor)

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(1) Due to liquidity restrictions in the TJLP derivative markets, some swap operations were contracted according to CDI equivalence.

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• Protection program for interest rates: Vale carried out 10-year Treasury operations during the last quarter in 2011 in order to ensure partial protection against the cost of debt related to said rate.

• Exchange Protection program for selling coal at a fixed price: The goal is to reduce volatility of cash flows associated with sales contracts for coal at fixed prices, Vale carried out forward operations to buy Australian dollars in order to equalize the cost and revenue currencies.

• Protection program for compensation exposure: in order to have profit on part of the cash flow applications in reais with compensation in US dollars in the Brazilian market, Vale carried out swap operations to alter the CDI profitability from applications in reais to US dollars at a pre-fixed rate. In these operations Vale received foxed rates in US dollars and paid compensation linked to CDI. The program ended on December 2011, with realized gains of R$ 129 million.

• Foreign exchange protection program for the purchase of assets in the African copper belt: in order to volatility of the amount in US dollars related to the payment in South-African Rands in the purchase proposal of assets in the African copper belt, Vale carried out forward purchase of South-African Rands in April 2011. In July 2011, Vale announced the agreement with the request by Metorex Limited to terminate the agreement related to the bid offer for the entire capital of Metorex, reason why operations related to this program were settled in July 2011, with negative income of R$ 13 million.

• Foreign exchange protection program for cash flow: In order to reduce the cash flow volatility, Vale entered into swap operations to translate part of the cash flow in Real at fixed rates for US dollars. In these operations, Vale paid fixed rate for US dollars and received fixed rates in Real. The program ended in December 2011 with realized gains of R$ 0.5 million.

• Hedge program for the selling of nickel: The objective of this program is the protection of cash flows for 2011 and 2012, whereby Vale carried out hedge operations fixing the pricing of part of the sales of nickel in the period.

• Sales program for nickel at a fixed price: aiming to maintain its exposure to fluctuations in the price of nickel, it has been carried out derivative transactions to convert to a floating-price basis commercial Nickel contracts with those clients seeking to fix the price. The operations are intended to ensure that prices for these sales are equivalent to the average price of the LME upon physical delivery to the customer. Typically, operations made within this program are purchases of nickel for future liquidation, either in the Stock Market (LME) or over-the-counter. These operations are reverted before the original maturity date in order to match with the dates of liquidation of the commercial contracts that had a fixed price. When the Hedge program for selling of nickel is performed, the Sales program for nickel at a fixed price is discontinued.

• Protection Program for purchase transactions of nickel: Protection operations were made in order to reduce the volatility of the cash flow and eliminate the mismatching between the pricing period of the purchase of Nickel (concentrated, cathode, sinter and other types) and the reselling period of the processed product. The products purchased are raw material used in the process of production of refined nickel. In this case, operations usually made are the selling of nickel for future liquidation either in the Stock Market (LME) or over-the-counter.

• Protection Program for purchase of fuel oil - Bunker Oil: In order to reduce the impact of fluctuations in the price of fuel oil (Bunker Oil) when procuring freight, and hence reduce the volatility of Company s cash flow, hedge operations were carried out by the contracting of future purchases.

• Protection program for selling of copper scrap: Hedge operations were made in order to reduce the volatility of the cash flow and eliminate the mismatching between the pricing period of the purchase of copper scrap. Copper scrap bought is combined with other inputs in order to manufacture copper for Vale s final customers. In this case, operations usually made are sales for future liquidation either in the Stock Market (London Metal Exchange) or over-the-counter

The foreign exchange hedge programs for cash flow and the foreign exchange protection programs for cash flow present the same purpose to hedge exchange variation. However, different names are required to identify the foreign exchange hedge program for cash flow related to the applicability of accounting requirements required for hedge accounting (for the foreign exchange protection program for cash flow, no accounting requirements are required for hedge accounting).

On December 31, 2011, the value of the principal and interest of the debts denominated in reais and translated into US dollars by swap transactions was R$ 11.2 billion (US$ 6 billion) and the value of the principal and interest of the debts denominated in Euro and translated into US dollars by swap transactions was 500 million (US$ 647 million).

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The average cost of these operations was 3.22% after swap transactions. Due to market liquidity conditions, the average term of swap transactions could be shorter than the debt average term.

d. Parameters used for managing those risks

The parameters used to check the qualification or disqualification of the Company s exposure are:

(i) verification of execution of the programs mentioned in 5.2.c above;

(ii) analysis and constant monitoring of the contracted volumes, and

(iii) adjustment to the adequacy of maturity dates, taking into account their corresponding protection or hedge strategies, guaranteeing the framing of our exposures. The failure to match exposure and protection strategies may occur if:

a. the protection volumes/amounts are higher than the respective exposure volumes/amounts;

b. the exposure that is protected ends; or

c. the maturity dates of protection strategies and the respective exposures no longer match

To avoid potential non-matching due to item (iii.a) above, the criterion adopted is monthly follow up of volumes/amounts to be realized used as basis to propose strategy proposals. in the case of protection of product prices, for instance, if production updated estimates point to a decrease in volumes compared to initial estimates used to propose protection strategies, protection strategy volumes will be adjusted accordingly.

To avoid potential non-matching due to item (iii.b) above, if during monthly follow up the initial exposure fails to be realized, the protection strategy ends immediately (unwind position).

To avoid potential non-matching due to item (iii.c) above, the company constantly checks the alignment between protection strategies and the initially estimate exposure maturity.

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e. If the Company uses various financial instruments with various objectives for asset protection (hedge) and what these goals are

When needed, the company may allocate specific risk limits to management activities requiring those, including, without limitation, limits on market risk, corporate and sovereign risks, according to acceptable limits to corporate risk. Should strategies like these be approved, they should be controlled according to above mentioned limits.

f. Organizational structure for risk management control

The Executive Board for Risk Management, created by the Board of Directors is responsible for supporting the Executive Board in risk assessment for issuing opinions on company risk management. It is also responsible for supervising and reviewing the main corporate risk management principles and instruments. For more information about the members of our Executive Board for Risk Management,, see item 12.7 in this Reference Form.

The Executive Board is responsible for approving policy developments into rules, regulations and responsibilities and for notifying the Board of Directors on such procedures.

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

In Vale, the area formally responsible for risk management is the Corporate Risk Management Department that includes Market Risk Management, Credit Risk Management, Operational Risk Management, Internal Controls and Insurance, directly responding to the Executive Board of Finances and Relations with Investors.

The recommendation and implementation of the operations are carried out by independent areas. It is the responsibility of the area of risk management to define and propose to the Executive Committee for Risk Management operations or measures to mitigate market risk consistent with Vale s strategy. It is the responsibility of the financial area to carry out the transactions involving derivative contracts. The independence between areas ensures effective control over these operations.

g. Adequacy of the operational structure and internal controls to verify the effectiveness of the policy adopted

The monitoring and monthly assessment of Vale s consolidated position allow it to keep pace with the financial results and the impact on cash flow and ensure that the goals originally outlined are met. The fair value calculation of the positions is made available weekly for management monitoring.

Several areas act as *compliance* in the process of risk management: the back-office, part of the General Board of Financial Department, is responsible for confirming the financial characteristics of transactions as well as the counter-parties with which the operations were performed, report the fair value of the positions. This area, along with the area of market risk management, part of the Department of Corporate Risk Management, also assesses whether the operations were performed according to approval given. As well as these areas, the area of internal controls, which is also part of the Department of Corporate Risk Management, acts to verify the integrity of the controls that mitigate risks in the contracted transactions within the above mentioned governance criteria.

5.3 Significant changes in key market risks

In 2010, the Benchmark iron ore pricing system (annual reference prices) was replaced by iron ore price index. As it promptly reflects market price variations, the company expects that adoption of price index contracts offer better volatility to the cash flow. For more information about the iron ore pricing system, see item 10.2 in this Reference Form.

5.4 Other relevant information

In line with the integrated view of risks exposure, Vale considers in risk management, additionally to market risk management, the risk from the obligations assumed by third parties to the Company (credit risk), those inherent to inappropriate and deficient internal processes, personnel, systems or external events (operational risk), and those arising out of liquidity risk and others.

Credit Risk

Vale s credit risk arises from potential negative impacts in its cash flow due to uncertainty in the ability of having counterparts meet their contractual obligations. To manage that risk, Vale has procedures and processes, such as

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credit limits control, obligatory exposure diversification through several counterparts and monitoring the portfolio s credit risk.

Vale s counterparts may be divided into three categories: clients, responsible for obligations represented by receivables related to sales in installments; financial institutions with whom Vale maintains its cash investments or acquires transactions with derivatives; and suppliers of equipment, products and services, in case of anticipated payments.

Regarding credit risk, the company adopts the following management standards:

Credit Risk Assessment for commercial operations (sales to customers)

For the commercial credit risk, which arises from sales of products and services to final customers, the Risk Management Department, according to current powers, approves or requests the approval of credit risk limits for each counterpart. Besides that, the Executive Board annually sets global credit risk limits for the portfolio and working capital limits, both monitored on a monthly basis.

Vale attributes a credit risk classification for each client based on a credit risk assessment quantitative method, using three main information sources: i) the expected default frequency (*Expected Default Frequency* or EDF) found by the KMV model (Moody s); ii) credit *ratings* attributed by the main international rating agencies; and iii) client s financial statements to make an economic-financial analysis based on financial indicators.

Whenever deemed appropriate, the quantitative credit analysis is complemented by a qualitative analysis which takes into consideration the payment history of that counterpart, the time of relationship with Vale and the strategic position of the counterpart in its economic sector, and other factors.

Depending on the counterpart s credit risk or the consolidated credit risk profile of Vale, risk mitigation strategies are used to minimize the Company credit risk in order to achieve the acceptable risk limit approved by the Executive Board. The main credit risk mitigation strategies include credit insurance, mortgage, credit letter and corporate collaterals.

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

The Company controls its account receivables portfolio through Credit and Cash Collection committees, in which representatives from risk management, cash collection and commercial departments monitor periodically each counterpart position. Additionally, Vale maintains credit risk systemic controls that block additional sales to counterparts with past due receivables.

Credit Risk Assessment for treasury operations (cash flow investments and financial hedge)

To control exposure from cash investments and derivatives instruments, the Executive Board annually sets credit limits by counterpart. Furthermore, the Risk Management Department controls portfolio diversification, exposure due to counterparts spread variations and overall credit risk of treasury portfolio. There is also a daily monitoring of all positions with monthly reporting to the Risk Management Executive Committee and the Executive Board.

To calculate exposure to a specific counterpart that has several derivative transactions with Vale, we consider the sum of exposures of each derivative acquired with this counterpart. The exposure for each derivative is defined as the future potential value calculated by the due date, considering a joint distribution of market risk factors affecting the value of the derivative instrument.

Vale also uses a risk assessment classification to evaluate the counterparts in treasury operations, following a method similar to that used for commercial credit risk management, for purposes of calculating the possibility of counterpart default.

According to the type of counterpart (banks, insurance companies, countries or corporations), different variables are used: i) the expected default frequency from the KMV model; ii) credit *Spreads* found in CDS (*Credit Default Swaps*) or in the (*Bond Market*); iii) credit *ratings* attributed by the main international rating agencies; and iii) client s financial statements to make an economic-financial analysis based on financial indicators; and v) country debt data, evaluation of fiscal and monetary policies in different countries, as well as other indicators of financial health to evaluate the country-risk.

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Liquidity Risk

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

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

Operational Risk

Thus, the operational risk mitigation is performed by creating new controls and improving existing ones, establishing financial provisions, retention through our reinsurance companies, as well as partial transfer of some market risks. Therefore, the Company seeks to have a clear view of its major risks, the best cost-benefit mitigation plans and controls in place, monitoring potential impact of operational risks and allocating capital efficiently.

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Item 6

6.1/6.2/6.4 Establishment of the Company. Company Lifetime and Date of Filing with CVM

Date of Establishment of Issuer	11.01.1943
Legal Form of the Issuer	Mixed economy company
Country of Establishment	Brazil
Company Lifetime	Company lifetime Undetermined
Date of Filing with CVM	02.01.1970

6.3 Brief History

Vale was initially founded by the Brazilian Federal Government (Government of Brazil) on 01.06.1942, through Decree-Law No. 4352, and definitively on 11.01.1943, by the Assembly for the Definitive Constitution of the Companhia Vale do Rio Doce SA, in the form of mixed economy company, aiming to mine, trade, transport and export iron ore from the Itabira mines, and run the Vitória-Minas Railroad (EFVM), which carried iron ore and agricultural products from Vale do Rio Doce, in south-eastern Brazil, to the port of Victoria, located in Espírito Santo.

The privatization process was initiated by the Company in 1997. Under Privatization Decree PND-A-01/97/VALE and the Resolution of the National Privatization Council - CND paragraph 2, of 05.03.1997, the Extraordinary General Assembly approved on 18.04.1997 the issue of 388,559,056 participatory non-convertible debentures, with a view to guaranteeing its pre-privatization shareholders, including the Federal Government itself, the right to participation in revenues from Vale s and its subsidiaries mineral deposits, which were not valued for purposes of fixing the minimum price in the auction for the privatization of Vale. The Participatory Debentures were allocated to the shareholders of Vale in payment of the redemption value of preferred class B shares issued as bonus, in the proportion of one share owned by holders of class A common and preferred shares at the time, through the part capitalization of Vale s revenue reserves. The Participatory Debentures could only be traded with prior authorization of CVM, as of three months from the end of Secondary Public Offering of Shares under the privatization process.

On 06.05.1997 the privatization auction was held, when the Brazilian government sold 104,318,070 Vale common shares, equivalent to 41.73% of the voting capital for Valepar SA (Valepar), for approximately R$ 3.3 billion.

Later, under the terms of the Bid, the Brazilian government sold another 11,120,919 shares representing approximately 4.5% of the outstanding common shares and 8,744,308 class A preferred shares, representing 6.3% of class A shares in circulation, through a limited offer to the employees of Vale.

On 20.03.2002 a Secondary Public Offering of Shares issued by Vale was held, in which the Brazilian Government and the National Bank for Economic and Social Development (BNDES) each sold 34,255,582 Vale common shares. The demand by investors in Brazil and abroad was substantial, exceeding supply by about three times, which led to the sale of the entire batch of 68,511,164 shares. A portion of about 50.2% was posted in the Brazilian market and the remainder was sold to foreign investors. Later, on 04.10.2002, the proper certification of the Participatory

Debentures was obtained from CVM, the Securities Commission, allowing their trading on the secondary market.

The following describes the most significant historical events in the history of the Company since its incorporation:

1942

• President Getulio Vargas, by Decree-Law nº 4352 of 01.06.1942, sets out the basis on which Companhia Vale do Rio Doce SA would be organized. By Decree-Law, the Brazilian Company for Mining and Metallurgy and Mining Company Itabira would be expropriated.

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1943

• Vale is constituted on 11.01.1943, as mixed economy company, pursuant to Decree-Law nº 4.352/42.

• Listing of Vale shares on the Rio de Janeiro Stock Market (BVRJ) in October 1943.

1944

• First business with Vale shares on the BVRJ occurred in March 1944.

1952

• The Brazilian Government takes definitive control of Vale s operational system.

1953

• First shipment of iron ore to Japan.

1954

• It revises its business practices abroad, and proceeds to contact directly steel mills, without the intermediation of traders.

1962

• Signed long-term contracts with Japanese and German steel mills.

1964

• Opening of Vale s first office outside of Brazil in Dusseldorf, Germany.

1966

• Opening of the Port of Tubarão, in Vitória, in Espírito Santo, which is connected to the iron ore mines by the Vitoria a Minas Railroad.

1967

• Geologists of the Southern Mining Co., a subsidiary of United States Steel Corp. (U.S. Steel), record the occurrence of iron ore in Carajás, Pará State.

1968

• Vale shares become part of the IBOVESPA index.

1969

• Inauguration of Vale s first Pellet Plant in Tubarão, in Espírito Santo, with capacity for 2 million tons/year.

1970

• Agreement makes Vale the majority shareholder of the Carajas venture in Para State, along with U.S. Steel.

1972

• Vale signs agreement with Alcan Aluminum Ltd. of Canada for a project to mine bauxite in the Rio Trombetas, where Mineração Rio do Norte (MRN) was set up.

1974

• It becomes the largest exporter of iron ore in the world, with 16% of seaborne iron ore market.

1975

• For the first time, Vale issues bonds in the international market, worth 70 million marks, with the intermediation of Dresdner Bank.

1976

• Decree No. 77.608/76 grants Vale the concession to construct, use and operate the railroad between Carajás and São Luís, in Pará and Maranhão states, respectively.

1977

• Vale announces priority for the Carajas Project, in order, from 1982, to start the export of iron ore through the Port of Itaqui (MA).

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1979

• Beginning of the effective implementation of the Carajás Iron Ore Project, adopted as the main goal of Vale s business strategy.

1980

• Federal Government approves the Carajas Iron Project and gives financial backing.

1982

• With the start of Valesul Aluminio SA in Rio de Janeiro operations, Vale joins the aluminum sector and helps to reduce imports of the metal into Brazil.

1984

• Inauguration of Vale office in Japan.

1985

• On February 28, the Carajás railroad (EFC) is inaugurated and handed over to Vale.

• Inauguration of the Carajás Iron Ore Project, which increases the productive capacity of the company, now organized in two separate logistic systems (North and South).

1986

• Start of operation of the Port Terminal of Ponta da Madeira, in São Luís in the state of Maranhao.

1987

• The EFC begins operating on a commercial scale.

1989

• Implementation of the Profit Sharing Program for Vale employees.

1994

• In March, Vale launches its program for *American Depositary Receipts* (ADR) Level 1, negotiable on the OTC market of the United States.

1995

• Vale is included in the National Privatization Program by Decree No. 1510 of June 1, signed by the President.

1996

• On October 10, the National Privatization Council (CND) approves the model for privatization of Vale.

1997

• BNDES releases on March 6, the terms of the bidding for the privatization of VALE.

• On April 18, Vale issues 388,559,056 Participatory Debentures that can only be traded with prior authorization of the CVM, as of three months from the end of Secondary Public Offering of Shares under the terms of the privatization process.

• On May 6, Vale is privatized in an auction held at the Stock Exchange of Rio de Janeiro. Valecom consortium, put together by the Votorantim Group, and the Brazil Consortium, led by Companhia Siderurgica Nacional (CSN) took part in the auction. The Brazil Consortium buys 41.73% of common shares of VALE for US$ 3,338 million at present-day values.

1998

• In the first year after privatization, Vale reaches 46% growth in profit over 1997.

1999

• It has the largest profit in its history so far: US$ 1.251 billion.

2000

• On February 2, Vale opened the Container Terminal of the Port of Sepetiba.

• In May, Vale acquires Mineração Socoimex S.A. and S.A. Mineração da Trindade (Samitri), companies producing iron ore, initiating the consolidation of the market for Brazilian iron ore.

• On June 20, Vale announced the listing of its *American Depositary Receipts* (ADRs), representing preferred shares of the Company on the Stock Exchange of New York (NYSE) in a DR Level II program approved by the CVM.

• On August 31, the Extraordinary General Meeting approves the merger of a wholly owned subsidiary Mineração Socoimex S.A, without issuing new shares, aiming to add to the assets of the Company the Gongo Soco mine, with reserves of high grade hematite in the iron quadrangle in Minas Gerais.

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2001

• In February, the Board of Directors of Vale authorizes the start of the process of divesting its holdings in the sector of pulp and paper.

• On February 19, the shares of S.A. Mineração da Trindade (Samitri) are incorporated by Vale, with no increase of capital and without issuing new shares, by using shares held in treasury, as authorized by the CVM.

• In March, shareholdings involving Vale and CSN are unwound.

• In April, Vale acquires 100% shareholding in Ferteco Mining SA, the third largest producer of iron ore in Brazil at the time.

• In October 2001, the General Assembly of Shareholders approves the incorporation of wholly owned subsidiary Samitri, without issuing new shares and with no capital increase in Vale, in line with guidelines for administrative and financial streamlining.

2002

• In March, the pellet plant in Sao Luis, in Maranhão state, is officially opened.

• On March 21, the comprehensive sale offer of 68,511,164 Vale common shares owned by the Brazilian Government and BNDES is concluded, of which approximately 50.2% was placed in the Brazilian market and the remainder sold to outside investors. The selling price in Brazil was R$ 57.28 per share and abroad US$ 24.50 per ADR.

• Vale common shares start to be traded on the NYSE in the form of ADRs.

• The Company s common shares also start to be traded on the Madrid Stock Exchange - Latibex.

• The foundation stone of the Sossego Copper Project, State of Pará, is laid

• In October 2004, VALE obtains from the CVM registration of Publicly Traded Participatory Debentures.

• On December 16, the General Assembly of Shareholders approves Vale s Dividend Policy in order to increase both transparency and financial flexibility, taking into account the expected path of the Company s cash flow.

• On December 27, the Extraordinary General Meeting approves the Amendment to the Bylaws in order to (i) expand the Company s activities in energy and logistics, (ii) adjust the Statutes to the new rules introduced by Law No. 10303 of 10.31.2001 and (iii) introduce the principles of best corporate governance practices.

2003

• On February 14, Vale completes the acquisition of 100% stake in Elkem Rana AS (Rana), a Norwegian producer of ferroalloys, for the price of US$ 17.6 million.

• On March 31, Vale acquires 50% stake in Caemi Mineracao e Metalurgia SA (Caemi) for US$ 426.4 million.

• On August 29, Vale incorporates the wholly owned subsidiaries Celmar SA - Indústria de Celulose e Papel SA and Ferteco Mining

• On November 7, Vale completes the restructuring of shareholdings in logistics companies, which was aimed at the elimination of the relationship between Vale and CSN in the shareholding structure of the Ferrovia Centro-Atlantica SA (FCA), Companhia Ferroviária do Nordeste (CFN) and CSN Aceros S.A. (CSN Aceros).

• On December 12, Vale adheres to Level 1 of the Program for Differentiated Corporate Governance Practices established by the BM&F Bovespa Exchange.

• Continuing the process of simplifying its operating structure, on December 30, Vale incorporates the following wholly owned subsidiaries: Rio Doce Geologia e Mineração S.A. Docegeo (Docegeo), Mineração Serra do Sossego S.A. (MSS), Vale do Rio Doce Alumínio S.A. Aluvale (Aluvale) and Mineração Vera Cruz S.A. (MVC).

2004

• On July 02, the Sossego mine opens, the first copper mine in Brazil, in the State of Pará. This project was completed in record time.

• In November Vale wins an international bidding for coal mining in the Moatize region of northern Mozambique.

• In December, Vale signed a memorandum of understanding with ThyssenKrupp Stahl AG (ThyssenKrupp) for the construction of an integrated steel slab plant with a capacity of 5 million tons in the State of Rio de Janeiro.

2005

• Vale is the first Brazilian company to achieve a risk score greater than the host country and the only one to have this recognition for three different rating agencies: i.e. Investment Grade, given by Moody s, and confirmed by Standard & Poor s and Dominion Bond.

• In July, Vale signs an agreement with two Australian mining companies to carry out studies to exploit the Belvedere Underground Coal Project, located in the State of Queensland, Australia.

• On September 22, it launches *Vale Investir*, a program that allows investors to automatically reinvest Brazilian funds from shareholders payments - dividends and/or interest on capital - to buy shares of the Company.

• In November, Vale agrees to acquire a minority stake in Ceara Steel, a steel slab project aimed at exporting from the state of Ceará, with a nominal capacity of 1.5 million tons of slabs per year.

• The Company consolidates its entry into the copper concentrate industry, with the first full year of operation of the Sossego Mine and sales to 13 customers in 11 different countries.

• In the last quarter of 2005, Vale acquires 99.2% of Canico Resources Corp. (Canico), which owns the lateritic nickel project Onça Puma, located in Para State, for approximately US$ 800 million.

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2006

• In January, Vale acquires mineral resources, land and mining equipment from the Rio Verde Mineração (Rio Verde) for US$ 47 million.

• In February, the acquisition of all shares of Canico is completed, these being removed from trading on the Toronto Stock Exchange.

• In March, it inaugurated the expansion of production capacity is inaugurated of alumina refinery Alunorte - Alumina do Norte do Brazil SA (Alunorte), located in Barcarena in the State of Pará

• On May 3, Vale completes incorporation of shares of Caemi, now holding 100% of the shares.

• On July 3, Vale buys 45.5% stake in Valesul Aluminio SA and now owns 100% of the shares.

• On August 11, the Company announces that it intends to offer to acquire all common shares of Inco Limited (Toronto Stock Exchange - TSX Stock Exchange and New York - NYSE under the symbol N) (Inco). The offer is consistent with long-term corporate strategy and strategy for the non-ferrous metals business of Vale.

• In the third quarter, Vale divides the administration of former Southern System for production and distribution of iron ore into two departments: the South-eastern System and the Southern System, and began to report production separately for each system.

• In September, Mineracoes BR Holdings GmbH buys 25% stake in a joint venture, Zhuhai YPM, to build a new pellet plant in Zhuhai, in the region of Guandong, China.

• On October 5, Vale opens the Brucutu Project, the largest mine/plant complex in the world for initial production capacity of iron ore, located in São Gonçalo do Rio Abaixo in Minas Gerais.

• On October 26, Vale concludes the financial settlement of a major part of the acquisition of Canadian miner Inco Ltd., the second largest nickel producer in the world, effecting payment of US$ 13.3 billion for the purchase of 174,623,019 shares issued by Inco. On November 6, Vale joins the control group of Usiminas steel company in Minas Gerais - (Usiminas).

2007

• In January, Vale completed the expansion of iron ore production capacity in Carajás, which now reaches 100 million tons per year.

• On January 30, the acquisition of Inco (now Vale Canada Limited) is ratified at Vale Extraordinary General Meeting. The nickel business is now managed from Toronto as well as activities related to marketing and sales of metals. With the completion of its acquisition of Inco, Vale becomes the second largest mining and metals company in the world by market value.

• On February 16, Vale announces secondary public offering of shares of Log-In Logistica Intermodal SA (Log In).

• On February 26, Vale signs a sale and purchase agreement to acquire Australian AMCI Holdings Australia Pty Ltd. (AMCI), which operates and controls coal assets through holdings in joint ventures.

• In March, Vale acquires an 18% stake in Ferro-Gusa Carajás S.A. (FGC), which belonged to Nucor do Brasil S.A for 20 million dollars, and now holds a 100% stake in FGC.

• In May, Vale signs a usufruct contract, and now controls the entire capital of the MBR, for the following 30 years.

• On May 2, Vale signs a freight contract for 25 years with Bergesen Worldwide (B.W. Bulk), which provides for the construction of the four largest bulk carriers in the world, each with a capacity of 388 thousand tons.

• On June 28, the Government of Mozambique approved the mining contract for the operation, by Vale, of the Moatize coal project in the province of Tete in the northwest of the country.

• On August 30, shareholders meeting at an Extraordinary General Meeting, ratify the acquisition of control of AMCI by the Company.

• On November 29, Vale begins to use the brand Vale in all countries where it operates and at the same time takes on a new global identity.

• On December 21, Vale signs an agreement for commercial exploitation for 30 years of 720 km of the Norte-Sul railroad (FNS).

2008

• In the first half of 2008, Vale launches operations to increase capacity in the production of pellets in Samarco, a (50% -50%) joint venture with BHP Billiton in the Brazilian State of Espírito Santo.

• Vale leases three pellet plants in the Tubarão complex, in Vitória, State of Espírito Santo, owned by the JV s in which it participates (Itabrasco, Kobrasco and Nibrasco).

• On May 5, Vale signs a sale and purchase agreement to acquire the mining and surface rights in the municipalities of Rio Acima and Caeté, State of Minas Gerais.

• In July, Vale makes a global offering of 256,926,766 ordinary shares and 189,063,218 preferred shares, including ADSs, in order to promote investment and strategic acquisitions as well as maximizing the financial flexibility of the Company. The aggregate value of Vale s global offer, after underwriting discounts and commissions, including the values of the exercise of further stock options, was US$ 12.2 billion. In August, exercising the option of complementary lot, Vale issues 24,660,419 class A preferred shares.

• In connection with the offer above, Vale lists and trades its common and preferred ADSs on Euronext Paris.

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• On August 3, Vale orders the building of 12 large ships for carrying iron ore, buys used vessels and signs long term freight contracts. The total investment was US$ 1.6 billion for the construction of new ships and US$ 74 million for the purchase of used ships.

• On August 14, Vale announces its intention to invest in building a new steel plant in Marabá in Para State, with an annual production capacity of 2.5 million metric tons of semi-finished steel.

• On October 31, Vale announces a reduction in its rate of production of iron ore, pellets, nickel, manganese, ferro-alloys, aluminum and kaolin, in the face of the impact of global economic crisis on the demand for minerals and metals.

• On December 16, Vale signs with African Rainbow Minerals Limited (ARM) and its subsidiary TEAL Exploration & Mining Incorporated (TEAL) a contract providing for the acquisition of 50% of the capital of a joint venture to hold TEAL subsidiaries for CAD $ 81 million, therefore increasing the strategic options for Vale to grow in the copper business in Africa.

• On December 23, Vale signs a sale and purchase agreement to acquire 100% of the coal exporting assets of Cementos Argos SA (Argos) in Colombia for US$ 306 million.

2009

• On January 30, Vale signs with Rio Tinto plc (Rio Tinto) a sale and purchase agreement for the acquisition, through cash payment, of iron ore and potash assets, located in Brazil, Argentina and Canada.

• On March 24, Vale completes the previously announced transaction, and creates a 50%-50% joint venture with ARM for future development and operation of the assets of TEAL, expanding in December 2008 the strategic options for growth in the copper business in Africa.

• On March 27, Vale initiates the construction of the Moatize project, in Tete province, Mozambique. The project involves investments of US$ 1.3 billion and has a nominal production capacity of 11 million metric tons (Mt) of coal, comprising 8.5 Mt of metallurgical coal and 2.5 Mt of thermal coal.

• On April 1, the Company concluded the acquisition of the assets of export thermal coal with Argos in Colombia.

• On April 16, Vale completes the sale of all of its 14,869,368 common shares issued by Usiminas and linked to the steel mill s existing shareholders agreement.

• On May 21, the Board of Directors of Vale approve the revised 2009 investment budget for US$ 9.035 billion as compared with the US$ 14.235 billion announced on October 16, 2008.

• On May 22, the Extraordinary General Meeting of Vale approves the proposal to change its name from Companhia Vale do Rio Doce SA to Vale SA

• On June 23, Vale launches a project to produce biodiesel to fuel its operations and projects in northern Brazil, from 2014, using palm oil (dende oil) as feedstock, which will be produced by a consortium between Vale and Biopalma Amazonia SA (Biopalma).

• On July 13, the Company announces that its unionized employees in Sudbury and Port Colborne in Ontario, Canada, are on strike. The same happens on the 1st of August, with the unionized employees of its operation in Voisey s Bay in the province of Newfoundland and Labrador, Canada.

• On July 22, Vale signs a memorandum of understanding (MOU) with ThyssenKrupp to raise its stake in ThyssenKrupp CSA Siderurgica do Atlantico Ltda. (TKCSA) from 10% to 26.87% through a capital injection of EUR $ 965 million.

• On September 18, Vale completes the acquisition of the operations of iron ore in Corumbá, located in Mato Grosso do Sul, owned by Rio Tinto PLC (Rio Tinto) and other controlled entities.

• On October 19, the Board of Directors of Vale approves the investment budget for 2010, including expenditures of US$ 12.9 billion dedicated to sustaining existing operations and promoting growth through research and development (R & D) and project execution.

2010

• On January 22, integrated subsidiary Valesul Alumínio S.A. (Valesul) enters into an agreement to sell its aluminum assets located in Rio de Janeiro to Alumínio Nordeste S.A., a Metalis group company, for US$ 31.2 million.

• On the same date, Vale approves at a Special Shareholders Meeting the incorporation of integrated subsidiaries Sociedade de Mineração Estrela de Apolo S.A. (Estrela de Apolo) and Mineração Vale Corumbá S.A. (Vale Corumbá).

