



Reference Form - 2011

# 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.

### 2.1/2.2 Identification and remuneration of Auditors:

Does it have auditor?	YES
CVM (Securities Commission)	287-9
Code	
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 service	provision	of	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.

### 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	103,195,407,000.00	83,225,006,000.00	48,496,566,000.00
Revenue/Temporary			
Revenue/Insurance			
Premium			
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	<u>84,079</u>	<u>146,938</u>	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

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

	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			

# 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 retain	ed	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 Divide	end						
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				

# 3.6 Statement of Dividends on account of retained earnings or reserves

	Fisc	al Year Ended Decemb	per 31
Dividends distributed to (in R\$ thousands):	2011	2010	2009
Retained Earnings	-	-	-
Constituted Reserves	-	513,050	370,507

# 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
10/01/00/1	. , ,	0.1. 1. 1.	20.01	
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.

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.

# 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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## 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.

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.

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.

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.

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.

### 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

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.

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

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.

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.

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

Chances of loss Analysis of impact in the case of losing the suit/ Reasons for importance for the Company	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 viola
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).

Claim n. 00685-45.2008.5.08.0114	
Court	1ª Federal Court of Parauapebas – Pará
Instance	1st Instance (settlement during 1 <sup>st</sup> 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
Amounts, goods or rights involved	Mineração e Construção S/A, and Vessoni Transportes Ltda.
Amounts, goods or rights involved Main facts	R\$ 108.6 million  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 de
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

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	2 <sup>nd</sup> 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.  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.  In March, the parties agreed to extend the period of a
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.

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.

Jurisdiction Instance Date of Filing Parties in the suit Amounts, goods or rights Involved Main facts	Federal Regional Court of the 2 <sup>nd</sup> Region  2 <sup>nd</sup> instance  02/03/2003  Vale (Plaintiff) and Federal Tax Authority (Defendant)  Not applicable  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
Date of Filing Parties in the suit Amounts, goods or rights nvolved	O2/03/2003  Vale (Plaintiff) and Federal Tax Authority (Defendant)  Not applicable  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
Parties in the suit Amounts, goods or rights nvolved	Vale (Plaintiff) and Federal Tax Authority (Defendant)  Not applicable  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
Amounts, goods or rights nvolved	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
	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
Main facts	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
Chances of loss	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 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 w
Chances of loss Analysis of impact in the case of losing the suit/ Reasons for mportance for the Company  Amount provisioned (if any)	Possible  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.  Not applicable

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
	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	2 <sup>nd</sup> 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	Not applicable. Considering the granting of the injunction related to	
loss/Reasons for the importance	item 1.4, this discussion is prejudiced as the object no longer	
of the claim to the Company	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	In the event of any unfavorable outcome, tax credits will not be
loss/Reasons for the importance	enforceable immediately as their effectiveness is subject to the final
of the claim to the Company	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 I	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

	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. 184		
Court	Tax Appeals Administrative Council	
Instance	2 <sup>nd</sup> 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  Main factors		
	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	

	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	28 <sup>th</sup> 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	Not applicable
loss/Reasons for the	
importance of the claim to the	
Company	
Allocated amount (if any)	None

2.2) Tax Collection no. 00151 18471.001243/2007-69	97-06.2012.4.02.5101 regarding the Tax Assessment Notice no.
Court	5th Tax Collection Court
Instance	1 <sup>st</sup> 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	In the event of any unfavorable outcome related to the Injunction
loss/Reasons for the	object of item 1.4, Vale may have to present a new guarantee to
importance of the claim to the	suspend the applicability of the amounts in question.

Company	
Allocated amount (if any)	None

3) Notice of Infraction no 18471.0		
Jurisdiction	Administrative Council of Fiscal Resources	
Instance	2 <sup>nd</sup> 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	In the event of a final unfavorable decision, the taxes on the	
of losing the suit/ Reasons for importance for the Company	accounting gain regarding the ownership equity of foreign subsidiaries discussed under this tax assessment notice may be levied. Any	
importance for the company	financial impact, however, shall only occur in case of a final	
	in oddo of a mar	

	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	1 <sup>st</sup> Instance
Date of filing	01/25/2012
Parties to the claim	Vale (plaintiff) and President of the 2 <sup>nd</sup> 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	Not applicable
loss/Reasons for the importance	
of the claim to the Company	
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	In the event of any unfavorable outcome related to the
of loss/Reasons for the importance of the claim to the Company	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

4) Notice of Infraction nº 12897.000868/2009-98		
Jurisdiction	Federal Revenue Secretariat	
Instance	2 <sup>nd</sup> 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 0	
Chances of loss	Possible	
Analysis of impact in the case of	In the event of a final unfavorable decision, the taxes on the accounting	
losing the suit/ Reasons for importance for the Company	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	
(" 3)	1	

4.1) Writ of mandamus 20 12897.000868/2009-98	11.51.01.005614-9	related	to	the	Tax	Assessment	Notice	no.
Court	32nd Federal Co	urt						
Instance	1st federal instan	се						
Date of filing	04/29/2011							

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 Net applicable
Analysis of impact in case of loss/Reasons for the	Not applicable
importance of the claim to the	
Company	
Allocated amount (if any)	None

	1.51.01.518168-2 regarding the Tax Assessment Notice no.	
12897.000868/2009-98 dated 1/1 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
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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	enforced	
importance of the claim to the Company		
Allocated amount (if any)	None	

4.4) Development of the Assessment 0023958-26.201	Notice of Infraction no. 12897.000868/2009-98: Tax 2.4.02.5101		
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	In the event of any unfavorable outcome related to the		
of loss/Reasons for the	Injunction object of item 1.4, Vale may have to present a		
importance of the claim to the Company	guarantee to suspend the applicability of such amounts.		
Allocated amount (if any)	None		

5) Notice of Infraction no. 12897.000023/2010-36		
Jurisdiction	Federal Revenue Secretariat	
Instance	2 <sup>nd</sup> 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	In the event of a final unfavorable decision, the taxes on the accounting	
losing the suit/ Reasons for	gain regarding the ownership equity of foreign subsidiaries discussed	
importance for the Company	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	

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5.1) Writ of mandamus 201	0.51.01.017597-3 related to the Tax Assessment Notice no.
12897.000023/2010-36, dated 02/	/12/10:
Court	Federal Regional Court of the 2nd Region
Instance	2 <sup>nd</sup> 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

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 Not applicable loss/Reasons for the importance of the claim to the Company 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	1 <sup>st</sup> 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	In the event of any unfavorable outcome, the guarantee of this
loss/Reasons for the	execution may be enforced.
importance of the claim to the	
Company	
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	1 <sup>st</sup> 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)	

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 00	11476-46.2012.4.02.5101 regarding the Tax Assessment	
Notice no. 12897.000023/2010-36 dated 02/12/10		
Court	4 <sup>th</sup> 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	In the event of any unfavorable outcome, the deposit that guarantees this execution may be converted into revenue to the Union.	
the Company Allocated amount (if any)	None	
Allocated amount (ii any)	NOTE	

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	1 <sup>st</sup> 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

	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.	
Court	1 <sup>st</sup> 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	41 <sup>st</sup> 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

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

Claim no. 0015963-69.2006.4025101	
Jurisdiction	30 <sup>th</sup> 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	5 <sup>th</sup> Panel of TRF 2 <sup>nd</sup> 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,	Remote
possible, 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	2 <sup>nd</sup> 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

	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	Any unfavorable decision in the lawsuit would generate financial losses for the
losing the suit/ Reasons for	Company.
importance for the Company	
Amount provisioned (if any)	None.

Claim no. 0317.02.007032-0	
Jurisdiction	1 <sup>st</sup> 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	Any unfavorable decision in the lawsuit would generate financial losses for the
losing the suit/ Reasons for importance for the Company	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

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 48 <sup>th</sup> Civil Court of the Justice Court of Rio de
	Janeiro. Special Recourse under way before 3 <sup>rd</sup> 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	18 <sup>th</sup> 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

Chances of loss (probable, possible, remote)	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.
Analysis of impact in the case of losing the suit	Incalculable amount
Amount provisioned (if any)	None

	Procedure No. 0529364272010.8.13.0145
Jurisdiction	7 <sup>th</sup> 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
possible, remote)	
Analysis of impact in the case	Any unfavorable decision in the lawsuit would generate financial
of losing the suit	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.,

Amounts, goods or rights involved	Minerações Brasileiras Reunidas S.A., Usiminas – Usinas Siderúrgicas de Minas Gerais, Gerdau S.A., and Vale S.A. (defendant) 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 preinsolvency 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
possible, remote)	Assume for each land a sinism in the language to see all as a great of
Analysis of impact in the case	Any unfavorable decision in the lawsuit would generate financial
of losing the suit	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

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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
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	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	Vale is involved in many administrative and in-court proceedings in which the
subsidiary which caused the	collection of CFEM is discussed. Such claims result from tax assessments by the
contingency	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.
I .	

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.	
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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	Adoption of the ICMS taxable base for iron ore transportation from MG		
subsidiary which caused the	to ES different from the taxable base used by the tax authorities.		
contingency			

#### (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.

# 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.

## 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:

- <u>Protection program of loans and financing in reais, indexed to CDI</u>: 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.
- <u>Protection program of loans and financing in reais, indexed to TJLP</u>: 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<sup>1</sup> 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.
- <u>Protection program of loans and financing in reais with fixed rates:</u> 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.
- <u>Currency cash flow hedge</u>: 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.
- <u>Protection Program for loans and financing in Euros</u>: 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)

<sup>&</sup>lt;sup>1</sup> Due to liquidity restrictions in the TJLP derivative markets, some swap operations were contracted according to CDI equivalence.

- <u>Protection program for interest rates</u>: 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.
- <u>Exchange Protection program for selling coal at a fixed price</u>: 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.
- <u>Protection program for compensation exposure</u>: 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.
- <u>Foreign exchange protection program for the purchase of assets in the African copper belt</u>: 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.
- <u>Foreign exchange protection program for cash flow</u>: 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.
- <u>Hedge program for the selling of nickel</u>: 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.
- <u>Sales program for nickel at a fixed price</u>: 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.
- <u>Protection Program for purchase transactions of nickel</u>: 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.
- <u>Protection Program for purchase of fuel oil Bunker Oil:</u> 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.
- <u>Protection program for selling of copper scrap</u>: 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 overthe-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).

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.

# 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 counterparties 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

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.

# **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.

#### 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.

- 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).

- 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.

- 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.

- 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.

- 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).

- 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).

- 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.

- 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, ferroalloys, 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.

- 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.

- 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).

- 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.

- 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.

# 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 KCl. 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.

## 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. (latm-D) and 77% of Inco Advanced Technology Materials (Shenyang) Co. Ltd. (latm-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

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

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

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.

## 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.

## 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".

#### 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.

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

In R\$ thousands	2011		2010	2009	
Segment	Net Revenue	% of	Net Revenue % of	Net Revenue % of	

		total		total		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

In R\$ thousand	2011		2010		2009	
				% 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).

#### Our interest (%)

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

#### 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.

#### 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.

		Production December 3	for fiscal year 31	r ended on	Recovery Rate
Mine/Plant	Туре	2009	2010	2011	_
		(million metr	ic tons)		(%)
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 Minas Itabirito				11.8	72.2
Segredo/João Pereira(6)	Onon nit	8.4	12.4	18.6	64.7
	Open pit	8.4 9.8		8.8	
Sapecado/Galinheiro(7) Vargem Grande	Open pit	9.8	17.7	8.8	79.7
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	- p p	55.2	74.7	76.3	_
Centralwestern System		33.2		, 0.0	
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	Open pit	1.0	4.2	5.6	_
Northern System		1.0	4.2	5.0	
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 92.4
*	Open pit	84.6			92.4
Total Northern System			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	_

- (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.

Our Participation

Firm	Local Operation	Voting (%)	Total (%)	Our Partners	
Vale	Brazil:  1) Tubarão, Fábrica, Vargem Grande e São Luís	-	-	-	
Hispanobras	Tubarão	51	50.9	Arcelor Mittal	
Samarco	Mariana and Anchieta	50	50	BHP Billiton	
Vale Oman Pelletizing Company LLC (VOPC)(1)	<u>Oman</u> Sohar industrial Complex	100	100	-	
Zhuhai YPM	<i>China:</i> 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

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.

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.

# **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.

# Our Participation (%)

Firm	Location of Operation	Voting	Total
		(%	%)
	Brazil:	•	•
Vale Manganês	Pará and Minas		
· ·	Gerais	100	100
MCR	Mato Grosso do Sul	100	100
Vale Mina do	Pará	100	100
Azul <sup>1</sup>			

<sup>(1)</sup> 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.

		Rate of			
Mine	Type	2009	2010	2011	recovery
		(Millions o	of metric tons)		(%)
Azul	Open pit	1.4	1.6	2.1	66.6
Morro da Mina	Open pit	0.1	0.1	0.1	88.0
	Undergroun	0.2	0.2	0.3	80.4
Urucum	d				<del>_</del>
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.

	Our Participation (%)				
Firm	Location	Voting	Total		
	Brazil:				

Vale Manganês	Minas Gerais and Bahia	100.0	100.0
	Mato Grosso do Sul	100.0	100.0
Vale Manganèse France Vale Manganese Norway AS	Dunkerque, France Mo I Rana, Norway	100.0 100.0	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.

	Production for fiscal year ending December 31				
Firm	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		

<sup>(1)</sup> (2) 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.

# 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.

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

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

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

Company	Business	Location	participatio n (%)	Our Partners
Company	Dusiness	Eccation	11 (70)	- Cui i di tileis
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)

Our

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 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.

<sup>\*\*</sup>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.

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	
		(m	nillion 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					
	Underground and open	1.184	1.151	467	
Integra Coal(3)	pit				
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.

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 Atlantic	South Korea — Onsan(6) (5) Brazil – Ourilândia do Norte, Pará	Stand-alone nickel refinery (producer of finished nickel) 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

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 codeposits 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.

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	
			(thous	ands of metric	tons, exce	pt percer			
	Grade			Grade			Gra	ıde	
	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

	2009				2010		2011		
	(thousa			ands of metric	tons, except percentages)				
		Gra	de		Gra	ide		Gra	ıde
	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	-	-	-	326	-	1.31	1.043	-	1.29
total operations									
Mine operations in Brazil				4.056		4.00	1 100		1.00
Onça Puma	-	-	-	1.259	-	1.93	1.466	-	1.86
Total operations in Brazil	-	-	-	1.259	-	1.93	1.466	-	1.869

<sup>(1)</sup> This mine has been closed indefinitely since January 2009.

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.

Production for fiscal year ending December 31 2010 Mine Type (Thousands of metric tons) 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)..... 68.8 78.4 67.8 Open pit Onça 7.0 Puma(4)..... Open pit VNC(5)..... 5.1 Open pit 5.9 External (6)..... 5.4 8.0 186.7 178.7 241.5

# 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.

<sup>(2)</sup> This mine has been closed indefinitely since May 2008.

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

<sup>(2)</sup> 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.

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

<sup>(4)</sup> Primary nickel production only. Nickel found in iron nickel.

<sup>(5)</sup> Primary nickel production only. Nickel found in nickel.

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

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

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.

# 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.

		Production during fiscal year ending December 31					
Mine	Туре	2009	2010	2011			
			(million metric tons)				
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:							
	Open pit and	-	-	9			
Tres Valles	underground						
Total		198	207	302			

<sup>(1)</sup> We process copper in our facilities using third party resources.

# 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.

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

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

#### 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	<u> </u>	<u>-</u>	245	
External (1)	-	64	51	93	
Total		1,575	1,066	2,675	

<sup>(1)</sup> 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	Voting	Total	Our partners
			(%)	
Vale Fertilizantes	Uberaba, Brazil	100	100	-
MVM Resources International,	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.

# Production of Fertilizers (Phosphates)

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

Production for fiscal year ending December 31 2010 Mine Type 2011 (million metric tons) 791 Bayóvar..... Open pit 2,544 Catalão..... Open pit 626 947 Tapira..... Open pit 2.068 2.011 Patos de Minas..... Open pit 43 44 Open pit 1,182 1,231 Araxá..... Open pit 545 582 Cajati..... Total..... 7.359 5,255

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

	Production for ending Dec	-
Product	2010	2011
	(million me	etric 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:

	Production for fiscal year ending December 31				
Mine	Type	2009	2010	2011	Recovery rate
		(Thousands of metric tons)			(%)
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.

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.

			Participation	of Vale (%)	
Firm	Business	Location	Voting	Total	Vale Partners
			(%	p)	
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

			Participation of Vale (%)			
Firm	Business	Location	Voting	Total	Vale Partners	
			(%	(6)		
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 Vale Logística	Railroad operations	Colombia	8.4	8.4	Drummond, Glencore and Coalcorp	
Argentina	Port Operations	Argentina	100	100	_	
SDCN		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		

Participation of Vale (%)

- (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

<u>Vitória a Minas railroad ("EFVM")</u>. 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.

<u>Carajás railroad ("EFC")</u>. 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

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

<u>Ferrovia Centro-Atlântica ("FCA")</u>. 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.

<u>Ferrovia Norte-Sul railroad ("FNS")</u>. 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

<u>Ferrocarriles del Norte de Colombia S.A. ("FENOCO")</u>. 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.

# **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.

<u>Tubarão Port</u>. 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 III 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.

<u>Itaguaí maritime terminal – Cia. Portuária Baía de Sepetiba ("CPBS")</u>. 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.

<u>Guaíba Island maritime terminal</u>. 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.

<u>Inácio Barbosa maritime terminal ("TMIB").</u> 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.

# Argentina

<u>Vale Logistica Argentina S.A..</u> 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.

# **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.

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

- 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.

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.

		Approximate area covered	Expiration
Location Brazil	Concession or other right	(in hectares)	date
DIAZII	Exploration Concession (1)	650,810	Undetermined
Canada		000,010	G.1.43-13-11-11-13-4
Ontario	Exploration Concession (total)	265,804	2011-2032
	Mineral Lease Patented Mineral Rights Mining License of Occupation	20,994 82,969 3,075	2012-2032 Non-existent Undetermined
Manitoba	Order in Council Leases Potash Leases Mineral Lease Patented Mining Claims	109,043 6,533 4,854 378	2020-2025 2016-2030 2013 Non-existent
Newfoundland and Labrador	Mining Lease	1,599	2027
Saskatchewan	Potash Leases Petroleum and Natural Gas Leases	27,404 8,955	2029-2032 2013-2016
Indonesia	(1)		
<b>A</b>	Employment Agreement (Contract of Work) <sup>(1)</sup>	190,510	2025
Australia	Exploration Concession (Mining concessions)	26,917	2011-2041
New Caledonia	Exploration Concession ( <i>Mining concessions</i> )	21,269	2016-2051
Peru	, , , , , , , , , , , , , , , , , , , ,	,	
	Exploration Concession ( <i>Concesión de Exploración</i> ) <sup>(3)</sup>	187,617	Undetermined
Colombia			
	Exploration Concession El Hatillo Exploration Concession Cerro Largo Sur	9,638 1,092	2028 2032
Argentina			
	Exploration Concession ( <i>Manifestación de Descubrimiento</i> )	88,707	Undetermined
Chile	Exploration Concession (Concesión de Explotación)	58,903	Undetermined
Zambia	(4)		
DRC	Exploration Concession (Mining Concessions) (4)	68,550	2012-2033
China	Exploration Concession ( <i>Mining Concessions</i> ) (4)	9,200	2039
J	Exploration Concession (Mining Concessions) (4)	12,383	2034
Mozambique			
0.1	Exploration Concession (Mining Concession)	23,780	2032
Guinea	Evaluation Concession (Mining Concession)	102.400	2025
	Exploration Concession (Mining Concession)	102,400	2035

<sup>(1)</sup> Includes Exploration Requirements

<sup>(2)</sup> 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.

- (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.

# **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

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.

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

# • 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.

# 7.6 Relevant revenue from abroad

Fiscal year December 31, 2011			
Revenue from customers attributed to:	Revenue (R\$ thousands)	% In total net income of the	

		Company
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-desustentabilidade.

# 7.9 Other information the issuer deems relevant

No further relevant information about this item 7.

## 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 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

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

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

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.

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

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	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:

### In thousands of R\$

			North				New		
2011	Brazil	Europe	America	Australia	Africa	Asia	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

## 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	

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

<sup>\*\*</sup>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.

# 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

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.

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.	Interruption and/or cancellation of mining operations in Indonesia.
				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.	
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.	Interruption and/or cancellation of mining operations in New Caledonia.
				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.	
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.

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.

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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Mining concession EI 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; nonpayment 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.

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.

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	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)	with the mining plan. 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	the states of Maranhão and	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		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.

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 concessionaire.	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.  Note: The cities involved are: Aimorés (MG), Baixo Guandu (ES), Resplendor (MG), and Itueta (MG).

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	Cities in the states of Maranhão and	2037	(i) termination of the contractual period; (ii) nationalization; (iii) forfeiture; (iv) rescission;	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
	electric energy generation – Estreito Dam	Tocantins		(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.	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	Cities in the states of	2037	(i) termination of the contractual period; (ii) nationalization; (iii) forfeiture; (iv) rescission;	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
	electric energy generation – Santa Isabel Dam	Tocantins and Pará		(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.	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	Cities in the states of Rio	2032	(i) by reversion of the asset at the end of the contractual period; (ii) by nationalization: (iii)	Interruption and/or cancellation of the supply of energy from the hydroelectric plant.
	energy generation – Machadinho Dam	Grande do Sul and Santa Catarina		by forfeiture.	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 hydraulic energy – Glória Dam	Muriaé (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 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.

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	The loss of rights to trademarks results in the impossibility of stopping third parties from using identical or similar trademarks to branceven competing products and services, since the holder loses the right to the exclusive use of them. There also exists the possibility that

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.

# 9.1 - Relevant non-current assets / 9.1.c - Participation in Corporations

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % I	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Aços Laminados do Pará	10.335.963/0001-08		Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	Develop studies for technical-economic viability, as well as market studies, business plans, and other related studies to build an integrated siderurgical plant in Marabá, in the state of Pará (the "Project"). This plant will produce steel including one or more plants for sintering, coking, high furnace, steel mill, and machines for ingot casting/finishing for the Project. The studies will also include market, engineering, and environmental assessments, budgets, and fiscal and economic analysis (the "Project Study"). Acquire the premises where the Project will be installed and sign the necessary agreements for said acquisition. Obtain the required licenses for the implementation of the Project, including, but not limited to the environmental licenses. Negotiate all commercial agreements that are necessary for the implementation of the Project, including the supply of iron ore/pellets, contracts for the supply of logistic services, among others.	100.000000
				Market value				
31/Dec/2011	213.0000	0.00000	0.00000	Book value 3	1/Dec/2011	266,000,000.00		
31/Dec/2010	740.0000	0.000000	0.00					
31/Dec/2009	0.000000	0.000000	0.00					
Reasons for buying a	and holding that participation	ı						
Encourage the consur	mption of iron ore in Brazil throu	ugh investment in the	iron and steel company.					

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % I	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
BSGR Limited	00.000.000/0000-00	-	Controlled	Virgin Islands			All and any activity not prohibited by	1.000000
				(England)			law.	
				Market valu	ie			
31/Dec/2011	-9,0000	0,00000	0 0	0,00 Book value 3	31/Dec/2011	757,000,000.00		
31/Dec/2010	0,00000	0,00000	0 0	),00				
-31/Dec/2009	<del>0,00000</del>	0	0 6	0,00				
Reasons for buying	and holding that participation	1						
Iron ore investment in	n Guinea.							
California Steel Industries, Inc.	00.000.000/0000-00	-	Affiliated	United States			Exploration of any type of activity that is legal in the state of Delaware.	50.000000

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
				Market value				
31/Dec/2011	17.00000	0.000000	0.00	Book value 3	1/Dec/2011	301,000,000.00		
31/Dec/2010	0.000000	0.000000	0.00					
31/Dec/2009	-30.30000	0.000000	0.00	)				
Reasons for buying an	nd holding that participation							
Carry out relamination of	pperations in the US.							
Companhia Coreano- Brasileira de Pelotização - Kobrasco	33.931.494/0001-87	-	Associated	Brazil	Espírito Santo	Vitória	Production and marketing of iron ore pellets, as well as the performance of oth activities directly or indirectly related to its purpose, including the import, export, and provision of services of any nature. The company is also able to participate, in any manner, in other companies.	i I
				Market value				
31/Dec/2011	0.000000	0.000000	54,000,000.00	Book value 3	1/Dec/2011	208,000,000.00		
31/Dec/2010	38.670000	0,000000	18,000,000.00					
31/Dec/2009	18.110000	0.000000	0.00	)				
Reasons for buying an	nd holding that participation			i				
Expansion of Vale's part	ticipation in the pellet market i	n Brazil.						
Companhia Hispano- Brasileira de Pelotização - HISPANOBRAS	27.240.092/0001-33		Associated	Brazil	Espírito Santo	Vitória	Production and sale of iron ore pellets ar performing any activity directly or indirect related to the production and sale of iron pellets. The company may also participat any other industrial and/or commercial at correlated with its main purpose, as well participate in other undertakings in Brazi	tly ore te in ctivities as
				Market value				
31/Dec/2011	1.000000	0.000000	0.00	Book value	31/Dec/2011	214,000,000.00		
31/Dec/2010	45.21000	0.000000	32,000,000.0	0				
31/Dec/2009	85.880000	0.00000		i				

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % M	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Reasons for buying a	and holding that participation							
Expansion of Vale's pa	articipation in the pellet market ir	n Brazil						
Companhia Ítalo- Brasileira de Pelotização - ITABRASCO	27.063.874/0001-44		Associated	Brazil	Espírito Santo	Vitória	Production and sale of iron ore pellets and performing any activity directly or indirectly related to the production and sale of iron ore pellets. The company may also participate in any other industrial and/or commercial activities correlated with its main purpose, as well as participate in other undertakings in Brazil.	
				Market value	•			
31/Dec/2011	5.000000	0.000000	71,000,000.00	Book value 31/Dec/2	2011	150,000,000.00		
31/Dec/2010	-10.060000	0.000000	)	0.00				
31/Dec/2009	16.910000	0.000000	)	0.00				
Reasons for buying a	and holding that participation							
xpansion of Vale's part	ticipation in the pellet market in I	Brazil.						
Companhia Nipo- Brasileira de Pelotização - NIBRASCO	27.251.842/0001-72		Affiliated	Brazil	Espírito Santo	Vitória	Production and sale of iron ore pellets and performing any activity directly or indirectly related to the production and sale of iron ore pellets. The company may also participate in any other industrial and/or commercial activities correlated with its main purpose, as well as participate in other undertakings in Brazil.	
				Market value	•			
31/Dec/2011	12.000000	0.000000	36,000,000.00 <b>Book</b> v	value 31/Dec/2011		372,000,000.00		
		0.000000	5,000,00	00.00				
31/Dec/2010	30.590000							
31/Dec/2010 31/Dec/2009	30.590000 -0.770000	0.000000	46,0000,000.00	I I				
31/Dec/2009		0.000000	46,0000,000.00					

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Companhia Portuária da Baía de Sepetiba - CPBS	04.788.980/0001-90	-	Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	The construction and utilization of a port facility for private, mixed use, located with the area of Porto de Sepetiba, Rio de Janeiro, specialized in moving and storagrof iron ore and its derivatives. Secondarily and with a complementary character, the company may carry out port operations with other dry bulks, as long as these complementary operations do not interfer with the main operations. It is forbidden for the company to perform any activity different from its purpose, except with the express authorization of Companhia Docado Rio de Janeiro – CDRJ.	e e e e
				Market value	е			
31/Dec/2011	12.00000	0.00000	155,000,000.00	Book value	31/Dec/2011	372,000,000.00		
31/Dec/2010	0.000000	0.00000	147,000,000.0	00				
31/Dec/2009	6.700000	0.000000	46,000,000.00					
Reasons for buying ar	nd holding that participation							
Supply port services for	iron ore operations.							
Ferrovia Centro - Atlântica S.A.	00.924.429/0001-75		Controlled	Brazil M	Minas Gerais	Belo Horizonte	Provide rail transport services; operate services for loading, unloading, warehousing, and transshipment in stations, yards, and land within the range of existing railway lines which are object of the concession; furnish modal transport related to rail transport; serve as a port operator, running services and operations for moving and storage of goods destined for or coming from water transport; participate in projects that aim to promote the socio-economic development of the areas of influence and seek to expand rail services offered; perform all similar or related activities as those described above and engage in other activities that are based on the infrastructure of the Company.	of

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporati	on	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation %	Market Value - variation %	Amount of Divide Received (R\$)	nds		Date	Value (R\$)		
					Market value				
31/Dec/2011	35.0000	0.00000	)	0.00	Book value 3	1/Dec/2011	2,590,000,000.00		
31/Dec/2010	12.4000	0.00000	)	0.00					
31/Dec/2009	0.230000	0.00000	)	0.00					
Reasons for buying	and holding that participation	n							
Operation of the Centr	ro-Atlantica Railroad concessi	on.,							
					Market value			the regime of sub concession, through the following activities: (a) provision of the administration and operation of the North-South Railroad, for the stretch from Açailândia, in the state of Maranhão, to Palmas, in the state of Tocantins (Stretch), including operation, conservation, maintenance, monitoring, improvement, and adaptation of the Stretch of railroad, as defined in the Bid Notice No. 001/2006 (Notice) including, in compliance with the conditions of the Sub-concession Contract with Lease (Contract); and (b) implementation, management, and supervision of the services mentioned in item (a) above, including associated projects, operational services, and complementary services, as well as supporting additional services and related acts provided that such activities are related to the objectives of the Company, under the terms of the Contract.	
31/Dec/2011	0.00000	0.00000	3,000,000.00	Воо	k value 31/Dec/2	011	1,740,000,000.00		
31/Dec/2010	35.0000	0.00000	)	0.00					
31/Dec/2009	57.6000	0.00000	5,680,000.00						
Reasons for buying	and holding that participation	n							
Operation of the North	n-South Railroad concession.								

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation		HQ - Country	HQ - State	HQ - Municipality	Description of Activities Iss (%	suer Participation )
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)			Date	Value (R\$)		
Henan Longyu Energy Resources Co., Ltd.	00.000.000/0000-00	-	Affiliated		China			Utilization and development of coal resources; producing, washing, processing, trading, and selling (including exportation) of coal and other related products; utilization, for different purposes, of the natural resources of coal; manufacturing and repair of mechanical and electrical equipment for mining, rental of equipment, and treatment of waste; and supply of post-sale technical and advisory services regarding the items above. The company can adjust its corporate purpose, based on the needs to develop the business and its own capacity, through the approval by the general meeting of shareholders and the competent government authorities	0.000000
					Market value				
31/Dec/2011	27.00000	0.000000	0.00000	00	Book value 31/	/Dec/2011	529,000,000.00		
31/Dec/2010	-4.14000	0.000000	147,000,000.00						
31/Dec/2009	5.840000	0.000000	)	0.00					
Reasons for buying ar	nd holding that participation								
Participate in a company	y that has coal assets in China	ì.							
Log-In - Logística Intermodal S.A.	42.278.291/0001-24	-	Controlled		Brazil	Rio de Janeiro	Rio de Janeiro	Operate its own or third-party boats for long-distance maritime commerce, coastal, and river transport of general cargo; operate inland terminals and ports, including port support navigation; carry out marketin and warehousing services and freight logistics [translator's note: to this point, text missing in the updated Portuguese version] and management of vessels; provide transport services by road and rail, and carry out complementary, related, or incidental activities, related to their main activities, when necessary or convenient for corporate interests. Reasons for Acquisition and to holding Participation provide logistics solutions to clients.	g
					Market value 3	1/Dec/2011	629,141,582.86		
31/Dec/2011	-5.00000	-34.00000	)	0.00	Book value 31	/Dec/2011	212,000,000.00		
31/Dec/2010	2.70000	22.400000	)	0.00					

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % M	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Provide logistics solution	ns for clients.							
Minas da Serra Geral S.A MSG	33.137.654/0001-10	-	Affiliate	Brazil	Minas Gerais	Belo Horizonte	Utilize, directly or indirectly, mineral deposits, including research, prospection, extraction, mining, production, processing transportation, manufacture, and marketing of any and all mineral substance; participate in the distribution and marketing of its products, derivatives, and by-products in Brazil and import and export inputs and raw material, either "in natura" or processed and industrialized; perform studies, projects, and technological research; and rent equipment. The company may also participate, directly or indirectly, in any way, in other companies related to its corporate purposes, either in Brazil or abroad.	,
				Market value	•			
31/Dec/2011	-8.620000	0.00000	0 0	.00 Book value 3	31/Dec/2011	53,000,000.00		
31/Dec/2010	13.7300	0.00000	0 0	.00				
31/Dec/2009	4.080000	0.00000	0 0	.00				
Reasons for buying a	nd holding that participation	ı						
Expansion of Vale's pa	ticipation in the iron ore marke	et in Brazil.						

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % M	arket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Mineração Corumbaense Reunida S.A MCR	03.327.988/0001-96	-	Controlled	Brazil	Mato Grosso do S	ul Corumbá	Investigate and research ores and minerals; utilize and administer mine and mineral resources in general; obtain research permits and mining concessions for all kinds of ores and minerals under the terms of the laws regarding these matters; purchase and lease land, equipment, and facilities, including rights and interests in the subsoil and on the surface; purchase, sell, improve, process refine, industrialize, import and export, market, and transport by rail, road and/or sea, ores, minerals, and metals of any kind whatsoever, on its own behalf or that of third parties; purchase and sell any and all manufactured products, machinery, and equipment related to the activities listed above; represent other companies, domestic and foreign; and participate in other commercial or civil companies, either as a partner, shareholder, or quota holder.	
				Market value	•			
31/Dec/2011	22.000000	0.000000	0.00	0 Book value 3	1/Dec/2011	1,113,0000,000.00		
31/Dec/2010	-14.1000	0.00000	0.00	0				
31/Dec/2009	0.000000	0.000000	0.00	0				
Reasons for buying ar	nd holding that participation							
Expansion of Vale's par	ticipation in the market for grai	nulated iron ore.						

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Minerações Brasileiras Reunidas S.A. – MBR	33.417.445/0001-20	-	Controlled	Brazil	Minas Gerais	Nova Lima	The mineral extraction industry, including prospecting and mining; provision of technical services especially to mining companies; transportation, processing, shipping, and sale of ores, for its own account or that of third parties; export and import of ores; participation in other companies, especially those whose objective is mining or transportation, processing, and shipping and sale of ores provision of transport services; port and fluvial support.	
				Market valu	е			
31/Dec/2011	16,0000	0.00000	)	0.00 Book value	31/Dec/2011	3,834,000,000.00		
31/Dec/2010	0.000000	0.000000	)	0.00				
31/Dec/2009	-4.100000	0.000000	)	0.00				
Reasons for buying ar	nd holding that participation							
Running iron ore operat	tions in Brazil.							
MRS Logística S.A.	01.417.222/0001-77	-	Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	Provide rail transport services for cargo; operate services for loading, unloading, warehousing, and transshipment at the stations, yards, and land within the range of existing railway lines which are object the concession; run modal transport related to rail transport; serve, as per the law, as a port operator, and run services and operations for moving and storage of goods destined for or coming from water transport; participate in projects that aim t promote the socio-economic developmen of the areas of influence and seek to expand rail services offered; perform all similar or related activities to those described above; and engage in other activities that utilize the infrastructure of the Company as a base.	of O
				Market valu	е			
.31/Dec/2011	21.00000	0.000000	0 92,000,00	DO.00. Book value :	31/Dec/2011	1,028,000,000.00		

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % M	arket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
31/Dec/2010	4.700000	0.000000	126,000,000.00					
31/Dec/2009	307.20000	0.000000	54,063,0	00.00				
Reasons for buying a	and holding that participation							
Provide logistics service	es for iron ore and pellet opera	tions.						
Salobo Metais S.A.	33.931.478/0001-94	-	Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	Utilization of mineral resources within Brazil, particularly the Salobo deposit, located in the Serra dos Carajás in the district and municipality of Marabá in the State of Pará, the subject of Mining Ordinance No. 1121 of 14/Jul/87, includin the mining, processing, smelting, refining, transport, and marketing of copper, gold, and their by-products.	
				Market valu	е			
31/Dec/2011	41.000000	0.000000		0.00 Book value	31/Dec/2011	4,625,000,000,00		
31/Dec/2010	104.50000	0.000000		0.00				
31/Dec/2009	92.200000	0.000000		0.00				
Reasons for buying a	nd holding that participation							
Running the Saloboco	oper deposit operations in Brazi	l.						
Samarco Mineração S.A.	16.628.281/0001-61	-	Affiliated	Brazil	Minas Gerais	Belo Horizonte	Prospecting and mining of ores throughou Brazil; processing and marketing of ores; transport and navigation within the port [sic], including for third parties; and importation of equipment for its own use, spare parts, and raw materials.	t 50.000000
				Market-value	e			
31/Dec/2011	10.000000	0.000000	1,384,000,0	00.00 Book value	31/Dec/2011	745,000,000.00		
31/Dec/2010	-25.050000	0.000000	1,639,000,000.00					
31/Dec/2009	200.80000	0.000000	347,114,0	00.00				
Reasons for buying a	and holding that participation							
Expansion of Vale's pa	rticipation in the market for iron	ore and pellets in Bra	azil.					

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Sociedad Contractual Minera Tres Valles	00.000.000/0000-00	-	Controlled	Chile			Acquisition of mining rights and concessions in Chile or abroad; prospection, development, and utilization of mineral deposits in Chile or abroad; provision and hiring of all types of services and advisory services; development in Chile or abroad of other activities related directly or indirectly to the business purpose, including the investigation [sic], processing, purchase and sale, and impor and export of all types of assets; participation in all types of companies in Chile or abroad related to the business purpose; and development of other activities as agreed to by the partners.	
				Market value				
31/Dec/2011	10.000000	0.00000	0.00	Book value 3	1/Dec/2011	432,000,000.00		
31/Dec/2010	-13.6000	0.00000	0.00	 				
31/Dec/2009	0.000000	0.00000	0.00					
Reasons for buying a	nd holding that participation							
Running of copper oper	rations in Chile.							

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation	n % Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Thyssenkrupp CSA – Cia Sederúrgica do Atlântico	07.005.330/0001-19		Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	Construction and operation of an integrated plant for the production, selling and transformation of iron and steel products, as well as the production, transformation, and selling of all byproducts related to the working of the plant, including the importation and exportation of all products, inputs, and capital assets of the plant; construction, management, operation, and utilization of a commercial complex of port operations, including operation as a Brazilian shipping company in performing shipping services, port support, and carrying out drainage services; construction, administration, operation, and utilization of a thermoelectric plant; creation of subsidiaries, as well as the participation in any other company, consortium, or entity in Brazil or abroad for achieving the business purpose; and development, within Brazilian or abroad, of any other activity that is directly or indirectly related to the achievement of the business purpose of the company.	3
				Market value	•			
31/Dec/2011	-2.00	0.0000	0.0	00 Book value 3	1/Dec/2011	3,003,000,000.00		
31/Dec/2010	-13.50	0.0000	0.0	00				
31/Dec/2009	234	4.040000 0.00000	0.0	00				
Reasons for buying a	and holding that particip	ation						
Encourage the consum	nption of iron ore in Brazil	through the investment in	a company that manufactures s	teel sheets.				

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Vale Austria Holdings GMBH	00.000.000/0000-00	-	Controlled	Austria			Acquisition and management of shares and participation in companies/associations of any kind and investments in assets; control and management of one or more activities related to any of the companies in which it participates or the assets in which it has investments; exercise of any and all activities which are necessary or useful in order to reach the above-mentioned purposes.	
				Market value	•			
31/Dec/2011	383.0000	0.00000	0.	00 Book value	1/Dec/2011	7,850,000,000.00		
31/Dec/2010	0.000000	0.00000	0.	00				
31/Dec/2009	0.000000	0.00000	0.	00				
Reasons for buying a	nd holding that participation							
Holder of a company th	at exploits minerals world-wide	).						
Vale Canada Limited	00.000.000/0000-00	-	Controlled	Canada			The global activities of Vale Canada Limited are managed from headquarters i Toronto, in the Canadian province of Ontario, which continues its corporate functions and has significant local involvement.	100.000000 n
				Market value				
31/Dec/2011	8.000000	0.00000	0.	00   Book value 3	1/Dec/2011	9,746,000,000.00		
31/Dec/2010	13.34000	0.00000	0.	00				
31/Dec/2009			θθ.	00				
Reasons for buying a	nd holding that participation							
Running nickel operation	ns and by-products (copper, c	obalt, platinum group	metals, and other precious me	tals) in Canada, the	United Kingdom,	and Indonesia.		

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation %	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Vale Colombia Limited	d 00.000.000/0000-00		Controlled	Colombia			Prospection, utilization, and exploitation of mines and quarries for all types of minerals and other non-renewable natural resources, metallic or non-metallic, including their extraction, processing, alteration or transformation, marketing, and/or exportation. In the development of its business purpose, the company can proceed and perform the following acts an contracts: buy, sell, mortgage, administer, receive, lease out, or give in any other way all types of assets; take part in credit operations, either as creditor or debtor, giving or receiving the corresponding guaranties, if that were the case; enter with credit agencies and insurance companies into all types of transactions that are appropriate to its business purpose; transform, accept, endorse, guarantee, collect, and negotiate, in general, titles, securities, and any other class of credits; be part of other companies that are similar, complementary, and accessory to the company.	d y,
				Market value	•			
31/Dec/2011	43.0000	0.00000	0	.00 Book value 3	1/Dec/2011	1,183,000,000.00		
31/Dec/2010	21.830	0.00000	0	.00				
31/Dec/2009	0.0000	0.00000	0	.00				
Reasons for buying	and holding that participation	n						
Running if thermal coa	al operations in Colombia. On	05/28/2012, Vale signe	d an agreement to sell all of its	s thermal coal opera	tions in Colômbia.	. For more information about the	ne operation, please see item 6.5 of this Index For	m

VALE FERTILIZANTES S.A.	19.443.985/0001-58 -	Controlled	В	azil Minas Gerais	Uberaba	Utilization of mineral resources, through prospecting, mining. and concentration of phosphate rocks; industrial utilization of phosphate and associated ores, including the utilization of these associated ores and other ores and minerals, associated with these or not, and also for production other chemical products; manufacturing of fertilizers and other products for agriculture and livestock production; trade, transportation, exportation, and importation of these products, as well as brokering for third parties; provision of manufacturing services to third parties; and participation in other commercial or civil companies, domestic or foreign, as a partner, shareholder, or quota holder.	78.920000
				Market value 31/Dec/2011	0.00		
31/Dec/2011	77.0000000	0.000000	0.00	Book value 31/Dec/2011	10,735,000,000,00		
31/Dec/2010	0.000000	0.000000	0.00				
31/Dec/2009	0.000000	0.000000	0.00				
Reasons for buying an	nd holding that participation						
Expansion of fertilizer ad	ctivities, in line with Vale's strategy to b	pecome a global leader in the ferti	lizer industry.				
Vale Florestar S.A.	11.985.056/0001-69 -	Controlled	В	azil Rio de Janeiro	Rio de Janeiro	Act directly or indirectly and develop projects in the areas of reforestation, forest management, rendering of environmental services, usage of carbon credits so derived, rendering of services related to forest activities, and carrying out other activities related to the forest or timber sector.	100.000000
				Market value			
31/Dec/2011	-3.000000	0.000000	0.00	Book value 31/Dec/2011	227,000,000.00		
31/Dec/2010	0.000000	0.000000	0.00				
31/Dec/2009	0.000000	0.000000	0.00				
Reasons for buying an	nd holding that participation						

Corporate Name C	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year B	Book Value - variation % Ma		Amount of Dividends Received (R\$)		Date	Value (R\$)		

Promote the reforestation of degraded areas.

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation %	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Vale International SA	00.000.000/0000-00		Controlled	Switzerland			Buy, own, manage, and sell direct or indirect holdings in companies or businesses, especially abroad; trade and distribute the products of companies within the group, develop relationships with customers, and provide technical assistance, including product development and production planning, to customers and companies of the group throughout the world; perform research and development activities in the sectors of mining, logistics, and energy; finance companies and businesses of the group and provide business, financial, administrative, and legal services to othe companies and businesses of the group in Switzerland and abroad. The company may conduct any activities that have a relation to its business objective, or support them, especially as regards managing and defining ownership rights and/or licensing of patents, trademarks of any kind, know-how and other intellectual property rights, and buy, hold, and sell real estate.	r
				Market value	•			
31/Dec/2011	9.00000	0.00000	0	.00 Book value 3	31/Dec/2011	43,804,000,000.00		
31/Dec/2010	23.3000	0.00000	0	.00				
31/Dec/2009	-18.300	0.00000	0	.00				
Reasons for buying a	nd holding that participation	on						
Perform financial transa	actions and business activitie	es.						

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation %	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
Vale Manganês S.A.	15.144.306/0001-99		Controlled	Brazil	Bahia	Congonhas	The steel industry, metallurgy, industry, and sale of ferroalloys; utilization, for its own account or in combination with other companies, of mineral deposits, including prospecting, mining, processing, transportation, sale, import, and export of mineral substances; reforestation; extraction, production, sale, import, and export of wood and charcoal and other goods of mineral or vegetable origin used in its production processes and their derivatives and by-products; import and export of goods related to or required for its activities, including equipment, inputs, and miscellaneous materials; any other related activities that do not conflict with its business purpose or with prevailing legislation.	100.000000
				Market value				
31/Dec/2011	-19.00000	0.00000	0 383,000,000.00	Book value 3	1/Dec/2011	717,000,000.00		
31/Dec/2010	29.10000	0.00000	0.00	i i				
31/Dec/2009	14.80000	0.00000	0.00	I I				
Reasons for buying a	nd holding that participatior							

Running of ferroalloy and manganese operations in Brazil.

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation %	Market Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
VALE SOLUÇÕES EM ENERGIA	09.327.793/0001-22		Controlled	Brazil	Rio de Janeiro	Rio de Janeiro	Research and development of technologies in order to obtain systems and products ecologically efficient for the generation of energy, as well as the development and test of prototypes; development of technical and economic viability studies related to the business purpose of the company, as well as market studies, business plans, and other related studies; participation as a partner or shareholder in other simple or business companies and in business undertakings of any nature, including partnerships, in Brazil and/or abroad; development, manufacturing, construction, purchase, sale, distribution, renting, gratuitous loan, importation, and exportation of machines and equipment for the industry, including accessories, parts, and other materials that are necessary in order to obtain ecologically efficient products for generating energy; and rendering services for the assembly, maintenance, and technical assistance of machines and equipment for the generation of energy.	
				Market value				
31/Dec/2011	37,000,0	0.00000	0.00	Book value 3	1/Dec/2011	272,000,000.00		
31/Dec/2010	15.12000	0.00000	0.00					
31/Dec/2009	75.5100	0.00000	0.00					
Reasons for buying ar	nd holding that participation	า						
Develop systems for the	e generation of energy.							

Corporate Name	Corporate Tax ID	SEC (CVM) Code	Type of Corporation	HQ - Country	HQ - State	HQ - Municipality	Description of Activities	Issuer Participation (%)
Business Year	Book Value - variation % N	larket Value - variation %	Amount of Dividends Received (R\$)		Date	Value (R\$)		
NORSK HYDRO ASA	00.000.000/0000-00	-	Affiliate	Norway			Supplying aluminum worldwide, with presence in the entire production chain,	

supplying auminium wondwide, with presence in the entire production chain, from bauxite extraction to production of rolled sheets. Market value 3,795,872,140.32

31/Dec/2011	84,000,000.00	-10,50000	0.00 Book val	lue 31/Dec/2011	6,029,000,000.00
31/Dec/2010	0.000000	0.000000	0.00		
31/Dec/2009	0.0000	0.000000	0.00		

#### Reasons for buying and holding that participation

Creation of one of the largest and most competetive integrated aluminium-producing companies, with growth potential and access to large bauxite reserves and energy, competetive costs, and technological know-how.

### 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).

# 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<sup>2</sup> 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.

<sup>&</sup>lt;sup>2</sup> Profit before interest and taxes.

In 2011, we set a new record for cash generation, measured by EBITDA<sup>3</sup> 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 <sup>1</sup>
EBIT margin (%)	27.2%	48.7%	49.1% <sup>1</sup>
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 (%) <sup>2</sup>	10.7%	26.8%	26.4%

<sup>&</sup>lt;sup>1</sup> Excludes non-recurring gains from the sale of aluminum assets

# 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<sup>4</sup> 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.

# c. Payment Capacity in Relation to the Financial Commitments Assumed

<sup>&</sup>lt;sup>2</sup> Return on equity

<sup>&</sup>lt;sup>3</sup> Profit before interest, taxes, depreciation and amortization and depletion, plus dividends received from related companies, also known as EBITDA.

<sup>&</sup>lt;sup>3</sup> Includes cash and cash equivalents and investments of up to 90 days.

- 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.
- 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.
- The total debt/EV<sup>5</sup> 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

<sup>\*</sup> 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.

<sup>&</sup>lt;sup>4</sup> EV, enterprise value, equals the sum of the company's market capitalization with the net debt.

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.

 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 of 9.8 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.

- 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 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

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:

<b>Date</b> 8/04/2011	Counterparty Banco Bilbao Viscaya, Banco Santander, BNP Paribas, Citibank Europe, Credit Agricole, HSBC, Natixis, and Societé Generale	Allocation Credit to be used to finance the acquisition of ships with the Korean shipbuilders Daewoo and Sungdong	Value R\$ 827.12 million	Disbursement of funds 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	R\$ 246.6 million	The credit is provided in tranches according to the
9/09/2010	Exim Bank of China Limited	production capacity Credit allocated to financing for the acquisition of ships from the shipbuilder Rongsheng	R\$ 2.119 billion	project schedule The credit is provided in tranches according to the schedule of payments contemplated in the construction contract
6/30/2010	Banco do Brasil <sup>6</sup>	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

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 $<sup>^{6}</sup>$  This contract, originally with Banco Votorantim, was transferred to Banco do Brasil in October 2011.

project schedule 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.

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.

# 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 Onca 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.

# 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

Assets	2010	Variation %	2011
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
<u> </u>	8,088	34.9	10,913
Investments	2.045	17/ 7	10.017
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
Liabilities and shareholders' equity  Current liabilities	2010	Variation %	2011
	E 004	E7 0	0.157
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	F 240		
sale _	5,340	20.0	22.225
Non-current liabilities	31,384	-29.2	22,225
Non-current habilities			
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
		-16.8	
Income tax and social sec, deferred payments	12,947		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 66,952	37.8 8.8	4,680 72,866
Change halds and Family	00,932	0.0	12,000
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 Common shares – 3,600,000,000 authorized shares,	19,650	50.0	29,475
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		10.1	360
Mandatorily convertible securities into common	115		
Mandatorily convertible securities into common shares Mandatorily convertible securities into preferred	445 996	-19.1 -20.1	796

shares 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
685	-110.4	-71
1,867	-	=
-25	980.0	220
-9,512	-89.3	-1,017
72,487	7.8	78,105
-		=
112,117	28.0	143,476
4,209	-23.6	3,215
116,326	26.1	146,691
214,662	12.6	241,782
	685 1,867 -25 -9,512 72,487 - 112,117 4,209 116,326	685 -110.4 1,86725 980.0 -9,512 -89.3 72,487 7.8 - 112,117 28.0 4,209 -23.6 116,326 26.1

# 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.

### 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.

# 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.

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 : (in R\$ billion			
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.

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.

# 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.

# 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	-07.3 -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
Liabilities and shareholders' equity	2009	AV	2010
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 Loans and financing	5,310 646	-8.4 77.1	4,866 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			
Saic	17,470	79.6	31,384
Non-current liabilities		. , , , ,	0.700.
Derivatives at fair price	40	157.5	103
Loans and financing	36,132	4.6	37,779
Related Parties	103	-97.1	3
Pension and retirement benefits	3,101	4.0	3,224
Contingency Provisions	4,202	-11.7	3,712
Deferred income tax and social security	9,307	39.1	12,947
Provision for asset retirement	1,930	27.6	2,463
Participation Debentures	1,306	63.9	2,140
Non-controlling shareholders' redeemable share Others	1,273 2,581	-6.8 31.6	1,186 3,396
Oniois	59,975	11.6	66,953
			,

Shareholders' Equity

Class A preferred shares - 7,200,000,000 authorized shares with no nominal value and 2,108,579,618			
(2009 - 2,108,579,618) issued	18,469	6.4	19,650
Common shares – 3,600,000,000 authorized			
shares, no nominal value and 3,256,724,482 (2009 –			
3,256,724,482) issued	28,965	4.8	30,350
Mandatorily convertible securities into common	20,703	4.0	30,330
shares	2,584	-82.8	445
Mandatorily convertible securities into preferred	•		
shares	2,003	-50.3	996
Treasury shares – 99,649,571 preferred shares			
(2009 – 77,581,904) and 47,375,394 common			
shares (2009 – 74,997,899)	2.470	05.4	4.007
Operating results with non-controlling	-2,470	95.4	-4,826
shareholders	_	_	685
Result from share conversion/issuance	161	1,259.60	1,867
Equity valuation adjustment	-21	19	25
Accumulated conversion adjustment	8,886	7	9,512
Profit reserves	49,272	47.1	72,486
Accumulated profits	6,003	-	-
Total controlling shareholders' equity	95,758	17.1	112,116
Non-controlling shareholders' interest	4,535	-7.2	4,209
Total shareholders' equity	100,293	15.9	116,325
Total liabilities and shareholders' equity	177,738	20.8	214,662

# Position on December 31, 2009 compared with the position on December 31, 2010

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, 2010, we had 57% of our assets related to Brazilian *reais*, 25% to Canadian dollars, 14% to US dollars and 4% to other currencies, while the majority of our debt was expressed in US dollars. Consequently, the effects of changes in exchange rates, especially the US dollar, impact the financial statements, which in 2009 devalued by 4.3% against the *real*.

# **Current Assets**

# Cash and cash equivalents.

There was a 1.9% increase in the cash and cash equivalents position, which rose from R\$ 13.221 billion on December 31, 2009, to R\$ 13.469 billion on December 31, 2010. Although Vale has raised financing during 2010 in the amount of R\$ 4.771 billion, there were significant disbursements to pay down loans, including debentures maturing in 2010, and also investments in assets, as well as the acquisition of companies.

# Short-term investments.

Short-term investments were R\$ 2.987 billion on December 31, 2010, showing a 54.2% reduction, compared with R\$ 6.525 billion on December 31, 2009, mainly due to the investments' maturity dates.

# Accounts receivable from customers.

On December 31, 2010, accounts receivable from customers totaled R\$ 13.962 billion, an increase of 147.4% over the R\$ 5.643 billion reported on December 31, 2009, mainly due to the increased prices for products and an increase in the sales volume.

# Inventories

The 28.4% increase in inventories, rising from R\$ 5.913 billion on December 31, 2009 to R\$ 7.592 billion on December 31, 2010, was related in large part to the start of operations of the project in Nova Caledônia.

Non-current assets held for sale

The amount of R\$ 11.876 billion in 2010 pertained to assets in the aluminum and kaolin segments. There was no execution in 2009.

#### Non-current assets

Advances to energy providers

The amount of R\$ 889 million in 2009 was not linked to the availability of aluminum assets for sale. There was no execution in 2010.

# Derivatives at fair price

The reduction in derivatives at fair value was 66.7%, which dropped from R\$ 1.506 billion on December 31, 2009 to R\$ 502 million on December 31, 2010, basically referring to the mark to market of derivative swap transactions denominated in *reais*, floating, due to the variation of the dollar.

#### Investments

Investments at December 31, 2010 were R\$ 3.945 billion, a 13.5% decrease in relation to R\$ 4.562 billion on December 31, 2009, mainly due to losses in the ThyssenKrupp CSA Siderúrgica do Atlântico (TKCSA) operations.

## Fixed assets

There was an increase of 19.4% in the fixed assets account, rising from R\$ 108.948 billion on December 31, 2009 to R\$ 130.087 billion on December 31, 2010, due mainly to the acquisition of companies in the fertilizer segment, as well as project to expand infrastructure.

# **Current liabilities**

Accounts payable to suppliers and contractors

The 50.8% increase in accounts payable to suppliers and contractors, rising from R\$ 3.849 billion on December 31, 2009, to R\$ 5.804 billion on December 31, 2010, essentially occurred due to the consolidation of the fertilizer companies.

Current liabilities portion of long-term loans

The 8.4% reduction in the current liabilities portion of long-term loans, dropping from R\$ 5.310 billion on December 31, 2009, to R\$ 4.866 billion on December 31, 2010, was due to payments during the year.

# Loans and financing

The 77.1% increase in loans and financing, from R\$ 646 million on December 31, 2009, to R\$ 1.144 billion on December 31, 2010, was due to the new credit lines made available to the Vale group.

# Income tax provision

The income tax provision grew 257.9%, increasing from R\$ 366 million in 2009, to R\$ 1.310 billion in 2010, due to the tax loss in 2009, and decreasing the comparative basis, which was totally used up by that date. In addition, there was an increase to net income in 2010.

Dividends and interest on own capital

The 178.8% increase in proposed dividends and interest on own capital, from R\$ 2.907 billion on December 31, 2009 to R\$ 8.104 billion on December 31, 2010, was in large part related to the 190% increase in net income.

Liabilities related to non-current assets held for sale

The amount of R\$ 5.340 billion in 2010 was linked to the assets made available for sale in the aluminum segment and the kaolin companies. There was no execution in 2009.

# Non-Current liabilities

# Loans and financing

The 4.6% increase in loans and financing, rising from R\$ 36.132 billion on December 31, 2009, to R\$ 37.779 billion on December 31, 2010, was due to securities issuances in 2010, which were partially offset by the transfer to the short term of debt parcels.

# Provisions for contingencies

On December 31, 2010, the provisions for contingencies totaled R\$ 3.712 billion, an 11.7% reduction in relation to the R\$ 4.202 billion on December 31, 2009, due to payment of contingencies for which Value had formed legal deposits.

# Deferred Income tax and social security contribution

The increase of 39.1% in the deferred income tax and social contribution, from R\$ 9.307 billion in 2009 to R\$ 12.947 billion in 2010, was related to allocation of the added value due to the acquisition of the fertilizer companies.

# Provision with obligations for asset retirement

The increase of 27.6% in the provision with obligations for asset retirement, from R\$ 1.930 billion in 2009 to R\$ 2.463 billion in 2010, was related to the adjustment of adopting the IFRS in the controlled company Vale Canada, and to the acquisition of the fertilizer companies.

# Participatory Debentures

There was an increase of 63.9%, from R\$ 1.306 billion in 2009, to R\$ 2.140 billion in 2010, due to the mark to market of the participative debentures.

# Shareholders' Equity of Controlling Shareholders

The shareholders' equity of the controlling shareholders increased by 17.1%, rising from R\$ 95.758 billion on December 31, 2009, to R\$ 112.117 billion on December 31, 2010. The increase in the profit reserves came from withholdings on net income.

# 10.2 Operating and Financial Results

# a) Results of Vale Operations, in particular:

# i. Description of key components of revenue

Net operating revenues totaled R\$ 103.105 billion in 2011, increasing by 23.9% in relation to the 83.225 billion in 2010, and 112.6% in relation to the R\$ 48.496 billion in 2009.

Individually, the most important products in terms of revenue generation in 2011, 2010 and 2009 were: iron ore, pellets, nickel and copper.

RE	VENUES BY PROD	UCT				
R\$ million	2009	%	2010	%	2011	%
Bulk materials	31,214	62.7	62,608	73.4	77,690	73.6
Ferrous minerals	30,212	60.7	61,269	71.9	75,859	71.9
Iron ore	25,234	50.7	45,419	53.2	57,645	54.6
Pellet plant operation services	18	-	22	-	31	-
Pellets	3,869	7.8	14,205	16.6	17,000	16.1
Manganese	275	0.6	458	0.5	283	0.3
Ferroalloys	693	1.4	1,091	1.3	928	0.9
Others	123	0.2	74	0.1	8	0.0
Coal	1,002	2	1,339	1.6	1,795	1.7
Thermal Coal	400	0.8	515	0.6	863	0.8
Metallurgical Coal	602	1.2	824	1	932	0.9
Basic metals	13,414	26.9	14,505	17	16,150	15.3
Nickel	6,457	13	6,698	7.8	9,552	9.1
Copper	2,232	4.5	2,794	3.3	4,301	4.1
PGMs	291	0.6	174	0.2	825	0.8
Precious metals	133	0.3	124	0.1	659	0.6
Cobalt	84	0.2	52	0.1	146	0.1
Primary aluminum	1,687	3.4	1,794	2.1	-	-
Alumina	2,337	4.7	2,650	3.1	-	-
Bauxite	193	0.4	219	0.3	-	-
Fertilizers	810	1.6	3,201	3.8	5,929	5.6
Potash	810	1.6	492	0.6	482	0.5
Phosphates	-	-	2,085	2.4	3,996	3.8
Nitrogen	-	-	593	0.7	1,307	1.2
Others	-	-	31	-	144	0.1
Logistics services	2,838	5.7	3,236	3.8	3,633	3.4
Railroads	2,322	4.7	2,605	3,1	2,853	2.7
Ports	516	1	631	0.7	780	0.7
Others	1,537	3.1	1,795	2	2,118	2.0
Gross Revenues	49,812	100.0	85,345	100.0	105,520	100.0
Taxes	(1,316)	(2.6)	(2,120)	(2.5)	(2,325)	(2.3)
Net Revenues	48,496	97.4	83,225	97.5	103,195	97.7

In 2011, sales to Asia represented 52.1% of total revenues, in line with the 52.2% reported in 2010. Sales to the Americas amounted to 25.5%, slightly higher than the 24.3% reported in 2010, mainly due to the increase in sales to the United States and Brazil. Revenues from Europe represented 18.6% in 2011, below the 19.0% for the prior year, while the rest of the world contributed with 3.8%.

Considering sales by country, China was responsible for 31.7% of our revenues in 2011, followed by Brazil with 17.1%, Japan with 11.7%, Germany with 6.3%, South Korea with 4.3%, and the United States with 3.8% in 2011.

	REVENUES BY REGION					
R\$ million	2009	%	2010	%	2011	%
North America	4,138	8.3	4,556	5.3	6,568	6.2
USA	2,264	4.5	2,433	2.9	4,034	3.8
Canada	1,832	3.7	1,994	2.3	2,364	2.2
Others	42	0.1	130	0.2	170	0.2
South America	8,507	17.1	16,148	18.9	20,37 1	19.3
Brazil	7,758	15.6	14,306	16.8	18,007	17.1
Others	749	1.5	1,842	2.2	2,364	2.2
Asia	27,709	55.6	44,544	52.2	54,95 8	52.1
China	18,379	36.9	27,581	32.3	33,432	31.7
Japan	4,709	9.5	9,303	10.9	12,377	11.7
South Korea	1,783	3.6	3,359	3.9	4,587	4.3
Taiwan	1,365	2.7	2,168	2.5	2,368	2.2
Others	1,474	3.0	2,133	2.5	2,193	2.1
Europe	8,081	16.2	16,217	19.0	19,67 4	18.6
Germany	2,118	4.3	5,601	6.6	6,646	6.3
France	661	1.3	1,339	1.6	1,402	1.3
United Kingdom	1,103	2.2	2,052	2.4	2,420	2.3
Italy	650	1.3	1,832	2.1	3,192	3.0
Others	3,549	7.1	5,394	6.3	6,014	5.7
Rest of the World	1,377	2.8	3,879	4.5	3,949	3.7
Gross Revenues	49,812	100.0	85,345	100.0	105,5 20	100.0
Taxes	(1,316)	(2.6)	(2,120)	(2.5)	(2,32 5)	(2.3)
Net Revenues	48,496	97.4	83,225	97.5	103,1 05	97.7

# ii. Factors that materially affected the operating results

Vale's operating result is mainly affected by demand, which impacts the prices of our principal products, and it is also affected by exchange rates.

# Demand and prices

The following table summarizes the average sale price of the main products for the periods indicated.

	2009	2010	2011		
	\$/metric ton, unless otherwise indicated <sup>7</sup>				
Iron ore	111.68	182.09	227.86		
Pellets	147.10	283.76	324.53		
Manganese	293.33	405.03	277.49		
Ferroalloys	2,782.99	2,723.11	2,416.46		
Coal			-		
Thermal coal	132.84	123.85	160.00		
Metallurgical Coal	230.48	263.82	394.00		
Nickel	29,114.28	38,669.75	37,781.39		
Copper	10,430.54	13,599.55	14,101.35		
Platinum (US\$ /oz)	2,142.16	2,922.55	2,875.03		
Cobalt (US\$ /lb)	20.01	26.55	26.17		
Aluminum	3,364.63	3,837.07	-		
Alumina	451.70	498.92	-		
Bauxite	68.12	55.66	-		
Potash	1,040.10	722.30	846.14		
Phosphates					
MAP	-	994.60	1,138.14		
TSP	-	794.85	981.30		
SSP	-	389.44	471.46		
DCP	-	987.79	1,138.13		
Nitrogen	-	793.16	1,024.87		

<sup>&</sup>lt;sup>6</sup> Amounts converted using the average exchange rate in each period: R\$ 1.9935/US\$ in 2009, R\$ 1.7593/US\$ in 2010, and R\$ 1.6746 in 2011.

# Iron ore and pellets

The demand for iron ore and pellets is a result of the global demand for carbon steel, which in turn is highly influenced by global industrial production. The pricing of iron ore and pellets is done according to several levels of quality and physical characteristics. Several factors affect the prices of different types of iron ore, such as the iron content in deposits, the size of particles, humidity and the type and concentration of contaminants (such as phosphorus, alumina and manganese) in the ore. Generally, the classification of ore into thin ore, lump ore and pellet feed determines price differences.

Since the fourth quarter of 2011, our sales of iron ore and pellets have been priced according to a diversified range of options, all of which are referenced to the spot market. Each client has the option to continue using the three-month moving average system with a one-month delay, or to choose another, more current pricing option, such as the current quarterly average, which uses provisory prices and an adjustment when the effective sales price is known. That change increases the flexibility of the prices, it brings more efficiency, and it allows us to better serve our clients with their different preferences.

Fine iron ore prices command premiums as a function of the content of iron. The lump ore and pellet prices contain premiums in relation to fine iron ore prices and are determined based on client negotiations. The average prices for iron ore in 2011 were 25.1% higher than the average prices in 2010,

<sup>&</sup>lt;sup>7</sup> Amounts converted using the average exchange rate in each period: R\$ 1.9935/US\$ in 2009, R\$ 1.7593/US\$ in 2010, and R\$ 1.6746 in 2011.

and 104.0% higher than in 2009. The average price for pellets was 14.4% higher than prices in 2010, and 120.6% higher than the average price in 2009.

Chinese iron ore imports reached 688.1 million metric tons in 2011, 10.8% higher than the 619.1 million metric tons reported in 2010, and 9.3% above the 2009 level, mainly due to the strong increase in Chinese steel production in 2011.

We expect China's growth to remain strong in 2012, driven mainly by internal demand.

# Manganese and ferroalloys

The prices of manganese ore and ferroalloys are mainly influenced by trends in the carbon steel market. The prices of ferroalloys are also influenced by the prices of its main inputs, such as manganese ore, energy and coke. Manganese ore sales are based on the spot market or calculated on a quarterly basis. Ferroalloys prices are determined on a quarterly basis.

#### Coal

The demand for metallurgical coal is driven by the demand for steel, especially in Asia. The demand for thermal coal is directly related to electricity consumption, which will continue to be driven by worldwide economic growth, especially in emerging economies. Since April 2010, the prices for metallurgical coal have been established on a quarterly basis for most volumes sold in the transoceanic market, while some players are selling it on a quarterly basis, and a minority continues to use annual pricing. The prices of thermal coal are set in spot negotiations and/or through annual contracts.