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• During the first half of the year, Vale closes agreements with its customers in the iron ore business to shift from annual contracts to contracts with values adjusted on a quarterly basis. The new contracts offer more efficiency and transparency for iron ore prices and make it possible to differentiate qualities, which helps stimulate long-term investment. Besides, customers can learn in advance the price to be paid in the following quarter.

• In the second quarter, Vale acquires a 51% interest in VBG - Vale BSGR Limited (formerly BSG Resources (Guinea) Limited), which holds iron ore concession rights in Simandou South (Zogota) and iron ore exploration permits in Simandou North (Blocks 1 & 2), Guinea.

• Through a series of transactions in 2010, Vale acquires the phosphate operations of Vale Fertilizantes S.A. (Vale Fertilizantes, formerly Fertilizantes Fosfatados S.A. Fosfertil) and Vale Fosfatados S.A. (formerly Bunge Participações and Investimentos S.A.). The total cost of these acquisitions was US$ 5.829 billion. The sellers included Bunge Ltd., The Mosaic Company (Mosaic), Yara Brasil Fertilizantes S.A. and other Brazilian companies.

• In May, Vale enters into an agreement with Oman Oil Company S.A.O.C. (OOC), an integrated subsidiary of the government of the sultanate of Oman, for the sale of a 30% interest in Vale Oman Pelletizing Company LLC (VOPC), for US$ 125 million.

• In July, Vale sells to Imerys S.A. 86.2% of its interest in Pará Pigmentos S.A. (PPSA), a kaolin producer, along with other kaolin mining rights, for US$ 74 million.

• In July, Vale concludes the transaction announced on March 31, 2010, by virtue of which it sells 35% of the total capital of MVM Resources International B.V. (MVM) to Mosaic for US$ 385 million, and 25% of the total capital of MVM to Mitsui, for US$ 275 million. MVM manages and operates Bayóvar phosphate rock project in Peru.

• In the fourth quarter, Vale lists Depositary Receipts representing its common and preferred Class A shares (HDRs) on Hong Kong Limited Stock Exchange (HKEx). The HDRs start to be traded on December 8, 2010.

2011

• On February 28, Vale announces the completion of the operation announced on 02.05.2010 with Norsk Hydro ASA (Hydro) to transfer all its interests in Albras - Alumínio Brasileiro S.A. (Albras), Alunorte - Alumina do Norte do Brasil S.A. (Alunorte) and Companhia de Alumina do Pará (CAP), receiving in return 22% of the outstanding common shares of Hydro and US$ 503 million in cash. Additionally, Vale sold 60% of Mineração Paragominas S.A. (Paragominas) to Hydro for US$ 578 million in cash. The remaining 40% will be sold in 3 and 5 years.

• In February 2011, Vale pays US$ 173.5 million to acquire the control of Biopalma, in the State of Pará, to produce palm oil (dende oil) as feedstock to manufacture biodiesel.

• On April 28, the Board of Directors approves the acquisition, subject to certain conditions, of up to 9% of the capital of Norte Energia S.A. (NESA), a stake previously held by Gaia Energia e Participações S.A (Gaia). NESA is a company whose sole purpose is the implementation, operation and management of Belo Monte hydroelectric power plant in Pará. In June 2011, Vale concluded the acquisition of 9% of the equity of NESA, for R$ 3.8 million.

• In June 2011, Vale acquired additional 16% equity of Sociedade de Desenvolvimento do Corredor Nacala S.A. (SDCN) for US$ 8 million, equivalent to R$ 12.8 million. The acquisition is aligned with the Company strategy to develop the logistic corridor of Nacala, and continued with the acquisition of 51% of SDCN in September 2010. SDCN has a concession to create the required logistic structure for the flow resulting from coal production expansion in Moatize.

• In July 2011, Vale signed an agreement to create a *joint venture* with Vale Fertilizantes for purposes of exploring the concession of Terminal Portuário da Ultrafértil (TUF), in the city of Santos, State of São Paulo, with imported cargos of sulfur, ammonia and fertilizers in general, being strategically linked to Vale s railroads, upon payment of R$150 million to Vale Fertilizantes and capital investment in the *joint venture* of R$432 million to fund TUF investment project.

In December 2011, Vale concluded, by its wholly-owned subsidiary Mineração Naque S.A. a public offer (IPO) to acquire outstanding shares issued by Vale Fertilizantes. As a result of the IPO, Vale acquired 211,014 common shares and 82,919,456 preferred shares issued by Vale Fert, representing 82.8% of outstanding common shares and 94.0% outstanding preferred shares of Vale Fertilizantes. Common and preferred shares were acquired by the par value of R$25.00, in a total amount of R$2.1 billion.

2012

• On February 9, the board of directors approved the execution of a lease agreement of potassium mining rights and assets with Petróleo Brasileiro S.A. Petrobras, for 30 years, which allows continuing with potassium extraction in Taquari-Vassouras and development of the Carnalita Project in the State of Sergipe.

In April, Vale sold its 61.5% interest in Cadam S.A. concluding the divestment operation by selling the kaolin business beginning in 2010 with the sale of the interest in Pará Pigmentos S.A.

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6.5 - Description of main corporate events undergone by the Company, its subsidiaries and related companies

2009

Acquisition of potash assets

On January 30, 2009, Vale signed with Rio Tinto plc and other affiliate companies (Rio Tinto) a contract of sale and purchase for the acquisition, on a cash basis, on the date of conclusion of the operation, of potash assets. The assets, purchased for US$ 850 million (equivalent to approximately R$ 1.995 billion at the time of payment), represented 100% of the Colorado River project, located in the province of Mendoza, Argentina, and 100% of the Regina project, located in the province of Saskatchewan, Canada. The Rio Colorado project includes the development of a mine with an initial production capacity of 2.4 Mtpy of potash (potassium chloride, KCl) and potential for expansion up 4.35 Mtpy, with construction of a railway branch of 350 km, port and power-station. The estimated mineral resources amount to 410 Mt. The Argentinean authority approved the operation on May 13, 2011, subject to Vale selling potassium chloride in the Argentinean domestic market under conditions equal to those offered for customers in the foreign market. Regina is at the exploration stage, with potential for an estimated annual production of 2.8 Mt of KCI. The project area needs infrastructure for water supply, energy and logistics services, allowing the transport of the final product to Vancouver on the west coast of Canada, which will facilitate access to the Asian market.

Acquisition of iron ore assets

On January 30, 2009, Vale enters into an agreement with Rio Tinto plc and other affiliate companies (Rio Tinto) to acquire Corumbá iron ore operations located in Mato Grosso do Sul, belonging to Rio Tinto and other subsidiaries for US$ 750 million (equivalent to R$ 1,473 billion on the date of payment), by means of payment on cash, on the date of conclusion of the operation. The operation was concluded on September 18, 2009. Iron ore assets represented 100% of open-pit iron ore mining operations at Corumbá, in the State of Mato Grosso do Sul, Brazil, and included logistic assets including river port and barges. Logistics assets enable Vale to be 70% self-sufficient in the carriage of iron ore along Paraguay river. Approval of the acquisition by the Argentine antitrust authority is pending.

Acquisition of copper mining assets in Africa

On March 24, 2009, Vale finished creating a 50%-50% joint venture with African Rainbow Minerals Limited (ARM) for the development and operation of the copper assets of TEAL Exploration & Mining Incorporated (TEAL), expanding the strategic options for growth in the business in Africa. The operation involved a series of stages through which Vale has acquired a 50% stake in the capital of a joint venture to hold the subsidiaries of TEAL for CAD $ 81 million (equivalent to R$ 139 million on the date of payment), in a one-time payment, as well as an offer to close TEAL s own capital held by ARM at a price of CAD $ 3.00 per share in cash. As a result of this transaction, the assets of TEAL are owned directly or indirectly by the new joint venture controlled by Vale and ARM, and there is an agreement regulating the relationship between these parties.

Acquisition of coal assets in Colombia

On April 1, 2009, Vale completed the acquisition of the coal mining assets of Cementos Argos SA (Argos) in Colombia for US$ 306 million (equivalent to R$ 695 million on the date of payment), with payment on cash, on the date of conclusion of the operation, including the coal mine El Hatillo, located in the department of Cesar, a coal deposit in the exploration stage, Cerro Largo, a minority stake in the Fenoco consortium, which holds the concession and operation of the railroad that links the coal operations to the Rio Cordoba port - SPRC, and 100% of the concession for this port, which is located on the Caribbean coast in the department of Magdalena. The acquired assets are managed by its subsidiary Vale Coal Ltd. Sucursal Colombia (Vale Columbia).

Increased participation by ThyssenKrupp CSA Siderurgica do Atlantico Ltda. (TKCSA)

On September 21, 2009, Vale concludes an agreement with ThyssenKrupp Steel AG (ThyssenKrupp) to increase its 10% stake in CSA to 26.87% through a capital contribution of EUR $ 965 million (equivalent to R$ 2.532 billion at the time of payment). By the end of 2010, capital contributions to CSA resulted in the payment by Vale of US$ 2,069 million (equivalent to R$ 3,794 million on the date of payment). CSA built an integrated steel slab mill, with a nominal capacity of five million metric tons of slab steel per year in the State of Rio de Janeiro. The power plant started to operate in 2010. As a strategic partner of ThyssenKrupp, Vale is the sole and exclusive supplier of iron ore to TKCSA. On the same date, a shareholder agreement was executed between ThyssenKrupp and Vale to regulate the relationship between the parties, as shareholders of TKCSA. The operation was approved by Brazilian regulating entities on 11/25/2009, and German regulating entities on 08/21/2009.

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Sale of nickel assets

As a result of the strategic review of operations of nickel, Vale sold its indirect participation in International Metals Reclamation Company, Inc. (Inmetco) on December 31, 2009 for US$ 34 million (equivalent to R$ 59 million) and 65% of Jinco Nonferrous Metals Co., Ltd (Jinco) on 09.12.2009 for US$ 6.5 million (equivalent to R$ 11 million), received in a one-time payment. Inmetco, formerly a wholly owned subsidiary of Vale Canada in Ellwood City, Pennsylvania, USA, is dedicated to the recycling of nickel, chromium and other metal by-products generated by the production of stainless steel and specialty metals. Jinco operates Chinese nickel facilities and produces nickel sulphate and nickel chloride. That same month, Vale entered into agreements to sell its stake of 76.7% in Inco Advanced Technology Materials (Dalian) Co. Ltd. (Iatm-D) and 77% of Inco Advanced Technology Materials (Shenyang) Co. Ltd. (Iatm-S), which operates manufacturing facilities for nickel foam in China for US$ 7 million (equivalent to R$ 16 million), received in a one-time payment, to partners of the remaining shareholders. Due to the above transactions, Vale no longer has any equity interest in Inmetco, in Jinco, in IATM-D and in IATM-S.

2010

Incorporation of the Sociedade de Mineração Estrela de Apolo S.A. (Estrela de Apolo) and Mineração Vale Corumbá S.A. (Vale Corumbá)

On January 22, 2010 Vale approved the incorporation of its wholly owned subsidiaries Estrela de Apolo and Vale Corumbá, without issuing new shares and with no change in Vale capital, at their respective book asset value, with the release of their assets to Vale. According to the Appraisal Reports, produced by Domingues e Pinho Accountants on 31.10.2009, the asset value of *Estrela de Apolo* was R$ 4,160.00 and the net worth of Vale Corumbá was R$ 354,766,285.89. The main objective of the incorporations was to simplify corporate structure and optimize resources and costs.

Sale of assets of Valesul

On January 22, 2010, integrated subsidiary Valesul Alumínio S.A. (Valesul) entered into an agreement to sell its aluminum assets, located in Rio de Janeiro, to Alumínio Nordeste S.A., a member company of Metalis group, for US$ 31.2 million (equivalent to R$ 55,9 million on the date of receipt), received in a one-time payment. The operation was concluded on June 18, 2010.

The assets of Valesul included in the agreement are: (i) anode factory, (ii) reduction, (iii) foundry, (iv) industrial and administrative service area, and (v) inventories.

The operation was approved by CADE (Economic Defense Administrative Council) on 02/09/2011.

Acquisition of iron ore deposits (Simandou)

On April 30, 2010, Vale acquired from BSG Resources Ltd. (BSGR) a 51% stake in BSG Resources (Guinea) Ltd. (currently named VBG Vale BSGR Limited), which holds concessions for iron ore in Guinea, Simandou South (Zogota) and exploration permits for Simandou North (Blocks 1 & 2), in the Republic of Guinea. Vale will pay US$ 2.5 billion for the acquisition of these assets, of which $ 500 million (equivalent to R$ 865 million on the date of transaction) has already been paid in cash, and the remaining US$ 2 billion will be paid in tranches subject to the achievement of specific milestones.

The joint venture between Vale and BSGR started the implementation of the Zogota project and is conducting feasibility studies for Blocks 1 & 2, with the creation of a logistics corridor for the flow of materials through Liberia. For the right to move goods through Liberia, the joint venture is committed to renew 660 km of the Trans-Guinea railway for passenger and light cargo. Vale is now responsible for asset management, marketing and sales of the joint venture with the exclusive off-take of the iron ore produced. Vale is a party in VBG shareholders agreement, entered with BSGR.

Acquisition of fertilizer assets

On May 27, 2010, Vale completed the acquisition through its subsidiary Mineração Naque S.A., of a direct and indirect stake of 58.6% in the capital of Vale Fertilizantes a company listed on the BM&F Bovespa exchange and the largest Brazilian producer of fertilizer nutrients - and the Brazilian fertilizer assets of Bunge Participacoes e Investimentos SA (BPI) for a total of US$ 4.7 billion, in a one-time payment. Of this amount, US$ 3.0 billion (equivalent to R$ 5.5 billion at the time of payment) relates to a direct and indirect stake of 58.6% in the capital of Fosfertil, which represents 72.6% of common shares and 51.4% of the preferred shares of Bunge Fertilizantes S.A., Bunge Brasil Holdings B.V., Yara Brasil Fertilizantes S.A. (Yara), Fertilizantes Heringer S.A. (Heringer) and Fertilizantes do Paraná Ltda. (Fertipar) - equivalent to a price per share of US$ 12.0185. The remaining US$ 1.7

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billion (equivalent to R$ 3.1 billion at the time of payment) is attributable to the acquisition of the Brazilian fertilizer asset portfolio of BPI Bunge Participações e Investimentos S.A. (BPI), which includes mining of phosphate rock and phosphate production units but does not include distribution/retail operations.

Additionally, on September 29, 2010 Vale completed the acquisition, for approximately US$ 1,0 billion (equivalent to R$ 1.76 billion on the date of transaction) in a one-time payment, of 20.27% of the capital of Vale Fertilizantes held by The Mosaic Company (Mosaic), corresponding to 27.27% of the common shares and 16.65% of the preferred shares of the company. Vale thus proceeded to hold 78.90% of the capital of Vale Fertilizantes, composed by 99.81% of the common shares and 68.24% of the preferred shares of the company.

Besides, under Brazilian corporate law and the norms of the capital market, Vale issued a mandatory tender offer (public offer for acquisition or OPA , according to the initials in Portuguese) to acquire up to the entirety of the common shares issued by Vale Fertilizantes outstanding in the market at a value of US$ 12.0185 per share, converted into Brazilian reais, the same price paid to other shareholders of Vale Fertilizantes. As a result of the OPA, in December 2010 Vale increased its direct and indirect interest in Vale Fertilizantes to 99.83% of the total common shares and 78.92% of the total capital.

The operation was approved by the Brazilian regulating authority on Feb 23, 2011.

Disposal of minority interests in Bayóvar

On July 07, 2010, Vale completed the transaction announced on 31.03.2010, by virtue of which it sold to The Mosaic Company (Mosaic) and Mitsui & Co. Ltd. (Mitsui) minority stakes in the Bayovar phosphate rock project located in Peru, through newly created MVM Resources International B.V. (MVM), which manages and operates the project.

Vale sold 35% of the total capital of MVM to Mosaic for US$ 385 million (equivalent to R$ 682 million on the date of transaction), in a one-time payment, and 25% of the total capital of MVM to Mitsui for US$ 275 million (equivalent to US$ 487 million on the date of transaction), in a one-time payment. Vale maintains control of the Bayóvar project, with 51% of the voting capital and 40% of the total capital of MVM, and is party in a shareholders agreement entered with Mitsui and Mosaic.

Sale of minority interest in Vale Oman Pelletizing Company

On May 29, 2010, Vale entered into an agreement with Oman Oil Company S.A.O.C. (OOC), an integrated subsidiary of the government of the sultanate of Oman, to sell a 30% interest in Vale Oman Pelletizing Company LLC (VOPC) for an amount equivalent in *Omani Rials* to US$ 125 million (equivalent to R$ 228 million on the date of closing of agreement). Payment was agreed as follows: (i) US$ 71 million paid by OOC against transfer of all the shares held by Vale Mauritius Limited; and (ii) US$ 54 million by assuming the debt originally contracted by VOPC along with Vale International. VOPC is a subsidiary that was created by Vale to build and operate a pelletizing plant in the Industrial District of Porto de Sohar, in Oman.

The transaction is subject to the terms and conditions established in the final contract of purchase of shares to be executed and filed with the Ministry of Industry and Commerce of Oman after meeting the conditions above, as established in the Shareholders Agreement entered into with OOC which, in turn, provides for the operational and administrative management of the pelletizing plant by Vale.

Increased participation in Belvedere

On June 01, 2010, Vale acquired from AMCI Investments Pty Ltd (AMCI) for US$ 92 million (equivalent to R$ 168 million on the date of payment), in a one-time payment, an additional share of 24.5% in the Belvedere coal project. As a result of this transaction, Vale s participation in Belvedere goes from 51.0% to 75.5%. Belvedere is an underground mine coal project in the Bowen Basin region, near the town of Moura in the State of Queensland, Australia. According to preliminary estimates by the Company, once ready, the Belvedere project will have the potential to reach a production capacity of up to 7.0 million metric tons of metallurgical coal per year.

Sale of interest in PPSA

On June 29, 2010, Vale signed a sales agreement with Imerys S.A. (company listed in Euronext) to sell its interest of 86.2% in Pará Pigmentos S.A. (PPSA) and other kaolin mining rights located in Pará for US$ 74 million (equivalent to R$ 131 million on the date of transaction), in a one-time payment. The operation was concluded on July 26, 2010 and approved by the Brazilian regulating authority on December 15, 2010.

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Acquisition of interest in SDCN

On September 21, 2010, Vale acquired 51% of Sociedade de Desenvolvimento do Corredor Nacala S.A. (SDCN) for US$ 21 million (equivalent to R$ 36.6 million on the date of payment), in a one-time payment, from Mozambican company SGPS SA (Insitec). SDCN holds, indirectly, concessions to create the logistics structure required for the production flow resulting from the second phase of Moatize coal project. SDCN controls, through a 51% interest, Corredor de Desenvolvimento do Norte S.A. (CDN) and Central East African Railway Limited (CEAR). CDN is responsible for the concession of a railway section of 872 km in Mozambique, linking Entrelagos, in the province of Niassa, with the port of Nacala, in the province of Nampula, to the North of Mozambique and the port of Nacala. CEAR holds the concession of the whole railway system of Malawi, currently consisting of 797 km of railway lines connecting the whole country along the north-south and east-west axes. CDN and CEAR railway systems are interconnected and close to Moatize mineral region, in the province of Tete, Mozambique, therefore providing an additional logistic corridor for the coal to be produced in the area. Vale is party in a SDCN shareholders agreement. Additionally, there is a shareholders agreement of CDN and another of CEAR, executed with SDCN and CFM (holder of the remaining 49% interest in each company).

2011

Restructuring of aluminum assets portfolio

On 28.02.2011, Vale announced the completion, through subsidiary Vale Austria Holdings GmbH, of the operation with Norsk Hydro ASA (Hydro) (company listed in the Oslo Stock Exchange and London Stock Exchange) announced on May 02, 2010, to transfer all its interests in Albras - Alumínio Brasileiro S.A. (Albras), Alunorte - Alumina do Norte do Brasil S.A. (Alunorte) and Companhia de Alumina do Pará (CAP), along with their respective rights of exclusivity, commercial agreements and net debt of US$ 655 million, for 22% of the outstanding common shares of Hydro and US$ 503 million (equivalent to R$ 836 million on the date of transaction) in cash, after adjustments, in a one-time payment.

Besides, Vale created a new company, Mineração Paragominas S.A. (Paragominas), to which it transferred the bauxite mine of Paragominas and all the other mining rights relating to bauxite in Brazil. As a part of this transaction, Vale sold 60% of Paragominas to Hydro for US$ 578 million (equivalent to R$ 960 million on the date of transaction), in a one-time payment, in cash. The remaining portion of 40% will be sold in two equal parts of 20% within 3 and 5 years, for US$ 200 million in cash.

Pursuant to the terms of the operation, Vale will not be allowed to sell its shares issued by Hydro for a period of 2 years nor will it be allowed to increase its interest in Hydro beyond 22%. Besides, as another part of the agreement, Vale is entitled to appoint a representative in the Board of Directors of Hydro. The operation was approved by Brazilian regulating authorities on January 19, 2011 and the Korean and Japanese regulating authorities on April 15, 2011.

Acquisition of Biopalma in Brazil

In February 2011, Vale acquired the majority stock of Biopalma da Amazônia S.A. Reflorestamento, Indústria e Comércio, in the State of Pará (Biopalma). The amount of the transaction was R$ 290.2 million, paid in cash and at present Vale owns a 70% interest in this partnership. The right to vote is regulated by the shareholder s agreement. Biopalma will produce palm oil (dende oil) as feedstock to manufacture biodiesel, and most of the production will be used for a B20 blend (a mixture of 20% of biodiesel and 80% of regular diesel oil), as a fuel for our fleet of locomotives, equipment and heavy machinery. Our investment in production of biodiesel forms part of our strategic focus on global sustainability. The operation was approved by Brazilian regulating authorities on May 18, 2011.

Acquisition of an interest in Belo Monte power project

On April 28, 2011, the Board of Directors approved the acquisition of up to 9% of the capital of Norte Energia S.A. (NESA), a stake then held by Gaia Energia e Participações S.A (Gaia). NESA is a company whose sole purpose is the implementation, operation and management of Belo Monte hydroelectric power plant in the Brazilian State of Pará. Vale reimbursed Gaia for its capital contributions to NESA and undertook to make future capital contributions as a result of the acquired stock interest, estimated at R$ 2.3 billion (equivalent to US$ 1.4 billion). This acquisition is consistent with the Company strategy to reduce operating costs and minimize the price of power and the risks of supply. The operation was completed on June 30, 2011, upon transfer to Vale of 9% of the shares issued by NESA, held by Gaia, and execution of the amendment to NESA s shareholders agreement to regulate the entrance of Vale, and other terms. The operation was filed before CADE - the Administrative Board for Economic Defense and approved with no restrictions on August 31, 2011.

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Takeover to acquire shares of Vale Fertilizantes S.A.

In June, 2011, Vale announced submission to the Board of Directors of a proposal by the executive directors for a takeover of up to 100% of shares issued by the subsidiary Vale Fertilizantes, aiming to close its capital. The takeover was approved by the Board of Directors on June 30, 2011 and was registered before the Brazilian Securities Commission (CVM) on July 15, 2011. The offer s tender was issued on November 10, 2011. The Takeover comprised the payment for shares in cash by the subsidiary Mineração Naque S.A., at R$25.00 per share, either common or preferred shares issued by Vale Fertilizantes, corresponding to a 41% premium over the average price of preferred shares traded in the last 20 trading days prior to the disclosure of the offer, in June 2011. On December 12, 2011, Vale concluded the Offer, resulting in the acquisition of 211,014 common shares and 82,919,456 preferred shares issued by Vale Fertilizantes, representing 83.8% of the common shares and 94.0% of preferred shares. On December 23, 2011 a Fertilizantes has its registration as open capital company cancelled before CVM. On January 24, 2012, Vale Fertilizantes redeemed 5,314,386 shares, balance of shares issued by the company, and Vale now holds, through subsidiaries, 100% of common and preferred shares issued by Vale Fertilizantes. The total disbursement by Vale and Vale Fertilizantes was R$2.2 billion.

Agreement to explore concession of port terminal in Santos

In July 2011, Vale signed an agreement to incorporate a *joint venture* with Vale Fertilizantes for purposes of exploring the concession of the Terminal Portuário da Ultrafértil (TUF). TUF is located in the city of Santos, State of São Paulo, and moves imported cargo of sulfur, ammonia and fertilizers in general, strategically connected to Vale s railroads. Vale will hold a 51% interest in the *joint venture*, acquired upon payment of R$150 million to Vale Fertilizantes and capital investment in the *joint venture* of R$432 million to fund TUF s investment plan. The *joint venture* positions Vale to serve, in a competitive way, the agribusiness growth in Brazil. Simultaneously, the investment in TUF strengthens the logistic infrastructure of the fertilizer business helping to make expansion feasible in the coming years.

2012

Sale of interest in CADAM

On April 26, 2012, Vale signed the sale agreement for its 61.5% interest in Cadam S.A (CADAM), for US$ 30.1 million, to KaMin LLC (a North-American closed capital company). CADAM is a producer of kaolin operating with open pit mines in the state of Amapá, a processing plant and a private port, both in the state of Pará. The mine and the plant are connected by a 5.8 km pipeline. Vale will receive US$ 30.1 million for the shareholding control of CADAM, to be paid in five years. Operation was concluded on May 7, 2012. The sale of CADAM is part of the Company s continuous efforts to optimize its asset portfolio. With the sale of Pará Pigmentos S.A. (PPSA), in 2010, the sale of CADAM consolidates the sale of the kaolin business. Vale s growth strategy to create sustainable value encompasses several options and active portfolio management is very important to optimize capital allocation and focus administration.

Sale of Coal Assets from Colombia

On May 28, 2012, Vale signed an agreement to see its thermal coal operations in Colombia to CPC S.A.S, a subsidiary of Colombian Natural Resource S.A.A (CNR), a private company, for US$ 407 million in cash, and subject to regulatory approval.

The thermal coal operations in Colombia are an integrated mine-railway-port system that consists of: (a) 100% of the El Hatillo coal mine and the coal deposit in Cerro Largo, both of which are located in Cesar s department; (b) 100% of Sociedad Portuária Rio Córdoba (SPRC), a coal port operation on Colombia s Atlantic Coast; and (c) participation in 8.43% of the Ferrocarriles Del Norte de Colombia S.A. (FENOCO) railway, which has the concession and operated the railways that connect the coal mines to SPRC.

The sale of the thermal coal operation in Colômbia is part of our continued efforts to optimize portfolio of assets. Vale s strategy for sustainable growth and value creation encompasses multiple options, and management of its portfolio of assets is important to optimize the allocation of capital and focus the attention of the administration.

6.6 Information on bankruptcy filing based on relevant values, or judicial or extrajudicial recovery

Not applicable. There are no bankruptcy filings based on relevant values, or judicial or extrajudicial recovery of the Company.

6.7 Other relevant information

There is no further relevant information about this item 6 .

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Item 7

7.1 Description of activities engaged by the issuer and its subsidiaries

Vale is the second largest mining company in the world and the largest in the Americas by market value. The Company is the largest iron ore producer and second largest nickel producer in the world. Vale is among the largest producers of manganese ore and ferroalloys. It also produces copper, thermal and metallurgical coal, phosphates, potash, cobalt, and platinum group metals (PGMs). To sustain its growth strategy, Vale is actively engaged in mineral exploration in 27 countries. The Company operates large logistics systems in Brazil and in other areas of the world integrated with its mining operations, including railroads, maritime terminals and ports. In addition, the Company has a portfolio of maritime freight to transport iron ore. Vale also has significant investments in the sectors of energy and steel, directly or through subsidiaries and joint ventures.

7.2 Information on operational segments

a. Products and services marketed in each operating segment

(i) Bulk Materials Includes extraction of iron ore and production of pellets, as well as the North, Southern and Southeastern transportation systems, including railroads, ports, maritime terminals, and ships, linked to these operations. Manganese ore and ferroalloys are also included in this segment.

(ii) Base metals Includes the production of non-ferrous minerals, including production of nickel (co-products and by-products), copper and investments in aluminum partnerships.

(iii) Fertilizers Includes three important nutrient groups: potassium, phosphates and nitrogen. This is a new business segment, reported as of 2010, that is being formed through acquisitions and organic growth.

(iv) Logistics Includes the system of cargo transportation for third parties, divided into ports, rail and maritime transport and shipping services.

(v) Other investments Includes investments in joint ventures and affiliates in other businesses.

The information presented to upper management regarding performance of each segment are usually originated from accounting records maintained according to generally accepted accounting principles in Brazil, with some minimum relocations between segments.

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b. **Revenue from the segment and its participation in the Company s net revenues**

	2011		2010		2009	
In R$ thousands		**% of**		**% of**		**% of**
Segment	**Net Revenue**	**total**	**Net Revenue**	**total**	**Net Revenue**	**total**
Bulk Materials	76,405,524	74	61,482,495	74	30,545,038	63
Base Metals	16,100,729	16	14,377,415	17	13,744,012	28
Fertilizers	5,551,489	5	3,013,814	4	777,991	2
Logistics	3,120,365	3	2,773,115	3	2,480,827	5
Other Investments	2,017,678	2	1,578,167	2	948,698	2
Total Revenue	**103,195,785**	**100**	**83,225,006**	**100**	**49,496,566**	**100**

c. **Profit or loss resulting from the segment and its participation in the Company s net income**

	2011		2010		2009	
In R$ thousand				**% of**		**% of**
Segment			**Profit/Loss**	**total**	**Profit/Loss**	**total**
Bulk Materials	36,570,065	98	30,894,978	101	11,236,619	107
Base Metals	3,463,686	9	(392,258)	-1	(1,067,178)	-10
Fertilizers	90,420		(97,935)		333,627	3
Logistics	(239,903)	-1	453,328	1	329,019	3
Other Investments	(2,430,044)	-6	(436,621)	-1	(326,808)	-3
Net Total Profit/Loss	**37,400,224**	**100**	**30,421,492**	**100**	**10,504,879**	**100**

7.3 **Information on products and services related to the operating segments**

a. **Characteristics of the production process**

b. **Characteristics of the distribution process**

c. **Characteristics of the markets, in particular:**

i. competition conditions in the markets

ii. participation in each market

d. **Possible seasonality**

Bulk materials

The Company s bulk materials business includes iron ore prospecting, pellet production, manganese prospecting, iron alloy production and coal production. Each activity is described below.

Iron Ore

Production Process of Iron Ore

Vale runs the majority of its iron ore operations in Brazil directly and through its subsidiary Mineração Corumbaiense Reunidas (MCR). Our mines, which are all open-pit, and other operations are concentrated mainly in three systems: the Southeastern System, the Southern System and the Northern System, each with its own transportation capacity. Moreover, Vale has mining operations in the Centralwestern System through its affiliate Samarco Mineração SA (Samarco).

Firm	System	Our interest (%) Voting (%)	Total	Our Partners
Vale	North, Southeastern, Southern and Centralwestern			
MCR	Centralwestern	100	100	
Samarco		50	50	BHP Billiton

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Southeastern System

The Southeastern System mines are located in the Iron Quadrangle region of the state of Minas Gerais, in Brazil, where they are divided into three mining complexes: Itabira (comprised of two mines, with two important processing plants), Minas Centrais (three mines, with three important processing plants and one secondary plant) and Mariana (comprises three mines and four processing plants).

The ore reserves in the three mining complexes have high ratios of itabirite ore relative to hematite ore. Itabirite ore has iron grade of 35-60% and requires concentration to achieve shipping grade.

We conduct open-pit mining operations in the Southeastern System. At the three mining sites, 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. In 2011, we produced 64% of the electric energy consumed by the Southeastern System through our hydroelectric power plants (Igarapava, Porto Estrela, Funil, Candonga, Aimorés, Capim Branco I and Capim Branco II).

We own and operate an integrated railroad and terminals connecting the three mining complexes, which are accessible by roads and railroad tracks of the Estrada de Ferro Vitória e Minas (EFVM) railroad. The EFVM connects all three complexes to the Tubarão port in Vitória, in Espírito Santo. For a more detailed description, please see *Logistics Services.*

Southern System

The Southern System mines are located in the Iron Quadrangle region of the state of Minas Gerais in Brazil. The mines of our subsidiary Minerações Brasileiras Reunidas S.A.- MBR are operated by Vale, pursuant to an asset lease agreement. The Southern System has three major mining complexes: the Minas Itabirito complex (comprised of four mines, with two major beneficiation plants and three secondary beneficiation plants); the Vargem Grande complex (comprised of three mines and one major beneficiation plant); and the Paraopeba complex (comprised of four mines and three beneficiation plants).

We process run-of-mine from open-pit mining operations into and we produce sinter feed, lump ore and pellet feed. In 2011, we produced 94% of the electric energy consumed in the Southern System at our hydroelectric power plants (Igarapava, Porto Estrela, Funil, Candonga, Capim Branco I and Capim Branco II).

We enter into freight contracts with MRS, a railway company in which we hold a 45.8% stake, 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.

Northern System

The Northern System mines, located in Carajás, in the state of Pará, contain some of the largest iron ore deposits in the world. The reserves are divided into northern, southern and eastern ranges situated 35 kilometers apart. Since 1985, we have been conducting mining activities in the northern range, which is divided into three main mining bodies (N4W, N4E and N5). 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.

Iron ore reserves in the Northern System Contain hematite. Because of the high grade (66.7% on average) of the Northern System deposits, we do not need to operate a concentration plant at Carajás. The beneficiation process consists simply of sizing operations, including screening, hydrocycloning, crushing and filtration. The beneficiation process produces sinter feed and pellet feed. We obtain all of the electrical power for the Northern System at market prices from regional utility companies.

We operate an integrated railroad and maritime terminal network in the Northern System. After completion of the beneficiation process, our Carajás railroad - EFC transports the iron ore to the Ponta da Madeira maritime terminal in the state of Maranhão. To support our Carajás operations, we have housing and other facilities in a nearby township. These operations complex is accessible by road, air and rail.

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Centralwestern System

The Centralwestern System includes the Urucum and Corumbá mines, located in the state of Mato Grosso do Sul.

We conduct open-pit mining operations in the Centralwestern System. The iron ore reserves in Urucum contain a high level of hematite ore. In September of 2009, we concluded the acquisition of the mine of Corumbá, were we produce iron ore pellets. In the Urucum and Corumbá mines, we usually process the ROm through standard crushing, followed by classification, producing granulated and fine.

The iron ore products from the Urucum and Corumbá mines are delivered to clients through Vale vessels sailing on Paraguay and Paraná rivers.

Samarco

We own 50% of Samarco, which operates an integrated system, comprised of a mine, pipeline, three pellet plants and a port. Samarco s Alegria mine complex, located in Mariana, Minas Gerais, is close to our Southeastern System.

Iron Ore Production

The following table sets forth information about our iron ore production.

Mine/Plant	Type	Production for fiscal year ended on December 31 (million metric tons) 2009	2010	2011	Recovery Rate (%)
Southeastern System					
Itabira					
Cauê(1)	Open pit	13.8	19.3	18.6	63.7
Conceição(1)	Open pit	17.3	19.4	21.4	74.2
Minas Centrais					
Água Limpa/Cururu(2)	Open pit	1.4	5.0	5.0	52.2
Gongo Soco	Open pit	2.7	6.8	5.3	100.0
Brucutu	Open pit	23.6	29.7	30.9	73.1
Andrade(3)	Open pit	0.7			
Mariana					
Alegria	Open pit	12.1	13.6	14.7	80.9
Fábrica Nova(4)	Open pit	13.7	12.5	13.2	72.4
Fazendão(5)	Open pit	3.1	10.6	11.1	100.0
Total Southeastern System		88.5	116.9		

Southern System				11.8	72.2
Minas Itabirito					
Segredo/João Pereira(6)	Open pit	8.4	12.4	18.6	64.7
Sapecado/Galinheiro(7)	Open pit	9.8	17.7	8.8	79.7
Vargem Grande					
Tamanduá(8)	Open pit	7.3	8.6	7.3	79.7
Capitão do Mato(8)	Open pit	8.0	8.2	5.3	100.0
Abóboras	Open pit	5.4	5.2	5.1	100.0
Paraopeba					
Jangada	Open pit		3.5	6.8	77.9
Córrego do Feijão	Open pit	5.6	6.8	8.4	78.0
Capão Xavier(9)	Open pit	10.9	9.3	4.1	100.0
Mar Azul	Open pit		3.0	18.6	63.7
Total Southern System		55.2	74.7	76.3	
Centralwestern System					
Corumbá	Open pit	0.4	2.8	4.1	50.0
Urucum	Open pit	0.5	1.4	1.5	76.0
Total Centralwestern System		1.0	4.2	5.6	
Northern System					
Serra Norte(10)					
N4W	Open pit	31	30.2	37.6	92.4
N4E	Open pit	16.9	34	24.2	92.4
N5	Open pit	36.8	37	48.0	92.4
Total Northern System		84.6	101.2	109.8	
Vale		293.4	291.0	311.8	
Samarco (11)		8.3	10.8	10.8	58.6
Total		301.7	307.8	322.6	

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(1) ROM from Meio and Conceição mines is sent to Cauê and Conceição concentration plants.

(2) Água Limpa/Cururu is owned by Baovale, in which we own 100% of the voting shares and 50% of the total shares. Production figures for Água Limpa/Curucu were not adjusted to reflect our ownership interest.

(3) The lease for the Andrade mine was terminated in 2009.

(4) Fábrica Nova ore is sent to the Alegria and Fábrica Nova plants.

(5) Fazendão ore is sent to the Alegria and Samarco plants.

(6) Segredo and João Pereira ore is processed at the Fabrica plant.

(7) Galinheiro and Sapecado ore is processed at the Pico plant.

(8) Tamanduá and Capitão do Mato ore is processed at the Vargem Grande plant.

(9) Capão Xavier ore is processed at the Mutuca plant.

(10) All of the ore at Serra Norte is processed at the Carajás plant.

(11) Production figures for Samarco, in which we have a 50% interest, have been adjusted to reflect our ownership interest.

Pellets

Pellet Production Process

Directly and through joint ventures, Vale produces iron ore pellets in Brazil, in Oman and China, as shown in the table below. The estimated total nominal capacity is 43.7 million metric tons per year, without including our joint ventures nominal capacity of 22.2 million metric tons per year at Samarco, 4.5 million metric tons per year at Hispanobras, 1.2 million metric tons per year at Zhuhai YPM Pellet Co., Ltd. (Zhuhai YPM) and 1.2 million metric tons per year at Anyang Yu Vale Yongtong Pellet Co., Ltd. (Anyang). With the launching of our pelletizing units in Oman, we will increase our annual nominal capacity by 9.0 million metric tons.

Firm	**Local Operation**	**Our Participation Voting (%)**	**Our Participation Total (%)**	**Our Partners**
	Brazil:			
Vale	(1) Tubarão, Fábrica, Vargem Grande e São Luís			
Hispanobras	Tubarão	51	50.9	Arcelor Mittal
Samarco	Mariana and Anchieta	50	50	BHP Billiton

	Oman			
Vale Oman Pelletizing Company LLC (VOPC)(1)	Sohar industrial Complex	100	100	
	China:			
Zhuhai YPM	Zhuhai, Guangdong	25	25	Zhuhai Yueyufeng Iron and Steel Co. Ltd, Pioneer Iron and Steel Group Coo, Ltd. (2)
Anyang	Anyang, Henan	25	25	(2) Anyang Iron & Steel Co. Ltd.

(1) Currently, VOPC is 100% held by Vale entities however 30% of the interest on VOPC will be transferred to Oman Oil Companhia S.A.O.C. (OOC) in 2012 under the terms in the Shareholders Meeting held on May 29, 2010 between Vale International and OOC.

(2) Based on the last business license held by Zhuhai YPM filed publicly.

In the Tubarão port area, in Espírito Santo, we operate our wholly owned pellet plants, Tubarão I and II, four plants we lease under operating leases and our jointly-owned plant, Hispanobras. We send iron ore from our Southeastern System mines to these plants and use our logistics infrastructure to distribute their final products.

Our São Luís pellet plant, located in 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 and Vargem Grande pellet plants, located in Minas Gerais, are part of the Southern System. We send some of the iron ore from the Fábrica mine to the Fábrica plant, and iron ore from the Pico mine to the Vargem Grande plant. We transport pellets from the Vargem Grande plant using MRS and pellets from the Fabrica plant using both MRS and EFVM.

We launched production at a pelletizing plant at the Sohar industrial complex, in Oman, in the Middle East. Each pelletizing plant will have an annual nominal production capacity of 4.5 million metric tons per year, for a total of 9

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million metric tons per year of direct-reduced pellets. The first plant was commissioned and is producing at full capacity and the second plant is in ramp-up since November 2011. The pelletizing units are located in the area where we will have the distribution center with a capacity to operate 40 million metric tons per year.

Samarco operates three pellet plants in two operating sites with nominal capacity of 22.2 million metric tons per year. The pellet plants are located in the Ponta Ubu unit, in Anchieta, Espírito Santo. In April 2011, our Board of Directors approved the construction of the fourth plant with nominal capacity of 8.3 million metric tons, increasing Samarco s pelleting capacity to 30.5 million metric tons. Iron ore from Alegria Fazendão, part of our Southeastern System, is sent to the Samarco pellet plants using a 396-kilometer pipeline, the longest pipeline in the world for the conveyance of iron ore. Samarco has its own port facilities to transport its production.

The Zhuhai YPM pellet plant, in China, is part of the Yueyufeng Steelmaking Complex. It has port facilities, which we use to receive pellet feed from our mines in Brazil. Zhuhai YPM s main customer is Zhuhai Yueyufeng Iron & Steel Co., Ltd. (YYS), which is also located in the Yueyufeng Steelmaking Complex. The company also has a 25% participation in Anyang, which is a pellet plant in China with capacity to produce 1.2 million metric tons per year which began operating in March of 2011.

The company sold pellet feed to our pelletizing joint ventures at market prices. Historically, we have supplied all of the iron ore requirements of our wholly owned pellet plants and joint ventures, except for Samarco, Zhuhai YPM, and Anyang to which we supply only part of their requirements. Of our total 2011 pellet production, 75.2% was blast furnace pellets, and the remaining 24.8% was direct reduction pellets, which are used in steel mills that employ the direct reduction process rather than blast furnace technology.

The company sold iron ore to our pelletizing joint ventures. in 2010, and the company sold 4.2 million metric tons to Hispanobras, 12 million metric tons to Samarco and 1.1 million metric tons to Zhuhai YPM. In 2011, the Company sold 4.5 million metric tons to Hispanobras, 13 million metric tons to Samarco, and 1.2 million metric tons to Zhuhai YPM.

Pellet Production

The table below provides information regarding our main pellet production for periods indicated.

	Production for fiscal year ending on December 31		
Firm	**2009**	**2010**	**2011**
		(million metric tons)	
Vale(1)	15.3	36.3	39.0
Hispanobras(5)	0.6	1.9	2.1
Itabrasco(2)			
Kobrasco(3)			
Nibrasco(4)			
Samarco (5)	8.0	10.8	10.7
Zhuhai (5)	0.3	0.3	0.3
Anyang (5)			0.2

Total	24.2	49.3	52.3

(1) Figure includes actual production, including production from the four pellet plants we leased in 2008.

(2) We signed a 10-year operating lease contract for Itabrasco s pellet plant in October 2008.

(3) We signed a five-year operating lease contract for Kobrasco s pellet plant in June 2008.

(4) We signed a 30-year operating lease contract for Nibrasco s two pellet plants in May 2008.

(5) Production figures for Hispanobras, Samarco and Zhuhai were adjusted to reflect our ownership interest.

Iron Ore and Pellets

Characteristics in the Iron Ore and Pellets Market

We supply all of our iron ore and pellets (including our share in joint-venture pellet production) to the steel industry. Prevailing and expected levels of demand for steel products affect demand for our iron ore and pellets. Demand for steel products is influenced by many factors, such as global manufacturing production, civil construction and infrastructure spending.

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In 2011, China accounted for 44.1% of our iron ore and pellet shipments, and Asia, as a whole, accounted for 62.4%. Europe accounted for 18.9%, followed by Brazil with 13.4%. Our 10 largest customers collectively purchased 97.7 million metric tons of iron ore and pellets from us, representing 32.7% of our 2011 iron ore and pellet shipments and 34.0% of our total iron ore and pellet revenues. In 2011, no individual customer accounted for more than 9% of our iron ore and pellet shipments.

In 2011, the Asian market (mainly Japan, South Korea, and Taiwan) 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 customers. 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, we operate sales support offices in Tokyo (Japan), Seoul (South Korea), Singapore, and Dubai (UAE), which support the sales made by our wholly owned subsidiary located in St. 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.

Competition in the Iron Ore and Pellets Market

The global iron ore and iron ore pellet markets are highly competitive. The main factors affecting competition are price, quality and 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 are 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 economical 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 its high grade, the alumina grade of our iron ore is very low compared to Australian ores, reducing consumption of coke and increasing productivity in blast furnaces, which is particularly important during periods of high demand. When demand is very high, our quality differential is in many cases more valuable to customers than a freight differential. 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 customers 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 help us ensure that our products are delivered on time and at a relatively low cost. In addition, we are developing a low-cost freight portfolio, aimed at enhancing our ability to offer our products in the Asian market at competitive prices and to increase our market share. To support this strategy, we ordered new ships, purchased used vessels and entered into medium and long-term freight contracts.

Our principal competitors in Europe are: Kumba Iron Ore Limited; Luossavaara Kiirunavaara AB (LKAB); Société Nationale Industrielle et Minière (SNIM); and Iron Ore Company of Canada (IOCC), subsidiary of Rio Tinto Ltd. We are competitive in the European market not only for the same reasons we are competitive in Asia, but also due to the proximity of our port facilities to European customers.

The Brazilian iron market is also competitive. There are many smaller iron ore producers and new companies that are developing projects, such as Anglo Ferrous Brasil, MMX, MHAG and Bahia Mineração. Some steel plants, including Companhia Siderurgica Nacional (CSN), V&M of Brasil S.A. (Mannesmann), Usiminas, and Arcelor Mittal, also have iron ore operations. Although price is important, quality and reliability are important factors as well. We believe that our integrated transportation systems, our high quality ore and technical support make us a strong competitor in the Brazilian market. Regarding pelleting, our largest competitors are LKAB, Cliffs Natural Resources Inc., Arcelor Mittal Mines Canada (Quebec Cartier Mining Co.), Iron Ore Company of Canada (subsidiary of Rio Tinto) and Gulf Industrial Investment Co.

Seasonality in the Iron Ore and Pellets Market

Demand for iron ore is higher in the months of December, March and April. Compared to the second semester, demand tends to be weaker than in the first half of the year.

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Manganese Ore

Manganese Ore Production Process

Vale conducts manganese operations in Brazil directly and through its subsidiaries, Vale Manganês S.A. (Vale Manganês) and Urucum.

Firm	Location of Operation	Our Participation (%) Voting	Total
		(%)	
	Brazil:		
Vale Manganês	Pará and Minas Gerais	100	100
MCR	Mato Grosso do Sul	100	100
Vale Mina do Azul(1)	Pará	100	100

(1) In August 2011, we incorporated the company Vale Mina do Azul, a 100% subsidiary of Vale, to operate our manganese mines in the state of Pará. Previously, the Azul mine was operated by Vale Manganês.

The Company s mines produce three types of manganese products:

- metallurgical ore used primarily in the production of ferroalloys;
- natural manganese dioxide, suitable for the manufacturing of electrolytic batteries; and
- chemical ore used in various industries for the production of fertilizers, pesticides and animal feed, and is also used as pigment in the ceramics industry.

We operate on-site beneficiation plants at our Azul mine and at the Urucum mines, which are accessible by road. The Azul and Urucum mines have high-grade ores (at least 40% manganese grade), while our Morro da Mina mine has low-grade ores. (24% manganese grade) All of these mines obtain electrical power at market prices from regional electric utilities.

Manganese Ore Production

The following table sets forth information about our manganese production.

Mine	Type	Production for fiscal year ending December 31 2009	2010	2011	Rate of recovery
Azul	Open pit	1.4	1.6	2.1	66.6
Morro da Mina	Open pit	0.1	0.1	0.1	88.0
Urucum	Underground	0.2	0.2	0.3	80.4
Total		1.7	1.8	2.5	

Ferroalloys

Ferroalloys Production Process

The following table sets forth the subsidiaries through which we conduct our ferroalloys business.

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Firm	Location	Our Participation (%) Voting	Total
	Brazil:		
Vale Manganês	Minas Gerais and Bahia	100.0	100.0
(3) Companhia Paulista de Ferro-Ligas (CPFL)	Mato Grosso do Sul	100.0	100.0
Vale Manganèse France	Dunkerque, France	100.0	100.0
Vale Manganese Norway AS	Mo I Rana, Norway	100.0	100.0

We produce several types of manganese ferroalloys, such as high carbon and medium carbon ferro-manganese and ferro-silicon manganese. Our facilities have nominal capacity of 651,000 metric tons per year.

The production of ferroalloys consumes significant amounts of power, representing 11.7% of our total consumption in 2011. The power supply for our ferroalloy plant in Dunkerque, France and Mo I Rana, Norway is provided through long-term contracts.

Ferroalloys Production

The following table presents information about the Company s ferroalloys production.

Firm	Production for fiscal year ending December 31 2009	2010	2011
		(Thousands of metric tons)	
Vale Manganês(1)	99	100	204
CPFL(2)	0	100	0
Vale Mina do Azul (3)	0	0	0
Vale Manganèse France(4)	45	100	131
Vale Manganese Norway AS	79	100	101
Total	**223**	**451**	**436**

(1) Vale Manganês has three plants in Brazil: Barbacena and Ouro Preto in the state of Minas Gerais; and Simões Filho in the state of Bahia.

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

(3) Vale Mina do Azul has one plant in Brazil: Santa Rita do Jacutinga in the State of Minas Gerais

(4) In August 2008, we shut down the furnaces at Vale Manganèse France due to technical problems and we restarted them in September 2009.

Manganese Ore and Ferroalloys: market and competition

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, Australia and Brazil. 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, power, logistics and reductants. We compete both with stand-alone producers and integrated producers that also mine their own ore. Our competitors are located mainly in countries that produce manganese ore or steel.

Coal

Coal Production Process

We produce thermal and metallurgical coal through Vale Mozambique, operating coal assets in Moatize and Vale Australia,, our subsidiary that operates coal assets in Australia through subsidiaries and non-formed joint ventures, and thermal coal, through our subsidiary, Vale Colombia.

We also have a minority stake in two Chinese companies, Henan Longyu Energy Resources Co., Ltd. (Longyu) and Shandong Yankuang International Coking Company Limited (Yankuang), according to the following table.

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Company	Business	Location	Our participation (%)	Our Partners
Vale Austrália		*Australia*		
Integra Coal	Thermal and metallurgical coal	Hunter Valley, New South Wales	61.2	Nippon Steel (NSC), JFE Group (JFE), Posco, Toyota Tsusho Austrália, Chubu Electric Power Co. Ltd
Carborough Downs	Metallurgical coal	Bowen Basin, Queensland	85.0	NSC, JFE, Posco, Tata
Isaac Plains	Thermal and metallurgical coal	Bowen Basin, Queensland	50.0	Aquila
Broadlea	Thermal and metallurgical coal	Bowen Basin, Queensland	100.0	
Vale Colombia				
El Hatillo	Thermal coal	Colombia	100.0	
Longyu	Coal and other related products	Henan Province, China	25.0	Yongmei Grupo Co., Ltd. (formerly, Yongcheng Carvão & Electricity (Grupo) Co. Ltd.), Shanghai Baosteel International Economic & Trading Co., Ltd. and other minority stockholders
Yankuang	Metallurgical coke and methanol	Shandong Province, China	25.0	Yankuang Grupo Co. Limited, Itochu Corporation
Vale Moçambique Moatize	Metallurgical coke and methanol	Mozambique Tete, Mozambique	95.0	(4) Empresa Moçambicana de Exploração Mineira, S.A. (EMEM)

**On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

Integra Coal Operations. The Integra Coal operations are located 10 km northeast of Singleton, Hunter Valley, in New South Wales, Australia. The operations are comprised of an underground coal mine that produces coal using the longwall method and an open pit mine. Coal from these mines is processed in a coal handling and preparation plant (CHPP) with a capacity of 1,200 metric tons per hour and it is transported using a railroad that was specially built to transport it to the port of Newcastle, in New South Wales, Australia.

Carborough Downs. Carborough Downs is located in the Central Bowen Basin, in central Queensland, Australia, 15 km from the township of Moranbah and 180 km from the coastal city of Mackay. The Carborough Downs concession comprises the Rangal Coal Measures of the Bowen Basin as well as the financial assets of Leichardt and Vermont. Both reserves produce metallurgical coke and can be beneficiated to produce metallurgical coal and PCI. The reserve in Leichardt is our main development objective and to constitute 100% of the current reserves and base resources. The coal from Carborough Downs is processed at the CHPP of Carborough Downs, with a processing capacity of 1,000 metric tons per hour, and it operates seven days a week. The product is shipped by the railroad and is transported 160 km to the Dalrymple Bay Terminal in Queensland, Australia.

Isaac Plains. The open pit mine at Isaac Plains is located next to Carborough Downs, in Central Queensland. The mine is run by Isaac Plains Coal Management, with shared control through a joint venture. Its coal is classified as semi-volatile, bituminous coal with low sulphur levels. The coal is processed at the CHPP of Isaac Plains and transported 180 km to the Dalrymple Bay Coal Terminal.

Broadlea. Broadlea is an open pit mine located north of the underground mine of Carborough Downs, consisting of several small deposits of coal. The operation in Broadlea uses the truck-and-shovel method and the coal is washed at the Carborough Downs CHPP and transported to the Dalrymple Bay Coal Terminal, located 172 km away, in Queensland, Australia. At the end of 2009, Broadlea stopped operating and underwent maintenance due to increasing unit costs. The financial viability of the mine will be monitored to determine if it is possible to resume operations.

El Hatillo. El Hatillo coal mine in Colômbia is located in the central area of the Province of Cesar, approximately 210 km southeast of Santa Marta. The concession is located next to the city of La Loma and includes an area of 23,952 acres. Mining at El Hatillo is carried out using the truck-and-shovel method and uses crushing and selection to produce thermal coal which is loaded onto trains at a facility dedicated to transportation to the port of SPRC. A large part of this thermal coal is exported to Europe and United States. On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

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Moatize. Moatize is an open pit mine, located in the province of Tete, Mozambique. It started operations in August 2011 and should reach full capacity in 2015, with nominal capacity of 11 Mtpa, comprised of 8.5 Mtpa of metallurgic coal and 2.5 Mtpa of thermal coal. Coal production is transported by the railroad of Sena to the Port of Beira. Currently, the main product of Moatize is Chipanga *prime*, hard metallurgic coal, while a standard metallurgic coal is under study.

Coal Process

The following table provides information about the Company s coal production.

		Production during fiscal year ending December 31		
Operation:	**Mine Type**	**2009**	**2010**	**2011**
			(million metric tons)	
Thermal coal:				
Vale Colombia				
El Hatillo(1)	open pit	1.143	2.991	3.565
Vale Austrália				
Integra Coal(2)	open pit	702	305	325
Isaac Plains(3)	open pit	551	371	274
Broadlea (6)	open pit	497	165	0
Vale Mozambique Moatize (5)	open pit			342
Total Thermal coal		**2.892**	**3.832**	**4.506**
Metallurgical coal:				
Vale Austrália				
Integra Coal(3)	Underground and open pit	1.184	1.151	467
Isaac Plains(3)	open pit	487	590	635
Carborough Downs(4)	Underground and	604	1.216	1.390
Broadlea	open pit	252	101	0
Vale Mozambique Moatize (5)	open pit			275
Total metallurgic coal		2.527	3.057	2.766

(1) Vale acquired El Hatillo on the first quarter of 2009. The figures for 2009 include only April through December production.

(2) These figures correspond to our participation of 61.2% in Integra Coal, a joint venture constituted as a partnership.

(3) These figures correspond to our participation of 50.0% in Isaac Plains, a joint venture constituted as a partnership.

(4) These figures correspond to our participation of 80.0% in Carborough Downs, a joint venture not constituted as a partnership.

(5) Moatize started production in August 2011.

(6) Boradlea stopped its operations in December 009. ROM processing ended in June 2010.

Longyu produces coal and other related products. Yankuang, a metallurgical coal plant, has nominal production capacity of 2.0 Mtpa of coal per year and 200,000 metric tons of methanol per year.

Market Characteristics of the Coal Market

Coal sales at our operations in Australia are basically geared towards the oriental Asian market. Coal sales from our operations in Colombia were basically geared towards Europe, Central and South America (Note: On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.). Coal from our Mozambique operations is directed for the main transoceanic coal markets, including Southeastern Asia, Americas, Europe, and India.

Competition in the Coal Market

The global coal industry, basically made up by the (metallurgical and thermal) hard coal and brown / lignite coal markets, is highly competitive. The growing demand for steel, particularly in Asia, continues to promote a strong demand for metallurgical coal. Significant port and railroad limitations in some of the countries where our main providers are located may lead to a limited availability of metallurgical coal.

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The global transoceanic market has expanded significantly in the last few years. The growing demand for thermal coal is closely related to an increased consumption of electricity, which will continue to grow driven by economic growth, particularly among emerging economies. Current large numbers of coal-powered plants with long life cycles take decades to be replaced or updated and this makes the presence of metallurgical coal in the energy matrix to continue to be very high in countries with high levels of consumption. Fuel cost is the most significant variable cost involved in the generation of electricity and coal is currently the cheapest fossil fuel that can be used for this purpose.

Competition in the coal industry is based mostly in production cost savings, coal quality, and transportation cost. We believe that our operations and our portfolio of projects are competitive; other strong points of our group include the geographical location of the current and future location of providers and production costs with regard to several other coal producers.

The main participants in the transoceanic market are subsidiaries and affiliates of Xstrata PLC, BHP Billiton, PT Bumi Resources Tbk., Anglo Coal, Drummond Company, Inc., Rio Tinto Ltd., Teck Cominco, Peabody, the Shenhua Group, and others.

Base Metals:

Nickel

Our base metal business includes production of non-ferrous minerals, including nickel operations (co-products and subproducts), copper, aluminum, bauxite, PGM, and other precious metals and cobalt. Below, we will describe each of our activities.

Nickel Production Process

We conduct our nickel operations primarily through our wholly owned subsidiary Vale Canada. Vale Canada operates two nickel production systems, one in North America and Europe and the other in Asia and the South Pacific. We recently commissioned and launched the ramp-up of Onça Puma, a new nickel plant in the state of Pará. The operations are listed in the table below.

System	Locations	Operations
North America & Europe	Canada Sudbury, Ontario	Fully integrated mines, mill, smelter and refinery (producer of intermediates and finished nickel and by-products)
	Canada Thompson, Manitoba	Fully integrated mines, mill, smelter and refinery (producer of finished nickel and by-products)
	Canada Voisey Bay, Newfoundland and Labrador	Mine and mill (producer of nickel concentrates and by-products)
	U.K. Clydach, Wales	Stand-alone nickel refinery (producer of finished nickel)

Asia & the South Pacific	Indonesia	Sorowako, Sulawesi(1)	Mining and processing operations (producer of nickel matte, an intermediate product)
	New Caledonia	Southern Province (2)	Mining and processing operations (producer of nickel oxide and cobalt)
	Japan	Matsuzaka(3)	Stand-alone nickel refinery (producer of finished nickel)
	Taiwan	Kaoshiung(4)	Stand-alone nickel refinery (producer of finished nickel)
	China	Dalian, Liaoning(5)	Stand-alone nickel refinery (producer of finished nickel)
	South Korea	Onsan(6)	Stand-alone nickel refinery (producer of finished nickel)
South Atlantic	(5) Brazil	Ourilândia do Norte, Pará	Mining and processing operations (producer of ferronickel)

(1) Operations conducted through our 59.2%-owned subsidiary PT Vale Indonesia Tbk.

(2) Operations conducted though our 74%-owned subsidiary Vale Nouvelle-Calédonie S.A.S.

(3) Operations conducted through our 87.2%-owned subsidiary Vale Japan Limited.

(4) Operations conducted through our 82.6%-owned subsidiary Taiwan Nickel Refining Corporation.

(5) Operations conducted through our 98.3%-owned subsidiary Vale Nickel (Dalian) Co. Ltd.

(6) Operations conducted through Korea Nickel Corporation (company in which we have a 25% interest).

North Atlantic

Sudbury Operations

Our long-established mines in Sudbury, Ontario, are primarily underground operations with nickel sulfide ore bodies. These ore bodies also contain co-deposits of copper, cobalt, PGMs, 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 nickel

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concentrates from our Voisey Bay operations. We ship a nickel intermediate product, nickel oxide, from our Sudbury smelter to our nickel refineries in Wales, Taiwan, China and South Korea for processing into finished nickel.

In 2011, we produced 10% of the electric energy consumed in Sudbury at our hydroelectric power plants there. The remaining electricity was purchased from Ontario s provincial electricity grid.

In February, 2011, we shut down one of our furnaces in our smelter at Sudbury due to an operational problem. The furnace resumed operations at the end of June 2011. The closure of the furnace resulted in a drop of approximately 15,000 metric tons in the production of finished nickel and 12,000 metric tons of copper.

Thompson Operations

Our long-established mines in Thompson, Manitoba, are primarily underground operations with nickel sulfide ore bodies. The ore bodies also contain 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 Bay operations. Low-cost energy is available from purchased hydroelectric power at our Thompson operations.

We are changing our operations in Thompson towards mining and processing operations eliminating smelting and finishing operations until 2015. This will allow us to better align our processing capabilities with our mineral reserves and observe our environmental commitments. The current mineral reserves at Thompson are not enough to run a long term full capacity smelting and finishing operation and do not support the significant capital investment required pursuant to new federal regulations regarding sulphur dioxide proposed emissions which we expect to go into effect in 2015.

Voisey Bay Operations

Our Voisey Bay operation in Newfoundland and Labrador is comprised of Ovoid, an open-pit mine, and deposits with the potential for underground operations at a later stage. We mine nickel sulfide ore bodies, which also contain co-deposits of copper and cobalt. We mill Voisey 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). After 2013, planning indicates that a high content copper concentrate will still be produced, and nickel concentrate will be embedded into our plant under construction in the area Long Harbour. The electricity requirements of our Voisey Bay operations are supplied through diesel generators.

Clydach Operations

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

Asia Pacific

Sulawesi Operations

Our subsidiary PT Vale Indonesia Tbk (formerly known as PT International Nickel Indonesia (PTVI) operates open pit mines and a processing facility in Sorowako on the Island of Sulawesi, Indonesia. PTVI 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, PTVI sells 80% of its production to our wholly owned subsidiary Vale Canada and 20% of its production to Sumitomo Metal Mining Co., Ltd. (Sumitomo). PTVI is a public company whose shares are traded on the Indonesia Stock Exchange. Vale Canada holds 58.7% of PTVI share capital, Sumitomo holds 20.1%, other 20.5% is publicly held and 0.7% is held by other stockholders (including another Vale subsidiary, Vale Japan (Limited). By its subsidiaries, Vale S.A. holds 59.2% share in PTVI stock.

Energy costs are a significant component of our nickel production costs for the processing of lateritic and saprolite ores at our PTVI operations in Indonesia. A major part of the electric furnace power requirements of PTVI is supplied at low cost by its two hydroelectric power plants on the Larona River, (namely, Larona, Balambano, and Karebbe). PTVI has thermal generating facilities in order to supplement its hydroelectric power supply with a source of energy that is not subject to hydrological factors. In 2011, the hydroelectric power plants provided 93% of the electric energy consumed at our Indonesian operations, and oil-powered generators provided the remainder.