#### Nickel

Nickel is traded on the London Metal Exchange (LME), and it is mainly used to produce stainless steel. Most nickel products are priced using a discount or a premium to the LME price, depending on the technical and physical characteristics of the product. Nickel demand is heavily affected by production of stainless steel, which represents 60-65% of consumption. Nickel demand for sources other than stainless steel production, represents approximately 35-40% of the global nickel demand.

We have short-term fixed-volume contracts with customers for the majority of our expected annual nickel sales. These contracts, together with our sales of nickel products to be used for other purposes (high nickel alloys, steel alloys, forging, plating, batteries and special applications), provide stable demand for a significant portion of our annual production. In 2011, 66% of our refined nickel sales were destined to applications outside the stainless steel industry. This, when compared to the industry average of 36% among nickel producers, results in our sales volume being more stable. As a result of our focus on such higher-value segments, our average realized nickel prices have typically exceeded LME prices.

Primary nickel (including iron-nickel, pig iron nickel and nickel cathode) and secondary nickel (scrap) are nickel's main competitors for stainless steel production. The choice between the different types of primary and secondary nickel is largely driven by its relative prices and availability. In recent years, secondary nickel accounted for about 43.48% of the overall nickel used in stainless steel production, and primary nickel accounted for 52-57%. In 2011, the Chinese nickel pig iron production and iron-nickel production was estimated to have been higher than 250,000 metric tons, representing 16% of the global supply of primary nickel, compared to 11% in 2010.

Nickel's market fundamentals are expected to remain strong, as the development of projects is increasingly challenging and the growth in demand should continue in the coming years. Nickel is widely used in industrial applications and consumption, tending to grow throughout the entire development cycle of a country's economy. This helps explain the intensity of nickel consumption, measured by consumption by US\$ of the GDP, which is even lower in emerging economies than in the most developed economies, which is different from other metals such as steel and copper. We believe that the revenues from emerging economies will continue to grow, consequently increasing the medium-term demand for nickel.

#### **Aluminum**

In February 2011, we transferred most of our aluminum businesses to Norsk Hydro ASA (Hydro), and we now own 22% of Hydro's capital, an aluminum-producing company based out of Norway.Before this transaction, the prices of our aluminum were based on the LME prices for the month prior to the sale. Our

alumina prices used to be calculated based on a percentage of the LME aluminum prices, and our bauxite prices were determined by a formula linked to the price of aluminum for three-month futures contracts on the LME and to the price of alumina FOB Australia.

#### Copper

Copper prices are determined on the basis of: (a) copper prices in final markets, such as the LME and the NYMEX; and (b) for intermediate products, such as copper concentrate (which represents the majority of our sales) and copper anode, treatment and refining rates are negotiated with each client. According to a pricing system known as MAMA (month after month of arrival), sale prices of copper concentrate and anode are provisionally set at the time of shipment, and the final prices are based on the LME at a future time, typically three months after shipment of product.

The growth in demand for copper has mainly been caused by Chinese imports, given the important role it performs in construction, along with electrical uses and consumption. The supply has had difficulty meeting the increased demand, with the average mine growth being only 1.4% per year over the last five years. This situation meant a 17% increase in prices in 2011 over 2010. We believe that the market fundamentals should remain solid, with growth in demand continuing, and supply keeping pace with demand continuing to be a challenge.

#### **Fertilizers**

The demand for fertilizers depends on the same market fundamentals as those for global demand for minerals, metals and energy. The rapid *per capita* growth of emerging economies causes changes in food, marked by an increase in the consumption of proteins, which contributes to higher demand for fertilizers. Demand is also driven by biofuels that are emerging as an alternative source of energy to reduce global dependency on greenhouse gases [sic], and essential raw materials for the production of biofuels – sugar cane, corn and palm – which are intensively used in fertilizers.

Fertilizers are sold in the market mainly on a cash basis using international reference prices, although certain large importers, such as China and India, often sign annual contracts. Seasonality is an important factor for determining price throughout the year, given that agricultural production in each region depends on the climactic conditions of the harvest.

# Logistics

Demand for our transportation services in Brazil is primarily driven by Brazilian economic growth, mainly in the agricultural and steel sectors. Our logistics revenues are primarily from fees charged to customers for the transportation of cargo using Vale's railroads, ports and ships. Our railroads account for most of this revenue. Nearly all of our logistics revenues are expressed in Brazilian *reais* and are subject to adjustments triggered by changes in fuel prices. Prices in the Brazilian market for railroad services are subject to ceilings set by the Brazilian regulatory authorities, but they primarily reflect competition with the trucking industry.

# Exchange Rates

The impact of exchange rate variations on our results are described in item "10.2 (b)."

b. Variations in revenues attributable to changes in prices, exchange rates, inflation, changes in volumes and the introduction of new products and services

# Exchange rate variations

Most of our revenues are expressed in US dollars, whereas most of our costs of goods sold are expressed in other currencies, mainly the Brazilian *real* (59% in 2011), the US dollar (19% in 2010), the

Canadian dollar, Indonesian rupees, Australian dollars, the euro, and others<sup>8</sup>. As a result, changes in exchange rates affect our operating margin.

Most of our long-term debt is expressed in US dollars. Due to the fact that Vale's functional currency is the Brazilian *real*, changes in the value of the US dollar against the Brazilian *real* result in exchange gains or losses on our net liabilities, which, in turn, affect our financial results.

On December 31, 2011 our debt expressed in Brazilian *reais* was R\$ 15.9 billion. Since most of our revenue is in US dollars, Vale uses derivatives to convert our debt from Brazilian *reais* to US dollars. As a consequence of the depreciation of the Brazilian *real* in the first half of the year, and its depreciation in the second half against the US dollar, the net exchange rate and monetary variation caused a negative impact on our net profits of R\$ 3.629 billion in 2011. The net result of the currency and interest rate swaps, structured mainly to convert the debt expressed in Brazilian *reais* into US dollars to protect our cash flow from currency price volatility, produced a negative accounting effect of R\$ 240 billion in 2011, of which R\$ 663 million generated a positive impact on the cash flow.

Variations in the inflation rates

Our revenues are not significantly affected by inflation rates.

# Variations attributable to price changes, volume changes and the introduction of new products and services

Our operating revenue is directly affected by changes to our products' prices and services, as well as by changes to the volumes sold, as discussed in item "10.2(a)(ii)" of this Reference Form.

# **Fertilizers**

The fertilizers segment, whose activities were substantially increased in 2010 with the acquisition of Vale Fosfatados and Vale Fertilizantes, had the following effects on our results: contribution of R\$ 5.447 billion to our 2011 net income (R\$ 3.014 billion in 2010, and R\$ 2.504 billion in 2011 (R\$ 2.729 billion in 2010).

# c. Impact of inflation, price variations of main inputs and products, exchange rate and interest rates on operating results and the issuer's financial result

For comments on the inflationary impact, price variations in the main products and exchange rates, see item "10.2 (b)" of this Reference Form.

We are exposed to the risk of interest rates for loans and financings. Debt tied to interest rates in US\$ consists mainly of loans, including export prepayment operations, loans from commercial banks and multilateral organizations. In general, these debts are indexed to the LIBOR (London Interbank Offered Rate). The natural hedge between US interest rate fluctuations and prices of metals mitigates the volatility of Vale's cash flow. In the event of an imbalance in this natural hedge, Vale assesses the possibility of contracting financial instruments to provide the desired protection. The floating rate of our debt expressed in Brazilian *reais* includes debentures, loans obtained from the BNDES, fixed assets and financing for the purchase of services in the Brazilian market. The interest on these obligations is tied primarily to the CDI (Interbank Deposit Certificate), the reference interest rate on the Brazilian interbank market and the TJLP (long-term interest rate). About 30% of the debt at December 31, 2011 was expressed in Brazilian *reais*, the remaining 70% was expressed in other currencies. On December 31, 2010, 27% of the debt was

<sup>&</sup>lt;sup>8</sup> Composition of the CPV by currency in 2009 was: 62% in *reais*, 17% in US dollars, 16% in Canadian dollars, and 2% in Indonesian rupees. In 2010, CPV composition was: 69% in *reais*, 15% in US dollars, 11% in Canadian dollars, 2% in Australian dollars, and 3% in other currencies.

expressed in *reais*, and 73% was in other currencies. Nearly 24% of the debt was tied to the floating interest rate on December 31, 2011, and it was 53\$ on December 31, 2010.

Energy costs are an important component of our production cost and represented 13.6% of our total cost of products sold in 2011, 17.4% in 2010, and 16.4% in 2009. Increases in the price of oil and gas negatively impact our logistics, mining, pellets and nickel businesses. Electricity costs were 4.1% of the total cost of products sold in 2011, 6.6% in 2010, and 6.3% in 2009.

# 10.3 Relevant effects on Financial Statements

The purchase of Vale Fosfatados and Vale Fertilizantes has had significant impacts on our results: contribution of R\$ 3.014 billion to our net income in 2010 and of R\$ 2.729 billion to our costs. The remaining operations did not have relevant impacts on the Company.

Vale does not provide guidance regarding its future financial performance. Vale seeks to disclose as much information as possible about its views on the different markets where it operates, its strategic guidelines and implementation in order to give the capital markets a sound basis for their expectations regarding the Company's performance in the medium and long term.

# a. Introduction or disposal of operating segment

In 2010, the fertilizer segment was introduced to Vale's operating segments, and its contribution to the Company's revenues was 3.8% in 2010, and 5.6% in 2011.

# b. Incorporation, acquisition or divestiture of stakeholder positions

# Events subsequent to the Accounting Statements of December 31, 2011

The following events have not had significant impacts on Vale's financial statements or its results in 2011.

# **Main Acquisitions**

2011

# Acquisition of control of Biopalma

In February 2011, Vale became the controller of Biopalma da Amazônia S.A. Reflorestamento Indústria e Comércio, in Pará, a producer of palm oil, which is used as a raw material in biodiesel production. The transaction value was R\$ 173.5 million. Our goal is to use this fuel in Vale's operations in Brazil. Biopalma begins palm oil production in 2012, and it expects to reach annual production of 500,000 tons by 2019, when crops reach maturity. The main use of the oil will be on Vale's biodiesel production to fuel its locomotives, machines and equipment in large Brazilian operations, using B20 (a mixture containing 20% biodiesel and 80% common diesel).

# Acquisition of stake in the Belo Monte Hydroelectric Plant

In June 2011, Vale purchased 9.0% of the capital of Norte Energia S.A. (NESA) for R\$ 3.8 million, held by Gaia Energia e Participações S.A. (Gaia). NESA's exclusive purpose is to implant, operate and develop the Belo Monte Hydroelectric Plant located in Pará. Vale reimbursed Gaia for capital contributions made by Gaia in NESA, and it will assume the commitments for future capital contributions arising from the stakeholder position that was acquired (estimated to be R\$ 2.3 billion). The acquisition is consistent with our strategy to reduce operating costs and to minimize energy prices and the risks of supply. At December 31, 2011, R\$ 106 million had been contributed to NESA.

#### Increase of participation in SDCN

In June 2011, Vale purchased an additional 16% of participation in Sociedade de Desenvolvimento do Corredor Norte S.A. (SDCN) for US\$ 8 million (equivalent to R\$ 12.8 million). The purchase was in line with our strategy to develop the logistic corridor of Nacala and was an extension of the purchase of 51% participation in SDCN in September 2010. SDCN has the concession to create the logistic structure necessary for the flow of production resulting from the expansion of coal production in Moatize. Vale will invest in the expansion of the capacity of the logistic corridor of Nacala by means of the rehabilitation of the existing railroads of the SDCN in Malawi and Mozambique, the construction of rail connections from Moatize to a new, deep-water marine terminal in Nacala, and the construction of the port of Nacala.

# Agreement to explore the port facility concession in Santos

In July 2011, Vale signed an agreement to create a joint venture with Vale Fertilizantes in order to explore the Port Facility concession of Ultrafértil (TUF). The TUF is located in the city of Santos, in the state of São Paolo, and it moves imported loads of sulfur, ammonia and fertilizers in general. It is strategically interconnected to Vale's railroad network. Vale now holds 51% in the joint venture, which was acquired through the payment of R\$ 150 million to Vale Fertilizantes, and it is contributing R\$ 432 million in capital to the joint venture in order to finance the TUF's investment plan. The formation of the joint venture positions Vale to competitively meet the growth of agribusiness in Brazil. At the same time, investment in the TUF strengthens the logistics infrastructure of the fertilizer business, contributing to making its expansion in the coming years feasible.

# Acquisition of shares in circulation of Vale Fertilizantes

In December 2011, Vale concluded the public offering to acquire the shares issued by Vale Fertilizantes in circulation in the market. As a result of this operation, Vale acquired 211,014 common shares, and 82,919,456 preferred shares issued by Vale Fertilizantes, which represent 83.8% of common shares and 94.0% of preferred shares of Vale Fertilizantes in circulation in the market, which corresponds to 0.1% of the total of common shares and 29.8% of the preferred shares of Vale Fertilizantes. Both the common and preferred shares were acquired at a price of R\$ 25.00 per share, for a total of R\$ 2.078 billion.

In January 2012, the General Extraordinary Shareholders' Meeting of Vale Fertilizantes approved the redemption of the 5,314,386 shares remaining in circulation, both common and preferred, and representing 0.94% of the total shares of Vale Fertilizantes. Thus, through its controlled companies, Vale holds 100% of the total number of common shares, and 100% of the total of preferred shares of Vale Fertilizantes. The shares were redeemed at the share price offered in the public offering held on December 12, 2011 of R\$ 25.00 (twenty-five *reais*) per share, plus interest calculated based on the SELIC rate, from the date of payment for the offering, on December 15, 2011, until the payment date for redemption of the shares, which date was January 26, 2012.

### 2010

# Acquisition of iron ore assets in Africa

In April 2010, Vale acquired from BSG Resources Ltd. (BSGR) a 51% stake in BSG Resources (Guinea) Ltd., which holds concessions for iron ore in Guinea, Simandou South (Zogota) and exploration permits for Simandou North (Blocks 1 & 2). Vale has paid US\$ 2.5 billion for the acquisition of these assets - US\$ 500 million in cash (equal to R\$ 866 million on the disbursement date), and the remaining US\$ 2 billion (R\$ 3.388 billion) will be paid in installments subject to the fulfillment of specific goals. Simandou Blocks 1 & 2 and Zogota are among the best still-unexploited iron ore deposits in the world, with high quality and potential for the development of large-scale and long-term projects, at low operating and investment

costs. We are implementing the Zogota project, and in parallel assessing the effects of Guinea's new mining code on the expected return on our projects.

# Acquisition of coal assets in Australia

In June 2010, Vale acquired additional holdings of 24.5% (equal to R\$ 167 million) in the Belvedere (Belvedere) coal project for US\$ 92 million from AMCI Investments Pty Ltd (AMCI). As a result of this transaction, Vale's interest in Belvedere increased from 51.0% to 75.5%. Belvedere is an underground coal mine project in the Bowen Basin region, near the town of Moura in Queensland, Australia. According to our preliminary estimates, when completed the Belvedere project will have the potential to produce up to 7.0 million metric tons of metallurgical coal per year.

## Acquisition of assets of fertilizer

In line with our strategy of becoming a global leader in the fertilizer industry, in May 2010 we acquired 58.6% of the capital of Fertilizantes Fosfatados S.A. (Fosfertil), now Vale Fertilizantes S.A., as well as the Brazilian company Bunge Participações e Investimentos S.A. (BPI), now Vale fosfatados, for R\$ 8.692 billion (equal to a price per share of US\$ 12.0185 for Fosfertil shares and a total of US\$ 1.7 billion for Bunge fertilizer assets). A payment of R\$ 103 million was made in July to complement the price of Vale Fosfatados. In September, we acquired an additional 20.27% of Fosfertil's capital for R\$ 1.762 billion (equal to a price per share of US\$ 12.0185) and in December we announced the result of the public offering for the acquisition of the company's common shares held by minority shareholders.

# Acquisition of stake in SDCN

In September 2010, Vale acquired 51% of Sociedade de Desenvolvimento do Corredor Norte S.A. (SDCN) for US\$ 21 million (equal to R\$ 37 million on the date of disbursement).SDCN has a concession to create the necessary logistics infrastructure to enable the flow of the production from the second phase of the Moatize coal project.

# 2009

# Iron ore assets in Corumbá

In September 2009, Vale concluded the acquisition of open-sky mine exploration operations for iron ore in Corumbá, in Brazil, along with associated logistics assets, for US\$ 750 million (R\$ 1.473 billion on the disbursement date) of Rio Tinto Plc. The iron ore mine in Corumbá is a world-class asset that is defined by its high iron content, with lump iron ore reserves. The logistics assets support 70% of the transport needs for the operations. The acquisition of Corumbá assets is subject to approval by the federal government.

# Potash deposits in Argentina and Canada

In January 2009, Vale acquired the Rio Colorado project from Rio Tinto Plc in Argentina, and the Regina project in the province of Saskatchewan, Canada, for US\$ 850 million (R\$ 1.995 billion on the disbursement date). The Rio Colorado project includes development of a mine with expected nominal capacity of 4.3 million tons per year (Mtpy) of potash, plus the construction of a railroad with 350 kilometers of rails, port facilities, and an electricity generation plant. The Regina project is still in the exploration phase. The infrastructure that is currently next to the project will allow the final product to be transported to Vancouver, facilitating access to the expanding Asian market.

Copper exploration assets in the African copper belt

In the first quarter of 2009, Vale acquired 50% of the stake in a joint venture with African Rainbow Minerals Limited, for future development of assets of TEAL Exploration & Mining Incorporated (TEAL) for US\$ 60 million (equal to R\$ 139 million on the disbursement date), thus increasing the strategic growth operations in the copper business segment in Africa.

TEAL has two copper projects already in the feasibility and approval phase in the African copper belt. Together these projects could represent, in the coming years, nominal production capacity of 65,000 metric tons of copper per year, as well as an extensive and highly promising copper exploration portfolio.

# Coal assets in Colombia

In the first quarter of 2009, Vale concluded the acquisition of coal exploration assets from Cementos Argos S.A. (Argos) in Colombia for US\$ 36 million (R\$ 695 million on the disbursement date). The assets purchased are the following: the El Hatillo coal mine, located in the department of Cesar; a coal deposit in the exploration phase, Cerro Largo; a minority stake in the Fenoco consortium, which holds the concession to operate the railway that links the coal operations to the Rio Córdoba port - SPRC; and 100% of the concession of this port.

# Increased stake in TKCSA

In the third quarter of 2009, Vale agreed with ThyssenKrupp Steel AG to increase its stake in ThyssenKrupp CSA Siderúrgica do Atlântico Ltda (TKCSA) from 10% to 26.87%, through a capital contribution of €965 million (equal to R\$ 2.532 billion on the date of each payment). TKCSA is comprised of an integrated steel plate plant, with nominal capacity of five million metric tons of sheets per year in the state of Rio de Janeiro. Production began in the third quarter of 2010. As a strategic partner of ThyssenKrupp, Vale is the sole and exclusive supplier of iron ore to TKSCA.

# Main investment disposals and asset sales

In accordance with our strategy, we continue to reduce our stakes in non-core assets. The following is a summary of the main disposals and sales of assets during the three-year period under discussion.

# 2011

#### Sale of aluminum assets

In February 2011, Vale announced that it had concluded a transaction with Norsk Hydro ASA (Hydro), a company listed on the Oslo Stock Exchange and on the London Stock Exchange (ticker symbol: NHY) to transfer all of its stake 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 exclusivity rights, commercial contracts and net debt of US\$ 655 million (equal to R\$ 1.088 billion) for 22% of Hydro's common shares in circulation, after the issuance on February 28, 2011, and US\$ 503 million in case (equal to R\$ 836 million) after adjustments.

Vale also created a new company, Mineração Paragominas S.A. (Paragominas), and transferred the bauxite mine of Paragominas and all of its remaining bauxite mining rights in Brazil. As part of this transaction, Vale sold 60% of Paragominas to Hydro for US\$ 578 million in cash (equal to R\$ 960 million) after adjustments to working capital. The remaining parcel will be sold in two equal portions, three and five years after conclusion of the transaction, for US\$ 200 million in cash, each.

According to the terms of the agreement, through its wholly owned subsidiaries, Vale transferred the following to Hydro: (a) 51% of the total capital of Albras; (b) 57% of the total capital of Alunorte; (c) 61% of the total capital of CAP; and it sold (d) 60% of the total capital of Paragominas.

Through its wholly owned subsidiaries, Vale subscribed 447,834,465 shares of Hydro, or 22% of the 2,035,611,206 shares in circulation, approximately US\$ 3.5 billion (equal to R\$ 5.866 billion) according to

Hydro's closing price and the exchange rate NOK/US\$ on February 25, 2011. According to the terms of the transaction, Vale cannot sell its shares for a two-year lock-up period, and it also may not increase its stake in Hydro beyond the 22%.

#### 2010

## Sale of Valesul assets

In January 2010, our wholly owned subsidiary, Valesul Alumínio S.A., entered into an agreement to sell its aluminum assets for US\$ 31.2 million (equal to R\$ 56 million). Valesul's assets that are included in the agreement are located in the state of Rio de Janeiro and include the anode factory, reducer and smelter, as well as industrial, administrative and inventory services.

# Sale of kaolin assets

In the second quarter of 2010, Vale sold 86.2% of its stake in Pará Pigmentos S.A. (PPSA), as well as other kaolin mining rights in Pará. Assets were sold to Imerys S.A., a company listed on Euronext, for US\$ 72 million (equal to R\$ 127 million).

### Sale of stake in the Bayóvar project

In July 2010, Vale completed the sale of its minority stake in the Bayóvar project in Peru by means of a newly incorporated company named MVM Resources International BV (MVM). Vale sold 35% of MVM's total capital to Mosaic for R\$ 682 million, and 25% to Mitsui for R\$ 487 million. Vale controls the Bayóvar project, holding 40% of the total capital and 51% of the voting capital of the newly incorporated company. Overall capital investments made by June 30, 2010 were approximately US\$ 550 million (equal to R\$ 932 million in September 2010). The difference between the fair value and book value in this transaction, totaling R\$ 544 million, was accounted for in our shareholders' equity as per gain/loss regulations applicable to when the control of a company is held.

# Sale of stake in Vale Oman Pelletizing Company LLC

In May 2010, Vale entered into an agreement with Oman Oil Company S.A.O.C., a company controlled by the Sultanate of Oman, to sell 30% of Vale Oman Pelletizing Company LLC, for US\$ 125 million (equal to R\$ 212 million on September 30, 2010). The transaction is still subject to the terms of the final agreement for the purchase of shares, to be signed when the preceding conditions are met. The difference between the fair value and the book value of this transaction, totaling R\$ 544 million, was accounted for in our net equity, as per gain/loss regulations applicable to when the control of a company is held.

# 2009

#### Usiminas

In the second quarter of 2009, Vale sold its 2.93% stakes in Usinas Siderúrgicas de Minas Gerais S.A. (Usiminas) for R\$ 595 million.

# PTVI

Through a book-building process, Vale sold 205,680,000 of its shares in its subsidiary PT International Nickel Indonesia Tbk (PTI), representing 2.07% of PTI's outstanding shares for IDR 925.6 billion, equivalent to US\$ 91.4 million (R\$ 171 million on the date disbursement) -.

# Sale of forestry assets to Suzano

In July 2009, Vale entered into an agreement with Suzano Papel e Celulose S.A, by which Vale agreed to supply reforested wood and to the sale of forest assets, totaling 84,700 hectares, including conservation areas of eucalyptus forest located in the southwest of Maranhão. The agreed value of this negotiation was R\$ 235 million.

Sale of nickel assets

In the last quarter of 2009, Vale sold downstream non-strategic assets: Jinco Nonferrous Metals Co., (US\$ 6.5 million - R\$ 11 million on the date of disbursement), and International Metals Reclamation Company (US\$ 34 million - R\$ 59 million on the date of disbursement). These companies produced very specific and low-profit nickel products.

# Unusual events or operations

Over the past three financial years there have been no unusual transactions or events.

## 10.4 Changes in Accounting Practices. Corrections and Remarks.

# a. Significant changes in accounting practices

There have been no significant changes in the consolidated financial statements for the year ended December 31, 2011. Vale prepared its consolidated financial statements in IFRS based on the circulars already issued by the CPC and approved by the CVM. The circulars issued by the IASB and not yet approved by the CVM will not be adopted in advance by the company.

a) Circulars, interpretations and guidance issued and/or updated by the CPC, adopted during fiscal year 2011.

CPC 15 (R1) – Combination of businesses

CPC 19 (R1) – Investment in joint ventures

CPC 10 (R1) - Cost of loans

CPC 21 (R1) – Intermediate financial statements

CPC 26 (R1) – Presentation of financial statements

CPC 35 (R1) – Separate financial statements correlated according to international accounting norms

CPC 36 (R2) – Consolidated financial statements ICPC 01 (R1) – Concession contracts

ICPC 17 - Concession contracts: evidence

b) Circulars and interpretations issued and/or updated by the IASB and still not approved by the CVM are consequently not adopted by the company.

IAS 01 - Presentation of financial statements

IAS 19 - Employee benefits

IAS 27 – Separate accounting statements

IAS 28 – Investments in associated companies and joint ventures

IFRS 09 – Financial instruments

IFRS 10 – Consolidated accounting statements

IFRS 11 – Joint ventures

IFRS 12 - Divulging investments in other entities

IFRS 13 - Measuring fair value

IFRIC 20 - Costs of sterile removal in the production phase of surface mining

# b. Significant effects of changes in accounting practices

There were no changes in accounting practices.

# c. Corrections and remarks in the auditor's opinion

There were no corrections or remarks on the opinions relating to the financial statements for 2009, 2010 and 2011.

# 10.5 Critical Accounting Policies

Preparation of financial statements requires the use of certain critical accounting estimates and also the exercise of judgment by Vale's Management in the process of applying Vale's accounting policies.

These estimates are based on the best information available in each fiscal year. Changes in facts and circumstances may lead to revision of estimates, therefore the actual future results may differ from estimates.

Significant estimates and assumptions used by Vale's Management in preparing these financial statements are thus presented:

# a) Mineral reserves and useful life of the mines

The estimates of proven and probable reserves are regularly evaluated and updated. These reserves are determined using generally accepted geological estimates. The calculation of reserves requires that Vale assume positions of future conditions that are uncertain, including future ore prices, exchange and inflation rates, mining technology, availability of permits and production costs. Changes in some of these assumptions could have a significant impact on proven reserves and probable reserves recorded.

The estimated volume of mineral reserves is based on calculation of the portion of the mines that is depleted, and the estimated useful life of the mine is a major factor in quantifying the provision of environmental rehabilitation of mines during the write-down of fixed assets. Any change in the estimates of the volume of mine reserves and the useful life of the assets linked to them may have a significant impact on charges for depreciation, depletion and amortization, which are recognized in the financial statements as cost of goods sold. Changes in the estimated useful life of the mines could cause a significant impact on estimates of the provision for environmental costs of recovery after write-down of fixed assets and impairment analysis.

# b) Disposal of Assets

Vale recognizes an obligation according to the fair value for disposal of assets during the period in which they occur, pursuant to Note 2(t). Vale believes the accounting estimates related to recovery of degraded areas and closure costs of a mine are a critical accounting policy because they involve significant values for the provision and it is expected to involve several assumptions, such as interest rates, inflation, the useful life of the asset considering the current stage of depletion and the projected dates of depletion of each mine. These estimates are reviewed each year.

# c) Deferred Income Tax and Social Security Contribution

Vale recognizes the effect of the deferred tax from the tax loss and/or temporary differences in its consolidated financial statements and the financial statements of the controlling company. A provision is recorded for loss of tax assets when the ability to recover those assets is not probable.

Determination of the provision for income taxes or deferred income tax, assets and liabilities, and any provision for losses on tax credits requires estimates from Management. For each future tax credit, Vale assesses the likelihood of part or the entire asset not being recovered. The provision for devaluation depends on the assessment by Vale, the probability of generating taxable income in the future, on

production and sales planning, commodity prices, operating costs, restructuring plans, the costs of recovering degraded areas, and planned capital costs.

#### d) Contingencies

Provisions for contingencies are only recorded when the possibility of loss is considered to be probable by the legal director and their legal advisers.

Contingencies are recorded when the value of losses can be reasonably estimated. By their nature, contingencies will be resolved when one or more future events occur or fail to occur. The occurrence of such events does not typically depend on Vale's activities, which makes it difficult to give precise estimates about the date on which such events are recorded. Assessing such liabilities, particularly in the uncertain legal environment in Brazil, and well as in other jurisdictions, involves exercising significant estimates and judgments from management regarding the results of future events.

### e) Employee Retirement Benefits

The amounts reported in this section depend on a number of factors that are determined based on actuarial calculations that use several assumptions to determine costs and liabilities, among other items. One of the assumptions used in determining the amounts to be recorded in the financial statements is the discount and corrective interest rate. Any changes in these assumptions will affect the accounting records.

At the end of each year, Vale, together with external actuaries, reviews which assumptions should be used for the following year. These assumptions are used to update and discount the fair value of assets and liabilities, costs and expenses, and to determine future values of estimated cash outflows that are necessary to pay pension plan obligations.

# f) Reduction in Recoverable Value of Assets

Every year Vale tests the recoverability of its tangible and intangible assets separated by cash-generation unity, usually employing discounted cash flow criteria, which depends on several estimates that are influenced by market conditions prevailing at the time that such recoverability is tested. Therefore, although the tests carried out in 2011 and 2010 have not generated loss recognition, Management believes it is not possible to determine whether or not new impairment losses will occur in the future.

### g) Fair Value of Derivatives and Other Financial Instruments

The fair value of financial instruments not traded in an active market is determined by using valuation techniques. Vale uses its judgment to choose the various methods and to define assumptions, which are mainly based on market conditions existing at balance sheet date

The analysis of the impact if actual results vary from Management's estimates is presented in note 24 on the topic of sensitivity analysis.

### 10.6 Internal Controls

# a. Degree of efficiency of such controls, and any imperfections and actions taken to correct them

Vale's Management evaluated the effectiveness of internal controls related to financial statements through a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements.

Management established a process for evaluating internal controls using a process mapping methodology and risk assessment to identify applicable controls in order to mitigate the risks affecting the Company's ability to start, authorize, record, process and release relevant information in the financial statements.

At the end of fiscal year, based on tests performed by Management during the period, no shortcomings were identified in the implementation of relevant controls. During the fiscal year, whenever inadequacies are identified in the implementation of controls, they are corrected through the implementation of action plans to ensure their effectiveness at year end.

Vale's Directors understand that the process-mapping and risk-assessment methodology used are adequate to ensure the efficiency, accuracy and reliability of our internal controls.

# b. Deficiencies and recommendations on internal controls included in the independent auditor's report

The auditors did not present any deficiencies or recommendations about the effectiveness of internal controls adopted by Vale.

#### 10.7 Public Sale of Securities

a. How resources resulting from the sale were used

2011

There was no public sale of securities in 2011.

2010

Vale prices US\$ 1 billion in bonds maturing in 2020

In September 2010, Vale issued US\$ 1 billion (equal to R\$ 1.694 billion) in bonds maturing in 2020 and US\$ 750 million (equal to R\$ 1.271 billion) in bonds maturing in 2039. The 2020 bonds will have a coupon of 4.625% per year, payable semiannually at a price of 99.030% of the instrument's face value. The 2039 bonds issued at a price of 110.872% of the face value of the instrument, will be consolidated with the bonds for US\$ 1 billion issued by Vale Overseas Limited (Vale Overseas) in November 2009, with a coupon of 6.875% and maturing in 2039, forming a single series.

Vale used the net proceeds of this offering for general corporate purposes.

Vale prices € 750 million in bonds maturing in 2018

In March 2010, Vale raised € 750 million (equal to R\$ 1.806 billion) from an issuance of eight-year Eurobonds at a price of 99.564% of the instrument's face value. The notes maturing in March 2018 have a coupon of 4.375% per year, payable annually.

Vale used the net proceeds of this offering for general corporate purposes.

2009

Public offering of US\$ 942 million in mandatorily convertible notes maturing in 2012

On July 7, 2009, Vale announced an offering for US\$ 942 million (R\$ 1.858 billion on the transaction date) of notes due in 2012 (VALE-2012 Series and VALE.P-2012 Series) through its subsidiary Vale Capital II.

The notes in the VALE-2012 and VALE.P-2012 Series bear interest at 6.75% per annum, and are payable quarterly. Upon their maturity on June 15, 2012, or prior, if certain events occur then the notes in the VALE-2012 series will be mandatorily exchanged for <u>ADSs (American Depositary Shares)</u>, each representing one common share or preferred class A share issued by Vale. Additional remuneration will be paid based on the net amount of cash distributions paid to holders of ADSs.

The ADSs together represent up to 18,415,859 common shares and 47,284,800 preferred class A shares issued by Vale, which Vale currently holds in treasury.

Vale used the net proceeds of this offering for general corporate purposes.

Public offering of US\$ 1 billion in bonds maturing in 2019

On September 8, 2009, Vale issued US\$ 1 billion (R\$ 1.8 billion on the transaction date) in bonds maturing in ten years, through its wholly owned subsidiary Vale Overseas.

The notes mature in September 2019, with a coupon of 5 5/8% per year, payable semiannually at a price of 99.232% of the instrument's face value. The bonds were issued with a spread of 225 basis points over the return of US Treasury securities, resulting in a yield to the investor of 5.727% per annum.

Vale used the net proceeds of this offering for general corporate purposes.

Public offering of US\$ 1 billion in bonds maturing in 2039

On November 3, 2009, Vale priced an offer of US\$ 1 billion (R\$ 1.7 billion on the transaction date) in bonds maturing in 30 years, through its wholly owned subsidiary Vale Overseas.

The notes expire in November 2039, with a coupon of 6.875% per year, payable semiannually at a price of 98.564% of face value of the instrument. The bonds were issued with a spread of 265 basis points over the return of US Treasury securities, resulting in a yield to the investor of 6.99% per annum.

As disclosed, Vale will use the net funds of these offerings for general corporate purposes.

# b. Whether there have been relevant deviations between the actual use of funds disclosed in the offering memoranda of that distribution

There have not been relevant deviations.

#### c. In the event of deviations, the reasons thereto

There have not been relevant deviations.

# 10.8 Significant items Not Included in the Financial Statements

# a. Assets and liabilities held by Vale, directly or indirectly, that do not appear on its balance sheet (off-balance sheet items)

Nickel Project - New Caledonia

In connection with the French Girardin tax law, which is favorable to financial merchant leasing operations, Vale guarantees BNP Paribas, in the capacity of an investor receiving a tax benefit pursuant to French law, certain payments due by Vale New Caledônia S.A.S. (VNC). Vale also assumes the commitment that the assets associated with financial merchant leasing determined by the Girardin Law would be substantially concluded by December 31, 2011. The French government and the investor mutually agree to a delay until December 31, 2012. The French government and the investors were given notice and a formal requisition was submitted to them. The probability of the guarantee being claimed is remote.

Sumic Nickel Netherlands B.V. (Sumic), which holds 21% of VNC, has an option to sell Vale 25%, 50%, or 100% of its shares in VNC if the defined cost of the initial nickel-cobalt development project, as defined by the financing given to VNC in local currency, is converted to US dollars at specific exchange rates, under the Girardin type of financing, loans from the shareholder and capital contributions by shareholders to VNC exceeds the limit of R\$ 8.594 billion (equal to US\$ 4.600 billion on December 31, 2011), and an agreement is not reached on how to proceed in relation to the project. On May 27, 2010 the limit was reached. Vale agreed with Sumic to an additional extension of the option to sell until 2012. Vale is currently in discussions with Sumic about the continuing participation of VNC, and it hopes for resolution during the second or third quarter of 2012.

In addition, during operations, letters of credit were granted, as were guarantees in the amount of R\$ 869 million on December 31, 2011 (equal to US\$ 465 million), which are associated with items such as environmental claims, commitment to retireassets, electricity contracts, service agreements for the community and import and export commitments.

#### Commercial Leasing

#### Railroad operations

Vale conducts part of its railroad operations using leasing operations. That leasing contract is for 30 years, and may be renewed for another 30 years. It is classified as an operational lease as it does not have risks and benefits inherent to ownership of the asset, but only the commitment to pay for rental of the asset. At the end of the leasing contract, the leased assets will be returned to the lessor. In the majority of cases, Vale's Management expects that during the normal course of business those contracts will be renewed.

The following tables show the minimum amount of future payments of the operating lease in railroad operations and pelletizing operations at December 31, 2011.

#### **Railroad Operations**

	R\$ millions
2012	163
2013	163
2014	163
2015	163
2016	163
2017 forward	1,621
	2,436

# **Pelletizing Operations**

	Consolidated R\$ millions
2012	123
2013	108
2014	43
2015	43
2016 forward	120
2017 forward	437

The total cost for operating leases in consolidated railroad operations during the year ended December 31, 2011 and 2010 was R\$ 163 million and R\$ 150 million, respectively, and costs for operating leases for consolidated pelletizing operations in the year ended December 31, 2011 and 2010, were R\$ 123 million and R\$ 178 million, respectively.

### Concessions and Sub-Concession Agreements

#### Railway transportation companies

Vale and some companies in the group, through the Ministry of Transport, entered into concession agreements with the government for exploration and development of public railway transport of cargo and leasing of assets for the provision of such services. The accounting records of concessions and subconcessions classified as intangible assets are shown in note 13 of the financial statements.

The concession periods for the railroad are:

Railroad	Period of the Concession
Vitória to Minas (direct) (*)	June 2027
Carajás (direct) (*)	June 2027
Center-East Network (indirect through FCA)	August 2026
Southeast Network (indirect through MRS)	December 2026
Ferrovia Norte Sul S.A. ("FNS")	December 2037

(\*) Non-onerous concessions.

The concession will be terminated if one of the following takes place: the end of the contractual period, expropriation, forfeiture, termination of period, cancellation, bankruptcy or closure of the Concessionary.

Concessions, sub-concessions and leasing of controlled companies are handled, for accounting purposes, as operational leases and have the following characteristics:

	FNS	FCA	MRS
Total number of installments	3	112	118
Payment frequency	(*)	Quarterly	Quarterly
			IGP-DI
Correction index	IGP-DI FGV	IGP-DI FGV	FGV
No. of parcels already paid	(**)	54	58
Current value of installment			
Concession	-	R\$ 2	R\$ 3
Leasing	=	R\$ 31	R\$ 48

<sup>(\*)</sup> According to the delivery of each stretch of railroad

#### Port Terminals

Vale owns specialized port terminals, as follows:

		Period of the
<b>Terminal</b> Tubarão, Praia Mole and Bulk Liquids Terminals	<b>Location</b> Vitória - ES	concession 2020
Various Products Terminal	Vitória - ES	2020
Vila Velha Terminal Maritime Terminal of Ponta da Madeira - Piers I and III Maritime Terminal of Ponta da Madeira - Pier II Inácio Barbosa Maritime Terminal	Vila Velha - ES -S. Luiz - MA -S. Luis - MA Aracajú - SE	2023 2018 2010 (*) 2012

<sup>(\*\*)</sup> Made two payments and 80% of the third payment was made, with the remaining 20% to cover existing pending items in the railroad stretch

Itaguaí - RJ 2021 Mangaratiba - RJ 2018

(\*) Extension of valid period for 36 months until the completion of new public bidding.

#### b. Other items not shown in the financial statements

There are no other items not shown in Vale's financial statements other than those previously reported.

# 10.9 - Comments on items not shown

Vale's Directors do not expect relevant effects on the operations described in item "10.8" of this Reference Form and not recorded in the financial statements that would change the revenues, expenses, operating result, financial expenses or other items in Vale's financial information.

For a description of the nature and purpose of each operation, as well as the amount of the obligations assumed and rights generated on behalf of Vale as a result of operations not shown in our financial statements, please refer to item "10.8" of this Reference Form.

#### 10.10 - Business Plan

- a. Investments, including: (i) quantitative and qualitative description of ongoing and planned investments; (ii) sources of investment financing; and (iii) relevant ongoing and planned divestments.
- b. Already-disclosed acquisition of plant, equipment, patents or other assets that should materially affect Vale's production capacity
- c. New products and services, including: (i) description of ongoing research already published; (ii) the total amounts spent by the issuer on research to develop new products or services; (iii) ongoing projects already announced; and (iv) the total amounts spent by the issuer to develop new products or services

NOTE: To convert the amounts of investments made, the average exchange rates in the periods were used for conversion.

In 2011, investments—excluding acquisitions—were R\$ 30.133 billion, a significant increase of 42% over the R\$ 21.276 billion invested in 2010, although this was below what was budgeted due to challenges in execution of projects. Of the total amount invested in 2011, R\$ 19.566 billion was allocated to project development, R\$ 2.917 billion to R&D, and R\$ 7.650 billion to sustaining existing operations. Investments in corporate social responsibility were R\$ 2.492 billion (R\$ 1.725 billion earmarked for environmental protection, and R\$ 765 million to social projects).

Investments in acquisitions were R\$ 2.371 billion in 2011. The main acquisitions are commented on in item "10.3" of this Reference Form.

In 2010, investments—excluding acquisitions—were R\$ 22.352 billion, with R\$ 14.494 billion allocated for project development, R\$ 1.998 billion for R&D—after adjustments in natural gas exploration—and R\$ 5.858 billion for maintaining existing operations. Investments in corporate social responsibility totaled R\$ 1.998 billion, R\$ 1.296 billion allocated for environmental protection, and R\$ 701 million for social projects.

Investments in acquisitions totaled R\$ 11.800 billion in 2010. Major acquisitions are explained in item "10.3" of this Reference Form.

In 2009, investments—excluding acquisitions—were R\$ 17.977 billion, with R\$ 11.658 billion allocated for project development, R\$ 2.015 billion for R&D and R\$ 4.302 billion for maintaining existing operations. Investments in corporate social responsibility totaled R\$ 1.558 billion, R\$ 1.157 billion allocated for environmental protection and R\$ 401 million for social projects.

Investments in acquisitions totaled R\$ 7.448 billion in 2009.

We used cash generated by operations and any issuances of securities to fund our investments and general corporate purposes.

In 2011, Vale initiated operations on five projects: (a) Onça Puma, our first ferronickel operation in Brazil; (b) Oman, two pelletizing plants and a distribution center in the industrial zone of Sohar, (c) Moatize, our first greenfield coal project, as well as our first project in Africa, in the province of Tete in Mozambique, and two hydroelectric plants; (d) Karebbe, in Indonesia, and (e) Estreito, in Brazil.

#### 2012 Capital Budget

In November 2011, our Board of Directors approved our capital budget for 2012, including expenditures of US\$ 12.9 billion (equal to R\$ 24.0 billion) for project execution, US\$ 2.4 billion (equal to R\$ 4.5 billion) for research and development (R&D), and US\$ 6.1 billion (equal to R\$ 11.3 billion) dedicated to sustaining existing operations.

The following table shows the estimated allocation of approved investments:

Allocation of Investments for 2012	%
By Category	
Organic growth	71.5%
Projects	60.5%
R&D	11.0%
Maintaining operations	28.5%
Total	100.0%
By business area	
Bulk materials	55.6%
Ferrous minerals	46.7%
Coal	8.9%
Base metals	21.6%
Fertilizers	9.6%
Logistics for general cargo	2.4%
Energy	3.6%
Steel	2.9%
Others	4.3%
Total	100.0%
By geographical region	
Brazil	63.7%
South America (excluding Brazil)	6.0%
Canada	11.7%
Africa	9.1%
Asia	5.7%
Oceania	3.3%
Others	0.5%
Total	100.0%

The following table shows the main projects under development by Vale and/or by companies in the group:

The following table she	WS the main	project	3 unuc	i ucvcio	princin L	y vaic and	aron by com	parties in the group.
		-	-	-		ected		
	Estimated				Inve	stment		
Project	Start-up	_			R\$ n	nillions		_
	Date			-		-		Status <sup>1</sup>
		2009	2010	2011	2012	Total		
IRON ORE – MINING AND LOGISTICS								

Carajás Additional 40 Mtpa	2H13	592	637	831	1,157	5,519	Installation license (IL) was issued. We are carrying out land-leveling to install the conveyor belt. Civil engineering work continues.
Construction of dry-processing plant located in Carajás, Pará							48% of physical advance in the mine and plant. Investments in logistics finalized
Estimated nominal capacity of 40 Mtpa	1						previously. Total investment executed of US\$ 1.5 billion.
CLN 150 Mtpa	1H14	257	1,038	2,488	1,655	6,466	Offshore civil engineering services in the
Increase capacity on the railroad and in the Northern							maritime terminal of Ponta da Madeira continue. Conclusion of civil engineering
System port, including the							services necessary for installation of the
construction of the fourth pier							railroad car turners. Installation licenses (IL)
at the maritime terminal of Ponta da Madeira, located in							for the railroad expected for 2H12.
Maranhão	<u> </u>						
Increase of nominal logistics							67% physical advance. Total investment
capacity of the EFC for approximately 150 Mtpa							executed of US\$ 2.3 billion.
Carajás Serra Sul S11D	2H16	166	378	1,233	1,477	14,949	Prior license (PL) expected for 1S12. Installation license (IL) expected for 1H13.
Development of mine and							mistaliation license (IL) expected for THTS.
processing plant. Location in							
the southern mountains of Carajás, Pará.							
Estimated nominal capacity of							25% physical advance. Total investment
90 Mtpa.							executed of US\$ 1.1 billion.
Serra Leste	1H13	0	26	194	444	889	Civil engineering services for the plant and excavations under way. Installation licenses
	<u> </u>			<u></u>			(IL) expected for 1H12.
Construction of new processing							
plant located in Carajás, Pará. Estimated nominal installed		1	<del>                                     </del>				26% physical advance. Total investment
capacity of 6 Mtpa.							executed of US\$ 143 million.
Conceição Itabiritos	2H13	15	315	613	342	2,183	Issuance of installations licenses (IL)
Construction of concentration plant, located in the							pending for the electricity transmission line expected for 1H12. Assembly of mills
Southeastern System, Minas							finalized.
Gerais.							
Estimated nominal capacity of 12 Mtpa.							86% physical advance. Total investment executed of US\$ 553 million.
Vargem Grande Itabiritos	1H14	0	102	621	798	3,059	Heavy equipment received. Issuance of
-		_				-,	installation license (IL) expected for 1H13.
Construction of new iron ore processing plant, located in the							
Southern System, Minas Gerais.							
Estimated nominal capacity of							46% physical advance. Total investment
10 Mtpa.  Conceição Itabiritos II	2H14	0	16	251	552	2,211	executed of US\$ 429 million.  Heavy equipment was received and the
ooneeişao Habiintos H	21117		10	201	332	2,211	assembly has already begun. Civil
							engineering services for installation of the
							primary crushers under way. Installation license (IL) issued.
Estimated nominal capacity of							20% physical advance. Total investment
19 Mtpa (without addition of liquid capacity).							executed of US\$ 159 million.
Simandou I – Zogota	1H12	0	55	298	707	2,343	Initial production expected for 2012.
Development of the Zogota	1			-			
mine and the processing plant in the south of Simandou,							
Guinea.							
Estimated nominal capacity of							
15 Mtpa. Teluk Rubiah	1H14	8	76	281	682	2,550	Prior licenses for environmental,
. SIMIN INMINIER	+		7.0	201	302	2,000	construction and installation issued.
							Operating license expected for 1H14.
							Project within period. Land-leveling services under way.
Construction of maritime							***
terminal with sufficient depth to							
receive ships of 400,000 dwt and an inventory yard. Located							
in Teluk Rubiah, Malaysia.		1	ļ				
Inventory yard with revolving capacity of up to 30 Mtpa for							14% physical advance. Total investment executed of US\$ 215 million.
iron ore products.	<u>.                                    </u>						executed of US\$ 215 Million.
PELLETIZING PLANTS	-	-	-	-	-	-	<u>-</u>
Tubarão VIII	2H12	415	236	313	444	1,800	Assembly of equipment and metal structures under way. Operating license (OL) expected
							for 2H12.
Estimated nominal capacity of	1						80% physical advance. Total investment
7.5 Mtpa. Samarco IV	1H14	-	ļ	-	_	3,148	executed of US\$ 612 million.  18% physical advance on the pelletizing
Sallidico IV	IH 14	-	-	-	-	3,148	plant. Budget fully financed by Samarco.
Construction of the fourth							
pelletizing plant, expansion of the mine, ore pipeline, and							
the filling, ore pipelline, and		1	1		l		1

		,					1
infrastructure at the maritime terminal. Vale has a 50% stake in Samarco.							
Estimated nominal capacity of 8.3 Mtpa, increasing the							
capacity of Samarco to 30.5 Mtpa.							
COAL – MINING AND LO	GISTICS						
Moatize II	2H14	0	0	122	928	3,846	Geological studies and preparation of the detailed engineering project under way. There are no pending installation licenses (IL).
New mine and duplication of CHPP of Moatize, as well as related infrastructure. Location in Tete, Mozambique.							
Estimated nominal capacity of 11 Mtpa (70% metallurgical coal and 30% thermal coal).							4% physical advance. Total investment executed of US\$ 73 million.
Nacala Corridor	2H14	0	0	64	1,285	8,264	Signature of concession contract with the government of Malawi for a railroad in the country.
Port and railroad infrastructure connect the Moatize site to the maritime terminal of Nacala-à- Velha, located in Nacala, Mozambique.							Development of the detailed engineering study under way. Licenses for plant suppression issued for construction of the railroad and the maritime terminal in Mozambique.
Estimated nominal capacity of 18 Mtpa.							Project in the initial stage of development. Total investment executed of US\$ 38 million.
COPPER - ORE	41146	07-	1.00:	001	550		Delivery and as a second secon
Salobo  Development of the mine, plant	1H12	870	1,226	981	550	4,346	Primary and secondary crushers, primary sieve and conveyor belt commissioned.  The start-up of the first line is expected for
and the related infrastructure in Marabá, Pará.							April 2012, and the second line for May 2012.
Estimated nominal capacity of 100,000 tpa of concentrated copper.							97% physical advance. Total investment executed of US\$ 2.0 billion.
Salobo II	2H13	4	150	447	1,080	2,654	Operating license (OL) for the plant expected for 2H13.
Expansion of Salobo, raising of the dam and increasing the capacity of the mine, located in Marabá, Pará.							
Estimated additional nominal capacity of 100,000 tpa of concentrated copper.							49% physical advance. Total investment executed of US\$ 354 million.
NICKEL – MINING AND F	REFINING						
Long Harbour	2H13	201	936	1,785	2,246	6,695	Civil engineering being finalized. Electromechanical assembly under way.
Hydro-metallurgical operation. Located in Long Harbour, Newfoundland and Labrador, Canada.							
Estimated nominal refining capacity of 50,000 tpa of refined nickel, and associated copper and cobalt.							59% physical advance. Total investment execution of US \$1.7 billion.
Totten	2H13	112	148	208	292	1,411	51% physical advance. Total investment executed of US\$ 402 million.
Nickel mine (being reopened) in Sudbury, Ontario, Canada. Estimated nominal capacity of 8,200 tpa.							
POTASH – MINING AND L		1					
Rio Colorado	2H14	0	384	1,018	2,010	11,000	Construction of dwellings for employees finished. Environmental licenses for the railway line issued. Installation license (IL) expected in 1H12.
Investments in an extraction system that uses solutions, located in Mendoza, Argentina, renewal of existing railroad (440 km), construction of a railroad line (350 km) and a maritime terminal in Bahia Blanca, Argentina.							
Estimated nominal capacity of 4.3 Mtpa of potash (KCI).						_	27% physical advance, total investment executed of US\$ 826 million.
ENERGY Biodiesel	2015	92	157	348	422	1,177	Planting under way. FEL III study of the biodiesel plant expected for July 2013. Prior License (PL) and installation license (IL) expected for 2H13.
Project to produce biodiesel from palm oil. Plantation of							. ,

80,000 hectares. Located in Pará, Brazil.							
Estimated nominal capacity of 360,000 tpa of biodiesel.							Total investment executed of US\$ 343 million.
STEEL							
CSP <sup>2</sup>	1H15	0	0	437	1,047	4,924	Implementation of the project began in December 2011.
Development of a steel sheet plant in partnership with Dongkuk e Posco, located in Ceará. Vale holds 50% of the joint venture.							Preliminary environmental license (PL) and installation license (IL) already issued.
Estimated nominal capacity of 3.0 Mtpa.							

# 10.11) Other factors with relevant influence

There are no other factors that have relevantly influenced the operating performance and that have not been identified or commented on other items in this section.

<sup>&</sup>lt;sup>1</sup>Based on December 2011. <sup>2</sup>Expected investment is related to Vale's stake in the project.

#### 11.1 Identification of forecasts

Vale provides no guidance in the form of quantitative predictions about its future financial performance (earnings guidance). However, Vale makes an effort to disclose as much information as possible about its vision of the different markets where it operates, as well as the strategic guidelines of the company and their execution, so as to provide participants in the capital market with a sound basis for the formation of expectations about its performance in the medium and long term.

For information about future investment projections for the company, see item 10.10 of this Reference form.

### a. Object of projections

Not applicable

# b. Term under consideration and the validity of forecasts

Not applicable

c. Premises of projections, with an indication of those which can be influenced by the administration of the Company

Not applicable

d. Values of indicators that are the object of projections for the last 3 fiscal years

Not applicable

- 11.2 On the hypotheses that the Company disclosed during the last 3 accounting reference periods, projections on the evolution of its indicators:
  - 4 to make known which are being replaced by new projections included in the form and which ones are being repeated in the form

Not applicable

5 regarding projection periods already elapsed, compare the data projected with the effective performance of the indicators, indicating clearly the reasons that led to deviations in the projections

Not applicable

6 regarding projections for periods still ongoing, to make known if projections are still valid on the date of submission of the form, and, when applicable, explain why they have been abandoned or replaced

Not applicable

#### Item 12

### 12.1 Description of Administrative Structure

# a. Powers of each body and committee Board of Directors:

Under provisions of the Bylaws Vale, the Board of Directors has the powers contemplated in law:

- I. Distributing the compensation set by the general assembly among its members, the two advisory committees, and the Executive Board:
- II. Creating technical and consultative committees to advise it, in addition to the permanent committees contemplated in the Bylaws;
- II. Approving policies of selection, evaluation, development, and compensation of the members of the Executive Board:
- IV. Approving general Human Resource policies;
- V. Approving strategic guidelines and the strategic plan of Vale submitted annually by the Executive Board;
- VI. Approving annual and multi-annual budgets;
- VII. Monitoring and evaluating the financial and economic performance of the Vale;
- VIII. Approving investment and/or development opportunities that exceed the limits established for the Executive Board as defined by the Board of Directors;
- IX. Issuing opinions on merger, split-off, or incorporation decisions of which Vale is a party, as well as share purchases;
- X. In accordance with the corporate purpose of the Vale, making decisions on the setting-up of companies or transformation into a different type of company, direct or indirect participation or withdrawal from other companies, consortia, foundations, and other organizations through exercise of withdrawal rights, exercise or non-exercise of rights of preference in subscription and acquisition, directly or indirectly, of corporate equity or of any other form of participation or withdrawal as prescribed by law, including, but not limited to, merger, split-off, and incorporation of companies in which it participates;
- XI. Approving the corporate risk and financial policies of Vale;
- XII. Approving the issuance of simple debentures, not convertible into shares and without collateral;
- XIII. Appointing and removing the person responsible for internal auditing and for the Ombudsman, who shall report directly to the Board of Directors;
- XIV. Approving policies and the annual internal audit plan of Vale, as well as to acknowledge the respective reports and determine the adoption of any necessary measures;
- XV. Approving alterations in corporate governance rules;
- XVI. Approving policies on employee conduct based on the ethical and moral standards described in the Code of Ethical Conduct of Vale;
- XVII. Approving policies to avoid conflicts of interest between the Vale and its shareholders or managers, as well as on the adoption of measures considered necessary in the event such conflicts arise;
- XVIII. Approving policies of institutional responsibility, especially those related to: the environment, work health and safety, and the social responsibility of the Vale;
- XIX. Approving the provision of guarantees in general, establishing criteria for the Executive Board for purchase of, financed sale of, or placing liens on, fixed assets and for the constitution of encumbrances for obtaining loans, financing, and other contracts, execution of commitments, non-exercise of rights and transactions of any nature, except waiver of preemptive rights in the subscription and purchase of corporate shares;
- XX. Approving any reformulations, alterations or amendments to shareholder agreements or consortia contracts or agreements among shareholders or among consortia parties of companies in which the company participates and, moreover, signing of new agreements and/or consortia contracts that address matters of this nature;
- XXI. Authorizing the negotiation, signing, or alteration of contracts of any kind or value between Vale (i) its shareholders, either directly or through intermediary companies, (ii) companies that directly or indirectly participate, in the capital of a controlling shareholder or which are controlled by or are under joint control

of entities that participate in the capital of the controlling shareholder and/or (iii) companies in which the controlling shareholder of the Company participates, and the Board of Directors may establish delegations, with standards and procedures that meet the requirements and nature of operations, without prejudice of keeping the aforementioned group duly informed of all company transactions;

XXII. Authorizing plans for repurchase of shares of their own issuance for maintenance in treasury, cancelation or subsequent sale;

XXIII. Approving or delegating to the Executive Board recommendation of persons who should form part of the administrative, consulting, and financial bodies of those companies and organizations in which Vale participates, either directly or indirectly;

XXIV. Determining the preparation of balance sheets for periods of less than one year and declaring dividends or interest on its own capital on the basis of the profits shown on these balance sheets, as well as declaring the m on the basis of accrued profits or existing profit reserves shown on the most recent annual or intermediate balance sheet:

XXV. Authorizing increases in corporate capital regardless of changes in bylaws, within the authorized capital limit and, at its discretion, exclude preemptory rights in the issuance of stock, debentures convertible into shares and subscription bonuses, the placement of which is done through sale on the stock market or by public subscription under terms established in Law 6.404/76; and

XXVI. Approving recommendations submitted by the Fiscal Council of the Company in the exercise of its legal and statutory attributions.

#### **Advisory Committees:**

the Board of Directors counts on the assistance, on a permanent basis of five (5) technical and advisory committees, as follows: Executive Development Committee; Strategic Committee; Finance Committee; Accounting Committee, and Governance and Sustainability Committee.

The mission of these committees is to assist the Board of Directors, including accompaniment of Vale activities, in order to provide more effective and higher quality solutions.

### **Executive Development Committee:**

Under terms of article 21 of the Bylaws, the Executive Development Committee shall be responsible for:

- I Issuing reports on the human resources general policies of the Company submitted by the Executive Board to the Board of Directors;
- II Analyzing and issuing reports to the Board of Directors on the appropriateness of remuneration of members of the Executive Board;
- III Submitting and ensuring up-to-datedness of the methodology of performance evaluation of the members of the Executive Board; and
- IV Issuing reports on health and safety policies proposed by the Executive Board.

### **Strategic Committee:**

Under terms of article 22 of the Bylaws, the Strategic Committee is responsible for:

- I Issuing reports on the strategic guidelines and the strategic plan submitted annually by the Executive Board;
- II Issuing reports on the company's annual and multi-annual investment budgets submitted by the Executive Board to the Board of Directors;
- III Issuing reports on investment and/or divestiture opportunities submitted by the Executive Board to the Board of Directors; and

IV - Issuing reports on operations relating to merger, split-off, and incorporation in which the Company and its controlled subsidiaries are a party, and on share purchases submitted by the Executive Board to the Board of Directors.

#### **Finance Committee:**

Under terms of article 23 of the Bylaws, the Financial Committee is responsible for:

- I Issuing reports on the corporate risks, financial policies and the internal financial control systems of the Company; and
- II Issuing reports on the compatibility between the shareholders remuneration level and the parameters established in the annual budget and financial planning, as well as their consistency with the general policy on dividends and the capital structure of the company.

#### **Accounting Committee:**

Under terms of article 24 of the Bylaws, the Comptroller's Committee is responsible for:

- I Recommending to the Board of Directors the appointment of the person responsible for the internal auditing of the Company;
- II Issuing reports on policies and the Company's annual auditing plan submitted by the employee responsible for internal auditing, and on its execution;
- III Tracking the results of the Company's internal auditing, and identifying, prioritizing, and submitting to the Board of Directors actions to be monitored by the Executive Board; and
- IV Analyzing the Annual Report, as well as the Financial Statements of the Company and making recommendations to the Board of Directors.

# **Governance and Sustainability Committee:**

Under terms of article 25 of the Bylaws, the Committee on Governance and sustainability is responsible for:

- I Evaluating the efficiency of the Vale's governance practices and the workings of the Board of Directors, and submitting improvements;
- II Submitting improvements to the Code of Ethics and the management system in order to avoid conflicts of interest between the company and its shareholders or managers:
- III Issuing reports on potential conflicts of interest between the company and its shareholders or administrators; and
- IV Issuing reports on policies related to the Company's institutional social responsibilities, such as environmental-related issues and the social responsibilities, as proposed by the Executive Board.

# **Executive Board:**

Under terms of the Bylaws, the Executive Board has the following responsibilities, in addition to those contemplated in law:

 Approving the creation and elimination of Executive Departments subordinated to each Executive Director;

- II. Preparing and submitting to the Board of Directors the company's general policies on human resources, and executing the approved policies;
- III. Preparing and submitting, annually, to the Board of Directors, the Vale's strategic guidelines and the strategic plan, and executing the approved strategic plan;
- IV. Preparing and submitting the Vale's annual and multi-annual budgets to the Board of Directors, and executing the approved budgets;
- V. Planning and conducting the Vale's operations and reporting the company's economic and financial performance to the Board of Directors, and producing reports with specific performance indicators:
- VI. identifying, evaluating and submitting investment and/or divestiture opportunities to the Board of Directors which exceed the limits of the Executive Board as defined by the Board of Directors, and executing the approved investments and/or divestitures;
- VII. Identifying, evaluating and submitting to the Board of Directors operations relating to merger, split-off, incorporation in which the Vale is a party, as well as share purchases, and conducting the approved mergers, split-offs, incorporations and purchases;
- VIII. Preparing and submitting the Vale's finance policies to the Board of Directors, and executing the approved policies;
- IX. Submitting to the Board of Directors the issuance of simple debentures, not convertible into shares and without collateral;
- X. Adhering to and encouraging adhesion to the Vaqçe's Code of Ethics, established by the Board of Directors:
- XI. Preparing and submitting to the Board of Directors the Vale's policies on corporate responsibility, such as the environment, health, safety and social responsibility, and implementing the approved policies;
- XII. Propose to the Board of Directors any reformulations, alterations, or amendments of shareholders' agreements or of agreements among the shareholders of companies in which the Vale participates, as well as suggesting the signing of new agreements and consortia contracts that address subjects of this nature;
- XIII. Authorizing the opening and closing of branch offices, subsidiary branch offices, depots, agencies, warehouses, representative office or any other type of establishment in this country [Brazil] or abroad;
- XIV. Authorizing the purchase of, sale of and placing of liens on fixed and non-fixed assets including securities, contracting of services, whether the company is the provider or receiver of such services, being empowered to establish standards and delegate powers, all in accordance with the criteria and standards established by the Board of Directors
- XV. Authorizing the signing of agreements, contracts and settlements that constitute liabilities, obligations or commitments on the Company, being empowered to establish standards and delegate powers, all in accordance with the criteria and standards established by the Board of Directors;
- XVI. Authorizing the signing of commitments, waiver of rights, and transactions of any nature, except in regard to the waiver of preemptory rights in subscription and purchase, and may establish rules and delegate powers, all within the limits of the Executive Board as established by the Board of Directors;
- XVII. Establishing rules and delegating powers, within the limits of the Executive Board as established by the Board of Directors;
- XVIII. Laying down voting guidelines to be followed at the General Assemblies or their equivalent by its representatives in the companies, foundations and other organizations in which the Vale participates, directly or indirectly, respecting the investment opportunities the , and guidelines approved by the Board of Directors, as well as the respective budget and all within its respective limits in regard to, among other things, indebtedness, the sale of or placing of liens on assets, the waiver of rights, and the increase or reduction of corporate equity.

#### **Non-Statutory Committees:**

The Executive Board shall have, for advice on a permanent basis, two (2) technical and advisory committees, denominated as follows: Risk Management Committee and Disclosure Committee.

#### **Disclosure Committee:**

The primary attributes of the Disclosure Committee are (a) the evaluation of the relevance of acts or events that have occurred and are related to the business of the Vale; and (b) the oversight of the disclosure of information to the capital markets pursuant to the terms of the Disclosure Policy. For more information on the Disclosure Committee see item 21.3.

# **Risk Management Committee:**

The primary responsibilities of the Risk Management Committee are issuing an opinion on the Vale's principles and instruments of risk management; and periodic reporting to the Executive Board on (a) the primary risks to which Vale is exposed (by type of risk and/or business) and the impact of these risks on the asset portfolio and cash flow; (b) how the risks are being monitored and managed, and (c) the impact on the profile of risk of the asset portfolio and on cash flow resulting from the inclusion of new investments and/or projects in the business plan, and, if necessary, what strategies of risk mitigation are recommended. The Risk Management Committee reports regularly to the Executive Board, and the latter is responsible for evaluating and approving strategies for risk attenuation over the long term, as recommended by the Risk Management Committee.

#### **Fiscal Council:**

The Fiscal Council shall be responsible for exercising the functions attributed to it by the applicable prevailing legislation, in Vale these By-Laws, and as regulated by its own Internal Rules to be approved by its members.

The Fiscal Council, additionally to attributions set forth in Law 6404/76, is responsible for:

- I. be aware of internal audit reports, external auditors and Comptroller Committee, evaluating recommendations and opinions and inviting them to attend meetings of the Fiscal Council, when needed.
- II. provide information on matters under its competence, upon request by shareholders or shareholders groups representing a minimum of 5% of capital stock;
- III. discuss with external auditors, internal auditors, Executive Directors, Comptroller Committee and Comptroller Director the result of internal control system evaluation, aiming improvement and certifying that recommendations presented and not questioned by the Executive Directors are deployed at the estimate schedule;
- IV. Recommending and help the Board of Directors in the selection, remuneration, and dismissal of external auditors of Vale;
- V. Oversee and evaluate the work of external auditors and determine to Company management any eventual withholding of compensation of the external auditor;
- VI. Deliberating on the contracting of new services that may be rendered by the external auditors of Vale:
- VII. Evaluate the effectiveness of internal controls of Vale and recommend changes, when needed; VIII. identify critical accounting aspects and analyze appropriate application of generally accepted accounting principles (US GAAP AND BR GAAP)
- IX. Mediating eventual disputes between management and external auditors regarding the financial statements of Vale;

X. Setting forth the procedures to be used by Vale to receive, process and deal with complaints or claims related to accounting and auditing matters, as well as guaranteeing that the mechanisms to receive complaints guarantee the confidentiality and unknown identity of the individual making the complaint;

XI. make available, thirty (30) days prior to General Shareholders' Meeting, an opinion on the report financial statements and other related documents and affairs included in the agenda to be discussed.

# b. Date of formation of the Fiscal Council, if it is not permanent, and of the formation of the committees.

The Fiscal Council has been a permanently functioning body since 9/25/1997.

The five Advisory Committees were formed by the Board of Directors on 12/19/2001, and pursuant to resolutions of the Special Shareholders' Meeting held on 12/27/2002, upon which date their existence became part of the Bylaws.

The Disclosure Committee and the Risk Management Committee were formed by decision by the Board of Directors on 6/19/2002 and 12/12/2005, respectively.

#### c. Mechanisms for evaluating the performance of each body or committee

Pursuant to Chapter Vi of the Internal Regulations of the Fiscal Council and provisions of the Sarbanes-Oxley Law, the Fiscal Council evaluates its own performance annually at the end of each audit cycle. The self-evaluation process considers the following: matters covered in monthly meetings, financial statements, risk management, and internal controls, management and internal audit responsibility, relationship with external auditors, resources and special research, formation of the Fiscal Council, and training and professional development of members. Only the independent auditors of the Vale shall have knowledge of the self-evaluation conducted by the members of the Fiscal Council.