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On September 27, 2011, a shareholders meeting of PTVI approved changing the corporate name of PTVI from PT International Nickel Indonesia Tbk to PT Vale Indonesia Tbk . Required approvals for the name change were obtained in November 2011. The new name was officially announced in January 2012.

Asian refinery Operations

Our subsidiary (in which we hold an 87.2 participation),Vale Japan Limited, operates a refinery in Matsuzaka, which produces intermediate and finished nickel products, primarily using nickel matte sourced from PTVI. Vale Japan is a private company controlled by Vale. A minority interest is held by Sumitomo, with 12.8% interest.

We also operate or have investments in nickel refining operations in Taiwan through our 93.7% stake in Taiwan Nickel Refining Corporation (TNRC), China through our 98.3% interest in Vale Nickel (Dalian) Co. Ltd. (VNDC) and South Korea through our 25% stake in Korea Nickel Corporation (KNC). Vale Europe Limited (VEL) presented an offer to acquire the remaining shares of TNRC before minority shareholders. Should any of the minor shareholders fail to accept the offer, VEL will promote compulsory acquisition of remaining shares. TNRC, VNDC 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 Japan and our Sudbury operations.

New Caledonia Operations

We are undergoing ramp up in our subsidiary Vale Nouvelle-Calédonie (VNC). VNC uses a High Pressure Acid Leach (HPAL) process to treat laterite and saprolite ores. We currently apply ramp up procedures to our nickel production and expect to achieve in four years a nominal production capacity of 60,000 metric tons per year of nickel contained in nickel oxide and 4,600 metric tons of cobalt, when the production of nickel oxide starts. In order to speed up the generation of revenue, the nickel solution resulting from the HPAL is being transformed into an intermediate product, Nickel Hydroxide Cake (NHC). We hold 74% of the stock capital of VNC. Other VNC shareholders are Sumic Nickel Netherlands B.V. (Sumic) (a joint venture between Sumitomo and Mitsui), holding 21%, and Société de Participation Minière Du Sud Calédonien (SPSMC), holding 5%. Sumic holds an option to sell 25%, 50% or 100% of VNC shares held, which may be exercised in the future should the Project cost exceed a specific amount agreed upon between specific shareholders and subject to other conditions. SPMSC must increase its share in VNC capital to 10% and an option to reach 20%. We are negotiating with Sumic the maintenance of VNC share.

South Atlantic

We started ramp up operations in our Onça Puma project in Ourilândia, in the state of Pará, in March 2011. Onça Puma mine explores laterite saprolite nickel reserves and it has a nominal estimated production capacity of 53,000 metric tons of nickel, in ferronickel, its final product.

Production of Base Metals (Nickel and Copper)

The following table sets forth our annual mine production by operating mine (or on an aggregate basis for PTVI because it has mining areas rather than mines) and the average percentage grades of nickel and copper. The mine production at PTVI represents the product from PTVI s dryer kilns delivered to PTVI s smelting operations and does not include nickel losses due to smelting. For our Sudbury, Thompson and Voisey 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 following table sets forth information about ore production at our nickel mining sites.

	2009			2010			2011		
	(thousands of metric tons, except percentages)								
		Grade			Grade			Grade	
	Production	% Copper	% Nickel	Production	% Copper	% Nickel	Production	% Copper	% Nickel
Ontario operating mines									
Copper Cliff North	524	0.96	1.06	326	1.13	1.13	892	1.15	1.03
Copper Cliff South(1)	78	1.45	1.40						
Creighton	395	1.57	1.82	426	2.65	3.10	991	1.72	2.22
Stobie	1.198	0.64	0.72	775	0.59	0.69	1.568	0.61	0.74
Garson	328	1.93	1.45	246	2.16	1.60	640	1.78	2.08
Coleman	624	3.28	1.64	786	2.74	1.73	1.363	3.02	1.77
Gertrude									
Ellen				86	0.56	0.75	131	0.45	0.90

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	2009			2010			2011		
	(thousands of metric tons, except percentages)								
		Grade			Grade			Grade	
	Production	% Copper	% Nickel	Production	% Copper	% Nickel	Production	% Copper	% Nickel
Totten				16	2.54	1.74	28	1.01	0.97
Total Ontario operations	3.145	1.49	1.19	2.660	1.78	1.53	5.612	1.61	1.45
Manitoba operating mines									
Thompson	1.270		1.98	1.325		1.83	1.182		1.76
Birchtree	769		1.48	832		1.41	721		1.36
Total Manitoba operations	2.040			2.158			1.903		1.61
Voisey Bay operating mines									
Ovoid	990	2.57	3.20	1.510	2.44	3.20	2.366	2.39	3.38
Total Voisey Bay operations	990	2.57	3.20	1.510	2.44	3.20	2.366	2.39	3.38
Sulawesi operating mining areas									
Sorowako	3.598		2.02	4.176		2.00			
Pomalaa (2)							3.669		2.05
Total Sulawesi operations	3.598			4.176			3.669		2.05
Mine operations in New Caledonia									
VNC				326		1.31	1.043		1.29
New Caledonia total operations				326		1.31	1.043		1.29
Mine operations in Brazil									
Onça Puma				1.259		1.93	1.466		1.86
Total operations in Brazil				1.259		1.93	1.466		1.869

(1) This mine has been closed indefinitely since January 2009.

(2) This mine has been closed indefinitely since May 2008.

The following table sets forth information about our nickel production, including: (i) nickel refined through our facilities, (ii) nickel further refined into specialty products, and (iii) intermediates designated for sale. The numbers below are reported on an ore-source basis.

Mine	Type	Production for fiscal year ending December 31 2009	2010 (Thousands of metric tons)	2011
Sudbury (1)	Underground	43.6	22.4	59.7
Thompson (1)	Underground	28.8	29.8	25.0
Voisey Bay(2)	Open pit	39.7	42.3	68.9
Sorowako (3)	Open pit	68.8	78.4	67.8
Onça Puma(4)	Open pit			7.0
VNC(5)	Open pit			5.1
External (6)		5.4	5.9	8.0
Total(7)		186.7	178.7	241.5

(1) Primary nickel production only (i.e., does not include secondary nickel from unrelated parties).

(2) Includes finished nickel produced at our Sudbury and Thompson operations, as well as some finished nickel produced by unrelated parties under toll-smelting and toll-refining arrangements.

(3) We have a 59.2% interest in PTVI, which owns the Sorowako mines, and these figures include the minority interests.

(4) Primary nickel production only. Nickel found in iron nickel.

(5) Primary nickel production only. Nickel found in nickel.

(6) Finished nickel processed at our facilities using feeds purchased from unrelated parties.

(7) Excludes finished nickel produced under toll-smelting and refining arrangements covering purchased intermediates with unrelated parties.

Market Characteristics of Base Metals (Nickel)

Our nickel customers are broadly distributed on a global basis. In 2011, 53% of our total nickel sales were delivered to customers in Asia, 27% to North America, 17% to Europe and 3% to customers in other markets. We have short-term fixed-volume contracts with customers for the majority of our expected annual nickel sales. These contracts generally 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) intermediates with various levels of nickel content, (ii) nickel pig iron has 1.5-6% nickel, (iii) ferro-nickel has 10-40% nickel, (iv) standard LME grade nickel has a minimum of 99.8% nickel, and (v) high purity nickel has a minimum of 99.9% nickel and does not contain specific elemental impurities;
- Shape (such as pellets, discs, squares, strips and foams); and
- Size.

In 2011, the principal end-use applications for nickel were:

- Austenitic stainless steel (64% of global nickel consumption);
- Non-ferrous alloys, alloy steels and foundry applications (19% of global nickel consumption);
- Nickel plating (9% of global nickel consumption); and
- Specialty applications, such as batteries, chemicals and powder metallurgy (9% of global nickel consumption).

In 2011, 66% of our refined nickel sales were made into non-stainless steel applications, compared to the industry average for primary nickel producers of 36%. As a result of our focus on such higher-value segments, our average realized nickel prices for refined nickel have constantly 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 St. Prex (Switzerland), Saddle Brook, New Jersey (United States), London (England), Tokyo (Japan), Shanghai (China), Singapore, Kaohsiung (Taiwan), Bangkok (Thailand) and Bridgetown (Barbados).

Competition in Base Metals (Nickel)

The global nickel market is highly competitive. Our key competitive strengths include our long-life mines, our low production costs compared to other nickel producers, sophisticated exploration and processing technologies, along with a diversified portfolio of products. Our global marketing reach, diverse product mix, and technical support direct our products to the applications and geographic regions that offer the highest margins for our products.

Our nickel deliveries represented 16% of global consumption for primary nickel in 2011. In addition to us, the largest suppliers in the nickel industry (each with their own integrated facilities, including nickel mining, processing, refining and marketing operations) are: Mining and Metallurgical Company Norilsk Nickel, Jinchuan Nonferrous Metals Corporation, BHP Billiton plc and Xstrata plc. Together with us, these companies accounted for about 51% of global finished primary nickel production in 2011.

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 (scrap). 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 43-48% of total nickel used for stainless steels, and primary nickel has accounted for about 52-57%. 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 and Indonesia) that is suitable primarily for use in stainless steel production. With nickel being sold at higher prices and a strong demand from the stainless steel industry, domestic production of nickel pig iron has experienced ongoing growth in China. It is estimated that in 2011, Chinese production of nickel pig iron and ferro-nickel exceeded 250,000 metric tons, representing 16% of world primary nickel supply.

Competition in the nickel market is based primarily on quality, reliability of supply and price. We believe our operations are competitive in the nickel market because of the high quality of our nickel products and our relatively low production costs.

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Copper

Base Metals Production Process (Copper)

We operate our copper businesses in Brazil at the parent-company level and through our wholly-owned subsidiaries in Canada and Chile.

Firm	**Location**	**Voting interest (%)**	**Total (%)**
Vale	Brasil		
Vale Canada	Canada	100.0	100.0
Tres Valles	Chile	100.0	90.0

Operations in Brazil

The Sossego mine, in Carajás, state of Pará, has two main copper areas, Sossego and Sequeirinho. The copper mine is operated using the open pit method and ROM ore is processed through primary crushing and transportation, SAG grinding (a semi automatic grinder that uses a large rotatory drum filled with ore, water and steel grinding spheres that transform the ore into a soft paste), grinding, fluctuation of copper in concentrate, elimination of waste, concentrate thickener, filtration and discharge. The concentrate is transported by truck to the storage terminal in Parauapebas and, immediately, and transferred via Carajás Railroad (EFC) to the maritime terminal in Ponta da Madeira, in São Luís, Maranhão.

We built an 85 km road to connect Sossego to the railroad and airport facilities in Carajás and a power line that allows us to purchase electricity at market prices. We have a long-term power distribution agreement with Eletronorte.

Operations in Canada

In Canada, we d recover copper along with our nickel operations, mostly in Sudbury and Voisey Bay. In Sudbury, we produce two intermediate copper products: copper concentrates and copper anodes and we also produce electrolytic copper cathodes as a by-product of our nickel finishing plants. In Voisey Bay, we produce copper concentrate. Use the same industrial structure used in nickel processing and transportation to process copper.

Operations in Chile

In Chile, we produce copper cathode in our Tres Valles operation, located in Salamanca, in the Coquimbo region. The plant has an estimated annual capacity of 18,500 tons of copper cathodes (metal plates) and it is our first industrial scale cathode plant to use a hydrometallurgical process. Operations in Tres Valles include two copper oxide mines: Don Gabriel, an open pit mine, and Papomono, an underground mine, as well as a SX-EW processing plant that produces copper cathodes.

Production of Base Metals (Copper)

The following table provides information about our production of copper.

Mine	Type	Production during fiscal year ending December 31 2009	2010 (million metric tons)	2011
Brazil:				
Sossego	Open pit	117	117	109
Canada:				
Sudbury	Underground	42	34	101
Voisey Bay	Open pit	24	33	51
Thompson	Underground	1	1	1
Externo (1)		14	22	31
Chile:				
Tres Valles	Open pit and underground			9
Total		198	207	302

(1) We process copper in our facilities using third party resources.

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Market Characteristics of Base Metal (Copper)

The copper concentrate from Sossego is sold under mid and long-term contracts executed with smelters in South America, Europe and Asia. We have long-term sale agreements to sell the entire first production phase of Salobo copper concentrate to smelters. We have long-term distribution agreements with Xstrata Copper Canada, to sell cathode copper and a significant part of copper concentrate produced in Sudbury. Copper concentrate from Voisey Bay is sold through mid-term agreements with clients in Europe. Electrolytic copper from Sudbury is sold in North America through short-term sale agreement.

Competition of Base Metal (Copper)

The cathode copper global market is highly competitive. It is produced by mining companies and smelters spanning worldwide, while customers are mostly producers of copper wires, rods and alloy. Competition takes place mostly at a regional level, and it is based mostly in product cost, quality, distribution reliability and logistics costs. The largest cathode copper producers in the world are Codelco, Aurubis, Freeport-McMoRan, Jiangxi and Xstrata, operating at the parent company level or through subsidiaries. Our participation in the global copper market is negligible.

Copper concentrate and copper anodes are intermediate products in the copper production chain. Both the concentrate and anode markets are competitive, with several producers, but fewer participants and smaller volumes than the cathode copper market due to the high levels of integration of large copper producers.

In the copper concentrate market, the main producers are mining companies located in South America and Indonesia, while the consumers are smelters located in Europe and Asia. Competition in the copper concentrate market takes place mostly at a global level, and it is based mostly in product cost, quality, logistics costs and distribution reliability. Main competitors in the copper concentrate market are Freeport-McMoRan, Xstrata , BHP Billiton, Antofagasta and Anglo American, operating at a parent company level and through subsidiaries. Our market share in 2011 was approximately 3.0% of the total copper concentrate market.

The copper anode/blister market is very limited in the copper industry. In general, anodes are produced to supply the integrated refining of every company. Anode/blister trade is limited to facilities that have more smelting capacity than what the plant can handle or the financial situation regarding logistics costs is an incentive to purchase anodes from other smelters. The main competitors in the anode market are Codelco, Anglo American and Xstrata, operating at a parent company level or through its subsidiaries.

Seasonality of the Base Metal (Nickel and Copper) Markets

Among the metals produced by Vale, there is no Strong seasonal demand for nickel and copper. However, nickel demand is usually slightly lower in the third quarter and copper demand is a bit lower during the entire second half of the year.

Aluminum

In 2010, we refined alumina through our subsidiary, Alunorte, and smelted aluminum through our subsidiary, Albras, as part of our aluminum operations. Alunorte produced alumina by refining bauxite supplied from the MRN and Paragominas mines. Albras produced aluminum using alumina supplied by Alunorte. Our aluminum production facilities were located in Pará. Furthermore, we had a participation in a project to build a new alumina refinery plant through our subsidiary, Companhia de Alumina do Pará (CAP). In several related transactions executed in February of 2011, we transferred our participation in Albras, Alunorte and CAP, among other items, to Hydro. We are still joined to those aluminum operations through a participation of 22.0% in Hydro which we received as compensation.

Bauxite

Production Process of Base Metals (Bauxite)

We also conduct our bauxite operations through a 40% participation in MRN and through a 40% participation in Paragominas, both located in Brazil.

- *MRN.* MRN, located in the state of Pará, northern Brazil, is one of the largest bauxite operations in the world and operates four open pit bauxite mines that produce high quality bauxite. Furthermore, MRN controls substantial additional reserves of high quality bauxite which will be converted into reserves after obtaining final environmental licenses. MRN also operates facilities for beneficiation of ore in its mines, which are linked by rail to the loading terminal and port facilities on the Trombetas River, a tributary of the Amazon River, through which ships of up to 60,000 DWT (deadweight) can sail. MRN owns and operates the railroad and port facilities which serve their mines. The MRN bauxite mines are accessible by road from the port area and are powered by its own thermoelectric plant.

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- *Paragominas.* Paragominas mine, located in the state of Pará, began operating in the first quarter of 2007 in order to supply the Alunorte s alumina refinery. The first expansion project of Paragominas (Paragominas II) was completed in the second quarter of 2008. The mine produces bauxite with 12% moisture content and the quality of the bauxite is similar to that of MRN. In Paragominas there is a beneficiation plant and 244 km pipeline to transport ore slurry. Electricity in Paragominas is provided by Eletronorte, a Brazilian state-run power generation plant.

- In 2010, we transferred the Paragominas bauxite mine and all its rights to bauxite exploration (with the exception of rights derived from our participation in Mineração Rio do Norte S.A.) to a new company, from which we will transfer 60.0% to Hydro in exchange for US$578 million in cash in February 2011. We will transfer the remaining interest of our joint venture in two equal amounts, in 3 and 5 years upon conclusion of the transaction, each for US$200 million in cash. For further information on this operation, please see item 6.5 of this Reference Form.

PGM and other precious metals

Production Process of Base Metals (PGM and other precious metals)

As by-products of our Sudbury nickel operations in Canada, we recover significant quantities of PGMs, 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 products for which we perform toll-refining for unrelated parties. In 2011, embedded PGM concentrates from our Sudbury operations, which also includes precious metals purchased from unrelated parties and metals processed by Copper Cliff method, supplied more than 53% of our total PGM production (over 53% in 2010). Our base metal commercial department sells our PGMs and other precious metals, as well as the sale of products and negotiation of product refining agreements with unrelated parties.

Production of Base Metals (PGM and other precious metals)

The following table presents information on production of the Company s precious metals.

Mine (1)	**Type**	**2009**	**2010**	**2011**
			(Thousand troy ounces)	
Sudbury:				
Platinum	Underground	103	35	174
Palladium	Underground	152	60	248
Gold	Underground	49	42	182
Sossego:				
Gold	Open pit			90

(1) Production figures exclude precious metals purchased from unrelated parties and toll-refined materials.

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Cobalt

Production Process of Base Metals (Cobalt)

We recover significant quantities of cobalt as a by-product of our Canadian nickel operations. In 2011, we produced 1,469 metric tons of refined cobalt metal at our Port Colborne refinery and 594 metric tons of cobalt in a cobalt-based intermediate at our Thompson nickel operations in Canada. Our remaining cobalt production consisted of 611 metric tons of cobalt contained in other intermediate products (such as nickel concentrates). We expect to increase our production of cobalt as we increase nickel production in New Caledonia, at the VNC operations, considering that the HPAL process used by VNC will produce cobalt carbonate as subproduct.

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%). Cobalt metal is used in the production of various alloys, particularly for aerospace applications, as well as the manufacture of cobalt-based chemicals.

The following table sets forth information on our cobalt production.

		Production for fiscal year ending December 31		
Mine	**Type**	**2009**	**2010**	**2011**
			(Metric tons)	
Sudbury	Underground	359	302	593
Thompson	Underground	181	189	158
Voisey Bay	Open pit	971	524	1,585
New Caledonia	Open pit			245
External (1)		64	51	93
Total		1,575	1,066	2,675

(1) These figures do not include unrelated-party tolling of feeds purchased from unrelated parties.

Fertilizers

Our fertilizer business comprises production and sale of three important groups of nutrients: phosphates, potash, and nitrogen. Below, we describe our activities in the fertilizer area.

Phosphates

Production Process of Fertilizers (Phosphates)

In 2010, we acquired the assets of fertilizers in Brazil, consolidated into our subsidiary Vale Fertilizantes, and we launched phosphate rock operations in Peru through our subsidiary, MVM Resources International, B.V. We operate our phosphate activities through our subsidiaries and joint ventures, as indicated in the table below.

Firm	System	Our participation (%) Voting	Total (%)	Our partners
Vale Fertilizantes	Uberaba, Brazil	100	100	
MVM Resources International, B.V	Bayóvar, Peru	51	40	Mosaic, Mitsui & Co .
Vale Cubatão	Cubatão, Brazil	100	100	

Vale Fertilizantes is a company that produces phosphate rock, phosphate fertilizers (P), (i.e. monoammonium phosphate (MAP), phosphate (DAP), triple superphosphate (TSP) and single superphosphate (SSP)) and nitrogen (N) fertilizers (e.g., ammonium nitrate and urea). It is the largest producer of phosphate and nitrogen crop nutrients in Brazil and operates the following phosphate rock mines: Catalão, in the state of Goiás, Tapira and Patos de Minas and Araxá, in the state of Minas Gerais, and Cajati, in Sao Paulo. In addition, Vale Fertilizantes has nine processing plants for the production of phosphate and nitrogen nutrients located in Catalão, Goiás; Araxá and Uberaba, in Minas Gerais; Guará, Cajati, and three plants in Cubatão, in Sao Paulo, and Araucaria, in Parana.

In addition to Vale Fertilizer s phosphate and nitrogen operations, starting in 2010, we started operating the Bayovar phosphate rock, in Peru, which should achieve a nominal production capacity of 3.9 million metric tons per year in 2014. Bayovar has high quality resources with a low phosphate rock production cost.

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Production of Fertilizers (Phosphates)

The following table contains information regarding Vale s phosphate rock production.

Mine	Type	Production for fiscal year ending December 31 2010	2011
		(million metric tons)	
Bayóvar	Open pit	791	2,544
Catalão	Open pit	626	947
Tapira	Open pit	2,068	2,011
Patos de Minas	Open pit	43	44
Araxá	Open pit	1,182	1,231
Cajati	Open pit	545	582
Total		5,255	7,359

The following table contains information regarding Vale s phosphate and nitrogen production.

Product	Production for fiscal year ending December 31 2010	2011
	(million metric tons)	
(6) Monoammonium phosphate (MAP)	898	823
Triple superphosphate (TSP)	788	811
Single superphosphate (SSP)	2,239	2,638
Bicalcium phosphate (DCP)	491	580
(7) Ammonia	508	619
Urea	511	628
(8) Nitric acid	454	468
(9) Ammonium Nitrate	447	458

Potash

Production Process of Fertilizers (Potash)

We conduct potash operations in Brazil at the parent-company level. We lease Taquari-Vassouras, the only potash mine in Brazil (in Rosario do Catete, in the state of Sergipe), from Petrobras Petróleo Brasileiro S.A. The lease, signed in 1991, became effective in 1992 for a period of 25 years, and the parties agreed to extend the agreement for other 30 years.

Production of Fertilizers (Potash)

The following table sets forth information on the production of potash:

Mine	Type	Production for fiscal year ending December 31 2009	2010 (Thousands of metric tons)	2011	Recovery rate (%)
Taquari-Vassouras	Underground	717	662	625	85.7

Market Characteristics of the Fertilizers Market

All potash sales from the Taquari-Vassouras mine are to the Brazilian market. in 2011, our production represented close to 9% of total potash consumption in Brazil. We have a strong presence and long-standing relationships with the major players in Brazil, with more than 60% of our sales allocated to four traditional clients.

Our phosphate products are sold to be used in fertilizer blenders and cooperatives. In 2011, Vale s production represented near 37% of the total phosphate consumption in Brazil, with imports representing a 35% of total supply.

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In the high concentration segment, Vale supplied over 33% of total consumption in Brazil, with products such as monoammonium phosphate (MAP), bicalcium phosphate (DCP) and triple superphosphate (TSP). In the low concentration nutrients segment, Vale s production represented near 49% of total consumption in Brazil.

Competition in the Fertilizers Market

The industry is divided into three major groups of nutrients: potash, phosphate and nitrogen. There are limited resources of potash around the world with Canada, Russia and Belarus being the most important sources. Due to the lack of resources, the high level of investment and the long time for a project to mature, it is unlikely that other regions will emerge as major potash producers. In addition, the potash industry is highly concentrated, with the 10 largest producers representing over 94% of the total global production capacity. While potash is a very scarce resource, phosphate is more available, but all major exporters are located in the northern region of Africa (Morocco, Algeria and Tunisia) and in the United States. The five largest producers of phosphate rock (China, Morocco, United States, Russia and India) hold 76% of global production, of which a maximum of 9% is exported. Meanwhile, products with great added value, such as MAP and DCP are marketed instead of phosphate rock, due to cost-benefit relationship.

Most phosphate rock concentrate is consumed locally by downstream integrated producers, with the seaborne market corresponding to 16% of total phosphate rock production. Major phosphate rock exporters are concentrated in North Africa, mainly through state-owned companies, with the Moroccan OCP Group holding 37% of the total seaborne market. Brazil imports 19% of the total phosphate nutrients it needs in both phosphate fertilizer products and phosphate rock. The phosphate rock imports supply non-integrated producers of phosphate fertilizers products such as single superphosphate (SSP), triple superphosphate (TSP) and monoammonium phosphate (MAP)

Nitrogen-based fertilizers are basically derived from ammonia (NH3), which, in turn, is produced from the nitrogen that is present in the air and in natural gas, making it a nutrient that requires a high level of energy. Ammonia and urea are the main consumables and nitrogen based on nitrogen. The consumption of nitrogen-based fertilizers has a regional profile because of the high cost associated with transportation and storage of ammonia which requires refrigerated and pressurized facilities. Thus, only 12% of ammonia produced in the world is traded. North America is the largest importer, with 35% of the global market. The larger exporters are the Middle East, North Africa and Russia.

Brazil is one of the largest agribusiness markets in the world due to its high production, exportation and consumption of grains and biofuel. It is the fourth-largest consumer of fertilizers in the world and one of the largest importers of phosphates, potash, urea and phosphoric acid. Brazil imports 91% of its potash, which corresponds to 5.2 million metric tons per year of KCL (potassium chloride) in 2011, 44% more than in 2010 from Russian, Belarusian, Canadian and German producers in descending order. In terms of global potash consumption, the United States, Brazil, China and India represent approximately 59% of global consumption, where Brazil is responsible for 13% of global consumption. Our projects portfolios are highly competitive in terms of cost and logistics with these regions.

The fertilizers market has strong demand growth potential, which is anchored in market fundamentals similar to those underlying the global demand for minerals, metals and energy. Rapid per capita income growth of emerging economies causes diet changes towards an increasing intake of proteins that ultimately contribute to boost fertilizer use.

More recently, global output of biofuels has started to boom as they emerged as an alternative source of energy to reduce world reliance on sources of climate-changing greenhouse gases. Given that key inputs for the production of biofuels sugar cane, corn and palm are intensive in the use of fertilizers, they are becoming another major driver of the global demand for crop nutrients.

Logistics Services

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

Firm	Business	Location	Participation of Vale (%) Voting	Total (%)	Vale Partners
Vale	Port, maritime and railroad operations (EFVM and EFC)	Brazil	100	100	
FCA	Railway operations	Brazil	100	99.9	
FNS(1)	Railroad operations	Brazil	100	100	
MRS	Railroad operations	Brazil	45.7	45. 8	CSN, Usiminas and Gerdau

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Firm	Business	Location	Participation of Vale (%) Voting	Total (%)	Vale Partners
CPBS	Maritime terminal operations and ports	Brazil	100	100	
Log In	Maritime terminal operations and ports and international logistic services	Brazil	31.3	31.3	Mitsui & Co., public investors
PTI	Maritime terminal operations and ports	Indonesia	59.2	59.2	Sumitomo, Sumitomo Corporation, public investors
SPRC	Maritime terminal operations and ports	Colombia	100	100	
FENOCO	Railroad operations	Colombia	8.4	8.4	Drummond, Glencore and Coalcorp
Vale Logística Argentina	Port Operations	Argentina	100	100	
SDCN	Maritime and railroad terminal Operations	Mozambique	67	67	(10) GESTRA Gestão e Transportes, SARL; Consórcio de Cabo Delgado, SARL; GEDENA Gestão e Desenvolvimento, SARL; STP Sociedade de Tecnologias e Participações, SARL; Niassa Desenvolvimento, SARL; and Moçambique Gestores, SARL
Vale Logistics Limited	Railroad operations	Malawi	100	100	
Transbarge Navigación	Fluvial System in Paraguay and Paraná rivers (convoys)	Paraguay	100	100	

(1) BNDESPAR owns debentures in FNS which, as of 2018, may be swapped, at the holder s discretion, in FNS ordinary stock representing a minority participation in the company, pursuant to the formula in the debenture contract.

(2) On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

Logistic Services (Railroads)

Brazil

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 to the Tubarão Port, in Vitória, in the 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. Large industrial manufacturers are located in this area and major agricultural regions are also accessible to it. The EFVM railroad has a daily capacity of 342,000 metric tons of iron ore. In 2011, the EFVM railroad carried a total of 69.3 billion ntk (nominal ton kilometer) of iron ore and other cargo, of which 9.4 billion ntk, or 7.4%, consisted of cargo transported for customers, including iron ore for Brazilian customers. The EFVM railroad also carried 1,0 million passengers in 2011. On December 31, 2011, we had a fleet of 322 locomotives and 14,221 wagons at EFVM.

Carajás railroad (EFC). We operate the EFC railroad under a 30-year renewable concession, which expires in 2027. EFC is located in the Northern System, beginning at our Carajás iron ore mines, state of Pará, and extending 892 kilometers to our Ponta da Madeira maritime terminal complex facilities located near the Itaqui Port in the Brazilian state of Maranhão. Its main cargo is iron ore, principally carried for us. It has a daily capacity of 313,970 metric tons of iron ore. In 2011, the EFC railroad carried a total of 98.1 billion ntk of iron ore and other cargo, 2.8 billion ntk of which was cargo for customers, including iron ore for Brazilian customers. EFC also carried 352,928 passengers in 2011. EFC supports the largest capacity train in Latin America, which measures 3.4 kilometers, weighs 42,300 gross metric

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tons when loaded and has 330 cars. On December 31, 2011, EFC also had a fleet of 234 locomotives and 14,261 wagons.

Ferrovia 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 8,023 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 2011, the FCA railroad transported a total of 10.7 billion ntk of cargo for customers. On December 31, 2011, FCA had a fleet of 481 locomotives and 12,413 wagons.

Ferrovia Norte-Sul railroad (FNS). In October 2007, we won the auction for the subconcession for commercial operation for 30 years of a 720-kilometer stretch of the FNS railroad, in Brazil. Since 1989, 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 452-kilometer extension was concluded in December 2008. In 2011, the FNS railroad transported a total of 9 billion ntk of cargo for customers. This new railroad creates 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. On December 31, 2011, FNS had a fleet of 6 locomotives and 375 wagons.

The principal items of cargo of the EFVM, EFC, FCA and FNS railroads are:

- 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 prices 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 prices 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, ANTT (Agência Nacional de Transportes Terrestres).

MRS Logística S.A. (MRS). The MRS railroad is 1,643 kilometers long and links the Brazilian states of Rio de Janeiro, São Paulo and Minas Gerais. In 2011, the MRS railroad carried a total of 151.87 million metric tons of cargo, including 113.51 million metric tons of iron ore and other cargo from Vale.

Colombia

Ferrocarriles del Norte de Colombia S.A. (FENOCO). We own an 8.4% equity stake in FENOCO, a company that owns a concession to restore and operate the Chiriguana - Santa Marta segment (220 kilometers) of the Atlantic Railroad, which connects the Cesar coal-producing region with various ports in the Atlantic Ocean.

Argentina

In August 24, 2010, through our subsidiary, Potasio Rio Colorado S.A., we entered into an agreement with Ferrosur Roca, S.A. for a partial concession, pending government authorization, an administrative concession of a 756 km. railroad track which is important support to the potash Project in Rio Colorado and to our strategy to become a leader in the fertilizer industry. On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

Africa

In line with our decision to invest in the Nacala logistic corridor and continuing with the purchase option of a 51% stake in Sociedade de Desenvolvimento do Corredor do Norte SA (SDCN) in September 2010, in June 2011, Vale acquired an additional 16% stake in SDCN for US$ 8 million, summing a 67% stake in the end of 2011. In December 2011, we signed concession agreements with the Republic of Malaui for a 137 kilometer railroad to be built from Chikawa to Nkaya Junction in Malaui. The acquisition of SDCN and the Malaui concession will allow the Moatize expansion (where we explore coal) and facilitate the creation of a high level logistics infrastructure supporting our operations in Central and East Africa. We will invest in the expanding the capacity of the Nacala logistic corridor through the rehabilitation of existing SDCN railroad tracks in Malaui and in Mozambique and the construction of necessary tracks to carry production from Moatize to the new deep water maritime terminal in Nacala, which will also be built by Vale.