As of December 31, 2009, Vale did not have in place mechanisms of formal evaluation of the performance of the Board of Directors, The Executive Board, and of the Committees. For a description of the individual evaluation of the Executive Directors, see item 12.1(and) of this Reference Form.

# d. On Executive Officers, their responsibilities and individual powers

# **Chief Executive Officer:**

Under terms of article 33 of the Bylaws, the Chief Executive Officers has the following responsibilities:

- Presiding over meetings of the Executive Board;
- II. Exercising executive direction of the Company, with powers to coordinate and supervise the activities of the other Executive Officers, exerting his best efforts to ensure faithful compliance with the decisions and guidelines laid down by the Board of Directors and the General Assembly;
- III. Coordinating and supervising the activities of the business areas and units that are directly subordinated to him;
- IV. Selecting and submitting to the Board of Directors the names of candidates for Executive Officer posts to be elected by the Board of Directors, as well as to propose their respective removal;
- V. Coordinating and processing the decision-making of the Executive Board in order to prioritize consensual decision among its members. If consensus is not achieved, the Chief Executive Officer may (i) withdraw the subject in debate; (ii) articulate the position of the majority, including making use of the deciding vote or (iii) in the interest of the Company and through well-based reasoning, decide individually on matters of joint deliberation; in this case he must report to the Board of Directors on the use of this prerogative at the first meeting of the Board of Directors that occurs after the corresponding decision.

Decisions related to annual and multi-annual budgets and the Strategic Plan and the Annual Report on Administration of the Vale shall be taken by a majority of votes, when considering all of the Executive Officers, so long as the favorable vote of the Chief Executive Officer is among the m;

- VI. Indicating who among the Executive Officers shall replace an Executive Officer in case of a temporary impairment or absence;
- VII. Keeping the Board of Directors informed about the activities of the Vale;
- VIII. Preparing the annual report and draw up the balance sheet together with the other Executive Officers.

### **Executive Officers:**

Under terms of article 34 of the Bylaws, the Executive Officers have the following responsibilities:

- I Performing the services for which the y are responsible;
- II —Participating in meetings of the Executive Board, contributing to the definition of the policies to be followed by the company reporting on matters of the respective areas of responsibility;
- III Complying with and ensure compliance with the policy and general guidance of the company's business laid down by the Board of Directors, each being responsible for his specific area of activities;
- IV Contracting the services of attorneys, consultants, analysts, and other resources necessary for performance of the functions of the Fiscal Council, within budget, as well as contracting experts under terms of article 163 §8 of Law 6,404/76.

In addition to this, under terms of article 28 of the Bylaws and within the limits established for each Executive Officer, decisions on matters affecting the specific area of responsibility of each one shall be made by him alone, so long as the matter does not affect the area of responsibility of another Executive Officer, or in conjunction with the Chief Executive Officer in matters or situations pre-established by the latter.

# e. Mechanisms of evaluation of the performance of members of the Board of Directors, of the Committees, and of the Committees and directorate

As of 31 December, 2011, Vale did not have mechanisms in place for formal evaluation of the performance of members of the Board of Directors, of the Fiscal Council, and of the Committees.

The members of the Board of Directors, are evaluated annually based on their performance according to goals previously defined formally by the Board of Directors. These goals are based on the Vale's performance, through measurement of the following indicators: asset cash flow and general indicators of productivity, safety, and the environment. The definition of these indicators and goals derive from the strategic planning and the budget approved by the Board of Directors. The goals are monitored by the area of budget and performance management. The final result is approved by Vale's Board of Directors.

#### 12.2 Description of the rules, policies, and practices relating to General Assemblies

#### a. Notification Periods

Vale customarily calls for the General Shareholders' Assemblies by notification, at least 30 days before the meeting in the first convocation, and 15 days prior in the second convocation, in accordance with the recommendations of the CVM and commitments assumed before the Hong Kong Stock Market.

In addition, pursuant to article 8, §2 of the Bylaws of the Company, a holder of special class preferred shares (Golden Shares) shall be called formally by the company, by means of personal correspondence directed to his legal representative at least fifteen (15) days in advance, for the purpose of considering any matter subject to the right of veto specified in Article 7 of the Bylaws and in item 18 of this Form of Reference.

#### b. Powers

Vale's General Shareholders' Assembly has powers pursuant to Law 6.404/76.

# c. Addresses (physical or electronic) at which documents relating to the General Meeting shall be available to shareholders for their review

At Vale's headquarters at Avenida Graça Aranha n° 26, 12° andar, Centro, Rio de Janeiro, RJ, Brazil and at the electronic addresses of Vale (www.vale.com)the, the CVM (www.cvm.gov.br), BM&FBovespa (www.bmfbovespa.com.br); the Securities and Exchange Commission (www.sec.gov) and the Hong Kong Stock Market (www.hkex.com.hk).

#### d. Identification and handling of conflicts of interests

According to Vale's Bylaws, the Board of Directors may set policies to avoid conflicts of interest between the Vale and its shareholders or its managers, as well as on the adoption of provisions deemed necessary should conflicts of interest arise.

In addition, under terms of the Bylaws, the Governance and Sustainability Committee may issue reports related to potential conflicts of interest between the Vale and its shareholders or its managers, upon request of the Board of Directors. The Committee may also analyze proposals to be considered by the Board of Directors.

# e. Request for power-of-attorney by the directors to exercise voting rights

There are no rules, policies or practices for requesting powers-of-attorney by the directors to exercise voting rights in General Shareholders' Meetings.

# f. Necessary formalities to accept powers-of-attorney granted for shareholders, indicating whether the Vale accepts powers from shareholders electronically

A shareholder who wishes to attend the General Meetings must provide identification and proof of Vale share ownership issued by the depositary financial institution.

Any shareholder may appoint a proxy or more, if the case may be, to attend meetings and vote in his name. If represented by proxy, the shareholder shall comply with the terms of Art. 126, Law No. 6,404/76, and must have been appointed by power-of-attorney no earlier than one year and qualify as a shareholder, manager, attorney who is a Member of the Order of Attorneys of Brazil, or be a financial institution. If the power-of-attorney is in a foreign language, it should be accompanied by corporate documents in the case of a legal entity, and of a letter of mandate duly translated into Portuguese, and notarized and with a consular stamp.

For the purposes of facilitating the Assemblies, shareholders represented by proxy may, at their exclusive discretion, deliver the documents within 72 hours prior to the Assemblies.

Vale does not accept powers-of-attorney granted electronically by shareholders.

# g. Maintenance of Internet forums and pages intended to receive and share shareholder comments relating to meetings.

The Vale does not keep Internet forums and pages for shareholders to receive and share comments relating to meeting minutes.

### h. Transmission of meetings by live video or audio.

The Vale does not transmit meetings by live video or audio.

### i. Mechanisms allowing for inclusion of shareholders' proposals.

There are no mechanisms allowing for inclusion on the agenda of proposals formulated by shareholders, except for those mechanisms contemplated in applicable law.

# 12.3. Dates and newspapers of publication of information required by Law no. 6.404/76.

Fiscal Year	Publication	Newspaper – State or Territory	Dates
12/31/2011	Financial Statements	Diário Comércio Indústria & Serviços	3/15/2012
		Diário Oficial do Estado – RJ	3/15/2012
		Jornal do Commercio	3/15/2012
	Call to General Shareholders' Meeting to approve the		3/17, 18,
	Financial Statements		19/2012
			(single issue)
			3/20/2012
		Diário Comércio Indústria & Serviços	3/21/2012
			3/19/2012;
			3/20/2012
		Diário Oficial do Estado – RJ	3/21/2012
			3/19/2012;
			3/20/2012
		Jornal do Commercio	3/21/2012
	Minutes of General Shareholders' Meeting that approved the Financial Statements	Diário Comércio Indústria & Serviços-	4/19/2012
		Diário Oficial do Estado – RJ	4/19/2012
		Jornal do Commercio	4/19/2012
12/31/2010	Financial Statements	Diário Comércio Indústria & Serviços	3/16/2011
		Diário Oficial do Estado – RJ	3/16/2011
		Jornal do Commercio	3/16/2011
	Call to the General Shareholders' Meeting to approve the		3/18, 19,
	Financial Statements		20/2011
			(single issue)
		Diário Comércio Indústria & Serviços	3/22/2011
			3/18/2011
			3/21/2011
		Diário Oficial do Estado – RJ	3/22/2011
			3/18, 19,
			20/2011
			(single issue)
		Jornal do Commercio – RJ	3/22/2011
	Minutes of General Shareholders' Meeting that approved	Diário Comércio Indústria & Serviço	4/20/2011
	the Financial Statements	Diário Oficial do Estado – RJ	4/20/2011
		Jornal do Commercio – RJ	4/20/2011
12/31/2009	Financial Statements	Diário Oficial do Estado - RJ –	3/4/2010
		Diário Comércio Indústria & Serviços-	3/4/2010
		Jornal do Commercio – RJ	3/4/2010
	Call to the General Shareholders' Meeting to approve the		3/26/2010,
	Financial Statements		3/27, 28,
			29/2010
		Diário Comércio Indústria & Serviços	(single issue)

		3/30/2010
		3/26/2010
		3/29/2010
	Diário Oficial do Estado – RJ	3/30/2010
		3/26, 27,
		28/2010
		3/29/2010
	Jornal do Commercio	3/30/2010
Minutes of General Shareholders' Meeting that approved	Diário Oficial do Estado – RJ	4/28/2010
the Financial Statements	Diário Oficial do Estado – SP	4/28/2010
	Jornal do Commercio	4/28/2010

### 12.4 Board of Director's rules, policies and practices

#### a. Frequency of meetings

The Board of Directors ordinarily holds meetings once a month, and special meetings whenever called by the Chairman or, in his absence, by the Vice-Chairman or by any other two board members.

# b. Shareholder provisions establishing voting restrictions on members of the Board of Directors

See item 15.5 (d) in this Form of Reference.

# c. Rules on identifying and handling conflicts of interest

The Vale does not have a corporate policy on conflicts of interest in meetings of the Board of Directors, apart from the Brazilian laws applicable in this regard. Vale's practice is to require that a Member of the Board of Directors who considers himself to have a conflict leave the Board meeting during deliberation of the relevant matters and abstain from any material intervention.

In addition, Vale has a Code of Ethical Conduct that must be followed by the members of the Board of Directors and its Advisory Committees, members of the Fiscal Council, Officers, employees and interns, and controlled companies (provided that the y are subject to the laws of the local jurisdiction). It prevails over, and serves as guidelines for, all Vale rules and policies.

Under the Code of Ethics, the abovementioned individuals are required to defend the interests of Vale in matters in which the y are participating and avoid situations in which conflicts of interest with Vale may arise, and when that is not possible, to abstain from representing the Vale in the matter in question, immediately disclosing the conflict to his immediate superior.

Violations of the Code of Ethics, rules, and disciplinary standards of the Vale subject violators to disciplinary penalties, which may include warning, suspension, and termination of employment. In applying disciplinary penalties, the nature and seriousness of the infraction shall be considered, noting Vale human resources rules and applicable law.

# **12.5** Description of binding clause the for the resolution of conflicts the through arbitration There are no binding clauses in the Bylaws for the resolution of conflicts by and between shareholders and the Vale through arbitration.

12.6 /8 Composition and professional experience of management and Board of Directors:

Name	Age	Management body	Date of election	Term
CPF	Occupation	Elected position	Date of entry	Elected by comptroller
Other positions held at the company				
Roger Allan Downey	45	Member of the Executive Board	4/25/2012	5/25/2013
623.291.626-34	Administrator	<b>Executive Director of Operations and</b>	02/05/2012	No
		Marketing for Fertilizers and Coal		
Executive Director of Marketing and Ope	erations of Fertilizers and Coal of Vale	e (since May 2012), where he served as Manager of	of Strategic Marketing-	Iron Ore (2002 to 2005).
losé Carlos Martins	62	Member of the Executive Board	5/26/2011	5/25/2013
304.880.288-68	Economist	<b>Executive Director of Operations and</b>	5/26/2011	No
		Marketing for Iron metals		
Executive Director of Marketing and Ope	erations of Iron Metals of Vale (since	Nov/2011) and member of the Information Disclosu	re Committee (since No	ov 2011) and Member of the
executive Committee of Risk Manageme	ent (since May/2010), where he serve	d as Executive Director of Marketing, Sales and St	rategy (May/2010-Nov/	2011), Executive Director of
ron Metals (June 2005 to May/2010), Ex	xecutive Director of Participations and	Business Development (April/2004 to May/2005).		
ito Botelho Martins Junior	49	Member of the Executive Board	5/26/2011	5/25/2013
01.888.956-04	Economist	Executive Director of Finance, Supplies,	5/26/2011	No
		Shared Services, and Investors Relations		
executive Director of Finance, Supplies,	Shared Services, and Investors Rela	tions of Vale (since Nov/2011), Permanent Membe	er of the Financial Comr	mittee (since Nov/2011) and
nember of the Risk Management Execu	itive Committee (since 2008) of Vale,	where he served as: Executive Director of Operation	ons with Base Metal (M	av/2010- Nov/2011). Execut
Director of Non-Iron Metals (Dec/2008- I				
	May/2010); Executive Director Non-Ire	on Metals and Power (Apr-Nov/2008); Executive Di		
Executive Director of Corporate Affairs (	May/2010); Executive Director Non-Ire	on Metals and Power (Apr-Nov/2008); Executive Di		
xecutive Director of Corporate Affairs ( furilo Pinto de Oliveira Ferreira	May/2010); Executive Director Non-In 2006-2007) and Director of the Finan	on Metals and Power (Apr-Nov/2008); Executive Di ce Department (1999-2003).	rector of Corporate Affa	airs and Power (2007-2008);
Executive Director of Corporate Affairs ( Murilo Pinto de Oliveira Ferreira 212.466.706-82	May/2010); Executive Director Non-Iro 2006-2007) and Director of the Finan 58 Business Administrator	on Metals and Power (Apr-Nov/2008); Executive Di ce Department (1999-2003).  Member of the Executive Board  President	5/19/2011 5/20/2011	airs and Power (2007-2008); 5/25/2013 No
Executive Director of Corporate Affairs ( Murilo Pinto de Oliveira Ferreira 212.466.706-82 Managing Director of Vale, Member of th	May/2010); Executive Director Non-Iron 2006-2007) and Director of the Finan 58 Business Administrator The Strategic Committee and of Inform	on Metals and Power (Apr-Nov/2008); Executive Di ce Department (1999-2003). Member of the Executive Board	5/19/2011 5/20/2011 11). Started his professi	5/25/2013 No ional career in Vale in 1977,
Executive Director of Corporate Affairs ( Murilo Pinto de Oliveira Ferreira 112.466.706-82 Managing Director of Vale, Member of the Served in different positions as	May/2010); Executive Director Non-In 2006-2007) and Director of the Finan 58 Business Administrator ne Strategic Committee and of Inform s Director of the Department of Alumin	on Metals and Power (Apr-Nov/2008); Executive Di ce Department (1999-2003).  Member of the Executive Board  President  ation Disclosure Committee of Vale (since May 201	5/19/2011 5/20/2011 11). Started his professi	5/25/2013 No ional career in Vale in 1977,
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Aurilo Pinto de Oliveira Ferreira  Murilo Pinto de Oliveira Ferreira  Managing Director of Vale, Member of the Vale has executive Director of Nickel and Base Managina Chaves Somavilla	May/2010); Executive Director Non-Irr 2006-2007) and Director of the Finan 58 Business Administrator he Strategic Committee and of Inform is Director of the Department of Alumin detals (2007 to 2008). 52	on Metals and Power (Apr-Nov/2008); Executive Dice Department (1999-2003).  Member of the Executive Board President ation Disclosure Committee of Vale (since May 201 num (2003 to 2005), Executive Director of Participa  Member of the Executive Board Executive Director of Human Resources, Health and Safety, Sustainability, Power,	5/19/2011 5/20/2011 11). Started his professitions and Business Dev	5/25/2013 No ional career in Vale in 1977, velopment (2005 to 2006) ar 5/25/2013
Executive Director of Corporate Affairs (Murilo Pinto de Oliveira Ferreira 12.466.706-82 Managing Director of Vale, Member of the Where he served in different positions as executive Director of Nickel and Base Murania Lucia Chaves Somavilla 56.117.426-53	May/2010); Executive Director Non-Irr 2006-2007) and Director of the Finan 58  Business Administrator ne Strategic Committee and of Inform s Director of the Department of Alumin letals (2007 to 2008). 52  Civil Engineer	on Metals and Power (Apr-Nov/2008); Executive Dice Department (1999-2003).  Member of the Executive Board President ation Disclosure Committee of Vale (since May 201 num (2003 to 2005), Executive Director of Participa  Member of the Executive Board Executive Director of Human Resources, Health and Safety, Sustainability, Power, and Corporate Affairs	5/19/2011 5/20/2011 11). Started his professitions and Business Dev 5/26/2011 5/26/2011	5/25/2013 No ional career in Vale in 1977, velopment (2005 to 2006) an 5/25/2013
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Executive Director of Operations and Marketing of Base Metals and Information Technology of Vale (since November 2011), where he also served as Executive Coordinator for Special Projects (Nov/1999 to Jan/2000).

Humberto Ramos de Freitas	58	Member of the Executive Board	11/24/2011	5/25/2013
222.938.256-04	Engineer	Executive Director of Logistics and	12/5/2011	No
		Mineral Exploration		
Executive Director of Logistics and Mineral Explo	ration of Vale (since November 2011	I), where he served as Director of Logistic C	perations (Sep/20	09 to Jun/2010); Director of Ports
and Navigation (Jun/2008 to Aug/2009); Director	of Ports and Navigation Operations	(Mar/2008 to May/2008); Director of the Por	t Operation Depart	ment (Mar/2007 to Feb/2008);
General manager of the Manganese Department	(Sep to Dec/1997) and General mar	nager of Port of de Ponta de Madeira (Mar/1	993 to Sep/1997).	
Galib Abrahão Chaim	61	Member of the Executive Board	11/24/2011	5/25/2013
132.019.646-20	Engineer	Executive Director of Capital Projects	11/25/2011	No
Executive Director of Capital projects of Vale (sin	ce November 2011), where he serve	ed as Director of the department of Coal Pro	jects for projects in	n Australia, Mozambique, Indonesia
and Zambia and Country Manager of Mozambiqu	e (2005 to 2011).			
Deli Soares Pereira	62	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
369.030.198-04	Graduate in Social Science	23 - Board of Directors (deputy)	4/19/2011	Yes
N/A				
Paulo Soares de Souza	47	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
541.150.276-49	Electrician	22 - Board of Directors (permanent)	4/19/2011	No
N/A				
Hajime Tonoki	52	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
628.127.266-87	Economist	23 - Board of Directors (deputy)	4/19/2011	Yes
N/A				
Luiz Maurício Leuzinger	70	Member of the Board of Directors	5/24/2012	Until 2013 General
				Shareholder's Meeting
009.623.687-68	Engineer	23 - Board of Directors (deputy)	5/24/2012	Yes
Member of the Financial Committee and the Exec	cutive Development Committee			
José Mauro Mettrau Carneiro of Cunha	62	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
299.637.297-20	Engineer	22 - Board of Directors (permanent)	4/19/2011	Yes
N/A				
José Ricardo Sasseron	56	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
003.404.558-96	Graduate in History	22 - Board of Directors (permanent)	4/19/2011	Yes
Member of the Executive Development Committee	е			
Luciano Galvão Coutinho	65	Member of the Board of Directors	4/19/2011	Until 2013 General

				Shareholder's Meeting
36.831.808-20	Economist	22 - Board of Directors (permanent)	4/19/2011	Yes
Member of the Strategy Committee				
uiz Carlos de Freitas	59	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholder's Meeting
659.575.638-20	Accountant	23 - Board of Directors (deputy)	4/19/2011	Yes
Member of the Controller Committee				
Mário da Silveira Teixeira Júnior	66	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
13.119.598-15	Engineer and Administrator	21 - Vice-President Board of Directors	4/19/2011	Yes
Member of the Strategic Committee				
Oscar Augusto de Camargo Filho	74	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
030.754.948-87	Lawyer	22 - Board of Directors (permanent)	4/19/2011	Yes
Member of the Strategic Committee and Exe	ecutive Development Committee			
aulo Sergio Moreira of Fonseca	61	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
268.745.477-04	Economist	23 - Board of Directors (deputy)	4/19/2011	Yes
J/A				
aimundo Nonato Alves Amorim	53	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
47.611.573-72	Electro-mechanic Technician	23 - Board of Directors (deputy)	4/19/2011	No
/A				
Renato de Cruz Gomes	59	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
126.961.277-00	Engineer	22 - Board of Directors (permanent)	4/19/2011	Yes
Member of the Governance and Sustainability	ty Committee			
Ricardo José of Costa Flores	48	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
285.080.334-00	Economist	20 - President do Board of Directors	4/19/2011	Yes
Member of the Strategic Committee				
Sandro Kohler Marcondes	48	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
185.322.749-00	Administrator	23 - Board of Directors (deputy)	4/19/2011	Yes
N/A				
Robson Rocha	53	Member of the Board of Directors	4/19/2011	Until 2013 General
				Shareholders' Meeting
298.270.436-68	Administrator	22 - Board of Directors (permanent)	4/19/2011	Yes

Nelson Henrique Barbosa Filho	42	Member of the Board of Directors	4/19/2011	Until 2013 General Shareholders' Meeting
009.073.727-08	Economist	22 - Board of Directors (permanent)	4/19/2011	Yes
N/A		,		
Fuminobu Kawashima	60	Member of the Board of Directors	4/19/2011	Until 2013 General
000.000.000-00	Economist	22 - Board of Directors (permanent)	4/19/2011	Shareholders' Meeting Yes
N/A				
Marco Geovanne Tobias of Silva	46	Member of the Board of Directors	4/19/2011	Until 2013 General Shareholders' Meetin
263.225.791-34 N/A	Economist	23 - Board of Directors (deputy)	4/19/2011	Yes
Eustáquio Wagner Guimarães Gomes	64	Member of the Board of Directors	4/19/2011	Until 2013 General Shareholders' Meetin
009.513.746-72 N/A	Administrator	23 - Board of Directors (deputy)	4/19/2011	Yes
Eduardo de Oliveira Rodrigues Filho	57	Member of the Board of Directors	4/19/2011	Until 2013 General Shareholders' Meetin
442.810.487-15 Member of the Financial Committee	Engineer	23 - Board of Directors (deputy)	4/19/2011	Yes
Aníbal Moreira dos Santos	73	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meetin
011.504.567-87	Accounting Technician	43 – Fiscal Council (permanent) Elected by Comptroller	4/18/2012	Yes
N/A		Compus.io.		
Cícero of Silva	61	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meetin
045.747.611-72	Accountant Lawyer	46 - FISCAL COUNCIL(deputy) Elected by Comptroller	4/18/2012	Yes
N/A	<b>/</b> -	,		
Marcelo Amaral Moraes	44	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meetin
929.390.077-72	Graduate in Economy	43 - FISCAL COUNCIL(permanent) Elected by Comptroller	4/18/2012	Yes

Oswaldo Mário Pêgo de Amorim Azevedo	70	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meeting
005.065.327-04	Engineer	46 - FISCAL COUNCIL(deputy) Elected by Comptroller	4/18/2012	Yes
N/A				
Arnaldo José Vollet	63	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meeting
375.560.618-68	Graduate in Mathematics	43 - FISCAL COUNCIL(permanent) Elected by Comptroller	4/18/2012	Yes
N/A				
Antônio Henrique Pinheiro Silveira	47	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meeting
010.394.107-07	Economist	44 - FISCAL COUNCIL(permanent) Elected by holders of preferred shares	4/18/2012	No
N/A				
Paulo Fontoura Valle	48	Fiscal Council	4/18/2012	Until 2013 General Shareholders' Meeting
311.625.571-49	Graduate in Physical Education	47 - FISCAL COUNCIL(deputy) Elected by holders of preferred shares	4/18/2012	No
N/A				

Roger Allan Downey 623,291,626-34

Main professional experience in last five years include: (i) Partner Director of CWH Consultoria Empresarial SC Ltda.(Jan 2012 to Apr 2012), privately-held company offering consulting services; (ii) Deputy Member of the Board of Directors of Valepar S.A. (Feb/2012 to Apr/2012), controlling shareholder of Vale, privately-held company acting as holding; (iii) Managing Director of Investors Relations of MMX Mineração e Metálicos S.A. (Aug/2009 to Nov/2011), open capital mining company; and (iv) Director of Variable Revenue Analysis of Banco de Investimentos Credit Suisse (Brasil) S.A. (Aug/2005 to Aug/2009), privately-held securities broker and investment bank. He also served as Commercial Manager, Marketing and New Business Manager at Rio Tino (October/1996 to Sep/2002), open capital company engaged in mining activities, and as Market Coordinator at CAEMI (Dec/1991 to October/1996), open capital company incorporated by Vale in 2006, that acted in mining and metallurgy. Graduated in Business Management at *University of Western Australia*, on 7.11. 2001, and Business Administration at *Australian National Business School/UWA*, on 7.10. 2002, and MBA by University of Western Australian, on 4.28. 2003. Mr. Roger Allan Downey, represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

José Carlos Martins 304.880.288-68

Main professional experience in last five years in companies where Vale holds interest directly or indirectly: (i) Vice-Chairman of the Board of Directors of Baosteel CSV – Companhia Siderúrgica de Vitória, currently Companhia Siderúrgica Ubu (2008 to 2009), privately-held company engaged in steel industry activities, where Vale holds the entirety of the capital stock; (ii) Chairman of the Board of Directors of Samarco Mineração S.A. (since 2005), privately-held company engaged in mining and pelleting activities, where a Vale holds 50% of the capital; (iii) Vice-President of the Decision Council of Thyssenkrupp CSA Siderúrgica do Atlântico Ltda., limited liability company that engages in steel industry activities (since 2008), where Vale holds 26.87% of the capital; and (iv) Chairman of the Board of Directors of Vale International SA (since 2006), subsidiary of Vale that develops trading and holding activities. Additionally, he served at the following open capital companies as: (v) Permanent Member of Board of Directors of Usinas Siderúrgicas de Minas Gerais S.A. – USIMINAS (2005 to 2006 / 2008 to 2009), open capital company engaged in steel industry activities; (vi) Director of Steel Area of Companhia Siderúrgica Nacional, company engaged in steel industry activities; (vii) Director-President of Latas de Alumínio S.A. - LATASA, currently Rexam Beverage Can South America S.A., the later turned privately-held, engaged in the manufacturing of metallic packaging; and (viii) President and Director of Aços Villares S.A., manufacturing and sale of special steels. Graduated in Economics at Pontificia Universidade Católica de São Paulo (PUC/SP), on 1/27/1975. Mr. José Carlos Martins /represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any profe

Tito Botelho Martins Junior 501.888.956-04

Main professional experience in last five years include: (i) CEO and President of Vale Canada (2008 to 2011), privately-held subsidiary, incorporated in Canada; (ii) Director-President of Investors Relations of Caemi (2003 to 2006), open capital mining and metallurgy, incorporated by Vale in 2006; (iii) Chairman of the Board of Directors of Albras (since 2008), privately-held company engaged in alumina production activities; (iv) Chairman of the Board of Directors of Alunorte (since 2008), privately-held company engaged in aluminum production; (v) Chairman of the Board of Directors of Cia de Alumina do Pará (2008-2011), privately-held company engaged in aluminum production, where Vale interest on this company was sold to Hydra in Feb 2011; (vi) Vice-Chairman of the Board of Directors of FNS (2007 a2008), open capital company engaged in cargo transportation, where Vale holds, directly and indirectly, 100% of the capital; (vii) Member of the Board of Directors of MRS (2004 to 2006), open capital company of cargo transportation (Vale holds 45.84% of capital); (viii) Chairman of the Board of Directors of Fundação Vale (2007), institution maintained by Vale; and (ix) Financial Director and Member of the Board of Directors of FCA, open capital logistics company (2002 to 2003), where Vale holds 99.99% of the capital. Additionally, he served at the following open capital companies as: (x) Permanent Member of the Board of Directors of FERROBAN, currently Brasil Ferrovias S.A., cargo transportation company, and turned privately-held; and (xi) Acominas, currently Gerdau Acominas S.A., steel industry turned privately-held. Graduated in Economic Sciences at UFMG, specialized in Business Administration at IEAD of UFRJ (MBA) and Kellogg School of Management - Northwestern University, USA, and INSEAD, França. Mr. Tito Martins was condemned (i) on 1.17, 2007, as Director of Investor Relations of Caemi, to a fine equal to R\$ 500 thousand for failure to disclose relevant fact about mutual agreements acquired by related parties. An administrative appeal was filed against this decision before CRSFN, which is pending judgment; (ii) on 8.22, 2006, as Financial Director of FCA, with other Directors, to a warning for non-compliance with §7 article 170 in Law 6.404/76, as the capital increase proposal of FCA Board failed to include detailed justification of economic aspects determining FCA issuance of shares. Decision confirmed by CRSFN.

# Murilo Pinto de Oliveira Ferreira 212.466.706-82

Main professional experience in last five years include (i) Chairman of the Board of Directors of Alunorte (2005 to 2008), privately-held company engaged in alumina production; (ii) Member of Decision Council of Albras (2005 to 2007), privately-held company engaged in aluminum production, and Vale interest in the company was sold to Hydro in Feb/2011; (iii) Member of the Board of CSA Companhia Siderúrgica do Atlântico (2005 to 2007), privately-held company engaged in steel industry; (iv) Chairman of the Board of Directors of Ferro Gusa Crajás S.A. (2005 to 2006), privately-held company engaged in pig iron production, incorporated into Vale in 2008; (v) Managing Director of Vale do Rio Doce Energia S.A., currently Vale Energia S.A., (2005 to 2007), privately-held company engaged in power activities; (vi) Chairman of the Board of Directors of Mineração Rio do Norte S.A. (2006 to 2008), privately-held company engaged in bauxite extraction, where Vale holds 40% of the voting capital; (vii) Member of the Board of Mineração Onça Puma Ltda. (2007 to 2008), privately-held company engaged in nickel mining activities, incorporated into Vale in 2008; (viii) Chairman of the Board of Directors of Valesul Alumínio S.A. (2006 to 2008), privately-held company engaged in the production of aluminum and primary alloys; (ix) Director-President of Vale Canada Limited (2007 to 2008), nickel production company turned privately-held in 2007, where he also served as Member of the Board (2006 to 2007); (x) member of the Board of Vale Canada Holdings (2006 to 2008), privately-held holding, where he also served as Director and Vice-President of the Executive Committee (2007 to 2008); (xi) Member of Board of Commissioners of PT Vale Indonesia Tbk (2007 to 2008), open capital company that develops mining activities, where Vale holds 59.14% of the capital stock; (xii) Director and Chairman of the Board of Directors of Vale Nouvelle-Calédonie S.A.S. (2007 to 2008); (xiii) Member of the Board of USIMINAS (2006 to 2008), open capital company engaged in the steel industry; (xiv) Member of Conselho Gestor of Associação Instituto Tecnológico – ITV, association that promotes research aiming the development of research for sustainable technology development; (xv) Financial Management of Caraíba Metais S.A. (1979 to 1980), turned privately-held in 2009 and develops copper metallurgy activities and derivatives; and (xvi) Partner of Studio Investimentos (Oct /2009 to Mar/2011), asset management company focused on the Brazilian stock market. Graduated in Business Administration at Fundação Getúlio Vargas de São Paulo on 8/16/1977, post graduate in Administration and Finance by Fundação Getúlio Vargas do Rio de Janeiro on 5/4/1982, and Executive specialization (Senior Executive) by IMD Business School, Lausanne, Switzerland, concluded on 12/9/2007. Mr. Murilo Ferreira represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Vânia Lucia Chaves Somavilla 456.117.426-53

Main professional experience in last five years include: (i) Member of Decision Council of Different Consortia in the Power Sector, including: (a) Power Consortium Foz do Chapecó (2004 to 2007); (b) Consortium Estreito Energia – CESTE (2006 to 2010); (c) Consortium Geração Santa Isabel – GESAI (2006) and (2008 to 2010); (d) Consortium Capim Branco Energia (2006 to 2008); (e) Consortium of Usina Hidrelétrica de Aimorés (2007 to 2010); and (e) Brazilian Consortium of Palm Oil Production - CBOP (extinct in 2011), of the oil and natural gas (deputy since 2010 to 2011); (ii) Member of the Board of Vale Soluções Energia S.A. – VSE, privately-held company engaged in power activities (2007 to 2009); (iii) Manager of PGT – Petroleum Geoscience Technology Ltda. (since 2008), currently Vale Óleo and Gás S.A., privately-held company engaged in exploration and exploitation of maritime and land reservoir, research and development of technologies related to exploration activities where she served as Director-President and Member of the Board (2009 to 2010); (iv) Director (2005 to 2009) and Director-President (2009 to 2010) of Vale Energia S.A., privately-held company engaged in power activities; (v) Member of the Board of Albrás – Alumínio Brasileiro S.A. (since 2009), privately-held company engaged in aluminum production; (vi) deputy member of the Board of Ultrafértil S.A. (2010 to 2011), privately-held company engaged in the production, industrialization, and sale of fertilizer and similar products, agricultural pesticides, soil corrections and other agricultural and cattle input; (vii) Director-President of Vale Florestar S.A. (since 2010), privately-held company engaged in forest projects; (viii) Director-President of Institute Ambiental Vale (since 2010), institute that acts in the defense, preservation, conservation of biodiversity and promotion of sustainable development; (ix) Deputy Member of the Board of Vale Fertilizantes S.A. (since 2011), open capital company engaged in trade, transportation, exportation and importation of phosphate and associate minerals; (x) Coordinator of New Business Development of power generations and Generation and Monitoring Projects to deploy hydroelectric plants of small and large size of Companhia Energética de Minas Gerais – CEMIG (1995 to 2001), open capital company engaged in operation and exploration of power generation, transmission, distribution, and sale; and (xi) Director-President of Associação Vale Sustainable Development (since 2010), association engaged in the monitoring, environmental protection, and creation of new areas of preservation in biomes relevant for sustainability. Graduated in Civil Engineering at UFMG, on 4/28/83; post graduate in Barrage Engineering by Federal University of Ouro Preto, on 4/13/90; extension course on Management of Hydro Power Utilities by SIDA, Stockholm, in Nov/96; MBA in Corporate Finance by IBMEC Business School, Belo Horizonte, on 7/16/98; and participated in Transformational Leadership Program by MIT in Mar/05 and Mastering Leadership Program by IMD on 12/15/06. Ms. Vânia Somavilla represented for all legal purposes that in the last five (5) years, she was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Gerd Peter Poppinga 604.856.637-91

Main professional experience in last five years include: (i) Executive Vice President, Asia-Pacific (since Nov/09); (ii) Executive Vice President, Strategy, Business Development, HR and Sustainability (Jan-Oct/09);(iii) Executive Vice President, Strategy, HR, Sustainability and IT(May 08 – Dec 08); and (iv) Executive Vice President Strategy and TI (Nov 07 – Apr 08) of Vale Canada Limited, privately-held controlling shareholder in Canada, engaged in nickel exploration activity; (v) President (since Nov/2009), (vi) member (since Nov 2007) and Chairman of the Board of Directors (since Jun 11) of Vale Nouvelle-Caledonie S.A.S., privately-held subsidiary in New Caledonia, engaged in nickel exploration activities; (vii) Commissioner (since Apr 09), President Commissioner (since Mar 10) and Vice-President Commissioner (Apr 09 – Mar 10) of PT Vale Indonesia Tbk, open capital subsidiary in Indonesia, engaged in nickel exploration activities; Director of Vale Japan Limited (since Mar 10), privately-held trading subsidiary in Japan; (viii) Director of Vale Nickel (Dalian) Co., Ltd. (since Mar 10), privately-held subsidiary in China, engaged in nickel exploration activities; (ix) President of Vale Technology Development (Canada) Limited (Jun 08 – Apr 10), privately-held subsidiary in Canada, service provider related to IT. He also served at Samitri, open capital company incorporated in Vale in 2001, engaged in mining activities, as: (a) Commercial Director (95-99); (b) Managing Director of Complexo de Mina de Alegria/Mariana (92-94); (c) Manager of the Planning and Quality Control Area (87-92); and (d) Exploration Geologist (84-87). Graduated in Geology at UFRJ (78-80) and Universität Erlangen (81-82), in Germany, post graduate in geology and Mine Engineering at Universität Clausthal – Zellerfeld (83-84). He also holds the following specializations: geostatistics at UFOP; Executive MBA by FDC; Industrial Marketing, Negotiation Dynamics Supply Chain Management by INSEAD; Senior Leadership Program by MIT: Leadership Program by IMD Business School and Strategic Megatrends with Asia Focus by Kellogg Singapure, Mr. Peter Poppinga represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Humberto Ramos de Freitas

222.938.256-04

Main professional experience in last five years include (i) Member of Board of Directors of MRS Logística S.A. (since Dec/2010), open capital company working with cargo transportation, where Vale directly and indirectly holds 45.84% of the total capital; (ii) President of Valesul Alumíno S.A. (Aug/2003 to Feb/2007), subsidiary of Vale, privately-held company engaged in aluminum production; (iii) General Port Superintendent of Companhia Siderúrgica Nacional (Dec/1997 to Nov/1999), open capital company engaged in steel industry; (iv) Planning Manager and Operation Control /Marketing Interface of Caraíba Metais S.A. (1979 to 1985), mining company, turned privately-held in 2009. He also served as (v) President of the Decision Council of ABTP - Associação Brasileira de Terminais Portuários (since May/2009), non-profit partnership dealing with issues related to port activities. Graduated in Metallurgy Engineering at Escola de Minas de Ouro Preto (1976), specialization course for Executives (Senior Executive) at MIT, USA (2005), and extension courses in (i) Advanced Management Program (PGA) by Fundação Dom Cabral (offered by INSEAD) (2004); (ii) Partnership for Corporate Development (PDE) by Fundação Dom Cabral (1996); (iii) Executive Development Program by J.L. Kellogg School of Management, Northwestern University, in the USA (1995); (iv) Business Strategic Planning by McKinsey Consulting (1993); and (v) Management Studies by the Association of Overseas Technical Scholarship, in Japan (1991). Mr. Humberto Freitas represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Galib Abrahão Chaim

132.019.646-20

Main professional experience include (i) Industrial Director of Alunorte – Alumina do Norte do Brasil S.A., privately-held company working with alumina production (1994 to 2005), and Vale interest in this company was sold to Hydro in Feb/2011; (ii) Industrial Superintendent of Albras – Alumínio Brasileiro S.A. works with aluminum production (1984 to 1994), and Vale interest in this company was sold to Hydro in Feb/2011; and (iii) Technical Superintendent of Mineração Rio do Norte S.A., privately-held company working in bauxite exploration and sale (1979 to 1984). Graduated in Engineering at the Federal University of Minas Gerais (1975) and MBA in Corporate Management at Fundação Getúlio Vargas (2004). Mr. Galib Chaim represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Deli Soares Pereira

369.030.198-04

Deputy Member of the Board of Directors of Vale (since 2009). Main professional experience in last five years include: (i) Deputy Member of the Board of Directors of Valepar S.A. (since 2009), controlling shareholder of Vale, privately-held company working as holding; (ii) Permanent Member of Board of Directors of (a) Cia. Piratininga de Força and Luz (2004 to 2006); (b) Cia. Paulista de Força and Luz - CPFL Paulista (2004 to 2006) and (c) CPFL Geração de Energia S.A. (2004 to 2006), all of them open capital companies in the power sector; (iii) Permanent Member of Board of Directors of CPFL Energia S.A. (2004 to 2006), open capital company working as holding in the power sector; (iv) Permanent Member of Board of Directors of SOLPART Participações S.A. (2006 to 2008), privately-held company acting as holding; ; and (v) Member of Board of Directors of Tigre S.A. – Tubos and Conexões (2001 to 2003), currently privately-held company manufacturing tubes and accessories in plastic to use in civil construction. Graduated in Social Sciences at University of São Paulo (USP) in Nov 1979, and post graduate in Economics and Management of Working Relations at Pontifícia Universidade Católica (PUC) de São Paulo Jul 2009. Mr. Deli Soares Pereira represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Paulo Soares de Souza

541.150.276-49

Deputy Member of the Board of Directors of Vale (2007 to 2009). Main professional experience in last five years include: (i) Union Director (since 1997); (ii) President of the Union of Workers in the Mineral Extraction and Research Industry, Prospection, Extraction and Processing of Iron and Base Metals and other Minerals in Itabira and area (Sindicato Metabase de Itabira e Região) (since 2003). Graduate in High School by Serviço Social of Indústria (SESI) Dec 1988. Mr. Paulo Soares de Souza represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Hajime Tonoki 628.127.266-87

Deputy Member of the Board of Directors of Vale (since 2009). Main professional experience in last five years include: (i) Member of the Board of Directors and Director Vice- President of Mitsui & Co. (Brasil) S.A. (since 2009), privately-held company working with trading; (ii) General Manager of the International Department of the Corporate Strategy and Planning Division of Mitsui & Co., Ltd. (2008 to 2009), open capital company, holding interest in Valepar S.A., working with trading, and (iii) Director of the Steel Product Department of Mitsui Brasileira Imp. and Exp. S.A. (2004 to 2008), privately-held company working with trading. Graduated in Economy at the Faculdade de Economia of Keio University, Mar 1983. Mr. Hajimi Tonoki represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disgualification for the engagement in any professional or commercial activity.

Luiz Maurício Leuzinger 009.623.687-68

Deputy Member of the Board of Directors of Vale (since May/2012), where he also served in 2003. He also serves as Member of the Financial Committee (since May/2007) and Member of the Executive Development Committee (since May/2012). Main professional experience in last five years include: (i) Director-President of Bradespar S.A. (since 2012), open capital company with interest in Valepar S.A., working as holding, where he also served as (ii) Director (2003 to 2007); (iii) Member of Board of Directors of Valid Soluções e Serviços de Segurança em Meios de Pagamento and Identificação S.A. (since 2006), current corporate name of American Banknote S.A., open capital company working with graphic services in general and plastic, magnetic cards, service provision and others; (iv) Member of Board of Directors of Companhia Paulista de Força and Luz (2000 to 2006), on capital company working with power distribution; (v) Member of Board of Directors of Companhia Piratininga de Força and Luz (2003 to 2006), open capital that works with power distribution; (vi) Member of Board of Directors of CPFL Energia S.A. (2000 to 2006), open capital that works as holding in the power sector; (vii) Member of Board of Directors of CPFL Geração de Energia S.A. (2000 to 2006), open capital that works as power generator; (viii) Chairman of the Board of Directors of Rio Grande Energia S.A. (2004 to 2006), open capital company that works with power distribution, where he served as (vix) Member of Board of Directors (2000 to 2006); and (x) Director-President (1997 to 1998); and (xi) Member of Board of Directors of VBC Energia S.A. (2000 to 2006), current corporate name of Serra of Mesa Energia S.A., open capital company turned privately-held in 2011, working as holding in the power sector. Graduated in Electric Engineering at Escola Nacional de Engenharia (currently Federal University of Rio de Janeiro – UFRJ) on 12/01//1965. Specialization in Economic Engineering and master's degree in Electric Engineering at Illinois Institute of Technology, in Chicago, USA, both on 7/1/1968. Mr. Luiz Maurício Leuzinger represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disgualification for the engagement in any professional or commercial activity.

José Mauro Mettrau Carneiro of Cunha 299.637.297-20

Member of the Board of Directors of Vale (since 2010). Main professional experience in last five years include: (i) Chairman of the Board of Directors of (a) Tele Norte Leste Participações S.A. ("TNL") (since 2007), (b) Telemar Norte Leste S.A. (since 2007), (c) Brasil Telecom S.A. (since 2009), (d) Tele Norte Celular Participações S.A. (since 2008), all of them open capital companies in the telecommunications sector, (ii) Chairman of the Board of Directors of (a) Coari Participações S.A. (since 2007) and (b) Calais Participações S.A. (since 2007), both open capital companies working as holding. And (iii) Permanent Member of Board of Directors of Santo Antonio Energia S.A. (since 2008), privately-held company working with power production, and (iv) Deputy Member of the Board of Directors of Telemar Participações S.A, open capital company in

the telecommunications sector (since 2008); (v) Chairman of the Board of Directors of TNL PCS S.A. (since 2007), telecommunications company, and (vi) Permanent Member of Board of Directors of Log-In Logística Intermodal S/A (2007 - 2011), open capital company working with intermodal transportation, where Vale holds 31.3% of the capital stock; and (vii) Permanent Member of Board of Directors of Lupatech S/A (since de 2006), open capital company that develops energy products and is engaged in flow control and metallurgy activities. Additionally to the above he also served as (viii) Permanent Member of Board of Directors of the following open capital companies: (a) Braskem S.A (2007 to 2010), petrochemical company, where he served as Vice-President of Strategic Planning (2003 to 2005); (b) LIGHT Serviços de Eletricidade S/A (1997 to 2000), power distributor; (c) AraCruz Celulose S.A. (1997 to 2002), paper production; (d) Politeno Indústria and Comércio S/A (2003 to 2004), petrochemical company; (e) BANESTES S.A. - Banco do Estado do Espírito Santo (2008 to 2009), financial institution; and (f) TNL (1999 to 2003), where he also served as Deputy Member of the Board of Directors (2006). Graduated in Mechanic Engineering at Universidade Católica de Petrópolis, RJ, Dec 71, participated in the Executive Program in Management at Anderson School, at the University of California (EUA) , Dec 02. Mr. José Mauro Mettrau Carneiro of Cunha represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

José Ricardo Sasseron 003.404.558-96

Member of the Board of Directors and Member of the Executive Development Committee of Vale (since 2007). Main professional experience in last five years include: (i) Member of the Board of Directors of Valepar S.A. (since 2007), controlling shareholder of Vale, privately-held company acting as holding; (ii) Security Director of PREVI - Caixa de Previdência dos Funcionários do Banco do Brasil (since 2006), complementary pension fund, where he also served as Member of the Decision Council (2004 to 2006); (iii) Chairman of the Board of Directors of Sauípe S.A. (de 2005 to 2007), open capital company working with lodging and tourism; (iv) Director of Litel Participações S.A. (since 2007), open capital company holding interest in Valepar S.A., acting as holding; (v) Director of LitelB Participações S.A. (since 2007), privately-held company with interest in Valepar S.A., acting as holding. Graduated in History at University of São Paulo (USP) in Nov 1983. Mr. José Ricardo Sasseron represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Luciano Galvão Coutinho

636.831.808-20

Member of the Board of Directors (since 2007) and Member of the Strategic Committee of Vale (since 2009), served before (2005 to 2006). Main professional experience in last five years include: (i) President of Banco Nacional de Desenvolvimento Econômico and Social – BNDES (since 2007), development bank; (ii) Member of Board of Directors of Petróleo Brasileiro S.A. – PETROBRAS (2009 to 2011), open capital company working with oil and gas exploration and refinement and production of derivatives; (iii) Partner of LCA Consultores (1995 to 2007), company working with consulting services; (iv) Partner of Macrotempo Consultoria (1990 to 2007), company working with consulting services; (v) Member of Board of Directors of Ripasa S.A. Celulose and Papel (2002 to 2005), open capital company working with the manufacturing of cellulose and paper. he also served as (vi) Member of Board of Directors of Guaraniana, currently Neoenergia S.A., (2003 to 2004) open capital company acting as holding in the power sector; (vii) Member of Conselho Consultivo Internacional of Fundação Dom Cabral (since 2009), education institution aiming the development of executives, businessmen and companies; (viii) Member of the Curator Council of Fundação Nacional de Qualidade (de 2009 to 2011), entity aiming the development of management excellence foundations; and (ix) Member of Director Council of Fundação Nacional de

Desenvolvimento Científico e Tecnológico (since 2007), financial assistance entity. Graduated in Economics at University of São Paulo (USP) Jun 1969, master's degree in Economics at Instituto de Pesquisas Econômicas, Jun 1970, and doctor's degree in Economics from Cornell University, Jan 1975. Mr. Luciano Galvão Coutinho represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Luiz Carlos de Freitas

659.575.638-20

Deputy Member of the Board of Directors and member of the Comptroller Committee of Vale (since 2007). Main professional experience in last five years include: (i) Deputy Member of the Board of Directors of Valepar S.A. (since 2005), controlling shareholder of Vale, privately-held company acting as holding; and (ii) Superintendent of Bradespar S.A. (de 2000 to 2007), open capital company holding interest in Valepar S.A., working as holding. Graduated in Accounting Sciences at Faculdade de Ciências Econômicas and Administrativas de Osasco Dec 1990. Mr. Luiz Carlos de Freitas represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Mário da Silveira Teixeira Júnior 113.119.598-15

Vice-Chairman of the Board of Directors of Vale (since 2003), where he also serves as Member of the Strategic Committee (since 2006). Main professional experience in last five years include: (i) Vice-Chairman of the Board of Directors of Valepar S.A. (since 2003), controlling shareholder of Vale, privately-held company acting as holding; (ii) Member of Board of Directors of Banco Bradesco S.A. (since 1999), financial institution where he also serves as (iii) Member and Coordinator of the Internal Control and Compliance Committee, and (iv) Member of the Compensation Committee (since 2004), and where he served as (v) Member and Coordinator of the Sudit Committee (2004 to 2009). (vi) Department Director (1984 to 1992), (vii) Executive Managing Director (1992 to 1998), and (viii) Executive Director Vice-President (1998 to 1999); (ix) Member of Board of Bradesco Leasing S.A. – Arrendamento Mercantil (since 1998), privately-held company working with leasing operations, where he also served as (x) Director (1992 to 1998); (x) Representative Member of the Board of Directors of Banco Espírito Santo de Investimento S.A. (2002 to 2009), privately-held financial institution; (xi) Member of Board of Directors of Banco BERJ S.A. (since 2011), open capital financial institution. He also served the following open capital companies as: (xii) Member of Board of Directors of Bradespar S.A. (since 2002 and de 2000 to 2001), open capital holding interest in Valepar S.A., acting as holding, where he also served as (xiii) Director-President (2001 to 2002); (xiv) Member of Board of Directors of Bradesplan Participações S.A. (1999 and 2002 to 2006), open capital turned privately-held in 2006, acting as holding, where he also served as (xv) Director (1998), and (xvi) Director-President (2001 to 2002); (xvii) Member of Board of Directors of CPFL Energia S.A. (2001 and 2003 to 2006), open capital company acting as holding; (xviii) Member of Board of Directors of CPFL Geração de Energia S.A. (2001 and 2003 to 2005), open capital company acting as holding; (xix) Member of Board of Directors of Companhia Paulista de Força and Luz - CPFL (1997 to 2000 and 2001 to 2005), open capital company acting as power distributor; (xx) Member of the Board of Directors of Companhia Piratininga de Forca and Luz (2003 to 2005), open capital company acting as power distributor; (xxi) Permanent Member of Board of Directors of Companhia Siderúrgica Nacional (1996 to 2000), open capital company acting in the steel industry; (xxii) Member of Board of Directors of COFAP - Companhia Fabricadora de Pecas (1996 to 1997), open capital company turned privately-held in 2002, manufacturer of parts and accessories for automotive vehicles; (xxiii) Member of Board of Directors of Everest Leasing S.A. Arrendamento Mercantil (2004) (formerly Zogbi Leasing S.A. Arrendamento Mercantil), privately-held company working with leasing; (xxiv) Member of Board of Directors of Finasa Leasing Arrendamento Mercantil S.A. (2002 to 2003), open capital company turned privately-held in 2002 (extinct in 2003), manufacturer of parts and accessories of

automotive vehicles; (xxv) Permanent Member of Board of Directors of Tigre S.A. - Tubos and Conexões (1997 to 1998), open capital company turned privately-held in 2003, manufacturer of tubes and plastic accessories to be used in civil construction; (xxvi) Member of Board of Directors of VBC Energia S.A. (1997 to 2000 and 2003 to 2005), open capital company turned privately-held in 2011, working as holding, where he also served as (xxvii) Chairman of the Board of Directors (2001 to 2003); (xxviii) Member of Board of Directors of São Paulo Alpargatas S.A. (1996 to 1999), open capital company working in the preparation and threading of cotton fibers; (xxix) Deputy Member of the Board of Directors of Net Servicos de Comunicação S.A. (1998 to 2000), open capital company working in cable TV services; (xxx) Member of Board of Directors of Banco Bradesco BBI S.A. (2004), financial institution turned privately-held in 2004; (xxxi) Deputy Member of the Board of Directors of Rio Grande Energia S.A. (1997 to 2000), open capital company working with power distribution; (xxxii) Member of Board of Directors of Scopus Tecnologia S.A. (1992 to 1994), open capital company turned privately-held in 1992, working as retailer of computing supplies and equipment. He also served in extinct companies as: (xxxiii) Member of Board of Directors of Pevê Prédios S.A. (2002 to 2003), open capital company extinct in 2003; (xxxiv) Member of Board of Directors of Banco Baneb S.A. (1999 to 2001), open capital company turned privately-held in 2000 (extinct in 2004): (xxxv) Member of Board of Directors of Banco BCN S.A. (1998), open capital company turned privately-held in 1998 (extinct in 2004); (xxxvi) Member of Board of Directors of Banco BEA S.A. (2002 to 2003), open capital company extinct in 2003; (xxxvii) Member of Board of Directors of Banco BEC S.A. (2006), open capital company extinct in 2006; (xxxviii) Director do Banco Bradesco de Investimento S.A. (1992), open capital company extinct in 1992; (xxxix) Member of Board of Directors of Bancocidade – Leasing Arrendamento Mercantil (2002 to 2003), open capital company turned privately-held in 2003 (extinct in 2004); (xxxx) Member of Board of Directors of Banco de Crédito Real de Minas Gerais S.A. (1998 to 2001), open capital company turned privately-held in 1998 (extinct in 2004); (xxxxi) Member of Board of Directors of Banco Mercantil de São Paulo S.A. (2002) to 2003), open capital company turned privately-held in 2003 (extinct in 2006); (xxxxiii) Member of Board of Directors of Baneb Leasing S.A. – Arrendamento Mercantil (1999 to 2000), open capital company extinct in 2000; (xxxxiii) Member of Board of Directors of Boavista S.A. Arrendamento Mercantil (2000 to 2001 and 2002 to 2003), open capital company extinct in 2003; (xxxxiv) Member of Board of Directors of Pevê Finasa Participações and Prédios S.A. (2002 to 2003), open capital company extinct in 2003 Graduated in Civil Engineering, Dec 1970, and Business Administration, Dec 1980, both at Universidade Presbiteriana Mackenzie. Mr. Mário da Silveira Teixeira Júnior represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disgualification for the engagement in any professional or commercial activity.

Oscar Augo de Camargo Filho 030.754.948-87

Member of the Board of Directors of Vale (since 2003), Member of the Strategic Committee (since 2006) and Member of the Executive Development Committee (since 2003). Main professional experience in last five years include: (i) Permanent Member of Board of Directors of Valepar S.A. (since 2003), controlling shareholder of Vale, privately-held company acting as holding; and (ii) Partner of CWH Consultoria Empresarial (since 2003), company working with consulting services. He also served as Manager of the following open capital companies: (iii) Chairman of the Board of Directors of MRS Logística S.A. (1996 to 2003), open capital company working with cargo railroad transportation; and (iv) Director-President and Member of Board of Directors of Caemi Mineração and Metalurgia S.A. (1996 to 2003), open capital mining company e metallurgy, incorporated into Vale in 2006. Graduated in Law at Law School of University of São Paulo (USP) Dec 1963, and post graduate in International Marketing by Cambridge University Sep 1970 Mr. Oscar Augo de Camargo Filho represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Paulo Sergio Moreira of Fonseca

268.745.477-

Deputy Member of the Board of Directors of Vale (since May 2008). Main professional experience in last five years include: (i) Deputy Member of the Board of Directors of Valepar S.A. (2005 to 2008), controlling shareholder of Vale, privately-held company acting as holding; (ii) Head of the Department of Base Industry of Banco Nacional de Desenvolvimento Econômico and Social – BNDES (2005 to 2010), development bank; and (iii) Deputy Member of the Board of Directors of Aços Villares S.A. (2005 to 2006), open capital company acting in the steel industry. Graduated in Economics at the federal University of Rio de Janeiro (UFRJ) Dec 1973, and MBA in Finance by COPPEAD/Federal University of Rio de Janeiro, Sep 1975. Mr. Paulo Sergio Moreira of Fonseca represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Raimundo Nonato Alves Amorim

147.611.573-72

Deputy Member of the Board of Directors of Vale (since 2009). ). Main professional experience in last five years includes President of the Union of Workers in the Industry of Iron and Base Metal Extraction of Marabá, Parauapebas, Curionópolis e Canaã dos Carajás (since 2001). Graduated in Technical Course as Electrotechnician by the Departamento de Ensino Supletivo DESU/SEDUC Dec 1992. Mr. Raimundo Nonato Alves Amorim represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Renato de Cruz Gomes

426.961.277-00

Member of the Board of Directors and Member of the Governance and Sustainability Committee of Vale (since 2001). Main professional experience in last five years include: (i) Director and (ii) Member of the Board of Directors of Valepar S.A. (since 2001), controlling shareholder of Vale, privately-held company acting as holding: (iii) Director of Investors Relations of Bradespar S.A. (since 2000), open capital company with interest in Valepar S.A., engaged in holding activities. He also served as Manager in the following open capital companies: (iv) Member of the Board of Directors of AraCruz Celulose S.A., currently Fibria S.A., open capital company operating in the Production of White Fiber Eucalyptus Cellulose; (v) Member of the Board of Directors of Iochpe-Maxion S.A., open capital company engaged in the Manufacturing of parts and accessories for automotive vehicles; (vi) Member of the Board of Directors of Bahia Sul Celulose S.A., currently Suzano Celulose S.A., open capital company engaged in the manufacturing of cellulose and other pastes for paper manufacturing; (vii) Member of the Board of Directors of Globo Cabo S.A., currently Net Serviços de Comunicação S.A., open capital company engaged in the provision of cable TV services; and (viii) Deputy Member of the Board of Directors of Latasa Alumínio S.A., currently Rexam Beverage Can South America S.A., turned into privately-held company engaged in the manufacturing of metallic packaging. Graduated in Engineering at the Federal University of Rio de Janeiro (UFRJ) Dec 1976, and post graduate in Corporate Management by Sociedade de Desenvolvimento Empresarial (SDE/IBMEC). Mr. Renato de Cruz Gomes represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial acti

Ricardo José of Costa Flores 285.080.334-00

Chairman of the Board of Directors and Member of the Strategic Committee of Vale (since Nov de 2010). Main professional experience in last five years include: (i) President of

PREVI - Caixa de Previdência dos Funcionários do Banco do Brasil (since 2010), complementary pension fund: (ii) Director-President of Valepar S.A. (since Nov de 2010), controlling shareholder of Vale, privately-held company acting as holding, where he serves as Chairman of the Board of Directors (since Dec 2010); (iii) Vice-President of Credit, Comptroller, and Global Risk of Banco do Brasil S.A. (2009 to 2010), financial institution where he served in the different positions as Vice-President of Government (2008 to 2009), Director of Insurance, Pension and Capitalization (2007 to 2008) and Director of Restructuring of Operational Assets (2004 to 2007); (iv) Chairman of the Board of Directors of (a) Banco Nossa Caixa S.A. (Jan to Nov 2009); (b) Brasilcap Capitalização S.A. (2007 to 2011); and (c) Ativos S.A. – Securitizadora de Créditos Financeiros (2004 to 2007), all of them privately-held financial institutions; (v) Member of the Board of Directors of (a) Brasilveículos Companhia de Seguros S.A. (2007 to 2008); (b) Brasilprev Seguros and Previdência S.A. (2007 to 2008); and (c) Brasilsaúde Companhia de Seguros S.A. (2007 to 2008), all of them privately-held companies in the insurance sector; (vi) Member of Fiscal Council of (a) Companhia Energética do Rio Grande do Norte -COSERN (2006 to 2008), (b) Companhia Energética de Pernambuco - CELPE (2004 to 2006), (c) CPFL Geração de Energia S.A. and (d) Companhia Paulista de Força and Luz (2002 to 2004), all of them open capital companies acting in the power sector. He also serves as (vii) deputy Counsel at CODEFAT - Conselho Deliberativo do Fundo de Amparo ao Trabalhador (Ministry of Labor), as representative of FENASEG (Federação Nacional das Empresas de Seguros Privados and Capitalização) (since 2010); (viii) Executive Director of FEBRABAN – Federação Brasileira de Bancos (em 2009); (ix) President of FENACAP – Federação Nacional de Capitalização (de 2008 to 2011); (x) Vice- President of CNSEG - Confederação Nacional das Empresas de Seguros Gerais, Previdência Privada e Vida, Saúde Complementar eCapitalização (de 2008 to 2011). Graduated in Economic Sciences at Centro de Ensino de Brasília – CEUB, Faculdade de Ciências Econômicas, Contábeis e Administração do Distrito Federal, Brasília, Mar 1990; MBA in basic general Qualification Program for High Executives by Universidade de São Paulo (USP) Dec 1994, and Comptroller by FIPECAFI/USP Dec 1996. Mr. Ricardo José of Costa Flores represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários or any condemnation on final decision, in the judicial or administrative spheres causing suspension or disqualification for the engagement in any professional or commercial activity.

Sandro Kohler Marcondes 485.322.749-00

Deputy Member of the Board of Directors of Vale (since Apr 2011), where he served as de Member of the Board of Directors (Apr 2007 to Mar 2011). Main professional experience in last five years include: (i) Deputy Member of the Board of Directors of Valepar S.A. (since 2009), controlling shareholder of Vale, privately-held company acting as holding; (ii) Director of Banco do Brasil S.A. (since 2005), financial institution; (iii) Director do BB Leasing S.A. Arrendamento Mercantil (since 2005), privately-held company working with leasing; (iv) Chairman of the Board of Directors of Banco do Brasil A.G., Viena (2008 to 2009), subsidiary of Banco do Brasil S.A. in Austria; (v) Member of Board of Directors of BB Securities Ltd Londres (since 2005), securities broker abroad; (vi) Member of the Board of Directors of BB Securities Ltd. New York (since 2005), securities broker abroad; (vii) Member of the Deliberative Council of BBTur Viagens and Turismo Ltda, corporate tourism agency (since 2005); and (viii) Deputy Member of the Board of Directors of Banco Patagônia S.A. (since 2011), open capital financial institution. Graduated in Business Administration at Universidade Estadual Centro Oeste PR, Dec 1986 and master's degree in Apr 1994 by Fundação Getulio Vargas (FGV) de São Paulo. Mr. Sandro Kohler Marcondes represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Robson Rocha 298.270.436-68

Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Vice-President de of Personnel Management e Sustainable Development at Banco do Brasil S.A. (since 2009), open capital financial institution, where he also served as (ii) Director (2008 to 2009).; (iii) Vice-Chairman of the Board of Directors of CPFL Energia S.A. (since 2010), open capital company acting as holding in the power sector; and (iv) Member of Board of Directors of Banco Nossa Caixa S.A. (May to Nov 2009), financial institution turned privately-held in 2009. Graduated in Business Administration at UNICENTRO – Newton Paiva, Belo Horizonte, Dec 1998, Course in Basic General Information for Executive Adults by UFMG Dec 1997, post graduate in Strategic Management by the Federal University of Minas Gerais (UFMG) Mar 2001; MBA in finance by Fundação Dom Cabral Dec 2002, and master's degree in Marketing by the Fundação Ciências Humanas – Pedro Leopoldo Dec 2001. Mr. Robson Rocha represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Nelson Henrique Barbosa Filho 009.073.727-08

Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Chairman of the Board of Directors of Banco do Brasil S.A. (since 2009), open capital financial institution; (ii) Member of the Board of Directors of BrasilVeículos Cia de Seguros (since 2011), privately-held insurance company; (iii) Member of Board of Directors of Brasilcap – Capitalização S.A. (2010 to 2011), privately-held company that trades capitalization notes; (iv) Executive Secretary of the Ministry of Finance (since 2011), where he also served as Secretary of Jeconomic Policy (2008 to 2010), Secretary of Economic monitoring (2007 to 2008) and Assistant Secretary of Economic Policy (2006 to 2007); (v) Member of Board of Directors of EPE – Empresa de Pesquisa Energética (2007 to 2009), privately-held company developing research in the power sector; and (vi) Assistant of the Presidency of Banco Nacional de Desenvolvimento Econômico Social – BNDES, development bank (2005 to 2006). Graduated in Economics at the Federal University of Rio de Janeiro (UFRJ) Mar 1992, master's degree in Economics also by UFRJ, Mar 1995, and Ph.D. in Economics by the New School for Social Research Jan 2002. Mr. Nelson Henrique Barbosa

Fiho represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Fuminobu Kawashima

000.000.000-00

Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Representative Director, Senior Executive Managing Officer of Mitsui & Co., Ltd. (since 2011), open capital company with interest in Valepar S.A., engaged in trading activities, where he served as Executive Director responsible for maritime and airspace operations (2010 to 2011), Executive Director responsible for operations in the power sector (2007 to 2010), General Manager of Power Operations (2005 to 2007) and General manager of Natural Gas and Power (May to Sep 2005). He also served as Member of Board of Directors of the following privately-held companies: (ii) Japan Australia LNG (MIMI) Pty Ltd. (de 2005 to 2007), with oil and gas activities; (iii) Mitsui Oil Co., Ltd. (de 2007 to 2009), sale of oil derivative products; and (iv) Kyokuto Petroleum Industries, Ltd. (2007 to 2009), oil refinery. Graduated in Economics at Hitotsubashi University, in Japan, Mar 1976, and post graduate in Economic development by Keble College, Oxford, Jun 1980. Mr. Fuminobu Kawashima represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Marco Geovanne Tobias of Silva

263.225.791-34

Deputy Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Permanent Member of Board of Directors of Valepar S.A. (since 2011), controlling shareholder of Vale, privately-held company acting as holding; (ii) Investor Relations Manager at Banco do Brasil S.A. (1999 to 2010), open capital financial institution; (iii) Participation Director of PREVI - Caixa de Previdência dos Funcionários do Banco do Brasil (since 2010), complementary pension fund; (iv) Member of Fiscal Council of Companhia de Energia Elétrica of Bahia – Coelba (2002 to 2010), open capital company that acts with power distribution and sale; and v) Chairman of the Board of Directors of Neoenergia S.A. (since 2011), open capital company acting as holding in the power sector. Graduated in Economics at Universidade de Brasília Jun 1990 and post graduate in Marketing by COPPEAD/Federal University of Rio de Janeiro Mar 1997. Mr. Marco Geovanne Tobias of Silva represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Eustáquio Wagner Guimarães Gomes

009.513.746-72

Deputy Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Permanent Member of Board of Directors of the following open capital companies: (a) Companhia de Energia Elétrica of Bahia – Coelba (1998 to 1999), power distribution and sale; (b) Companhia Energética do Rio Grande do Norte – COSERN (1998 to 1999), power distribution and sale; (c) of Guaraniana, currently Neoenergia S.A (1998 to 1999), holding company in the power sector; (d) Centrais Telefônicas de Ribeirão Preto S.A. (1999 to 2000), company acquired by Telesp S.A., that acted as holding in the telecommunications sector; and (e) Cia de Armazéns and Silos do Estado de Minas Gerais- CASEMG (2002 to 2003), privately-held company acting as grain warehouse, where he served as President and Financial Director (2000 to 2003). He also served as (ii) Member of Fiscal Council of the following companies: (a) Telesp Participações S.A. (2000 to 2001), open capital company acting as holding in the telecommunications sector; (b) Banco do Brasil S.A. (2006 to 2010), open capital financial institution; (c) Cia de Seguros Aliança Brasil (2007 to 2010), privately-held insurance company; (d) Banco Popular do Brasil (2008 to 2010),

privately-held financial institution; (e) BESC – Financeira S.A., Crédito, Financiamento e Investimentos – BESCREDI (2008 to 2010), open capital financial institution; (f) BB Investimentos (de 2003 to 2011), privately-held investment bank; (g) Fundação Banco do Brasil (since 2006), association dedicated to the development and management of sustainable actions related to social inclusion and transformation; and (h) BB Corretora de Seguros (2010 to 2011), privately-held insurance company. Graduated in Business Administration at Faculdade de Ciências Econômicas of Universidade Federal de Minas Gerais - UFMG in Jul 1977. Mr. Eustáquio Wagner Guimarães Gomes represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Eduardo de Oliveira Rodrigues Filho 442.810.487-15

Deputy Member of the Board of Directors of Vale (since 2011). Main professional experience in last five years include: (i) Deputy Member of the Board of Directors of Valepar S.A. (Apr 2008 to Jan 2012), controlling shareholder of Vale, privately-held holding company; (ii) Partner at CWH Consultoria Empresarial (since 2008), company engaged in consulting services; (iii) Commercial Director of Rio Tinto Brasil Ltda. (acquired by Vale in 2009, currently Mineração Corumbaense Reunida S.A.), privately-held mining company (1994 to 2008). Graduated in Civil Engineering at Pontifícia Universidade Católica do Rio de Janeiro, in Dec 1978, and post-graduate in Transportation Planning at PCL Politechnic of Central London, in October 2000. Mr. Eduardo de Oliveira Rodrigues Filho represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Aníbal Moreira dos Santos

011.504.567-87

Permanent Member of Fiscal Council of Vale (since 2005), where he served also as Deputy Member (Apr-Jul/2005). Main professional experience in last five years include: (i) Comptroller Manager of Caemi Mineração and Metalurgia S.A. ("Caemi") (1981 to 2003), mining company incorporated by Vale in 2006; (ii) Director of different privately-held companies controlled by Caemi abroad; (iii) Deputy Member of the Board of Directors (1998 to 2003) of Minerações Brasileiras Reunidas S.A. – MBR, privately-held mining company and Empreendimentos Brasileiros de Mineração S.A. – EBM, privately-held holding; and (iv) Permanent Member of Fiscal Council of Log-In Logística Intermodal S.A., since Apr 2009, open capital company engaged in intermodal transportation, where Vale holds 31,3% interest. Technical course in Accounting by Escola Técnica de Comércio of Fundação Getúlio Vargas completed in Apr 1962. Mr. Aníbal Moreira dos Santos represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Cícero of Silva 045.747.611-72

Deputy Member of Fiscal Council of Vale (since 2009). In 1986, he joined Banco do Brasil S.A., open capital financial institution, where he served in different positions, including Internal Audit. Main professional experience in recent years include: (i) Head of Division at PREVISUL – Instituto de Previdência Social do Mato Grosso (1999 to 2000); and (ii) Deputy Member of the Board of Directors of CPFL – Cia. Paulista de Força and Luz, company engaged in energy operations. Graduated in Accounting Sciences at the Federal University of Mato Grosso do Sul (UFMS) Dec 1980, and Law at Anhanguera – Centro Universitário de Campo Grande in Jun 2008. MBA in Audit by FIPECAFI/USP in Jan 1997, and post-graduation in Investigation, Accounting, Financial and Corporate Examination by Universidade Católica Dom Bosco in Sep 2002. Mr. Cícero of Silva represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Marcelo Amaral Moraes 929.390.077-72

Permanent Member of Fiscal Council of Vale (since 2004), where he served as Deputy Member (2003). Main professional experience in last five years include: (i) Investment Manager at Bradespar S.A. (2000 to 2006), open capital company holding interest in Valepar S.A., engaged in holding activities; (ii) Deputy Member of the Board of Directors of Net Serviços de Comunicação S.A., company operating in cable TV services (2004 to 2005); (iii) Executive Director of Stratus Investimentos Ltda. (2006 to 2010), private equity manager; and (iv) Executive Director of Capital Dynamics Investmentos Ltda. (since Jan/2012), private equity manager. Graduated in Economics at the Federal University of Rio de Janeiro in Jan 1991, MBA by COPPEAD/UFRJ in Nov 1993, and post-graduation in Corporate Law and Arbitration at Fundação Getúlio Vargas (FGV) in Nov 2003. Mr. Marcelo Amaral Moraes represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Oswaldo Mário Pêgo de Amorim Azevedo 005.065.327-04

Deputy Member of Fiscal Council of Vale, (since 2005), where he also served as Permanent Member of Fiscal Council (2004 to 2005) and Engineer in industrial supply (Pelleting (1964 to 1976). Main professional experience in last five years include: (i) Director of Sul América Cia de Seguros Gerais (since 2008), privately-held insurance company; (ii) Ombudsman of Sul America Seguros, insurance company (since 2005), where he also served as (iii) Vice-President of Institutional Relations e Branches Abroad (1990 to 2010); (iv) Director (1980 to 1990); and (v) Associate Director (1976 to 1980) (vi) Vice-President of the National Federation of Private Insurance and Capitalization Companies (2004 to 2007); (vii) Vice-President of the Union of Private Insurance, Capitalization and Reinsurance Companies of Rio de Janeiro (since 2007), where he served as President (2001 to 2004); (viii) Deputy Member of the Board of Directors of BrasilVeículos Cia de Seguros (2006 to 2010) and of (ix) BrasilSaúde Cia de Seguros (2006 to 2010), privately-held insurance companies; (x) Vice-President of Sul América S.A., open capital company engaged in asset management and equities (2006 to 2007); (xi) Director and (xii) Vice-President of Sul America Cia. Nacional de Seguros, insurance company turned privately-held in 2008 (1980 to 2010); (xiii) Director and Vice-President of Nova Ação Participações S.A., open capital company engaged in asset management, especially financial applications (2008 to 2010); (xiv) Director and (xv) Vice-President of Sul América Terrestres, Marítimos e Acidentes Cia de Seguros, insurance company turned privately-held and incorporated into Sul America Cia. Nacional de Seguros (1980 to 1998); (xvi) Director of Sul América Cia de Seguros S.A., open capital insurance company with head offices in Lima, Peru (1996 to 2003); (xvii) Director of Corcovado S.A., real estate company with head offices in Lima, Peru, turned privately-held in 2004 (2003 to 2009); and (xviii) Director of Sul América Capitalização S.A., privately-held company engaged in the trade of capitalization bonds (1987 to 1998). Graduated in Industrial and Production Engineering at Pontifícia Universidade Católica do Rio de Janeiro (PUC) in Jan 1964. Mr. Oswaldo Mário Pêgo de Amorim Azevedo represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

Arnaldo José Vollet 375.560.618-68

Permanent Member of Fiscal Council of Vale (since 2011). Main professional experience in last five years include: (i) Executive Officer of BB DTVM (2002 to 2009), a privately-held stock brokerage securities firm; (ii) Chief Financial Executive and Investor Relations of Companhia de Energia Elétrica da Bahia – Coelba (2000 to 2002), publicly-held company engaged in the distribution and commercialization of electric energy; (iii) Member of the Fiscal Council of Telesp Celular – Participações (1999 to 2000) a publicly-held telecommunications company; (iv) Member of the Fiscal Council of CELP - Cia de Eletricidade de Pernambuco (2004 to 2009), a publicly-held company engaged in the distribution of electric energy; (v) Member of the Board of Directors of Guaraniana, now known as Neoenergia S.A (2002 to 2003), a publicly-held electricity holding company; (vi) Alternate Member of the Board of Directors of CEMIG - Cia de Energia de Minas Gerais (2003 to 2005), a publicly-held company engaged in generation and distribution of energy; (vii) Member of Board of Directors of Pronor Petroguímica S.A. (1997 to 1998), open capital company turned into privately-held company May 2011, engaged in manufacturing, processing, sale, importing, exporting and marketing chemical and petrochemical products; and (viii) Member of Board of Directors of Nitrocarbono S.A. (1997 to 1998), open capital company incorporated in 2003 by Braskem S.A., and was engaged in the manufacturing of basic and intermediate organic products, petrochemical and coal- and alcoholderivatives. He graduated in Mathematics at University of São Paulo (USP) in Dec 1975, and holds an Executive MBA in Finance by Instituto Brasileiro de Mercado de Capitais (IBMEC/RJ) in Jun 1992. Mr. Arnaldo José Vollet represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários. or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

# Antônio Henrique Pinheiro Silveira

010.394.107-07

Permanent Member of Fiscal Council (since 2011). Main professional experience in last five years include: (i) Secretary of Economic Monitoring at Brazil's Ministry of Finance (since 2008), where he also served as Deputy Secretary of Economic Monitoring (2007 to 2008); (iii) Member of the Board of Directors of Companhia de Seguros Aliança do Brasil (since 2010), privately-held insurance company; (iv) Norte Energia S.A (since 2010), privately-held energy company; (v) Chairman of the Board of Directors of Banco Nordeste do Brasil (2008 to 2010), privately-held financial institution; (vi) Member of Board of Directors of Empresa Gestora de Ativos –EMGEA (2007 to 2008), private asset management institution; (vii) Deputy-Head of the Economic Advisor to the Ministry of Planning, Budget and Management (2004 to 2007); and (viii) took part of the administration of Cia Docas do Estado da Bahia, a port services entity (2005 to 2007). He graduated in Economic Sciences at the Federal University of Rio de Janeiro (UFRJ) in Jan 1987. He holds a master's degree and doctor's degree in Economics by UFRJ, completed respectively in Dec 1992 and October 2000. Mr. Antônio Henrique Pinheiro Silveira represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

# Paulo Fontoura Valle

311.652.571-49

Deputy Member of Fiscal Council (since Apr 2012). Main professional experience in last five years include: (i) Member of Fiscal Council of Petrobrás Gás S.A. – Gaspetro (2010 to 2011), open capital company engaged in oil and gas activities; (ii) Member of Fiscal Council of Petroquímica Triunfo S.A. (2006 to 2007), open capital company engaged in oil derivative production activities; and (iii) Member of Board of Directors of Brasilprev Seguros and Previdência S.A. (2007 to 2009), a privately-held insurance company. He Graduated in Physical Education at

Faculdade Dom Bosco de Educação Física on 8/13/1987. He concluded an Executive MBA in Finance at Instituto Brasileiro de Mercado de Capitais – IBMEC, in May 1996, and specialization in Economy at *George Washington University* (EUA) – Instituto Minerva, in Nov 1998. Mr. Paulo Fontoura Valle represented for all legal purposes that in the last five (5) years, he was not subject to any criminal condemnation, any administrative condemnation by the Comissão de Valores Mobiliários, or any condemnation on final decision, in the judicial or administrative spheres, causing suspension or disqualification for the engagement in any professional or commercial activity.

12.7 Composition of the statutory committees, and auditing, financial and compensation committees.

Name	Committee	Position	Occupation	Date of election	Term
CPF	Other committees	Other positions	Age	Date of entry	
Other positions held at com	pany				
José Carlos Martins	Risk Committee	Permanent Member	Economist	14/11/2011	November/2013
304.880.288-68			62	14/11/2011	
Executive Director of Operation	ons and Marketing Iron Metals				
Efrem José Daumas Junior	Risk Committee	Committee Member (permanent)	Geologist	14/11/2011	November/2013
521.085.206-78			44	14/11/2011	
Director of the Department of	Operational Improvement				
Roberto Moretzsohn	Risk Committee	Committee Member (permanent)	Engineer	09/01/2012	Janeiro/2014
691.554.107-15			51	09/01/2012	
Sônia Zagury	Risk Committee	Committee Member (permanent)	Economist	14/11/2011	November/2013
934.316.517-04			44	14/11/2011	
Global Director of Treasury ar	nd Finance				
Tito Botelho Martins Junior	Risk Committee	Permanent Member	Economist	14/11/2011	5/25/2013
501.888.956-04		Permanent Member of the Financial	49	14/11/2011	
		Committee Member of the			
		Information Disclosure Committee			
Executive Director of Finance,	, Supplies, Shared Services, ar	nd Investors Relations			
Eduardo de Oliveira	Financial Committee	Committee Member (permanent)	Engineer	5/26/2011	Until 2013 General
Rodrigues Filho					Shareholders' Meeting
442.810.487-15			57	5/26/2011	
Deputy Member of the Board	of Directors				
Luciana Freitas Rodrigues	Financial Committee	Committee Member (permanent)	Statistics and Actuarial	5/26/2011	Until 2013 General
					Shareholders' Meeting
759.395.847-72			45	5/26/2011	
N/A					
Luiz Maurício Leuzinger	Financial Committee	Committee Member (permanent)	Engineer	5/26/2011	Until 2013 General
		Member of the Executive			Shareholders' Meeting

		Development			
		Committee(permanent)			
009.623.687-68			70	5/26/2011	
Deputy Member of the Board					
Tito Botelho Martins Junior	Financial Committee	Permanent Member	Economist	11/24/2011	5/25/2013
501.888.956-04		Permanent Member of the Risk	49	11/24/2011	
		Management Executive Committee			
		and Member of the Information			
		Disclosure Committee			
Executive Director of Finance	, Supplies, Shared Services, and Inv				
Clovis Torres Junior	Information Disclosure	Committee Member (permanent)	Lawyer	18/07/2011	Undetermined
	Committee				
423.522.235-04			44	18/07/2011	
General Consultant					
Gilmar Dalilo Cezar	Governance and Sustainability	Committee Member (permanent)	Economist	5/26/2011	Until 2013 General
Wanderley	Committee				Shareholders' Meeting
084.489.987-90			32	5/26/2011	
Luiz Maurício Leuzinger	Executive Development	Member of the Financial Committee	Engineer	5/24/2012	Until 2013 General
	Committee	(permanent)			Shareholders' Meeting
009.623.687-68			70	5/24/2012	
Deputy Member of the Board	of Directors				
José Ricardo Sasseron	Executive Development	Committee Member (permanent)	Graduate in History	5/26/2011	Until 2013 General
	Committee				Shareholders' Meeting
003.404.558-96			56	5/26/2011	
Member of the Board of Direct	etors				
Luciano Galvão Coutinho	Strategic Committee	Committee Member (permanent)	Economist	5/26/2011	Until 2013 General
					Shareholders' Meeting
636.831.808-20			65	5/26/2011	
Member of the Board of Direct	etors				
Luiz Carlos de Freitas	Comptroller Committee	Committee Member (permanent)	Accountant	5/26/2011	Until 2013 General
					Shareholders' Meeting
659.575.638-20			59	5/26/2011	
Deputy Member of the Board	of Directors				
Marcelo Botelho Rodrigues	Information Disclosure	Committee Member (permanent)	Engineer	13/09/2010	Undetermined
-	Committee				
871.892.327-53			49	13/09/2010	
Comptroller					

Mário da Silveira Teixeira Júnior 113.119.598-15	Strategic Committee	Committee Member (permanent)	Engineer and Administrator 66	5/26/2011 5/26/2011	Until 2013 General Shareholders' Meeting
Vice Chairman of the Board of	f Directors			0/20/20 : :	
Murilo Pinto de Oliveira	Strategic Committee	Permanent Member	Business Administrator	5/19/2011	5/25/2013
Ferreira 212.466.706-82		Permanent Member of the Information Disclosure Committee	58	5/20/2011	
Managing Director					
Murilo Pinto de Oliveira	Information Disclosure	Permanent Member	<b>Business Administrator</b>	5/19/2011	5/25/2013
Ferreira	Committee				
212.466.706-82		Permanent Member of the Strategic Committee	58	5/20/2011	
Managing Director					
Oscar Augusto de Camargo F	Filho Strategic Committee	Committee Member (permaner	nt) Lawyer	5/26/2011	Until 2013 General Shareholders' Meeting
030.754.948-87		Member of the Executive Deve Committee	lopment 74	5/26/2011	
Member of the Board of Direct	tors				
Oscar Augusto de Camargo F	Filho Executive Development Committee	Committee Member (permaner	nt) Lawyer	5/26/2011	Until 2013 General Shareholders' Meeting
030.754.948-87 Member of the Board of Direct	tore	Member of the Strategic Comm	nittee 74	5/26/2011	, and the second
Paulo Ricardo Ultra Soares	Comptroller Committee	Independent Member	Graduate in L	aw 5/26/2011	Until 2011 General Shareholders' Meeting
599.057.437-15 N/A			51	5/26/2011	
Paulo Roberto Ferreira de Me	edeiros Comptroller Committee	Independent Member	Administrator	5/26/2011	Until 2011 General Shareholders' Meeting
024.772.117-49 N/A			70	5/26/2011	v
Renato de Cruz Gomes	Governance and Sustain Committee	nability Committee Member (permaner	nt) Engineer	5/26/2011	Until 2013 General Shareholders' Meeting

		_			
426.961.277-00			59	5/26/2011	
Member of the Board of Directors					
Ricardo José of Costa Flores	Strategic Committee	Committee Member (permanent)	Economist	5/26/2011	Until 2013 General
					Shareholders'
					Meeting
285.080.334-00			48	5/26/2011	
Chairman of the Board of Directors					
Ricardo Simonsen	Governance and Sustainability	Independent Member	Mechanic Engineer	5/26/2011	Until 2013 General
	Committee				Shareholders'
					Meeting
733.322.167-91			50	5/26/2011	
N/A					
Roberto of Cunha Castello Branco	Information Disclosure	Committee Member (permanent)	Economist	6/19/2002	Undetermined
	Committee				
031.389.097-87			66	6/19/2002	
Director of Investors Relations					
Tito Botelho Martins Junior	Information Disclosure	Permanent Member	Economist	11/24/2011	5/25/2013
	Committee	Permanent Member of the Financial			
		Committee and the Risk Management			
		Executive Committee			
501.888.956-04			48	11/25/2011	
Executive Director of Finance, Suppl	ies, Shared Services, and Investors	Relations			

12.9 Existence of relationship (as a spouse or significant other) or kinship to the second degree related to managers of the company, entities controlled by the Company, and controlling shareholders

#### Justification for not completing the chart:

Each and every Member of the Board of Directors, Executive Board and Fiscal Council of Vale have declared, individually for all lawful purposes, that he or she is not related (as spouse, or significant other) or has any other kindred relationship to the second degree to (i) managers of Vale; (ii) managers of companies controlled directly or indirectly by Vale; (iii) Vale's direct or indirect controlling shareholders; and (iv) the members of management of Vale's direct or indirect controlled entities.

In addition, all members of the Board of Directors, the Executive Board and of the Fiscal Council of companies controlled directly or indirectly by the Vale have declared individually for all lawful purposes that the y have no conjugal or stable union or kinship to the second degree with entities controlled directly or indirectly by Vale.

12.10 Subordination, rendering of services or control relationships the between directors/officers, entities controlled by the Company, controlling shareholders, and others

# Justification for not completing the chart:

All members of the Board of Directors, the Executive Board, and the Fiscal Council have declared individually for all legal purposes that there have been no relationships for rendering services or for control, maintained over the past three (3) fiscal years between the m and (i) a company controlled directly or indirectly by Vale; (ii) the controllers, direct or indirect, of Vale; or (iii) relevant suppliers, clients, debtors, or creditors of Vale, its controlled companies or its controllers.

# 12.11 Agreements, including insurance policies for the payment or reimbursement of expenses incurred by directors/officers

Vale maintains a global coverage liability insurance policy with a group of insurers lead by Zurich Insurance, Plc, through payment of a premium of US\$ 589,668.40, in effect between 3/1/2012 and 3/1/2013, and with total indemnity limit corresponding to US\$ 200 million. This insurance covers members of the Board of Directors, Executive Board, Fiscal Council, and any other body mentioned in the Bylaws, as well as certain employees at the management and strategic levels, in both the Company and its subsidiaries (collectively referred to as the "Insured"). The policy covers financial losses resulting from claims against the Insured for acts or omissions in the exercise of their functions of employment. The policy, in addition to contemplating the repair of damages caused to third parties, the Vale, and its controlled companies brought by government agencies, also covers agreements previously authorized by the insurer for the purpose of bringing to a close judicial or administrative suits. In addition, the policy provides coverage for payment of defense costs of the Insured, if and when incurred. In addition to those coverage mentioned above, the insurance provides additional guarantees for liability cases that may affect spouses, heirs, successors, legal representatives, and persons designated by Vale to act as managers of external entities.

# 12.12 Other relevant information

Regarding item 12.3, Vale hereby notes that the publication of the notice to shareholders about availability of financial statements in 2011, 2010 and 2009, was not done, under the terms in § 5, in article 133 in the Law of Corporations, considering such documents were published up to one (1) month before the general shareholders' meeting.

# Information about quorum and installation of shareholders' meetings

Below we present information regarding installation of our shareholders' meetings in the last three fiscal years:

Date	4/18/2012
Type of Shareholders' Meeting	General
Installation upon second calling	No
Installation Quorum	The meeting was installed with
	shareholders representing 54.51%
	of our voting capital.

Date	5/18/2011
Type of Shareholders' Meeting	Special
Installation upon second calling	Yes
Installation Quorum	The meeting was installed with
	shareholders representing 52.91% of
	our voting capital.

Date	4/19/2011
Type of Shareholders' Meeting	General
Installation upon second calling	No
Installation Quorum	The meeting was installed with shareholders representing 60.35% of our voting capital.

Date	6/22/2010
Type of Shareholders' Meeting	Special
Installation upon second calling	No
Installation Quorum	The meeting was installed with shareholders representing 51.23% of our voting capital.

Date	5/19/2010
Type of Shareholders' Meeting	Special
Installation upon second calling	Yes
Installation Quorum	The meeting was installed with shareholders representing 52.20% of our voting capital.

Date	4/27/2010
Type of Shareholders' Meeting	General
Installation upon second calling	No
Installation Quorum	The meeting was installed with shareholders representing 57.31% of our voting capital.

	4/00/0040
Date	1/22/2010
Type of Shareholders' Meeting	Special
Installation upon second calling	No
Installation Quorum	The meeting was installed with
	shareholders representing 52.36% of
	our voting capital.
Date	5/22/2009
Type of Shareholders' Meeting	Special
Installation upon second calling	Yes
Installation Quorum	The meeting was installed with
	shareholders representing 52.45% of
	our voting capital.
Date	4/16/2009
Type of Shareholders' Meeting	General
Installation upon second calling	No
Installation Quorum	The meeting was installed with shareholders representing 60.38% of
	our voting capital.

#### Item 13

13.1 Description of the compensation policy or practices for the Executive Board, the Statutory and Non-Statutory Boards, the Fiscal Committee, the Statutory Committees and the Audit, Risk, Finance, and Compensation Committees, covering the following topics:

## a. Objectives of the compensation policy or practices

According to the provisions of Article 10, Paragraph 3 of the Bylaws of the Company, the Managers of the Company's overall and annual compensation is set at the Annual General Meeting, and takes into account their responsibilities, the time they dedicate to their functions, their competence and professional reputation, and the market value of their services.

Vale is the second largest diversified mining company in the world, and the largest private company in Latin America. It has operations in over thirty countries, a market value of some US\$122 billion, over 400,000 shareholders on every continent, and around 80,000 employees and 55,000 subcontracted workers active in its operations.

Clearly, Vale is a global company of great complexity and magnitude, whose administration requires an in-depth understanding of its area of business and market, combined with total commitment.

As a global company, Vale is aware that retaining and engaging the right professionals in key roles, especially Executive Directors, is critical for its success in the mid and long terms. As such, the market is always the benchmark from the perspective of global competition, taking into account important competitors, such as the top mining companies and other large global enterprises.

The main factor for compensation and the main objective of the compensation policy adopted is the company's performance and growth in the short, medium, and long terms, in line with its strategic plan, while also assuring shareholder value. The compensation policy therefore prioritizes serving the company's business.

## b. Composition of compensation packages

(i) Description of the different elements of the compensation packages and the objectives of each of them.

#### **Executive Board**

### **Fixed Monthly Compensation**

Pró-labore. The compensation for the members of the Executive Board is made up exclusively of the payment of a fixed monthly fee. This fixed compensation is designed to remunerate the services of each board member, within their scope of responsibility as members of Vale's Executive Board. The overall annual compensation for the Managers, including the members of the Executive Board, the Statutory Board, the Fiscal Council and the advisory committees is set at the annual general meeting and distributed by the Executive Board.

Direct and indirect benefits. The members of the Executive Board do not have right to direct or indirect benefits.

Participation on Committees. The members of the Executive Board do not have the right to remuneration for participation on committees.

#### Variable Remuneration

The members of the Executive Board do not have the right to variable remuneration, including bonuses, profit sharing, or participation in meetings.

#### **Post-employment Benefits**

The members of the Executive Board do not have the right to post-employment benefits.

### Benefits Resulting from the Termination of Holding a Position

The members of the Executive Board do not have the right to benefits resulting from the termination of holding a position.

#### **Remuneration Based on Shares**

The members of the Executive Board do not have the right to remuneration based on shares.

#### **Fiscal Board**

# **Fixed Monthly Compensation**

*Pro-labore.* The compensation for the members of the Fiscal Board is made up of a fixed monthly fee, excluding benefits, representation monies, and profit shares. Deputies are compensated when they undertake the function when a seat is vacant, or when the member of the board in question is absent or unable to exercise the function. The aim of the fixed compensation is to remunerate the services of each board member, within their scope of responsibility as members of the Company's Fiscal Board. The fees for Fiscal Board members are adjusted in line with any adjustment made to the Executive Directors' compensation.

Direct and Indirect Benefits. Members of the Fiscal Board do not have right to direct or indirect benefits.

Participation on Committees. The members of the Fiscal Board do not have the right to remuneration for participation on committees.

#### Variable Remuneration

The members of the Fiscal Board do not have the right to variable remuneration, including bonuses, profit sharing, or participation in meetings.

# **Post-employment Benefits**

The members of the Fiscal Board do not have the right to post-employment benefits.

## Benefits Resulting from the Termination of Holding a Position

The members of the Fiscal Board do not have the right to benefits resulting from the termination of holding a position.

#### **Remuneration Based on Shares**

The members of the Fiscal Board do not have the right to remuneration based on shares.

# **Advisory Committees**

# **Fixed Monthly Compensation**

The members of the Advisory Committees do not have the right to fixed remuneration, direct and indirect benefits.

#### Variable Remuneration

The members of the Advisory Committees do not have the right to bonuses, profit sharing, or commissions.

Participation in Meetings. The compensation for the members of the Executive Board Advisory Committees (Strategy Committee, Finance Committee, Executive Development Committee, Financial Control Committee, and Governance and Sustainability Committee) is paid for each meeting an executive effectively takes part in. As set forth in Paragraph 2 of Article 15 of Vale's Bylaws, the committee members who are Vale Managers will not be eligible for extra compensation for sitting on the committees. The aim of the compensation is to remunerate each member's services within the scope of their responsibility as members of the Company's respective Advisory Committees. The compensation for Advisory Committee members is adjusted in line with the compensation paid to members of the Executive Board.

#### **Post-employment Benefits**

The members of the Advisory Committees do not have the right to post-employment benefits.

# Benefits Resulting from the Termination of Holding a Position

The members of the Advisory Committees do not have the right to benefits resulting from the termination of holding a position.

#### **Remuneration Based on Shares**

The members of the Advisory Committees do not have the right to remuneration based on shares.

#### **Executive Board (Statutory Directors)**

#### **Fixed Monthly Compensation**

*Pro-labore.* The aim of the fixed monthly compensation is to remunerate the services rendered by the statutory directors within the scope of their individual responsibility in managing the Company.

Direct and indirect benefits. Package of benefits that is compatible with market practices, including private healthcare, hospital and dental care, a designated car with driver, private pension scheme and life insurance. Not only are the benefits in line with market practices, but they are also aimed at assuring the executives and their dependents peace of mind when it comes to fundamental issues such as healthcare.

Participation on Committees. The members of the Executive Board do not have the right to remuneration for participation on committees.

# Variable compensation

Bonus. Variable annual payment (bonus) based on the Company's earnings and defined by indicators and objectives, measurable targets derived from the strategic plan, and the annual budget approved by the Executive Board. While assuring market competitiveness, the main aim of the bonus is to acknowledge an executive's contribution to the Company's performance and earnings.

Others. The members of the Executive Board do not have the right to profit sharing, participation in meetings, or commissions.

#### Post-employment benefits

Statutory Directors may have medical healthcare, hospital and dental care paid by the Company until 12 (twelve) months after their termination, in order to allow them to look for alternatives outside the corporative plan, plus life insurance and financial benefit as mentioned on item 13.12 of this Reference Form.

#### Benefits Resulting from the Termination of Holding a Position

The members of the Executive Board do not have the right to benefits resulting from the termination of holding a position.

#### Compensation based on shares

Long-Term Incentive Plan (ILP, as per the acronym in Portuguese)

Long-term variable payment based on the Company's expected performance in the future, with the aim of retaining and engaging the Executives and aligning them with the future vision of the Company. The program was introduced in 2007, the first payment having been made in January 2010. For further details, please see item 13.4 of the Reference Form.

#### Matching

Like the ILP, Matching is a variable, long-term form of compensation based on the Company's expected performance in the future. The main aim of this scheme is to encourage an "owner's vision", while also helping to retain executives and reinforce a sustained performance culture. For further details, see item 13.4 of the Reference Form.

Items 13.1 (a) (ii), (c) and (d) below, describe in detail the methodology for calculation used to determine the value of the compensation of the Executive Board, pursuant to what is above stated.

# **Non-Statutory Board**

The non-statutory directors are Company employees with a labor contract. There are two groups of executives that fall into this category: (i) "level 5" directors, who normally hold global corporate or business unit functions; and (ii) "level 4" directors, who generally hold regional or local corporate functions, or are responsible for operational systems or areas in the Company's different businesses.

# **Fixed Monthly Compensation**

Fixed Salary. Monthly amount based on the Company's organizational chart. The aim of the fixed salary is, as set out in the labor contract signed by each executive, to remunerate the services rendered within the scope of responsibility attributed to them in undertaking their respective duties within the company.

Direct and indirect benefits. Package of benefits compatible with market practices, including medical healthcare, hospital and dental care, private pension scheme (Valia) and life insurance. Not only are the benefits in line with market practices, but they are also aimed at assuring the executives and their dependents peace of mind when it comes to fundamental issues such as healthcare. For more information about the Complementary Benefits plan (Valia), see item 13.10 of the Reference Form.

Participation on Committees. The non-statuary directors do not have the right to remuneration for participation on committees.

#### Variable compensation

Profit Sharing. Variable annual payment (PR) based on the Company's earnings and defined by indicators and objective, measurable targets derived from the strategic plan, and the annual

budget approved by the Executive Board. While assuring market competitiveness, the main aim of the profit sharing is to acknowledge an executive's contribution to the Company's performance and earnings. Item 13.1 (d) below, describes in detail the methodology for calculation used to determine the value of the compensation of the Non-Executive Board, pursuant to what is stated below.

### Post-employment benefits

Non-Statutory Directors may have medical healthcare, hospital and dental care paid by the Company for up to twelve (12) months after their termination, in order to allow them to look for alternatives outside the corporative plan.

### Benefits Resulting from the Termination of Holding a Position

Non-Statutory Directors receive customized service of orientation for outplacement to be performed by the specialist company appointed by Vale.

#### Compensation based on shares

Long-Term Incentive Plan (ILP)

Long-term variable payment based on the Company's expected performance in the future, with the aim of retaining and engaging the executives and aligning them with the future vision of the Company. The program was introduced in 2007, the first payment having been made in January 2010. For further details, please see item 13.4 of the Reference Form

#### Matching

Like the ILP, Matching is a variable, long-term form of compensation based on the Company's expected performance in the future. The main aim of this scheme is to encourage an "owner's vision", while also helping to retain executives and reinforce a sustained performance culture. For further details, see item 13.4 of the Reference Form.

# **Non-Statutory Committees**

The Company also has two non-statutory committees: the Risk Committee and the Communication Committee. All the seats on the non-statutory committees are held by the Company's statutory and non-statutory directors, who do not receive any extra compensation for this function.

#### (ii) Proportion of each element to make up the total compensation package

The approximate proportions for 2011 were as shown in the table below:

Compensation Composition	Executive Board	Fiscal Board	Statutory Board	Non- Statutory Board	Advisory Committees
Fixed Monthly Compensation					
Wage or Pro-Labore	100.00%	100.00%	26.00%	36.00%	
Direct or Indirect Benefits	-	-	9.00%	10.00%	-
Advisory Committees	-	-	-	-	100.00%
Others	-	-	-	-	-
Bonus	-	-	38.00%	41.00%	-
Profit Sharing	-	-	-	-	-

Participation in Meetings	-	-	-	-	-
Commissions	-	-	-	-	-
Others	-	-	-	-	-
Benefits Post Labor	-	-	-	-	-
Resignation	-	-	-	-	-
Compensation Based on Shares					
Long-term incentive	-		16.00%	7.00%	-
Matching	-	-	11.00%	6.00%	-
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%

### (iii) Methodology for the calculation and readjustment of each compensation element

#### **Executive Board**

The methodology for the calculation of the fixed compensation of the members of the Executive Board is represented by the fixed monthly payments (fees). For deputy members the amount established is 50% of the value received by the regular members of the Executive Board. Values are annually defined according to the market practice, checked through referential researches made by specialized companies, where the effect of the compensation for similar companies can be observed. There is no variable compensation for the members of the Executive Board.

#### Fiscal Board

The methodology for the calculation of the fixed compensation of the members of the Fiscal Board is represented by the fixed monthly payments (fees), having as reference the value of 10% of the compensation that, in average, is granted to the Statutory Directors, not computing the benefits, representation monies, and profits participation. The members of the Fiscal Board also have the right to a refund for transport and lodging expenses that are necessary in performing their duties. There is no variable compensation for the members of the Fiscal Board.

#### **Advisory Committees**

The methodology for the calculation of the variable compensation of the members of the Advisory Committees of the Executive Board (Strategic Committee, Financial Committee, Executive Performance Committee, Controlling Committee, and Governance and Sustainability Committee) is represented by the payment of a certain value for the participation in meetings equal to the monthly value granted to the deputy members of the Executive Board. There is no additional compensation for the members of the Committees that are managers of Vale. There is also no fixed compensation for the members of the Advisory Committees or any other type of variable compensation.

# Executive (Statutory) Directors

The methodology for the calculation of the fixed compensation of the Statutory Directors is represented by the fixed monthly payment, defined according to the market practice, checked through referential researches made by specialized companies where the effect of the compensation for similar companies can be observed, and annually readjusted by the IPCA. Direct and indirect benefits (medical healthcare, hospital care, dental care, car with driver, private pension plan, and life insurance) to which they have right, are calculated according to the market practice checked through referential research made by specialized companies where the effect of the concession of benefits for the participating companies of similar size can be observed. The bonus of the Statutory Directors is calculated based on the earnings of the Company, and may vary between 0% and 150% of the annual fixed payment; this depends on the goals set forth for each fiscal year.

The methodology for the calculation of the compensation based on shares of the Statutory Directors takes into account a percentage of the bonus of 75% for the Executive Directors and 125% for the President Director, of the value actually paid to this title, and transformed, as reference, into a number of common shares issued by Vale (virtual shares), and considered the average quotation of the common shares issued by the Company during the last 60 trading days of the last fiscal year. If the executive member remains in the Company, by the end of three years the number of virtual shares is transformed into a monetary value by the average quotation of the common shares issued by the Company of the last 60 trading days of the third year. The program also considers the performance of the Company regarding a group of similar companies (peer group). If Vale is first in this ranking, the value settled is increased in 50%. This is a decreasing percentage, so in the 5th position the value remains unchanged, and as of the 15th position, there is no payment.

Formerly, together with the implementation of the ILP, the Company kept a program that was specific for the Statutory Board and its percentage of allocation was 36% of the bonus, with payment after a period of 13 months. This program was replaced by the current ILP, and its last payment was made on January, 2009.

The methodology for the calculation of the Matching determines that the executive member may allocate 30% or 50% of his short-term variable payment (bonus) to the purchase of class A preferred shares issued by Vale, through a pre-defined financial institution, under market conditions and without any benefit offered by Vale, on the days set forth in the plan. The bonus percentage that can be allocated by each executive member for participating in the Matching Plan is defined as of the valuation of his performance and potential. This shall be granted to those executive members who acquire shares as per the terms and conditions set forth in the Matching Plan and who three years after the acquisition, still remain linked to Vale and have kept the ownership of all the shares acquired. At the end of the three years period, the administrators shall end the cycle, and shall give a calculation of effective compliance of the conditions set forth in the manual of the above referred plan. If the terms of the plan have been adhered to, the Company shall pay the executive member a liquid value, as a prize, equal to the amount he bought in shares of the program. After the payment of the incentive, the executive members can freely negotiate the preferred shares issued by Vale to be acquired in order to become eligible for the Matching Plan and in agreement with the law in force.

#### Non-statutory Board

The methodology for the calculation of the fixed compensation for the Non-statutory Directors is represented by a fixed monthly payment, with a labor contract.

Every year, the Department of Human Resources and the Governance of Vale, hire specialized companies to perform analysis of compensations; the analysis is made pursuant to the complexity of each position compared in the market. The comparison is made with national and multinational companies of several sectors, and the equalization of the comparison is through a scoring system. This system of valuation is known as "Hay" System, a system of points created by The Hay Group that valuates the weight of the positions based on their complexity, allowing their global ranking. This system is the most used worldwide for this purpose. There is no predetermined index or periodicity for the readjustment of the fixed compensation and when there are readjustments, they are based on the market evolution and the merit of the executive member.

Direct and indirect benefits (medical healthcare, hospital care, dental care, private pension plan, and life insurance) to which they have right, are calculated according to the market practice checked through referential research made by specialized companies where the effect of the concession of benefits for similar companies can be observed. The component of the bonus of the Non-statutory Directors is calculated based on the earnings of the Company, and it ranges from 0, in the event the performance of the Company does not reach the goals set forth for each fiscal year, to 18 fixed monthly compensations for "level 5" directors, and 15 fixed monthly compensations for "level 4" directors. The readjustment of the variable compensation is a multiplier of the base wage.

The methodology for the calculation of the compensation based on shares of the Non-statutory Directors takes into account a percentage of the bonus of 75% for "level 5" directors and 50% for "level 4" directors of the value actually paid to this title. This amount is transformed, as reference, into a number of common shares issued by Vale (virtual shares), and considered the average quotation of the common shares issued by the Company during the last 60 trading days of the last fiscal year. If the executive member remains in the Company, by the end of three years the number of virtual shares is transformed into a monetary value by the average quotation of the common shares issued by the Company of the last 60 trading days of the third year. The program also considers the performance of the Company regarding a group of similar companies (peer group). If Vale is first in this ranking, the value settled is increased in 50%. This is a decreasing percentage, so in the 5th position the value remains unchanged, and as of the 15th position, there is no payment.

The methodology for the calculation of the Matching determines that the executive member may allocate 30% or 50% of his short-term variable payment (bonus) to the purchase of class A preferred shares issued by Vale, through a pre-defined financial institution, under market conditions and without any benefit offered by Vale, on the days set forth in the plan. The bonus percentage that can be allocated by each executive member for participating in the Matching Plan is defined as of the valuation of his performance and potential. This shall be granted to those executive members who acquire shares as per the terms and conditions set forth in the Matching Plan and who three years after the acquisition, still remain linked to Vale and have kept the ownership of all the shares acquired. At the end of the three years period, the administrators shall end the cycle, and shall give a calculation of effective compliance of the conditions set forth in the manual of the above referred plan. If the terms of the plan have been adhered to, the Company shall pay the executive member a liquid value, as a prize, equal to the amount he bought in shares of the program. After the payment of the incentive, the executive members can freely negotiate the preferred shares issued by Vale to be acquired in order to become eligible for the Matching Plan and in agreement with the law in force.

#### (iv) Reasons that justify the composition of the compensation

The reasons for the composition of the compensation are an incentive to improve the management and the permanence of the executive members of the Company, fixing earnings based on commitment to long-term results and short-term performance. Vale adopts a composition model of the compensation that concentrates a significant payment of the total compensation in the variable components (both of short- and long-term), being a part of the policy of risk and earnings sharing with the main executive members of the Company.

# c. Main performance indicators that are taken into consideration when determining each element of the compensation package

All the definitions concerning the compensation of Statutory Directors are sustained by market research, supported by one or more specialized consultancies, assessed by the Executive Development Committee and approved by the Executive Board.

The main performance indicators are the Company's performance in comparison with its main competitors (top mining companies), its cash flow return on gross investments (CFROGI), as well as general productivity, safety, and environmental indicators.

The performance indicators regarding the long-term incentive plans (ILP and Matching) are: the value of the Company's shares in the market and its position in relation to a group of twenty companies of similar size (peer group).

# d. How the compensation package is structured to reflect the development of the performance indicators

The executives' performance targets, which are used to structure the payment of their profit share (bonus), derive from the strategic plan and the budget, both approved by the Executive Board, which are reviewed each year to sustain the targets and expected results for the Company.

Further, the long-term incentive payments (ILP and Matching scheme) are pegged to some of the Company's performance indicators: the price of its shares on the market and its position relative to its peer group (a group of twenty companies of a similar size).

# e. How the compensation policy is aligned with the Company's short-, medium- and long-term interests

As already stressed, the main factor for compensation is the Company's performance and growth in the short, medium, and long term, in line with its strategic plan, while also assuring shareholder value. As such, the long-term incentives are structured with a three-year elimination period, and mirror changes in the Company's performance indicators.

# f. Existence of compensation supported by subsidiaries, and direct or indirect affiliates or holding companies

One of the Company's executive directors is also the President and Chief Executive Officer of Vale Canada Limited, a Vale subsidiary. As such, part of this executive's fixed compensation and benefits is paid by Vale Canada Limited.

# g. Existence of any compensation or benefits connected to the occurrence of a given corporate event, such as the sale of the Company's controlling interest

There is no compensation or benefit for the members of the Fiscal or Executive Boards, Statutory or Non-Statutory Committees, or the Executive or Non-Executive Board that is in any way connected to the occurrence of any corporate event.

# 13.2 – Total Compensation of the executive board, statutory board, and fiscal board

Total Compensation Estimates for the Current Fiscal Year to be Ended on December 31, 2012 – Annual Amounts					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members	21.00	9.00	7.00	37.00	
Annual fixed compensation (in R\$)	-	-	-	-	
Salaries or pro-labore fees	R\$ 4,640,000	R\$ 20,959,610	R\$ 1,416,000	R\$ 27,015,610	
Direct and indirect benefits	-	R\$ 9,268,017	-	R\$ 9,268,017	
Compensation for participation in	-	-	-	-	
Committees					
Other	R\$ 928,000	R\$ 5,030,306	R\$ 283,200	R\$ 6,241,506	
Description of other fixed compensation	Vale's Portion of	Vale's Portion of	Vale's Portion of		
·	Social Security [INSS]	Social Security [INSS]	Social Security [INSS]		
Variable Compensation (in R\$)	-	=	-	-	
Bonus	-	R\$ 19,579,947	-	R\$ 19,579,947	
Profit share	=	· · · · -	-	· · · · · -	
Compensation for participation in					
meetings	=	=	-	-	
Commissions	-	-	-	R\$11,085,811	
Other	-	R\$ 11,085,811	-		
Description of other variable		Vale's Portion of			
compensation		Social Security [INSS]			
Post-employment benefits	=	=	-	-	
Employment termination benefits	-	R\$ 22,824,873	-	R\$ 22,824,873	
Stock-based compensation	-	R\$ 13,024,236	-	R\$ 13,024,236	
Observation	The field "Number of	The field "Stock-	The field "Number of		
observation	members" includes	based compensation"	members" includes		
	the regular members	includes the amounts	the regular members		
	(11) and deputy	paid in the ILP	(7) and the deputy		
	members (10) of the Executive Board	program and the estimated amounts of	members (4) of the Fiscal Board		
	Executive Board	the Matching program	ristai BUAI'U		
Total amount of compensation	R\$ 5,568,000	R\$ 101,772,800	R\$ 1,699,200	R\$ 109,040,000	
. o.a. aount of componication	114 0,000,000	14 101,112,000	1.4 1,000,200	100,010,000	

Total Compensation for the Fiscal Year Ended on December 31, 2011 – Annual Amounts					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members	21.00	7.75	7.00	35.75	
Annual fixed compensation (in R\$)	-	-	-	-	
Salaries or pro-labore fees	R\$ 3,929,627	R\$ 16,970,226	R\$ 921,600	R\$ 21,821,453	
Direct and indirect benefits	-	R\$ 6,153,124	-	R\$ 6,153,124	
Compensation for participation in		114 0/100/121		114 0/100/121	
Committees	-	-	-	-	
Other	R\$ 785,925	R\$ 3,698,510	R\$ 184,320	R\$ 4,668,755	
Description of other fixed compensation	Vale's Portion of	Vale's Portion of	Vale's Portion of		
2 cooliption of other linear compensation	Social Security [INSS]	Social Security [INSS]	Social Security [INSS]		
Variable Compensation (in R\$)	_	_	-	-	
Bonus	_	R\$ 24,703,613	_	R\$ 24,703,613	
Profit share	_	-	-	-	
Compensation for participation in					
meetings	_	-	-	-	
Commissions	_	_	-	_	
Other	_	R\$ 28,224,426	-	R\$ 28,224,426	
Description of other variable		Vale's Portion of		Νψ 20,224,420	
compensation		Social Security [INSS]			
Post-employment benefits	_	, , ,	-		
Employment termination benefits	_	R\$ 98,741,007	-	R\$ 98,741,007	
Stock-based compensation	_	R\$ 17,677,508	_	R\$ 17,677,508	
Observation	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (11) and deputy members (10) of the Executive Board.	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 – The payment regarding "Employment termination benefits" was made to ex-Executive Directors who left the Company during the fiscal year ending on December 31, 2011  3 – The amounts shown in the field "Stock-based compensation" includes the amounts paid in the ILP and	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (7) and the deputy members (4) of the Fiscal Board.		
Total amount of compensation	R\$ 4,715,552	the Matching programs described in items 13.1 and 13.4.  R\$ 196,168,414	R\$ 1,105,920	R\$ 201,989,886	

Total Compensation for the Fiscal Year Ended on December 31, 2010 – Annual Amounts					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members	21.00	7.00	7.00	35.00	
Annual fixed compensation (in R\$)					
Salaries or pro-labore fees	R\$ 1,790,070.00	R\$ 15,203,831.00	R\$ 913,600.00	R\$ 17,907,501.00	
Direct and indirect benefits	0.00	R\$ 5,687,041.00	0.00	R\$ 5,687,041.00	
Compensation for participation in Committees	0.00	0.00	0.00	0.00	
Other	R\$ 358,014.00	R\$ 3,618,550.00	R\$ 182,720.00	R\$ 4,159,284.00	
Description of other fixed compensation	Vale's Portion of Social Security [INSS]	Vale's Portion of Social Security [INSS]	Vale's Portion of Social Security [INSS]		
Variable Compensation (in R\$)	-	-	-	-	
Bonus	0.00	R\$24,703,612.00	0.00	R\$24,703,612.00	
Profit share	0.00	0.00	0.00	0.00	
Compensation for participation in meetings	0.00	0.00	0.00	0.00	
Commissions	0.00	0.00	0.00	0.00	
Other	0.00	R\$10,988,646.00	0.00	R\$10,988,646.00	
Description of other variable compensation		Vale's Portion of Social Security [INSS]			
Post-employment benefits	0.00	0.00	0.00	0.00	
Employment termination benefits	0.00	R\$ 3,584,251.00	0.00	R\$ 3,584,251.00	
Stock-based compensation	0.00	R\$ 30,239,619.00	0.00	R\$ 30,239,619.00	
	members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (11) and deputy members (10) of the Executive Board.	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 – The payment regarding "Employment termination benefits" was made to an ex-Executive Director who left the Company during the fiscal year ended in 2010.  3 – The amounts shown in the field "Stock-based compensation" includes the amounts paid in the ILP and the Matching programs described in items 13.1 and 13.4.	members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (7) and the deputy members (4) of the Fiscal Board.		
Amount of compensation	R\$ 2,148,084.00	R\$ 94,025,550.00	R\$ 1,096,320.00	R\$ 97,269,954.00	

Total Compensation for the Fiscal Year Ended on December 31, 2009 – Annual Amounts					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members	21.00	6.33	7.00	34.33	
Annual fixed compensation (in R\$)					
Salaries or pro-labore fees	R\$ 3,249,794.00	R\$ 13,763,807.00	R\$ 824,000.00	R\$ 17,837,601.00	
Direct and indirect benefits	0.00	2,975,951.00	0.00	R\$ 2,975,951.00	
Compensation for participation in	0.00	0.00	0.00		
Committees	0.00	0.00	0.00	0.00	
Other	0.00	0.00	0.00	0.00	
Description of other fixed compensation					
Variable Compensation (in R\$)	-	-	-	-	
Bonus	0.00	R\$ 19,057,843.00	0.00	R\$ 19,057,843,00	
Profit share	0.00	0.00	0.00	0.00	
Compensation for participation in					
meetings	0.00	0.00	0.00	0.00	
Commissions	0.00	0.00	0.00	0.00	
Other	0.00	0.00	0.00	0.00	
Description of other variable					
compensation					
Post-employment benefits	0.00	R\$ 282,556.79	0.00	R\$ 282,556.79	
Employment termination benefits	0.00	R\$ 2,981,751.00	0.00	R\$ 2,981,751.00	
Stock-based compensation	0.00	R\$ 3,985,738.00	0.00	R\$ 3,985,738.00	
Observation	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (11) and deputy members (10) of the Executive Board.	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 – The payment regarding "Employment termination benefits" includes payments made to two Executive Director whose contracts were rescinded in Dec/2008 and Mar/2009 respectively.  3 – The amounts shown in the field "Stock-based compensation" includes the amounts paid in the ILP program described in items 13.1 and 13.4.	1 – The number of members corresponds to the average over the year of the cited administrative entity as determined monthly, in accordance with Circular Letter CVM/SEP 007/11.  2 - The field "Number of members" includes the regular members (7) and the deputy members (4) of the Fiscal Board.		
Amount of compensation	R\$ 3,249,794.00	R\$ 43,047,646.79	R\$ 824,000.00	R\$ 47,121,440.7	

# 13.3 Variable Compensation of the executive board, statutory board, and fiscal board

Estimates for the fiscal year to be ended on December 31, 2012				
	Executive Board	Statutory Board	Fiscal Board	Total
Number of members	-	9		9
Bonus (in R\$)				
Minimum amount estimated by compensation plan	-	-	-	-
Maximum amount estimated by compensation plan	-	R\$ 25,791,124	-	R\$ 25,791,124
Amount estimated by the compensation plan if pre- established goals are met	-	R\$ 17,194,082	<u>-</u>	R\$ 17,194,082
Profit share (in R\$)				
Minimum amount estimated by compensation plan	-	-	-	-
Maximum amount estimated by compensation plan	-	-	-	-
Amount estimated by the compensation plan if pre- established goals are met	-	-	-	-

Fiscal year ended on December 31, 2011					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members (1) [sic]	-	10.00	-	10.00	
Bonus (in R\$)					
Minimum amount estimated by compensation plan	-	-	-	-	
Maximum amount estimated by compensation plan	-	R\$ 34,464,477 <sup>2</sup>	-	R\$ 34,464,477	
Amount estimated by the compensation plan if pre- established goals are met	-	R\$ 21,675,771 <sup>2[</sup>	-	R\$ 21,675,771	
Amount effectively paid at the close of the fiscal year		R\$ 24,703,613	-	R\$ 24,703,613	
Profit share (in R\$)					
Minimum amount estimated by compensation plan	-	-	-	-	
Maximum amount estimated by compensation plan	-	-	-	-	
Amount estimated by the compensation plan if pre- established goals are met	-	-	_		
Amount effectively paid at the close of the fiscal year	-	-	-	-	

#### Notes:

<sup>1 –</sup> Corresponds to the number of executive officers and board members, as applicable, to whom variable compensation was paid at the close of the fiscal year, in accordance with the provision of Circular Letter CVM/SEP 07/2011.

2 – Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.

3 – Amount represents 100% of Fixed Annual Compensation paid to the Statutory Board.

Fiscal year ended on December 31, 2010				
	Executive Board	Statutory Board	Fiscal Board	Total
Number of members (1)	-	7 <sup>(2) [sic]</sup>	-	7
Bonus (in R\$)				
Minimum amount estimated by compensation plan	-	0	-	0
Maximum amount estimated by compensation plan	-	R\$ 26,615,414 <sup>(3)</sup>	-	R\$ 26,615,414
Amount estimated by the compensation plan if pre- established goals are met	-	R\$ 17,743,609 <sup>(4)</sup>	-	R\$ 17,743,609
Amount actually acknowledged in the formal results	-	R\$ 24,703,613	-	R\$ 24,703,613
Profit share (in R\$)				
Minimum amount estimated by compensation plan	-	-	-	-
Maximum amount estimated by compensation plan	-	-	-	-
Amount estimated by the compensation plan if pre- established goals are met	-	-	-	-
Amount actually acknowledged in the formal results	-	-	-	-

#### Notes:

- 1 Corresponds to the number of executive officers and board members, as applicable, to whom variable compensation was paid at the close of the fiscal year, in accordance with the provision of Circular Letter CVM/SEP 07/2011.
- 2 Considering one Executive Officer whose contract was rescinded during the fiscal year of 2009.
- 3 Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.
- 4 Amount represents 100% of Fixed Annual Compensation paid to the Statutory Board.

#### 2009

Fiscal year ended on December 31, 2009					
	Executive Board	Statutory Board	Fiscal Board	Total	
Number of members (1)	-	7 <sup>(2)</sup>	-	7	
Bonus (in R\$)					
Minimum amount estimated by compensation plan	-	0	-	0	
Maximum amount estimated by compensation plan	-	R\$ 23,153,617.00 <sup>(3)</sup>	-	R\$ 23,153,617.00	
Amount estimated by the compensation plan if pre- established goals are met	-	R\$ 15,435,745.00 <sup>(4)</sup>	-	R\$ 15,435,745.00	
Amount actually acknowledged in the formal results	-	R\$ 19,057,843.00	-	R\$ 19,057,843.00	
Profit share (in R\$)					
Minimum amount estimated by compensation plan	-	-	-	-	
Maximum amount estimated by compensation plan	-	-	-	-	
Amount estimated by the compensation plan if pre- established goals are met	-	-	-	-	
Amount actually acknowledged in the formal results	-	-	-	-	

#### Notes:

- 1 Corresponds to the number of executive officers and board members, as applicable, to whom variable compensation was paid at the close of the fiscal year, in accordance with the provision of Circular Letter CVM/SEP 07/2011.
- 2 Considering one Executive Officer whose contract was rescinded during the fiscal year of 2009.
- 3 Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.
- 4 Amount represents 100% of Fixed Annual Compensation paid to the Statutory Board.

13.4 With respect to the stock-based compensation plan for the Executive Board and the Statutory Board, which was in force in the last fiscal year and which is estimated for the current fiscal year:

The Company has two stock-based compensation plans for the Statutory Board, which do not extend to the Executive Board. Neither plan grants permission for Company stock purchasing option, but only the payment of a bonus as per the market quotation for the Company stock.

#### a. General Terms and Conditions

- Long-Term Incentive Plan (ILP): Long-term variable payment based on the Company's expected performance in the future, with the aim of retaining and engaging the Managers and aligning them with the future vision of the Company. The sum is defined as 75% of the bonus (profit share) for Executive Directors and 125% of the bonus (profit share) for the calculated on the value effectively paid for said bonus, and transformed, as a reference, into a number of ordinary stock issued by Vale (virtual shares), considering the average price for the Company's ordinary stock over the last sixty trading days of the previous year. Should the executive remain with the Company, at the end of three years, the number of virtual shares is transformed into a pecuniary value according to the average price of the ordinary stock issued by the Company over the last sixty trading days in the third year. The program also compares the Company's performance against twenty other companies of a similar size (peer group); should Vale come out first in this ranking, the amount calculated is increased by 50%. This percentage is reduced on a sliding scale, such that from first to fifth place, the percentage remains the same, and as of 15th place in the ranking, no payment is made.
- Matching: Like the ILP, Matching is a variable, long-term form of compensation based on the Company's expected performance in the future. To be eligible to take part in the Matching scheme, an executive may allocate a percentage of his/her bonus (short-term variable compensation) for the purchase of Class A preferred stock issued by Vale, through the mediation of a pre-defined financial institution, under market conditions, on the days set in the scheme, without any benefit being offered by Vale. The percentage bonus that may be allocated per executive for participating in the Matching scheme is based on an assessment of their performance and potential. Those executives who acquire shares under the terms and conditions of the Matching scheme on the stipulated dates and who are still in the employment of Vale three years after they were acquired and who have kept the ownership of all the shares purchased will be eligible for a cash prize. At the end of the three-year period, when the cycle reaches its conclusion, the Managers check that the terms of the scheme, as set forth in the manual, have been followed. Assuming that the terms of the plan have been observed, the Company will pay the executive a net value, as a prize, worth the amount they had purchased in shares as part of the scheme. After the incentive has been paid, the executives are free to sell the preferred stock issued by Vale that they had acquired at the beginning of the Matching scheme, in compliance with existing legislation. The main aim of this scheme is to encourage an "owner's vision", while also helping to retain executives and reinforce a sustained performance culture.

# b. Major Plan Objectives

The major objectives of both the ILP and the Matching Plan are retention of the Company's major executives, keep them engaged to the Company and encourage the "stockholder view", so that they become committed to mid and long terms results.

#### c. How the plans contribute for the achievement of these objectives

Both the ILP and the Matching Plan promote the alignment of the stockholders` and the statutory board members` interests, as they ensure gains for the executives only as long as there are gains for the Company as well.

#### d. Where the plans fit into the Company's compensation policy

Both the ILP and the Matching Plan fit into Vale's compensation policy once they constantly foster a competitiveness level that complies with the Company business and the competitive market context. Both the ILP and the Matching Plan have been designed upon the support provided by specialized consulting services and upon the consideration of domestic and international market trends and moves.

# e. How the plans promote the alignment between management and the Company interests at short, mid and long term

The design of both the ILP and the Matching Plan lies upon the executive's annual performance and its baseline is the short term variable compensation for assignation of incentives. The Plans also comprise the Company's performance rate upon company stocks fluctuated value in the past three years and the Company's performance relative to other companies of similar size within the same industry and the same reference period. Thus, the plans align the short, medium- and long-term interests of both the managers and the Company.

#### f. Maximum number of comprised stocks

Not applicable. No stock purchasing option is granted within the scope of either the ILP or the Matching Plan. The number of virtual ordinary stocks granted as reference within the scope of ILP plan varies according to each executive's short term variable compensation and the average quotation for Vale's issued stocks within a specific number of stock market floor sessions prior to such grant. Within the scope of the Matching Plan, an executive is given the option to allocate 30 or 50% of his/her bonus to purchase the Company's class A preferred stocks and so become eligible for the plan, taking into consideration the evaluation of his/her performance and potential.

#### g. Maximum number of options to be granted

Not applicable. No stock purchasing option is granted within the scope of either the ILP or the Matching Plan.

#### h. Stock purchasing conditions

Not applicable. No Company stock purchasing option is granted to executives within the scope of either the ILP or the Matching Plan. Once assessed, the amount owed to executives within the scope of the Plans is paid in cash.

# i. Criteria for stock pricing or option reference period

Not applicable. As no stock purchasing option is granted within the scope of either Plan, it makes no sense setting criteria for stock pricing or option reference period.

With respect to the ILP Plan, the amount owed to executives is calculated as per the valuation of a given number of Vale's virtual ordinary stocks within the period of the past three years, and is based upon the stock average initial quotation of the last 60 stock market floor sessions prior to the incentive grant, and the stock average final quotation at the closing of the last 60 stock market floor sessions of the third year. This figure is then multiplied by a Company performance factor in relation to a peer group comprising 20 similar-size global companies. Face to the Company ranking within the latter global companies group, the ILP Plan may have its amount expanded by up to 50% or it might be even zeroed.

However, for the Matching Plan, the net amount to be paid to executives as incentives is calculated upon the number of Company class A preferred stocks purchased by the executive in order to become eligible to the Plan.

# j. Criteria for establishing the reference period

Not applicable. As mentioned above, no Company stock purchasing option is granted within the scope of either the ILP or the Matching Plan. Therefore, there is no reference period. However, both the ILP and the Matching Plan pre-establish that the payment of incentives be made after a three-year grace period.

### k. Liquidation conditions

Both the ILP and the *Matching* Plan pre-establish that premiums be paid in cash.

#### I. Restrictions to stock transfer

With respect to the Matching Plan, the executive will lose his/her right to the premium if he/she transfers, within the three-year period, any Company preferred stock that is plan-bonded.

Not applicable to the ILP Plan, though, once this Plan's participants are not required to retain their stockholding position in the company nor are they granted any stocks within the scope of the Plan.

# m. Criteria and events that, upon occurrence, shall result in the plan suspension, change or extinction

With respect to the Matching Plan, any transference of Vale's issued preferred stocks that are plan-bonded before the three-year grace period or the executive's severance generate the extinction of any rights whatsoever that they would otherwise be entitled to within the scope of the Plan.

However, with respect to the ILP Plan, the executive's severance generates the extinction of any rights whatsoever that they would otherwise be entitled to within the scope of the Plan.

# n. Effects generated by the Company's Board and Committee Manager's departure upon his/her rights as provided by the stock-based compensation plan

As the Plan works as a retention mechanism, if the Manager resigns, he/she shall lose all his/her rights to the long-term plans – ILP and Matching. In case the Manager's contract is rescinded or not renewed by the Company, the participant shall receive the values he had purchased prior to the contract rescission or termination date.

- 13.5 Participation in stock, quotas, or other convertible securities held by executive officers and fiscal council members by board or committee
  - a. The number of stocks or quotas issued by the Company, held directly or indirectly, in Brazil or overseas, by its board of directors members, statutory directors, or fiscal council members, grouped by board or committee, on the closing day of the last accounting reference period:

# Shares issued by VALE S.A.

Stockholders 12/31/11	Common	Preferred
Board of Directors	1,044	46,244
Executive Officers	29,300(*)	412,532(*)
Fiscal Council	0	0
Total	54,344	648,305

- (\*) Including 20,000 VALE shares and 90,455 VALE.P shares owned as *American Depositary Receipts* (ADRs), at the New York Stock Exchange.
  - b. The number of stocks or quotas and other securities convertible into shares or quotas issued by the direct or indirect controllers of the Company, held directly or indirectly, either in Brazil or overseas, by its board of directors members, statutory directors, or fiscal council members, grouped by board or committee, on the closing day of the last accounting reference period:

### Shares issued by VALEPAR S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	11	0
Executive Officers	0	0
Fiscal Council	0	0
Total	11	0

# Shares issued by LITEL PARTICIPAÇÕES S.A.

Stockholders	Common	Preferred
12/ 31/11		
Board of Directors	1	0
Executive Officers	0	0
Fiscal Council	0	0
Total	1	0

#### Shares Issued by BRADESPAR S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	408	1,656
Executive Officers	0	0
Fiscal Council	0	0
Total	408	1,656

Stockholders	Common	Preferred
12/31/11		
Board of Directors	14,442	0
Executive Officers	0	0
Fiscal Council	0	0
Total	14,442	0

#### Shares issued by ELETRON S.A

Stockholders 12/31/11	Common	Preferred
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

### Shares issued by OPPORTUNITY ANAFI PARTICIPAÇÕES S.A

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

#### Shares issued by BELAPART S.A

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

#### Shares issued by VALETRON S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

#### **Shares issued by VALEFERTILIZANTES S.A.**

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

c. The number of stocks or quotas and other securities convertible into shares or quotas issued by the Company's subsidiaries, held directly or indirectly, either in Brazil or overseas, by its board of directors members, statutory directors, or fiscal council members, grouped by board or committee, on the closing day of the last accounting reference period:

#### Shares issued by FERROVIA CENTRO ATLÂNTICA S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

#### Shares issued by Ferrovia Norte Sul S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

#### Shares issued by LOG-IN - LOGÍSTICA INTERMODAL S/A

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	-	0
Fiscal Council	0	0
Total		0

#### Item 14

#### 14.1 - Description of human resources

#### the number of company employees (total, by groups based on activity, and by geographic location)

The table below shows the number of employees of the Company and its controlled companies for the financial years closed December 31, 2009, 2010, and 2011 by activity and by geographic location:

#### Financial Year ended December 31st of:

	2009	2010	2011
Total number of company employees	60,036	70,785	79,646
Per business area			
Ferrous	25,006	25,465	27,620
Non ferrous	19,358	17,765	15,252
Coal	1,103	1,776	2,741
Logistics	14,620	14,116	17,657
Fertilizers	1,576	6,284	7,127
Others (1)	1,798	5,379	9,249
Per geographical area			
Brazil	48,600	56,012	62,667
Canada	6,757	6,390	6,609
Indonesia	3,467	3,144	3,218
New Caledonia	856	950	1,123
Australia	834	893	1,055
USA	572	-	8
China	517	136	135
Mozambique	125	570	1,294
Peru	297	523	800
Colombia	177	361	457
Chile	58	183	203
Others (2)	1,201	1,623	2,077

<sup>(1)</sup> This includes the following: Exploration, Energy, Marketing and Sales, Strategy, Engineering, Institutes and Foundations, Project Management, Shared Services, Sustainability, and Corporate Services.

### II) the number of outsourced employees (total, by groups based on activity, and by geographic location)

The table below shows the number of outsourced employees of the Company and its controlled companies for the financial years closed December 31, 2009, 2010, and 2011 by activity and by geographic location:

<sup>(2)</sup> This includes the following: Angola, Argentina, Austria, Congo, Dubai, England, France, Guinea, Hong Kong, India, Japan, Kazakhstan, Liberia, Malaysia, Mongolia, New Caledonia [sic], Norway, Oman, Paraguay, Philippines, Singapore, South Africa, South Korea, Switzerland, Taiwan, Thailand, Wales, and Zambia.

	Financial Year ended December 31st of:		
-	2009	2010	2011
Total number of outsourced employees	80,571	103,300	108,084
Per business area			
Ferrous	20,551	12,674	10,427
Non ferrous	30,139	16,024	16,611
Coal	5,535	1,194	5,483
Logistics	12,932	10,392	8,614
Fertilizers	-	10,043	11,975
Others (1)	14,195	52,973	54,974
Per geographical area			
Brazil	63,229	74,857	83,723
Canada	1,189	3,583	5,149
Indonesia	2,710	3,169	5,315
New Caledonia	3,756	4,701	3,131
Australia	842	437	489
USA	16	-	-
China	5	-	-
Mozambique	4,104	7,729	4,121
Peru	3,027	575	1,313
Colombia	606	860	1,109
Chile	877	-	504
Others (2)	2,991	1,056	3,230

<sup>(1)</sup> This includes the following: Exploration, Energy, Marketing and Sales, Strategy, Engineering, Institutes and Foundations, Project Management, Shared Services, Sustainability, and Corporate Services.

#### c. employee turnover index

The index of employee turnover (churning index) for the financial years ending in 2009, 2010, and 2011 was 10.5%, 6.0%, and 4.7%, respectively.

#### d. the company's exposure to labor liabilities and contingencies

The company is a defendant in 16,999 labor and pension-related lawsuits, involving a total value of R\$ 5.8 billion, for which there is a provision of R\$ 1.2 billion by reason of the risks involved. The labor and pension-related lawsuits brought against the Company deal with matters such as: overtime, hours traveling, additional pay for unhealthy and dangerous working conditions, pay equity, and outsourcing, among others.