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Logistic Services (Ports and maritime terminals)

Brasil

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. We also use our port and terminals to handle customers cargo. In 2011, 10% of the cargo handled by our port and terminals represented cargo handled for customers.

Tubarão Port. The Tubarão Port, which covers an area of 18 square kilometers, is located near the Vitória Port, state of Espírito Santo, and contains four maritime terminals: (i) the Iron Ore Maritime Terminal, (ii) Praia Mole Terminal, (iii) Terminal de Produtos Diversos, and (iv) Terminal de Granéis Líquidos.

- *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 400,000 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 26,700 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 2011, 102.9 million metric tons of iron ore and iron ore pellets were shipped through the terminal. The iron ore maritime terminal has a storage capacity of 3.2 million metric tons.*

- *Praia Mole Terminal is principally a coal terminal and handled 10.9 million metric tons in 2011.*

- *Terminal de Produtos Diversos handled 5.6 million metric tons of grains and fertilizers in 2011.*

- *Terminal de Granéis Líquidos handled 1.0 million metric tons of liquid bulk in 2011.*

Ponta da Madeira maritime terminal. The Ponta da Madeira maritime terminal is located near the Itaqui Port, state of Maranhão. The terminal facilities can accommodate four vessels. Pier I can accommodate vessels displacing up to 420,000 DWT. Pier II can accommodate vessels of up to 155,000 DWT. Pier I has a maximum loading rate of 16,000 tons per hour. Pier II has a maximum loading rate of 8,000 tons per hour. Pier III, which has two berths and three shiploaders, can accommodate vessels of up to 220,000 DWT on the south berth and 180,000 DWT on the north berth and has a maximum loading rate of 8,000 metric tons per hour in each shiploader. Cargo shipped through our Ponta da Madeira maritime terminal consists principally of our own iron ore production. Other cargo includes manganese ore, copper concentrate and pig iron produced by us and pig iron and soybeans for unrelated parties. In 2011, 216 million metric tons were handled through the terminal. The Ponta da Madeira maritime terminal has a storage capacity of 6.2 million metric tons.

Itaguaí maritime terminal Cia. Portuária Baía de Sepetiba (CPBS). CPBS is a wholly owned subsidiary that operates the Itaguaí terminal, in the Sepetiba Port, state of Rio de Janeiro. Itaguaí s maritime terminal has a pier that allows the loading of ships up to 18 meters of draft and up to 230,000 DWT. In 2011, the terminal loaded 21.5 million metric tons of iron ore.

Guaíba Island maritime terminal. We operate a maritime terminal on Guaíba Island in the Sepetiba Bay, 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 2011, the terminal loaded 37.6 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 2011, 1.1 million metric tons of fuel, agricultural products and steel were shipped through TMIB.

Santos Maritime Terminal (TUF). We operate a maritime terminal through our subsidiary, Vale Fertilizantes, in Santos, Sao Paulo. The terminal has a pier that allows loading of ships of up to 67,000 DWT. In 2011, the terminal loaded 2.6 million tons of ammonia and bulk solids. In July 2011, Vale signed an agreement to create a joint venture with Vale Fertilizantes for purposes of exploring the TUF concession. Under this agreement, we paid R$ 150 million to Vale Fertilizantes for the acquisition of 51% of the joint venture and invested R$ 432 million to fund the TUF investment plan.

Colombia

Sociedad Portuaria Rio Cordoba (SPRC). SPRC is a seaport facility wholly owned by Vale and used to export coal from the El Hatillo operation, as well as other nearby mines. The port is located in Cienaga, on the Caribbean coast of Colombia, in the Magdalena Department, about 67 kilometers from Barranquilla and 31 kilometers from Santa Marta. On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

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Argentina

Vale Logistica Argentina S.A.. Vale Logistica Argentina S.A. (Vale Logistica Argentina) operates a terminal at the San Nicolas port located in the province of Buenos Aires, Argentina, where Vale Logistica Argentina has been authorized to use a 20,000 m² terminal until October 2016 and has executed an agreement with unrelated parties for the use of an additional 27,000 m² terminal. The company expects to handle 1.9 million metric tons of iron ore and manganese through this port in 2012, from Corumbá, Brazil, through the Paraguay and Paraná rivers to be transported to Asian and European markets. The loading rate at this port is 15 thousand tons per day and an unload rate of 11 thousand tons per day.

Indonesia

PTVI. PTVI owns and operates two ports in Indonesia to support its nickel mining activities.

- *The Balantang Special Port is located in Balantang Village, South Sulawesi, and has a pier that can accommodate vessels displacing up to 3,000 DWT, ships of up to 4,000 DWT for bulk dry volume and ships for up to 2,000DWT in general cargo.*

- *The Harapan Tanjung Mangkasa Village is located in Harapan Tanjung Mangkasa Village, South Sulawesi, and has a pier that can accommodate vessels displacing up to 20,000 DWT, and also a terminal that can accommodate fuel tankers with displacing up to 2,000 DWT, with total capacity of 22,000 DWT.*

Logistic Services (Seaborne Transportation)

In addition to seaborne transportation of iron ore to support our iron ore and pellet operations and the transportation and shipping in the fluvial system on the Paraná and Paraguay rivers carried out to support our bulk material transportation operations, we also provide tug boat services.

We continue to develop and operate a low cost fleet of vessels, comprised of company-owned vessels and leased vessels through mid and long-term lease agreements, to support our bulk material businesses. The last two years, we acquired 22 capesize vessels. We have placed orders for the construction of 19 very large ore carriers - VLOCs, each with a 400,000 DWT capacity, and four additional capesize vessels, each with a 180,000 DWT capacity. In the end of 2011, 30 of our ships were operating, with 22 capesize vessels and 4 VLOCs and 4 new capsize vessels with 180,000 DWT. Additionally to our own VLOCs, we commissioned other 16 to shippers to be leased by Vale and dedicated to transport Vale s iron ore products to the Asian market at competitive prices and to increase our market share in China and the global seaborne market. In 2011, 89.9 million metric tons of iron ore and pellets were shipped to China on CFR basis (cost and freight), from which 82.4 metric tons were shipped to China.

On the Paraná and Paraguay fluvial system, we transport iron ore and manganese through an intermediary of wholly-owned subsidiary, Transbarge Navigacion, which fluvially transported 1.7 tons in 2011 and our wholly-owned subsidiary, Vale Logistica Argentina, which loaded 1.5 tons of ore though the port of Saint Nicolas in seaborne vessels in 2011. In 2010, we also purchased two new convoys (two tugboats and 32 barges) which will start operating in 2012.

We also operate a fleet of 28 tugboats in maritime terminals in Brazil, in Vitória, state of Espírito Santo; Trombetas, state of Pará; São Luís, state of Maranhão; and Aracaju, state of Sergipe.

We own 31.3% of Log-In, which conducts our intermodal shipping business operations. Log-In offers port handling and container transportation services, by sea or rail, as well as container storage. It operates owned and chartered ships for coastal shipping, a container terminal (Terminal Vila Velha - TVV) and multimodal terminals. In 2011, Log-In s coastal shipping service transported 153,350 units equivalent to twenty-foot units (teus); and TVV handled 276,245 teus.

Others

Additionally to products and services above,. we also retain other assets, as described below.

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Electric Energy

We have developed our energy assets based on the current and projected energy needs of our mining operations, with the goal of reducing our energy costs and minimizing the risk of energy shortages.

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 electric energy shortages (as experienced in Brazil in the second half of 2001). We currently have nine hydroelectric power plants in operation. The Estreito power plant, the first company-owned hydroelectric plant in the Northern region which began generating power in March 2011. Additionally, in June 2011, Vale acquired 9.0% of the stocks in Norte Energia S.A. (NESA), a company which sole purpose is the deployment, operation, and exploration of the Belo Monte Hydroelectric Plant, in Pará. In 2011, our total installed energy capacity in Brazil was 981 MW. We use the electricity produced by these plants for our internal consumption needs. As a large consumer of electricity, we expect that investing in power projects will help us reduce costs and will protect us against energy price volatility. However, we may experience delays in the construction of certain generation projects due to environmental and regulatory issues, which may lead to higher costs.

Canada

In 2011, our wholly-owned and operated hydroelectric power plants in Sudbury generated approximately 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 56 MW. The output of the plants is limited by water availability, as well as restrictions imposed by a water management plan regulated by the Government of Ontario. Over the course of 2011, the power system operator distributed electricity at a rate of 179 MW to all surface plants and mines in the Sudbury area.

In 2011, diesel generation provided 100% of the electric requirements of our Voisey Bay operations. We have six diesel generators on-site, of which normally only four are in operation, producing an average of 12 MW.

Indonesia

Energy costs are a significant component of our nickel production costs for the processing of saprolitic lateritic ores at PTVI operations in Indonesia. A significant portion of the entire electricity consumption of PTVI s electric furnace power requirements are supplied at low-cost by its three hydroelectric power plants on the Larona River: (a) the Larona plant, which generates an average of 136 MW, and (b) the Balambano plant, which generates an average of 97 MW; and the Karebbe plant, that started operations recently with 90 MW average generation capacity. The Karebbe plant helps reducing the production costs by replacing the oil used in power generation for hydroelectric power, reducing CO2 emissions by replacing non-renewable power generation, as well as helping to increase current nickel production capacity in Indonesia. PTVI has thermal generating facilities of 77 MW, of which 53 MW are generated by 23 Caterpillar diesel generators, with capacity of 1 MW each, five Mirrlees Blackstone diesel generators, and one 24 MW oil burning steam turbine generator fueled with high sulphur levels, located in Sorowako.

Oil and natural gas

The use of natural gas in our energy matrix in Brazil is expected to increase from 2.4 million cubic meters per day (Mm3/day) in 2011 to 11.6 Mm3/day in 2020. In order to mitigate supply and price risks we started investing in natural gas exploration. Since 2007, we have developed an important hydrocarbon prospecting portfolio in the Brazilian coastline and deep water offshore basins. We believe natural gas will play an important role in our future global energy matrix, thanks to lower carbon emissions and higher flexibility regarding energy generation.

Other Investments

Vale owns 50% of capital stock of California Steel Industries (CSI), a producer of flat rolled steel and pipes, located in the United States. The remaining 50% belongs to JFE Steel. CSI expects to end the commission of a second reheating furnace with state-of-the-art environmental technology by the end of the second quarter in 2012, at a cost of US$ 71 million. The second furnace will increase annual capacity to about 2.8 million metric tons of flat steel and pipes.

Vale holds a 26.9% stake in TKCSA, an integrated producer of steel plates located in the state of Rio de Janeiro. The plant was commissioned on the third quarter in 2010, and has an annual production capacity of 5 million metric tons per year and requires 8.5 million metric tons of iron ore and pellets per year, which will be supplied exclusively by Vale.

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We have a 61.5 stake in CADAM S.A. (CADAM) located in the border between the states of Pará and Amapá, in the Amazon region. CADAM produces kaolin for paper coating and it also conducts research into other uses for kaolin products in order to develop a more diversified portfolio. CADAM s reserves are mostly concentrated in the Morro do Felipe open pit mine, in Vitória do Jari, state of Amapá. The beneficiation plant and private port facilities are situated on the west bank of the Jari River, in Munguba, in the state of Pará. CADAM products are sold mainly in the European, Asian and Latin American markets. CADAM gets its electricity from its own thermal power plant. In 2011, CADAM produced 370,969 metric tons of Kaolin.

Until recently, we have been operating a pig iron operation projection in northern Brazil. This operation was conducted through our wholly owned 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 350,000 metric tons of pig iron per year, using iron ore from our Carajás mines in northern Brazil. In February 2012, we started closing our pig iron operations.

e. Key consumables and raw materials:

i. Description of the relationships with suppliers, including whether they are subject to governmental control or regulation, identifying the institutions and applicable legislation

Vale s strategy in relation to its suppliers is to maintain a long term relationship in order to promote partnerships aimed at gains for both parties, through continuous innovation and development and supply of goods and quality services at a compatible cost.

In order to achieve continuous improvement and contribute to advances in the production chain, Vale s management of relationships with suppliers comprises the following steps: (i) supplier classification based on Vale s values, taking into account the identification and analysis of supply risks (environmental, institutional, financial, health and safety); (ii) periodic performance evaluations to ensure compliance with applicable requirements and as defined in the contracting stage, as well as adherence to agreement expectations; and (iii) development and support supplier offer, and (iv) promotion and prospecting new suppliers.

The guidelines and criteria that Vale adopts to evaluate its suppliers are based on environmental legal requirements applicable to suppliers whose operational processes involve the use of natural resources or are potentially polluting or likely to cause environmental degradation. In addition to these legal aspects, Vale s Environmental Management criteria and the principles of its Sustainable Development Policy are considered.

All the contracts involving construction sites / facilities within Vale areas are inspected prior to demobilization to assess compliance with environmental requirements specified in the contract. That evaluation focuses on the environmental quality of the area to verify the existence of potential liability for which the supplier may be responsible.

With regard to recipients of waste generated in Vale production processes, they all are subject to audit by the Department of the Environment and Sustainable Development during their initial approval and periodic revalidation.

The main environmental laws applicable to this process are:

a) Environmental Permit

• Federal Law 6938/81 - National Environmental Policy

• CONAMA Resolution (National Council for the Environment) 237/97

• CONAMA Resolution (National Council for the Environment) 01/86.

• Federal Law 10165/00

• IBAMA Normative Instructions (Brazilian Institute of Renewable Natural Resources) 96/06 and 97/06.

b) Pesticides

• Federal Law 7802/99

• Federal Decree 4047/02

• Law 6360/76 - ANVISA - National Agency for Sanitary Surveillance

c) Transportation of Dangerous Goods

• Decree 96044/88

• ANTT Resolution (National Ground Transportation Agency) 420/02

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d) Radioactive Material

• CNEN Resolution (National Nuclear Energy Council) NE 2.01

• CNEN Resolution (National Nuclear Energy Council) NE 5.02

e) Explosive Materials

• Federal Decree 3665/00

f) Controlled Chemicals

• Ministry of Justice Decree 1274/2003.

ii. Potential dependence on few suppliers

The main consumables purchased by Vale in 2011 were: (i) materials and other equipment, including tires, conveyor belts, parts and components, mining equipment, railroad gear, industrial installations and maintenance workshops, which accounted for 19% of cost of goods sold (COGS) in 2011, (ii) fuel and gas, which contributed 9.5% to COGS, and (iii) electricity with 4.1% of COGS. Moreover, the rendering of various services, such as operational services, maintenance of equipment and facilities, and transportation services represented 17% of COGS in 2011.

The main pieces of equipment purchased by Vale are Off-road trucks, Loaders, Auxiliary trucks, Tractors, Diggers, Wagons, and other mining equipment. The largest suppliers of these types of equipment for Vale in 2011 were Letourneau, Bucyrus International Inc., Sotreq CV, Amsted-Maxion and Komatsu, accounting jointly for 5% of total purchases of the company.

Fuel consumption is quite intense, especially in operations and transport of iron ore, located in Brazil. The main supplier of this consumable item for Vale is BR Distribuidora S.A., which accounted for approximately 75% of the purchase of fuels by Vale in 2011. In 2011, Vale used 56% of the power from self-production and the remaining portion was consumed through purchase of power in the market, which main suppliers, Cemig, Eletronorte, and Tractebel, correspond to 74% of purchases of power.

In 2011, the 10 largest Vale consumer, equipment and service providers represented 20% of Company s total purchases.

iii. Possible volatility in their prices

Vale has some contracts where prices are pegged to market indexes (parametric formulas) and therefore subject to these volatilities. Prices can also vary in relation to historical prices depending on offer versus demand in the market at the time of competition.

7.4 Customers that accounted for more than 10% of total net revenues

In 2011, no customers accounted for more than 10% of Vale s net revenue.

7.5 Relevant effects of state regulation on the Company s activities

a. Need for government authorization for the exercise of activities and long-standing relationship with the government to obtain such permits

We are subject to a wide range of governmental regulations in all jurisdictions where we operate worldwide. The following discussion summarizes the regulations that have the most significant impact on our operations.

Mining rights

In order to conduct mining activities, we generally require some form of governmental permits, which differ in form depending on the jurisdiction but may include concessions, licenses, prospecting applications, permits, releases or franchises (all of which we refer to below as concessions). Some concessions have indefinite duration, but many have specific expiration dates, and may not be renewable. The legal and regulatory regime governing concessions differs among jurisdictions, often in important ways. For example in many jurisdictions, including Brazil, mineral resources belong to the state and may only be extracted under concession. In other jurisdictions, including Canada, a substantial part of our mining operations is conducted pursuant to leases, often from government agencies.

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The table below summarizes our principal mining concessions and other similar rights. In addition to the concessions described below, we have exploration licenses covering 7.03 million hectares in Brazil (out of which, 4.39 are already under application) and 18.2 million hectares in other countries.

Location	Concession or other right	Approximate area covered (in hectares)	Expiration date
Brazil			
	Exploration Concession (1)	650,810	Undetermined
Canada			
Ontario	Exploration Concession (total)	265,804	2011-2032
	Mineral Lease	20,994	2012-2032
	Patented Mineral Rights	82,969	Non-existent
	Mining License of Occupation	3,075	Undetermined
Manitoba	Order in Council Leases	109,043	2020-2025
	Potash Leases	6,533	2016-2030
	Mineral Lease	4,854	2013
	Patented Mining Claims	378	Non-existent
Newfoundland and Labrador	Mining Lease	1,599	2027
Saskatchewan	Potash Leases	27,404	2029-2032
	Petroleum and Natural Gas Leases	8,955	2013-2016
Indonesia			
	Employment Agreement (*Contract of Work*)(1)	190,510	2025
Australia			
	Exploration Concession (*Mining concessions*)	26,917	2011-2041
New Caledonia			
	Exploration Concession (*Mining concessions*)	21,269	2016-2051
Peru			
	Exploration Concession (*Concesión de Exploración*)(3)	187,617	Undetermined
Colombia			
	Exploration Concession El Hatillo	9,638	2028
	Exploration Concession Cerro Largo Sur	1,092	2032
Argentina			
	Exploration Concession (*Manifestación de Descubrimiento*)	88,707	Undetermined
Chile			
	Exploration Concession (*Concesión de Explotación*)	58,903	Undetermined
Zambia			
	Exploration Concession (*Mining Concessions*) (4)	68,550	2012-2033
DRC			
	Exploration Concession (*Mining Concessions*) (4)	9,200	2039
China			
	Exploration Concession (*Mining Concessions*) (4)	12,383	2034
Mozambique			
	Exploration Concession (Mining Concession)	23,780	2032
Guinea			

Exploration Concession (Mining Concession)	102,400	2035

(1) Includes Exploration Requirements

(2) Work Contract of Vale s mines in Indonesia expire in 2025. Meanwhile, according to the new Mining Law, Vale will be entitled to request, at least, a 10 year extension.

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(3) According to Peruvian mining law, there is only one type of license. The above represents merely licenses with exploration concession.

(4) 50:50% joint venture with African Rainbow Minerals Limited (ARM).

(5) *Joint Venture* with Henan Longyu Energy Resources Co, .Ltd. In this entity, Vale is a minor shareholder with 25% interest

(6) On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.

Many concessions impose specific obligations on the concessionaire governing such matters as how operations are conducted and what investments are required. Our ability to maintain our mineral rights depends on meeting these requirements, which often involve significant capital expenditures and high operating costs.

Regulation of mining activities

Vale is subject to numerous regulations, which differ according to the jurisdiction in which it operates. Operations depend on legislation and regulations that apply to mining activities, which include in many countries, state and local laws, as well as federal laws. Moreover, most of the Company s concessions, especially for large operations, impose additional obligations on the concessionaire.

The jurisdictions in which Vale operates generally have government regulatory agencies responsible for granting mining licenses and supervising compliance with mining laws and regulations. For example, in Brazil, the exploration activities are supervised by the National Department of Mineral Production (ANP), an entity connected to the Ministry of Mines and Energy.

Changes in mining legislation may have a significant effect on Vale operations. Among the jurisdictions in which the Company has operations, there are several changes in legislation proposed or recently adopted. Among them we can mention:

- The Brazilian government plans to propose changes to the Mining Code. Should these changes be adopted, they may have important implications on local operations or require investments.

- In Indonesia, a new mining law became effective in January 2009, introducing a new licensing regime and determining renegotiation of some terms in the mining agreement with the government of Indonesia. Regulations implementing the new mining law have been gradually issued by the government and other regulations are expected. The trend is to have a more regulated environment in the country, including the establishment of a benchmark price for nickel products that were not regulated. Additionally, regulations requiring mining companies to process commodities prior to exporting and the obligation of foreign companies to sell part of their share in national companies, were recently issued. The Government of Indonesia issued a list of nine main items that will be adjusted in existing employment agreements, including fiscal adjustments and non-fiscal obligations of State revenue, domestic added value requirements, the term of any extension, application of authorization form for any extension, priority in hiring locals and restrictions to the use of mining services from associate/affiliates. PTVI submitted to the government its position regarding these nine items, but no discussion with the government began in 2011. PTVI continues to monitor evolvements of the Mining Law and its implications, evaluating impacts on current and future operations in Indonesia. Until all regulations are issued, it is not possible to determine how and to what extent PTVI Employment Agreement and its operations will be affected.

- In New Caledonia, a mining law was passed in March 2009 which states that for new mining projects, formal authorization is required, rather than a simple declaration. Vale s license application (which replaces the 2005 declaration) should be submitted by April 2012 and should be accepted no later than April 2015. Vale believes it is unlikely that the authorization application will be rejected, but there is the risk of new terms.

- In Guinea, a new Mining Code adopted in 2011 requires that the government holds 15% in all mining projects. Additionally, the new code determines that the applicant for a new mining concession should present a retrocession plan where 50% of the explored area during exploration returns to the government.

- In Mozambique, the Ministry of National Resources is following the trend in other African countries proposing a new mining code with more detailed terms that reiterate the rights of local communities, give preference to national services and establish the possibility of having government participation in case of strategic projects, which definition is still pending.

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Environmental regulations

Vale is also subject to environmental regulations that apply to the specific types of mining and processing activities we conduct. The company requires approvals, licenses or permits from governmental authorities to operate, and in most jurisdictions the development of new facilities requires submission of environmental impact statements for approval and often to make additional investments to mitigate environmental impacts. The company must also operate its facilities in compliance with the terms of the approvals, licenses or permits. The Company is adopting measures to make the licensing process more efficient, including better integration between environmental and project development teams, the development of the Best Practices Guide for Environmental Licensing, deployment of highly qualified expert teams, better integration with environmental regulators and the creation of an Executive Committee to issue license-related internal decisions.

Environmental regulations affecting company operations relate, among other matters, to emissions into the air, soil and water; recycling and waste management; protection and preservation of forests, coastlines, natural caverns, watersheds and other features of the ecosystem; water use; and decommissioning and reclamation. In many cases, the mining concessions or environmental permits under which the company operates impose specific environmental requirements. Environmental regulations can sometimes change and ongoing compliance can require significant costs for capital expenditures, operating costs, and costs for recovery of the damaged area. For example, in Brazil, a suit challenging a Brazilian environmental decree that permits mining in certain subterraneous areas may adversely affect our ability to conduct some mining operations or even reserves.

Environmental legislation is becoming stricter worldwide, which could lead to greater costs for environmental compliance. For instance, if the company is required to modify installations, develop new operational procedures or purchase new equipment, environmental compliance costs could increase. In particular, there is an expectation for heightened attention from various governments to reducing greenhouse gases. Some important regulatory environmental initiatives are described below, but the Company does not know if it will be necessary to carry out operational and capital investments to observe such changes or the effect it will have over our businesses, financial results and cash flow in those operations:

- *Vale operations in Canada and at PTVI in Indonesia are subject to air emission regulations that include, among other things, sulfur dioxide (SO2), particulates and metals. In Canada, the Company makes significant capital expenditures to ensure compliance with these emissions standards, related, without limitation, to SO2, particulate and metals. In Indonesia, PTVI and the Ministry of Environment agreed upon a plan to reduce SO2 emission, which is under deployment, and which conclusion is expected for 2013.*

- *The Canadian government diminished its efforts to legislate Greenhouse Gas (GHG) emissions. The three provinces where the Company operates, Ontario, Manitoba, and Newfoundland present limited progress in the definition of GHG emissions goals, except for Manitoba, where a provincial goal was set based on 1990 levels. Laws published by the Manitoba government will not impact Company operations. The Ontario government issued a legislation that determines the annual report on GHG emissions. Ontario and Manitoba provinces are considering negotiation schemes for emissions to limit greenhouse gases emissions. . The three provinces launched a public consultancy along with several interested parties with regards to climate change initiatives and also focused on implementation strategies.*

- *In Canada, a number of studies have been completed or are in progress in Sudbury and Port Colborne related to contamination of soil and water from past and current activities. The company is taking steps, in partnership with other stakeholders, to remediate the environmental impact of activities.*

- *The Australian government recently introduced a carbon pricing scheme that initially will operate as a carbon tax, with fixed (but increasing) price, that will eventually migrate into a limit price and a trade scheme after three years. The scheme begins on July 01, 2012 and will have impact on Vale Australia operations.*

- *In October 2009, Indonesia adopted new legislation on Environmental Protection and Management. The law sets out a broad regulatory structure and provides that many important details will be clarified in later implementing regulations, which the law provides should be issued within one year of its effective date.*

- *In December, 2010, Brazil adopted the carbon emission law (National Policy on Climate Change) which contemplates specific carbon emission limits to be set forth by the end of 2011) and that should be implemented before 2020. The law sets forth a voluntary commitment to reduce greenhouse gas emissions in Brazil between 36.1% and 38.9% before 2020, based on levels projected for 2020, and several regulated sectors, such the steel, forest, agriculture and energy industry to create projects to reduce greenhouse emissions. By the end of 2012, the government plans to publish regulations setting specific limits on carbon emissions for other sectors of the economy, including the mining and fertilizing sector. The Ministry of Mines and Energy, with the Brazilian Mining Institute IBRAM, presented the plan for the mining sector in December 2011.*

- *As part of the Global Report Initiative (GRI) that sets forth an information system for economic, environmental and*

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social sustainability, the Company launched a Sustainable Action Plan (SAP) in 2008. SAP leas with hydric resources, residue treatment and elimination, emissions and power related issues that are also associated with variable compensation of all employees. The result of SAP indicators offer the Company relevant data for the decision making process related to investments required to improve processes, as well as exploration of its potential.

Royalties and other taxes on mining activities

Many jurisdictions force the company to pay royalties or fees on revenues or profits obtained from the extraction and sale of mineral products. These payments are an important element in the economic development of mining operations. The following royalties refer to some of the jurisdictions in which the company has its largest operations:

- *In Brazil, we pay a royalty known as the CFEM (Compensação Financeira pela Exploração de Recursos Minerais or Financial Compensation for Exploration of Mineral Resources) on the revenues from the sale of minerals we extract, net of taxes, insurance costs and costs of transportation. The current annual CFEM rates on Company products are: 2% for iron ore, kaolin, copper, nickel, fertilizers and other materials; 3% on potash and manganese ore; and 1% on gold. The Brazilian government is considering changes in the CFEM regime. These changes should be incorporated into the proposal by DNPM and should be submitted to the approval of the National Congress. We are currently engaged in several administrative and legal proceedings. For further information on the above proceedings, see Item 4 in this Reference Form.*

- *The Canadian provinces in which we operate charge us a tax on profit from mining operations. Profit from mining operations is generally determined by reference to gross revenue from the products of mine output and deducting certain costs, such as mining and processing costs and investment in processing assets. The statutory mining tax rates are 10% in Ontario; up to 17% in Manitoba; and a combination of mining fee and royalties equal to 16% in Newfoundland and Labrador. The mining fee paid is deductible for income tax purposes.*

- *In Indonesia, our subsidiary PTVI pays royalties on nickel production on the concession area and has made certain other commitments. The payment of royalties based on sales volume (US$78 per metric ton of nickel, and US$ 140 or US$ 156 per metric ton of contained cobalt, based on overall production,). In 2011, the payment of royalties corresponded to 0.44% of the revenue from the sale of matte nickel, while the annual average of royalties paid for the 2008-2011 period corresponded to 0.5% of the revenue from the sale of matte nickel.*

- *In Australia, royalties are paid on the revenues from sales of minerals. In Queensland, 7% of the amount (net of freight and port fees) up to A$100 per ton and 10% thereafter. In New South Wales, it is the percentage on the production s total revenue (revenue net of specific expenses and fees) minus allowed deductions, equal to 6.2% for deep underground mines, 7.2% for underground mines, and 8.2% for open pit mines.*

- *The Australian government introduced a new mineral resource rent tax or MRRT , to be in force in July 2012. . The MRRT will be applied on the profits generated from the exploration of coal and iron ore resources in Australia. The tax will have an effective fee of 22.5% of the taxable profits and will be deductible for income tax purposes. The difference between the MRRT and royalties paid to each of the state governments is that royalties were calculated based on the volume and value of resources, whereas MRRT is calculated on profits. However,* *companies will receive a credit for state royalties where MRRT is paid.*

- *In December 2011, the states of Pará and Minas Gerais created a new fee incurring on mining production (Mineral Resources Supervision Fee), or TFRM, in effect in April 2012. For 2012, TRFM will be (a) R$ 6.906 per ton of mineral extracted in the state of Pará, and (b) R$ 2.3291 per ton of mineral transferred or sold in the state of Minas Gerais. Industry associations believe that the TFRM is unconstitutional and plan to initiate judicial measures questioning applicability of such laws.*

Regulation of other activities

In addition to mining and environmental regulation, we are subject to comprehensive regulatory regimes for some of our other activities, including rail transport, electricity generation, and oil and gas. We are also subject to more general legislation on health and safety, safety and support of communities near mines, and other matters.

Brazilian railroad business is subject to regulation and supervision by the Brazilian Ministry of Transportation and the transportation regulatory agency (Agência Nacional de Transportes Terrestres), or ANTT, and operates pursuant to concession contracts granted by the federal government. The concession contracts 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, EFC and FNS 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.

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The MRS concession contract provides that each shareholder can only own up to 20% of the voting capital of the concessionaire, unless determined by ANTT. As a result of our acquisitions of CAEMI and Ferteco, 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. Vale continues to have some voting rights through the shareholdings of a subsidiary.

The railroad concession contracts executed by the company 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. We also own the subconcession for commercial operation for 30 years of a 720-kilometer segment of the FNS railroad, in Brazil. This concession expires in 2037.

In 2011, ANTT published resolutions that: (a) increased the right of passage obligations and confirmed the possibility of having non-concessionaires investing in railroads to serve the increasing demand; (b) increased concessionaire obligations and consumer rights; (c) redefined the methodology to calculate the size of production goals; and (d) established a mechanism to allow that the ANTT decides on disputes about railroad access between concessionaires or concessionaires and third parties. The National Association of Railroad Carriers (ANTF) appealed against the resolutions, arguing infringement of current concession agreements. Additionally, concessionaires have argued with ANTT technical and economic aspects of the new rules, for purposes of clarifying their content, interpreting and applying them according to current law and concession agreements, and protecting concessionaire investments.

In January 2012, ANTT started a public consultation process on the Methodology and Tariff Review of Public Service Concessions of Railroad Transportation to reduce maximum limits for fees adopted by concessionaires, which could affect some of Vale agreements. The Company sent the contribution to the public consultation by April 20, 2011 and continues to work with ANTT to ensure the future regulation complies with conditions set forth on the date of signature of the concession agreements and sector legislation.

According to the approval in 2006 of the acquisition of Vale Canada, the company made a number of undertakings, expiring in October 2011, to the Canadian Minister of Industry under the Investment Canada Act. The company believes to be substantially in compliance with these undertakings, which include: locating our global nickel business in Toronto, Canada; enhancing investments in a number of areas in Canada; and honoring agreements with provincial governments, local governments, labor unions and aboriginal groups.