For a detailed description of the nature of the labor cases considered relevant to the business of the Company or its controlled companies, see item 4.3 of this Reference Form.

#### 14.2 Relevant changes – Human resources

<sup>(2)</sup> This includes the following: Angola, Argentina, Austria, Congo, England, Ethiopia, France, Guinea, Hong Kong, India, Japan, Kazakhstan, Liberia, Malaysia, Mongolia, New Caledonia [sic], Norway, Oman, Paraguay, Philippines, Singapore, South Africa, South Korea, Switzerland, Taiwan, Thailand, Wales, and Zambia.

Regarding the number of workers, there was a decrease in the number of Company employees in the Non ferrous business area, which is a result of the sale of Aluminum assets. The beginning of operations of projects in Oman led to a reduction in the number of outsourced employees in the Ferrous business area. The same thing occurred with projects in Mozambique and led to an increase in the number of Company employees in that country.

#### 14.3 Description of Company employee remuneration policies

#### a. Salary and variable remuneration policy

Vale follows the practice already adopted in recent years to carry out comparative research on remuneration and offers all its own employees a salary equal to or higher than the legal minimum practiced in each location. Additionally, in order to strengthen the culture of constant pursuit of results, the remuneration package for each employee includes the payment of variable remuneration, calculated according to the results achieved by the performance of the Company, the department, and the individual or the team.

In Vale's own units, performance assessment is based on annual goals aligned to Company strategy. These evaluations are conducted through an interactive process between employees and their managers, as well as using computer systems, in which the results are logged. The goals also serve as a basis for the Variable Remuneration Program, which awards employees for meeting or exceeding them. Each employee has a panel of annual goals, comprised of three blocks: Company Goals, Department Goals, and Individual/Team Goals. At the beginning of each year the results are evaluated in terms of the goals from the previous year. Each goal totally or partially reached corresponds to a number of points and the sum of the points of the three blocks corresponds to the variable remuneration of the employee.

For the short-term performance cycle (annual), the goals are defined based on the established, principal strategic objectives and annual budget, measuring economical-financial performance, technical and operational performance, and sustainability (management, health and safety, and environment).

Since November 2007, Vale has signed collective agreements valid for two years with all trade unions representing 100% of the total number of employees in Brazil. As a result of the agreements, for the period 2011-2013 there was a salary increase of 8.6% in 2011 and there will be another of 8.0% in 2012, resulting in a total of 17.29% of readjustment. In Canada, Australia, Indonesia, New Caledonia, Mozambique, Peru, England, France, Norway, Oman, Chile, Columbia, and Argentina, Vale negotiates collective agreements with workers' trade unions, with a duration of typically between one and five years.

Certain employees who are part of the management framework of Vale may participate in long-term incentives, depending on eligibility for each plan, such as: Matching, a program based on shares with the objective of compensating and retaining managers, in which the eligible employee invests in shares of Vale at time 0 and, if he meets certain requirements, the Company grants, after three years, an equivalent number of shares as were purchased at time 0; Project Bonus, a long-term program directed toward leaders of capital projects based on performance and sustainability of the projects; and Long-Term Incentive Program, a program that grants virtual shares of Vale to executives, taking into consideration the relative performance of the total return to the shareholder over a three-year period compared with a group of similar companies (peers) during the same period.

The salary and variable remuneration policy for non-statutory directors is described in item 13 of this Reference Form.

#### b. Benefits policy

The benefits are part of the total compensation package that ensures the employees' – and their legal dependents' – protection and security during the term of the contract of employment.

Vale establishes global guidelines for granting benefits to ensure that they are offered consistently in the various countries where Vale is present, bearing in mind the goals of its business in each locality, the human relations philosophy and corporate strategy, in addition to the legal requirements of the country and the given local market conditions.

Benefits considered essential are social security, health plan, life and accident insurance, and income plans for times when the employee leaves the Company.

Benefits such as transport vouchers, education, Employee Assistance Plan, meals at work, and personal accident insurance are offered in accordance with the specificity of each location.

As a result of the process of globalization of the benefits offered, Vale contracted the provider Global de Seguro Saúde (Global Health Insurance) to meet the needs all expatriate employees and their dependents in an equitable way, offering the same coverage anywhere in the world.

### c. Characteristics of compensation plans based in shares for non-administrative employees

Compensation plans based in shares described in item 13.4 of this Reference Form, which are the Long-Term Incentive Program and Matching, include the Company's non-statutory directors, as well as managerial-level employees. The characteristics of these plans are described in item 13.4 of this Reference Form.

#### 14.4 - Description of the relationships between the issuer and trade unions

Vale builds a harmonious relationship with trade unions all around the world. That covers approximately 50 trade unions in Brazil and 15 trade unions in the rest of the world. Today, there are collective agreements in Brazil, Canada, the United Kingdom, Norway, France, Peru, Argentina, Paraguay, Malawi, Mozambique, Australia, New Caledonia, and Indonesia. In addition, preliminary collective bargaining negotiations are underway in Oman and Chile.

In 2011 all collective agreements were concluded without the occurrence of strikes, unlike other large mining companies.

In general, Vale is concluding collective agreements with longer terms of validity (respecting the restrictions imposed by the legislation of each country). For example, Vale was the first company in New Caledonia to sign a three-year agreement. The local practice up to that time had been to have collective agreements valid for only one year.

Vale has been a pioneer in Brazil in the conclusion of collective agreements with a duration of two years (the maximum allowed by Brazilian legislation), without annual wage-renegotiation clauses or indexing, which demonstrates not only the confidence of trade unions, but also that of its employees in the Company.

Vale was also the first company in Brazil to sign an agreement for profit sharing with defined goals and duration of two years.

#### Shares issued by MRS LOGÍSTICA S.A.

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	1	0
Fiscal Council	0	0
Total	1	0

#### Shares issued by PT VALE INDONESIA TBK

Stockholders	Common	Preferred
12/31/11		
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

# 13.6 With respect to stock-based compensation, as acknowledged in the past three fiscal years and as estimated for the current fiscal year, for executive board and the statutory board.

The Matching Plan was established in 2008 and provides for a three-year grace period, so, the incentive within the scope of this Plan shall only be due by the Company three years after its application. Therefore, the value shown below for this program represents an estimation pursuant to the projection of increase of the shares price up to the date foreseen for the payment.

The information below that refers to the Long Term Incentive Plan (ILP), described in detail in 13.4 (I), does not include or grant stock purchasing option, because it is based on the quotations of the Company's common shares in order to define the value in kind to be paid as incentive to the executive directors; that is why most of the information appearing in the following tables does not apply.

#### 2012

Estimates for the fiscal year to be ended on December 31, 2012

Estimates for the fiscal year to	De ended on Decemi	Del 31, 2012	
	Executive Board	Statutory Board	Total
Number of members	-	9.00	9.00
With respect to each option grant			
Grant date	-	January and March 2009 <sup>1</sup>	-
Number of granted options	-	-	-
Deadline for options to become redeemable	-	January and March 2012 <sup>2</sup>	-
Deadline for redeeming options	-	-	-
Grace period for stock transfer	-	-	-
Pondered average price within accounting reference period for each of the following option groups:	-		
Outstanding at the beginning of the accounting reference period	-	-	-
Not redeemed throughout accounting reference period	-	-	-
Redeemed within accounting reference period	-	-	•
Expired within accounting reference period	-	-	-
Fair option price on grant date	-	R\$ 13,024,236 <sup>3</sup>	R\$ 13,024,236 <sup>3</sup>
Potential dilution in case all granted options were redeemed	-	-	-

- (1) In January 2009 the ILP cycle began and in March 2009 the Matching cycle began.
- (2) In January 2012 the ILP cycle ended and in March 2012 the Matching cycle will end.
- (3) Paid values regarding the ILP Program (cycle ended in January, 2012) and values estimated for the future payment of the Matching Program

#### 2011

Fiscal year ended on December 31, 2011

	Executive Board	Statutory Board	Total
Number of members (1) [sic]	-	7.75	7.75
With respect to each option grant			
Grant date	-	January and April 2008 <sup>1</sup>	-
Number of granted options	-	-	-
Deadline for options to become redeemable	-	January and April 2011 <sup>2</sup>	-
Deadline for redeeming options	-	-	-
Grace period for stock transfer	-	-	-
Pondered average price within accounting reference period for each of the following option groups:	-		
Outstanding at the beginning of the accounting reference period	-	-	-
Not redeemed throughout accounting reference period	-	-	-
Redeemed within accounting reference period	-	-	-
Expired within accounting reference period	-	-	-
Fair option price on grant date	-	R\$ 17,677,508 <sup>3</sup>	R\$ 17,677,508 <sup>3</sup>
Potential dilution in case all granted options were redeemed	-	-	-

- (1) Corresponds to the number of executive officers and board members, as applicable, to whom remuneration was Corresponds to the number of executive officers and board members, as applicable, to whom remainerand attributed based on shares as shown in the fiscal year statements, in accordance with Circular Letter CVM/SEP 007/11.
   In January 2008 the ILP cycle began and in April 2008 the Matching cycle began.
   In January 2011 the ILP cycle ended and in April 2011 the Matching cycle ended.
   Paid values regarding the ILP and Matching Programs (cycle ended 2011).

#### 2010

Fiscal year ended on December 31, 2010

	Executive Board	Statutory Board	Total
Number of members (1)	-	7.00	7.00
With respect to each option grant			
Grant date	-	January 2007	-
Number of granted options	-	-	-
Deadline for options to become redeemable	-	January 2010	-
Deadline for redeeming options	-	-	-
Grace period for stock transfer	-	-	-
Pondered average price within accounting reference period for each of the following option groups			
Outstanding at the beginning of the accounting reference period	-	-	-
Not redeemed throughout accounting reference period	-	-	-
Redeemed within accounting reference period	-	-	-
Expired within accounting reference period	-	-	-

	Executive Board	Statutory Board	Total
Fair option price on grant date	-	R\$ 30,239,619 <sup>(2)</sup>	R\$ 30,239,619
Potential dilution in case all granted options were redeemed	-	-	-

- Note:

  (1) Corresponds to the number of executive officers and board members, as applicable, to whom remuneration was attributed based on shares as shown in the fiscal year statements, in accordance with Circular Letter CVM/SEP 007/11.

  (2) Values paid regarding the ILP cycle ended in January 2010.

#### 2009

Fiscal year ended on December 31, 2009

Fiscal year ended on December 31, 2009			
	Executive Board	Statutory Board	Total
Number of members (1)	-	7.00	7.00
With respect to each option grant			
Grant date	-	February 2009	-
Number of granted options	-	-	1
Deadline for options to become redeemable	-	January 2012	-
Deadline for redeeming options	-	-	1
Grace period for stock transfer	-	-	-
Pondered average price within accounting reference period for each of the following option groups			
Outstanding at the beginning of the accounting reference period	-	-	-
Not redeemed throughout accounting reference period	-	-	-
Redeemed within accounting reference period	-	-	-
Expired within accounting reference period	-	-	-
Fair option price on grant date	-	R\$ 14,566,434.00 <sup>(2)</sup>	R\$ 14,566,434.00
Potential dilution in case all granted options were redeemed	-	-	-

<sup>(1)</sup> Corresponds to the number of executive officers and board members, as applicable, to whom remuneration was attributed based on shares as shown in the fiscal year statements, in accordance with Circular Letter CVM/SEP 007/11.

(2) Calculation made based on a percentage of the bonus paid February 2009

## 13.7 With respect to outstanding options for the Executive Board and the Statutory Board at the closing of the last accounting reference period

Not applicable, since the remuneration plans based on Company shares do not include the granting of options for the purchase of shares. See items 13.4 and 13.6.

### 13.8 With respect to redeemed and delivered options for the Executive Board and the Statutory Board, in the past three accounting reference periods

Not applicable, since the remuneration plans based on Company shares do not include the granting of options for the purchase of shares. See items 13.4 and 13.6.

13.9 Summary of relevant information aiming at a broader understanding of data presented under items 13.6 through 13.8 above, as well as an explanation of the pricing method used for stock and option values

Not applicable. See items 13.4 and 13.6.

### 13.10 Private Pension Funds in force granted to members of the executive board and the statutory board

Pursuant to contract provisions, the Company pays for both the employer's and the employee's share, up to 9% of the fixed compensation, to Valia – Fundação Vale do Rio Doce de Seguridade Social (Vale do Rio Doce Social Security Foundation), or to any other private pension fund chosen by the Statutory Board member.

At Valia, the minimum required age for a retirement plan is 45 years of age, after having contributed for the given plan for a minimum grace period of 5 years.

Valia – Fundação Vale do Rio Doce de Seguridade Social

Valia – Fundação Vale do Rio Doce de Seguridade Social			
	Executive Board	Statutory Board	Total
Number of members (1)		8 members	29
Plan name	Benefits Plan "\	/ale Mais" (Plano de Bene	efício Vale Mais)
Number of managers that are eligible for retirement benefits	-	6, of which (i) 2 with Normal Retirement and (ii) 4 with Early Retirement	
Eligibility for early retirement	-	- be at least 45 years old;  - have at least 5 years of uninterrupted participation in VALIA, counting from the most recent date of entering the Vale Mais Plan (except for participants migrating from the Defined Benefit Plan (Benefits Plan now closed) to the Vale Mais Plan;  - have rescinded the labor contract with the employer or have lost the position of administrator.	-
Updated value of accumulated contributions to social security and pension plan up until the closing of the last accounting reference period, minus amounts paid by managers	-	R\$ 6,489,202.92 <sup>(2)</sup>	R\$ 7,331,786
Total accumulated amount of contributions paid throughout the last accounting reference period, minus amounts paid by managers	-	R\$ 950,703.77 <sup>(3)</sup>	R\$ 1,039,644

[continues]

ontinueuj	- The active
Eligibility for advanced redemption and conditions	- The active participant who, on the date of rescission of his/her labor contract with the employer or on the date of loss of the position of administrator, does not opt to become an independent contributor or associate, nor opts for the institution of portability and is not enjoying benefits from the Vale Mais Plan, is eligible to receive the redemption.  The amount of the redemption shall be equal to: 100% of the participant's account + 1% of the employer's account per month of normal, ordinary contribution made by the participant to the Vale Mais Plan

- (1) Corresponds to the number of executive officers and board members, as applicable, enrolled in the benefits plan, in accordance with Circular Letter CVM/SEP 007/11.
- (2) Amount corresponding to the sum of the Accounts of the Employer belonging to the participants on 12/31/2011.
- (3) Amount corresponding to the sum of the ordinary contributions made by the employer in the name of each one of the participants during the year of 2011.

### 13.11 – Maximum, minimum, and average individual compensation of the executive board, statutory board, and the fiscal board

#### Justification for not filling out this table.

Information not disclosed due to injunctive relief granted in the case of ordinary proceedings No. 2010.51.01.002888-5 by the Honorable Judge of the 5th Circuit Court of Federal Justice of Rio de Janeiro to IBEF/RJ, to which Vale and the company executives are linked. The concerning preliminary injunction continuous in force due to the decision of the High Court of Justice in MC 17350–RJ.

# 13.12 Contract agreements, insurance policies or other instruments that might underlie the compensation or indemnity mechanisms applicable to managers in the occurrence of dismissal or retirement, and the financial burden they result in for the Company

The contracts signed by members of the Statutory Board have a provision for indemnity for contract rescission or non-renewal once such events are generated by the Company. In the latter case, the following amounts and conditions are provided for: (i) 2 (two) fixed annual salaries for the Managing President; or (ii) 1 (one) fixed annual salary for the Statutory Directors. Indemnity payment is made in four quarterly payments and conditioned to a non-compete agreement to be in force for the following 12 months.

The contract also provides for a Life Insurance Policy, whose insured capital is worth twice as much as the fixed annual compensation, for the purposes of death or total permanent disability (TPD).

No other type of contract agreement is drawn with members of the Executive Board or the Fiscal Board. The same applies to any other types of contract agreements, life insurance policies or any other instruments that might underlie compensation or indemnity mechanisms in case an executive is dismissed or retires.

13.13 With respect to the last three accounting reference periods, disclosing the percentage of total compensation for each board or committee as acknowledged in the Company results and which applies to members of the executive board, of the statutory board, or the fiscal board, that are somehow connected to direct or indirect affiliates, in compliance with the accounting rules that govern this matter.

<b>Board or Committee</b>	Fiscal year ended on December 31, 2011		
Executive Board	74.00%		
Statutory Board	0.00%		
Fiscal Board	15.00%		
<del></del>	<u></u>		
Board or Committee		Fiscal year ended on December 31, 2010	
Executive Board	90.00%		
Statutory Board	0.00%		
Fiscal Board	14.00%		
Board or Committee		Fiscal year ended on December 31, 2009	
Executive Board	83.37%		
Statutory Board	0%		
Fiscal Board	25.00%		

13.14 - With respect to the last three accounting reference periods, disclosing the amounts as acknowledged in the Company results for compensation paid to members of the executive board, of the statutory board or the fiscal board, grouped by board or committee, for any purpose other than the function they perform, such as commissions, consulting, or advisory services.

No payments in the last three accounting reference periods of any other type rather than for the function they perform were made to any member of the Executive Board, of the Statutory Board, or the Fiscal Board.

13.15 With respect to the last three accounting reference periods, disclose the amounts as acknowledged in the results released by direct or indirect affiliates, subsidiaries or companies under common control, by members of the executive board, of the statutory board or the fiscal board, grouped per board or committee, specifying the purpose of such amounts paid to the referred individuals.

	FISCAL YEAR ENDED ON 12/31/2011				
	EXECUTIVE BOARD	STATUTORY BOARD	FISCAL BOARD	TOTAL	
DIRECT AND INDIRECT CONTROLLING ENTITIES	0	0	0	0	
COMPANIES CONTROLLED BY THE COMPANY	0	R\$ 1,023,381.00 <sup>1</sup> (Fixed annual compensation: R\$ 766,330.00/ Direct and indirect benefits: R\$ 257,051.00	θ	R\$ 1,023,381.00	
COMPANIES UNDER COMMON CONTROL	0	0	0	0	

Note:

1 - The above amount refers to compensation paid to an Executive Manager working at our controlled company Vale Canada.

	FISCAL YEAR ENDED ON 12/31/2010				
	EXECUTIVE BOARD	STATUTORY BOARD	FISCAL BOARD	TOTAL	
DIRECT AND INDIRECT CONTROLLING ENTITIES	0	0	0	0	
COMPANIES CONTROLLED BY THE COMPANY	0	R\$ 961,667.00 <sup>1</sup> (Fixed annual compensation: R\$698,809.00/ Direct and indirect benefits: R\$ 262,858.00)	0	R\$ 961,677.00	
COMPANIES UNDER COMMON CONTROL	0	0	0	0	

Note:

1 - The above amount refers to compensation paid to an Executive Manager working at our controlled company Vale Canada.

	FISCAL YEAR ENDED ON 12/31/2009				
	EXECUTIVE BOARD	STATUTORY BOARD	FISCAL BOARD	TOTAL	
DIRECT AND INDIRECT CONTROLLING ENTITIES	0	0	0	0	
COMPANIES CONTROLLED BY THE COMPANY	0	R\$ 707,352.00 <sup>1</sup> (Fixed annual compensation: R\$ 515,523.00 / Direct and indirect benefits: R\$ 191,829.00)	0	R\$ 707,352.00	
COMPANIES UNDER COMMON CONTROL	0	0	0	0	

Note:

1 – The above amount refers to compensation paid to an Executive Manager working at our controlled company Vale Canada

#### 13.16 Other information about the Company judged relevant

The proposal for global compensation of the managers for the fiscal year 2012 and submitted to the General Annual Meeting intended to fix as a global sum the amount of up to R\$ 110,000,00 (one hundred million reais), to be distributed by the Executive Board, taking into account the responsibilities of the administrators, the time devoted to their positions, the competence, the professional reputation, and the value of their services in the market.

The above amount comprises: (a) up to R\$ 5,896,000,00 (five million, eight hundred and ninetysix thousand reais) corresponding to the fixed compensation of the members of the Executive Board, and of the members of the Fiscal Board, under the terms of Act No. 6404/76, Art. 163; (b) up to R\$ 76,388,666.00 (seventy six million, three hundred and eighty eight thousand, six hundred and sixty six reais) corresponding to the fixed and variable compensation of the Executive Directors, which takes into account an Executive Board comprised by 9 Executive Directors. The individual and fixed compensation is compatible with the values paid to the executive members of similar companies, while the payment of the variable compensation. corresponding to the bonus and the long-term incentive, is linked to the fulfillment of predetermined goals, based on the performance of the Company. Thus, the payment of the variable compensation is equivalent to the partial or total fulfillment of the predetermined goals, and they may also be not owed in the event of not reaching such goals; (c) up to R\$ 26,755,334.00 (twenty-six million, seven hundred and fifty five thousand and three hundred and thirty four reais) corresponding to taxes and charges that have an incidence over the compensation and the responsibility of Vale, and also, benefits of any nature; and (d) up to R\$ 960,000.00 (nine hundred and sixty thousand reais) corresponding to the remuneration of the members of the Advisory Committees and charges related to that remuneration.

It is important to note that the proposal for overall compensation shown above considers the remuneration of the members of the Advisory Committees and charges related to that remuneration, an amount that is not shown in item 13.2.

Moreover, it is proposed the ratification of amounts paid to directors in fiscal year 2011, with the supplemental amount of R\$ 93,346,090.00 (ninety-three million, three hundred forty-six thousand and ninety reais).

#### 14.1 - Description of human resources

### III) the number of company employees (total, by groups based on activity, and by geographic location)

The table below shows the number of employees of the Company and its controlled companies for the financial years closed December 31, 2009, 2010, and 2011 by activity and by geographic location:

#### Financial Year ended December 31st of:

	2009	2010	2011
Total number of company employees	60,036	70,785	79,646
Per business area			
Ferrous	25,006	25,465	27,620
Non ferrous	19,358	17,765	15,252
Coal	1,103	1,776	2,741
Logistics	14,620	14,116	17,657
Fertilizers	1,576	6,284	7,127
Others (1)	1,798	5,379	9,249
Per geographical area			
Brazil	48,600	56,012	62,667
Canada	6,757	6,390	6,609
Indonesia	3,467	3,144	3,218
New Caledonia	856	950	1,123
Australia	834	893	1,055
USA	572	-	8
China	517	136	135
Mozambique	125	570	1,294
Peru	297	523	800
Colombia	177	361	457
Chile	58	183	203
Others (2)	1,201	1,623	2,077

<sup>(1)</sup> This includes the following: Exploration, Energy, Marketing and Sales, Strategy, Engineering, Institutes and Foundations, Project Management, Shared Services, Sustainability, and Corporate Services.

### IV) the number of outsourced employees (total, by groups based on activity, and by geographic location)

The table below shows the number of outsourced employees of the Company and its controlled companies for the financial years closed December 31, 2009, 2010, and 2011 by activity and by geographic location:

Financial Year ended December 31st of:

<sup>(2)</sup> This includes the following: Angola, Argentina, Austria, Congo, Dubai, England, France, Guinea, Hong Kong, India, Japan, Kazakhstan, Liberia, Malaysia, Mongolia, New Caledonia [sic], Norway, Oman, Paraguay, Philippines, Singapore, South Africa, South Korea, Switzerland, Taiwan, Thailand, Wales, and Zambia.

	2009	2010	2011
Total number of outsourced employees	80,571	103,300	108,084
Per business area			
Ferrous	20,551	12,674	10,427
Non ferrous	30,139	16,024	16,611
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Logistics	12,932	10,392	8,614
Fertilizers	-	10,043	11,975
Others (1)	14,195	52,973	54,974
Per geographical area			
Brazil	63,229	74,857	83,723
Canada	1,189	3,583	5,149
Indonesia	2,710	3,169	5,315
New Caledonia	3,756	4,701	3,131
Australia	842	437	489
USA	16	-	-
China	5	-	-
Mozambique	4,104	7,729	4,121
Peru	3,027	575	1,313
Colombia	606	860	1,109
Chile	877	-	504
Others (2)	2,991	1,056	3,230

<sup>(1)</sup> This includes the following: Exploration, Energy, Marketing and Sales, Strategy, Engineering, Institutes and Foundations, Project Management, Shared Services, Sustainability, and Corporate Services.

#### c. employee turnover index

The index of employee turnover (churning index) for the financial years ending in 2009, 2010, and 2011 was 10.5%, 6.0%, and 4.7%, respectively.

#### d. the company's exposure to labor liabilities and contingencies

The company is a defendant in 16,999 labor and pension-related lawsuits, involving a total value of R\$ 5.8 billion, for which there is a provision of R\$ 1.2 billion by reason of the risks involved. The labor and pension-related lawsuits brought against the Company deal with matters such as: overtime, hours traveling, additional pay for unhealthy and dangerous working conditions, pay equity, and outsourcing, among others.

For a detailed description of the nature of the labor cases considered relevant to the business of the Company or its controlled companies, see item 4.3 of this Reference Form.

#### 14.2 Relevant changes – Human resources

Regarding the number of workers, there was a decrease in the number of Company employees in the Non ferrous business area, which is a result of the sale of Aluminum assets. The beginning of operations of projects in Oman led to a reduction in the number of outsourced

<sup>(2)</sup> This includes the following: Angola, Argentina, Austria, Congo, England, Ethiopia, France, Guinea, Hong Kong, India, Japan, Kazakhstan, Liberia, Malaysia, Mongolia, New Caledonia [sic], Norway, Oman, Paraguay, Philippines, Singapore, South Africa, South Korea, Switzerland, Taiwan, Thailand, Wales, and Zambia.

employees in the Ferrous business area. The same thing occurred with projects in Mozambique and led to an increase in the number of Company employees in that country.

#### 14.3 Description of Company employee remuneration policies

#### a. Salary and variable remuneration policy

Vale follows the practice already adopted in recent years to carry out comparative research on remuneration and offers all its own employees a salary equal to or higher than the legal minimum practiced in each location. Additionally, in order to strengthen the culture of constant pursuit of results, the remuneration package for each employee includes the payment of variable remuneration, calculated according to the results achieved by the performance of the Company, the department, and the individual or the team.

In Vale's own units, performance assessment is based on annual goals aligned to Company strategy. These evaluations are conducted through an interactive process between employees and their managers, as well as using computer systems, in which the results are logged. The goals also serve as a basis for the Variable Remuneration Program, which awards employees for meeting or exceeding them. Each employee has a panel of annual goals, comprised of three blocks: Company Goals, Department Goals, and Individual/Team Goals. At the beginning of each year the results are evaluated in terms of the goals from the previous year. Each goal totally or partially reached corresponds to a number of points and the sum of the points of the three blocks corresponds to the variable remuneration of the employee.

For the short-term performance cycle (annual), the goals are defined based on the established, principal strategic objectives and annual budget, measuring economical-financial performance, technical and operational performance, and sustainability (management, health and safety, and environment).

Since November 2007, Vale has signed collective agreements valid for two years with all trade unions representing 100% of the total number of employees in Brazil. As a result of the agreements, for the period 2011-2013 there was a salary increase of 8.6% in 2011 and there will be another of 8.0% in 2012, resulting in a total of 17.29% of readjustment. In Canada, Australia, Indonesia, New Caledonia, Mozambique, Peru, England, France, Norway, Oman, Chile, Columbia, and Argentina, Vale negotiates collective agreements with workers' trade unions, with a duration of typically between one and five years.

Certain employees who are part of the management framework of Vale may participate in long-term incentives, depending on eligibility for each plan, such as: Matching, a program based on shares with the objective of compensating and retaining managers, in which the eligible employee invests in shares of Vale at time 0 and, if he meets certain requirements, the Company grants, after three years, an equivalent number of shares as were purchased at time 0; Project Bonus, a long-term program directed toward leaders of capital projects based on performance and sustainability of the projects; and Long-Term Incentive Program, a program that grants virtual shares of Vale to executives, taking into consideration the relative performance of the total return to the shareholder over a three-year period compared with a group of similar companies (peers) during the same period.

The salary and variable remuneration policy for non-statutory directors is described in item 13 of this Reference Form.

#### b. Benefits policy

The benefits are part of the total compensation package that ensures the employees' – and their legal dependents' – protection and security during the term of the contract of employment.

Vale establishes global guidelines for granting benefits to ensure that they are offered consistently in the various countries where Vale is present, bearing in mind the goals of its

business in each locality, the human relations philosophy and corporate strategy, in addition to the legal requirements of the country and the given local market conditions.

Benefits considered essential are social security, health plan, life and accident insurance, and income plans for times when the employee leaves the Company.

Benefits such as transport vouchers, education, Employee Assistance Plan, meals at work, and personal accident insurance are offered in accordance with the specificity of each location.

As a result of the process of globalization of the benefits offered, Vale contracted the provider Global de Seguro Saúde (Global Health Insurance) to meet the needs all expatriate employees and their dependents in an equitable way, offering the same coverage anywhere in the world.

### c. Characteristics of compensation plans based in shares for non-administrative employees

Compensation plans based in shares described in item 13.4 of this Reference Form, which are the Long-Term Incentive Program and Matching, include the Company's non-statutory directors, as well as managerial-level employees. The characteristics of these plans are described in item 13.4 of this Reference Form.

#### 14.4 - Description of the relationships between the issuer and trade unions

Vale builds a harmonious relationship with trade unions all around the world. That covers approximately 50 trade unions in Brazil and 15 trade unions in the rest of the world. Today, there are collective agreements in Brazil, Canada, the United Kingdom, Norway, France, Peru, Argentina, Paraguay, Malawi, Mozambique, Australia, New Caledonia, and Indonesia. In addition, preliminary collective bargaining negotiations are underway in Oman and Chile.

In 2011 all collective agreements were concluded without the occurrence of strikes, unlike other large mining companies.

In general, Vale is concluding collective agreements with longer terms of validity (respecting the restrictions imposed by the legislation of each country). For example, Vale was the first company in New Caledonia to sign a three-year agreement. The local practice up to that time had been to have collective agreements valid for only one year.

Vale has been a pioneer in Brazil in the conclusion of collective agreements with a duration of two years (the maximum allowed by Brazilian legislation), without annual wage-renegotiation clauses or indexing, which demonstrates not only the confidence of trade unions, but also that of its employees in the Company.

Vale was also the first company in Brazil to sign an agreement for profit sharing with defined goals and duration of two years.

#### **ITEM 15**

15.1 / 15.2 Identification of majority shareholder or group of shareholders / Information on shareholders or groups of shareholders who work in conjunction with or who represent the same interests, with a share equal to or greater than 5% of the same class or type of shares and which are not listed in item "15.1".

#### Vale S.A.

	b)			d) and e) Commo	on Shares	d) and e) Prefe Shares Class		d) and e) P Shares Spec		d) and e) Total of Shares	Preferred	f) Tota	al	Shareh olders' agreem	Controllin	Date of last
a) Shareholder	Nationality	State	c) CPF/CNPJ	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	ent	g entity	change
Valepar S.A. BNDES	Brazilian	RJ	01.772.413/0001- 57 00.383.281/0001-	1,716,435,045	52.7%	20,340,000	1.0 % 3.3	0	0.0%	20,340,000	1.0%	1,736,775,045	32.4%	No	Yes	12/31/2011
Participações S.A.	Brazilian	RJ	09	218,386,481	6.7%	69,432,771	%	0	0.0%	69,432,771	3.3%	287,819,252	5.4%	No	No	12/31/2011
Aberdeen Asset Management PLC	British			1,257,000	0.0%	105,832,561	5.0 % 8.6	0	0.0%	105,832,561	5.0%	107,089,561	2.0%	No	No	03/16/2012
Shares in Treasury				86,911,207	2.7%	181,099,814	% 82.1	0	0.0%	181,099,814	8.6%	268,011,021	5.0%	No	-	12/31/2011
Others Total				1,233,734,749 3,256,724,482	37.9% 100.0000	1,731,874,460 2,108,579,606	%	12 12	100.0%	1,731,874,472 2,108,579,618	82.1%	2,965,609,221 5,365,304,100	55.2% 100.0000			12/31/2011

### h) Information on direct and indirect controlling entities of Valepar, as far as controlling entities who are individuals:

The table below presents information on Valepar S.A., direct controlling entity of Vale at December 31, 2011:

#### Valepar S.A.

							· u.op	.a. O.,									
a) Shareholder	b) Nationalit y	c) CPF/CNPJ	d) and e) Co Share		d) and e) Pr Shares Cl		d) and e) P Shares C		d) and e) F Shares (		d) and e) Preferred		f) Tota	al .	Shareho Iders' agreem ent	Controllin g entity	Date of last change
		at e	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%			
Litel Participações	5 "	00.743.065/000		40.000/	200,864,2	71.41		2 222/		0.000/	200,864,2	<b>=</b> 4.000/		40.700/	.,	.,	
S.A.	Brazilian	1-27 03.847.461/000	637,443,857	49.00%	72	%	0	0.00%	0 12,532,06	0.00%	72 12,532,06	51.66%	838,308,129	48.79%	Yes	Yes	1/10/2011
Bradespar S.A.	Brazilian	1-92	275,965,821	21.21%	0		0	0.00%	5	16.71%	5	3.22%	288,497,886	17.00%	Yes	Yes	1/10/2011
	Japanes	05.466.338/000							17,302,20		17,302,20						
Mitsui & Co., Ltd BNDES	е	1-57 00.383.281/000	237,328,059	18.24%	0		0	0.00%	9 15,598,96	23.08%	9 15,598,96	4.45%	254,630,268	15.00%	Yes	Yes	1/10/2011
Participações S.A.	Brazilian	1-09	149,787,385	11.51%	0		0	0.00%	15,596,96	20.80%	15,596,96	4.01%	165,386,354	9.79%	Yes	Yes	1/10/2011
r artioipagood C.7 t.	Brazman	00.514.998/000	1 10,7 07,000	11.0170	· ·		Ŭ	0.0070	Ü	20.0070	Ü	1.0170	100,000,001	0.70	100	100	1710/2011
Eletron S.A.	Brazilian	1-42	380,708	0.03%	0		0	0.00%	27,755	0.04%	27,755	0.01%	408,463	0.02%	Yes	Yes	1/10/2011
					80,416,93	28.59		100.00	29,519,06		142,495,4						
Others			0	0.000%	1	%	32,559,442	%		39.37%	41	36.65%	142,495,441	9.40%			1/10/2011
Total			1,300,905,8 30	100.000	281,281,2 03		32,559,442		74,980,06 6		388,820,7 11	100.00%	1,689,726,5 41	100.000			1/10/2011
· Otal			•	,,	00		,o, · ·-		•				• • • • • • • • • • • • • • • • • • • •	,,			

#### The following table presents information on Litel Participações S.A., direct controlling entity of Valepar S.A. at December 31, 2011:

#### Litel Participações S.A.

	b)		c) CPF/CNPJ	d) and e) Co Shares		d) and e) P Shares C		d) and e) P Shares C		d) and e) F Shares C		d) and e) T Preferred S		f) Tota	ıl			
<ul> <li>a) Shareholder</li> </ul>	Nationality	Stat		-												Shareholders'	Controlling	Date of last
		е		Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	agreement	entity	change
			01.578.476/0001	193,740,12	78.4									222,125,49	78.74			
BB Carteira Ativa	Brazilian		-77	1	0	103	14.11%	28,385,274	100.00	0.00	0.00	28,385,377	78.5%	8	%	No	Yes	10/31/2011
										7,772,02								
					21.6					0				61,160,871	21.26			
Others				53,388,224	0	627	85.89%	0,00			100.00	7,772,647	21.5%		%			
										7,772,02				283,286,36				
				247,128,34	100.					0				9				
Total				5	00	730	100%	28,385,274				36,158,024	100.00		1.00			

#### The following table presents information on Bradespar S.A., direct controlling entity of Valepar S.A. at December 31, 2011:

#### Bradespar S.A.

a) Shareholder	b) Nationality		c) CPF/CNPJ	d) and e) C Share		d) and e) Preferre	d Shares	f) Tot	al	Shareholders	Controlling	Date of last
		State		Quantity	%	Quantity	%	Quantity	%	' agreement	entity	change
NCF Participações S.A.	Brazilian	SP	04.233.319/0001- 18	30,388,376	24.8000	2,235,627	0.98	32,624,003	9.33000	No	Yes	12/29/2011
Cidade de Deus Cia. Cial. de Participações S.A.	Brazilian	SP	61.529.343/0001- 32 60.701.521/0001-	44,883,224	36.6300	300,960	0.13	45,184,184	12.93000	No	Yes	12/29/2011
Fundação Bradesco	Brazilian	SP	06	18,179,304	14.8400	0,000	0	18,179,304	5.20000	No	Yes	12/29/2011
Others	-	-	-	29,072,145	23.7300	224,488,309	98.89	253,560,454	72.54000	-	-	-
Total				122,523,049	100	227,024,896	100	349,547,945	100			

The following table presents information on the controlling group of Cidade de Deus Cia. Cial. de Participações S.A., direct controlling entity of Bradespar S.A., at December 31, 2011:

### Cidade de Deus Cia. Cial. De Participações S.A.

	b)		c) CPF/CNPJ	d) and e) Co Shares		d) and e) Preferre	d Shares	f) Total				
a) Shareholder	Nationality	State		Quantity	%	Quantity	%	Quantity	%	Shareholders ' agreement	Controlling entity	Date of last change
Nova Cidade de Deus			04.866.462/0001-	2,984,615,1				2,984,615,19				
Participações S.A.	Brazilian	SP	47 60.701.521/0001-	97 2,206,742,1	44.91	0	0	7 2,206,742,16	44.91	No	Yes	12/29/2011
Fundação Bradesco	Brazilian	SP	06	62	33.20	0	0	2	33.2	No	Yes	12/29/2011
Lina Maria Aguiar	Brazilian	SP	017.080.078-49	565,685,655	8.51	0	0	565,685,655	8.51	No	Yes	12/29/2011
Lia Maria Aguiar	Brazilian	SP	003.692.768-68	465,914,818	7.01	0	0	465,914,818	7.01	No	Yes	12/29/2011
Others	-	-	-	423,506,954 6,646,464,7	6.37	0	0	423,506,954 6,646,464,78	6.37	-	-	
Total	-	-	-	86	100,0	0	0	6	100,0	-	-	

The following table presents information on Nova Cidade de Deus Participações S.A., direct controlling entity of Cidade de Deus Cia. Cial. de Participações S.A. and of Bradespar, at December 31, 2011:

#### Nova Cidade de Deus Participações S.A.

a) Shareholder	b) Nationality		c) CPF/CNPJ	d) and e) Co Share		d) and e) Preferre	d Shares	f) Total		Shareholders	Controlling	Date of last
a) Shareholder	wattorianty	State		Quantity	%	Quantity	%	Quantity	%	' agreement	entity	change
			60.701.521/0001-									
Fundação Bradesco	Brazilian	SP	06	117,742,937	46.3	269,460,629	100	387,203,566	73.93	No	Yes	12/29/2011
			07.838.611/0001-									
BDD Participações S.A.	Brazilian	SP	52	136,552,446	53.7	0	0	136,552,446	26.07	No	Yes	12/29/2011
Total	-	-	-	254,295,383	100	269,460,629	0	523,756,012	100	-	-	-

The following table presents information on BBD Participações e Investimentos S.A., controlling entity of Nova Cidade de Deus Participações S.A., at December 31, 2011:

#### BDD Participações S.A.

a) Shareholder	b) Nationality		c) CPF/CNPJ	d) and e) Co Share		d) and e) Preferre	d Shares	f) Total		Shareholders	Controlling	Date of last
	reactorianty	State		Quantity	%	Quantity	%	Quantity	%	' agreement	entity	change
Lázaro de Mello Brandão	Brazilian	SP	004.637.528-72	10,997,761	6.24	0	0	10,997,761	3.56	No	Yes	12/29/2011
Shares in Treasury	-	-	-	68,613,823	38.94	17,576,761	13.23	86,190,584	27.89	No	No	-
Others	-	-	-	96,594,715	54.82	115,293,850	87.77	211,888,565 309,076,910	68.55	-	-	-
Total	-	-	-	176,206,299	100.00	132,870,611	0		100.00	-	-	-

The following table presents information on NCF Participações S.A., direct controlling entity of Bradespar S.A., at December 31, 2011:

#### NCF Participações S.A.

	b)		c) CPF/CNPJ	d) and e) Co Share:		d) and e) Preferre	ed Shares	f) Tota	ıl			
a) Shareholder	Nationality	State		Quantity	%	Quantity	%	Quantity	%	Shareholders 'agreement	Controlling entity	Date of last change
			60.701.521/0001-					1,104,716,40				
Fundação Bradesco	Brazilian	SP	06	242,971,736	25.13	861,744,667	100	3	60.41	No	Yes	12/29/2011
Cidade de Deus Cia. Cial.			61.529.343/0001-									
de Participações S.A.	Brazilian	SP	32	722,486,702	74.72	0	0	722,486,702	39.51	No	Yes	12/29/2011
Nova Cidade de Deus			04.866.462/0001-									
Participações S.A.	Brazilian	SP	47	1,446,537	0.15	0	0	1,446,537	0.08	No	Yes	12/29/2011
								1,828,649,64				
Total	-	-	-	966,904,975	100	861,744,667	100	2	100	-	-	-

The following table presents information on BNDES Participações S.A., shareholder of more than the 5% of the voting capital stock of Valepar S.A. at December 31, 2011:

			BNDES Part	icipações S.A.					
Shareholder	Nationality	CPF/CNPJ	Common	shares	Total of	shares	Shareholders 'agreement	Controlling entity	Date of last change
			Qty.	%	Qty.	%			3
Banco Nacional de Desenvolvimento Econômico e Social –	Destilian	33.657.248/0001-	1	100.00	1	100.00		Vaa	10/01/11
BNDES <b>Total</b>	Brazilian	89	1 1	100.00 <b>100.0</b> <b>0</b>	1	100.00 <b>100.0</b> <b>0</b>	-	Yes	12/31/11

The following table presents information on Eletron S.A., direct controlling entity of Valepar S.A. at December 31, 2011:

#### Eletron S.A.

a) Shareholder b) c) CPF/CNPJ d) and e) Common Shares d) and e) Preferred Shares f) Total	Shareholders Controlling Date of last
-------------------------------------------------------------------------------------------	---------------------------------------

	Nationality								' agreement	entity	change	
		State	Quantity	%	Quantity	%	Quantity	%				
Opportunity Anafi		02.992.366/0001-										
Participações S.A.	Brazilian	10	5,561,459	99.98%			5,561,459	99.98%			12/31/2011	
Others			1,080	0.02%			1,080	0.02%			12/31/2011	
Total			5,562,539				5,562,539					

The following table gives information on Opportunity Anafi Participações S.A., direct controlling entity of Eletron S.A., at December 31, 2010:

#### Opportunity Anafi Participações S.A.

	b)		c) CPF/CNPJ	d) and e) Con	nmon Shares	d) and e) Prefer	red Shares	f) To	otal			
a) Shareholder	Nationality	State		Quantity	%	Quantity	%	Quantity	%	Shareholders ' agreement	Controlling entity	Date of last change
Belapart S.A.	Brazilian		01.608.571/0001- 76 08.277.553/0001-	1,236,116	31.60%			1,236,116	31.60%			12/31/2011
Opportunity Holding FIP	Brazilian		06 01.772.313/0001-	1,439,301	36.80%			1,439,301	36.80%			12/31/2011
Valetron S.A.	Brazilian		20	1,236,116	31.60%			1,236,116	31.60%			12/31/2011
Others				5	0.00%			5	0.00%			
Total				3,911,538	100.00%			3,911,538	100.00%			

The table below presents information on Belapart S.A. and Valetron S.A., direct controlling entities of Opportunity Anafi Participações S.A., at December 31, 2011:

#### Valetron S.A.

	b)		c) CPF/CNPJ	d) and e) Co	mmon Shares	d) and e) Prefe	erred Shares	f) T	otal			
a) Shareholder	Nationality	State		Quantity	%	Quantity	%	Quantity	%	Shareholders ' agreement	Controlling entity	Date of last change
Verônica Valente Dantas	Brazilian		262.853.205-00	507	50.70%			507	50.70%			12/31/2011
Others				493	49.30%			493	49.30%			
Total				1,000				1000	0.00%			

#### Belapart S.A.

a) Shareholder	b) Nationality		c) CPF/CNPJ	d) and e) Co	mmon Shares	d) and e) Prefe	erred Shares	f) T	otal	Shareholders	Controlling	Date of last
a) Shareholder	rvationanty	State		Quantity	%	Quantity	%	Quantity	%	' agreement	entity	change
Verônica Valente Dantas	Brazilian		262.853.205-00	507	50.70%			507	50.70%			12/31/2011
Others				493	49.30%			493	49.30%			
Total				1.000				1000	0.00%			

#### 15.3 Distribution of Capital

Date of last meeting	04/18/12
Number of individual shareholders	154,124
Number of corporate shareholders	2,060
Number of institutional investors	4,038

#### **Outstanding shares**

Outstanding shares corresponding to all shares issued by the Company, except for the shares kept by the controlling entity, by people related to it, by the managers of the Company, and by the shares held in treasury

Quantity of common shares (Units)	1,234,937,538	37.9%
Quantity of preferred shares (Units)	1,837,385,893	87.1%
Quantity of class A preferred shares		
(Units)	1,837,385,893	87.1%
Total	3,072,323,431	57.3%

15.4 In case the issuer desires to do so, please insert the organizational chart of company shareholders identifying all direct and indirect controlling entities as well as shareholders with participation equal to or more than 5% of one class or type of shares, compatible with the information stated in 15.1 and 15.2:

Vale decided not to disclose the organizational chart of its shareholders at that moment.

15.5 Shareholders' Agreements filed at the headquarters of the Company in which the controlling entity participates, which regulate the exercise of voting rights or rights to transfer Company shares:

Vale does not have a shareholders' agreement. However, the controlling shareholders of Valepar S.A. signed a Private Instrument of Agreement for Valepar S.A. shareholders (Shareholders' Agreement).

#### a) Parties

Litel Participações S.A., Bradespar S.A., Mitsui & Co. Ltd., BNDES Participações S.A. and Eletron S.A. (Signatories)

#### b) Date of Signing

April 24, 1997.

#### c) Term

20 years from the date signed, extendable for equal periods of 10 years.

d) Description of clauses relative to the exercise of the right to vote and controlling votes.

The Shareholders' Agreement stipulates that the Signatories shall be obliged to orientate their representatives in the General Meetings and the meetings of Vale's Board of Directors to vote as per agreed in the prior Meeting of Valepar.

With the exception of permitted quorums mentioned below, items in the Prior Meetings will be decided by a simple majority of the votes of the Signatories present.

In accordance with the Shareholders' Agreement, it is necessary to have the support of at least 75% of the holders of the relevant common shares for the adoption of the following items:

- amendment of Vale's bylaws, except for a legal requirement;
- increase of Vale's share capital by share subscription, creation of a new class of shares, change in the characteristics of the existing shares or any reduction of Vale's share capital;
- issuance of debentures of Vale, whether or not convertible into shares of Vale, call options or any other security of Vale;
- determination of issuance price for any new shares of share capital or other security of Vale;
- amalgamation, spin-off, or merger to which Vale is a party, as well as any change to Vale's corporate form;
- dissolution, receivership, bankruptcy or any other voluntary act for financial reorganization or any suspension thereof;
- the election and replacement of Vale's Board of Directors, including the Chairman of the Board, and any executive officer of Vale;
- the disposal or acquisition by Vale of an equity interest in any company, as well as the acquisition of any shares of share capital of Vale for maintenance in treasury;
- the participation by Vale in a group of companies or in a consortium of any kind;
- the execution by Vale of agreements relating to distribution, investment, sales, exportation, technology transfer, trademark license, patent exploration, license to use, and leases in which Vale is a part;
- the approval and amendment of Vale's business plan;
- the determination of the compensation of the executive officers and directors of Vale, as well as the duties of the Board of Directors and the Board of Executive Officers:
- any profit sharing among the members of the Board of Directors or Board of Executive Officers of Vale
- any change in the corporate purpose of Vale;
- the distribution or non-distribution of any dividends (including distributions classified as interest on shareholders' equity) on any shares of share capital of Vale other than as provided in Vale's bylaws;
- the appointment and replacement of Vale's independent auditor;
- the creation of any "in rem" guarantee, granting of guarantees including rendering of sureties by Vale with respect to obligations of any unrelated party, including any affiliates or subsidiaries;
- the passing of any resolution on any matter which, pursuant to applicable law, entitles a shareholder to withdrawal rights through reimbursement of his shares:
- the appointment and replacement by the Board of Directors of any representative of Vale in subsidiaries, companies related to Vale or other companies in which Vale is entitled to appoint directors and officers; and

• any change in the maximum debt limit and debt to equity threshold, as defined in the shareholders' agreement, among others.

#### e) Description of clauses relative to the appointment of directors

The management of Vale's business will be carried out by experienced, independent, competent professionals, who have the required qualifications for the positions that they hold.

For the purpose of electing Members of the Board at the respective General Meetings, the Signatories will indicate the total number of Board members, whose designation will fall to Valepar, proportionately to its share in the share capital of Valepar. The CEO of Vale will be selected from names in a triple list put forward by an international executive search company and elected in a meeting of the Board of Directors summoned for this purpose. It will fall to the CEO of Vale to propose to the Board of Executive Officers the names of the other directors.

Each Signatory will, during the period of his or her respective mandate, be able to replace the Board member they indicated. In this situation, all Signatories will vote in favor of the name thus proposed at the General Meeting called for this purpose.

#### f) Description of clauses relative to the transfer of shares and the preference for acquiring them

The Shareholder Agreement stipulates that Valepar S.A. will have preference as regards the Signatories for the acquisition at any time of Vale's shares, as well as vetoing the direct acquisition of Vale shares by the Signatories, unless there is authorization from the remaining Signatories, to be granted in a Prior Shareholder Meeting, at which the issue must be approved by a quorum of 75% of the total of the common Valepar shares, related to the shareholder agreement.

In line with the Shareholder Agreement, it is necessary to have the Approval of the Shareholders of 100% of the common shares related to the Agreement in question for the disposal in any form of Vale shares owned by Valepar.

## g) Description of clauses which restrict or tie voting rights of members of the Board of Directors See line "d)".

#### 15.6 Significant Changes in the shareholdings of Members of the Control Group and directors of the Company in the last 3 financial years

There were no significant changes in the shareholdings of Members of the Control Group and directors of the Company in the last 3 financial years.

#### 15.7 Other information which the Company deems relevant

The following is additional information related to Vale controlling group:

1) As described in item 15.1, Litel Participações S.A., is one of the indirect controllers of Vale, and it is controlled by BB Carteira Ativa.

**BB Carteira Ativa** shares are 100% owned by PREVI – Caixa de Previdência dos Funcionários do Banco do Brasil ("PREVI"). BB Carteira Ativa is managed by BB Gestão de Recursos – Distribuidora de Títulos e Valores Mobiliários S.A.

**Previ** is a private pension fund and its participants are employees of the Banco do Brasil and of Previ itself. Previ management is divided between the Board of Directors and the Board of Executive Officers. The Board of Executive Officers is composed of six members: President, Director of Administration, and Directors for Investments, Security, Participations, and Planning. The Board of Directors is composed of six members and their substitutes. Three are elected by the participants and users of the security, and three others indicated by the Banco do Brasil. According to the Statutes of Previ, the Board of Directors is the part of the organizational structure responsible for defining the general policy of the administration of the entity.

On December 31, 2011 the Board of Directors was composed of the following board members: Robson Rocha (President), Ivan de Souza Monteiro, Alexandre Correa Abreu, Mirian Cleusa Fochi, Celia Maria Xavier Larichia and William José Alves Bento; and their respective substitutes: Carlos Eduardo Leal Neri, Amauri Sebastião Niehues, Eduardo Cesar Pasa, Waldenor Moreira Borges, Jr., Luiz Carlos Teixeira, and José Souza de Jesus. The Board of Executive Officers was composed of the following members: Ricardo José da Costa Flores (President), Paulo Assunção de Sousa (Director of Administration), Renê Sanda (Director of Investments), Marco Geovanne Tobias da Silva (Director of Participations), Vitor Paulo Camargo Gonçalves (Director of Planning), José Ricardo Sasseron (Director of Security). The Audit Committee was composed of the following members: Romildo Gouveia Pinto (President), Fabiano Félix do Nascimento, Renato Donatello Ribeiro and Rudinei dos Santos; and by their corresponding substitutes: Francisco de Assis Chaves Costa, Aldo Bastos Alfano, and Sérgio lunes Brito, with one vacant substitute position. Additionally, the CEO, Sr. Sérgio Ricardo Silva Rosa, was responsible, among other things, for representing Previ, and the Director of Participations, Mr. Marco Geovanne Tobias da Silva, for monitoring the companies which make up the variable income portfolio and the real estate portfolio, especially as concerns the shareholdings and Previ's share and representation in the administrative and supervisory organs of the companies or undertakings, with a view to adopting any measures necessary to assure good corporate governance for companies in which investments have been made.

2) As described in the item 15.1, Fundação Bradesco is one of the indirect controlling of Vale

The Fundação Bradesco is a non-profit entity which has worked to foster and develop children and adolescents through schools in low income areas. The activities of the Bradesco Foundation are financed exclusively by resources coming from donations which Bradesco and its affiliates make, as well as from dividends and interest on its own capital from its share in Bradesco capital.

According to the terms of the Fundação Bradesco bylaws, all Bradesco directors, members of the Board and department directors, as well as all directors and responsible for Cidade de Deus Cia. Cial. de Participações S.A., act as members of the board of trustees of the Fundação Bradesco, known as the Mesa Regedora,

3) As described in the item 15.1, Mitsui & Co. Ltd. is one of the indirect controlling of Vale

Mitsui & Co. Ltd., direct controlling entity of Valepar S.A., has share control spread among many shareholders. The following table presents information regarding Mitsui & Co. Ltd. on March 31, 2012:

		Mi	tsui & Co. L	td.					
Shareholder	Common sh	nares	Preferred	shares	Total number o	of shares	Shareholder 's agreement	Controllin g entity	Date of last change
	Qty	%	Qty.	%	Qty	%			
The Master Trust Bank									
of Japan, Ltd. (trust account)	161,738,000	8.84%	-	-	161,738,000	8.84%	No	No	03/31/12
Japan Trustee Services									
Bank, Ltd. (trust									
account)	131,219,000	7.17%	-	-	131,219,000	7.17%	No	No	03/31/12
SSBT OD05 Omnibus Account (Treaty Clients)	42,987,000	2.35%	-	-	42,987,000	2.35%	No	No	03/31/12
Japan Trustee Services Bank, Ltd.(Trust account 9)	42,870,000	2.34%	_	_	42,870,000	2.34%	No	No	03/31/12
Sumitomo Mitsui Banking									
Corporation	38,500,000	2.10%	-	-	38,500,000	2.10%	No	No	03/31/12
Nippon Life Insurance Company The Chuo Mitsui Trust	35,070,000	1.92%	-	-	35,070,000	1.92%	No	No	03/31/12
Banking Company,									
Limited	24,799,000	1.35%	-	-	24,799,000	1.35%	No	No	03/31/12
	1,351,970,527,				1,351,970,527,				
Others	00 <b>1,829,153,52</b>	73.9% <b>100,0</b>	-	-	00 <b>1,829,153,52</b>	73.9% <b>100.0</b>	-	-	03/31/12
Total	7	%	-	-	7	%			

<sup>4)</sup> As described in item 15.1, **Banco Nacional de Desenvolvimento Econômico e Social – BNDES** is one of the indirect controlling entities of Vale. BNDES is a public company with legal personality under private law, whose shares are 100% owned by the Federal Government.

- 5) As described in item 15.1, **Opportunity Holding FIP** is one of the indirect controlling entities of Vale. Opportunity Holding FIP is an investment fund, and the person responsible for its investment decisions is the fund manager, Mr. Marco Nascimento Ferreira, CPF No. 489.614.185-72.
- 6) Regarding the relevant acquisition of shares by the manager Aberdeen Asset Managers Limited, subsidiary of Aberdeen Asset Management PLC'S, on 03/16/12 operation is reflected in item 15.2 above, the interest of 5.02% is held by different security portfolios.

#### Item 16

# 16.1 Description of rules, policies, and practices adopted by the issuer regarding transactions with related parties

Vale is the largest private Brazilian company, and operates in various segments of the economy, with cash flow and wealth consistent with its size. For this reason, in view of the constant search for better trading conditions for the achievement of its activities and the investment of its resources, the Company often negotiates the terms of the transactions inherent in its businesses, which inevitably leads to agreeing on transactions with related parties whenever its best interests and those of its shareholders are served.

Thus, transactions with related parties are made by the Company in a strictly exchanged based manner, observing usual price and market conditions, and therefore do not generate any undue advantage to their counterparts nor damage to the Company.

As provided in the Bylaws, it is Vale's Board of Directors' responsibility to discuss any business between the Company and (i) its shareholders, directly or through interposed companies, (ii) companies that participate, directly or indirectly, in the capital of a controlling shareholder or are Subsidiary by or under common control of entities that participate in the capital of the controlling shareholder, and / or (iii) companies in which the controlling shareholder of the company is involved. Accordingly, the Board of Directors may delegate responsibilities with limits and procedures that meet the peculiarities and nature of operations, without withholding due information on all the Company's transactions with related parties.

Additionally, Vale has a Governance and Sustainability Committee committed to reviewing and proposing improvements to its management system to avoid conflicts of interest, as well as advising on potential conflicts of interest between the Company, its shareholders, and directors.

The procedures for making decisions for the conduct of transactions with related parties follow the terms of Corporate Law, which stipulate that the shareholder or director, as appropriate, in general meetings or meetings of directors, abstain from voting on resolutions concerning: (i) the valuation report of assets, which contribute to the formation of equity capital, (ii) the approval of its accounts as administrator, and (iii) any matters that may benefit them in any particular way. Additionally, in accordance with the provisions of Corporate Law and the practices adopted by Vale, its administrators must abstain from intervening in any matter in which they have conflicting interests with the Company, including withdrawing from the room or area where the administration meeting is being held.

# 16.2 Information on transactions with related parties

Name of related party	Panas Nacional de Decembrigante Feanâmice e Social PNDES
Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	10/08/2007
Amount (R\$)	774,568,410.00
Current balance (R\$) (12/31/2011)	557,474,908,46,
Amount of related party	Not applicable
Duration	09/15/2019
Loan or other type of debt	YES
Interest rate	1.8%
Relationship with the Issuer	Indirect controlling shareholder
Purpose of the contract	Funding for expansion of transport capacity of Carajás Railroad
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate the contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:  a) reducing Vale's staff without offering training programs and/or replacement programs for workers in other companies;  b) inclusion in Vale bylaws, statute or contract, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting Vale or its controlling shareholders, or even the inclusion therein, of conditions leading to:  i) restrictions on Vale's ability to grow or its technological development;  ii) restrictions or loss of ability to pay financial obligations resulting from this operation;  c) the use of proceeds to finance any purpose other than the expansion of Carajás railroad's transport capacity to 103 million tons transported annually;  d) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment;  e) not observing the following ratios during the term of the contract:  - Adjusted EBITDA debt ratio less than or equal to 4.5, and  - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0.  f) And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES within 60 days from the date of written communication.  In case the proceeds granted under this Contract are used for any purpose other than
	the expansion of the Carajás railroad's annual transport capacity to 103 million tons, BNDES, without prejudice to the provisions, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86.  This contract will also expire, with the enforceability of the debt and suspension of any immediate disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, shareholder, or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54,
Nature and reason for the	paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.  The change in indirect control of Vale, during the term of the Contract, is excluded from the possibility of early expiration by default.  Applicable interest rate is: TJLP (long-term interest rate) +1.8% per year
transaction/other relevant information	This is funding for expansion of transport capacity of Carajás Railroad

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	03/28/2008
Amount (R\$)	808,350,800.00
Current balance (R\$) (12/31/2011)	930,360,694.47
Amount of related party	Not applicable

Duration	09/15/2029
Loan or other type of debt	YES
Interest rate	1.46% per year
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Financing for installation of the UHE Estreito Hydroelectric Power Plant
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Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:  a) reducing Vale's staff without providing training programs and/or replacement programs for workers in other companies;  b) inclusion in Vale bylaws, statute, or contract, of a provision by which a special quorum is required for deliberation or approval of matters limiting or restricting control of any of these companies by the respective controlling shareholders, or even the inclusion therein, of conditions leading to:  i) restrictions on Vale's ability to grow or its technological development;  ii) restrictions on Vale's access to new markets, or
	iii) restrictions or loss of ability to pay financial obligations resulting from this operation; c) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment; d) not observing the following ratios during the term of the contract: - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0. And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication. In case the proceeds granted under this Contract are used for any purpose other than the installment of the UHE Estreito Hydroelectric Power Plant and its transmission system, BNDES, without prejudice to the terms set forth above in this Clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86. The contract will also expire, with the enforceability of the debt and immediate
	suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, holder or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.  The change in indirect control of Vale, during the term of the Contract, is excluded from the possibility of early expiration by default.
Nature and reasons for the operation / other relevant information	The applicable interest rates are: TJLP+1.46% per year (subcredits A and B), and TJLP (subcredit C). This is financing for installation of UHE Estreito Hydroelectric Power Plant

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of Transaction	12/26/2008
Amount (R\$)	7,300,000.00
Current balance (R\$) (12/31/2011)	2,750,990,110.81
Amount of related party	Not applicable
Duration	01/15/2022
Loan or other type of debt	YES
Interest rate	1.5% per year
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Credit line
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:

reducing Vale's staff without providing training programs and / or replacement programs for workers in other companies the existence of a definitive legal judgment on the performance of acts by Vale consisting of an infringement of legislation which deals with combating discrimination based on race or gender, child labor and forced labor; inclusion in Vale bylaws, statute, or contract, of a provision by which a special quorum is required for deliberation or approval of matters limiting or restricting control of any of these companies by the respective controlling shareholders, or even the inclusion therein, of conditions leading to: restrictions on Vale's ability to grow or its technological development; i) ii) restrictions on Vale's access to new markets, or restrictions or loss of ability to pay financial obligations resulting from this operation; d) not observing the following ratios during the term of the agreement: - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0 And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication. In case of change of indirect control of VALE, without prior authorization from BNDES, not submit a letter of guaranty issued according to the BNDES model. In the event proceeds granted under this contract are used for a purpose different from that provided for in Clause First: revolving credit limit, BNDES, notwithstanding above provisions, will notify the fact to the Federal Public Prosecutor pursuant to the terms of Law No. 7,492 of 16.06.86. The contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or anyone who is remunerated by Vale, or any owner, holder or director of Vale, or any person listed the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	11/16/2005
Amount (R\$)	225,793,697.00
Current balance (R\$) (12/31/2011)	32,573,002.55
Amount of related party	Not applicable
Duration	01/15/2013
Loan of other type of debt	YES
Interest rate	4.35% per year
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Financing for investments in the railway system of the Federal Railway leased by Ferrovia Centro Atlantica SA
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:  I) inclusion in FCA bylaws, statute or contract, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting Vale's control of FCA, or even the inclusion therein, of conditions leading to:  i) restrictions on FCA's ability to grow or its technological development; ii) restrictions on FCA's access to new markets, or iii) restrictions or loss of ability to pay financial obligations resulting from this operation;
	II) the reduction of FCA's staff while meeting its obligations with environmental

Nature and Reasons for the operation /

other relevant information

The applicable interest rates are: Libor 3M+1.5% per year (subcredit A), TJLP

(subcredits B4 and B11), TJLP + 1.36% per year (subcredits B2, B3, B6, B7, B9, and B10). TJLP + 1.76% per year (subcredits B1, B5, and B8). This is a credit line for

financing Projects Salobo, Mineração Onça Puma, and Usina VIII.

	agencies;
	III) non-compliance by Vale with the project's goals such as investments made by the FCA in the railway system leased by the Federal Network Rail and invalidity of the bank guaranty in accordance with the model provided by BNDES.
	IV) non-registration by Vale of this Amendment within 60 days as of December 13, 2005.
	In case proceeds granted under this Contract are used for any purpose other than investments made by the FCA in the railway system leased by the Federal Network Rail, BNDES, without prejudice to the terms of this clause, will notify the fact to the Federal Public Prosecutor pursuant to the terms of Law No. 7492 of 16.06.86.  The change of control by Vale contemplated in section III of Article 39 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS" referred to in the Eleventh Clause is excluded from the possibility of early maturity contemplated in this Clause during the term of this Amendment.
Nature and reasons for the operation /	MC + 4.35% per year (tranche in USD) and TJLP + 3% (tranche in URTJLP).
other relevant information	This is financing for investments in the railway system of the Federal Railway leased
	by Ferrovia Centro Atlantica SA.
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[ N	To
Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	12/14/2009
Amount (R\$)	23,608,437
Current balance (R\$) (12/31/2011)	9,375,116.66
Amount of related party	Not applicable
Duration	05/15/2013
Loan or other type of debt	YES
Interest rate	1.2% per year
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Debt assumption of Usina Tecpar
Amount of related party	Not applicable
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS", the following are certified by BNDES:
	a) reducing TECPAR's staff without providing training programs and / or replacement programs for workers in other companies;
	b) the existence of a definitive legal judgment on the performance of acts by Vale or by TECPAR consisting of an infringement of legislation which deals with combating discrimination based on race or gender, child labor and forced labor;
	c) inclusion in Vale bylaws, statute or contract, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting Vale or its controlling shareholders, or even the inclusion therein, of conditions leading to:
	i) restrictions on Vale's ability to grow or its technological development; ii) restrictions on Vale's access to new markets, or iii) restrictions or loss of ability to pay financial obligations resulting from this operation; d) not observing the following ratios during the term of the contract: - Adjusted EBITDA debt ratio less than or equal to 4.5, and
	- Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0.
	And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of debt, as stipulated by BNDES, and within 60 days from the date of written communication.
	In case proceeds granted under this Contract are used for any purpose other than those set forth in the First Clause, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86.  This contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of

	Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.  In the event proceeds granted under the contract are used for a purpose different from that provided for in Clause First, as described above, and in the instances mentioned in Paragraph "b" above, BNDES may terminate the Contract in advance within five (5) business days from the date of notification to Vale of occurrence of these events, excluding reciprocal power of attorney, made among VALE, TECPAR and TECNOLOGOS until the final debt settlement.  BNDES may terminate the Contract in advance on the day following the date determined by BNDES or by judicial or extrajudicial notification, without the non-financial default having been remedied by Vale or TECPAR.
Nature and reasons for the operation / other relevant information	Applicable interest rate: TJLP+1.2% per year This is a debt assumption of Companhia Usina Tecpar intended for installation of a pig iron production plant in Pindamonhangaba, SP, using residues from mining slices and other metal debris.

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social – BNDES
Date of transaction	11/23/2010
Amount (R\$)	208,026,000.00
Current balance (R \$) (12/31/2011)	203,855,822.87
Amount of related party	Not applicable
Duration	09/15/2029
Loan or other type of debt	YES
Interest rate	1.46%
Relationship with the Issuer	Indirect controlling shareholder
Purpose of the contract	Financing for supplementation of resources relative to installation of (UHE) Estreito Hydroelectric Power Plant
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS", the following are certified by BNDES:  a) reducing Vale's staff without providing training programs and / or
	replacement programs for workers in other companies;  b) the existence of a definitive legal judgment on the performance of acts by the Beneficiary consisting of a crime against the environment or an infringement of legislation which deals with combating discrimination based on child labor and forced labor, in accordance with following provision;
	c) inclusion in the bylaws, statute, or contract of Vale or of the other controlling companies, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting its controlling shareholders, or even the inclusion therein, of conditions leading to:
	<ul> <li>i) restrictions on Vale's ability to grow or its technological development;</li> <li>ii) restrictions on Vale's access to new markets, or</li> <li>iii) restrictions or loss of ability to pay financial obligations resulting from this operation;</li> <li>d) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment;</li> <li>e) not observing the following ratios during the term of the contract:</li> <li>- Adjusted EBITDA debt ratio less than or equal to 4.5, and</li> <li>- Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0.</li> <li>And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication.</li> <li>Termination of the contract in advance based on provisions of Paragraph "b" above</li> </ul>
	will not occur provided the remedy imposed has been fulfilled or while the penalty imposed to the Beneficiary is being fulfilled following the due legal procedure. In the event of any of the situations provided for in Paragraph "b" above, observing the provisions of above paragraph, BNDES may only declare the expiration in advance of the debt resulting from the Contract within 60 days after giving notice to the Beneficiary.

	In case proceeds granted under this Contract are used for any purpose other than general investments for installation of UHE Estreito Hydroelectric Power Plant and its transmission system, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86.  The contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installation as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.  The change in indirect control of Vale, during the term of the Contract, is excluded from the possibility of early expiration by default.
Nature and reasons for the operation / other relevant information	Applicable interest rate: TJLP+1.46% per year This is financing for supplementation of resources relative to installation of the (UHE) Estreito Hydroelectric Power Plant.

Name of valeta disputs	Described de Describe de Cariel DNDEC
Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	06/29/2010
Amount (R\$)	135,127,397.00
Current balance (R\$) (12/31/2011)	115,911,357.22
Amount of related party	Not applicable 07/15/2020
Duration Loan or other type of debt	YES
Interest rate	4.50%
Relationship with the Issuer	Indirect controlling shareholder
Purpose of the contract	Financing to purchase machinery and equipment for Project Pier IV, and for
Turpose of the contract	installation of a simple mobile waste material crushing, transportation, and deposit system of Carajás, in Parauapebas (PA).
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:
	a) reducing Vale's staff without providing training programs and / or replacement programs for workers in other companies
	b) the existence of a definitive legal judgment on the performance of acts by the Beneficiary consisting of a crime against the environment or an infringement of legislation which deals with combating discrimination based child labor and forced labor, in accordance with following provision;
	c) inclusion in the bylaws, statute or contract of Vale or of the other controlling companies, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting its controlling shareholders, or even the inclusion therein, of conditions leading to:
	<ul> <li>i) restrictions on Vale's ability to grow or its technological development;</li> <li>ii) restrictions on Vale's access to new markets, or</li> <li>iii) restrictions or loss of ability to pay financial obligations resulting from this operation;</li> </ul>
	d) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment; e) not observing the following ratios during the term of the contract: - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0. And, in case these ratios are not observed, guarantees an amount equivalent to at
	least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication.  In case proceeds granted under this Contract are used for any purpose other than general investments for purchase of machinery and equipment, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86.
	This contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided

	that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default.  Termination of the contract in advance based on provisions of Paragraph "b" above will not occur provided the remedy imposed has been fulfilled or while the penalty imposed to the Beneficiary is being fulfilled following the due legal procedure. In the event of any of the situations provided for in Paragraph "b" above, observing the provisions of above paragraph, BNDES may only terminate the debt in advance arising from the Contract within 60 days after giving notice to the Beneficiary.
Nature and reasons for the operation / other relevant information	Available interest rate: 4.5% per year This is financing to purchase machinery and equipment for Project Pier IV, and for installation of a simple mobile waste material crushing, transportation and deposit system of Carajás, in Parauapebas (PA).

Name of related north	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Name of related party	
Date of transaction	03/31/1997
Amount (R\$)	Not applicable
Current balance (R\$) (12/312011)	Not applicable
Amount of related party	Not applicable
Duration	Determined. Until full execution of its purpose. Contract was changed and consolidated on 06/28/2007.
Loan or other type of debt	No
Interest rate	-
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Regulate the relationship between Vale and BNDES to determine mineral rights for deposits which existence, size and economic validity are undefined in the Carajás mineral province, there being, therefore, no record of the asset's worth when privatized. The Contract stipulates bilateral rules with the purpose of regulating: survey tasks by Vale; the cases and manner for BNDES to provide financial resources to Vale for reimbursement of additional expenses resulting from survey tasks and payment of the respective administration fee; BNDES participatory rights; abandonment or assignment of exploratory targets or mining rights to third parties; payment of the finder's fee owed by BNDES to Vale.
Guaranties and insurance	Not applicable
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant information	-

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of Transaction	11/24/2009
Amount (R\$)	170,423,295.62
Current balance (R\$) (12/31/2010)	R\$ 32,169,649.61
Amount of related party	Not applicable
Duration	12/10/2028
Loan or any other debt	YES
Interest rate	exchange variation + 3.00% per year
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Pr Financing to purchase 15 tugboats
Conditions of termination or expiration	I BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:
	a) reducing Vale's staff without offering training programs and/or replacement programs for workers in other companies;
	b) inclusion in the statutes or bylaws or acts of incorporation by Vale of a mechanism by which a <i>quorum</i> is required to determine or approve particular matters restricting or limiting Vale's control by their respective controlling shareholders and also the inclusion in those documents of the mechanism which leads to
	(i) restrictions on Vale's ability to grow or its technological development,
	(ii) restrictions on Vale's ability to access new markets, or

	(iii) restrictions or loss of ability to pay financial obligations of this operation.
	c) inclusion in the bylaws, statute or contract of Vale or of the other controlling companies, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting its controlling shareholders, or even the inclusion therein, of conditions leading to:  i) restrictions on Vale's ability to grow or its technological development; ii) restrictions on Vale's access to new markets, or iiii) restrictions or loss of ability to pay financial obligations resulting from this operation; d) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment; e) not observing the following ratios during the term of the contract: - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0. And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication. In case proceeds granted under this Contract are used for any purpose other than general investments for purchase of machinery and equipment, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86. This contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expirat
Nature and reasons for the operation / other relevant information	Operation aims the acquisition of 15 tugboats, where four vessels are to be built by H. Dantas Construções e Reparos Navais LTDA and eleven vessels are to be built by Detroit Brasil LTDA with funds from the Merchant Marine Fund and remitted by BNDES.

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	3/25/2011
Amount (R\$)	102,536,220.00
Current balance (R\$) (12/312011)	R\$ 87,481,771.13
Amount of related party	Not applicable
Duration	4/15/2021
Loan or other type of debt	Yes
Interest rate	5.5%
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Funding for the acquisition of Handling and Transportation System, named 5 <sup>a</sup> Linha de Embarque to be installed at Terminal Marítimo Ponta da Madeira in São Luís (MA) to serve Pier IV project
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:
	a) reducing Vale's staff without offering training programs and/or replacement programs for workers in other companies;
	<ul> <li>existence of final decision condemning the Beneficiary for engagement in acts classified as environmental crimes or non- compliance with children's labor and slavery legislation, under the terms below.</li> </ul>
	c) inclusion in the bylaws, statute or contract of Vale or of the other controlling companies, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting its controlling shareholders, or even the inclusion therein, of conditions leading to:  i) restrictions on Vale's ability to grow or its technological development;  ii) restrictions on Vale's access to new markets, or iii) restrictions or loss of ability to pay financial obligations resulting from this operation;  d) give, without prior authorization from BNDES, guaranties of any

kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment; not observing the following ratios during the term of the contract: - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0. And, in case these ratios are not observed, guarantees an amount equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication. In case proceeds granted under this Contract are used for any purpose other than general investments for purchase of machinery and equipment, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. 7492 of 16.06.86. This contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default. Early termination based on the terms in item "b" above will not be in effect upon appropriate repair or during compliance with penalty imposed to the Beneficiary, according to due legal process. In case of any of the circumstances provided for in "b", under the terms above, the BNDES may only be entitled to represent early termination of the debt upon sixty (60) day prior written notice to the Beneficiary. Nature and reasons for the operation Rate of interest: 5,5 % per year / other relevant information Funding for the acquisition of Handling and Transportation System, named

5ª Linha de Embarque to be installed at Terminal Marítimo Ponta da

Madeira in São Luís (MA) to serve Pier IV project

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	6/29/2011
Amount (R\$)	175,882,585.50
Current balance (R\$) (12/312011)	R\$ 99,995,584.22
Amount of related party	Not applicable
Duration	7/15/2020
Loan or other type of debt	Yes
Interest rate	4.5%
Relationship with the Company	Indirect controlling shareholder
Purpose of the contract	Funding for the acquisition of 2,258 railroad wagons to transport iron ore
Guaranties and insurance	None
Conditions of termination or expiration	BNDES may terminate this contract in advance, with the enforceability of the debt and immediate suspension of any disbursement, if in addition to the cases set forth in Articles 39 and 40 of "PROVISIONS APPLICABLE TO BNDES CONTRACTS, the following are certified by BNDES:
	<ul> <li>reducing Vale's staff without offering training programs and/or replacement programs for workers in other companies;</li> </ul>
	<ul> <li>existence of final decision condemning the Beneficiary for engagement in acts classified as environmental crimes or non- compliance with children's labor and slavery legislation, under the terms below.</li> </ul>
	c) inclusion in the bylaws, statute or contract of Vale or of the other controlling companies, of a provision by which a special <i>quorum</i> is required for deliberation or approval of matters limiting or restricting its controlling shareholders, or even the inclusion therein, of conditions leading to:  i) restrictions on Vale's ability to grow or its technological development;  ii) restrictions on Vale's access to new markets, or  iii) restrictions or loss of ability to pay financial obligations resulting from this operation;  d) give, without prior authorization from BNDES, guaranties of any kind in operations with other creditors without the same quality of guaranties provided to BNDES, with equal priority of payment; e) not observing the following ratios during the term of the contract:  - Adjusted EBITDA debt ratio less than or equal to 4.5, and - Adjusted EBITDA ratio of Interest Expense greater than or equal to 2.0. And, in case these ratios are not observed, guarantees an amount

equivalent to at least 130% of the debt, as stipulated by BNDES, and within 60 days from the date of written communication. In case proceeds granted under this Contract are used for any purpose other than general investments for purchase of machinery and equipment, BNDES, without prejudice to the terms set forth above in this clause, will inform the Federal Public Prosecutor, pursuant to the terms of Law No. This contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installing as a Federal Deputy or Senator or any person remunerated by Vale, or any owner, controller or director of Vale, or any person listed in the prohibitions provided by the Federal Constitution, article 54, paragraphs I and II. There will be no impact on charges of default, provided that the debt payment occurs within five (5) business days as of the date of installing, under risk of, if in default, assuming all charges related to the assumptions set forth above for early expiration by default. Early termination based on the terms in item "b" above will not be in effect upon appropriate repair or during compliance with penalty imposed to the Beneficiary, according to due legal process. In case of any of the circumstances provided for in "b", under the terms

Nature and reasons for the operation / other relevant information

Rate of interest: 4,5 % per year Funding for the acquisition of 2,258 railroad wagons to transport iron ore

above, the BNDES may only be entitled to represent early termination of the debt upon sixty (50) day prior written notice to the Beneficiary.

Name of related party	Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Date of transaction	12/17//2007
Amount (R\$)	1,407,420,000
Current balance (R\$) (12/31/2011)	R\$ 1,685,502,845.29
Amount of related party	Not applicable
Duration	12/17/2027
Loan or other type of debt	Yes
Interest rate	0.8%
Relationship with the Issuer	Indirect Controlling shareholder
Purpose of the contract	Private issuance of debentures for financing of the expansion project of the
, p	Norte-Sul Railroad
Guaranties and insurance	None
Conditions of termination or expiration	EARLY REDEMPTION OF DEBENTURES In addition to the terms under Articles 39, 40 and 47(a) of APPLICABLE PROVISIONS, the debenture-holders may declare early maturity of all debentures and require payment by Vale, of the outstanding debt, plus interest and other fees accrued to date of payment, in the event of the following:
	<ul> <li>a) Vale non-compliance of any financial obligation related to DEBENTURES not remedied within 10 (ten) business days from the date of maturity;</li> <li>b) Bankruptcies requested for Vale made by third parties not resolved by Vale within legal term; application for judicial or extrajudicial recovery made by Vale, or even a declaration of</li> </ul>
	bankruptcy by Vale;  c) dissolution and liquidation of Vale;
	<ul> <li>the breach of any non-monetary obligation under this Deed not being remedied within 45 (forty five) days;</li> </ul>
	e) declaration of early maturity of any debt of VALE due to breach of contract where the individual amount is equal to or greater than R\$ 125,000,000.00 or whose value, in a period of twelve (12) consecutive months, is equal to or greater than R\$ 1,000,000,000.00;
	f) inclusion in the statutes or bylaws by Vale and FNS of a mechanism by which a <i>quorum</i> is required to determine or approve particular matters restricting or limiting Vale's and FNS's control by their respective controlling shareholders and also the inclusion in those documents of the mechanism which leads to restrictions on Vale's and FNS's ability to grow or its technological development, restrictions on Vale's and FNS's ability to access new markets, or restrictions or loss of ability to pay financial obligations of the agreement.

- g) finding that data in the deed provided by VALE, is in any relevant aspect inaccurate or incomplete on the date of provision;
- h) change of corporate purpose of VALE, da FNS or Vale Logística, except when (i) previously approved by debenture holders representing the majority of the outstanding debentures, and (ii) for Vale Logística, if the change aims to include a complementary activity to those currently developed by Vale Logística;
- i) Should VALE approve reduction of the capital stock with reimbursement to shareholders of part of the value of the shares or diminishing their value, when not paid up, to amounts provided, without prior express approval of debenture holders representing the majority of outstanding debentures;
- j) If the effective direct controlling shareholding of Vale or FNS or Vale Logística is modified in any way, unless previously approved by DEBENTURE holders;
- k) acquisition by FNS or Vale Logística of the shareholding control or interest in other companies, joint ventures or consortia that are activities that complement the regular development of the corporate purpose of FNS, characterizing deviation from the corporate purpose of FNS or Vale Logística, except when previously approved by debenture holders; I) in relation to FNS, any merger, consolidation, division, transformation or any other corporate reorganization, whether strictly corporate or related to a disposition of relevant assets, and, in relation to Vale Logística, any incorporation (except when Vale Logística appears as incorporator and provided the incorporated company is not FNS), merger, consolidation, division, transformation or other oper5ation or set of operations under which a significant part of the assets of Vale Logística is transferred to third parties, when significant portion of assets means 50% (fifty per cent) of all assets held by Vale Logística; in relation to VALE, corporate reorganizations that may result in transfer to third parties that are not controlled by Vale, of share ownership issued by FNS, being the object of the exchange in the terms of this DEED, with the observation that this subparagraph will not apply if any of the transactions referred to in this item has been previously approved by debentures holders representing at least 50% plus one of outstanding debentures;
- m) non-compliance by Vale of any provision for interchangeability of the debentures:
- n) constitution, by Vale, of a collateralized guaranty with the other creditors, without the present ISSUANCE being given the same quality of guaranty and equal priority of payment unless previously approved by DEBENTURE holders;
- o) If Vale does not promote and maintain the block on exchange of common shares issued by FNS corresponding to the Percentage of Shares in the permutation;
- p) if Vale does not use the proceeds of this ISSUANCE for FNS's capitalization, within 3 (three) business days of redemption of the DEBENTURES; and  ${\bf e}$
- q) if VALE fails to promote redemption within the terms and conditions in item 25 in the deed;
- o) engage in an initial public offering of shares of any subsidiary of VALE other than Vale Logística that controls FNS and Ferrovia Centro-Atlântica S.A. or transfer the effective direct or indirect control of such companies to any open capital company under control of the ISSUER.

#### EARLY REDEMPTION

Vale should redeem all of the outstanding debentures within 30 (thirty) days from the occurrence of the following events:

- a) termination of the subconcession agreement executed between Valec Engenharia, Construções e Ferrovias S.A. and FNS, due to termination, resolution, settlement, annulment of the subconcession or concession or if the bidding process is deemed to be void; and
- b) intervention by the Public Authority responsible for the subconcession or concession for the administration and operation of public transport service

## Nature and reasons for the operation / other relevant Information

Transaction for financing the Norte-Sul railroad expansion project. Three issuances of debentures: 17/12/2007 (1st issuance), 15/10/2009 (2nd issuance), and 6/9/2011 (3<sup>rd</sup> issuance). The amount reported above is the sum of all three issuances.

The interest rate is of TJLP+0.8% per year

Name of related party	Banco Bradesco S.A.
Date of transaction	4/8/2010
Amount (R\$)	639,066,746.04 (initial balance applied)
Current balance (R\$) (12/31/2011)	385,169,802.14
Amount of related party	Not applicable
Duration	Maturities between 3/29/2012 and 12/16/2013
Loan or any other type of debt	NO
Interest rate	-
Relationship with the Company	Bradespar SA, indirect controlling shareholder of Vale, and Banco Bradesco S.A. are under common control.
Purpose of the contract	80CDs issued by Banco Bradesco S.A. and contracted by Vale in the period from 4/8/2010 to 12/26/2011. Financial investment – 99.87% of CDI (average open transactions)
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant information	

Name of related party	Banco Bradesco S.A. Grand Cayman Branch
Date of transaction	9/26/2011
Amount (R\$)	473,679,900.00
Current balance (R\$) (12/31/2011)	473,066,297.14
Amount of related party	Not applicable
Duration	Expiry date on 1/3/2012 to 3/23/2012
Loan or any other debt	NO
Interest rate	-
Relationship with the Company	Bradespar S.A., Vale indirect controlling shareholder, and Banco Bradesco S.A. are under common control.
Purpose of the contract	3 Investments in Time Deposits contracted by Vale on 9/26/2011. Financial investment – 0.57% per year (average of outstanding operations)
Guaranties and insurance	None

Conditions of termination or expiration Nature and reasons for the operation / other relevant information	None

Name of related party	CBSS - Companhia Brasileira de Soluções e Serviços
Date of transaction	09/02/2008
Amount (R\$)	Not applicable
Current balance (R\$) (12/31/2011)	112,459,741.12
Amount of related party	Not applicable
Duration	09/01/2013
Loan or any other debt	NO
Interest rate	-
Relationship with the Company	CBSS is a company controlled by Banco Bradesco S.A. Bradespar S.A., indirect controlling shareholder of Vale, and Banco Bradesco S.A. are under common control.
Purpose of the contract	Provision of meal vouchers and food stamps, and services to purchase bus passes for officials of Vale and affiliate companies.
Guaranties and insurance	None
Conditions of termination or expiration	The Contract may be lawfully terminated at the discretion of the innocent party, by simple written communication, under the following instances:  a) breach of any provision of this instrument or the laws and regulations under which it is subject to, if not remedied within five (5) days from the date of notification receipt sent by the non-defaulting party to the infringing party, or within a reasonable time as agreed by the parties at the time;  b) bankruptcy, or extrajudicial dissolution or judicial or extrajudicial liquidation,
	requested or approved; c) occurrence of unforeseeable circumstances or force majeure, duly verified,

excluding the execution of the Contract for more than 30 days; d) technical failure, negligence, recklessness, malpractice or bad faith of the CONTRACTED. Subject to the satisfaction of its other rights, Vale may, at its sole discretion, terminate this Contract upon prior written notice to the CONTRACTED, said CONTRACTED forbearing any rights to claim, indemnification or compensation, for whatever the reason, in the following cases: a) occurrence of lawsuits brought by the CONTRACTED, shareholders or companies forming part of the same group against Vale, its subsidiaries, controlling companies and affiliate companies. b) assignment, and / or transfer of all or part of their obligations to third parties, or of credits under this Contract without prior written authorization of Vale. Notwithstanding the above, the Contract may be terminated at any time by the parties by notice of at least 90 (ninety) days. In the event of termination of this Contract for any reason, VISA Vale CARDS delivered to Vale and the respective current balances of benefits, will be valid for use for a period of ninety (90) calendar days after the effective termination and, after that period, will automatically be canceled. If any of the Parties are temporarily prevented from fulfilling its obligations in whole or in part as a result of unforeseeable circumstances or force majeure, it will report it immediately to the other party and ratify the communication in writing within 10 (ten) days of informing the harmful effects of the event. In the event of unforeseeable circumstances or force majeure, the obligations which the parties remain unable to fulfill will be suspended while the situation lasts. However, if the impediment resulting from force majeure or unforeseeable circumstances lasts for more than 30 (thirty) days, or if, from the outcome, delays indefinitely the fulfillment of this Contract, either party may opt for termination, mutually satisfying obligations due until the date of this impediment

Name of related party	-Banco Bradesco S.A.
Date of transaction	04/12/10
Amount (R\$)	554,464,602.61
Current balance (R \$) (12/31/2011)	N/A (corporate card agreement)
Amount of related party	554,464,602.61
Duration	04/11/2013
Loan or other type of debt	No
Interest rate	-
Relationship with the Company	Bradespar S.A., indirect controlling shareholder of Vale, and Banco Bradesco S.A., are under common control.
Purpose of the contract	Issuing international corporate credit cards, purchasing cards, and virtual credit cards for air tickets and hotels, intended for purchasing services and items for consumers.
Guaranties and insurance	N/A
Conditions of termination or expiration	Not applicable
	Contract may be terminated by any Party by giving written notice to the other, without there being any right of claim, indemnification or compensation for the benefit of the Party receiving the notice of termination, in following cases:  (i) Petition or declaration of bankruptcy or liquidation, or judicial or extrajudicial recovery by the other Party;  (ii) In accordance with paragraph 11.4 of the Contract, occurrence of unforeseeable circumstance or force majeure which causes execution of SERVICES to be suspended for more than thirty (30) days.  (iii) In the event the fines on the other Party reach 10% (ten percent) of the value indicated in paragraph 9.3 of the Contract.  Without failing to satisfy its other rights, Vale may, at their exclusive discretion, terminate this Contract by giving prior and express communication with the CONTRACTED PARTY, at least thirty (30) days in advance, without there being any right by the CONTRACTED PARTY to any claim, indemnification or compensation for whatever reason, in following cases:  (i) Non-compliance of any contractual obligations by the CONTRACTED PARTY for more than thirty (30) days after receipt of the relevant notice by Vale; and  (ii) Assignment, subcontracting, and/or partial or total transfer of the

Nature and reasons for the operation /

other relevant information

undertaken obligations to third parties, or of the credits arising from this Contract, without prior and express authorization by the CONTRACTING PARTY, except in case of the CONTRACTED PARTY for its affiliates, controlling companies, subsidiaries or for any financial institution that is part of its group of companies.

Without failing to satisfy its other rights, the CONTRACTED PARTY may, at their discretion, terminate this Contract by giving prior and express notice to Vale, with at least 30 (thirty) days in advance, without there being any right by the CONTRACTED PARTY to any claim, indemnification or compensation for whatever reason, in following cases:

- 14 Arrears exceeding 60 (sixty) days;
- Delays in providing information which endangers regular fulfillment of the obligations of this Contract and is not remedied within thirty (30) days after receipt of the relevant notice by the CONTRACTED PARTY; and
- Non-fulfillment of any of the obligations resulting from the Contract by Vale as a result of which the CONTRACTED PARTY is directly unable to continue regular fulfillment of its contractual obligations, and which is not remedied within 30 (thirty) days after receipt of the relevant notice by the CONTRACTED PARTY.

In the event of termination by any Party, a cancellation fine of 10% (ten percent) will be imposed to the Party causing termination over the value stated in paragraph 9.3, as updated to variations of IGP-M/FGV (General Market Price Index), from the date of signature of this Contract until the date of actual payment of such fine, without detracting from eventual losses or damages.

## Nature and reasons for the operation / other relevant information

Name of related party	Vale Energy S.A.
Amount (R\$)	217,047,000.00
Current balance (R \$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	12/31/2009
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Power Supply. In 2009, short term power supply agreements were entered into at the market price, to cover demand of Vale units.
Date of transaction	01/01/2009
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant information	-

Name of related party	Vale Energy S.A.
Amount (R\$)	434,593,204.75
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	31/12/2010
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Power Supply. In 2010, short-term power supply agreements were entered into at the market price, to cover demand of Vale units.
Date of transaction	01/01/2010
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant information	-

Name of related party	Vale Energy S.A.
Amount (R\$)	149,434,49.80
Current balance (R \$) (12/31/2011)	123,819,118.86
Amount of related party	Not applicable
Duration	12/31/2011
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Power Supply. In 2008, 12 short-term power supply agreements were entered into at
	the market price, to cover demand of Vale units.
Date of transaction	01/01/2008

Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant information	

Amount (R\$)  296,274,165.10  Current balance (R \$) (12/31/2011)  55,384,000.00  Not applicable  By 2022. Contract will be automatically renewed for equal periods, provided there is no order to the contrary from any of the parties until 24 months before the date scheduled to close contract.  Loan or other type of debt  No interest rate  Relationship with the Company  Purpose of the contract  Subsidiary  Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  Guaranties and insurance  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days. In the event of contract termination, CPBS will provide Vale in its possession. After the release of cargo and documents. Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any falling of which will be deemed to be abandoned purusuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this; in the event of default, a letter identifying the breach of contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that port	Name of related party	Companhia Portuária Baía de Sepetiba (CPBS)
Current balance (R \$) (12/31/2011)  55,384,000.00  Amount of related parry  Not applicable  Duration  By 2022. Contract will be automatically renewed for equal periods, provided there is no order to the contrary from any of the parties until 24 months before the date scheduled to close contract.  No  Interest rate  Relationship with the Company  Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, tem or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale is whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS provided for herein.  - For purposes of this item, CPBS may offset any	Date of transaction	01/01/2004
Duration  By 2022. Contract will be automatically renewed for equal periods, provided there is no order to the contrary from any of the parties until 24 months before the date scheduled to close contract.  NO  Interest rate	Amount (R\$)	296,274,165.10
By 2022. Contract will be automatically renewed for equal periods, provided there is no order to the contrary from any of the parties until 24 months before the date scheduled to close contract.  NO Interest rate  Relationship with the Company  Purpose of the contract  Subsidiary  Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved;  Chefault of obligation established in any clause, Item or subitem of the contract, not resolved;  Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINHAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any falling of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have lifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggreed party may terminate this contract as an assign and perhaps not permit the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS provided for herein.  For purposes of	Current balance (R \$) (12/31/2011)	55,384,000.00
no order to the contrary from any of the parties until 24 months before the date scheduled to close contract.  NO  Interest rate  - Relationship with the Company  Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptey, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseable circumstances or force majeure, for more than sixty (60) calendar days. In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINIAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any falling of which will be deemed to be abandoned pursuant to the terms of the Civil Code. In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations ansing from this:  In the event of Edeal thas not been remedied, the aggrieved party may terminate this contract as an extrajudicial execution order for the recovery of any sums due, regarded now as certain net devia the tother of calms that Vale might have, and use this contr	Amount of related party	Not applicable
Relationship with the Company  Subsidiary  Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptov, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days. In the event of contract termination, CPBS will provide Vale it its whole cargo/property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any falling of which will be deemed to be abandoned pursuant to the terms of the Civil Code. In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggreed party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this; In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the reimbursement of costs resulting from this suspension	Duration	no order to the contrary from any of the parties until 24 months before the date
Relationship with the Company Purpose of the contract  Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptoy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days. In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code. In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this; In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (ii) the compensation for any burden caused by Vale to CPBS provided for her	Loan or other type of debt	NO
Providing operating services and iron ore shipping. Contract purpose is to ensure the use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and ranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this;  In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspicion. (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS provided for herein.  - For purposes of this item, CPBS may offset any debts they have with respect to the claims that Vale might have, and use this	Interest rate	-
use of port infrastructure and loading capacity of iron ore for an annual quantity of 11,000,000 t (eleven million tons).  None  The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale is whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this;  In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS may offset any debts they have with respect to the claims that Vale might have, and use this contract as an extrajudicial execution order for the recovery	Relationship with the Company	Subsidiary
The contract may be terminated by operation of law, at the discretion of the innocent party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this;  In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation from yburden caused by Vale to CPBS may offset any debts they have with respect to the claims that Vale might have, and use this contract as an extrajudicial execution order for the recovery of any sums due, regarded now as certain net debt in the event of default by Vale. It will be Vale's responsibility to cover all	Purpose of the contract	use of port infrastructure and loading capacity of iron ore for an annual quantity of
party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days. In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code. In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this; In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS provided for herein For purposes of this item, CPBS may offset any debts they have with respect to the claims that Vale might have, and use this contract as an extrajudicial execution order for the recovery of any sums due, regarded now as certain net debt in the event of default by Vale. It will be Vale's responsibility to cover all costs that CPBS has to incur due	Guaranties and insurance	None
	Conditions of termination or expiration	party, by simple written communication addressed by the interested party to the other party in any of the following cases:  - Bankruptcy, liquidation agreement, dissolution or liquidation, declared or approved; - Default of obligation established in any clause, Item or subitem of the contract, not resolved; - Suspension or termination of services and / or the occurrence of unforeseeable circumstances or force majeure, for more than sixty (60) calendar days.  In the event of contract termination, CPBS will provide Vale its whole cargo/ property which is in the TERMINAL and all documents owned by Vale in its possession. After the release of cargo and documents, Vale will pay all expenses and service costs, and perhaps not yet settled, offsetting any claims and arranging the withdrawal of the product within 30 (thirty) days, any failing of which will be deemed to be abandoned pursuant to the terms of the Civil Code.  In the event of default, a letter identifying the breach of contract should be presented to the other party, which will have fifteen (15) days to remedy the default. If after this time the default has not been remedied, the aggrieved party may terminate this contract by operation of law, subject to judicial collection, corresponding to the obligations arising from this;  In the event of suspension of service determined by Vale or contract termination, the following will be owed to CPBS: (i) the amounts pending payment for that portion of services already performed until the date of suspension, (ii) the reimbursement of costs resulting from this suspension or contract termination, (iii) the compensation for any burden caused by Vale to CPBS may offset any debts they have with respect to the claims that Vale might have, and use this contract as an extrajudicial execution order for the recovery of any sums due, regarded now as certain net debt in the event of default by Vale. It will be Vale's responsibility to cover all costs that CPBS has to incur due to the collection, judicial or extrajudicial, of th
OTHER RELEVANT INFORMATION	Nature and reasons for the operation / other relevant information	

Name of related party	Ferrovia Centro Atlântica S.A., Vale Fertilizantes, Ultrafértil e Vale S.A.
Date of transaction	12/30/2002
Amount (R\$)	R\$ 12,685,295.00
Current balance (R\$) (12/31/2011)	R\$ 6,793,424.00
Amount of related party	Not applicable
Duration	12/31/2011
Loan or other type of debt	NO
Duration	12/31/2011
Interest rate	-
Relationship with issuer	Subsidiary
Purpose of the contract	Three contracts:

	- Provision of railroad transportation services of phosphate rocks, sulphur, and fertilizers. The balance refers to advancement of freight. (date of transaction
	12/30/002).
	- Provision of goods unloading services from ships, stocking in warehouses, loading
	and weighing cars and trucks and railroad transportation (date of transaction
	05/09/2011).
	- Provision of railroad transportation services (date of transaction 16/08/2010).
Guaranties and insurance	The contracts foresee indemnity in the event of theft, loss or damage of goods and
	will be treated in specific process and if they are due, they will be paid up to 60 (sixty)
	days after receiving the request for compensation. The price to be considered will be
	the one declared in the RECEIPT at the time of the transportation.
Conditions of termination or expiration	This agreement may be terminated by any of the Parties, regardless of notice,
	communication or judicial summons or extrajudicial communication, in the following
	events:
	a) Petition or declaration of insolvency, bankruptcy or judicial or extrajudicial recovery
	of the other Party;
	b) Suspension/revocation of Contractor's concession to explore public cargo railroad
	transportation service, at any time;
	c) Non-fulfillment of any of the obligations resulting from the Contract by Vale as a result of which the CONTRACTED PARTY is directly unable to continue regular
	fulfillment of its contractual obligations, and which is not remedied within 30 (thirty)
	days after receipt of the relevant notice by the CONTRACTED PARTY The
	agreements can be terminated ipso jure in case of not complying with any of its
	conditions, as well as in the case of bankruptcy or judicial or extrajudicial recovery,
	under the provisions or Act 11.101, of 02.09.2005, of any of the contracting parties
	without need of any judicial or extrajudicial notification for this purpose
	This contract may be terminated by either PARTY, without any charge, provided it is
	done in writing with at least 30 (thirty) days in advance, of the intended termination
	date. If that is the case, no indemnification or compensation for whatever reason may
	be paid, not even for loss or damage.
Nature and reasons for the operation /	
other relevant information	-

Name of related party	Ferrovia Centro Atlântica S.A. and e VLI Multimodal S.A.
Date of transaction	12/7/2010
Amount (R \$)	R\$ 165,916,530.67
Current balance (R \$) (12/31/2011)	R\$ 69,395,146;00
Amount of related party	Could not be assessed.
Duration	5 years and 5 months – until termination of subconcession
Loan or other type of debt	No
Interest rate	
Relationship with the Company	Subsidiary
Purpose of the contract	Two contracts: Providing railway transportation services of various products in containers owned by the CONTRACTED PARTY and/or the CONTRACTING PARTY, by the CONTRACTED PARTY to the CONTRACTING PARTY, along pre-established routes, jointly agreed upon between the PARTIES (Annex 1), exclusively on railroad flatcars. (transaction date 10/1/2011) purpose of the contract is the provision of railroad transportation services (date of transaction 12/7/2010)
Guaranties and insurance	Both contracts specify compensations for theft, loss, or damage of the goods that will be handled in a specific process and, in the case of any debt, they will be settled within 60 days after receipt of the compensation request. The price to be considered will be that declared in the fiscal note at the time of carriage.
Conditions of termination or expiration	Contracts may be terminated by operation of law, regardless of notice, communication or judicial summons or extrajudicial communication, in the event of non-observance of its terms, bankruptcy or judicial or extrajudicial recovery of either PARTY.  - Contract may be terminated by any Party by giving written notice to the other, without there being any right of claim, indemnification or compensation for the benefit of the Party receiving the notice of termination, in following cases::  (i) Non-compliance of any contractual obligations by the other Party, except when non-compliance is solved within sixty (60) days after receipt of the relevant notice by the non-default Party;  (ii) Petition or declaration of bankruptcy or liquidation, or judicial or extrajudicial recovery by the other Party; and  (iii) In the event of an act of God or force majeure regularly proved, that comes to stop the execution of this Contract for more than six (6) months.
Nature and reasons for the operation / other relevant information	-

Name of related party	Farrania Contra Atlântica C.A. Commonhio Hispana huscilaina da Dalaticação
Name of related party	Ferrovia Centro Atlântica S.A., Companhia Hispano-brasileira de Pelotização – HISPANOBRAS, and Vale S.A.
Relationship with the Company	Subsdiaries and affiliates
Date of transaction	01/01/2010
Purpose of the contract	Supply railroad transport service
Business amount	R\$ 6,620,094.00
Current balance	R\$ 1,509,42.00
Amount of related party	Could not be assessed
Guaranties and insurance	The contract foresees indemnity in the event of theft, loss or damage of goods and
	will be treated in specific process and if they are due, they will be paid up to 60
	(sixty) days after receiving the request for compensation. The price to be considered
	will be the one declared in the RECEIPT at the time of the transportation.
Duration	5 (five) years.
Conditions of termination or expiration	This agreement may be terminated by any of the Parties, by means of a written notification to the other Party. The Party by reason of which the Resolution was requested, will have no right to any claim, indemnity or compensation in the following cases:  (i) If the other Party fails to fulfill any of the obligations foreseen by this Contract, except when the failure can be corrected and if the defaulting party corrects it within 5 (five) days after receiving the corresponding written notification;  (ii) Petition or declaration of insolvency, bankruptcy or judicial or extrajudicial recovery of the other Party  (iii) In the event of an act of God or force majeure regularly proved, that comes to stop the execution of this Contract for more than 30 (thirty) days.
Loan or other type of debt	No
Nature and reasons for the operation /	-
other relevant information	
Rate of interest	-

Name of related party	Ferrovia Centro Atlântica S.A.
Relationship with the Company	Subsidiary
Date of transaction	01/01/2009
Purpose of the contract	This refers to 4 contracts: Supply railroad transport service (date of transaction
i dipose di tile contract	01/01/2010).
	- Provision of Railroad Transportation Service (date of transaction 11/11/2010).
	- Provision of Railroad Transportation Service (date of transaction 11/11/2010).
	- Provision of Railroad Transportation Service (date of transaction 4/30/2010).
Business amount	R\$ 31.798.316.00
Current balance	R\$ 21,450,044,00
Amount of related party	Could not be assessed
Guaranties and insurance	The contracts foresee indemnity in the event of theft, loss or damage of goods and
- Call and and and and	will be treated in specific process and if they are due, they will be paid up to 60
	(sixty) days after receiving the request for compensation. The price to be considered
	will be the one declared in the RECEIPT at the time of the transportation
Duration	5 (five) years – 2 (two) years – 4 (four) years – 9 (nine) months
Conditions of termination or expiration	This agreements may be terminated by any of the Parties, through written
	notification to the other Party. The Party by reason of which the Resolution was
	requested, will have no right to any claim, indemnity or compensation in the
	following cases:
	(i) If the other Party fails to fulfill any of the obligations foreseen by this
	Contract, except when the failure can be corrected and if the defaulting party
	corrects it within 5 (five) days after receiving the corresponding written
	notification;
	(ii) Petition or declaration of insolvency, bankruptcy or judicial or extrajudicial
	recovery of the other Party;
	(iii) In the event of an act of God or force majeure regularly proved, that comes
	to stop the execution of this Contract for more than 30 (thirty) days.
	This agreement may be terminated by any of the Parties, through written
	notification to the other Party. The Party by reason of which the Resolution was
	requested, will have no right to any claim, indemnity or compensation in the
	following cases:
	(i) Petition or declaration of insolvency, bankruptcy or judicial or extrajudicial
	recovery of the other party;
	(ii) with observance of the provisions set forth in clause 12, in the event of an

act of God or force majeure regularly proved, that comes to stop the execution of this Contract for more than 90 (ninety) days. Without prejudice of its other rights, Vale S.A. can terminate this Contract at its exclusive judgment, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnity or compensation whatsoever, in any of the following cases: (i) If the Company fails to fulfill any of the obligations foreseen by this Contract, that have to be corrected within 30 (thirty) days after receiving Vale's written notification for this purpose; and (ii) assignment, outsourcing and/or partial or total transfer for third parties of assumed obligations, or of the credits deriving from this contract, without previous and written authorization from Vale S.A. Without prejudice of its other rights, Vale S.A. can terminate this Contract at its exclusive judgment, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnity or compensation whatsoever, in any of the following cases: (i) delay in the payments for a period higher than 90 (ninety) days; (ii) delay in the availability of information that compromises the regular fulfillment of the obligations assumed in the contract, that have to be corrected within 30 (thirty) days after receiving the Company's notification for this purpose; and (iii) if Vale S.A. fails to fulfill any of the obligations of this contract and as a consequence the Company cannot continue with the regular fulfillment of its contract obligations, and is not corrected within 30 (thirty) days after receiving the Company's notification for this purpose .. - None - This agreement may be terminated by any of the Parties, through written notification to the other Party. The Party by reason of which the Resolution was requested, will have no right to any claim, indemnity or compensation in the following cases: (iii) Petition or declaration of insolvency, bankruptcy or judicial or extrajudicial recovery of the other party; (iv)with observance of the provisions set forth in clause 12, in the event of an act of God or force majeure regularly proved, that comes to stop the execution of this Contract for more than 90 (ninety) days. Without prejudice of its other rights, Vale S.A. can terminate this Contract at its exclusive judgment, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnity or compensation whatsoever, in any of the following cases: (i) If the Company fails to fulfill any of the obligations foreseen by this Contract, that have to be corrected within 30 (thirty) days after receiving Vale's written notification for this purpose; and (ii) assignment, outsourcing and/or partial or total transfer for third parties of assumed obligations, or of the credits deriving from this contract, without previous and written authorization from Vale S.A. Without prejudice of its other rights, Vale S.A. can terminate this Contract at its exclusive judgment, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnity or compensation whatsoever, in any of the following cases: (iii) delay in the payments for a period higher than 90 (ninety) days; delay in the availability of information that compromises the regular fulfillment of the obligations assumed in the contract, that have to be corrected within 30 (thirty) days after receiving the Company's notification for this purpose; and (iii) if Vale S.A. fails to fulfill any of the obligations of this contract and as a consequence the Company cannot continue with the regular fulfillment of its contract obligations, and is not corrected within 30 (thirty) days after receiving the Company's notification for this purpose Loan or other type of debt Nο Nature and reasons for the operation / N/A other relevant information Rate of interest N/A

Name of related party	Ferrovia Centro Atlântica S.A. and Log-in Logística Intermodal S.A.
Relationship with the Company	Subsidiary
Date of transaction	02/01/2009
Purpose of the contract	Railroad transportation of miscellaneous goods arranged in containers and
	transportation of empty containers. (nine contracts with the same object_
Business amount	R\$ 12,451,209.64
Current balance	0.00

Amount of related party	Could not be assessed.
Guaranties and insurance	The contract foresees indemnity in the event of theft, loss or damage of goods and will be treated in specific process and if they are due, they will be paid up to 60 (sixty) days after receiving the request for compensation. The price to be considered will be the one declared in the RECEIPT at the time of the transportation.
Duration	12 (twelve) months
Conditions of termination or expiration	It can be terminated ipso jure in case of not complying with any of its conditions, as well as in the case of bankruptcy or judicial or extrajudicial recovery, under the provisions or Act 11.101, of 02.09.2005, of any of the contracting parties without need of any judicial or extrajudicial notification for this purpose.
Loan or other type of debt	No
Nature and reasons for the operation / other relevant information	-
Rate of interest	-

Name of related party	Ferrovia Centro Atlântica S.A. and Log-in Logística Intermodal S.A.
Date of transaction	3/1/2007
Amount (R \$)	R\$ 4,786,038.00
Current balance (R \$) (12/31/2011)	R\$ 63,470.00
Amount of related party	Could not be assessed
Duration	10 years – relationship with LOG-IN terminated on 10/01/11, considering assignment of the contract from LOG-IN to VLI MULTIMODAL
Loan or other type of debt	No
Rate of interest	-
Relationship with the Company	Subsidiary
Purpose of the contract	Providing railway transportation services of various products in containers owned by the CONTRACTED PARTY and/or the CONTRACTING PARTY, by the CONTRACTED PARTY to the CONTRACTING PARTY, along pre-established routes, jointly agreed upon between the PARTIES (Annex 1), exclusively on railroad flatcars
Guaranties and insurance	Contract specifies compensations for theft, loss, or damage of the goods that will be handled in a specific process and, in the case of any debt, they will be settled within 60 days after receipt of the compensation request. The price to be considered will be that declared in the fiscal note at the time of carriage.
Conditions of termination or expiration	Contract may be terminated by operation of law, regardless of notice, communication or judicial summons or extrajudicial communication, in the event of non-observance of its terms, bankruptcy or judicial or extrajudicial recovery of either PARTY.
Nature and reasons for the operation / other relevant information	-

Name of related party	MIL Multimardal C.A. a Mala C.A.
. ,	VLI Multimodal S.A. e Vale S.A.
Date of transaction	07/12/2010
Amount (R \$)	0,00
Current balance (R \$) (12/31/2011)	0,00
Amount of related party	Not applicable
Duration	30/06/2027
Loan or other type of debt	No
Rate of interest	-
Relationship with the Company	Subsidiary
Purpose of the contract	Providing railway transportation services
Guaranties and insurance	Contract specifies compensations for theft, loss, or damage of the goods that will be handled in a specific process and, in the case of any debt, they will be settled within 60 days after receipt of the compensation request. The price to be considered will be that declared in the fiscal note at the time of carriage.
Duration	30/06/2027
Conditions of termination or expiration	Contract may be terminated by any Party by giving written notice to the other, without there being any right of claim, indemnification or compensation for the benefit of the Party receiving the notice of termination, in following cases:: (i) Non-compliance of any contractual obligations by the other Party, except when non-compliance is solved within sixty (60) days after receipt of the relevant notice by the non-default Party; (ii) Petition or declaration of bankruptcy or liquidation, or judicial or extrajudicial recovery by the other Party; and (iii) In the event of an act of God or force majeure regularly proved, that comes to stop the execution of this Contract for more than six (6) months
Nature and reasons for the operation / other relevant information	-

Name of related party	Ferrovia Norte Sul S.A.( through Estrada de Ferro Carajás – EFC)
Date of transaction	12/19/2008
Amount (R \$)	12,154,561.75
Current balance (R \$) (12/31/2011)	0,00
Amount of related party	None
Duration	30 (thirty) years or termination of the subconcession
Loan or other type of debt	No
Rate of interest	-
Relationship with the Company	Subsidiary
Purpose of the contract	Specific Contractual Transaction, with the objective (i) to carry out specific transactions relating to mutual traffic and/or the right of passage; (ii) to refine global operational efficiency for railroad transportation and better conditions in general for passengers, in order to allow for increased railroad transportation between parties; (iii) to maintain a heightened relationship between parties, in order to increase service of the demands of transportation of cargo in its areas of influence, producing economic development in the regions it attends, all in accordance with our contracts, as well as in observance of the applicable technical norms and regulations; and (iv) to consider the junction between the two railroads and the Açailândia station, in the state of Maranhão, operated by Vale S.A., where we will make the exchange between railroad stations with dispatched cargo in mutual traffic
Guaranties and insurance	None
Conditions of termination or expiration	Contract may be terminated by giving notice, communication or judicial summons or extrajudicial communication within 30 (thirty) days, only in the event of non-compliance by either party with any clause, provided it is not remedied within 90 (ninety) days by the non-complying party, after receiving prior written notice identifying the non-compliance, with acknowledgement of receipt
Nature and reasons for the operation / other relevant information	-

Name of related party	Vale Manganês S.A. e Ferrovia Centro Atlântica S.A.
Date of transaction	9/1/2008
Amount (R \$)	R\$ 20,323.00
Current balance (R \$) (12/31/2011)	R\$ 638,763.00
Amount of related party	None
Duration	12/31/2014 – 12/31/2011
Loan or other type of debt	NO
Rate of interest	-
Purpose of the contract	Refers to two contracts:
	<ul> <li>Handling of manganese ore dispatched from and to Vale Manganês by Estrada de Ferro Vitória a Minas e Ferrovia Centro-Atlântica (date of transaction 01/05/2010).</li> <li>Handling of manganese ore dispatched from Carajás-PA to São Luis-MA for Vale Manganês, and shipping at Ponta da Madeira terminal. (date of transaction 9/1/2008).</li> </ul>
Guaranties and insurance	None
Conditions of termination or expiration	This contract may be terminated by either PARTY, without any charge, provided it is done in writing with at least 60 (sixty) days in advance of the intended termination date. If that is the case, no indemnity or compensation whatsoever may be paid, not even for loss or damage.
Nature and reasons for the operation /	-
other relevant information	
Name of related party	Docepar S.A. (DOCEPAR)
Date of transaction	1/2/2006
Amount (R \$)	49,030,201.87
Current balance (R \$) (12/31/2011)	794,060.20
Amount of related party	Not applicable
Duration	6/28/2012
Loan or other type of debt	Yes
Rate of interest	94% of CDI
Relationship with the Company	Subsidiary
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or	PREPAYMENT

expiration	DOCEPAR may prepay the amount, in whole or in part, including principal and interest calculated from January 2 (two), 2006 until the date of actual payment.
	DOCEPAR should notify its intention to make the prepayment at least 3 (three) days in advance.
	EARLY TERMINATION If DOCEPAR fails to meet any of its obligations, Vale may automatically assume the debt for the total value (principal and interest) plus the contractual penalty provided for in the contract, the present serving as an extrajudicial execution order, in accordance with Article 585 of the Code of Civil Procedure.
Nature and reasons for the operation / other relevant information	Interest rate charged: 94% CDI Inter-company loan to cover cash needs. Vale is debtor in this transaction.

Name of related party	CVRD Overseas Ltd.
Date of transaction	8/15/2000
Amount (R\$)	Not applicable
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	Undetermined
Loan or other type of debt	NO
Interest rate	
Relationship with the Company	Subsidiary
Purpose of the contract	Purchase of iron ore agglomerated and non-agglomerated products. In accordance with Vale securitization program started in 2000, it was established with the Trustee that sales for securitized customers over the term of the program would be made through CVRD Overseas
Guaranties and insurance	None
Conditions of termination or expiration	None. Vale securitization program, started in 2000, specifying that sales for securitized customers were to be made by CVRD Overseas, was finished in January 2010.
Nature and reasons for the operation / other relevant information	

Name of related party	Vale International S.A.
Date of transaction	01/13/2006
Amount (R\$)	28,014,166,800.00 (equivalent to USD 16,089,000,000.00)
Current balance (R\$) (12/31/2011)	<b>27,897,325,514.25</b> (equivalent to USD 14,922,295,945.11)
Amount of related party	Not applicable
Duration	12/21/2026
Loan or other type of debt	YES
Interest rate	2.66% per year (average rate)
Relationship with the Company	Subsidiary
Purpose of the contract	Export prepayment
Guaranties and insurance	None
Conditions of termination or expiration	Prepayment - The exporter may, by notice in writing at least two (2) business days for the Importer, elect to prepay any amount, in whole or in part, with accrued interest.
Nature and reasons for the operation / other relevant information	This is an export prepayment to cover cash needs. The Company is the debtor in this transaction.

Name of related party	Vale International S.A.
Date of transaction	01/31/2005
Amount (R\$)	3,120,634,886.35 (equivalent to USD 1,792,232,303.21)
Existing balance (R\$) (12/31/2011)	2,440,400,247.14 (equivalent to USD 306,214,337.71)
Amount of related party	Not applicable

Duration	04/29/2014
Loan or other type of debt	YES
Interest rate	3.37% per year (average rate)
Relationship with the Company	Subsidiary
Purpose of the contract	Import financing
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation /	This is an import financing for the optimization of the import area (streamlining import
other relevant information	processes, with reduction of the number of exchange contracts).

Name of related party	Vale International S.A.
Date of transaction	03/01/2006
Amount (R\$)	57,026,586,180.25
Existing balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	12/31/2016
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Sale of agglomerated and non-agglomerated iron ore, manganese, copper concentrate, copper cathode, and nickel products. The "Termination" clause was prepared under English jurisdiction, and for this reason an analogy has been made with the wording of Brazilian legal institutions (which are different from English legal institutions).
Guaranties and insurance	None
Conditions of termination or expiration	The contract may be terminated immediately by written notification to the other party, if: (I) the other party commits a serious breach of any obligation under this contract if such breach is not remedied within 7 (seven) business days following the warning about the violation requesting its remedying; (II) an actual charge is made on the property of the other party or a judicial administrator or administrator is appointed to manage the property of the other party; (III) the other party enters into a contract with its creditors or has an administrator or other person who takes the decisions, including the decision to file documents in a Court of Justice declaring the intention to appoint an administrator to substitute the administrator in office; (IV) the other party declares liquidation (except in cases of mergers or restructurings, in which case the new company will assume the obligations imposed by the other party in relation to the current contract); (V) any occurrence of any event similar to events previously listed in accordance with the laws of any jurisdiction; or (VI) the other party stops or threatens to stop commercial/business transactions.
Nature and reasons for the operation / other relevant information	

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Name of related party	Baovale Mineração S.A.
Date of transaction	10/10/2001
Amount (R\$)	39,533,815.51
Current balance (R\$) (12/31/2011)	13,620,000.00
Amount of related party	Not applicable
Duration	20 years ( by 10/18/2021)
Loan or other type of debt	No
Relationship with the Company	Subsidiary, joint control
Purpose of the contract	Leasing
Guaranties and insurance	None
Conditions of termination or expiration	This contract may be terminated:  - due to act of God or force majeure under the terms in article 1058 and sole paragraph in the Civil Code  - upon mutual agreement;  - upon termination by either party due to non-compliance by the other party;  - due to bankruptcy or composition with creditors by either party.
Nature and reasons for the operation / other relevant Information	

Name of related party	Companhia Hispano Brasileira de Pelotização - Hispanobras
Date of transaction	05/13/1974
Amount (R\$)	234,722,277.81

Current balance (R\$) (12/31/2011)	13,587,999.97
Amount of related party	Not applicable
Duration	Current while the company exists
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Supply of pellet feed (Vale for Hispanobras) Pellet acquisition contract (Hispanobras for Vale) Plant operation contract (Vale operates Hispanobras plant) In accordance with the shareholders' contract between Vale and Arcelor Mittal Spain, Vale operates Hispanobras pellet plant, supplies pellet feed, and purchases part of the pellets produced in that plant.
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant Information	

Name of related party	Companhia Nipo-Brasileira de Pelotização - Nibrasco
Date of transaction	04/30/2008
Amount (R\$)	250,835,944.25
Current balance (R\$) (12/31/2011)	11,078,000.19
Amount of related party	Not applicable
Duration	Up to 2013
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Contract for leasing assets. Vale leased the 2 pellet plant of Nibrasco, upon payment of a fixed portion and variable portion depending on the performance of the assets. The duration of the agreement is of 3 years, successively renewable for an equal period
Guaranties and insurance	None
Conditions of termination or expiration	Written notification to the other party, at least one year before its termination.
Nature and reasons for the operation / other relevant Information	

Name of related party	Companhia Italo-Brasileira de Pelotização - Itabrasco
Date of transaction	09/30/2008
Amount (R\$)	248,875,236.48
Current balance (R\$) (12/31/2011)	318,999.97
Amount of related party	Not applicable
Duration	2018
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Contract for leasing assets. Vale leased the pellet plant of Itabrasco, upon payment of a fixed portion and variable portion depending on the performance of the assets.
Guaranties and insurance	None
Conditions of termination or expiration	Either party will have the right to terminate the lease after the initial period of three years, provided that they send to the other party written notice at least a year before the lease expires.  The parties may also, during the eighth year, review the conditions agreed in this contract in order to decide whether or not this will be renewed.
Nature and reasons for the operation / other relevant Information	

Name of related party	Companhia Coreano Brasileira de Pelotização - Kobrasco
Date of transaction	05/06/2008
Amount (R\$)	165,855,214.58
Current balance (R\$) (12/31/2011)	4,668,000.00
Amount of related party	Not applicable
Duration	2013
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Contract for leasing assets. Vale leased the Kobrasco pellet plant of Kobrasco, upon
	payment of a fixed portion and variable portion depending on the performance of the assets. Term of the contract is five years, renewable successively for an equal period.

Guaranties and insurance	None
Conditions of termination or expiration	Written notice to the other party at least one year in advance of its termination
Nature and reasons for the operation /	
other relevant Information	

Name of related party	Samarco Mineração S.A.
Date of transaction	04/12/2004
Amount (R\$)	788,338,735.21
Current balance (R\$) (12/31/2011)	R\$ 37,715 thousand
Amount of related party	Not applicable
Duration	1/1/2027
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Regulate commercial relations between the parties regarding sale or iron ore produced by Vale for Samarco. (total of three contracts)
Guaranties and insurance	There is insurance against damages, in the area in control of the purchaser, related to the materials and/or equipment belonging to the vendor, as provided for by the PURCHASER.
Conditions of termination or expiration	The contract may be terminated by operation of law, by the innocent party, without prior notice, in any of the following cases:  a) Default of any term, condition or provision of this contract or its exhibits, provided that the breach is not remedied within thirty (30) calendar days of the written notices provided for above. In such case, the party at fault must pay the innocent party a contractual fine of 10% of the annual amount in which the event occurs, which will be deducted from the losses and damages. The higher value holds, in any case, over the lower, at the risk of refund; b) Bankruptcy, judicial or extrajudicial recovery, dissolution or, judicial or extrajudicial liquidation, declared or approved; c) Suspension by the competent authorities of the implementation of the Services for more than thirty (30) days; d) Suspension of service due to the occurrence of force majeure or unforeseeable circumstances as noted in the fourteenth clause for a period exceeding ninety (90) days, in which case the VENDOR has the right to receive from the PURCHASER the supplies already provided.
Nature and Reasons for the operation / other Relevant Information	

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Name of related party	MRS Logística S.A.
Date of transaction	01/01/2011
Amount (R\$)	1,232,682,130.43
Current balance (R\$) (12/31/2011)	R\$ 6,138 thousand
Amount of related party	Not applicable
Duration	01/01/2011 to 11/30/2026
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Affiliate
Purpose of the contract	Regulate the provision by MRS to VALE, of rail transportation services of iron ore loading from iron ore terminals named Terminal do Andaime, Terminal do Córrego do Feijão, Terminal Águas Santa, Terminal Olhos D´Agua, Terminal Sarzedo Novo – TCS (Terminal de Carga de Sarzedo), Terminal Sarzedo, Terminal Alberto Flores, Terminal Souza Noschese, Terminal de Juiz de Fora, located in the state of Minas Gerais, and certain other terminals for shipping - while transportation conditions will be agreed upon at the time – to unloading terminals Guaíba, CPBS, CSA, and Patrag, the first three in the State of Rio de Janeiro and the last one in the State of Minas Gerais (Ouro Branco).
Guaranties and insurance	Vale will guarantee MRS the minimum payment of 80% (eighty per cent) of MRS' Scheduled Annual Revenue, based on annually adjusted volumes.  MRS must contract the Optional Liability Insurance for personal injury and damage caused to third parties, and is responsible for payment of the corresponding values of the policies, copies of which should be sent to Vale with the general terms of the respective insurance; the same applies for insurances and attributions under Vale responsibility.

Conditions of termination or expiration	The contract may be terminated by operation of law, by written notice to the other party, without prior notice, in any of the following cases:
	<ul> <li>a) default, by either party of any term, condition or provision of this contract, provided that the breach is not remedied within sixty (60) calendar days of the notices provided for above.</li> </ul>
	<ul> <li>b) bankruptcy, judicial or extrajudicial recovery, dissolution or, judicial or extrajudicial liquidation, declared or approved;</li> </ul>
	c) suspension by the competent authorities of the implementation of the Services;
	<ul> <li>d) If MRS suspends the Service, in whole or in part, without express prior notice or written consent by Vale, for more than ten (10) consecutive days or 30 (thirty) alternating days;</li> </ul>
	e) Suspension of service due to the occurrence of <i>force majeure</i> or unforeseeable circumstances for a period exceeding sixty (60) days;
	f) If a party assigns this contract without prior knowledge and written consent of the other party, compliant with clause eighteen
Nature and reasons for the operation / othe relevant Information	

Name of related party	Minerações Brasileiras Reunidas S.A MBR
Date of transaction	06/01/2007
Amount (R\$)	Annual payments up to 320,000,000.00
Current balance (R\$) (12/31/2011)	25,932,000.00
Amount of related party	Cannot be assessed
Duration	31.05.2037
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Lease of facilities
Guaranties and insurance	-
Conditions of termination or expiration	Through dissolution or if the contract of usufruct of shares of Empreendimentos Brasileiros de Minerações S.A. – EBM ends
Nature and reasons for the operation / other relevant Information	-

Name of related party	Teal Minerals (Barbados) Incorporated
Date of transaction	03/23/09
Amount (R\$)	153,290,400.00 (equivalent to USD 92,000,000.00)
Current balance (R\$) (12/31/2010)	0.00
Amount of related party	50%
Duration	04/01/14
Loan or other type of debt	YES
Interest rate	Prime rate + 2% per year
Relationship with the Company	Affiliate
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant Information	Prime rate + 2% per year This is an inter-company loan for provision of the necessary resources for continuation of ore exploration activities and maintenance of the company.

Name of related party	Vale Mina do Azul S.A.
Date of transaction	8/1/2010
Amount (R \$)	31,662,064.43
Current balance (R \$) (12/31/2011)	23.731,341.47
Amount of related party	None
Duration	01/01/2012
Loan or other type of debt	NO
Rate of interest	-

Relationship with the Company	Subsidiary
Purpose of the contract	SERV.TEC-TECHNICAL SUPPORT/ASSISTED OPERATION: Mineral Loading Service, Laboratory Services, Quality Control Services, Process Development Service, Support Service in the Use of Core, Occupational Health Support Service, Safety at Work Support Service, Engineering Consulting Service;
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant information	-

Name of related party	Vale Mina do Azul S.A.
Date of transaction	8/1/2011
Amount (R \$)	20,645,094.64
Current balance (R \$) (12/31/2011)	20,645,094.64– Some 2011 sales notes were registered in Jan 2012. In January the balance was 7,177,503.01
Amount of related party	None
Duration	2/29/2012
Loan or other type of debt	NO
Rate of interest	-
Relationship with the Company	Subsidiary
Purpose of the contract	Handling of manganese ore dispatched from Carajás-PA to São Luis-MA for Vale Manganês, and shipping at Ponta da Madeira terminal.
Guaranties and insurance	None
Conditions of termination or expiration	This contract may be terminated by either PARTY, without any charge, provided it is done in writing with at least 60 (sixty) days in advance of the intended termination date. If that is the case, no indemnity or compensation whatsoever may be paid, not even for loss or damage.
Nature and reasons for the operation / other relevant information	-

Name of related party	Vale Manganês S.A.
Date of transaction	01/01/2006
Amount (R\$)	2,901,223.99
Current balance (R\$) (12/31/2011)	657,805.10
Amount of related party	None
Duration	12/31/2012
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Supply of hematite (HTFA), raw material necessary for industrial operation in manufacture of iron alloys.
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant Information	

Name of related party	Vale Manganês S.A. and Vale Energia S.A.
Date of transaction	11/18/2009
Amount (R\$)	918,000.00
Current balance (R\$) (12/31/2011)	780.483.45
Amount of related party	None
Duration	2025
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Agency services (power supply)
Guaranties and insurance	None

	The contract may be terminated by either party, without cause, with thirty (30) days' prior notice. If such is the case, no compensation may be owed by either party. The contract may also be terminated by either party upon notice given to the other in the event of bankruptcy, recovery, or judicial or extrajudicial liquidation of the other party, or non-compliance by the other party of any obligation arising from the contract.
Nature and reasons for the operation / other relevant Information	-

Name of related party	Vale Manganês S.A.
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Date of transaction	9/1/2008
Amount (R\$)	179,236,548.75
Current balance (R\$) (12/31/2011)	17,048,054.59
Amount of related party	None
Duration	12/31/2011. The amount was estimated based on the volume scheduled for the term of the contract.
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Handling of manganese ore dispatched from Carajás-PA to São Luis-MA for Vale Manganês, and shipping at Ponta da Madeira terminal.
Guaranties and insurance	None
Conditions of termination or expiration	This contract may be terminated by either PARTY, without any charge, provided it is done in writing with at least 60 (sixty) days in advance, of the intended termination date. If that is the case, no indemnification or compensation for whatever reason may be paid, not even for loss or damage.
Nature and reasons for the operation / other relevant Information	

Name of related party	Vale Manganês S.A.
Amount (R\$)	2,880,000.00
Current balance (R\$) (12/31/2011)	1,967,495.32
Amount of related party	-
Duration	5/25/2012
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Supply of POWER; CONSUMPTION
Date of transaction	8/2/2010
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant Information	-

Name of related party	Vale Manganês S.A. and PASA – Plano de Assistência à Saúde do Aposentado da Vale
Amount (R\$)	2,891,178.90
Current balance (R\$) (12/31/2011)	2,137,182.26
Amount of related party	-
Duration	5/18/2012
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Management and Complementary Medical Services ("AMS")
Date of transaction	4/12/2010
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation / other relevant Information	-

Name of related party	Vale Manganês S.A
Amount (R\$)	20,757,456.00
Current balance (R\$) (12/31/2011)	20,757,456.00
Amount of related party	-
Duration	6/16/2012
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Medical Care
Date of transaction	5/25/2010
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation /	
other relevant Information	-

Name of related party	Vale Manganês S.A
Amount (R\$)	10,559,760.0
Current balance (R\$) (12/31/2011)	6,798,101.28
Amount of related party	-
Duration	6/16/2012
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Employees assigned Vale
Date of transaction	5/26/2010
Guaranties and insurance	None
Conditions of termination or expiration	None
Nature and reasons for the operation /	-
other relevant Information	

Name of related party	Vale Canada Limited
Relationship with the Company	Controlling Shareholders
Date of transaction	09/21/2010
Purpose of the contract	Regulate cooperation between the parties for development of support processes by Vale S.A. and share the costs relative to such processes with the companies of Vale Group.
Amount (R\$)	17,362,000.00
Current balance (R\$)	39,782,192.00
Amount of related party	N/A
Guaranties and insurance	None
Duration	12/31/2011. The amount reported above corresponds to the total value paid by the Vale Canada Limited to the Company for the services rendered during the fiscal year ended on 31.12.2011.
Conditions of termination or expiration	This contract could have been terminated by operation of law if either party fails to fulfill its obligations, provided that a written notice had been given by the non-defaulting party to the party in default, and provided that the non-compliance had not been remedied within 15 (fifteen) days.
Loan or other type of debt	No
Interest rate	
Other relevant Information	

Name of related party	Salobo Metais S.A.
Date of transaction	07/01/2009
Amount (R\$)	843,309.76
Current balance (R\$) (12/31/2011)	843,309.76
Amount of related party	Not applicable
Duration	03/01/2013.

Loan or other type of debt	NO
Interest rate	-
Relationship with the Issuer	Subsidiary
Purpose of the contract	Lease of equipment owned by Vale for Salobo . Mina do Sossego, Canaã dos Carajás/PA.
Guaranties and insurance	None
Conditions of termination or expiration	This contract may be terminated by either party by giving written notice 30 (thirty) days in advance to the other, there being no right for any claim, indemnity or compensation for whatever reason.
Nature and reasons for the operation / other relevant Information	

other relevant Information	
Name of related party	Salobo Metais S.A.
Date of transaction	03/10/2010
Amount (R\$)	6,870,933.60
Current balance (R\$) (12/31/2011)	6,870,933.60
Amount of related party	Not applicable
Duration	03/09/2015
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Lease of an offroad, Caterpillar 793D- truck for handling services internally, in Mina do Sossego, Canaã dos Carajás/PA.
Guaranties and insurance	None
Conditions of termination or expiration	The contract may be terminated by either Party by written notice to the other, without there being any right of claim, indemnification or compensation for whatever reason, in following cases:  (i) petition or declaration of insolvency, bankruptcy or liquidation agreement of the other Party;  (ii) on accordance with para. 10.4, occurrence of unforeseeable circumstances or force majeure, regularly proven, resulting in suspension of the LEASE for more than 30 (thirty) days.  (iii) suspension of the LEASE without written agreement of the parties; and (iv) in the event the fines on the other Party reach 10% (ten percent) of the value indicated in paragraph 7.4.  Subject to the satisfaction of its other rights, Vale may, at its sole discretion, terminate this Contract upon prior written notice to the LESSOR with at least 30 (thirty) days in advance, said LESSOR forbearing any rights to claim, indemnification or compensation, for whatever the reason, in the following cases:  (i) failure to fulfill any contractual obligations by the LESSOR, provided that Vale has given written notice establishing a reasonable term for remedy;  (ii) occurrence of lawsuits brought by the LESSOR, shareholders, quota holders, or companies forming part of the same group against Vale, its subsidiaries, controlling companies and affiliate companies; and,
	(iii) assignment, sucontracting, and / or transfer of all or part of their obligations to third parties, or of credits under this Contract without prior written authorization of Vale.  Subject to the satisfaction of its other rights, the LESSOR may, at its sole discretion,
	terminate this Contract upon prior written notice to Vale with at least 30 (thirty) days in advance, Vale forbearing any rights to claim, indemnification or compensation, for whatever the reason, in the following cases:
	(i) arrears for a period of more than 30 (thirty) days;
	(ii) delays in releasing information that might endanger regular fulfillment of the obligations undertaken pursuant to this Contract, after giving notice to Vale, and such information was not provided within 30 (thirty) days; and,
	(iii) Failure to comply with any obligations arising from this Contract by Vale, directly resulting in the LESSOR being unable to continue with regular fulfillment of its contractual obligations, after notice given to Vale clearly identifying its violations and establishing a reasonable term for remedy.