Some of our products are subject to regulations applicable to the marketing and distribution of chemicals and other substances. For example, the European Commission has adopted a European Chemicals Policy, known as REACH (Registration, Evaluation, and Authorization of Chemicals). Under REACH, manufacturers and importers will be required to register new substances prior to their entry into the European market and in some cases may be subject to an authorization process. A company that fails to comply with the REACH regulation could face restrictions to commercialize its products in Europe. The Company has complied with registration requirements for the substances imported into or manufactured in the EU in 2011 and continues to take measures to manage exposure to the authorization process.

b. Environmental policy of the Company and costs incurred for compliance with environmental regulation and, where appropriate, other environmental practices, including adherence to international standards of environmental protection

Vale s Environmental Management System determines the development of effective monitoring, conservation, environmental protection and rehabilitation, aimed at ensuring the maintenance and recovery of ecosystems in which it operates. The Company s system is based on ISO 14001

(*International Organization for Standardization*) guidelines, to which it adds additional features that make up Vale s standard of environmental quality. Aiming to assess the management and ensure the development of performance, various operations are submitted by Vale, periodically, to internal and external audits.

Listed below are units of Vale with ISO 14001:

- *Iron ore and pellets (all iron ore mines and the Tubarão and Fábrica pelletizing plants);*
- *Manganese and ferroalloys (Azul, Conselheiro Lafaiete, and Morro da Mina, Vale Manganèse France and Vale Manganese Norway AS);*
- *Nickel (Vale Europe Limited, Taiwan Nickel Refining Corporation, Vale Japan Limited, Korea Nickel Co. and Vale Nickel Dalian Co. Limited (VNDC));*
- *Port of Tubarão;*
- *Kaolin (CADAM); and*

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- *Copper (Sossego).*

In many cases, Vale operates with higher levels of environmental requirements than is legally required. To run the Environmental Management System, Vale disbursed US$ 17 million in the last three years.

Vale systems and control equipment, such as the storage and spraying of water on the roads, besides the use of chemical powder inhibitors or installation of filters and electrostatic precipitators in facilities, are complemented by comprehensive monitoring systems and control software.

The control of air emissions is one of Vale s main goals. Besides complying with all legal requirements, the Company continuously evaluates the air quality of its facilities and its effects on surrounding communities, and makes the necessary investments to improve air quality.

Regarding improvement of water quality, Vale makes every effort to treat and control pollutants discharged into the sea, rivers and other water bodies, and runs a comprehensive water recycling program for water used in its operations. The Company is researching into new processes and technologies to improve the use, recycling and treatment of water. Through its comprehensive system of waste treatment and removal of debris, Vale seeks greater control of generation and disposal of residues in order to create opportunities for reuse, recycling and reducing waste.

Vale s guidelines for decommissioning mines describe a complete set of guidelines, including practical and technical procedures to be followed during closure of the mines. The handbook outlines the procedures for monitoring and recovery of degraded areas, the main steps and sequence to be obeyed during the closure and other liabilities that may result from the closure of the mine. The manual also provides standardized basic criteria, based on the guidelines of the CVM and the SEC (FAS 143), for cost evaluation, budgeting for the present, future decommissioning and restoration.

The waters of the mine, waste dams and waste rock deposits are classified according to a risk matrix involving all the parameters related to construction, operation and safety control. A complete audit program has been established which can evaluate the stability of these structures and provide elements for the preparation, if necessary, of plans for corrective or preventive action.

Vale s environmental program also includes restoration projects aimed at (i) protecting the soil against erosion, (ii) building impact reducers between their activities and the communities in surrounding areas and (iii) maintaining biodiversity through recovery of the ecosystem. The Company has partnerships with universities and governmental research agencies to conduct extensive research on methods of protecting the ecosystem.

Vale conducts extensive studies on fauna and flora, to minimize the environmental risks associated with investments in potentially sensitive areas. It takes part in the conservation of Brazilian ecosystems, leaving some land untouched and protecting some private land. It also participates in the preservation of federal lands located in areas of environmental conservation, called protected areas and develops and supports research in the field of biodiversity. Over the past 25 years the Company has offered support to indigenous communities in education, health, infrastructure development and technical assistance to improve the quality of life and self-sufficiency of these communities.

c. Reliance on patents, trademarks, licenses, concessions, franchises, contracts, royalties for the development of relevant activities.

Vale operates mines, railways, ports, marine terminals and power plants, in general, through concessions granted by federal and state governments in several countries. Accordingly, the Company depends greatly on the concession of operating licenses for such assets for the development of their activities. For more information on permits and concessions held by the Company, see item 9.1 b of this form.

Furthermore, the Company believes its many patents are fundamental in achieving the goals of research and technological development and its major brand Vale is of great importance for the development of their activities.

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7.6 Relevant revenue from abroad

Fiscal year December 31, 2011

	Revenue (R$ thousands)	**% In total net income of the Company**
Revenue from customers attributed to:		
Brazil	18,006,994	17.1%
China	33,432,242	31.7%
Japan	12,377,471	11.7%
United States	4,034,124	3.8%
Germany	6,645,987	6.3%
Canada	2,364,052	2.2%
South Korea	4,587,188	4.3%
Taiwan	2,367,508	2.2%
England	2,419,657	2.3%
France	1,402,204	1.3%
Belgium	772,949	0.7%
Other countries	17,110,087	16.2%
Total income from abroad	**87,513,469**	**13.2%**

7.7 Effects of foreign regulations on activities

For information on the effects of foreign regulations on our activities see item 7.5 in this Reference Form.

7.8 Relevant long-term relationships

Yes, my company publishes a sustainability report available at http://www.vale.com >sustentabilidade >relatorio-de-sustentabilidade.

7.9 Other information the issuer deems relevant

No further relevant information about this item 7.

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Item 8

8.1 -Description of the Economic Group

a. direct and indirect controllers

Valepar S.A. is a holding company that has direct control of Vale, with a participation of 32.4% of the capital stock. Valepar is controlled by: (i) Litel Participações S.A., a holding company (48.79%); (ii) Bradespar S.A., a holding company (17.00%); (iii) Mitsui & Co., Ltd, a trading company (15.00%); (iv) BNDES Participações S.A., a holding company (9.79%); and (v) Eletron S.A., a holding company (0.02%).

Litel Participações S.A. is a holding company controlled by BB Carteira Ativa Portfolio (78.41%), an investment fund, administered by BB Gestão de Recursos Distribuidora de Títulos e Valores Mobiliários S.A., whose shares are 100% owned by Previ Caixa de Previdência dos Funcionários do Banco do Brasil (Previ). Previ is a closed, private pension fund and its participants are employees of the Banco do Brasil and of Previ itself. Previ management is divided between the Advisory Board and the Board of Directors. The Board of Directors is composed of six members: President, Director of Administration, and Directors for Investments, Social Security, Share Participation, and Planning. The Advisory Board is composed of six members and their substitutes. Three are elected by the participants and users of the pension fund, and three others are indicated by the Banco do Brasil. According to the Charter of Previ, the Advisory Board is the highest body of the organizational structure of Previ and responsible for defining the general policy for the administration of the entity.

Bradespar S.A. is a holding company controlled by: (i) Cidade de Deus Companhia Comercial de Participações S.A., a holding company (12.93%); (ii) NCF Participações S.A., a holding company (9.33%); and (iii) [sic] Fundação Bradesco, a non-profit entity with the objective of providing education and professional training for children, youths, and adults (5.20%). The Cidade de Deus Companhia Comercial de Participações S.A. is controlled by: Nova Cidade de Deus Participações S.A., a holding company (44.91%); Fundação Bradesco (33.20%), and Mmes. Lina Maria Aguiar (8.51%) and Lia Maria Aguiar (7.01%). NCF Participações S.A. is controlled by: Fundação Bradesco (60.41%); Cidade de Deus Companhia Comercial de Participações S.A. (39.51%); and Nova Cidade de Deus Participações S.A. (0.08%). Nova Cidade de Deus Participações S.A. is controlled by Fundação Bradesco (73.93%) and BBD Participações S.A. (26.07%). BBD Participações S.A. has its capital dispersed among multiple shareholders, with Mr. Lazáro de Mello Brandão the largest of them, with 3.56% of the total share capital. In accordance with the terms of the Statute of the Fundação Bradesco, all Directors of Bradesco, members of the Board of Directors and directors of departments, as well as all directors and leaders of Cidade de Deus Companhia Comercial de Participações S.A., act as members of the Fundação Bradesco board of trustees, known as the Mesa Regedora.

Mitsui & Co., Ltd is a trading company, headquartered in Japan, which has its capital spread among many shareholders, but whose largest shareholders are the following Japanese banks: (i) the Master Trust Bank of Japan, Ltd. (trust account) with 8.84% of the share capital; and (ii) Japan Trustee Services Bank, Ltd. (trust account) with 7.17% of the share capital.

BNDES Participações is a holding company 100% owned by Banco Nacional de Desenvolvimento Econômico e Social (BNDES). BNDES is a public company endowed with legal personality under private law, whose shares are 100% owned by the Federal Government.

Eletron S.A. is a holding company controlled by Opportunity Anafi Participações S.A. (99.98%), a holding company controlled by Belapart S.A. (31.60%), Opportunity Holding FIP (36.80%), and Valetron S.A. (31.60%). Belapart S.A. and Valetron S.A. [sic] are corporate holding companies controlled by Ms. Verônica Valente Dantas, who owns 50.7% of the total share capital of each of the above-mentioned companies. Opportunity Holding FIP is an equity investment fund with the Fund Manager, Mr. Marco Nascimento Ferreira, responsible for its investment decisions.

b. subsidiaries and affiliates

c. participation of the Company in companies of the group

Vale controls or holds relevant participation, under the corporate law in force and according to the case, in the following companies (for a detailed description of the subsidiaries and affiliates of the Company which carry out relevant activities for the business of Vale, see Item 9 of this Reference Form):

Aceros Del Orinoco S.A

Aços Laminados do Pará S.A. ALPA

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Aegis Indemnity Limited

Anyang Yu Vale Yongtong Pellet Co., Ltd.

Associação Brasileira dos Investidores em Auto Produção de Energia ABIAPE

Associação Instituto Tecnológico Vale ITV

Associação Itakyra

Associação Memorial Minas Gerais Vale

Associação Museu Ferroviário da Vale do Rio Doce

Associação Vale para Desenvolvimento Sustentável Fundo Vale

Auracária Nitrogenados S.A

Australian Coal Inter Holding (NL) I B.V

Balderton Trading Corporate

Baovale Mineração S.A.

Belcoal Pty Ltd

Belvedere Australia (BP) PTY Ltd

Belvedere Coal Management Pty Ltd

Belvedere JV (Unincorporate)

Biopalma da Amazônia S.A - Reflorestamento, Indústria e Comércio

Bowen Central Coal JV (Unincorporate)

Bowen Central Coal Pty Ltd. - (ACN107 198 676)

Bowen Central Coal Sales Pty Ltd. - (ACN 107 201 230)

Broadlea Coal Management Pty Ltd. - (ACN 104 885 994)

Broadlea JV (Unincorporate)

Caemi Holding GmbH

California Steel Industries, Inc.

Camberwell Coal Pty Ltd. - (ACN 003 825 018)

Canico Resources Corp.

Carborough Downs Coal Management Pty Ltd. - (ACN 108 803 461)

Carborough Downs Coal Sales Pty Ltd - (ACN 108 803 470)

Carborough Downs JV (Unincorporate)

Central Eólica Garrote Ltda

Central Eólica Santo Inácio III Ltda.

Central Eólica Santo Inácio IV Ltda.

Central Eólica Santo Inácio V Ltda.

Central Eólica Santo Inácio VI Ltda.

Central Eólica São Raimundo Ltda.

CI Vale Colombia SAS

Charlotte, Ltd

Charlotte Unit Trust

CMM Overseas S.A

Compagnie Minière Trois Rivières

Companhia Coreano-Brasileira de Pelotização KOBRASCO

Companhia de Maracás S.A

Companhia Ferro-Ligas do Amapá S.A. - CFA

Companhia Hispano-Brasileira de Pelotização HISPANOBRAS

Companhia ítalo-Brasileira de Pelotização ITABRASCO

Companhia Nipo-Brasileira de Pelotização NIBRASCO

Companhia Paulista de Ferro-Ligas- CPFL

Companhia Portuária Baía de Sepetiba CPBS

Companhia Siderúrgica Ubu CSU

Companhia Usina Tecpar

Compañia Minera Andino-Brasileira Ltda CMAB

Compañia Minera Miski Mayo S.A.C.

Consórcio AHE Porto Estrela

Consórcio BM-ES-21

Consórcio BM-ES-22-A

Consórcio BM-ES-27

Consórcio BM-PAMA-9

Consórcio BM-PAMA-10

Consórcio BM-PAMA-11

Consórcio BM-PAMA-12

Consórcio BM-S-48

Consórcio BT-PN-2

Consórcio BT-PN-3

Consórcio SF-T-80

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Consórcio SF-T-81

Consórcio SF-T-82

Consórcio SF-T-83

Consórcio SF-T-93

Consórcio Candonga

Consórcio Capim Branco Energia

Consórcio da Usina Hidrelétrica de Aimorés

Consórcio da Usina Hidrelétrica de Funil

Consórcio da Usina Hidrelétrica de Igarapava

Consórcio de Rebocadores da Baía de São Marcos

Consórcio de Rebocadores da Barra dos Coqueiros

Consórcio Estreito Energia - CESTE

Consórcio Gesai - Geração Santa Isabel

Consórcio Machadinho

Consórcio Railnet

Consórcio Tup Mearim - Granéis Sólidos

Copperbelt (B) Inc.

Corredor do Desenvolvimento do Norte S.à.r.L

CPP Participações S.A

CSP - Companhia Siderúrgica do Pecém

Cubatão Fertilizer B.V

CVRD Venezuela S.A

Docepar S.A.

Eagle Downs Coal Management PTY Ltd

Ellensfield Coal Management Pty Ltd. - (ACN 123 542 754)

Empreendimentos Brasileiros de Mineração S.A.   EBM

Empresa de Mineração Curuá Ltda.

Exide Group Incorporated

Ferrovia Centro-Atlântica S.A. FCA

Ferrovia Norte Sul S.A. - FNS

Ferteco Europa S.à.r.l

Fertilizantes Participações S.A

Florestas Rio Doce S.A. FRDSA

Fortlee Investiments Limited

Fosbrasil S.A

Fundação Caemi de Previdência Social

Fundação Estação do Conhecimento Moçambique

Fundação Vale

Fundação Zoobotânica de Carajás FZC

GEVALE Indústria Mineira Ltda.

Glennies Creek Coal Management Pty Ltd. - (ACN 097 768 093)

Glennies Creek JV (Unincorporate)

Goro Funding, LLC

Henan Longyu Energy Resources Co. Ltd. Yongcheng

IFC - Indústria de Fosfatados Catarinense Ltda

Inco Australia Management Pty Ltd.

Infostrata S.A.

Instituto Ambiental Vale IAV

Integra Coal JV (Unincorporate)

Integra Coal Operations Pty Ltd. - (ACN 118 030 998)

Integra Coal Sales Pty Ltd. - (ACN 080 537 033)

Internacional Iron Company. Inc IICI

Isaac Plains Coal Management Pty Ltd. - (ACN 114 277 315)

Isaac Plains Coal Sales Pty Ltd. - (ACN 114 276 701)

Isaac Plains JV (Unincorporate)

Kaolin Overseas Ltd.

Kaserge Serviços Gerais Ltda.

Kasonta-Lupoto Mines S.P.R.L Kaluminas

Kasonta (B) Inc.

Katanga (B) Inc.

Katanga Holdings Zambia Ltd

Kobrasco International Trading Co. Ltd. KOBIN

Konnoco (B) Inc.

Konnoco Holdings Zambia Ltd

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Konnoco Zambia Ltd

Korea Nickel Corporation

Log-in Logística Intermodal S.A.

Log-in Mercosur S.R.L

Lukali Holdings (B) Inc.

Machadinho Energética S.A. MAESA

Maitland Main Collieries Pty Ltd. - (ACN 000 021 652)

MBR Overseas Ltd.

Millberg Holdings Zambia Ltd

Minas da Serra Geral S.A. MSG

Mineração Corumbaense Reunida S.A. MCR

Mineração Dobrados S.A. Indústria e Comercio

Mineração Guanhães Ltda.

Mineração Guariba Ltda.

Mineração Japurá Ltda.

Mineração Manati LTDA

Mineração Mato Grosso S.A. MMT

Mineração Naque S.A.

Mineração Ocirema Indústria e Comércio Ltda

Mineração Paragominas S.A.

Mineração Rio do Norte S.A. MRN

Mineração Urucum Ltda

Mineração Zarzuela Ltda

Minerações BR Holdings GmbH

Minerações Brasileiras Reunidas S.A. MBR

Minérios Metalúrgicos do Nordeste S.A. MMN

Monticello Insurance Limited

MRS Logística S.A

MS Empreendimentos e Participações Ltda MSEP

MSE - Serviços de Operação, Manutenção e Montagem Ltda

MSL Minerais S.A.

MSL Overseas Ltd

Multiplex Resource (Kazakhstan) Ltd. - MRK

MVM Resources International B.V

Mwambashi Holdings Zambia Ltd

Mystery Lake Nickel Mines Limited

Nebo Central Coal Pty Ltd - (ACN 079 942 377)

NORPEL - Pelotização do Norte S.A.

Norsk Hydro ASA

Norte Energia S.A. NESA

NSW Coal Resources Pty Ltd - (ACN 077 459 735)

Pineland Timber Company Limited

Ponta Ubú Agropecuária Ltda

Porto Norte S.A.

Potássio Rio Colorado S.A.

Prairie Potash Mines Limited

Prony Nickel S.A.S.

PT Vale Indonesia Tbk

PT Vale Eksplorasi Indonesia

Qld Coal Holdings Pty Ltd - (ACN 081 724 129)

Railvest Investments Inc.

Rio Doce Amsterdam B.V.

Rio Doce Australia Pty. Ltd

Rio Doce International S.A. RDI

Rio Doce Netherlands B.V.

Rio Paranoá Participações LTDA

Salobo Metais S.A.

Samarco Mineração S.A.

Seamar Shipping Corporation

Shandong Yankuang International Coking Company Ltd.

SL Serviços Logísticos Ltda

Sociedad Contractual Minera Tres Valles

Sociedad Portuaria Río Córdoba S.A SPRC

Sociedade de Desenvolvimento do Coredor de Nacala S.A.R.L.- SDCN

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Sociedade de Mineração Constelação de Apolo

Société Industrielle et Commerciale Brasilo-Luxembourgeoise - Brasilux

SRV Reinsurance Company Ltd

SRV Reinsurance do Brasil S.A.

Taiwan Nickel Refining Corporation   TNRC

Tao Sustainable Power Solutions (BVI) Ltd

Tao Sustainable Power Solutions (UK) Ltd

Tao Sustainable Power Solutions (US) LLC

TEAL (Zambia) Ltd

TEAL Bazaruto (B) Incorporate

Teal Development (Zambia) Ltd

TEAL Etolie (B) Incorporated

Teal Exploration (Zambia) Ltd

Teal Group Zambia Ltd

TEAL Holdings (B) Inc.

TEAL Lubumbashi (B) Inc.

TEAL Management Corporation - Teal Manco

Teal Metals (DRC) Ltd s.p.r.l

Teal Minerals (Barbados) Incorporated

Teal Mining (DRC) s.p.r.l

Teal Mining Moçambique Ltd.

Teal Venture (Z) Ltd

Tecnored Desenvolvimentos Tecnológicos S.A.

Tethys Mining LLC

The Central East African Railway Company Limited   CEAR

ThyssenKrupp Companhia Siderúrgica do Atlântico

ThyssenKrupp Slab International B.V. TKSI

Tiebaghi Nickel S.A.S.

Transbarge Navegacion S.A. TKSI

Transporte Ferroviário Concesionária S.A TFC

Transporte Ferroviário Inversora S.AC

Turbo Power Systems Inc.

UF Distribuidora de Combustíveis Ltda

Ultrafértil S.A.

Vale Africa Investments (Proprietary) Limited

Vale Americas Inc.

Vale Asia Kabushiki Kaisha - Vale Asia KK

Vale Australia (CQ) Pty Ltd - (ACN 103 902 389)

Vale Australia (EA) Pty Ltd - (ACN 081 724 101)

Vale Australia (GC) Pty Ltd - (ACN 097 238 349)

Vale Australia (IP) Pty Ltd - (ACN 114 276 694)

Vale Australia Ellensfield Pty Ltd - (ACN 123 542 487)

Vale Australia Holdings Pty Ltd (ACN 075 176 386)

Vale Australia Pty Ltd (ACN 062 536 270)

Vale International Holdings GmbH

Vale Belvedere (BC) Pty Ltd

Vale Belvedere (SEQ) Pty Ltd

Vale Belvedere Pty Ltd (ACN 128 403 645)

Vale Canada Holdings Inc.

Vale Canada Limited

Vale Capital II

Vale Capital Ltd.

Vale China Holdings (Barbados) Limited

Vale Coal Colombia Ltd.

Vale Coal Exploration Pty Ltd - (ACN 108 568 725)

Vale Colombia Holdings Ltd.

Vale Colombia Port Ltd

Vale Colombia Transportation Ltd

Vale Comércio Internacional SE VCI

Vale Cubatão Fertilizantes Ltda

Vale Emirates Ltd.

Vale Empreendimentos e Participações Ltda

Vale Energia Limpa Moçambique, Limitada

Vale Energia Limpa S.A.

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Vale Energia S.A.

Vale Europa SE

Vale Europe Limited

Vale Europe Pension Trustees Ltd.

Vale Evate Moçambique, Limitada

Vale Exploracion Argentina S.A.   VEA

Vale Exploracion Liberia Limited

Vale Exploraciones Chile Ltda

Vale Exploration Canada Inc.

Vale Exploration Peru SAC

Vale Exploration Philippines Inc

Vale Exploration Pty Ltd (ACN 127 080 219)

Vale Explorationes Mexico, S.A de C.V.

Vale Exploration USA, Inc.

Vale Fertilizantes Moçambique, Limitada

Vale Fertilizantes S.A.

Vale Fertilizer Australia Pty Ltd

Vale Fertilizer International Holdings B.V.

Vale Fertilizer Netherlands B.V

Vale Florestar Fundo de Desenvolvimento e Participações (Fundo)

Vale Florestar S.A.

Vale Guinée S.A

Vale Holdings (Barbados) Limited

Vale Holdings AG

Vale Inco Asia Limited

Vale Inco Atlantic Sales Limited

Vale Inco Australia Limited Partnership

Vale Inco Europe Holdings

Vale Inco Management Advisory Services (Shangai) Co., Ltd. VIMAS

Vale Inco Pacific Limited

Vale Inco Resources (Australia) Pty. Ltd.

Vale India Private Limited

Vale International SA

Vale Investments Ltd.

Vale Japan Limited

Vale Kazakhstan LLP

Vale Limited

Vale Logística Africa, LDA

Vale Logística de Argentina S.A - VLA

Vale Logística de Uruguay S.A

Vale Logístics Limited

Vale Malaysia Manufacturing Sdn. Bhd.

Vale Manganês S.A

Vale Manganêse France

Vale Manganêse Norway AS

Vale Mauritius Ltd.

Vale Mina do Azul S.A.

Vale Minerals China Co. Ltd

Vale Moçambique S.A

Vale Newfoundland & Labrador Limited

Vale Nickel (Dalian) Co. Ltd

Vale Nouvelle-Calédonie S.A.S.

Vale Oil & Gas Peru S.A.C.

Vale Óleo e Gás S.A.

Vale Oman Distribution Center LLC

Vale Oman Pelletizing Company LLC VOPC

Vale Overseas Ltd

Vale Potash Canada Limited VPCL

Vale Potássio Nordeste S.A. VPN

Vale Projectos e Desenvolvimento Moçambique Limitada

Vale Proyectos de Minerales S.A VPM

Vale Republic Democratique Du Congo - Vale Congo

Vale Shipping Company Pte. Limited

Vale Shipping Enterprise Pte. Ltd

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Vale Shipping Holding Pte. Ltd

Vale Shipping Singapore Pte. Ltd

Vale Slab S.A

Vale Soluções em Energia S.A. VSE

Vale South Africa (Proprietary) Ltd.

Vale Technology Development (Canada) Limited

Vale Trading (Shanghai) Co., Ltd

Vale Zambia Limited

ValeServe Malaysia Sdn. Bhd.

Valesul Alumínio S.A.

VBG - Logistics (Vale BSGR Logistics) Corp.

VBG - Vale BSGR BVI Limited

VBG - VALE BSGR Guinea Limited

VBG - Vale BSGR Liberia Limited

VBG - Vale BSGR Limited

VEL (ME) Ltd

VEL Holdings GmbH

Vistaerea S.A.

VLI Multimodal S.A.

VLI Operações de Terminais S.A. VOT

VLI Operações Portuárias S.A. VOP

VLI Participações S.A.

VLI S.A.

YPF S.A

Zhuhai YPM Pellet Co. Ltd.

d. participation in the Company by companies in the group

As well as participation in Vale by the direct controller Valepar, described in item a above, the following companies hold direct shares in the Company:

Company in the Group	**Participation in the Company (%)**
BNDES Participações S.A.	5.3%
Caixa de Previd. dos Func. do Banco do Brasil Previ	0.1%

e. companies under common control

None.

8.3 Restructuring operations

Justification for not filling out the table:

See item 6.5 of this Reference Form.

8.4 Other information which the Company judges to be relevant

As Mitsui & Co. Ltd., a direct controller of Valepar S.A., has capital shares spread among many shareholders with no clearly defined control, its shareholders were not considered to be a company of the group in item 8.1 (d).

9.1 Relevant non-current assets others

Items 9.1 (a), 9.1 (b), and 9.1(c) of this Reference Form, describe the principal non-current assets of the Company

The main fixed assets of the Company consist of various buildings, facilities, equipment, IT equipment, railroads, and mining rights, as described in item 9.1 (a) of this Reference Form. The following table describes the book value of fixed assets of the Company in December 31, 2011 by category and geographic location:

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	In thousands of R$								
2011	**Brazil**	**Europe**	**North America**	**Australia**	**Africa**	**Asia**	**New Caledonia**	**Others**	**Total**
Buildings	8,020,281	159,420	843,715		2,803	1,850,969	2,346,851	73,749	**13,297,788**
Facilities	13,200,330	181,373	1,701,534		295,302	9,053	5,422,884	707,708	**21,518,184**
Equipment	11,250,612	176,331	1,228,744		360,348	2,136,438	146,626	2,206,152	**17,505,251**
Mining	10,200,816	6,406	16,023,277	1,478,344	2,626,506	2,082,615	1,354,664	891,355	**34,663,983**
Others	8,144,669	534,540	5,280,633	1,978,804	1,014,499	2,873,206	582,800	518,846	**20,927,997**
Ongoing	33,424,770	408,564	7,557,609		3,732,806	4,044,801	675,917	347,723	**50,192,190**
Total	**84,241,478**	**1,466,633**	**32,635,513**	**3,457,148**	**8,032,264**	**12,997,082**	**10,529,742**	**4,745,533**	**158,105,393**

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Item 9

9.1 Relevant non-current assets / 9.1.a Fixed assets

Description of the fixed asset	Location Country	Location State	Location Municipality	Type of Property
Iron ore mine - Carajás	Brazil	Pará	Various	
Iron ore mines various Southeast system	Brazil	Various	Various	
Iron ore mines various Southern system	Brazil	Minas Gerais	Various	
Pelletizing plant - Tubarão I	Brazil	Espírito Santo	Vitória	
Pelletizing plant - Tubarão II	Brazil	Espírito Santo	Vitória	
Pelletizing plant - Fábrica	Brazil	Minas Gerais	Congonhas	
Pelletizing plant - São Luiz	Brazil	Maranhão	São Luiz	
Pelletizing plant - Vargem Grande	Brazil	Minas Gerais	Nova Lima	
Pelletizing plant - Samarco	Brazil	Espírito Santo	Anchieta	
Pelletizing plant - Zhuhai YPM	China		Zhuhai	
Pelletizing plant - Anyang	China		Anyang	
Pelletizing plant - Hispanobras	Brazil	Espírito Santo	Vitória	
Pelletizing plant - Itabrasco	Brazil	Espírito Santo	Vitória	
Pelletizing plant - Kobrasco	Brazil	Espírito Santo	Vitória	
Pelletizing plant - Nibrasco	Brazil	Espírito Santo	Vitória	
Integrated nickel production system: mine, processing plant, smelter	Canada		Sudbury	
Integrated nickel production system: mine, processing plant, smelter	Canada		Thompson	
Nickel mine and processing plant	Canada		Voisey s Bay	
Carajás Railroad	Brazil	Various	Various	
Vitória a Minas Railroad	Brazil	Various	Various	
Centro-Atlântica Railroad	Brazil	Various	Various	
North-South Railroad	Brazil	Various	Various	
MRS Logistics	Brazil	Various	Various	
Manganese Mines	Brazil	Various	Various	
Paragominas Mine - bauxite	Brazil	Pará	Various	
Thermal and metallurgical coalmine	Australia		Hunter Valley	
Thermal and metallurgical coalmine	Australia		Bowen Basin	
Iron ore mines various Central West system	Brazil	Mato Grosso do Sul	Various	
Pelletizing plant - Oman	Oman			
Platinum Refinery	England		Acton	

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Nickel mine and processing plant	New Caledonia		Noumea
PTI nickel mine	Indonesia		Sorowako
Nickel refinery	Wales		Clydach
Sossego mine	Brazil	Pará	Various
Salobo mine	Brazil	Pará	Various
Onça Puma mine	Brazil	Pará	Various
Thermal and metallurgical coalmine - Moatize	Mozambique		Various
Thermal coalmine El Hatillo	Colombia		Santa Marta
Phosphorite mine - Bayóvar	Peru		Piura
Phosphorite mine and processing plant	Brazil	Various	Various
Port Colborne smelter of precious metals	Canada		Ontario
Ferroalloys plant	Brazil	Various	Various
Ferroalloys plant	France		Dunkirk
Ferroalloys plant	Norway		Mo I Rana
Nickel processing plant	Taiwan		Kaoshing
Cathode copper processing plant Tres Valles	Chile		Salamanca

**On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colombia. For more information about the operation, please see item 6.5 of this Index Form.

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9.1 - Relevant non-current assets / 9.1.b - Patents, trademarks, licenses, concessions, franchises, and contracts for technology transfer

Type of asset	Description of asset	Territory affected	Duration	Events which might cause a loss of rights	Consequences of loss of rights
Concessions	Mining concessions in Brazil	491,522 hectares	Undetermined	Persistent breach of current mining legislation: predatory mining; mining stopped without notice to, and consent of, the competent agency; not answering repeated requests for routine inspections.	Interruption and/or cancellation of mining operations in Brazil
Concessions	Patented mineral rights in Ontario, Canada	82,969 hectares	Inexistent	Non-payment of mining tax or breach of legislation	Interruption and/or cancellation of mining operations in Ontario, Canada
Concessions	Leasing of mining rights in Ontario, Canada	20,994 hectares	2012-2032	Failure/refusal (i) to request renewal or (ii) to satisfy the conditions for renewal (mineral production, investment in evaluation works). Breach of legislation.	Interruption and/or cancellation of mining operations in Ontario, Canada
Licenses	Sub aquatic mining right (Mining License of Occupation) in Ontario, Canada	30,752.hectares	Undetermined	Non-payment of taxes (mining rent). Breach of legislation.	Interruption and/or cancellation of mining operations in Ontario, Canada
Licenses	Order in Council Leases in Manitoba, Canada	109,043 hectares	2020-2025	Failure to present renewal request or to satisfy the conditions for renewal of the area and non-payment of taxes (mining tax rental fee and royalties). Breach of legislation.	Interruption and/or cancellation of mining operations in Manitoba, Canada

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Concessions	Patented Mining Claims in Manitoba, Canada	378 hectares	Inexistent	There are no requirements that, if not complied with, could lead to the loss of the mining right.	Not applicable.
Licenses	Leasing of mining rights in Manitoba, Canada	4,854 hectares	2013	Failure/refusal (i) to request renewal or (ii) to satisfy the conditions for renewal (mineral production, investment in evaluation works). Breach of legislation.	Interruption and/or cancellation of mining operations in Manitoba, Canada
Concessions	Potash Lease in Manitoba, Canada	6,533 hectares	2016-2030	Failure/refusal (i) to request renewal or (ii) to pay taxes (rental fee).	Interruption and/or cancellation of mining operations in Manitoba, Canada
Concessions	Mining lease in Newfoundland and Labrador, Canada	1,599 hectares	2027	Failure/refusal (i) to request renewal or (ii) to satisfy the conditions for renewal (mineral production, evaluation work), or non-payment of taxes (mining tax or rental fee).	Interruption and/or cancellation of mining operations in Newfoundland and Labrador, Canada
Concessions	Potash Leases in Saskatchewan, Canada	27,404 hectares	2029-2032	Failure/refusal (i) to request renewal or (ii) to pay taxes (rental fee). Breach of legislation.	Interruption and/or cancellation of mining operations in Saskatchewan, Canada.
Concessions	Petroleum and Natural Gas Leases in Saskatchewan, Canada	8,955 hectares	2013-2016	Failure to request renewal or its denial. Breach of legislation.	Interruption and/or cancellation of mining operations in Saskatchewan, Canada.

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Concessions	Contract of Work in Indonesia	190,510 hectares	2025	End of the term of the contract; cancellation due to errors or irregularity in the procedure for or in the act of its granting; and in the case of the bankruptcy or dissolution of the concessionaire. Breach of legislation. Note: The Contract of Work of mines that Vale has in Indonesia expires in 2025. However, according to the new mining law, Vale can request an extension of at least ten years.	Interruption and/or cancellation of mining operations in Indonesia.
Concessions	Mining concessions in Australia	26,917 hectares	2011-2041	Non-payment of lease/royalties; failure to submit report on activities. Breach of legislation.	Interruption and/or cancellation of mining operations in Australia.
Concessions	Mining concessions in New Caledonia (in the area of the VNC project)	6,570 hectares	2016-2051	Non-payment of lease/royalties; failure to submit report on activities; lack of activity on the concessions for at least 15 years. Breach of legislation. Note: The Goro project comprises 6,571 hectares in eight mining concessions, out of which three are renewable in 2016, while the others should be renewed in 2048 and 2051.	Interruption and/or cancellation of mining operations in New Caledonia.
Concessions	Mining concessions in New Caledonia (outside the area of the VNC project)	13,895 hectares	2016-2051	Non-payment of lease/royalties; failure to submit report on activities; lack of activity on the concessions for at least 15 years. Breach of legislation.	Interruption and/or cancellation of mining operations in New Caledonia; impossibility of extending our mining activities outside the area of the VNC project.
Concessions	Mining concessions in New Caledonia (Tiebaghi Nickel SAS)	936 hectares	2017-2048	Non-payment of lease/royalties; failure to submit report on activities; lack of activity on the concessions for at least 15 years. Breach of legislation.	Interruption and/or cancellation of mining operations in New Caledonia; impossibility of extending our mining activities.

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Concessions	Mining concession in China.	12,383 hectares	2034	Mining rights may be revoked in cases of: (i) predatory mining; (ii) assignment or lease of mining rights without permission of the competent authorities; (iii) non-payment or insufficient payment of the amounts owed as financial compensation for the exploration of mineral resources or the systematic failure in the payment of other taxes related to the development of mining activity.	Interruption and/or cancellation of mining operations in China.
Concessions	Mining concessions in the Democratic Republic of Congo (DRC)	9,200 hectares	2039	The loss of mining rights may be the result of: (i) non-payment of the amounts owed as the annual fee per hectare; (ii) not observing the obligation to begin mining activities within a period of three years counting from the date in which the mining concession entered into force; and (iii) certain violations of environmental legislation.	Interruption and/or cancellation of mining operations in DRC.
Concessions	Mining concessions in Zambia	68,550 hectares	2012-2033	Non-compliance with mining legislation after notification and failure to correct the situation by the holder of the concession within the deadline stipulated by the competent authority. Non-payment of royalties and fees owed under the terms of mining legislation and bankruptcy or dissolution of the company.	Imposition of a fine (indemnification of the government); loss of the concessions and/or suspension or cancellation of mining rights held by the company.

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Concessions	Mining concessions in Guinea	102.400 hectares	2035	Mining rights may be cancelled under the following circumstances: (i) mining activity is suspended for a period greater than twelve months or drastically reduced without a legitimate reason and in a way that is harmful to the national interest; (ii) mining activities or the amount of expenses realized by the holder of the concession are less than 20% of the total forecast for a period of two years, except in cases of force majeure duly justified; (iii) irregularities in the mining and sales reports or refusal to present these reports; (iv) non-payment of fees; (v) performing mining outside the perimeter of the mining grant or for substances not provided for in the grant; (vi) loss of financial guarantees or of technical capacity that had guaranteed concession of the grant when it was given; (vii) assignment, transfer, or leasing of mining rights without the prior permission of the competent authority; (viii) tax evasion associated with fraudulent omissions in the financial statements of the company; and (ix) disrespect of provisions of the Law regarding the rules of transparency and good governance.	Interruption and/or cancellation of mining operations in Guinea.
Concessions	Mining concessions in Peru	187,617 hectares	Undetermined	Non-payment of the annual fee for more than two years in a row and non-payment of the fine.	Interruption and/or cancellation of mining operations in Peru.

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Concession	Mining concession El Hatillo in Colombia (On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.)	9,638 hectares	2028	Not performing the work and the works of exploration, construction and installation, and operation under the terms established; non-payment of royalties and other considerations; failure to submit the reports agreed upon; non-renewal or adjustment of policies to comply with the contract; not maintaining the area granted in compliance with the obligations of the concession; non-payment of fines that may be imposed by the regulatory authority; suspension of work and construction for certain periods without prior authorization from regulatory authority; not meeting technical standards of mining and environmental standards; carrying out construction and mining activities in special areas without prior authorization of the regulating agency; violation of the standards that regulate the sale and marketing of coal; assignment, subcontracting, or subletting of equipment without prior approval of the competent authority.	Consecutive fines and declaration of termination of the mining contract and, consequently, inability to execute this type of contract with the State again.

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Concessions	Mining concession Cerro Largo Sur in Columbia (On 05/28/2012, Vale signed an agreement to sell all of its thermal coal operations in Colômbia. For more information about the operation, please see item 6.5 of this Index Form.)	1,092 hectares	2032	Not performing the work and the works of exploration, construction and installation, and operation under the terms established; non-payment of royalties and other considerations; failure to submit the reports agreed upon; non-renewal or adjustment of policies to comply with the contract; not maintaining the area granted in compliance with the obligations of the concession; non-payment of fines that may be imposed by the mining authority; suspension of work and construction for certain periods without prior authorization from mining authority; not meeting technical standards of mining and environmental standards; carrying out construction and mining activities in special areas without prior authorization of the authority; violation of the standards that regulate the sale and marketing of coal; assignment, subcontracting, or subletting of equipment without prior approval of the competent authority.	Consecutive fines and declaration of termination of the mining contract and, consequently, inability to execute this type of contract with the State again.
Concessions	Mining concessions (Discovery Statement) in Argentina	880,707 hectares	Undetermined	Failure to present the request for measurement; failure to use legalized labor; non-payment of mining fees.	Interruption and/or cancellation of mining operations in Argentina.
Concessions	Mining concessions in Chile	58,903 hectares	Undetermined	Non-compliance with annual payment deadlines; lack of opposition [sic] from third parties to requests for areas by Vale.	Interruption and/or cancellation of mining operations in Chile.

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Concessions	Mining concessions in Mozambique	23,780 hectares	2032	In this country, the reasons for loss of the concession are, above all, related to: (i) the abandonment or the mine; (ii) the performance of mining activities under health and safety conditions that are not compatible with the requirements of local legislation; (iii) the lack of payment of fees regarding production of minerals and other levies due as a result of carrying out mining activity; and (iv) bankruptcy of the company, failure to demarcate the area, failure to pay specific taxes, failure to present working reports, and non-performance of work in accordance with the mining plan.	Interruption and/or cancellation of mining operations in Mozambique.
Concessions	Rail concession for passenger and freight transport on the Carajás Railroad	892 km (in the states of MG, SP, ES, RJ, GO, BA, SE, and the DF)	2027 (extendible for 30 years)	The concession will be terminated if one of the following takes place: the end of the contractual period, nationalization, forfeiture, rescission, cancellation, or bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the railroad operations, which make up the Northern System of Vale.
Concessions	Rail concession for passenger and freight transport on the Vitória a Minas Railroad	905 km in the states of Espírito Santo and Minas Gerais	2027 (extendible for 30 years)	The concession will be terminated if one of the following takes place: the end of the contractual period, nationalization, forfeiture, rescission, cancellation, or bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the railroad operations, which make up the Southeast System of Vale.
Concessions	Concession for the Center-East network belonging to the Federal Railroad Network (RFF), granted to the Centro-Atlântica Railroad	8,023 km [sic] in the states of Maranhão and Pará	2026 (extendible for 30 years)	The concession will be terminated if one of the following takes place: the end of the contractual period, nationalization, forfeiture, rescission, cancellation, or bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the railroad operations.
Concessions	Concession for the South-East network belonging to the Federal Railroad Network (RFF), granted to MRS Logística	1,643 km in the states of Minas Gerais, São Paulo, and Rio de Janeiro	2026 (extendible for 30 years)	The concession will be terminated if one of the following takes place: the end of the contractual period, nationalization, forfeiture, rescission, cancellation, or bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the railroad operations, which make up the Southern System of Vale.

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Concessions	Sub concession contract with lease of North-South Railroad network	720 km, between Açailândia (MA) and Palmas (TO)	2037 (extendible for 30 years)	The concession will be terminated if one of the following takes place: the end of the contractual period, nationalization, forfeiture, rescission, cancellation, or bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the railroad operations.
Concessions	Concession for use of public property for electric energy generation Igarapava Dam	Igarapava (SP), Conquista (MG), Rifaina (SP), and Sacramento (MG)	2028	(i) by reversion of the asset at the end of the contractual period; (ii) by nationalization.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
Concessions	Concession for use of public property for electric energy generation Porto Estrela Dam	Joanésia (MG), Braúnas (MG), and Açucena (MG)	2032	(i) the termination of the contractual period; (ii) by nationalization of the services; (iii) by forfeiture; (iv) by rescission; (v) by cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) in the case of bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
Concessions	Concession for use of public property for electric energy generation Capim Branco I and II Dam	Araguari (MG), Uberlândia (MG), and Indianópolis (MG)	2036	(i) the termination of the contractual period; (ii) by nationalization of the services; (iii) by forfeiture; (iv) by rescission; (v) by cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) in the case of bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
Concessions	Concession for use of public property for electric energy generation Funil Dam	Cities in Minas Gerais	2035	(i) the termination of the contractual period; (ii) by nationalization of the services; (iii) by forfeiture; (iv) by rescission; (v) by cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) in the case of bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant. Note: The cities involved are: Lavras (MG), Perdões (MG), Ijaci (MG), Itumirim (MG), Ibituruna (MG), and Bom Sucesso (MG).
Concessions	Concession for use of public property for electric energy generation Aimorés Dam	Cities in Minas Gerais [sic]	2035	(i) the termination of the contractual period; (ii) by nationalization of the services; (iii) by forfeiture; (iv) by rescission; (v) by cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) in the case of bankruptcy or dissolution of the	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.

	concessionaire.	Note: The cities involved are: Aimorés (MG), Baixo Guandu (ES), Resplendor (MG), and Itueta (MG) .

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Concessions	Concession for use of public property for electric energy generation Candonga Dam	Rio Doce (MG) and Santa Cruz do Escalvado (MG)	2035	(i) the termination of the contractual period; (ii) by nationalization of the services; (iii) by forfeiture; (iv) by rescission; (v) by cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) in the case of bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
Concessions	Concession for use of public property for electric energy generation Estreito Dam	Cities in the states of Maranhão and Tocantins	2037	(i) termination of the contractual period; (ii) nationalization; (iii) forfeiture; (iv) rescission; (v) cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant. Note: The cities involved are: Estreito and Carolina (MA) and Aguiarnópolis, Darcinópolis, Goiatins, Babaçulândia, Barra do Ouro, Palmeirante, Palmeiras do Tocantins, Tocantinópolis, Tupiratins, Itapiratins, and Filadélfia (TO).
Concessions	Concession for use of public property for electric energy generation Santa Isabel Dam	Cities in the states of Tocantins and Pará	2037	(i) termination of the contractual period; (ii) nationalization; (iii) forfeiture; (iv) rescission; (v) cancellation as a result of defect or irregularity verified in the procedure or act of making the grant; (vi) bankruptcy or dissolution of the concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant. Note: The cities involved are: Ananás, Araguanã, Riachinho, and Xambioá (TO) and Palestina do Pará, Piçarra, and São Geraldo do Araguaia (PA)
Concessions	Concession in a shared arrangement for electric energy generation Machadinho Dam	Cities in the states of Rio Grande do Sul and Santa Catarina	2032	(i) by reversion of the asset at the end of the contractual period; (ii) by nationalization: (iii) by forfeiture.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant. Note: The cities involved are: Anita Garibaldi, Celso Ramos, Campos Novos, Zortéa, Capinzal, and Piratuba (RS) and Maximiliano de Almeida, Machadinho, Barracão, and Pinhal da Serra (SC).
Concessions	Concession for the utilization of hydraulic energy Nova Maurício Dam	Leopoldina (MG)	2021	(i) termination of the contractual period.	Interruption and/or cancellation of the supply of energy from the small hydroelectric plant.
Concessions	Concession for the utilization of	Muriaé (MG)	2021	(i) termination of the contractual period.	Interruption and/or cancellation of the supply of energy from the small

	hydraulic energy Glória Dam				hydroelectric plant.
Concessions	Concession for the utilization of hydraulic energy Ituerê Dam	Rio Pomba (MG)	2021	(i) termination of the contractual period.	Interruption and/or cancellation of the supply of energy from the small hydroelectric plant.

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Concessions	Concession for the utilization of hydraulic energy Mello Dam	Rio Preto (MG)	2025	(i) termination of the contractual period.	Interruption and/or cancellation of the supply of energy from the small hydroelectric plant.
Trademarks	Registration of Mixed Trademark Vale	98 countries	2017 (extendible every 10 years)	Within the administrative sphere (the Brazilian National Institute for Industrial Property INPI), the registration of trademarks already granted may be contested through nullification procedures or be subject to petitions for partial or total cancellation under the allegation that the trademark is not being used in the way that the registration was granted. In the judicial sphere, third parties may sue for the nullification of trademark registrations alleging violation of their rights to industrial property. Trademark registrations are maintained by periodic payments to INPI. The payment of the fees due and the continual use of the trademarks are indispensible to avoid the termination of their registration and the consequent cessation of the rights of the holder.	The loss of rights to trademarks results in the impossibility of stopping third parties from using identical or similar trademarks to brand even competing products and services, since the holder loses the right to the exclusive use of them. There also exists the possibility that the holder be subject to criminal and civil lawsuits for improper use, in the case of the violation of the rights of third parties, resulting in the impossibility of using the trademarks when carrying out its activities. It is not possible to quantify the impact of these events.

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9.2 Other Relevant Information

As of December 31, 2011, Vale considered as intangibles of Intellectual Property a total of 5,482 processes throughout the world, in a total of 98 countries (376 patents in Brazil and 1,360 abroad; 837 trademark processes in Brazil and 1,310 abroad; and 1,251 domain names in Brazil and 348 abroad).

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Item 10

10.1. General Financial and Equity Conditions

a. General Financial and Equity Conditions

In 2011, Vale S.A. (Vale) had strong performance, characterized by record net operating revenues (R$ 103.2 billion), operating income (R$ 53.1 billion), operating margin (49.1%), cash generation (R$ 60.2 billion) and net income (R$ 37.8 billion). Shipments of iron ore and iron pellets reached historical levels, with more than 300 million tons (Mt), while sales of nickel and copper had their best year since 2008.

The year 2010 was marked by strong recovery with extraordinary performance, due to two main factors. On one hand, the initiatives developed in 2009 in response to the global recession, focusing on structural transformations, started to present returns. On the other hand, the global economy, led by the emerging companies, which are the main source of expansion of demand for ores and metals, showed exceptional growth.

The year 2009 was a transitional period, marked by operating and financial performance at levels that were lower than in the two previous years, although they were quite robust.

In 2011, return on shareholders equity reached the record amount of US$ 12 billion, and the dividend yield on our shares was the highest among our peers, and one of the highest among global companies.

Standard & Poor s raised its credit rating on Vale from BBB+ to A- in November 2011. According to S&P s risk rating, A indicates a strong ability to comply with its financial obligations. The improvement reflects our strong cash flow, solid balance sheet, and continuing focus on minimizing the cost of capital.

Bulk materials sales iron ore, pellets, manganese ore and iron alloy, thermal and metallurgical and thermal coal represented 73.46% of total operating revenues in 2011, in line with the 73.4% in 2010. Participation of basic metals in total revenues decreased to 15.3% from 17.0% in 2010, due to the sale of aluminum assets in February 2011. Revenues from fertilizers were 5.6% above the 3.8% in 2010. Logistics services contributed with 3.4% and other products with 2.1%.

Business segments	**2009**	**2010**	**2011**
Bulk Materials	62.7%	73.4%	73.6%
Basic Metals	26.9%	17.0%	15.3%
Fertilizers	1.6%	3.8%	5.6%
Logistics services	5.7%	3.8%	3.4%

Others	3.1%	2.1%	2.1%

In 2011, operating profit, measured by EBIT(2) reached a new record of R$ 53.139 billion, 31.2% higher than the previous record of R$ 40.490 billion in 2010. After excluding the non-recurring gain from the sale in aluminum assets in the first quarter of 2011, EBIT was R$ 50.647 billion in 2011. The operating margin during the year also set a record of 49.1%, excluding the non-recurring gain, in comparison with the previous record of 48.7% in 2010.

(2) Profit before interest and taxes.

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In 2011, we set a new record for cash generation, measured by EBITDA(3) of R$ 60.155 billion, which was 29.7% higher than the previous record of R$ 46.378 billion in 2010. Excluding the non-recurring gain of R$ 2.492 billion, EBITDA in 2011 was R$ 57.663 billion.

in R$ million	**2009**	**2010**	**2011**
Net Operating revenue	48,496	83,225	103,195
EBIT	13,173	40,490	50,647(1)
EBIT margin (%)	27.2%	48.7%	49.1%(1)
EBITDA	18,641	46,378	57,663
Net profit	10,337	30,070	37,814
Remuneration to shareholder (parent company)	5,299	5,095	14,960
ROE (%)(2)	10.7%	26.8%	26.4%

(1) Excludes non-recurring gains from the sale of aluminum assets

(2) Return on equity

b. Capital Structure

Vale s shareholders equity on December 31, 2011, was R$ 143.476 billion. On the same date, the gross debt added to obligations with third parties totaled R$ 46.625 billion, with a cash position(4) of R$ 7.458 billion. The gross debt index and obligations with third parties /shareholders equity and participation of non-controlling shareholders was 31.8% compared to 37.6% on December 31, 2010, and 42.0% on December 31, 2009.

On December 31, 2010, net shareholders equity was R$ 112.117 billion, gross debt totaled R$ 43.789 billion, and the cash position was R$ 13.469 billion.

On December 31, 2009, shareholders equity was R$ 95.758 billion, gross debt was R$ 42.088 billion, and the cash position was R$ 13.221 billion.

i. Hypotheses of Redemption

ii. Redemption Value Method

Vale s by-laws do not authorize the application of profits or reserves to redeem or amortize shares. Additionally, on the date of this Reference Form, Vale s Management does not intend to call a Special Shareholders Meeting for this purpose.

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(3) Profit before interest, taxes, depreciation and amortization and depletion, plus dividends received from related companies, also known as EBITDA.

(3) Includes cash and cash equivalents and investments of up to 90 days.

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c. Payment Capacity in Relation to the Financial Commitments Assumed

(1) Vale enjoys a healthy financial position, supported by strong cash generation, ample liquidity, availability of short- and long-term credit facilities, and a portfolio of debt with low risk. This position gives us the capacity to easily pay our financial commitments.

(2) The leverage, measured by the ratio of total debt/EBITDA, decreased to 0.8x on December 31, 2011, compared to 0.9x on December 31, 2010 and 2.3x on December 31, 2009. The reduction in leverage reflects the effects of the recovery of the global economy on our financial performance.

(3) The total debt/EV(5) ratio was equal to 18.5% on December 31, 2011, while the index of interest coverage, measured by the indicator EBITDA/payment of interest, was 30.21 times on December 31, 2011.

in R$ million	**2009**	**2010**	**2011**
Gross debt	42,088	43,789	46,625
Cash position *	13,221	13,469	7,458
Net debt	28,856	30,320	39,167

* Includes cash and investments up to 90 days.

d. Source of financing for working capital and investments in non-current assets

The sources of funds utilized by Vale were generation of operating cash, loans and financing, and issue of bonds and securities, convertible or not, launched in the capitals market.

Operating activities generated cash flows of R$ 42.062 billion in 2011, compared with R$ 35.375 billion in 2010. Operating cash flows grew significantly in recent years until 2008, driven by the growth in sales volume and by the high of prices of our products. In 2009, this cycle of growth was interrupted as a result of negative effects of the global recession on the prices and volumes of sales. In 2010, growth was resumed and the strong recovery of demand reflected positively on the price. Performance in 2011 was driven by higher prices and by the recovery of volumes sold.

Among other more relevant operations in the three-year period, the following are highlighted:

- In August 2011, Vale signed an agreement with commercial banks with the support of the Korean Trade Insurance Corporation (K-SURE), in order to finance the acquisition of five shipments of large-scale ore and two capsize ships. The total amount contracted was US$ 530 million (equal to R$ 827 million), and the funds will be disbursed according to delivery of the ships. By December 31, 2011, Vale had disbursed US$ 178 million (equal to R$ 333 million) from this line of credit.

- In January 2011, Vale signed an agreement with some commercial banks with the guarantee of the official Italian credit agency Servizi Assicurativi Del Commercio Estero S.p.A (Sace) to provide a line of credit of US$ 300 million (equivalent to R$ 500 million on the transaction date) for 10 years. The entire amount of this line of credit had been used by Vale by December 31, 2011.

- In October 2010, Vale signed an agreement with Export Development Canada (EDC), the official credit agency for exports from Canada, to finance the package of Vale s Investments Program. According to the contract, EDC provides a line of credit for up to US$ 1 billion. The amount of US$ 500 million (equivalent to R$ 855.6 million) will be available for investment operations in Canada, the remaining US$ 500 million (equivalent to R$ 855.6 million) are available for financing Vale s purchases from Canadian companies for the supply of our operations outside of Canada.

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(4) EV*, enterprise value*, equals the sum of the company s market capitalization with the net debt.

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At December 31, 2011, Vale had used US$ 500 million (equivalent to R$ 934 million) of this line of credit.

- In September 2010, Vale issued US$ 1.75 billion (equivalent to R$ 3 billion on the transaction date), with US$ 1 billion in bonds maturing in 2020 and a coupon rate of 4.65%, with semi-annual payments and US$ 750 million through the reopening of the 2039 bond, with yield to the investor of 6.074%. The 2039 bond is part of the US$ 1 billion bond issued in November 2009.

- In September 2010, Vale signed a contract with The Export-Import Bank of China and the Bank of China Limited to finance the construction of 12 ships, with capacity of 400,000 dwt, for the total amount of up to US$ 1.229 billion (equivalent to R$ 2.119 billion on the transaction date). The financing has a total period for payment of 13 years and Vale will receive the funds over the next three years according to the ship construction schedule. At December 31, 2011, US$ 467 million had been disbursed (equivalent to R$ 873 million) from this line of credit.

- In June 2010, Vale entered into an agreement with the National Bank for Economic and Social Development BNDES for some lines of credit totaling R$ 774 million, to finance the acquisition of certain equipment. In March 2011, Vale increased that line of credit through a new agreement with the BNDES in the amount of R$ 103 million. By December 31, 2011, R$ 615 million had been disbursed from those lines of credit.

- In June 2010, Vale signed an export pre-payment financing agreement in the amount of US$ 500 million (equivalent to R$901 million) with maturity in 10 years.

- In March 2010, Vale raised 750 million (equivalent to R$1.7 billion) through eight-year Eurobonds at the price of 99.564% of their face value. The notes maturing in March 2018 have a coupon of 4.375% per year, paid annually.

- In November 2009, Vale made a public offering of 30-year bonds in the amount of US$ 1 billion (equivalent to R$ 1.7 billion on the date of the transaction) issued through the wholly owned subsidiary Vale Overseas, fully and unconditionally guaranteed by Vale, maturing in November 2039, and a coupon of 6.875% per year, paid semi-annually.

- In September 2009, Vale made a public offering of 10-year bonds in the amount of US$ 1 billion (equivalent to R$ 1.8 billion on the date of the transaction) issued through its wholly owned subsidiary Vale Overseas, fully and unconditionally guaranteed by Vale, maturing in September 2019, and a coupon of 5.625% per annum, paid semi-annually.

- In July 2009, Vale issued US$ 942 million (equivalent to R$ 1.858 billion on the date of the transaction) in mandatorily convertible notes maturing in 2012 through its wholly owned subsidiary Vale Capital II. The notes are divided into two series: Vale 2012 and Vale P 2012. Both series mature in June 2012 and must be convertible by American Depositary Shares (ADS). The series Vale 2012 will be swapped by ADS in connection with common shares issued by Vale, and the series Vale P 2012 will be swapped by ADS in connection with preferred Class A shares issued by Vale. Additional remuneration will be paid by Vale to note holders, based on the net value of the dividends distributed by Vale to the ADS holders.

• In May 2008, Vale signed agreements with the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI) to finance projects that are part of the investment program for 2008-2012. Vale s projects to be financed must follow the criteria required by Japanese financial institutions. The JBIC provides funds of up to US$ 3 billion (equivalent to R$ 5.0 billion on the date of signature of the contract) and NEXI provides debt insurance on loans of up to US$ 2 billion (equivalent to R$ 3.3 billion on the date of signature of the contract). In November 2009, Vale, through its subsidiary PT International Nickel Indonesia Tbk (PTI), took out a line of credit in the amount of US$ 300 million (equivalent to R$ 525 million on the date of signature of the contract) with Japanese financial institutions, using insurance from NEXI to finance construction of the Karebbe hydroelectric plant in Indonesia, which funds were used in full by the end of 2011.

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• In April 2008, Vale signed a line of credit with the BNDES in the amount of R$ 7.3 billion (equivalent to US$ 4.2 billion on the date of signature of the contract) used to finance projects that are part of Vale s investment program for 2008-2012. By December 31, 2011, Vale had used R$ 2.8 billion (equivalent to US$ 1.5 billion on December 31, 2011) of this line of credit with the BNDES.

e. Potential sources of financing used for working capital and for investments in non-current assets for coverage of liquidity deficiency

In the regular course of business, Vale s principal need for funds refers to capital investments, payments of dividends and debt service. The sources of funds frequently used are operating cash flow and financing.

Moreover, the main sources of financing to cover liquidity deficiency are the facilities related to the export transactions offered by local banks (Advance on Foreign Exchange Contract ACCs, and Advance on Delivered Exchange Instruments - ACEs).

Vale has, moreover, revolving lines of credit available that may be used at the option of the debtor. On December 31, 2011, the amount available involving lines of credit was US$ 4.1 billion (equivalent to R$ 7.660 billion) of which US$ 3.0 billion may be used by Vale, Vale Canada Ltd. (Vale Canada), and Vale International S.A. (Vale International), US$ 350 million may be used by Vale International, and the remaining balance may be used by Vale Canada. By December 31, 2011, Vale had not used any of this credit, but US$ 107 million (equal to R$ 200 million on December 31, 2011) was issued in letters of credit in favor of the subsidiary Vale Canada, and they continue to be open pursuant to the agreed-upon terms.

f. Indebtedness levels and composition of such debts

On December 31, 2011, our total debt was R$ 46.625 billion, with a tranche of R$ 2 billion guaranteed by Vale s assets, with an average maturity period of9.8 years and an average cost of 4.8% per year in US dollars.

DEBT STRUCTURE

In R$ million	**2009**	**2010**	**2011**
Gross debt	42,088	43,789	46,625
Tranche guaranteed by assets of Vale	4%	0%	4%
Average term of maturity (in years)	9.2	9.6	9.8
Average cost (in US dollars)	5.3%	4.9%	4.8%

Since July 2005, Vale has been considered investment grade. Vale currently has the following credit risk ratings: A- (Standard & Poor s), Baa2 (Moody s), BBB high (Dominion Bond Ratings) and BBB+ (Fitch).

i. Relevant loan and financing contracts

Short-term debt consists principally of financing for exports (trade financing*)* and imports expressed in US dollars, with financial institutions. On December 31, 2011, the short-term debt was R$ 660 million, compared with R$ 1.144 billion and R$ 646 million in 2010 and 2009, respectively.

The most important categories of the long-term debt are presented below. The values presented include the short-term portion of the long-term debt and exclude the accumulated costs.

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• *Loans and financing expressed in US dollars (R$ 7.7 billion, R$ 10.7 billion, and R$14.5 billion on December 31, 2011, 2010 and 2009, respectively)*. These loans include credit facilities for exports, financing imports from the export credit agencies and loans from commercial banks and multilateral organizations. The main credit facility is a prepayment for exports linked to future exports, originally in the amount of US$ 6.0 billion (equivalent to R$ 10.4 billion), raised as part of the refinancing of the debt for the acquisition of Inco, now Vale Canada. On December 31, 2011, the outstanding balance was US$ 650 million (equivalent to R$ 1.2 billion)

• *Fixed income instruments expressed in US dollars (R$ 19.6 billion, R$ 17.1 billion, and R$ 12.9 billion on December 31, 2011, 2010 and 2009, respectively).* Vale issued several debt securities in the capital market through its wholly owned subsidiary Vale Overseas in the total amount of US$ 9.2 billion (equivalent to R$ 17.2 billion). The subsidiary Vale Canada issued debt securities in the amount of US$ 1.1 billion (equivalent to R$ 2 billion).

• *Fixed income instruments in euros (R$ 1.8 billion and R$ 1.7 billion on December 31, 2011 and 2010, respectively).* Vale issued debt securities in the capital market in the total amount of 750 million euros (equivalent to R$ 1.7 billion).

• *Instruments expressed in US dollars guaranteed by receivables from future exports (R$ 0.3 billion on December 31, 2009).* In December 2009, we had a securitization program originally in the amount of US$ 400 million based on existing and future accounts receivable related to export of iron ore and pellets to customers in Europe, Asia and the USA. On January 15, 2010, Vale paid down the remaining balance of the securitization program in advance.

• *Non-convertible debentures expressed in reais (R$ 5.0 billion, R$ 4.7 billion and R$ 6.0 billion and R$ 6.0 billion on December 31, 2011, 2010 and 2009, respectively).* In November 2006, we issued non-convertible debentures in the amount of approximately US$ 3.2 billion (equivalent to R$ 5.5 billion), in two series, maturing in four and seven years. The first series of US$ 862 million (equivalent to R$ 1.5 billion), expired in 2010, with interest of 101.75% on the accumulated variation of the interest rate of the CDI (interbank deposit certificate). The second series of US$ 2.3 billion (equivalent to R$ 4.0 billion), maturing in 2013, has interest that varies from the CDI plus 0.25% per year.

ii. Other long-term relationships with financial institutions

Vale and its associated and subsidiary companies have a commercial relationship in the normal course of their business with some of the main financial institutions in the country, according to regular financial market practices.