Nature and reasons for the operation /	
other relevant Information	•

Name of related party	Salobo Metais S.A.
Date of transaction	07/01/2010
Amount (R\$)	3,933,206.30
Current balance (R\$) (12/31/2011)	2,217,806.66
Amount of related party	Not applicable
Duration	12/15/2011 (contract terminated)
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Stripping service by Vale to SALOBO for opening Mina do Salobo.
Guaranties and insurance	None
Conditions of termination or expiration	Contract terminated on 12/15/2011. Prior to termination, the contract could be terminated by either party by written notice to the other, there being no right to any claim, indemnification or compensation, for whatever the reason.
Nature and reasons for the operation / other relevant Information	

Name of related party	Salobo Metais S.A.
Date of transaction	07/24/2009
Amount (R\$)	147,070.91
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	11/24/2009
Loan or other type of debt	NO
Interest rate	-
Relationship with the Company	Subsidiary
Purpose of the contract	Lease to Salobo of equipment owned by Vale – Nickel mine Ourilândia do Norte/PA.
Guaranties and insurance	None
Conditions of termination or expiration	Contract terminated on 11/24/2009. Prior to termination the contract could be terminated by either party by giving written notice to the other, there being no right to any claim, indemnification or compensation, for whatever the reason.
Nature and reasons for the operation / other relevant Information	

Name of related party	MRC Serviços Ferroviários CBRJ-AL Ltda.
Date of transaction	1/1/2011
Amount (R\$)	8,903,861.25
Current balance (R\$) (12/31/2011)	Not applicable
Amount of related party	Not applicable
Duration	12/31/2016
Loan or other type of debt	NO
Interest rate	-
Relationship with the Issuer	Company belonging to Mitsui, controlling group of Vale.
Purpose of the contract	Lease of 300 new HPE type- wagons.
Guarantees and insurances	None
Conditions of termination or expiration	Provided that (i) no breach has occurred or persists at the time of the notice foreseen in item (ii) below, and at the time of return of all wagons as specified under para. (iii) below; (ii) written notice has been given to MRC by the LESSEES 180 (one-hundred and eighty) days in advance to inform on their intention to terminate the Contract; and (iii) all the wagons have been returned by the LESSEES as provided for in Clause 20, the LESSEES will have the right, upon payment of the consideration provided for in Clause 23.2 of the Contract, to irrevocably terminate the Contract with respect to all (and not less than all) wagons.  If the LESSEES terminate the Contract pursuant to Clause 23.1, they will pay MRC:  i) a fine per leased wagon for the LESSEES for a value in Reais equivalent to the remaining balance in the Contract; and  ii) a compensation for any other costs, fines, expenses, damages or disbursement incurred as a result of termination of the contract and other operational documents.  Above mentioned value, including that resulting from the established formula in Clause 23.2 of the contract, will be corrected based on the IGP-M (General Market Price

	Index) within the least time slot allowed by the applicable law.  Except in the event of non-compliance by MRC, the values mentioned in clause 23 of the Contract will be owed by the LESSEES to MRC, regardless of the reason which caused termination by the LESSEES.
Nature and reasons for the operation / other relevant Information	

Name of related party	Mitsui & Co. Ltd. and Vale Fertilizers
Date of transaction	01/01/2011
Amount (R\$)	57,701,762.84
Current balance (R\$) (12/31/2011)	43,900,521.35
Amount of related party	Not applicable
Duration	12/31/2011
Loan or other type of debt	NO
Interest rate	-
Relationship with the Issuer	Controlling group of Vale and subsidiary.
Purpose of the contract	Guarantee the operational continuation of the manufacturing plants with supply of sulfur.
Guarantees and insurances	Not applicable
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	

Name of related party	Ultrafértil S.A. and Vale Fertilizers
Date of transaction	01/01/2011
Amount (R\$)	84,220,473.14
Current balance (R\$) (12/31/2011)	8,915,384.79
Amount of related party	Not applicable
Duration	One year
Loan or other type of debt	NO
Interest rate	-
Relationship with the Issuer	Subsidiary of Vale Fertilizers
Purpose of the contract	Guarantee the supply of LOW DENSITY AMMONIUM NITRATE to Vale by ULTRAFERTIL, marketed under brand "ULTRAPRILL", and HIGH DENSITY AMMONIUM NITRATE, marketed under brand "ULTRAPRILL PLUS".
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	-

Name of related party	Ultrafertil S.A. and Vale Fertilizantes
Date of transaction	01/01/2011
Amount (R\$) (R\$)	277,525,905.35
Current balance (R\$) (12/31/2011)	8,915,384.79
Amount of related party	Not applicable
Duration	One year
Loan or other type of debt	NO
Rate of interest	-
Relationship with the Issuer	Subsidiary of Vale Fertilizantes
Purpose of the contract	Sale of supplies for fertilizers
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation /	
other relevant Information	=

Name of related party	Ultrafertil S.A. and Vale Fertilizantes
Date of transaction	01/01/2011
Amount (R\$)	503.252.69
Current balance (R\$) (12/31/2011)	503,252.69
Amount of related party	Not applicable
Duration	One year
Loan or other type of debt	Yes
Rate of interest	0.00

Relationship with the Issuer	Subsidiary of Vale Fertilizantes
Purpose of the contract	Loan of Ultrafertil of supplies for fertilizers (with incidental taxes)
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	It is a loan of supplies for manufacturing of fertilizers.

Name of related party	Ultrafertil S.A. and Vale Fertilizantes
Date of transaction	01/01/2011
Amount (R\$)	366,146,181.90
Current balance (R\$) (12/31/2011)	18,967,886.54
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	No
Rate of interest	-
Relationship with the Issuer	Subsidiary of Vale Fertilizantes
Purpose of the contract	Acquisition of supplies for fertilizers
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	-

Name of related party	Ultrafertil S.A. and Vale Fertilizantes
Date of transaction	01/01/2011
Amount (R\$)	7,540,985.97
Current balance (R\$) (12/31/2011)	7,540,985.97
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	Yes
Rate of interest	0.00
Relationship with the Issuer	Subsidiary of Vale Fertilizantes
Purpose of the contract	Loan of Ultrafertil of supplies for fertilizers (with incidental taxes)
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	It is a loan of supplies for manufacturing of fertilizers.

Name of related party	Vale Fertilizantes S.A.
Date of transaction	01/01/2011
Amount (R\$)	1,888,000.00
Current balance (R\$) (12/31/2011)	Not applicable
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	No
Rate of interest	-0.00
Relationship with the Issuer	Parent company
Purpose of the contract	Sale of logistic services
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	-

Name of related party	Vale Energia
Date of transaction	01/01/2011
Amount (R\$)	19,785,000.00
Current balance (R\$) (12/31/2011)	Not applicable
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	No
Rate of interest	0.00
Relationship with the Issuer	Subsidiary of Vale S.A.

Purpose of the contract	Purchase of power
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation /	
other relevant Information	

Name of related party	Vale Cubatão Fertilizantes
Date of transaction	01/01/2011
Amount (R\$)	87,561,000.00
Current balance (R\$) (12/31/2011)	20,036,000.00
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	No
Rate of interest	-0.00
Relationship with the Issuer	Subsidiary of Vale S.A.
Purpose of the contract	Sale of supplies for fertilizers
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	-

Name of related party	Vale Cubatão Fertilizantes
Date of transaction	01/01/2011
Amount (R\$)	3,335,000.00
Current balance (R\$) (12/31/2011)	211,000.00
Amount of related party	Not applicable
Duration	1 year
Loan or other type of debt	No
Rate of interest	-0.00
Relationship with the Issuer	Subsidiary of Vale S.A.
Purpose of the contract	Acquisition of supplies for fertilizers
Guarantees and insurances	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	-

Name of related party	Korea Nickel Corporation ("KNC")
Date of transaction	12/01/2006
Amount (R\$)	212,000.00
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	It cannot be assessed
Duration	12/31/2013 (agreement added in 10/01/2007, 05/20/2008 and 02/01/2009)
Loan or other type of debt	No
Interest rate	-
Relationship with the Issuer	Affiliate
Purpose of the contract	Supply of inputs – contract for the purchase and sale of product for the refining of the nickel in an area with an important consumer market
Guaranties and insurance	None
Conditions of termination or expiration	The contract may be terminated by any of the parties through written notification in the following cases: (a) bankruptcy or insolvency of the other party; or (b) if the other party fails to comply any obligation assumed pursuant to the terms of the agreement, if such condition lasts more than 60 days after the reception of such notification.
Nature and reasons for the operation / other relevant Information	

Name of related party	Sociedad Contractual Minera Tres Valles
Date of transaction	8/29/2011
Amount (R\$)	64,456,000.00
Current balance (R\$) (12/31/2011)	49,448,601.37
Amount of related party	Not applicable
Duration	8/29/2015
Loan or other type of debt	Yes

Interest rate	Exchange variation + 3.11% per year
Relationship with the Issuer	Subsidiary
Purpose of the contract	Financing Working Capital
Guaranties and insurance	None
Conditions of termination or expiration	PREPAYMENT
	<ul> <li>Vale and Sociedad Contractual Minera Tres Valles may cancel the non-disbursed portion of the funding.</li> <li>Sociedad Contractual Minera Tres Valles may, upon notification to Vale ten days in advance, prepay the funding as a whole or in part.</li> <li>EARLY REDEMPTION</li> <li>If upon execution of the funding agreement there is any amendment to law, regulation or interpretation by any governmental authority that considers the agreement illegal or Vale being prevented from complying with it or funds impossible to be sent, the agreement is cancelled and every disbursement and accrued interest and accrued amounts related to the agreement shall be immediately due and payable.</li> <li>If the Company no longer controls Sociedad Contractual Minera Tres Valles, the agreement is cancelled and every disbursement and accrued interest and accrued</li> </ul>
Notice and researches the expection /	amounts related to the agreement shall be immediately due and payable
Nature and reasons for the operation / other relevant Information	The operation aims to cover the working capital need of Sociedad Contractual Minera Tres Valles
Caron Caronia mornidadon	1162 Agues

Date of transaction  Amount (R\$)  Current balance (R\$) (12/31/2011)  Amount of related party  Duration  Loan or other type of debt	8/9/2010 349,586.25 400,999.25 Not applicable 6/29/2012 YES 94% of CDI
Current balance (R\$) (12/31/2011) Amount of related party Duration	400,999.25 Not applicable 6/29/2012 YES
Amount of related party Duration	Not applicable 6/29/2012 YES
Duration	6/29/2012 YES
24.4	YES
Loan or other type of debt	
Louis of other type of debt	94% of CDI
Interest rate	74 76 OI CDI
Relationship with the Issuer	Subsidiary
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or	PREPAYMENT
expiration	CPP may prepay the amount, in whole or in part, including principal and interest calculated from August 9, 2010 until effective payment.  CPP should notify its intention to make the prepayment at least 3 (three) days
	in advance.  EARLY REDEMPTION  If CPP fails to meet any of its obligations, Vale may automatically assume the debt for the total value of the loan (principal and interest) plus the contractual penalty provided for in the contract, the present serving as an extrajudicial execution order, in accordance with Article 585 of the Code of Civil Procedure.
Nature and reasons for the operation / other relevant Information	Interest rate charged: 94% of the CDI. This is an inter-company loan for cash centralization Vale is the creditor in the operation.

Name of related party	Kserge Serviços Gerais Ltda.
Date of transaction	3/17/2011
Amount (R\$)	11,677,485.25
Current balance (R\$) (12/31/2011)	12,739,769.15
Amount of related party	Not applicable
Duration	29/06/2012
Loan or other type of debt	YES
Interest rate	94% of CDI
Relationship with the Issuer	Subsidiary
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or	PREPAYMENT
expiration	KSG may prepay the amount, in whole or in part, including principal and
	interest calculated from March 17, 2011 until effective payment.
	KSG should notify its intention to make the prepayment at least 3 (three)
	days in advance

	EARLY REDEMPTION  If KSG fails to meet any of its obligations, Vale may automatically assume the debt for the total value of the loan (principal and interest) plus the contractual penalty provided for in the contract, the present serving as an extrajudicial execution order, in accordance with Article 585 of the Code of Civil Procedure
Nature and reasons for the operation / other relevant Information	Interest rate charged: 94% of the CDI.  This is an inter-company loan for cash centralization Vale is the creditor in the operation.

Name of related party	MSE – Serviços de Operação, Manutenção e Montagem Ltda.
Date of transaction	03/17/2011
Amount (R\$)	55,841,996.61
Current balance (R\$) (12/31/2011)	62,536,195.45
Amount of related party	Not applicable
Duration	29/06/2012
Loan or other type of debt	YES
Interest rate	94% of CDI
Relationship with the Issuer	Subsidiary
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or	PREPAYMENT
expiration	MSE may prepay the amount, in whole or in part, including principal and interest calculated from March 17, 2011 until effective payment.  MSE should notify its intention to make the prepayment at least 3 (three) days in advance
	EARLY REDEMPTION  If MSE fails to meet any of its obligations, Vale may automatically assume the debt for the total value of the loan (principal and interest) plus the contractual penalty provided for in the contract, the present serving as an extrajudicial execution order, in accordance with Article 585 of the Code of Civil Procedure
Nature and reasons for the operation / other relevant Information	Interest rate charged: 94% of the CDI.  This is an inter-company loan for cash centralization Vale is the creditor in the operation.

Name of related party	Norpel Pelotização do Norte S.A.
Date of transaction	03/17/2011
Amount (R\$)	25,460,362.19
Current balance (R\$) (12/31/2011)	27,656,159.00
Amount of related party	Not applicable
Duration	29/06/2012
Loan or other type of debt	YES
Interest rate	94% of CDI
Relationship with the Issuer	Subsidiary
Purpose of the contract	Loan
Guaranties and insurance	None
Conditions of termination or	PREPAYMENT
expiration	NORPEL may prepay the amount, in whole or in part, including principal and interest calculated from March 17, 2011 until effective payment.  NORPEL should notify its intention to make the prepayment at least 3 (three) days in advance  EARLY REDEMPTION  If NORPEL fails to meet any of its obligations, Vale may automatically assume the debt for the total value of the loan (principal and interest) plus the contractual penalty provided for in the contract, the present serving as an extrajudicial execution order, in accordance with Article 585 of the Code of
	Civil Procedure
Nature and reasons for the operation / other relevant Information	Interest rate charged: 94% of the CDI.  This is an inter-company loan for cash centralization Vale is the creditor in the operation.

Name of related party	Vale S.A. e Vale Óleo e Gás S.A.

Date of transaction	7/1/2011
Amount (R\$)	35,766,000.00
Current balance (R\$) (12/31/2011)	0,00
Amount of related party	Not applicable
Duration	6 months (by 12/31/2011)
Loan or other type of debt	NO
Interest rate	Not applicable
Relationship with the Issuer	Subsidiary
Purpose of the contract	The purpose of the contract is the provision of technical support services by Vale Óleo e Gás, in Brazil and abroad, for technical-economic assessment and oil and natural gas asset risks, as well as potential areas for research and exploration, accompaniment of E&P activities, assisting and representing Vale before its partners, committees and managing entities, including preparation, approval and control of budgets, schedules and compliance with environmental requirements, and health and safety requirements, compliance and release of cash calls and service measurements
Guaranties and insurance	None
Conditions of termination or	
expiration	Not applicable
Nature and reasons for the operation / other relevant Information	Not applicable

Name of related party	Vale S.A. e Vale Óleo e Gás S.A.
Date of transaction	3/16/2012
Amount (R\$)	3,214,208.89
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	11 months
Loan or other type of debt	NO
Interest rate	Not applicable
Relationship with the Issuer	Subsidiary
Purpose of the contract	The purpose of the contract is the provision of technical support services by Vale Óleo e Gás, in Brazil and abroad, for technical-economic assessment and oil and natural gas asset risks, as well as potential areas for research and exploration, accompaniment of E&P activities, assisting and representing Vale before its partners, committees and managing entities, including preparation, approval and control of budgets, schedules and compliance with environmental requirements, and health and safety requirements, compliance and release of cash calls and service measurements,
Guaranties and insurance	None
Conditions of termination or expiration	Not applicable
Nature and reasons for the operation / other relevant Information	Not applicable

Name of related party	Bionalma Da Amazônia S.A. Deflarestamento, Indústria E Comórcia
. ,	Biopalma Da Amazônia S.A. Reflorestamento, Indústria E Comércio
Date of transaction	3/17/2011
Amount (R\$)	301,800,000.00
Current balance (R\$) (12/31/2011)	R\$ 349,416,896.00
Amount of related party	Not applicable
Duration	5/15/2021
Loan or other type of debt	YES
Interest rate	4.5%
Relationship with the Issuer	Subsidiary
Purpose of the contract	Funding Investments
Guaranties and insurance	None
Conditions of termination or	EARLY REDEMPTION
expiration	a) Biopalma may at any time redeem the debentures early, as a
	whole or in part, with no fine.
	b) If it intends to exercise the right of early redemption of
	Debentures, Biopalma should notify VALE in writing.
	c) In case of early redemption of Debentures, under the terms in
	clause 5.6.2 of the deed, Biopalma should pay VALE, in up to
	thirty (30) days from date of the notice of early redemption, in full,
	the remaining balance of the Debentures.

#### **EARLY MATURITY**

Without prejudice to the penalty set forth in clause 6.1 of the deed, VALE may determine the early maturity of all obligations related to the Debentures, and require immediate payment from Biopalma of the remaining balance of the Updated Unit Value of the Debentures, added with Interest due from the Date of Issue, or the last date of payment of Interest, as the case may be, until effective payment, calculated pro rata temporis, and other fees, regardless of notice, communication, judicial or extrajudicial notification, in the event of any of the Default Events below:

a) non-payment by Biopalma on the due date of the principal, of Compensation or any other obligation due to VALE;

- b) non-compliance by Biopalma of any obligation in the Deed, failing to be solved within ten (10) calendar days on the date of non-compliance;
- c) if Biopalma present any guaranty or in any case, assume, as a whole or in part, any financial obligation, or of any nature, from any party or authorize any Subsidiary, direct or indirect, to offer any guaranty or assume any obligation in this clause, except with VALE's prior written approval;
- d) non-compliance by Biopalma or any of its Affiliates or Subsidiaries with any obligation or condition in any other agreement they are parties in, unresolved within thirty (30) calendar days, except those in lines (a) and (b) above which shall not be subject to any resolution term;
- e) failure to renew, cancel, revoke, or suspend for a period exceeding thirty (30) days from the date of the event, authorizations and licenses, including environmental and those granted by regulation entities, required to operate and maintain its activities and those of its Affiliates and Subsidiaries;
- f) amendment, suspension, cancellation, termination or representation of nullity or unenforceability, as a whole or in part of the Deed, without VALE's prior written consent:
- g) file for judicial recovery or composition with creditors or class of creditors of the request for extrajudicial recovery filed by Biopalma, or any of its Affiliates or Subsidiaries;
- h) request of termination, liquidation, dissolution, insolvency, bankruptcy, bankruptcy out of legal terms or Biopalm's bankruptcy filed by third parties, or its Affiliates or Subsidiaries;
- i) failure to obtain or renew any approval, permit, registration, or governmental authorization required to have Biopalma comply with obligations set forth in the Deed;
- j) any Relevant Adverse Impact;
- k) any action, arbitration or administrative procedure against Biopalma or its Affiliates or Subsidiaries which, at Vale's discretion, is likely to cause a Relevant Adverse Impact as well as pledge of any of Biopalma's assets in amount exceeding R\$ 500,000.00 (five hundred thousand reais);
- I) any action, arbitration or administrative or judicial procedure related to environmental issues;
- m) reduction of the capital stock of Biopalma, without VALE's prior approval;
- n) early termination of any financial obligation to which Biopalma, or its Affiliates or Subsidiaries are subject to, in domestic or international market, individually or jointly, exceeding R\$ 500,000.00 (five thousand reais);
- o) legitimate protest of titles against Biopalma or its Affiliates or Subsidiaries, individually or jointly, exceeding R\$ 200,000.00 (two hundred reais), except when within thirty (30) calendar days from said protest, (i) it is validly proven by Biopalma that the protest was based on third party's mistake or bad faith; (ii) the protest was cancelled or suspended, or, (iii) sufficient guaranties were presented in court:
- p) if VALE (or any of its Subsidiaries) is no longer a shareholder of Biopalma; and
- q) any corporate reorganization, including incorporation, merger,

	division of Biopalma, or any of its Affiliates or Subsidiaries.
Nature and reasons for the operation / other relevant Information	The transaction aims funding investments related to grow, production and trade of palm oil. Two issues of debentures:. 3/17/2011 (1st series 1st issue), 8/1/2011 (2nd series 1st issue) and 10/28/2011 (2nd issue). The amount above corresponds to the sum of both 2 issues.  Interest rate: Libor+4,5% per year

Name of related party	Vale Operações Ferroviárias S.A. e Vale S.A.
Date of transaction	12/07/2010
Amount (R\$)	R\$194,146,310.97
Current balance (R\$) (12/31/2011)	0,00
Amount of related party	Not applicable
Duration	Not applicable
Loan or other type of debt	NO
Interest rate	Not applicable
Relationship with the Issuer	Subsidiary
Purpose of the contract	Sale by Vale S.A. to Vale Operações Ferroviárias S.A., of 3,944 wagons and 97 locomotives and other related equipment.
Guaranties and insurance	None
Conditions of termination or	
expiration	Not applicable
Nature and reasons for the operation / other relevant Information	Not applicable

Name of related party	Vale Operações Ferroviárias S.A. e Vale S.A.
Date of transaction	12/07/2010
Amount (R\$)	When the Option is exercised, prices for the assets are determined by the residual book value recorded by Vale Operações Ferroviárias S.A., considering maintenance and improvements accounted for, and depreciation, over time. Price paid by Vale will never be lower than the value paid by Vale Operações Ferroviárias S.A. for each asset.
Current balance (R\$) (12/31/2011)	0.00
Amount of related party	Not applicable
Duration	linked to the Agreement for Cargo Railroad Transportation and Similar Services between the parties.
Loan or other type of debt	NO
Interest rate	Not applicable
Relationship with the Issuer	Subsidiary
Purpose of the contract	Purchase Option by Vale S.A., from Vale Operações Ferroviárias S.A., of specific assets related to railroad operations, described in the exhibit of the Agreement.
Guaranties and insurance	None
Conditions of termination or	
expiration	Not applicable
Nature and reasons for the operation / other relevant Information	Not applicable

## 16.3 Identification of measures taken to address the conflict of interest and demonstration of the strictly commutative nature of conditions agreed upon or appropriate compensation payment

As mentioned in item 16.1, the Company conducts transactions with related parties in order to always best serve its interests and those of its shareholders.

Transactions concluded with related parties are supported by prior, careful evaluations of the terms therein, so that they takes place under strictly equitable conditions, obeying the normal market prices and conditions. Thus, transactions with related parties do not generate any undue benefits or harm to the parties involved.

To check the equitable nature of operations with related parties, the Company reviews the financial viability of each operation vis-à-vis similar market transactions between unrelated parties. The Company uses comparative analysis methods.

Transactions with related parties of the Company may, in general, be divided into: (i) Operational transactions, and (ii) Financial transactions.

Within the operational part of its activities, Vale performs a substantial volume of transactions with its wholly owned subsidiaries, subsidiaries and companies under joint control with third parties, in view of its policy of integration of its activities in the production and commercial chain. Besides the extraction of minerals, Vale invests heavily in activities related to transport, logistics, and energy services and supplies essential to achieving its corporate purpose. The Company's investments in the logistics segment are based on the transport needs for mining operations and for other products sold to customers. Additionally, Vale invests in power generation to meet its own internal needs, in order to reduce costs and minimize risks due to problems of energy supply. In this context, several operational contracts have been signed between Vale and members of companies in its group, always taking care to observe fair and balanced terms and avoid discrepancies with market conditions, as required by Corporate and Tax laws.

With respect to transactions of a financial nature, Vale seeks continuously and energetically to find the best options available in local and international markets, with a view to securing or investing resources. Overall, investments are undertaken in order to maintain the liquidity of the company available for its investments coupled with a conservative policy regarding the assuming of credit risk of counterparties, with a focus on maintaining its assets in first-tier banks.

Item 17 17.1 – Information about the capital stock

Date of authorization or approval	Value of the Capital (R\$)	Deadline for payment	Number of common shares	Number of preferred shares	Total number of shares
Class of share	Issued capital				
18/May/2011	75,000,000,000.00		3,256,724,482	2,108,579,618	5,365,304,10
Capital stock by class of sha	are		(	Other securities convertible into shares	<u> </u>
Class of preferred share	Number of shares	Denomination		Conditions for conversion	
Preferred Class A	2,108,579,606	SERIES VALE-2012 and VALE.P-2012	interest of 6.75% per year, payable quarter be mandatorily converted to American Dep Vale. Mandatory convertible notes series VALE.F	2012: The notes in the amount of US\$ 292,4 ly. At their maturity, on June 15, 2012, or be ositary Shares (ADS), each ADS representing 2-2012: The notes in the amount of US\$ 648 parterly. At their maturity, on June 15, 2012, each ADS representing one preferred class.	ofore, notes of Series VALE-2012 will ng one common share issued by 9,213,250 with maturity in 2012 will or before, notes of Series VALE.P-
Preferred Class E	12				
Class of share Subscribed capital					
18/May/2011	75,000,000,000.00		3,256,724,482	2,108,579,618	5,365,304,100
Capital stock by class of sha	are		(	Other securities convertible into shares	
Class of preferred share	Number of shares	Denomination	Conditions for conversion		
Preferred Class A	2,.108,579,606				
Preferred Class E	12				
Class of share	Paid-in capital				
18/May/2011	75,000,000,000.00		3,256,724,482	2,108,579,618	5,365,304,100
Capital stock by class of share			(	Other securities convertible into shares	
Class of preferred share	Number of shares	Denomination		Conditions for conversion	
Preferred Class A	2,108,579,606				
Preferred Class E	12				

Class of share	uthorized capital					
30/Aug/2007	0.00		3,600,000,000	7,200,000,000	10,800,000,000	
Capital stock by class of share		Other securities convertible into shares				
Class of preferred share	Number of shares	Denomination	mination Conditions for conversion			
Preferred class A	7,200,000,000					

## 17.2 – Increases in the capital stock

uale	Corporate body that ruled the increase	Issue date	Total amount of the issue (R\$)	J 1	Common shares (number)	Preferred shares (number)	Total shares (number)	Subscription / Previous capital	Issue price	Quote factor
19/May/2010	Special stockholders meeting	19/May/2010	2,565,806,871.32	Without issue of shares	0	0	0	0.00000000	0.00	R\$ per Unit
Criteria for det value of the iss	•	N/A								
Type of payme	ent	Capitalization of par	rt of the expansion/investmen	ts reserve and capi	talization of the investn	nents reserve.				
18/May/2011	Board of Directors	18/May/2011	25 000 000 000 00	Without issue of shares	0	0	0	0.00000000	0.00	R\$ per Unit
Criteria for det value of the is:		N/A								
Type of payme	ent	Capitalization of par	rt of the expansion/investmen	ts reserve, the ope	rational results/share co	onversion reserve, and pa	art of the tax incentives re	eserve.		

## 17.3 – Information on stock splits, reverse splits, and stock bonuses

### Justification for not giving information on this item:

There were no stock splits, reverse splits, or bonuses in the last three fiscal years.

## 17.4 – Information on reductions in the capital stock

### Justification for not giving information on this item:

There was no reduction in the capital stock of the company in the last three fiscal years.

### 17.5 - Other relevant information

## Additional information about securities convertible to shares

1) Series VALE-2012 and Series VALE.P-2012: US\$941,658,400 in mandatorily convertible notes with maturity in 2012, issued on July 13, 2009 by Vale Capital II.

The notes in the amount of US\$292,445,150 with maturity in 2012, notes of Series VALE-2012, will yield interest of 6.75% per year, payable quarterly. At their maturity, on June 15, 2012, the Series VALE-2012 notes will be mandatorily converted to American Depositary Shares (ADS), each ADS representing one common share issued by Vale. Additional remuneration will be paid based on the net amount of cash distributions paid to holders of ADS.

The notes in the amount of US\$649,213,250 with maturity in 2012, notes of Series VALE.P-2012, will yield interest of 6.75% per year, payable quarterly. At their maturity, on June 15, 2012, the Series VALE.P-2012 notes will be mandatorily converted to ADS, each ADS representing one preferred class A share issued by Vale. Additional remuneration will be paid based on the net amount of cash distributions paid to holders of ADS

The ADS, jointly, will represent the amount of up to 18,415,859 common shares and 47,284,800 preferred class A shares issued by Vale, which are currently held by Vale in the treasury.

The notes are unsecured obligations of Vale Capital II and are completely and unconditionally guaranteed by Vale. The guarantee is an unsecured obligation of Vale

Holders of notes of Series VALE-2012 and VALE.P-2012 will be entitled to convert their notes at any time prior to the maturity date by the minimum conversion rate of 2.6797 ADSs, representing Vale common shares for series VALE-2012 and 3.0993 ADSs representing Vale common shares for series VALE.P-2012

#### Convertible notes 2012

Notes	Average market value* for the last 20 days prior to the maturity	Conversion rate
Vale.P 2012	Less than or equal to US\$ 13.73	3.64170
	Range between US\$ 13.73 and US\$ 16.13	3US\$ 50.00 divided by the average market value
	Equal to or greater than US\$ 16.13	3.09930
Vale 2012	Less than or equal to US\$ 15.88	3.14860
	Range between US\$ 15.88 and US\$ 18.66	SUS\$ 50.00 divided by the average
		market value
	Equal to or greater than US\$ 18.66	2.67970

<sup>\*</sup> Market Value is the value adopted for trading common ADSs for Series VALE-2012 and preferred ADSs for Series VALE.P-2012 at the New York Stock Exchange.

### Item 18

### 18.1. Share rights

Share types or CDA Common
Tag along 80.000000

**Dividend rights** Under the Company's Bylaws and the applicable legislation,

owners of common shares will have the right to receive a dividend proportionate to their interest in the capital stock, after distribution

of dividends to holders of preferred shares.

According to Article 44 of the Company's Bylaws, at least 25% (twenty-five percent) of the annual net profits, adjusted under the law, will be assigned to the payment of the mandatory dividend to

all the company's shareholders.

Voting rights Full
Convertibility No
Right to reimbursement of capital

Description of the characteristics of the reimbursement of capital

Shareholders who hold common shares will have the right to the reimbursement of the value of their shares according to the provisions set forth in the applicable law, according to the terms and conditions established

Restrictions regarding outstanding shares

No

Circumstances where guaranteed rights of said securities may be altered

The rights guaranteed to the common shares that are not determined by the applicable law may be altered by means of an amendment of the bylaws, and approved at the extraordinary General Meeting that can only be held in the 1<sup>st</sup> instance, with the presence of the shareholders representing at least 2/3 of the voting capital, and in a second instance with any number of shareholders present. Changes shall be approved based on quorums and conditions set forth by the Law of Joint Stock Company. It is also stressed that in accordance with article 7 of the bylaws, special class preferred shares shall have the right of veto over any modification of rights assigned to types and classes of shares issued by the Company, as well as any modification of article 7, or any other rights granted by the bylaws to special class preferred shares.

Other Relevant Characteristics

There are no restrictions regarding outstanding common shares issued by the Company. For information about restrictions to the Company's stock trading by the involved individuals, see description of our Negotiation Policy in item 20 on this Reference Form. All the other characteristics of the common shares issued by the Company that we believe are relevant were described on items above

**Share types or CDA** 

Preferred

**Class of Preferred Shares** 

Class "A"

**Tag Along** 

0.00000000

**Dividend rights** 

Class "A" preferred shares have the following rights: a) priority in receiving dividends, to be calculated in the form of Company bylaws, corresponding to (i) at least 3% of the net worth of the share based on the Financial Statements that served as a reference for the payment of dividends or (ii) 6% calculated on the part of the capital formed by each class of share, whichever of them is greater; (b) the right to participate in profit sharing on equal terms with the common shares, once these have been guaranteed a dividend equal to the minimum priority; and (c) participation in any premiums, on equal terms with the common shares, maintaining the priority for the distribution of dividends. According to the Company's Bylaws, at least 25% of the annual net profits, adjusted under the law, will be assigned to the payment of the mandatory dividend to the company's shareholders.

**Voting rights** 

Restricted.

Description of restricted vote

Preferred shares class "A" will have the same political rights as the common shares, with the exception of voting for the election of members of the board of directors, with the qualification set forth in §§ 2 and 3 of article 11 of the Company bylaws, as well as the right to elect and dismiss a member of the fiscal Council and his Deputy. Preferred shares will exercise full and unrestricted right to vote if the Company no longer pays, for a period of three (3) consecutive financial years, the minimum dividends assured to holders of preferred shares, to which they have a right under the terms above.

Convertibility

No

Right to reimbursement of capital

No

Restrictions regarding outstanding shares

No

Circumstances where guaranteed rights of said securities may be altered

The rights guaranteed to the class "A" preferred shares that are not determined by the applicable law may be altered by means of an amendment of the bylaws, and approved at the extraordinary General Meeting, that can only be held in the 1st instance, with the presence of shareholders representing at least 2/3 of the voting capital, and the 2<sup>nd</sup> instance with any number of shareholders present. Changes shall be approved based on quorums and conditions set forth by the Law of Joint Stock Company. The effectiveness of the decision will depend on the prior approval or ratification within one year, without the possibility of extending this period, by holders of more than half of each class of preferred shares whose rights would be impaired, It is also stressed that in accordance with article 7 of the bylaws, special class preferred shares shall have the right of veto over any modification of rights assigned to types and classes of shares issued by the Company, as well as any modification of article 7.

## Other Relevant Characteristics

There are no restrictions regarding outstanding common shares issued by the Company. For information about restrictions to the Company's stock negotiations by the involved individuals, see description of our Negotiation Policy in item 20 on this Reference Form. All the characteristics of the class "A" preferred shares that the Company believes are relevant were described above.

**Share types or CDA** 

Preferred

**Class of Preferred Shares** 

Preferred Class E

Tag Along

0.0000000

**Dividend rights** 

Special class preferred shares have the following rights: a) priority in receiving dividends, to be calculated in the form of the Company's bylaws, corresponding to (i) at least 3% of the net worth of the share based on the Financial Statements that served as a reference for the payment of dividends or (ii) 6% calculated on the part of the capital formed by each class of share, whichever of them is greater; (b) the participation in profit sharing on equal terms with the common shares, once these have been guaranteed a dividend equal to the minimum priority; and (c) participation in any premiums, on equal terms with the common shares, maintaining the priority established for the distribution of dividends. According to the Company's Bylaws, at least 25% of the annual net profits, adjusted under the law, will be assigned to the payment of the mandatory dividend to the company's shareholders.

**Voting rights** 

Restricted.

**Description of restriction** 

The special class preferred shares (golden shares) have the same political rights as common shares, with the exception of voting for the election of members of the board of directors, with the qualification set out in §§ 2 and 3 of article 11 of the Company Bylaws, as well as the right to elect a member of the fiscal Council and his Deputy. Golden shares also have a right to veto on the following subjects: (I) change in corporate name; (ii) change of headquarters; (iii) change in statutory purpose regarding mining activities; (iv) liquidation of the company; (v) transfer or closing of the activities of any or all of the following stages of the company's integrated system of iron ore: (a) mineral deposits, reservoirs. mines; (b) railroads; (c) ports and maritime terminals; (vi) any modification of rights assigned to types and classes of shares set forth in the bylaws; and (vii) any amendment to article 7, or any rights granted to special class shares in the Bylaws.

Convertibility

No

Right to reimbursement of capital

No

Restrictions regarding outstanding shares

Yes

**Description of** 

Special class preferred shares belong exclusively to the Union.

### Restriction

Circumstances where guaranteed rights of said securities may be altered

The rights guaranteed to the preferred shares class A that are not determined by the applicable law may be altered by means of an amendment of the bylaws, and approved at the Extraordinary General Meeting that can only be held in the first instance, with the presence of the shareholders representing at least 2/3 of the voting capital, and in the 2<sup>nd</sup> instance with any number of shareholders present. Changes shall be approved based on quorums and conditions set forth by the Law of Joint Stock Company. It is also stressed that in accordance with article 7 of the bylaws, special class preferred shares shall have the right of veto over any modification of rights assigned to types and classes of shares issued by the Company, as well as any modification of article 7.

## Other Relevant Characteristics

All the other characteristics of the special class preferred shares that the Company believes are relevant were described above.

18.2 Description of eventual statutory regulations which limit the right to vote of large shareholders or which cause them to hold a public offering.

There are no statutory regulations which limit the right to vote of large shareholders or which cause them to hold a public offering.

# 18.3 Description of exceptions and suspensive clauses relative to ownership or political rights set forth in the bylaws

There are no exceptions or suspensive clauses relative to ownership or political rights set forth in the Company's bylaws

## 18.4 Volume of trading as well as minimum and maximum prices for securities traded

Fiscal Year	12/31/2011							
Quarter	Securities	Туре	Class	Market	Administrative entity	Traded Financial Volume(R\$)	Highest Price Listed (R\$)	Lowest Price Listed (R\$)
03/31/2011	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	169,739,167	60.92	50.75 R\$ per unit
06/30/2011	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	159,927,701	54.40	47.22 R\$ per unit
09/30/2011	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	216,116,854	51.45	39.81 R\$ per unit
12/31/2011	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	179,141,262	46.00	38.59 R\$ per unit
03/31/2011	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	758,096,190	53.41	44.70 R\$ per unit
06/30/2011	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	625,315,346	48.30	32.15 R\$ per unit
09/30/2011	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	721,283,562	46.41	36.54 R\$ per unit
12/31/2011	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	693,382,780	42.64	36.80 R\$ per unit
Fiscal Year	12/31/2011							
Quarter	Securities	Туре	Class	Market	Administrative entity	Traded Financial Volume(R\$)	Highest Price Listed (R\$)	Lowest Price Listed (R\$)
03/31/2010	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	153,821,415	57.45	47.16 R\$ per unit
06/30/2010	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	178,385,133	59.85	43.65 R\$ per unit
09/30/2010	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	130,785,983	52.30	42.85 R\$ per unit
12/31/2010	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	161,444,574	58.19	52.80 R\$ per unit
03/31/2010	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Valores, Mercadorias e Futuros	763,899,296	49.55	40.80 R\$ per unit

06/30/2010	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va	alores,	900,334,068	51.34	37.50 R\$ per unit
09/30/2010	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	685,509,796	46.30	37.52 R\$ per unit
12/31/2010	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	674,544,688	50.92	46.75 R\$ per unit
Fiscal Year	12/31/2009								
Quarter	Securities	Туре	Class	Market	Administrative entity		Traded Financial Volume(R\$)	Highest Price Listed (R\$)	Lowest Price Listed (R\$)
03/31/2009	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	153,993,412	38.75	28.36 R\$ per unit
06/30/2009	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	148,605,707	40.00	31.50 R\$ per unit
09/30/2009	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	132,971,156	41.77	31.89 R\$ per unit
12/31/2009	Shares	Common		Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	158,108,479	50.30	40.05 R\$ per unit
03/31/2009	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	561,323,131	32.48	25.25 R\$ per unit
06/30/2009	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	596,092,582	33.79	27.05 R\$ per unit
09/30/2009	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	523,833,158	37.02	27.75 R\$ per unit
12/31/2009	Shares	Preferred	PNA	Stock Exchange	BM&FBOVESPA S.A Bolsa Va Mercadorias e Futuros	alores,	663,912,411	43.37	35.67 R\$ per unit

## 18.5 Description of other securities which are not shares

Security	Securities Deposit Certificates
Identification of security	ADS (American Depositary Shares) VALE
Issuing date	03/15/2002
Quantity (Units)	768,103,941
Total value (Reais)	30,905,361,040.72
Restriction to outstanding units	No
Convertibility	Yes
Convertibility condition and effects on capital stock	Each VALE ADS represents one common share issued by the Company, and conversion has no effect on the capital stock
Possibility of redemption	No
Characteristics of securities	Each VALE ADS represents one common share issued by the Company. Quantity (units) represents VALE ADS outstanding on 12/31/2011. (*)Total value based on the ADS price on 12/31/2011
Conditions to alter rights assured by the securities	There isn't
Other relevant characteristics	VALE ADS are traded on the New York Stock Exchange under the tag VALE. The ADSs are represented by ADRs ( <i>American depositary receipts</i> ) issued by the depositary, JPMorgan Chase Bank

Security	Securities Deposit Certificates
Identification of security	ADS (American Depositary Shares) VALE-P.
Issuing date	06/20/2000
Quantity (Units)	762,466,453
Total value (Reais)	29,462,832,194.27
Restriction to outstanding units	No
Convertibility	Yes
Convertibility condition and effects on capital stock	Each VALE-P ADS represents one preferred share issued by the Company, and conversion has no effect on the capital stock
Possibility of redemption	No
Characteristics of securities	Each VALE ADS represents one preferred share issued by the Company. Quantity (units) represents one VALE-P ADS outstanding on 12/31/2011. (*)Total value based on the ADS price on 12/31/2011
Conditions to alter rights assured by the securities	There isn't
Other relevant characteristics	VALE-P ADS are traded on the New York Stock Exchange under the tag VALE. The ADSs are represented by ADRs ( <i>American depositary receipts</i> ) issued by the depositary, JPMorgan Chase Bank

Security	Debentures
Identification of security	CVRD27 Debentures (7th issue – 2nd series)

Issuing date	11/20/2006
Maturity date	11/20/2013
Quantity (Units)	400,000
Total value (Reais)	4,000,000,000.00
Restriction to outstanding units	No
Convertibility	Yes
Possibility of redemption	No
Circumstance and calculation of redemption value	I. Possibility of redeeming: from 11/20/2010, it will be possible to effect acceleration of all the debentures II. Formula for calculating value of redemption: p = d/D*0.35% (p=premium; d=number of days between redemption date and maturity date; D=number of days between 11/20/2010 and redemption date)
Characteristics of Securities	I. Maturity date: 11/20/13  II. Circumstances for early maturity: all Company obligations may be declared overdue early, under the terms and conditions set forth in the Deed of Issue, in the occurrence of any of the events summarized below:  a) bankruptcy, receivership order or out-of-court recovery or settlement, dissolution or extinction of company  b) changing the company into a limited liability company, pursuant to articles 220 to 222 of law No. 6,404/76  c) non-payment of the Nominal Value, of Remuneration of premium or of any other amounts owed to the debenture holders violation, by the Company, of any obligation for non-monetary compensation provided for in the deed of issue, and if such breach is not dealt

- with within 60 (sixty) days from the date of receipt of notice in writing, that is sent to the Company by the Fiduciary Agent for this purpose
- d) if any of the statements made in the deed of issue are proven to be false, incorrect or misleading in any relevant aspect
- e) occurrence of default or of default event by the Company or by any Relevant Subsidiary (any subsidiary in which the proportional participation of Vale in the total assets of the subsidiary exceeds 10% of the total consolidated assets of the company at the end of the last financial year), which is not dealt with, for any contract, debt instrument or document showing an open debt at a value equal to or exceeding R\$ 125.000.000 (one hundred and twenty-five million reais) updated monthly, from the date of issue, by IGMP, provided that such default or default event results in an effective acceleration of said debt;
- f) reduction of the capital stock of the company, in accordance with article 174 of law No. 6,404/76, except if the operation has been previously approved by holders of at least the majority of outstanding Debentures of the first series and at least the majority of outstanding Debentures of the second series, as provided for in paragraph 3 of article 174 of law No. 6,404/76; or
- g) approval of incorporation, merger or split of the company or sale, by the company, of all or substantially all of its assets or its mining properties, with some exceptions. The provisions of this section shall not apply to the operations of incorporation that have been previously approved by holders of at least the majority of Debentures of the first series in circulation or has been assured for the holders of Debentures who wish, during the period of at least six months, to redeem the Debentures which they own

III. Interest: DI+0.25% per year.

IV. Guarantee:: None

V. in the absence of a guarantee, if the credit is secured or subordinate: Secured Credit

VII. The fiduciary agent, indicating the key terms of the contract: Pentagon SA DTVM. The contract concluded with Pentagon has the usual market terms, among Vale's obligations we highlight: (i) maintaining proper functioning body to take care of Debenture holders' interests; and (ii) contracting, at the beginning of the offer, at least one risk classification agency to perform risk classification (rating) of the Debentures, also, with respect to at least one agency risk classification, update it annually, until the expiration date. Among the obligations of the fiduciary agent we highlight: (i) protecting the rights and interests of debenture holders (ii) keeping in safe custody all deeds and titles (iii) convening, when necessary, the General Meeting of debenture holders (iv) preparing an annual report for debenture holders (v) maintaining an updated record of debenture holders. The fiduciary agent receives annual remuneration of R\$ 24,000.00, adjusted annually by IGMP

## Conditions to alter rights assured by the securities

During deliberations of the General Meetings of debenture holders for each of the series, for each outstanding Debenture one vote will be granted, permitting the establishment of proxy, whether Debenture holder or not. Except for the provisions below, all deliberations to be taken in the General Meeting of debenture holders will depend on approval of debenture holders representing at least the majority of outstanding Debentures of the Second Series. Not included in the quorum above are: (I) the quorums expressly provided for in other clauses of the deed of issue, such as the quorum for substitution of fiduciary agent in case of absence, temporary impediments, renunciation, intervention, judicial or extrajudicial settlement or bankruptcy of the same; and (ii) changes, which should be approved by debenture holders representing at least 90% (ninety per cent) of outstanding Debentures of the Second Series, as provided for in article 71, paragraph 5, of law No. 6,404/76: (a) of

	the quorums for approval provided for in the Deed of issue; (b) the remuneration of Debentures, except in case of replacement of the DI rate; (c) any dates for payment of any amounts provided for in the Deed of issuance; (d) of the type of Debentures; (e) of the amendment of the provisions for optional early redemption; or (f) creation of a repricing event.
Other relevant characteristics	Debentures issued by Vale S.A.

Security	Debentures
Identification of security	Participative Debentures (CVRDA6, CVRDB6, CVRDC6, CVRDD6)
Issuing date	07/08/1997
Quantity (Units)	388,559,056
Total value (Reais)	3,885,590.56
Restriction to outstanding units	No
Convertibility	No
Possibility of redemption	No
Characteristics of Securities	Single series. Registered. Not represented by certificate. Par value updated pursuant to IGP-M variation. Participative debentures are traded in secondary market together with the SND (National System of Debentures) under the management of ANDIMA (National Association of Open Market Institutions) and the operation of CETIP since October 2002. CETIP codes of the debentures are CVRDA6, CVRDB6, CVRDC6, CVRDD6. The ISIN number of the debentures is BRVALEDBS028
Conditions to alter rights assured by the securities	Any change in the conditions of the debentures shall depend on the approval of the debenture holders that

	represent the absolute majority of the outstanding debentures. The maturity of the debentures shall take place in the event of extinction of all the mining rights that are the purpose of the Deed, including also the exhaustion of the discriminated mineral reserves or the reserves that replaced them. In that case, the Issuer (Vale) binds itself to liquidate the outstanding Debentures at it par value updated according to the provisions set forth in the Deed, without Premium
Other relevant characteristics	Any change in the conditions of the debentures shall depend on the approval of the debenture holders that represent the absolute majority of the outstanding debentures. The maturity of the debentures shall take place in the event of extinction of all the mining rights that are the purpose of the Deed, including also the exhaustion of the discriminated mineral reserves or the reserves that replaced them. In that case, the Issuer (Vale) binds itself to liquidate the outstanding Debentures at it par value updated according to the provisions set forth in the Deed, without Premium. Premiums due to debenture holders shall be paid every six months, on March 31 and September 30 of each year.

Security	Securities Deposit Certificates
Identification of security	HDS (Hong Kong Depositary Shares) 6210
Issuing date	12/08/2010
Quantity (Units)	899,750
Total value (Reais)	36,501,310.04
Restriction to outstanding units	No
Convertibility	Yes

Convertibility condition and effects on capital stock	Each HDS VALE 6210 represents one preferred share issued by the Company, and conversion has no effect on the capital stock
Possibility of redemption	No
Characteristics of securities	Each HDS VALE 6210 represents one preferred share issued by the Company. (*)Total value based on the HDS price on 12/31/2011
Conditions to alter rights assured by the securities	There isn't
Other relevant characteristics	HDS 6210 are traded on the Hong Kong Stock Exchange (HKEx), under the tag 6210. The HDS are represented by HDR ( <i>Hong Kong depositary receipts</i> ) issued by the depositary, JPMorgan Chase Bank.

Security	Securities Deposit Certificates
Identification of security	HDS (Hong Kong Depositary Shares) 6230
Issuing date	12/08/2010
Quantity (Units)	31,400
Total value (Reais)	1,51,48.95
Restriction to outstanding units	No
Convertibility	Yes
Convertibility condition and effects on capital stock	Each HDS VALE 6230 represents one preferred share issued by the Company, and conversion has no effect on the capital stock
Possibility of redemption	No
Characteristics of securities	Each HDS VALE 6230 represents one preferred share

	issued by the Company. (*)Total value based on the HDS price on 12/31/2011
Conditions to alter rights assured by the securities	There isn't
Other relevant characteristics	HDS 6230 are traded on the Hong Kong Stock Exchange (HKEx), under the tag 6230. The HDS are represented by HDR ( <i>Hong Kong depositary receipts</i> ) issued by the depositary, JPMorgan Chase Bank.

### 18.6 Brazilian markets where company's securities are admitted for trading

The main market for trading the Company's common and preferred shares is the BM & F BOVESPA - Stock Exchange in São Paulo.

The debentures of the Company were recorded for trading in the secondary market through (a) the SND - National Debenture System, administered and operated by CETIP S.A. – Mercados Organizados; and (b) the BOVESPAFIX, an integrated environment for trading, settlement and custody of securities, administered and operated by BM & F BOVESPA.

### 18.7 Information on class and type of securities admitted to trading in foreign markets

The following bonds: VALE22, reopening of VALE39, VALE39, VALE19, CVRD36, CVRD34B, CVRD17, CVRD16, CVRD34, CVRD13, INCO2015, INCO2012, INCO2032, CVRD20 and CVRD39 were accepted for trading in the United States of America, on the New York Stock Exchange, on 01/11/2012, 04/04/2012, 11/10/2009, 09/15/2009, 11/21/2006, 11/02/2005, 11/21/2006, 01/10/2006, 01/15/2004, 08/08/2003, 09/26/2003, 05/13/2002, 09/23/2002, 09/15/2010 and 09/15/2010. The Securities Exchange Commission – SEC, is the body responsible for the administration of the New York Stock Exchange and the Bank of New York is the depositary bank and custodial institution for the Bonds.

The mandatory convertible notes Series Vale 2012 and Series Vale P 2012 ("Convertible Notes") were accepted for trading in the United States of America, on the New York Stock Exchange, on 07/13/2009 and 0/13/2009 respectively. The Securities Exchange Commission – SEC, is the body responsible for the administration of the New York Stock Exchange and the Bank of New York is the depositary bank and custodial institution for the Convertible Notes.

The American Depositary Shares (ADSs), represented by American Depositary Receipts (ADRs) Vale and VALE. P, were admitted to trading in the United States of America, on the New York Stock Exchange on 03/15/2002 and 06/20/2000 respectively. The ADSs, represented by ADRs, VALE3 and VALE5, have also been admitted for trading in France, on the NYSE Euronext, both on 07/21/2008. The Securities and Exchange Commission – SEC, is the body responsible for the administration of the New York Stock Exchange and the French Autorité des Marchés Financiers (AMF) is the entity responsible for the NYSE Euronext. The depositary bank is the JPMorgan Chase Bank. Each ADS VALE or ADS VALE3, represents a common share issued by the company, and 24% of the company's common shares are linked to the ADSs VALE and VALE3. Each ADS Vale.P or ADS VALE5, represents a Class A preferred share issued by the Company, and 36% of Vale Class A preferred shares are linked to the ADSs VALE.P and VALE5.

Hong Kong Depositary Shares (HDSs), represented by Hong Kong Depositary Receipts (HDRs), 6210 and 6230 were admitted to trading in Hong Kong, on the Hong Kong Stock Exchange on 12/08/2010. The Hong Kong Securities and Futures Commission (SFC) is the body responsible for the administration of the Hong Kong Stock Exchange. The depositary bank is the JPMorgan Chase Bank. Each HDR 6210 represents a common share issued by the company, and 0.3% of Vale's common shares are linked to the HDRs 6210. Each HDR 6230 represents a Class A preferred share issued by the Company and 0.001% Vale Class A preferred shares are linked to the HDRs 6230.

The *Eurobond CVRD18* with due date in 2018 was admitted to trading on the regulated market of the Luxembourg Stock Exchange on 03/24/2010. The *Commission de la Surveillance du Secteur Financier* is responsible for approval of the issue prospectus and the Bank of New York is the depositary bank and custodial institution for *Eurobond CVRD18*.

Trading of Bonds, Convertible Notes, American Depositary Shares and Eurobonds last year was wholly conducted abroad.

For more information about the securities admitted to trading in foreign markets, see items 18.5 and 18.10 of this Reference Form.

## 18.8 Distribution public offerings made by the issuer or by third parties, including controlling companies and subsidiaries, relating to issuer's securities, during the last three financial years

There were no distribution public offerings in the last three fiscal years.

### 18.9 Description of takeover bids made by the issuer for shares issued by third parties

#### 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. In December 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, for a total amount of R\$ 2.1 billion..

In January 2012, an Extraordinary Shareholders' Meeting at Vale Fertilizantes approved the redemption of 5,314,386 remaining outstanding shares, including common and preferred shares, representing 0.94% of the total shares of Vale Fertilizantes. Vale now holds, through subsidiaries, 100% of common and preferred shares issued by Vale Fertilizantes.

### 18.10 Other relevant information

In Item 18.4 the shares financial volume pertains to the daily trading average in each quarter.

Below is information about the securities trading volume and the highest and lowest price traded in the stock exchange in each of the quarters during the last three fiscal years, other than those referred to in item 18.4 of this Reference Form.

Vale ON – ADS VALE	Daily Average Volume (US\$ Mil)	Highest List Price (US\$) <sup>(1)</sup>	Lowest List Price (US\$) <sup>(1)</sup>
1 <sup>th</sup> Quarter 2008	597,375	17.7	11.9
2 <sup>th</sup> Quarter 2008	545,433	20.8	13.8
3 <sup>th</sup> Quarter 2008	520,215	23.3	15.9
4 <sup>th</sup> Quarter 2008	631,128	29.5	22.3
1 th Quarter 2009	755,835	32.3	25.2
2 <sup>th</sup> Quarter 2009	950,663	34.6	24.0
3 <sup>th</sup> Quarter 2009	569,570	31.3	24.3
4 <sup>th</sup> Quarter 2009	632,066	34.7	31.5
1 <sup>th</sup> Quarter 2010	720,241	37.1	31.0
2 <sup>th</sup> Quarter 2010	555,372	34.3	29.4
3 <sup>th</sup> Quarter 2010	556,741	33.6	22.8
4 <sup>th</sup> Quarter 2010	426,554	26.6	20.5
Vale PNA – ADS VALE.P	Daily Average Volume (US\$ Mil)	Highest List Price (US\$) <sup>(1)</sup>	Lowest List Price (US\$) <sup>(1)</sup>
1 <sup>th</sup> Quarter 2009	114,610	14.7	10.4
2 <sup>th</sup> Quarter 2009	161,166	17.7	11.9
3 <sup>th</sup> Quarter 2009	157,321	20.7	13.7
4 <sup>th</sup> Quarter 2009	214,032	25.7	19.9

1 <sup>th</sup> Quarter 2010	243,184	27.8	21.9
2 <sup>th</sup> Quarter 2010	318,938	29.5	20.2
3 <sup>th</sup> Quarter 2010	214,045	27.8	21.1
4 <sup>th</sup> Quarter 2010	247,639	30.5	27.9
1 <sup>th</sup> Quarter 2011	240,922	32.5	27.0
2 <sup>th</sup> Quarter 2011	202,807	30.4	26.1
3 <sup>th</sup> Quarter 2011	221,425	30.4	21.0
4 <sup>th</sup> Quarter 2011	185,228	24.9	19.6

<sup>(1)</sup> Based on prices at closing

Below is the description of other securities issued by the Company and its subsidiaries, other than those referred to in item 18.5 of this Reference Form.

Security	Debentures
Identification of security	BNDESPAR Debentures – Ferrovia Norte Sul – 1st Issue
Quantity	66,510 debentures, at par value of R\$ 10,000.00
Value	R\$ 665,100,000.00
Issuing date	12/17/2007
Restriction to outstanding units	No
Convertibility into shares or granting the right to subscribe or acquire issuer shares	The Debentures can be exchanged at any time from the first day of the 11th year from date of issue, at the free discretion of their holder, for a quantity of common shares issued by Ferrovia Norte Sul S.A> ("FNS") or Vale Logística de Carga Geral S.A. ("Vale Logística") that matches, in each Annual Exchange Period, the application of the percentages that range from 0.74% to 9.62% ("Percentage Of Shares In The Exchange") on the

number of common shares in which Ferrovia Norte Sul S.A. (FNS) capital stock is divided, as long as this value is equal to or less than R\$ 1,876,280,000.00. The debenture holders may, at their sole discretion, exchange the entirety or only part of their Debentures, and each Debenture can be exchanged for the amount of shares resulting from the division between (i) the application of the Percentage of Shares in the Exchange to the number of common shares that make up the capital of FNS, as long as this value is equal to or less than R\$ 1,876,280,000.00 and (ii) the amount of Debentures fully paid.

The Percentage Of Shares In The Exchange was obtained on the basis of (i) projected economic value of FNS forecast as from the 11th year after Date Of Issue, as per cash flow projection and (ii) projected value of Nominal Unit Value as of the 11th year after Date Of Issue.

Once the Debentures are exchanged for FNS or Vale Logística controlling shares, there will be no effects on Vale's capital stock.

The number of shares issued by Vale Logística which the Debentures holders will have a right to receive at the exchange regulated will be that resulting from the multiplication of Vale Logística capital stock percentage, defined in the third clause of the first annex, by the number of shares in which Vale Logística capital stock is divided.

The debenture holders will have to choose between the exchange for FNS shares or for Vale Logística shares, provided that (i) in neither case, will the Debenture holder be able to exchange part of his debentures for FNS shares and part for Vale Logística shares; and (ii) at the time of the exchange for FNS shares, the option to exchange for Vale Logística shares will immediately be void

	and any blockage established may be released and vice-versa.
Possibility of redemption	I. Possibilities of redemption:
	Vale must effect the early redemption of all (and nothing less than the entirety) of debentures outstanding within 30 (thirty) days of the occurrence of the following events:
	a) extinction of sub-concession contract concluded between VALEC Engenharia, Construções e Ferrovias S.A. and the FNS for the administration and operation of public rail cargo transport service on the Norte-Sul Railroad, due to expiry; buy-in; termination; agreement between the parties; annulment of sub-concession or concession or declaration of nullity of the administrative bidding procedure; and
	b) Intervention by the Licensing Authority in the sub-concession or in the concession for the administration and operation of public rail cargo transport service on the Norte-Sul Railroad conferred granted to FNS.
	17 Formula for calculating value of redemption
	On the payment date of the redemption, Vale will affect the settlement of the debentures which are still outstanding, at their non-amortized nominal unit value, plus the amount capitalized but not amortized, as well as the monetary interest capitalized semi-annually on the 15th of June and December each year with a grace period of 4 years counted from the date of issue and still not amortized, and remuneration in the amount of 0.8% p.a. above the TJLP (long-term interest rate) liable until such date (the "redemption value").

The Value of Redemption shall be increased by a percentage of 20% (twenty per cent) if (i) the termination of letter "a" above is due to the expiry of the concession or even sub-concession (ii) when the cancellation of the above-mentioned concession or sub-concession is attributable, as determined in administrative proceedings, to Vale Logística or the FNS.

#### **Characteristics of Securities**

I. Maturity date: 12/17/2027

II. Early maturity: Acceleration:

In addition to the assumptions referred to in articles 39, 40 and 47-A of the Provisions Applicable, to BNDES Agreements, debenture holders may declare all debentures to be matured in advance and require payment, by Vale, of the debt relative to the balance of debentures, plus the interest and other charges which are liable up to the date of payment in the occurrence of the following events:

- a) failure by Vale to fulfill any monetary obligation related to the debentures not dealt with within 10 (ten) days counted from their respective maturity date;
- b) failure to correct any default of any nonmonetary obligation as provided in the Deed, within a forty-five-day-term.
- c) declaration of acceleration of any debt of Vale by reason of breach of contract which individual amount equals or exceeds R\$ 125,000,000.00 or which aggregate value, in a period of twelve (12) consecutive months, is equal to or greater than R\$ 1,000,000,000.00
- d) the inclusion in the articles of incorporation or bylaws of Vale and FNS of any mechanism

whereby a special quorum is required for a decision or approval of matters which limit or restrict control of Vale and FNS by their controlling companies or, further, the inclusion in those documents, of mechanisms which lead to: restrictions on the growth capacity of Vale and FNS or their technological development; restrictions on access by Vale and FNS to new markets; or restrictions on or impairment of the ability to pay financial obligations provided for in this Deed of Issue.

- e) if the effective direct share control of Vale or FNS is changed by any means, unless approved in advance by holders of debentures;
- f) acquisition by FNS of controlling shareholding or shareholdings in other companies, joint ventures or consortia consisting of activities which are not complementary to the normal development of the corporate purpose of FNS, characterizing deviation from FNS's corporate purpose, unless approved in advance by holders of debentures;
- g) in relation to FNS, the occurrence of any acquisition, merger, split, transformation or any other corporate reorganization, whether this reorganization be strictly corporate or performed by using relevant assets, and in relation to Vale, the occurrence of corporate re-organizations which imply transferring to third parties that are not controlled by Vale, ownership of FNS shares which will be the subject matter of an exchange in the terms of the deed, unless approved in advance by holders of debentures representing at least 50% plus one of outstanding debentures;

- h) non-compliance, by Vale, of any provision concerning the interchangeability of debentures
- i) constitution, by Vale, of any collateralized guarantee with other creditors, without giving a guarantee of the same quality and with equal priority of payment to this issue of debentures, unless approved in advance by holders of debentures;
- j) if Vale does not support and maintain the block for the exchange of common shares issued by FNS corresponding to the percentage of share capital for the exchange;
- k) if Vale does not use the proceeds generated by the issuance for capitalization of FNS, within 3 (three) days counted from the paying up of the debentures; and

III. Interest: TJLP + 0.8% per year

IV. Guarantee: None

V. In the absence of a guarantee, if the credit is secured or subordinate: Secured Credit

VI. Possible restrictions imposed on the issuer:

a) for distribution of dividends: None

- b) disposal of certain assets: Vale may dispose of any goods, if at its discretion, this act is desirable for the efficient running of its business and does not adversely affect Vale's capacity to honor its obligations in terms of the Deed of Issue.
- c) assumption of new debt: none
- d) issuing new securities: none
- VI. The fiduciary agent, indicating the key terms of the contract: none

Conditions to alter rights assured by the securities	Any changes to the terms of this debenture issue will depend on the approval of debenture holders representing at least 50% plus 1 debenture of outstanding debentures. For the purpose of setting up the quorum, debentures possibly belonging to Vale shall be excluded.
Other relevant characteristics	Debentures issued by Vale S.A., privately, which were fully subscribed by BNDES Participações S.A. Vale undertakes to maintain, for the duration of the Deed, the following indexes compiled annually through the financial statements audited by external auditors registered with the CVM (Securities Commission): a) Ratio of Debt over Adjusted EBITDA less than or equal to 4.5 (four and five tenths); and b) Ratio of Adjusted EBITDA over Interest Expenses greater than or equal to 2.0 (two).
	In the event these levels are not observed, Vale should provide, within 60 (sixty) days counted from the date of such communication, in writing to debenture holders, collateralized guarantees, accepted by the debenture holders, at a value corresponding to at least 130% (one hundred and thirty per cent) of the debt balance of debentures, unless within that period the levels above are reestablished.

Security	Debentures BNDESPAR Debentures – Ferrovia Norte Sul – 2nd Issue
Quantity	66,510
Unit Value	R\$ 10,000.00
Issuing date	10/15/2009
Restriction to outstanding units	No

Convertibility into shares or granting the right to subscribe or acquire issuer shares

The debentures are exchangeable against shares issued by Ferrovia Norte Sul S.A. ("FNS"), or Vale Logística de Carga Geral S.A. ("Vale Logística"), held by Vale S.A.

The Debentures can be exchanged at any time from the first day of the 11th year from date of issue, at the free discretion of their holder, for a quantity of common shares issued by Ferrovia Norte Sul S.A. ("FNS") or Vale Logística de Carga Geral S.A. ("Vale Logística") that matches, in each Annual Exchange Period, the application of the percentages that range from 0.74% to 9.62% ("Percentage Of Shares In The Exchange") on the number of common shares in which Ferrovia Norte Sul S.A. (FNS) capital stock is divided, as long as this value is equal to or less than R\$ 1.876.280.000.00. The debenture holders may, at their sole discretion, exchange the entirety or only part of their Debentures, and each Debenture can be exchanged for the amount of shares resulting from the division between (i) the application of the Percentage of Shares in the Exchange to the number of common shares that make up the capital of FNS, as long as this value is equal to or less than R\$ 1,876,280,000.00 and (ii) the amount of Debentures fully paid.

The Percentage Of Shares In The Exchange was obtained on the basis of (i) projected economic value of FNS forecast as from the 11th year after Date Of Issue, as per cash flow projection and (ii) projected value of Nominal Unit Value as of the 11th year after Date Of Issue. Once the Debentures are exchanged for FNS or Vale Logística controlling shares, there will be no effects on Vale's capital stock.

The number of shares issued by Vale Logística which the Debentures holders will have a right to receive at the exchange regulated will be that

resulting from the multiplication of Vale Logística capital stock percentage, defined in the third clause of the First Amendment to the Deed, by the number of shares in which Vale Logística capital stock is divided.

The Debenture holders will have to choose between the exchange for FNS shares or for Vale Logística shares, provided that (i) in neither case, will the Debenture holder be able to exchange part of his debentures for FNS shares and part for Vale Logística shares; and (ii) at the time of the exchange for FNS shares, the option to exchange for Vale Logística shares will immediately be void and any blockage established may be released and vice-versa.

# Possibility of redemption

I. Possibilities of redemption:

Vale must effect the early redemption of all (and nothing less than the entirety) of debentures outstanding within 30 (thirty) days of the occurrence of the following events:

- a) extinction of sub-concession contract concluded between VALEC Engenharia, Construções e Ferrovias S.A. and the FNS for the administration and operation of public rail cargo transport service on the Norte-Sul Railroad, due to expiry; buy-in; termination; agreement between the parties; annulment of sub-concession or concession or declaration of nullity of the administrative bidding procedure; and
- b) Intervention by the Licensing Authority in the sub-concession or in the concession for the administration and operation of public rail cargo transport service on the Norte-Sul Railroad conferred granted to FNS.

## II. Formula for calculating value of redemption

On the payment date of the redemption, Vale will affect the settlement of the debentures which are still outstanding, at their non-amortized nominal unit value, plus the amount capitalized but not amortized, as well as the monetary interest capitalized semi-annually on the 15th of June and December each year with a grace period of 4 years counted from the date of issue and still not amortized, and remuneration in the amount of 0.8% p.a. above the TJLP (long-term interest rate) liable until such date (the "Redemption Value").

The Value of Redemption shall be increased by a percentage of 20% (twenty per cent) if (i) the termination of letter "a" above is due to the expiry of the concession or even sub-concession (ii) when the cancellation of the above-mentioned concession or sub-concession is attributable, as determined in administrative proceedings, to Vale Logística or the FNS.