Other debts totaled R$ 11.8 billion, R$ 7.8 billion and R$ 7.2 billion on December 31, 2011, 2010 and 2009, respectively. We have several loans contracted in Brazil, especially with the BNDES and some Brazilian private banks, in addition to loans and financing in other currencies.

iii. Degree of subordination among debts

There is no degree of contractual subordination among our unsecured debts. Debts that are secured through collateral have the privileges and prerogatives granted by the law.

iv. Any restrictions that might be imposed on the issuer in particular, in relation to limits of indebtedness and contracting of new debts, the distribution of dividends, the disposal of assets, the issue of new securities and the transfer of corporate control

Some long-term financial instruments contain obligations related to financial indicators. The main indicators are debt on Earnings Before Interest Tax, Depreciation and Amortization (EBITDA), and interest coverage. Vale is in conformity with the levels required for the indicators. We believe that the

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current clauses will not significantly restrict the capacity to contract new debts to meet capital needs. Additionally, no clause directly restricts our ability to distribute dividends or interest on own equity.

g. Limits of use of financing already contracted

Certain financing contracts signed by Vale establish restrictions in connection with the use of funds. The following is a description of the relevant financing contracts:

Date	Counterparty	Allocation	Value	Disbursement of funds
8/04/2011	Banco Bilbao Viscaya, Banco Santander, BNP Paribas, Citibank Europe, Credit Agricole, HSBC, Natixis, and Societé Generale	Credit to be used to finance the acquisition of ships with the Korean shipbuilders Daewoo and Sungdong	R$ 827.12 million	The credit is provided in tranches according to the ship delivery schedule
11/23/2010	BNDES	Supplementation of funds related to implementation of the Estreito Hydroelectric Plant	R$ 208.03 million	The credit is provided in tranches according to the project schedule
10/27/2010	BNDES	Credit allocated to financing of equipment and expansion of production capacity	R$ 246.6 million	The credit is provided in tranches according to the project schedule
9/09/2010	Exim Bank of China Limited	Credit allocated to financing for the acquisition of ships from the shipbuilder Rongsheng	R$ 2.119 billion	The credit is provided in tranches according to the schedule of payments contemplated in the construction contract
6/30/2010	Banco do Brasil(6)	Credit allocated to financing equipment	R$ 57.2 million	The credit is provided in tranches according to the project schedule
6/30/2010	Banco do Brasil	Credit allocated to financing equipment	R$ 16.8 million	The credit is provided in tranches according to the project schedule
6/30/2010	Banco do Brasil	Credit allocated to financing equipment	R$ 59.8 million	The credit is provided in tranches according to the project schedule
6/30/2010	Banco do Brasil	Credit allocated to financing equipment	R$ 17.8 million	The credit is provided in tranches according to the project schedule
6/30/2010	Banco Santander and Banco Bradesco	Credit allocated to financing equipment	R$ 135.1 million	The credit is provided in tranches according to the project schedule

6/30/2010	Banco do Brasil	Credit allocated to financing equipment	R$ 175.8 million	The credit is provided in tranches according to the project schedule
6/29/2010	BNDES	Credit allocated to financing equipment	R$ 135.1 million	The credit is provided in tranches according to the project schedule
6/29/2010	BNDES	Credit allocated to financing equipment	R$ 175.8 million	The credit is provided in tranches according to the project schedule
4/01/2008	BNDES	Credit allocated to investmentsmade in Brazil	R$ 7.3 billion	The credit is provided in tranches according to the project schedule

(6) This contract, originally with Banco Votorantim, was transferred to Banco do Brasil in October 2011.

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3/11/2008	BNDES	Credit allocated to construction of the Estreito Hydroelectric Plant, its transmission lines and several social investments	R$ 808.4 million	The credit is provided in tranches according to the project schedule

h. Significant alterations in each item of the financial statements

Analysis of Operating Results, 2011 vs. 2010

The table below presents the values for the consolidated income statements for the fiscal years ended December 31, 2010 and December 31, 2011:

		On December 31 (in R$ billions)	
Income Statement	**2010**	**Variation (%)**	**2011**
Net Operating Revenues	**83.225**	24.0%	**103.195**
Cost of products and services	(33.756)	19.9%	(40.489)
Administrative and sales expenses	(3.201)	31.6%	(4.211)
Research and development	(1.567)	82.6%	(2.862)
Gain in the realization of assets available for sale			2.492
Other expenses	(4.211)	18.4%	(4.986)
Operating Revenues	**40.490**	31.2%	**53.139**
Result of corporate participations	(48)	6.3%	(51)
Net financial result	(2.763)	139.7%	(6.623)
Income before income tax and social contribution	**37.679**	23.3%	**46.465**
Income tax and social contribution	(7.035)	28.9%	(9.065)
Discontinued Operations	(222)		
Income (loss) of non-controlling shareholders	(352)	217.6%	414
Net Income	**30.070**	25.8%	**37.814**

Year ended December 31, 2010, compared to the year ended December 31, 2011

Revenues

Net operating revenues were R$ 103.195 billion in 2011, compared with R$ 83.225 billion in 2010, an increase of 24.0% over 2010.

In 2011, the increase in revenues was basically due to the higher volume sold, which contributed to the increased revenues with R$ 17.981 billion.

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Iron ore

Revenues from sales of iron ore rose 26.9%, from R$ 45.419 billion in 2010 to R$ 57.645 billion in 2011, due to the 25.1% increase in the average sale price, and 1.6% in the volumes sold.

Pellets

Revenues from pellet sales increased 19.7%, from R$ 14.227 billion in 2010, to R$ 17.031 billion in 2011, due to the 14.4% variation in the average sale price for pellets and to the 4.9% increase in volumes sold.

Manganese ore

Revenues from manganese sales decreased 31.4%, from R$ 458 million in 2010 to R$ 283 million in 2011, due to the 31.5% drop in prices and the 7.8% fall in volumes sold, which was a function of the excess global stock. This was partially offset by the product mix.

Iron alloys

Revenues from sales of iron alloys decreased 14.9%, from R$ 1.091 billion in 2010 to R$ 928 million in 2011, due to the 3.7% reduction in volumes sold, and 11.3% in the average price, reflecting market conditions.

Nickel and other products

There was a 65.3% increase in revenues from sales of these products, from R$ 8.204 billion in 2010, to R$ 13.563 billion in 2011, mainly due to the following:

• Revenues from nickel sales increased by 42.6%, from R$ 6.698 billion in 2010 to R$ 9.552 billion in 2011, mainly due to the higher volume of nickel sales (45.7%), as a function of the return following the temporary paralysis of operations of Sudbury and Voisey s Bay; and

• Revenues from copper sales increased 134.9%, from R$ 1.156 billion in 2010, to R$ 2.715 billion in 2011, mainly due to the growth of 140.2% in volumes sold, as a function of the return to normality of our operations, previously mentioned, which was partly offset by the 4.72% drop in the average sale price.

Copper concentrate

Revenues from sales of copper concentrate increased 3.1%, from R$ 1.638 billion in 2010, to R$ 1.688 billion in 2011, due to the 12.3% increase in the average sale price, offset in part by the drop in volume sold.

Potash

Revenues from potash sales decreased 2.0%, from R$ 492 million in 2010, to R$ 482 million in 2011, due to the 16.7% drop in volumes sold, which was partly offset by the 17.1% increase in the average sale price.

Phosphate

Revenues from phosphate sales increased 91.7%, from R$ 2.085 billion in 2010, to R$ 3.996 billion in 2011, reflecting the acquisition of Vale Fosfatados (previously Bunge Participações e Investimentos S.A.) and of Vale Fertilizantes (previously Fertilizantes Fosfatados S.A. Fosfertil).

Nitrogen

Sales revenues from nitrogen increased 120.4%, from R$ 593 million in 2010, to R$ 1.307 billion in 2011, reflecting the acquisition of Vale Fosfatados and Vale Fertilizantes. The phosphate and nitrogen products were included in the accounting records for the first complete year after the acquisition in 2010. The numbers reported in 2010 reflect the financial result in the period from May to December 2010.

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Logistics services

Revenues from logistics services increased 12.3%, from R$ 3.236 billion in 2010, to R$ 3.633 billion in 2011, mainly due to the increase in the rate charged to clients for transporting cargo.

Other products and services

Revenues from other products and services increased 18.0%, from R$ 1.795 billion in 2010 to R$ 2.118 billion in 2011. This occurred mainly because of the higher revenues from steel products.

Costs of Products and Services

Costs related to services and goods sold by Vale are detailed below:

Comments on Cost by Type of Product

The total cost of products and services totaled R$ 40.489 billion in 2011, compared with R$ 33.756 billion in 2010, an increase of 19.9%. The impact was mainly due to: (a) higher volumes sold; (b) return of basic metals operations in Canada; (c) consolidation of fertilizer assets (included in the results for the first complete year); and (d) the costs referring to the operations of Onça Puma.

• Outsourced services. The cost of outsourced services increased 47.9% in 2011, from R$ 4.640 billion in 2010, to R$ 6.681 billion in 2011, reflecting in part the entry into operation of Onça Puma.

• Materials costs. Materials costs increased by 26.1% in 2011, from R$ 6.071 billion in 2010, to R$ 7.653 billion in 2011.

• Costs of energy and fuels. Energy costs decreased 5.9% in 2011, from R$ 5.858 billion in 2010 to R$ 5.514 billion in 2011.

• Personnel costs. Personnel costs increased 42.5%, from R$ 3.922 billion in 2010, to R$ 5.587 billion in 2011, reflecting the return of activities at Sudbury and Voisey s Bay, and the 8.6% adjustment of salaries paid in Brazil.

• Acquisition of products. The cost of products purchased from third parties increased 54.7%, from R$ 1.908 billion in 2010, to R$ 2.951 billion in 2011, mainly due to the increase in the price of pellets.

• Depreciation and depletion. The cost of depreciation and depletion increased 27.2%, from R$ 4.916 billion in 2010, to R$ 6.251 billion in 2011, mainly reflecting the acquisition of fertilizer assets.

• Other costs. Other costs fell 11.9%, from R$ 6.440 billion in 2010 to R$ 5.672 billion in 2011.

Sales and administrative expenses

Sales and administrative expenses increased 31.6%, rising from R$ 3.201 billion in 2010 to R$ 4.211 billion in 2011. The increase is due to consolidation of the fertilizer assets, operations at Onça Puma, and the 8.6% increase in salaries due to the collective bargaining agreement of our Brazilian employees.

Research and development expenses

Research and development expenses grew 82.6% over 2010, rising from R$ 1.567 billion in 2010 to R$ 2.862 billion in 2011. The increased research occurred mainly due to the segments of bulk materials and basic metals.

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Other operating costs and expenses

Other operating expenses increased from R$ 4.211 billion in 2010, to R$ 4.986 billion in 2011, an 18.4% increase, due to the provision for contingencies and pre-operating expenses of VNC, Onça Puma, Moatize and Rio Colorado.

Result from sale of assets

In 2010 we did not have results from asset sales, and in 2011, we had revenues of R$ 2.492 billion due to the sale of aluminum assets.

Result from Corporate Participations

The result from corporate participations in non-controlled companies dropped 6.3%, increasing expenses from R$ 48 million in 2010 to R$ 51 million in 2011.

Net Financial result

The financial result varied 139.7%, expenses increased from R$ 2.763 billion in 2010, to R$ 6.623 billion in 2011. The main factor contributing to the negative result was the increase in the monetary and exchange rate variations recorded in 2011 on our loans.

Income Taxes and Social Security Contributions

In 2011, we recorded a tax expense on net income of R$ 9.065 billion, compared to R$ 7.035 billion in 2010, basically due to the higher tax base.

Net income

The 25.8% increase in net income, from R$ 30.070 billion in 2010 to R$ 37.814 billion in 2011, was mainly due to the factors explained above.

Analysis of equity accounts

In R$ millions

	2010	Variation %	2011
Assets			
Current Assets			
Cash and cash equivalents	13,469	-44.6	7,458
Short-term investments	2,987	96.1	115
Derivatives at fair price	87	1,190.0	1,122
Accounts Receivable	13,962	16.3	16,236
Related parties	90	-23.3	69
Inventory	7,592	36.3	10,351
Taxes to be refunded	2,796	54.4	4,317
Advances to suppliers	318	130.5	733
Others	1,091	55.2	1,694
	42,392	-0.7	42,095
Non-current assets held for sale	11,876		
	54,268	-22.4	42,095
Non-current			
Related Parties	8	11,200.00	904
Loans and financing	274	45.6	399
Advanced expenses	254	99.2	506
Legal deposits	3,062	-4.6	2,920
Income tax and social sec. payments deferred	2,440	51.3	3,692
Taxes to be refunded	612	101.5	1,233
Derivatives at fair price	502	-77.7	112
Deposit for incentives and reinvestment	239	79.5	429
Others	697	3.0	718
	8,088	34.9	10,913
Investments	3,945	176.7	10,917
Intangibles	18,274	8.1	19,752
Fixed Assets	130,087	21.5	158,105
	160,394	24.5	199,687
Total Assets	214,662	12.7	241,782

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	2010	Variation %	2011
Liabilities and shareholders equity			
Current liabilities			
Accounts Payable to suppliers and contractors	5,804	57.8	9,157
Salaries and employment taxes	1,966	28.5	2,527
Derivatives at fair price	92	50.0	138
Portion of long-term current loans	4,866	-34.0	
Loans and financing	1,144	-42.3	660
Related Parties	24	33.3	32
Taxes, contributions and royalties	455	117.4	989
Income tax provision	1,310	-20	1,048
Pension and retirement benefits	311	1.6	316
Provision for asset retirement	128	6.3	136
Dividends and interest on own capital	8,104	-72.8	2,207
Others	1,840	-2.0	1,803
	26,044	-14.7	22,225
Liabilities related to non-current assets held for sale	5,340		
	31,384	-29.2	22,225
Non-current liabilities			
Derivatives at fair price	103	1,102.9	1,239
Loans and financing	37,779	13.2	42,753
Related Parties	3	7,566.7	230
Pension and retirement benefits	3,224	-11.7	2,846
Contingency Provisions	3,712	-7.4	3,438
Income tax and social sec, deferred payments	12,947	-16.8	10,773
Provision for asset retirement	2,463	40.8	3,468
Participation Debentures	2,140	16.6	2,496
Non-controlling shareholders redeemable share	1,186	-20.5	943
Others	3,395	37.8	4,680
	66,952	8.8	72,866
Shareholders Equity			
Class A preferred shares - 7,200,000,000 authorized shares with no nominal value and 2,108,579,618 (2010 2,108,579,618) issued	19,650	50.0	29,475
Common shares 3,600,000,000 authorized shares, no nominal value and 3,256,724,482 (2009 3,256,724,482) issued	30,350	50.0	45,525
Mandatorily convertible securities into common shares	445	-19.1	360
Mandatorily convertible securities into preferred shares	996	-20.1	796
Treasury shares 181,099,814 preferred shares (2010 99,649,571) and 86,911,207 common shares (2010 47,137,394)	-4,826	105.5	-9,917
Operating results with non-controlling shareholders	685	-110.4	-71
Result from share conversion/issuance	1,867		
Equity valuation adjustment	-25	980.0	220
Accumulated conversion adjustment	-9,512	-89.3	-1,017
Profit reserves	72,487	7.8	78,105
Accumulated profits			
Total controlling shareholders equity	112,117	28.0	143,476
Non-controlling shareholders interest	4,209	-23.6	3,215
Total equity	116,326	26.1	146,691
Total liabilities and equity	214,662	12.6	241,782

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Position on December 31, 2010 compared with the position on December 31, 2011

Vale has assets and debts referenced to different currencies, the main ones being the *real*, the US dollar and the Canadian dollar. On December 31, 2011, we had 57% of our assets related to Brazilian *reais*, 8% to US dollars, 29% to Canadian dollars and 6% to other currencies, while the majority of our debt was expressed in US dollars. Consequently, the effects of changes in exchange rates had an impact on the financial statements, especially the depreciation of the *real* by 12.6% against the US dollar.

Current Assets

Cash and cash equivalents.

The 44.6% reduction, dropping from R$ 13.469 billion on December 31, 2010 to R$ 7.458 billion on December 31, 2011, occurred as a function of: (a) dividend distribution and the share repurchase program; (b) disbursement to pay the social contribution on net income (CSLL); and (c) acquisition of 100% of Vale Fertilizantes.

Short-term investments.

Short-term investments dropped 96.1%, falling from R$ 2.987 billion on December 31, 2010, to R$ 115 million on December 31, 2011, again reflecting the items mentioned above.

Derivatives at fair value

The increase in derivatives at fair value of 1,190.0%, rising from R$ 87 million on December 31, 2010 to R$ 1.112 billion on December 31, 2011, essentially refers to the drop in the CDI, which is the index for most of our swaps that protect the debt flow in *reais*.

Accounts receivable from customers.

The increase of 16.3%, rising from R$ 13.962 billion on December 31, 2010, to R$ 16.236 billion on December 31, 2011, refers mainly to the increase in sales over 2010.

Inventories

The 36.3% increase in inventories, rising from R$ 7.592 billion on December 31, 2010 to R$ 10.351 billion on December 31, 2011, refers mainly to the significant increase in production, including new operations.

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Taxes to recover or offset

The 54.4% increase in taxes to recover or to offset, rising from R$ 2.796 billion to R$ 4.317 billion, refers to the revision of the PIS/COFINS calculation, by virtue of a change in the legislation.

Non-current assets held for sale

In 2010, asset sales totaled R$ 11.876 billion, referring to sales of aluminum and kaolin assets. There was no execution in 2011.

Non-current assets

Related Parties

The increase of R$ 8 million in this item at December 31, 2010, to R$ 904 billion on December 31, 2011, basically refers to inclusion of the company Norsk Hydro ASA (to which we transferred our aluminum assets and we received a shareholder stake) as a related party.

Deferred income tax and social contribution

The increase in the deferred income tax and social contribution of 51.3%, rising from R$ 2.440 billion to R$ 3.692 billion, was due to the exchange rate variation on the added value linked to the investment in the nickel area.

Taxes to recover or offset

The increase in taxes to recover or offset of 101.5%, which rose from R$ 612 million to R$ 1.233 billion, refers to the ICMS on operations that were stopped for part of 2010.

Derivatives at fair price

The 77.7% reduction in derivatives at fair price, which dropped from R$ 502 million on December 31, 2010 to R$ 112 million on December 31, 2011, basically refers to the mark to market of derivative swap operations denominated in *reais*, due to depreciation of the *real* against the US dollar.

Investments

The 176.7% increase in investments, from R$ 3.945 billion on December 31, 2010 to R$ 10.917 billion on December 31, 2011, mainly reflects the consolidation of Norsk Hydro.

Fixed assets

The 21.5% increase in fixed assets, rising from R$ 130.087 billion on December 31, 2010 to R$ 158.105 billion on December 31, 2011, occurred due to projects in the iron ore, nickel and logistics segments.

Current liabilities

Accounts payable to suppliers and contractors

The 57.8% increase in accounts payable to suppliers and contractors, rising from R$ 5.804 billion on December 31, 2010, to R$ 9.157 billion on December 31, 2011, was basically due to the increase in Vale s projects.

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Portion of liabilities of long-term loans

The 34.0% reduction in the portion liabilities of long-term loans, dropping from R$ 4.866 billion on December 31, 2010, to R$ 3.212 billion on December 31, 2011, was due to maturities during the year.

Derivatives at fair value

The increase in derivatives at fair value was 50%, rising from R$ 92 million on December 31, 2010, to R$ 138 million on December 31, 2011, basically due to the appreciation of the dollar against the *real*, which is the index for the majority of our swaps that protect the flow of debt.

Dividends and interest on own capital

Proposed dividends and interest on own capital decreased 72.8%, falling from R$ 8.104 billion in 2010, to R$ 2.207 billion in 2011, due to advances for the year 2011 made in August and October of that year. The balance of R$ 2.207 billion remained for payment of the dividends proposed by Vale in 2012.

Liabilities related to non-current assets held for sale

Liabilities related to non-current assets held for sale were R$ 5.340 billion in 2010, due to the payment of commitments linked to assets made available for sale of the assets in the aluminum segment and the kaolin companies. There was no execution in 2011.

Non-current liabilities

Loans and financing

The increase in loans and financing was 13.2%, rising from R$ 37.779 billion on December 31, 2010, to R$ 42.753 billion on December 31, 2011, reflecting the exchange rate variation on the debt.

Derivatives at fair value

The increase in derivatives at fair value was 1,102.9%, from R$ 103 million on December 31, 2010, to R$ 1,239 million on December 31, 2011, basically due to the appreciation of the dollar against the *real*, which is the index for the majority of our swaps that protect the flow of debt.

Provisions for contingencies

Provisions for contingencies fell 7.4%, from R$ 3.712 billion on December 31, 2010, to R$ 3.438 billion on December 31, 2011, due to the payment of contingencies.

Deferred Income tax and social security contribution

In 2011, the deferred income tax and social contribution fell 16.8%, from R$ 12.947 billion in 2010, to R$ 10.773 billion, due to payment of the CSLL.

Provision with obligations for asset retirement

The increase of 40.8%, from R$ 2.463 billion on December 31, 2010 to R$ 3.468 billion on December 31, 2011, was due to the annual review of the estimates.

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Shareholder Debentures

The 16.6% increase of shareholder debentures, from R$ 2.140 billion on December 31, 2010 to R$ 2.496 billion on December 31, 2011, refers to mark to market.

Shareholders Equity of Controlling Shareholders

The shareholders equity of the controlling shareholders increased by 28.0%, rising from R$ 112.117 billion on December 31, 2010, to R$ 143.476 billion on December 31, 2011. The increase in the profit reserves came from withholdings on net income.

Analysis of the Operating Results 2009 x 2010

The following table shows the values related to the consolidated income statements for the years ended December 31, 2009 and December 31, 2010:

		On December 31	
		(in R$ billions)	
Income Statement	**2009**	**Variation %**	**2010**
Net Operating Revenues	**48.496**	71.6%	**83.225**
Cost of products and services	(27.750)	21.6%	(33.756)
Administrative expenses and sales	(2.347)	36.4%	(3.201)
Research and development	(1.964)	(20.2%	(1.567)
Reduction in recoverable value of intangible assets			
Other expenses	(3.262)	29.1%	(4.211)
Operating Revenues	**13.173**	207.4%	**40.490**
Result from corporate participations	99	(148.5)%	(48)
Amortization of goodwill			
Net financial result	2.094	(231.9)%	(2.763)
Gain (loss) on realization of assets	93		
Income before income tax and social contribution	**15.459**	143.7%	**37.679**
Income tax and social contribution	(4.954)	42.0%	(7.035)
Discontinued operations			(222)
Income (loss) for non-controlling shareholders	(168)	109.5%	(352)
Net Income	**10.337**	190.9%	**30.070**

Year ended on December 31, 2009, compared to the year ended on December 31, 2010

Revenues

Net operating revenues were R$ 83.225 billion in 2010, compared with R$ 48.496 billion in 2009, growth of 71.6% over 2009.

In 2010, the increase in the revenues was due basically to the higher volume sold, and to the increase in the prices of the main products sold by Vale, which contributed to an increase in the revenues of R$ 7.366 billion and R$ 28.167 billion, respectively, before 2009.

The higher revenues were determined principally by the higher iron ore prices, R$ 17.953 billion, pellets at R$ 6.880 billion, and by the purchase of fertilizer assets, which contributed with revenues of R$ 2.419 billion.

Iron ore

Revenues from sales of iron ore rose 80% from R$ 25.234 billion in 2009 to R$ 45.419 billion in 2010, due to the 71.1% increase in the average sale price, and 8.8% in the volumes sold. The increase in prices reflects the strong demand.

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Pellets

Revenues from pellet sales increased 266.0%, from R$ 3.887 billion in 2009, to R$ 14.227 billion in 2010, due to the 177.8% variation in the average sell price for pellets and to the 89.3% increase in volumes sold. Higher prices are explained by the strong demand, which is widely reflected by the same pricing methodology applied to iron ore, which also influences the volumes, through higher use of plants.

Manganese ore

Revenues from manganese sales increased 66.5%, from R$ 275 million in 2009 to R$ 458 million in 2010, due to the 53.1% rise in prices as a consequence of the impact of global conditions, and to the 13.5% increase in volumes sold as a function of recovery in demand.

Iron alloys

Revenues from sales of iron alloys increased 57.4%, from R$ 693 million in 2009 to R$ 1.091 billion in 2010, due to the 58.5% increase in volumes sold due to the resurgence of the steel industry. The average price of alloys remained stable due to the variation in the mix of alloys sold.

Nickel and other products

There was a 4.3% increase in revenues from sales of these products, from R$ 7.868 billion in 2009, to R$ 8.204 billion in 2010, mainly due to the following:

• Revenues from nickel sales increased by 3.7%, from R$ 6.457 billion in 2009 to R$ 6.698 billion in 2010, mainly due to the 26.4% increase in the average price of nickel. The sales volume of nickel fell 22.8% as a function of the temporary paralysis of operations of Sudbury and Voisey s Bay, as a result of strikes that started in the second half of 2009; and

• Revenues from copper sales increased 28%, from R$ 903 million in 2009, to R$ 1.156 billion in 2010, mainly due to the growth of 33.8% in the average price, which was partly offset by the 5.7% drop in volumes sold due to the strikes described previously.

Copper concentrate

Revenues from sales of copper concentrate increased 23.3%, from R$ 1.329 billion in 2009, to R$ 1.638 billion in 2010, due to the 25.8% increase in the average sale price.

Aluminum

Revenues from sales of aluminum products increased 10.6%, from R$ 4.217 billion in 2009, to R$ 4.663 billion in 2010, mainly as a function of the variation in the LME price.

Potash

Revenues from potash sales fell 39.3%, from R$ 810 million in 2009, to R$ 492 million in 2010, due to the 13.9% drop in volumes sold, which was explained by the recovery in internal inventory, and by the 25.3% drop in the average price.

Phosphate

Revenues from phosphate sales are attributed to the acquisition of Vale Fosfatados and Vale Fertilizantes. The revenues from sales in 2010 were R$ 2.085 billion.

Nitrogen

Sales revenues are attributed to the acquisition of Vale Fosfatados and Vale Fertilizantes. Revenues from sales in 2010 were R$ 593 million.

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Logistics services

Revenues from logistics services increased 14%, from R$ 2.838 billion in 2009, to R$ 3.236 billion in 2010, mainly due to the increase in the mix of products transported.

Other products and services

Revenues from other products and services increased from R$ 1.537 billion in 2009 to R$ 1.795 billion in 2010. This occurred mainly because of the higher revenues from steel products.

Costs of Products and Services

Costs related to services and goods sold by Vale are detailed below:

Comments on Cost by Type of Product

The total cost of products and services totaled R$ 33.756 billion in 2010, compared with R$ 22.750 billion in 2009, an increase of 21.6%, due to the higher volumes sold. This increase was mainly a consequence of a variation in the following items:

• Outsourced services. The cost of outsourced services increased 8.6% in 2010, from R$ 4.277 billion in 2009, to R$ 4.640 billion in 2010, due to the higher sales volume.

• Materials costs. Materials costs increased by 2.2% in 2010, from R$ 5.943 billion in 2009, to R$ 6.071 billion in 2010, reflecting the increase in demand. In 2009, anticipated maintenance was performed, reflecting the higher consumption of materials during the period.

• Costs of energy and fuels. Energy costs increased 29.1% in 2010, from R$ 4.539 billion in 2009 to R$ 5.858 billion in 2010, reflecting higher volumes sold and higher prices.

• Personnel costs. Personnel costs decreased 3.9%, from R$ 4.076 billion in 2009, to R$ 3.922 billion in 2010, reflecting the temporary stoppage that occurred in the basic metals operations in Canada, reflected in the reduction of volumes sold, and offset in part by the 7% adjustment in salaries paid in Brazil.

• Acquisition of products. The cost of products purchased from third parties increased 56.6%, from R$ 1.218 billion in 2009, to R$ 1.908 billion in 2010, mainly due to the increase in the volume of pellets sold.

• Depreciation and depletion. The cost of depreciation and depletion increased 5.9%, from R$ 4.642 billion in 2009, to R$ 4.916 billion in 2010, mainly reflecting the acquisition of fertilizer assets.

• Other costs. Other costs increased 110.8% in 2010, from R$ 3.055 billion in 2009 to R$ 6.440 billion in 2010, mainly due to allocation of fertilizer costs to this line Vale Fosfatados and Vale Fertilizantes.

Sales and administrative expenses

Sales and administrative expenses increased 36.3%, rising from R$ 2.347 billion in 2009 to R$ 3.201 billion in 2010. The increase is due to higher expenses for services, advertising and personnel, reflecting our efforts to drive the marketing of products.

Research and development expenses

Research and development expenses decreased 20.2% in 2010, from R$ 1.964 billion in 2009 to R$ 1.567 billion in 2010. The reduction in research with gas and energy was due to verification of the economic viability of some of those projects.

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Other operating costs and expenses

Other operating expenses increased from R$ 3.262 billion in 2009, to R$ 4.211 billion in 2010, a 29.1% increase, due to the provision for losses with materials, higher distribution of variable remuneration (participation in the result) and reassessment of mining rights.

Result from Corporate Participations

The result from corporate participations in non-controlled companies was 148.5% lower in 2010, going from revenues of R$ 99 million in 2009 to an expense of R$ 48 million. The reduction was due to losses with the entry into operation of Companhia Siderúrgica Atlântico.

Net Financial result

The financial result varied 231.9%, from a revenue of R$ 2.094 billion in 2009, to an expense of R$ 2.763 billion in 2010. The main factors contributing to the negative result were the lower monetary variation and the positive exchange rate variation recorded in 2009, the mark to market of participative debentures, and expenses with the IOF due to the redemption of securities convertible into shares.

Gain (loss) on realization of assets

The gain (loss) on realization of assets was R$ 93 billion in 2009, mainly due to the sale of our remaining stake in Usiminas, with a gain of R$ 288 million, which was partially offset by a loss in Valesul of R$ 147 million in 2009. In 2010, no gains/losses were recorded.

Income Taxes and Social Security Contributions

In 2010, we recorded a tax expense on net income of R$ 7.035 billion, compared to R$ 4.954 billion in 2009, basically due to the higher tax base.

Net income

The 190.9% increase in net income, from R$ 10.337 billion in 2009 to R$ 30.070 billion in 2010, was mainly due to the factors explained above.

Analysis of equity accounts

In R$ billions

	2009	Variation %	2010
Assets			
Current Assets			
Cash and cash equivalents	13,221	1.9	13.469
Short-term investments	6,525	-54.2	2,987
Derivatives at fair price	183	-52.5	87
Financial assets available for sale	28	-25.0	21
Accounts Receivable	5,643	147.4	13,962
Related parties	4	2,150.00	90
Inventory	5,913	28.4	7,592
Taxes to recover or offset	2,685	4.1	2,796
Advances to suppliers	872	-63.5	318
Others	1,719	-37.8	1,070
	36,793	15.2	42,392
Non-current assets held for sale	36,793	47.5	54,268
Non-current assets			
Related Parties	64	-87.5	8
Loans and financing	286	-4.2	274
Advanced expenses	295	-13.9	254
Legal deposits	3,109	-1.5	3,062
Advances to energy providers	889		
Income tax and social sec. payments deferred	2,760	-11.6	2,440
Taxes to recover or offset	1,540	-60.3	612
Derivatives at fair price	1,506	-66.7	502
Others	546	71.4	936
	10,995	-26.4	8,088
Investments	4,562	-13.5	3,945
Intangibles	16,440	11.2	18,274
Fixed Assets	108,948	19.4	130,087
	140,945	13.8	160,394
Total Assets	177,738	20.8	214,662

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	2009	AV	2010
Liabilities and shareholders equity			
Current liabilities			
Accounts Payable to suppliers and contractors	3,849	50.8	5,804
Salaries and employment taxes	1,556	26.3	1,966
Derivatives at fair price	264	-65.2	92
Portion of long-term current loans	5,310	-8.4	4,866
Loans and financing	646	77.1	1,144
Related Parties	33	-27.3	24
Taxes, contributions and royalties	256	72.7	442
Income tax provision	366	257.9	1,310
Pension and retirement benefits	292	6.5	311
Sub-concession Ferrovia Norte Sul	496	-76.4	117
Provision for asset retirement	157	-18.5	128
Dividends and interest on own capital	2,907	178.8	8,104
Others	1,338	29.7	1,736
	17,470	49.7	26,044
Liabilities related to non-current assets held for sale			