### **Characteristics of Securities**

I. Maturity date: 12/17/2027

#### II. Early maturity

In addition to the assumptions referred to in articles 39, 40 and 47-A of the Provisions Applicable, to BNDES Agreements, debenture holders may declare all debentures to be matured in advance and require payment, by Vale, of the debt relative to the balance of debentures, plus the interest and other charges which are liable up to the date of payment in the occurrence of the following events:

 failure by Vale to fulfill any monetary obligation related to the debentures not dealt with within 10 (ten) days counted from their respective maturity date;

- failure to correct any default of any nonmonetary obligation as provided in the Deed, within a forty-five-day-term.
- c) declaration of acceleration of any debt of Vale by reason of breach of contract which individual amount equals or exceeds R\$ 125,000,000.00 or which aggregate value, in a period of twelve (12) consecutive months, is equal to or greater than R\$ 1,000,000,000.00
- d) the inclusion in the articles of incorporation or bylaws of Vale and FNS of any mechanism whereby a special quorum is required for a decision or approval of matters which limit or restrict control of Vale and FNS by their controlling companies or, further, the inclusion in those documents, of mechanisms which lead to: restrictions on the growth capacity of Vale and FNS or their technological development; restrictions on access by Vale and FNS to new markets; or restrictions on or impairment of the ability to pay financial obligations provided for in this Deed of Issue.
- e) if the effective direct share control of Vale or FNS is changed by any means, unless approved in advance by holders of debentures:
- f) acquisition by FNS of controlling shareholding or shareholdings in other companies, joint ventures or consortia consisting of activities which are not complementary to the normal development of the corporate purpose of FNS, characterizing deviation from FNS's corporate purpose, unless approved in advance by holders of debentures:
- g) in relation to FNS, the occurrence of any acquisition, merger, split, transformation or any other corporate reorganization, whether this reorganization be strictly corporate or

performed by using relevant assets, and in relation to Vale, the occurrence of corporate re-organizations which imply transferring to third parties that are not controlled by Vale, ownership of FNS shares which will be the subject matter of an exchange in the terms of the deed, unless approved in advance by holders of debentures representing at least 50% plus one of outstanding debentures;

- h) non-compliance, by Vale, of any provision concerning the interchangeability of debentures
- constitution, by Vale, of any collateralized guarantee with other creditors, without giving a guarantee of the same quality and with equal priority of payment to this issue of debentures, unless approved in advance by holders of debentures;
- if Vale does not support and maintain the block for the exchange of common shares issued by FNS corresponding to the percentage of share capital for the exchange;
- k) if Vale does not use the proceeds generated by the issuance for capitalization of FNS, within 3 (three) days counted from the paying up of the debentures; and

III. Interest: TJLP + 0.8% per year

IV. Guarantee: None

V. In the absence of a guarantee, if the credit is secured or subordinate: Secured Credit

VI. Possible restrictions imposed on the issuer:

a) for distribution of dividends: None

 disposal of certain assets: Vale may dispose of any goods, if at its discretion, this act is desirable for the efficient running of its

	business and does not adversely affect Vale's capacity to honor its obligations in terms of the Deed of Issue.  c) assumption of new debt: none d) issuing new securities: none VII. The fiduciary agent, indicating the key terms of
Conditions to alter rights assured by the securities	the contract: none  Any changes to the terms of this debenture issue will depend on the approval of debenture holders representing at least 50% plus 1 debenture of outstanding debentures. For the purpose of setting up the quorum, debentures possibly belonging to Vale shall be excluded.
Other relevant characteristics	Debentures issued by Vale S.A., privately, which were fully subscribed by BNDES Participações S.A.  Vale undertakes to maintain, for the duration of the Deed, the following indexes compiled annually through the financial statements audited by external auditors registered with the CVM (Securities Commission): a) Ratio of Debt over Adjusted EBITDA less than or equal to 4.5 (four and five tenths); and b) Ratio of Adjusted EBITDA over Interest Expenses greater than or equal to 2.0 (two).  In the event these levels are not observed, Vale should provide, within 60 (sixty) days counted from the date of such communication, in writing to debenture holders, collateralized guarantees, accepted by the debenture holders, at a value corresponding to at least 130% (one hundred and thirty per cent) of the debt balance of debentures, unless within that period the levels above are reestablished.

Security	Debentures Salobo 1
Quantity	5 debentures
Unit Value	R\$ 15,250,399.93
Total Value	R\$ 76.251,999.65
Issuing date	01/06/97
Restriction to outstanding units	No
Convertibility into shares or granting the right to subscribe or acquire issuer shares	The debentures combine 5 subscription premiums (1 for each debenture) giving the holder the right to subscribe to preferred shares of Salobo Metais S.A., in the amount equivalent to 50% of the shares issued existing at the time the subscribed fully paid in capital 2 times the issue value of the debentures.
Possibility of redemption	None
Characteristics of Securities	I. Maturity date: 7 years as of the achievement of accumulated commercial invoicing of 200,000 tons of copper by Salobo Metais S.A. (5 successive annual installments, formed of principal and interest due after the first 2 years after the achievement of accumulated commercial invoicing of 200,000 tons of grade A copper cathode of London Metals Exchange)  II. Possibility of early redemption: none
	III. Interest: IGP-DI + 6,5% per year (capitalized)
	IV. Guarantee:: Vale S.A. guarantee
	V. In the absence of any guarantee, if the credit is secured or subordinate: the debentures will be subordinate to the other creditors of the issuer
	VI. Possible restrictions imposed on the issuer, in relation to:  a) distribution of dividends: None
	c) disposal of determined assets: none

Conditions to alter rights assured by the securities	a) contracting of new debt: none d) issuing new securities: none VII. The fiduciary agent, indicating the key terms of the contract: none None
Other relevant characteristics	Debentures issued by Salobo Metais s.a., privately, which were fully subscribed by the Banco Nacional de Desenvolvimento Econômico e Social (BNDES)  When issuing shares arising from the exercise of the right of subscription, a premium will be paid corresponding to the dividends distributed to shareholders until that date, in the proportion of shares subscribed by BNDES or its assignee.

Security	Bonds VALE22 <sup>9</sup>
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000
Value	US\$ 1,000,000,000.00 issued on 01/11/2012 e US\$ 1,250,000,000.00 issued by the reopening of existing bond on 04/04/2012, in a total of US\$ 2,250,000,000.00
Issuing date	01/11/2012 and 04/04/2012
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None

 $^{\rm 9}$  Bonds issued by subsidiary Vale Overseas Ltd.

Descibility of redemention	I. Possibilities of redemption
Possibility of redemption	i. i dodinimos di rodompilon
	a) Redemption by means of payment of premium, at any time, at Vale Overseas criterion.
	b) Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.
	II. Formula for calculating value of redemption:  a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.40%
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.
Characteristics of Bonds	I. Maturity date: 01/11/2022
	II. Early maturity: If a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	b) in relation to Vale, its Relevant Subsidiaries

(any subsidiary which total assets are greater than 10% of the total consolidated assets of the group at the end of each fiscal year), and in regard to Vale Overseas, the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.

- c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
- f) the collateral becomes invalid or unenforceable.

III. Interest: 4.375% per year

IV. Guarantee:. There is no granting of collateral: Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

V. the credit is secured or subordinate: N/A

- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (i) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance: (ii) no default event occurs as a result of the transaction; and (iii) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2039. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the

	consent from the note holders, debts from its subsidiaries and issue its own debt.  VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a
	trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None

Security	Bonds VALE39 <sup>10</sup>
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 1,000,000.000
Issuing date	10/11/09
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None

 $^{\rm 10}$  Bonds issued by subsidiary Vale Overseas Ltd.

Possibility of redemption	I. Possibilities of redemption
	Redemption by means of payment of premium, at any time, at Vale Overseas criterion.
	b) Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.
	II. Formula for calculating value of redemption:  a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0,30%
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.
Characteristics of Bonds	I. Maturity date: 10/15/39

II. Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:

- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries (subsidiaries with total assets exceeding 10% of the total consolidated assets of the group at the end of each fiscal year, "Relevant Subsidiaries") and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
- f) the collateral becomes invalid or unenforceable.

III. Interest: 6.825% per year

IV. Guarantee: There is no granting of collateral. Vale

guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing, without the consent from the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond

Other relevant characteristics	investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.  None
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the
	VII. the fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
	VALE 2019. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.

Security	Bonds VALE99 <sup>11</sup>
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 1,000,000,000.00
Issuing date	9/15/2009
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	Possibilities of redemption
	Redemption by means of payment of premium, at any time, at Vale Overseas criterion.
	b) Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.
	II. Formula for calculating value of redemption:  a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.30%
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.
Characteristics of <i>Bonds</i>	I. Maturity date: 9/1/19

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<sup>&</sup>lt;sup>11</sup> Bonds issued by subsidiary Vale Overseas Ltd

- II. Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
  - a) failure to pay interests, principal or premium, if any.
  - b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
  - c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:
  - d) insolvency or bankruptcy.
  - e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
  - f) the collateral becomes invalid or unenforceable.

III. Interest: 5.625% per year

IV. Guarantees: There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2036. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.

	VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a <i>trustee</i> of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None

Security	Bonds CVRD36 <sup>12</sup>
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 2,500,000,000.00
Issuing date	11/21/2006
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption
	Redemption by means of payment of premium, at any time, at Vale Overseas criterion.
	b) Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.

<sup>&</sup>lt;sup>12</sup> Bonds issued by subsidiary Vale Overseas Ltd

	II. For calculating value of redemption:
	a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.35%
	<ul> <li>Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.</li> </ul>
Characteristics of Bonds	I. Maturity date: 11/21/36
	II. Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	<ul> <li>b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.</li> </ul>
	c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions

- and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
- f) the collateral becomes invalid or unenforceable.
- III. Interest: 6.875% per year
- IV. Guarantees: There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets

	most the requirements set forth in item h
	meet the requirements set forth in item b.
	c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
	d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2036. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.
	VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None

Security	Bonds CVRD34B <sup>13</sup>
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 300,000,000.00

<sup>&</sup>lt;sup>13</sup> Bonds issued by subsidiary Vale Overseas Ltd.

Issuing date	11/02/2005
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption  Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.  II. For calculating value of redemption: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.

#### Characteristics of Bonds

- I. Maturity date: 01/17/34
- II. Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
  - a) failure to pay interests, principal or premium, if any.
  - b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
  - b) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
  - c) insolvency or bankruptcy.
  - d) If Vale Overseas notes become illegal, the trustee, upon guidance from at least 25% of bond holders in outstanding principal, will also immediately include the amount of principal, interest accrued and any due and unpaid amounts.
- III. Interest: 8.25% per year.
- IV. Guarantee a. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to

this note, in the event Vale Overseas fails to pay.

V. If the credit is secured or subordinate: N/A

- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2036. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own

	debt.
	VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None
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Security	CVRD17 <sup>14</sup> Bonds
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<sup>&</sup>lt;sup>14</sup> Bonds issued by Vale Overseas Ltd. subsidiary

Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in
	multiples of US\$ 1,000.
Value	US\$ 1,250,000,000.00
Issuing date	11/21/2006
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption
	Redemption by means of payment of premium, at any time, at Vale Overseas criterion.
	b) Redemption due to changes in the tax law: if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law, Vale Overseas may redeem the entirety of the notes in advance.
	II. Formula for calculating value of redemption: <ul> <li>a) Redemption by means of payment of premium: The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.25%</li> </ul>
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.

### Characteristics of Bonds

I. Maturity date: 01/23/17

Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:

- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
- f) the collateral becomes invalid or unenforceable.

III. Interest: 6.25% per year

IV. Guarantee:. There is no granting of collateral. Vale

guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

V. If the credit is secured or subordinate: N/A

- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond CVRD2017. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note

	holders, debts from its subsidiaries and issue its own debt.  VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities  Other relevant characteristics	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.  none

Security	CVRD16 <sup>6</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 100,000, always in multiples of US\$ 1,000.

Value	US\$ 1,000,000,000.00
Issuing date	01/10/2006
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibility of redemption: Redemption due to changes in the tax law: Vale Overseas may only redeem the entirety of the notes in advance if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law.  II. Formula for calculating value of redemption: The redemption value will be 100% of the principal value plus interests accrued up to the time of redemption.
Characteristics of Bonds	II. Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:  a) failure to pay interests, principal or premium, if any.  b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.  c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to

conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.

- d) insolvency or bankruptcy.
- e) If an event occurs that turns Vale Overseas notes illegal, the trustee as instructed by at least 25% of the note holders for the value of the principal showing an open debt, also declares the value of the principal, the interests accrued and any amount unpaid due immediately.
- III. Interest: 6.25% per year
- IV. Guarantee:. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the

contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.  d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond CVRD 2016. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.  VII. The fiduciary agent, indicating the key terms of the contract. The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights  Conditions to alter rights assured by the securities  The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the		
exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.		c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt. d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond CVRD 2016. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt. VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure
Other relevant characteristics none		The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
	Other relevant characteristics	none

Security	CVRD34 Bonds
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 500,000,000.00
Issuing date	01/15/2004
Restriction to outstanding units	none

Convertibility into shares or granting the right to subscribe or acquire issuer shares	None  L Describilities of redemption Redemption due to changes in the
Possibility of redemption	I. Possibilities of redemption: Redemption due to changes in the tax law: Vale Overseas may only redeem the entirety of the notes in advance if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law.
	II. Formula for calculating value of redemption: The redemption value will be 100% of the principal value plus interests accrued up to the time of redemption.
Characteristics of Bonds	I. Maturity date: 01/07/34
	Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
	c)- failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:

- d) insolvency or bankruptcy.
- e) If an event occurs that turns Vale Overseas notes illegal, the trustee as instructed by at least 25% of the note holders for the value of the principal showing an open debt, also declares the value of the principal, the interests accrued and any amount unpaid due immediately.
- III. Interest: 8.25% per year
- IV. Guarantee:. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
- b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to

	contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt. Moody's must confirm in advance that the new issuance from Vale Overseas will not result in a lower rating granted for other open notes.  d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2034. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.  VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	none

Security	CVRD13 <sup>15</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 100,000 always in multiples of US\$ 1,000.

<sup>&</sup>lt;sup>15</sup> Bonds issued by Vale Overseas Ltd. subsidiary

Value	US\$ 124,415,000.00
Issuing date	08/08/2003
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	
	I. Possibilities of redemption: Redemption due to changes in the tax law: Vale Overseas may only redeem the entirety of the notes in advance if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or in Cayman tax law.
	II. Formula for calculating value of redemption: The redemption value will be 100% of the principal value plus interests accrued up to the time of redemption.

I. Maturity date: 08/15/13

Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:

- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Overseas to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:
- d) insolvency or bankruptcy.
- e) If an event occurs that turns Vale Overseas notes illegal, the trustee as instructed by at least 25% of the note holders for the value of the principal showing an open debt, also declares the value of the principal, the interests accrued and any amount unpaid due immediately.
- III. Interest: 9% per year
- IV. Guarantee:. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
- b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt. Moody's must confirm in advance that the new issuance from Vale Overseas will not result in a lower rating granted for other open notes.
- d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2013. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, debts from its subsidiaries and issue its own debt.

VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the

	scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance, allows, at any time, with some exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments are classified in the deed in 4 groups. Depending on the type of amendment, they may be executed by Vale Overseas and the trustee with the consent from 100%, 50% or 25% of the note holders for the value of the principal showing an open debt. Some non-material clarifications or amendments may be made without the consent from the note holders.
Other relevant characteristics	In January 2006, Vale Overseas reacquired through a public offering part of its outstanding debt instruments (CVRD13). The holders of approximately US\$ 176 million principal, out of an outstanding total US\$ 300 million adhered to the offering. Vale Overseas reacquired and subsequently paid off all the instruments offered.

Security	CVRD18 Eurobonds
Quantity	Bonds are issued at the minimum value of EUR 50,000, always in multiples of EUR 1,000.
Value	EUR 750,000,000
Issuing date	03/24/2010
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption:
	a) Redemption by means of payment of premium, at any time, at the issuer's criterion.
	b) Redemption due to changes in the tax law: Vale may redeem the entirety of the notes in advance if Vale is forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian tax law.
	II. Formula for calculating value of redemption:
	a) Redemption by means of payment of premium: The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Bund Rate ("German Bund" instruments) + 0.25%.
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.

I. Maturity date: 03/24/2018

Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:

- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale and its Relevant Subsidiaries: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale to comply with its covenants in relation to the note and this failure persists 60 days after Vale has received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale notes become illegal, generating the acceleration of over US\$ 50 million total.
- e) the collateral becomes invalid or unenforceable.
- III. Interest: 4.375% per year
- IV. Guarantee:. The notes are obligations unsecured by Vale and do not hold privileges over other Vale unsecured debts.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend

distribution by Vale.

- b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
- d) issuing new securities: Vale may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Eurobonds CVRD18. In addition, Vale may issue new notes under other terms and conditions.
- VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights

## Conditions to alter rights assured by the securities

The deed of issuance allows amending the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from 100% or the majority of the note holders for the value of the principal showing an open debt, pursuant to the type of amendment. Some non-material clarifications or amendments may be made without the consent from the note holders.

Other relevant characteristics	Bond issued by Vale S.A.

Security	CVRD20 <sup>16</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 1,000,000,000.00
Issuing date	09/15/2010
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	<ul> <li>I. Possibilities of redemption: <ul> <li>a) Redemption by means of payment of premium, at any time, at Vale Overseas' criterion.</li> </ul> </li> <li>b) Redemption due to changes in the tax law: Vale Overseas may redeem the entirety of the notes in advance if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or Cayman tax law.</li> <li>II. Formula for calculating value of redemption: <ul> <li>a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.30%.</li> <li>b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.</li> </ul> </li></ul>

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<sup>&</sup>lt;sup>16</sup> Bonds issued by Vale Overseas Ltd. subsidiary

- I. Maturity date: 09/15/2020
- II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries (any subsidiary in which the proportional participation of Vale in the total assets of the subsidiary exceeds 10% of the total consolidated assets of the company at the end of the last financial year), and Vale Overseas: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Overseas to comply with its covenants in relation to the note and this failure persists 60 days after Vale or Vale Overseas have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) Vale Overseas notes become illegal, generating the acceleration of over US\$ 50 million total.
- f) the collateral becomes invalid or unenforceable.
- III. Interest: 4.625% per year
- IV. Guarantee:. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to

this note, in the event Vale Overseas fails to pay.

- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
- b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
- d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2020. In addition, Vale Overseas may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.
- VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights

Conditions to alter rights assured by the securities	The deed of issuance allows, at any time, with certain exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None

Security	CVRD39 <sup>17</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 2,000, always in multiples of US\$ 1,000.
Value	US\$ 750,000,000.00
Issuing date	05/10/2010
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	<ul> <li>I. Possibilities of redemption: <ul> <li>a) Redemption by means of payment of premium, at any time, at Vale Overseas' criterion.</li> </ul> </li> <li>b) Redemption due to changes in the tax law: Vale Overseas may redeem the entirety of the notes in advance if Vale or Vale Overseas are forced to maintain values greater than 15%, in the event of payment of interest over note, due to changes in the Brazilian or Cayman tax law.</li> <li>II. Formula for calculating value of redemption:</li> </ul>
	a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the

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<sup>&</sup>lt;sup>17</sup> Bonds issued by Vale Overseas Ltd. subsidiary

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	date of redemption at the rate equivalent to Treasury + 0.40%.
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests accrued up to the date of redemption.
Characteristics of Bonds	
	I. Maturity date: 11/10/2039
	II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	b) in relation to Vale, its Relevant Subsidiaries: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
	c)- failure from Vale to comply with its covenants in relation to the note and this failure persists 60 days after Vale has received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Overseas, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
	d) insolvency or bankruptcy.
	e) Vale notes become illegal, generating the acceleration of over US\$ 50 million total.
	f) the collateral becomes invalid or unenforceable.

III. Interest: 6.875% per year

IV. Guarantee:. There is no granting of collateral. Vale guarantees, irrevocably and unconditionally, the full payment of the principal, interests and other amounts owed in relation to this note, in the event Vale Overseas fails to pay.

V. If the credit is secured or subordinate: N/A

- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, Vale Overseas may not declare or pay any dividends, without the trustee's consent, as instructed by at least 25% of the note holders for the value of the principal showing an open debt.
  - b) disposal of determined assets: Vale and Vale Overseas may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Overseas in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Overseas, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
  - c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Overseas may issue debts instruments within the scope of the deed of issuance, but Vale Overseas may not contract any other type of loan or financing.
  - d) issuing new securities: Vale Overseas may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Bond VALE 2039. In addition, Vale Overseas may issue new notes under other

	terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.  VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance allows, at any time, with certain exceptions, to amend the rights and obligations of Vale Overseas and the investors' in the notes. Said amendments may only be executed by Vale Overseas and the trustee with the consent from the majority of the note holders for the value of the principal showing an open debt.
Other relevant characteristics	None

Security	Mandatorily Convertible Notes II –Vale 2012 <sup>18</sup> Series
Quantity	5,848,903
Value	US\$ 292,445,150.00
Issuing date	7/13/2009
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	Convertible to ADSs in relation to Vale common shares. Conversion into shares may also be made, at the note holder's criterion, at any time, prior to expiration, using the 2.6797 ADS/Note conversion rate. Note unit face value is US\$ 50.00
Possibility of redemption	I. Possibilities of redemption: Notes may not be redeemed or

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<sup>&</sup>lt;sup>18</sup> Bonds issued by Vale Capital II subsidiary.

converted into ADSs by Vale Capital II prior to expiration, except in the cases where, due to changes in the Brazilian or Cayman tax law, Vale or Vale Capital II are forced to maintain values greater than 15%, in the event of payment of interest over note.

II. Formula for calculating value of redemption: Notes are converted as VALE US ADSs, as per the rate described below.

### Price of VALE US

Date	US\$10	US\$12	2US\$1	4US\$1	5US\$1	7US\$18	US\$20	)US\$22I	<b>US\$2</b> 4	4US\$28	US\$30	US\$35	US\$40	US\$45	US\$
	.00	.00	.00	.88	.00	.66	.00	.00	.00	.00	.00	.00	.00	.00	50
07/13/2	2.7326	2.6713	32.631	12.607	32.597	82.5888	2.5847	72.5825	2	2.5907	2.5956	32.6088	2.6213	32.6321	2.641
009									.5835						2
06/15/	2.8071	2.7345	2.683	32.651	12.637	82.6240	2.6171	12.6119	2	2.6158	2.6199	2.6317	2.6427	2.6518	2.65
2010									.6108	1					9
06/15/	2.9461	2.8569	2.783	12.731	42.708	42.6834	2.6698	32.6576	2	2.6523	2.655	2.663	2.6698	32.6746	2.677
2011									.6522						6
07/15/	3.1486	3.1486	3.148	63.148	62.941	22.6797	2.6797	72.6797	2	2.6797	2.6797	2.6797	2.6797	2.6797	2.679
2012									.6797	•					

### Characteristics of Notes

- I. Maturity date: 6/15/12
- II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries and Vale Capital II: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Capital II to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Capital II have received communication from the trustee or from at least 25% of the note holders reporting the non-compliance of the obligations. These obligations include,

but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Capital II, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.

- d) insolvency or bankruptcy.
- e) the collateral becomes invalid or unenforceable.
- III. Interest: 6.75% per year
- IV. Guarantee:. Vale guarantees, irrevocably and unconditionally, all the payments in relation to the note, in the event Vale Capital II fails to pay.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, if there were a distribution of dividends or interests over principal by Vale, Vale Capital II will pay to the note holders additional interests based on this distribution. The value of the additional interests will be the amount in dollars equivalent to the cash distribution paid by the depository for a VALE US ADS multiplied by the number of VALE US ADSs that the note holder would receive in the mandatory conversion at the maximum conversion rate of 3.1486 ADS/Note.
- b) disposal of determined assets: Vale and Vale Capital II may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Capital II in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Capital II, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to

,	
	contracting new debts by Vale. Vale Capital II may issue debts instruments within the scope of the deed of issuance.
	d) issuing new securities: Vale Capital II may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Mandatory Convertible Notes II - Vale 2012 Series, provided it has a sufficient number of common shares in the treasury to support the conversion obligations of the new issuance. In addition, Vale Capital II may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.
	VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights
Conditions to alter rights assured by the securities	The deed of issuance allows amending the rights and obligations of the company and the investors' in the notes. Said amendments may only be executed by the company and the trustee with the consent from 100% or the majority of the note holders for the value of the principal showing an open debt, pursuant to the type of amendment. Some non-material clarifications and changes may be made without the consent from the note holders.
Other relevant characteristics	I Upon expiration, notes will be mandatorily converted to VALE US ADS. The conversion rate may not be greater than 3.1486 VALE US ADSs per note and may not be lower than 2.6797 VALE US ADSs per note, depending on the market value applicable to VALE US ADS at the conversion date. Vale maintains in the treasury 18,415,859 common shares reserved for the conversion of notes.
	II Vale Capital II, under certain circumstances as defined in the deed of issuance, may defer payment of interests.
	III Note holders have the right to convert them prior to expiration at the minimum conversion rate (2.6797 VALE US ADSs per note) at any time, provided it is not a Cash Acquisition period.

IV "Cash Acquisition" – notes will be converted prior to expiration in the event of a "Cash Acquisition", as defined below, pursuant to the conversion rates described in the table, plus a conversion premium over the interests
V. "Cash Acquisition"- means the consolidation of any acquisition (liquidation, change of shares, public offering, consolidation, reclassification, merger or sale of assets of Vale or its subsidiaries) by means of which 75% of Vale common shares are changed or converted into other instruments, in such a manner that no more than 10% trade in the New York Stock Exchange or Nasdaq.

#### Price of VALE US Date US\$10US\$12US\$14US\$15US\$17US\$18US\$20US\$22US\$24US\$28US\$30US\$35US\$40US\$45 US\$ .00 .00 .00 .00 .00 .88 .00 .66 .00 .00 .00 .00 .00 07/13/2 2.73262.67132.63112.60732.59782.58882.58472.5825 2.59072.59562.60882.62132.63212,641 .5835 06/05/ 2.80712.73452.68332.65112.63782.62402.61712.6119 2 2.61582.61992.63172.64272.6518 2,65 2010 .6108 2011 .6522 2 2.67972.67972.67972.67972,679 07/05/ 3.14863.14863.14863.14862.94122.67972.67972.6797 2012 .6797

Security	Mandatorily Convertible Notes II – Vale P 2012 <sup>19</sup>
	Series
Quantity	12,984,265
Value	US\$ 649,213,250.00
Issuing date	07/13/2009
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	Convertible to ADSs in relation to Vale class A preferred shares. Conversion into shares may also be made, at the note holder's criterion, at any time, prior to expiration, using the 3.0993 ADS Note conversion rate. Note unit face value is US\$ 50.00

<sup>&</sup>lt;sup>19</sup> Bonds issued by Vale Capital II subsidiary.

Possib	ility of	f redem	nption					I. Pos redeem prior to change Vale C than 19 notes. II. Forn are cor describ	ned or expirates in the apital 5%, in nula fo	conver	ted into xcept in ilian or orced to rent of ating v	o ADS n the concentration to t	s by \cases on tax nan tax ntain vent of	/ale Ca where, k law, values interes	due to Vale or greater st over Notes
Date						'US\$18	US\$20	VALE US OUS\$22U	JS\$24I						
	.00	.00	.00	.88	.00	.66	.00	.00	.00		.00	.00	.00	.00	50
07/13/2 009	3.117	3.0574	3.025	3.0107	.0020	2.9945	2.992	2.99523	3.00003	3.01273	3.01953	3.03563	3.0494	3.0605	3.06
06/15/ 2010	3.189 2	3.1151	3.073	3.0531	.0406	3.0284	3.023	3.02413	3.02773	3.03893	3.04513	3.05943	3.0709	3.0797	3.0
06/15/ 2011	3.330	3.2283	3.163	3.129	.1068	3.0834	3.0471	3.06783	3.06883	3.07623	3.08053	3.08943	3.0953	3.0987	3.10
07/15/ 2012	3.641	3.6417	3.641 7	3.3333	.0993	3.0993	3.0399	3.09933	3.09933	3.09933	3.09933	3.09933	3.0993	3.0993	3.0

## Characteristics of Notes

- I. Maturity date: 06/15/12
- II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale, its Relevant Subsidiaries and Vale Capital II: the occurrence of any default, in any transaction characterized as debt, that exceeds, in total, US\$ 50 million and this default results in the effective acceleration of the debt.
- c) failure from Vale or Vale Capital II to comply with their covenants in relation to the note and this failure persists 60 days after Vale or Vale Capital II have received communication from the trustee or from at least 25% of the note holders reporting the noncompliance of the obligations. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale or Vale Capital II, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:.
- d) insolvency or bankruptcy.
- e) the collateral becomes invalid or unenforceable.
- III. Interest: 6.75% per year
- IV. Guarantee:. Vale guarantees, irrevocably and unconditionally, all the payments in relation to the note, in the event Vale Capital II fails to pay.
- V. If the credit is secured or subordinate: N/A

- VI. Possible restrictions imposed on the issuer, in relation to:
- a) distribution of dividends: There are no restrictions on dividend distribution by Vale. However, if there were a distribution of dividends or interests over principal by Vale, Vale Capital II will pay to the note holders additional interests based on this distribution. The value of the additional interests will be the amount in dollars equivalent to the cash distribution paid by the depository for a VALE US ADS multiplied by the number of VALE US ADSs that the note holder would receive in the mandatory conversion at the maximum conversion rate of 3.1486 ADS/Note.
- b) disposal of determined assets: Vale and Vale Capital II may not, without the consent from the majority of the note holders, participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale and Vale Capital II in the deed of issuance; (b) no default event occurs as a result of the transaction; and (c) Vale or Vale Capital II, as applicable, provide their trustee with a certification attesting that the consolidation or transfer of assets meet the requirements set forth in item b.
- c) contracting of new debt: there are no restrictions to contracting new debts by Vale. Vale Capital II may issue debts instruments within the scope of the deed of issuance.
- d) issuing new securities: Vale Capital II may issue, without the consent from the note holders, new notes according to the terms and conditions applicable to Mandatory Convertible Notes II Vale P 2012 Series, provided it has a sufficient number of common shares in the treasury to support the conversion obligations of the new issuance. In addition, Vale Capital II may

issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.
VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights

Conditions to alter rights assured by the securities	The deed of issuance allows amending the rights and obligations of the company and the investors' in the notes. Said amendments may only be executed by the company and the trustee with the consent from 100% or the majority of the note holders for the value of the principal showing an open debt, pursuant to the type of amendment. Some non-material clarifications and changes may be made without the consent from the note holders.
Other relevant characteristics	I. Upon expiration, notes will be mandatorily converted to VALE US ADS. The conversion rate may not be greater than 3.6417 VALE US ADSs per note and may not be lower than 3.0993 VALE US ADSs per note, depending on the market value applicable to VALE US ADS at the conversion date. Vale maintains in the treasury 47,284,800 common shares reserved for the conversion of notes.
	II. Vale Capital II, under certain circumstances as defined in the deed of issuance, may defer payment of interests.
	III. Note holders have the right to convert them prior to expiration at the minimum conversion rate (3.0993 VALE US ADSs per note) at any time, provided it is not a "Cash Acquisition" period.
	IV. "Cash Acquisition" – notes will be converted prior to expiration in the event of a "Cash Acquisition", as defined below, pursuant to the conversion rates described in the table, plus a conversion premium over the interests
	V. "Cash Acquisition"- means the consolidation of any acquisition (liquidation, change of shares, public offering, consolidation, reclassification, merger or sale of assets of Vale or its subsidiaries) by means of which 50% of Vale class A preferred shares are changed or converted into other instruments, in such a manner that no more than 10% trade in the New

								York S	Stock E	Exchanç	ge or N	asdaq.			
						Pr	ice of '	 VALE/P	US						
Data	US\$10	US\$12	US\$14	US\$15 .88	US\$17 .00	US\$18	US\$20	US\$22	US\$24	US\$28 .00	US\$30	US\$351	JS\$40l	JS\$45 <sub>(</sub>	JS\$50
86/13/	3.1175	. <b>00</b> ა.ყა/	. <b>00</b> 0256	3.0107	.0020	2.9945	.9928	2.9952	3.0000	. <b>00</b> )3.0127	3.0195	. <b>00</b> 3.03563	<b>.00</b> 3.04943	. <b>00</b> 3.06053	3.0694
	3.1892	3.115	0735	3.0531	.0406	3.0284	.0236	3.0241	.0277	3.0389	3.0451	3.05943	3.07093	3.07973	3.0861
1 1 1	3.3309 3.6417	J	1002	3.129 3.3333	.1068 .0993	3.0834 3.0993	.0714	3.0678 3.0993	.0688 .0993	3.0762 3.0993	3.0805 3.0993	3.08943 3.09933	3.09533 3.09933	3.09873 3.09933	3.1006 3.0993

Security	Inco 2015 <sup>20</sup> Bonds
Quantity	bonds are issued at the minimum value of US\$ 1,000.
Value	US\$ 300,000,000.00
Issuing date	09/26/2003
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption:
	a) Redemption by means of payment of premium, at any time, at Vale Inco's criterion.
	b) Redemption due to changes in the tax law: if Vale Inco is forced to maintain additional values to note holders, due to changes in the Canadian tax law.
	II. Formula for calculating value of redemption:
	a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.35%
	b) Redemption due to changes in the tax law: The

<sup>20</sup> Bonds issued by Vale Inco Ltd. subsidiary (Vale Inco).

	redemption value will be equal to 100% of the principal value plus the interests to any additional values established by the Canadian tax law up to the date of redemption.
Characteristics of Bonds	I. Maturity date: 10/15/2015
	II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	b) in relation to Vale Canada: the occurrence of any default, in any transaction characterized as debt that results in the effective acceleration of the debt.
	c) insolvency or bankruptcy by Vale Canada in Canada.
	d) failure from Vale Canada to comply with its covenants in relation to the notes. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale Canada, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:
	III. Interest: 5.7% per year
	IV. Guarantee:. There is no granting of collateral by Vale Canada or its Relevant subsidiaries.
	V. If the credit is secured or subordinate: N/A
	VI. Possible restrictions imposed on the issuer, in relation to:

- a) distribution of dividends: There are no restrictions on dividend distribution by Vale Canada.
- b) disposal of determined assets: Vale Inco may not participate in a merger with another company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale Canada in the deed of issuance; (b) no default event occurs as a result of the transaction; (c) Vale Canada provides its trustee with a certification attesting to the consolidation or transfer of assets; and (d) if the company created by means of this consolidation or a third party acquisition of said assets were outside Canada, the Canadian tax law requirements must be met.
- c) contracting of new debt: there are no restrictions to contracting new debts by Vale Canada.
- d) issuing new securities: Vale Canada may issue, without the consent from the note holders, new notes according to the deed of issuance terms and conditions. In addition, Vale Canada may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.
- VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights.

# Conditions to alter rights assured by the securities

The deed of issuance allows, with certain exceptions, to amend the rights and obligations of Vale Canada and the investors' in the notes. Depending on the type of changes, said amendments may be executed by Vale Canada and the trustee with the consent from the note holders. In most cases, the note holders may approve changes to the note with the

	consent from 66.67% of the note holders for the value of the principal showing an open debt. Some non-material clarifications and changes may be made without the note holders' consent.
Other relevant characteristics	None

Security	Inco 2012 <sup>21</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 1,000.
Value	US\$ 400,000,000.00
Issuing date	05/13/2002
Restriction to outstanding units	None
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption:
	a) Redemption by means of payment of premium, at any time, at Vale Canada's criterion.
	b) Redemption due to changes in the tax law: if Vale Canada is forced to maintain additional values to note holders, due to changes in the Canadian tax law.
	II. Formula for calculating value of redemption:
	a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.35%
	(b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests to any additional values established by the Canadian tax law up to the

<sup>&</sup>lt;sup>21</sup> Bonds issued by Vale Inco subsidiary.

	date of redemption.
Characteristics of Bonds	I. Maturity date: 05/15/12
	II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
	a) failure to pay interests, principal or premium, if any.
	b) in relation to Vale Canada: the occurrence of any default, in any transaction characterized as debt that results in the effective acceleration of the debt.
	c)- insolvency or bankruptcy by Vale Canada in Canada.
	d) failure from Vale Canada to comply with its covenants in relation to the notes. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale Canada, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:
	III. Interest: 7.75% per year
	IV. Guarantee:. There is no granting of collateral by Vale Canada or its Relevant subsidiaries.
	V. If the credit is secured or subordinate: N/A
	VI. Possible restrictions imposed on the issuer, in relation to:
	a) distribution of dividends: There are no restrictions on dividend distribution by Vale Canada.
	b) disposal of determined assets: Vale Canada may not participate in a merger with another company or

transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale Canada in the deed of issuance; (b) no default event occurs as a result of the transaction; (c) Vale Canada provides its trustee with a certification attesting to the consolidation or transfer of assets; and (d) if the company created by means of this consolidation or a third party acquisition of said assets were outside Canada, the Canadian tax law requirements must be met.

- c) contracting of new debt: there are no restrictions to contracting new debts by Vale Canada.
- d) issuing new securities: Vale Canada may issue, without the consent from the note holders, new notes according to the deed of issuance terms and conditions. In addition, Vale Canada may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.
- VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights.

# Conditions to alter rights assured by the securities

The deed of issuance allows, with certain exceptions, to amend the rights and obligations of Vale Canada and the investors' in the notes. Depending on the type of changes, said amendments may be executed by Vale Canada and the *trustee* with the consent from the note holders. In most cases, the note holders may approve changes to the note with the consent from 66.67% of the note holders for the value of the principal showing an open debt. Some non-material clarifications and changes may be made without the note holders' consent.

Other relevant characteristics	None

Security	Inco 2032 <sup>22</sup> Bonds
Quantity	Bonds are issued at the minimum value of US\$ 1,000.
Value	US\$ 400,000,000.00
Issuing date	09/23/2002
Restriction to outstanding units	none
Convertibility into shares or granting the right to subscribe or acquire issuer shares	None
Possibility of redemption	I. Possibilities of redemption:
	a) Redemption by means of payment of premium, at any time, at Vale Canada's criterion.
	b) Redemption due to changes in the tax law: if Vale Canada is forced to maintain additional values to note holders, due to changes in the Canadian tax law.
	II. Formula for calculating value of redemption:
	a) The redemption value will be 100% of the principal value or the sum of the current value of the interest installments and the remaining principal, whichever is the greatest, deducted at the date of redemption at the rate equivalent to Treasury + 0.40%
	b) Redemption due to changes in the tax law: The redemption value will be equal to 100% of the principal value plus the interests to any additional values established by the Canadian tax law up to the date of redemption.

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<sup>&</sup>lt;sup>22</sup> Bonds issued by Vale Inco. subsidiary.

- I. Maturity date: 09/15/32
- II. Possibility of Early maturity: if a default event occurs, which is not corrected or condoned, the trustee, as instructed by at least 25% of the note holders for the value of the principal showing an open debt, must declare the principal value, the interests accrued and any amount unpaid immediately due. The default events are described in the deed of issuance, including, but not limited to:
- a) failure to pay interests, principal or premium, if any.
- b) in relation to Vale Canada: the occurrence of any default, in any transaction characterized as debt that results in the effective acceleration of the debt.
- c) insolvency or bankruptcy by Vale Canada in Canada.
- d)- failure from Vale Canada to comply with its covenants in relation to the notes. These obligations include, but are not limited to: (a) obligation not to conduct a merger or sale of the entirety of the assets or a significant part of the assets of Vale Canada, with some exceptions and (b) limitations to granting collateral in debt transactions, with some permitted exceptions:
- III. Interest: 7.2% per year
- IV. Guarantee:. There is no granting of collateral by Vale Canada or its Relevant subsidiaries.
- V. If the credit is secured or subordinate: N/A
- VI. Possible restrictions imposed on the issuer, in relation to:
  - a) distribution of dividends: There are no restrictions on dividend distribution by Vale Canada.
  - b) disposal of determined assets: Vale Canada may not participate in a merger with another

company or transfer all or a significant part of its assets to a third party, except, however that: (a) the company created by this consolidation or a third party that acquired said assets undertakes to make timely payments of the principal and interests and other obligations from Vale Canada in the deed of issuance; (b) no default event occurs as a result of the transaction; (c) Vale Canada provides its trustee with a certification attesting to the consolidation or transfer of assets; and (d) if the company created by means of this consolidation or a third party acquisition of said assets were outside Canada, the Canadian tax law requirements must be met.

- c) contracting of new debt: there are no restrictions to contracting new debts by Vale Canada.
- d) issuing new securities: Vale Canada may issue, without the consent from the note holders, new notes according to the deed of issuance terms and conditions. In addition, Vale Canada may issue new notes under other terms and conditions. Vale has the right to guarantee, without the consent from the note holders, its subsidiaries' debts and issue its own debt.

VII. The fiduciary agent, indicating the key terms of the contract: The Bank of New York acts as a trustee of the notes within the scope of the deed of issuance and its main role is to secure investors' rights.

# Conditions to alter rights assured by the securities

The deed of issuance allows, with certain exceptions, to amend the rights and obligations of Vale Canada and the investors' in the notes. Depending on the type of changes, said amendments may be executed by Vale Canada and the trustee with the consent from the note holders. In most cases, the note holders may approve changes to the note with the consent from 66.67% of the note holders for the value

	of the principal showing an open debt. Some non-material clarifications and changes may be made without the note holders' consent.
Other relevant characteristics	None

#### Item 19

### 19.1 - Information about b uy-back plans for shares of the issuer

Meeting date	IDACK	Available reserves and profits (Reais)	Туре	Class	Quantity	in relation to outstanding		. 5		% purchased
Other charac	teristics									
10/30/2011	8/02/2011 a 11/25/2011	63,394,491,000.00	Common		84,814 902	6.65461	39,536 080	44.45201	R\$ per unit	46.61 454
		6/30/2011	Preferred	Class A	102,231,12	5.32688	81,451 900	40.90835	R\$ per unit	79.67 427

Pursuant to CVM Instruction No. 10/80, according to amendment and article 14, XXXII of Vale's bylaws, on June 30, 2010, the Board approved the acquisition by Vale and/or any of its subsidiaries of common shares and class "A" preferred shares issued by Vale to stay in the Treasury or depository receipts representing such shares, for the purpose of cancellation of the same after the end of the buy-back period for a value of up to US\$3.0 billion, comprising up to 84,814,902 common shares and up to 102,231,122 preferred shares corresponding to 6.65% and 5.33% respectively of the total amount of outstanding shares of each type...The deadline for completion of operations was 180 days from the date of authorization. This program was executed in full by November 25, 2011. 39,536,080 common shares were acquired at an average price of US\$26.25 per share and 81,451,900 preferred shares at an average price of US\$24.09 per share, totaling US\$3.0 billion, and corresponding, respectively, to 3.10% and 4.24% of the outstanding ("free float") common and preferred shares, based on the equity position at the inception date of the program. Purpose of the program: use of the excess of the resources held in cash, maximizing the value for shareholders. The program followed strictly the Brazilian law in force, and the acquisition of shares was made in the stock market at market value. The institutions that took part as intermediary parties in the buy-back were: (a) BRADESCO S.A. CTVM – 72 (Headquarters), Avenida Paulista, no. 1450 - 7th floor, in the city of São Paulo, SP, Postal Code: 01.310-100; (b) ITAÚ CV S.A. – 114 (Headquarters), Avenida Brigadeiro Faria Lima, no. 3400 - 10th floor,- in the city of São Paulo, SP, Postal Code: 04.538-132; (c) ÁGORÁ CTVM S.A. – 39 (Headquarters), Praia de Botafogo, no. 300 - 6th floor, in the city of Rio de Janeiro, R.J. Postal Code: 22.250-040; (d) FATOR S.A. CV – 131 (Headquarters), Avenida Brigadeiro Faria Lima no. 3064, 13th floor, in the city of São Paulo, SP, Postal Code: 04.530-001; (e) CRE

Meeting date	IDACK	Available reserves and profits (Reais)	Туре	Class	Quantity					% purchased
Other charac	teristics									
19/2.3/2010	9/24/2010 à 3/22/2011	62,121,595,000.00	Common		64 ,8	5.000000	21,682,700	53.09	R\$ per unit	33.455 530
		8/31/2010	Preferred I	Class A	98	5.000000	48,197,700	46.44	R\$ per unit	48.997 460

Pursuant to CVM Instruction No. 10/80, as amended, and article 14, XXXII of Vale's bylaws, on September 23, 2010, the Board approved the acquisition by Vale and its subsidiaries of common shares and class "A" preferred shares issued by Vale to stay in the Treasury and for later cancellation or disposal in an amount up to US\$ 2 billion, involving up to 64.810.513 common shares and up to 98.367.748 preferred shares, corresponding to 5% of the total amount of outstanding shares of each type. The deadline for completion of operations was 180 days from the date of authorization, after the blackout period for trading. This program was executed in full by October 11, 2010. 21,682,700 common shares were acquired at an average price of US\$31.31 per share and 48,197,700 preferred shares at an average price of US\$27.40 per share, totaling US\$2.0 billion, and corresponding, respectively, to 1.67% and 2.45% of the outstanding ("free float") common and preferred shares, based on the equity position at the inception date of the program. Purpose of the program: use of the excess of resources held as cash for the optimal allocation of capital and maximize the value for shareholders. The program followed strictly the Brazilian law in force, and the acquisition of shares was made in the stock market at market value. The institutions that took part as intermediary parties in the buy-back were: Bradesco S.A. CTVM – Avenida Paulista, 1450 – 7th floor, São Paulo/SP; Itaú CV S.A. - Avenida Brigadeiro Faria Lima, 3400 – 10th floor, São Paulo/SP; Ágora CTVM S.A. - Praia de Botafogo, 300 - 6th floor, Rio de Janeiro/RJ; Fator S.A. CV - Rua Doutor Renato Paes de Barros, 1017 – 11th and 12th floors, São Paulo/SP; Ceptitolic Suisse Brasil S.A. CTVM - Avenida Brigadeiro Faria Lima 3064, 13th floor, São Paulo/SP; Santander CCVM S.A. - Avenida Presidente Juscelino Kubitschek, 2041, 2235 – 24th floor, São Paulo/SP; S.P.Morgan CCVM S.A. - Avenida Brigadeiro Faria Lima 3729, 13th floor, São Paulo/SP; Santander CCVM S.A. - Avenida Presidente Juscel

Meeting date	IDACK	Available reserves and profits (Reais)	Туре	Class	Quantity envisaged (units)	in relation to outstanding	Approve d amount	Weighted Ave Price	erage	Quote fac	ctor %
Other charac	Other characteristics										
10/16/Oct/2008	10/28/2008 à 1/30/2009	45,224,907,000.00	Common		(		18,415,859	27.27344	R\$ per uni	t	33.45553
		9/30/2008	Preferred	Class A	1		47,284,800	24.87573	R\$ per uni	t	48.99746

Pursuant to CVM Instruction No. 10/80 and article 14, XXXII of Vale's bylaws, on October 16, 2008, the Board approved the acquisition by Vale and its subsidiaries of common shares and class "A" preferred shares issued by Vale to stay in the Treasury and for later cancellation or disposal involving up to 69,944,380 common shares and up to 169,210,249 class "A" preferred shares, corresponding to 5.5% and 8.5% respectively of the total amount of outstanding ("free float") shares of each type. Currently outstanding in the market are 1,265,264,204 common shares and 1,995,511,531 class "A" preferred shares issued by Vale. The deadline for completion of operations was 360 days from the date of authorization, after the blackout period for trading. The objective of the program is to maximize value for shareholders. The acquisition of the shares shall be done in the stock market at market prices through the following financial institutions: Bradesco S.A. CTVM – Avenida Ipiranga 282, 13th, 14th and 15th floors – São Paulo (SP); Itaú CV – Av. Doutor Hugo Beolchi 900, 15th floor, Torre Eudoro Viiella – São Paulo (SP); Gredit Suisse Hedging-Griffo CV S.A. – Av. Presidente Juscelino Kubitschek 1.830, 6th and 7th floors – Torres III e IV – São Paulo (SP); Magliano S.A. CCVM – Rua Bela Cinta 986, 2nd floor – São Paulo (SP); Credit Suisse (Brasil) S.A. CTVM – Av. Brigadeiro Faria Lima 3064, 13th floor – São Paulo (SP); e Santander S.A. CCT – Rua Hugiano S.A. CCVM – Rua Bela Cinta 986, 2nd floor – São Paulo (SP); Credit Suisse (Brasil) S.A. CTVM – Av. Brigadeiro Faria Lima 3064, 13th floor – São Paulo (SP); e Santander S.A. CCT – Rua Hugiano S.A. CCVM – Rua Bela Cinta 986, 2nd floor – São Paulo (SP); credit Suisse (Brasil) S.A. CTVM – Av. Brigadeiro Faria Lima 3064, 13th floor – São Paulo (SP); e Santander S.A. CCT – Rua Hugiano S.A. CCVM – Rua Bela Cinta 986, 2nd floor – São Paulo (SP); e Santander S.A. CCT – Rua Hugiano S.A. CCVM – Rua Bela Cinta 986, 2nd floor – São Paulo (SP); e Santander S.A. CCT – Rua Hugiano S.A. CCVM – Ru

### 19.2 - Movement of the securities held in the Treasury

### Fiscal year ended 12/31/2011

#### **Shares**

Type of share C	class of preferred share	Description of securities	
Common			_
<u>Movement</u>	Quantity (units)	Total value (reais)	Weighted average price (reais)
Initial balance	47,375,394	1,369,103,063.00	28.90
Acquisition	39,536,080	1,758,382,460.35	44.45
Disposal	267	11,999.24	44.94
Cancellation	0	0	0
Final balance	86,911,207	3,127,473,524.11	35.98

Type of share	Class of preferred share	Description of securities	
Preferred	Class A preferred		-
<u>Movement</u>	Quantity (units)	Total value (reais)	Weighted average price (reais)
Initial balance	99,649,57	3,457,023,752.00	34.69
Acquisition	81,451,90	3,334,043,647.72	40.91
Disposal	1,657	418.22	32.74
Cancellation	0	0	0
Final balance	181,101,462	6,791,066,981.50	37.50

### Fiscal year ended 12/31/2010

#### **Shares**

Type of share	Class of preferred share	Description of securities	
Common			
<u>Movement</u>	Quantity (units)	Total value (reais) (reais)	Weighted average price
Initial	74,997,899	635,116,088.00	8.47
balance	21,682,700	1,151,602,061.00	53.11
Acquisition	49,305,205	417,615,086.00	8.47
Disposal	0	0.00	0.00
Cancellation	47,375,394	1,369,103,063.00	28.90

Type of share	Class of preferred share	Description of securities
Preferred	Class A preferred	
<u>Movement</u>	Quantity (units)	Total value (reais) Weighted average price (reais)

Initial balance	77,581,90	1,835,578,895.00	23.66
Acquisition	48,197,70	2,239,681,438.00	46.47
Disposal	26,130,03	618,236,581.00	23.66
Cancellation	0	0.00	0.00
Final balance	99,649,57 1	3,457,023,752.00	34.69

### Fiscal year ended 12/31/2009

#### **Shares**

Type of share	Class of preferred share	Description of securities	
Common			
Movement	Quantity (units)	Total value (reais)	Weighted average price
Initial	74,937,89	633,153,905.00	8.45
balance	60,000	1,962,183.00	32.70
Acquisition	0	0.00	0.00
Disposal	0	0.00	0.00
Cancellation	74,997,89	9 635,116,088.00	8.47

Type of share	Class of preferred share	Description of securities	
Preferred	Class A preferred		_
Movement (reais)	Quantity (units)	Total value (reais)	Weighted average price
Initial balance	76,854,304	1,815,333,130.00	23.62
Acquisition	771,400	21,679,777.00	28.10
Disposal	43,800	1,434,012.00	32.74
Cancellation	0	0.00	0.00
Final balance	77,581,904	1,835,578,895.00	23.66

# 19.3 – Information about the securities held in the Treasury on the date of the close of the last fiscal year

Security	Shares						
Type of Share	Class of Share	Description of the securities	Quantity (units)	Weighted average price of acquisition (in R\$)	Quote factor	Date of acquisition	Percentage in relation to outstanding shares
Preferred	Preferred Class A		1.383.814	21.49	R\$ per unit	7/13/2006	0.049793261
Preferred	Preferred Class A Preferred		60.000	21.45	R\$ per unit	7/13/2006	0.001477107
Preferred	Class A Preferred		60,000	21.45	R\$ per unit	7/13/2006	0.001477107
Preferred	Class A Preferred		960,600	21.29	R\$ per unit	7/14/2006	0.023648476
Preferred	Class A Preferred		1,012,400	21.26	R\$ per unit	7/14/2006	0.024923711
Preferred	Class A Preferred		161,200	21.20	R\$ per unit	7/14/2006	0.003968493
Preferred	Class A Preferred		527,400	20.87	R\$ per unit	7/17/2006	0.012983766
Preferred	Class A Preferred		1,819,500	21.06	R\$ per unit	10/28/2008	0.089586511
Preferred Preferred	Class A Preferred Class A		722,000 4,755,600	23.88 25.00	R\$ per unit	10/29/2008 10/30/2008	0.035549031 0.234150928
Preferred	Preferred Class A		5,608,600	25.30	R\$ per unit	10/30/2008	0.276149991
Preferred	Preferred Class A		6,340,600	26.09	R\$ per unit	11/03/2008	0.31219139
Preferred	Preferred Class A		1,139,400	27.65	R\$ per unit	11/04/2008	0.056100506
Preferred	Preferred Class A		3,943,700	27.11	R\$ per unit	11/05/2008	0.194175502
Preferred	Preferred Class A Preferred		5,048,400	24.54	R\$ per unit	11/06/2008	0.248567488
Preferred	Class A Preferred		2,579,200	24.95	R\$ per unit	11/07/2008	0.126991773
Preferred	Class A Preferred		348,000	24.79	R\$ per unit	11/07/2008	0.017134436
Preferred	Class A Preferred		2,351,900	25.89	R\$ per unit	11/10/2008	0.115800229
Preferred Preferred	Class A Preferred Class A		662,.000 1,442,000	25.89 24.66	R\$ per unit	11/10/2008 11/11/2008	0.032594818 0.070999588
Preferred	Preferred Class A		1,362,200	24.00	R\$ per unit	11/11/2008	0.067070484
Preferred	Preferred Class A		1,291,600	23.27	R\$ per unit	11/12/2008	0.06359436
Preferred	Preferred Class A		795,700	23.66	R\$ per unit	11/13/2008	0.039177789
Preferred	Preferred Class A		481,600	24.47	R\$ per unit	11/17/N008	0.023712484
Preferred	Preferred Class A Preferred		94,500	24.49	R\$ per unit	11/17/2008	0.004652886
Preferred	Class A Preferred		741,300	22.76	R\$ per unit	11/19/2008	0.036499303
Preferred	Class A Preferred		370,100	22.87	R\$ per unit	11/19/2008	0.018222571
Preferred	Class A Preferred		2,216,900	21.04	R\$ per unit	11/21/2008	0.109153249
Preferred	Class A Preferred		989,100	23.37	R\$ per unit	11/24/2008	0.048700203
Preferred	Class A Preferred		1,409,500	25.03	R\$ per unit	11/28/2008	0.069399389
Preferred Preferred	Class A Preferred Class A		412,000 359,400	28.01 32.12	R\$ per unit	1/30/2009	0.020285596 0.017695736
Preferred	Preferred Class A		4,780,300	44.68	R\$ per unit	9/24/2010	0.237952536
Preferred	Preferred Class A		4,521,400	45.33	R\$ per unit	9/27/2010	0.225065079
Preferred	Preferred Class A		3,900,000	45.78	R\$ per unit	9/28/2010	0.194133191
Preferred	Preferred		3,990,000	45.96	R\$ per unit	9/29/2010	0.198613187

Class A	

Preferred	Preferred Class A	183,600	46.50	R\$ per unit	9/29/2010	0.009139193
Preferred	Preferred - Class-A		46.19 -	R\$ per unit	9/30/2010 -	0 <del>.</del> 18666653 -
	Preferred	3,169,000	46.53	R\$ per unit	10/01/2010	
Preferred	Class A Preferred	, ,		R\$ per unit		0.157745662
Preferred	Class A Preferred	1,050,000	47.53	R\$ per unit	1/01/2010	0.052266628
Preferred	Class A Preferred	3,030,000	46.56		10/04/2010	0.150826556
Preferred	Class A Preferred	1,079,800	46.82	R\$ per unit	10/04/2010	0.053750005
Preferred	Class A Preferred	3,950,000	47.06	R\$ per unit	10/05/2010	0.196622078
Preferred	Class A	177,800	47.77	R\$ per unit	10/05/2010	0.008850482
Preferred	Preferred Class A	4,090,000	47.65	R\$ per unit	10/06/2010	0.203590962
Preferred	Preferred Class A	4,290,300	47.31	R\$ per unit	10/07/2010	0.213561443
Preferred	Preferred Class A	352,500	47.60	R\$ per unit	10/07/2010	0.017546654
Preferred	Preferred Class A	4,290,000	47.46	R\$ per unit	10/08/2010	0.21354651
Preferred	Preferred Class A	1,593,000	47.61	R\$ per unit	10/11/2010	0.079295942
Preferred	Preferred Class A	930,900	45.28	R\$ per unit	8/05/2011	0.0485056651%
Preferred	Preferred Class A	1,620,900	43.52	R\$ per unit	8/08/2011	0.0844589457%
Preferred	Preferred	2,460,400	41.64	R\$ per unit	8/09/2011	0.1282021038%
	Class A Preferred			R\$ per unit		
Preferred	Class A Preferred	2,525,200	40.07	R\$ per unit	8/10/2011	0.1315785858%
Preferred	Class A Preferred	2,189,200	37.53	R\$ per unit	8/11/2011	0.1140709013%
Preferred	Class A Preferred	1,076,400	37.89		8/12/2011	0.0560871177%
Preferred	Class A Preferred	2,579,200	39.24	R\$ per unit	8/17/2011	0.1343923208%
Preferred	Class A Preferred	861,600	39.85	R\$ per unit	8/18/2011	0.0448947052%
Preferred	Class A Preferred	680,000	39.55	R\$ per unit	8/19/2011	0.0354322186%
Preferred	Class A Preferred	1,552,000	39.92	R\$ per unit	8/22/2011	0.0808688283%
Preferred	Class A Preferred	1,730,600	38.10	R\$ per unit	8/23/2011	0.0901749963%
Preferred	Class A Preferred	710,000	37.73	R\$ per unit	8/24/2011	0.0369954047%
Preferred	Class A Preferred	760,000	37.76	R\$ per unit	8/25/2011	0.0396007149%
Preferred	Class A	1,270,600	37.98	R\$ per unit	8/26/2011	0.0662061425%
Preferred	Preferred Class A	1,812,100	38.45	R\$ per unit	8/29/2011	0.0944216519%
Preferred	Preferred Class A	1,567,000	38.28	R\$ per unit	8/30/2011	0.0816504213%
Preferred	Preferred Class A	1,548,500	38.54	R\$ per unit	8/31/2011	0.0806864565%
Preferred	Preferred Class A	901,800	39.87	R\$ per unit	9/01/2011	0.0469893746%
Preferred	Preferred Class A	648,900	40.00	R\$ per unit	9/02/2011	0.0338117156%
Preferred	Preferred Class A	1,826,000	39.53	R\$ per unit	9/09/2011	0.0951459281%
Preferred	Preferred Class A	2,037,300	40.34	R\$ per unit	9/12/2011	0.1061559690%
Preferred	Preferred Class A	392,700	42.25	R\$ per unit	9/12/2011	
	Preferred	•		R\$ per unit		0.0204621062%
Preferred	Class A Preferred	1,863,300	41.42	R\$ per unit	9/13/2011	0.0970894895%
Preferred	Class A Preferred	2,774,000	40.82	R\$ per unit	9/14/2011	0.1445426093%
Preferred	Class A Preferred	1,759,500	41.75	R\$ per unit	9/19/2011	0.0916808655%
Preferred	Class A Preferred	1,794,500	42.70		9/20/2011	0.0935045827%
Preferred	Class A Preferred	1,985,000	42.91	R\$ per unit	9/21/2011	0.1034308145%
Preferred	Class A Preferred	1,718,300	43.16	R\$ per unit	9/22/2011	0.0895340900%
Preferred	Class A	2,220,000	44.36	R\$ per unit	9/23/2011	0.1156757724%

	Preferred			D¢		
Preferred	Class A	2,340,000	44.17	R\$ per unit	9/26/2011	0.1219285168%
Preferred	Preferred Class A	1,690,000	41.58	R\$ per unit	9/27/2011	0.0880594844%
Preferred	Preferred Class A	3,280,000 -	41.11	R\$ per unit-	9/28/2011	0.1709083484%
	Preferred			R\$ per unit		
Preferred	Class A Preferred	2,561,600	41.38	·	11/08/2011	0.1334752516%
Preferred	Class A	983,600	42.06	R\$ per unit	11/09/2011	0.0512516620%
Preferred	Preferred Class A	1,508,000	41.76	R\$ per unit	11/14/2011	0.0785761553%
Dueferned	Preferred	0.457.000		R\$ per unit		
Preferred	Class A Preferred	2,457,800	41.89	R\$ per unit	11/16/2011	0.1280666276%
Preferred	Class A Preferred	1,620,000	42.22		11/17/2011	0.0844120501%
Preferred	Class A Preferred	1,082,600	42.01	R\$ per unit	11/18/2011	0.0564101762%
Preferred	Class A	2,627,000	42.33	R\$ per unit	11/21/2011	0.1368829973%
Preferred	Preferred Class A	3,550,000	41.60	R\$ per unit	11/22/2011	0.1849770234%
Preferred	Preferred Class A	3,600,000	41.04	R\$ per unit	11/23/2011	0.1875823336%
	Preferred Class A			R\$ per unit		
Preferred	Preferred	2,700,000	40.69	R\$ per unit	11/24/2011	0.1406867502%
Preferred	Class A Preferred	2,430,000	41.01		11/25/2011	0.1266180752%
Preferred	Class A Preferred	1,879,000	39.97	R\$ per unit	11/28/2011	0.0979075569%
Preferred	Class A	750,000	39.85	R\$ per unit	11/29/2011	0.0390796528%
Preferred	Preferred Class A	596,400	39.26	R\$ per unit	11/30/2011	0.0310761399%
Common		182,168	4.31	R\$ per unit	9/27/2001	0.002118347
Common		1,512,000	4.26	R\$ per unit	9/28/2001	0.003960114
Common		78,000	4.22	R\$ per unit	10/01/2001	0.000204292
Common		170,400	4.29	R\$ per unit	10/02/2001	0.000446299
Common		1,784,400	4.28	R\$ per unit	10/03/2001	0.004673563
Common		109,200	4.25	R\$ per unit	10/03/2001	0.000286008
Common		60,000	4.28	R\$ per unit	10/04/2001	0.000157147
Common		1,038,000	4.28	R\$ per unit	10/04/2001	0.00271865
Common		60,000	4.28	R\$ per unit	10/05/2001	0.000157147
Common		600,000	4.27	R\$ per unit	10/05/2001	0.001571474
Common		248,400	4.30	R\$ per unit	10/05/2001	0.00065059
Common		600,000	4.30	R\$ per unit	10/09/2001	0.001571474
Common		546,000	4.31	R\$ per unit	10/11/2001	0.001430041
Common		284,400	4.20	R\$ per unit	11/08/2001	0.000744879
Common		3,600	4.18	R\$ per unit	11/12/2001	0.00009429
Common		988,900	23.35	R\$ per unit	10/28/2008	0.031080609
Common		249,000	26.50	R\$ per unit	10/29/2008	0.00782594
Common		249,600	28.01	R\$ per unit	10/30/2008	0.007844797
Common		•		R\$ per unit	10/31/2008	
Common		1,873,900 1,810,000	28.15 28.84	R\$ per unit	11/03/2008	0.058895696 0.056887352
Common		354,800	31.02	R\$ per unit	11/04/2008	
Common		1,754,400	31.02	R\$ per unit	11/05/2008	0.011151178 0.055139873
Common				R\$ per unit	11/06/2008	
Common		1,909,959	27.06	R\$ per unit	11/07/2008	0.060029011
Common		1,182,800	27.36	R\$ per unit	11/07/2008	0.037174784
Common		502,000	27.15	R\$ per unit	11/10/2008	0.015777597
Common		855,000	28.65	R\$ per unit	11/10/2008	0.026872202
Common		561,000	28.49	•		0.017631936
Common		926,000	27.22	R\$ per unit	11/11/2008	0.029103695
Common		158,600	27.93	R\$ per unit	11/12/2008	0.004984715
Common		965,100	26.73	R\$ per unit	11/12/2008	0.030332588
Common		1,038,000	25.72	R\$ per unit	11/13/2008	0.032623796
		283,700	26.15	R\$ per unit	11/17/2008	0.008916542
Common		219,500	27.00	R\$ per unit	11/17/2008	0.00689877
Common		145,500	26.97	R\$ per unit	11/19/2008	0.004572989
Common		322,700	25.07	R\$ per unit	11/19/2008	0.010142292
Common		580,800	24.93	R\$ per unit	11/21/2008	0.01825424
Common		651,400	23.41	R\$ per unit	11/24/2008	0.020473161

Common	425,800	27.36	R\$ per unit	11/27/2008	0.013382671
Common	347,400	27.98	R\$ per unit	11/28/2008	0.0109186
Common	60,000	32.72	R\$ per unit	1/30/2009	0.001885769
Common		50.67	R\$ per unit	9/24/2010	0.048425964
Common	660,000	51.57	R\$ per unit	9/24/2010	0.031300691
Common	572,600	51.50	R\$ per unit	9/27/2010	0.027155721
Common	980,000	52.56	R\$ per unit	9/27/2010	0.046476784
Common	520,000	51.83	R\$ per unit	9/28/2010	0.024661151
Common	1,640,000	52.70	R\$ per unit	9/28/2010	0.077777476
Common	680,000	52.07	R\$ per unit	9/29/2010	0.032249197
Common	1,933,000	52.88	R\$ per unit	9/29/2010	0.091673086
Common	420,000	52.19	R\$ per unit	9/30/2010	0.019918622
Common	1,603,000	52.96	R\$ per unit	9/30/2010	0.07602274
Common	400,000	52.51	R\$ per unit	10/01/2010	0.018970116
Common	1,900,000	53.67	R\$ per unit	10/01/2010	0.090108051
Common	1,748,000	52.92	R\$ per unit	10/04/2010	0.082899407
Common	1,700,000	54.38	R\$ per unit	10/05/2010	0.080622993
Common	647,000	53.86	R\$ per unit	10/06/2010	0.030684163
Common	1,685,500	54.83	R\$ per unit	10/06/2010	0.079935326
Common	630,000	53.44	R\$ per unit	10/07/2010	0.029877933
Common	2,182,500	53.81	R\$ per unit	10/07/2010	0.103505696
Common	640,000	53.55	R\$ per unit	10/08/2010	0.030352186
Common	120,000	53.60	R\$ per unit	10/11/2010	0.005691035
Common	421,200	49.77	R\$ per unit	8/02/2011	0.0330475395%
Common	652,100	47.49	R\$ per unit	8/03/2011	0.0511640563%
Common	491,000	48.21	R\$ per unit	8/03/2011	0.0385240786%
Common	275,000	45.59	R\$ per unit	8/04/2011	0.0215766224%
Common	1,425,200	45.42	R\$ per unit	8/04/2011	0.1118218266%
Common	1,258,400	43.84	R\$ per unit	8/05/2011	0.0987346243%
Common	1,090,200	40.81	R\$ per unit	8/08/2011	0.0855375774%
Common	572,600	41.50	R\$ per unit	8/09/2011	0.0449264510%
Common	874,400	42.67	R\$ per unit	8/12/2011	0.0686058133%
Common	332,300	43.30	R\$ per unit	8/15/2011	0.0260724060%
Common	382,100	42.87	R\$ per unit	8/16/2011	0.0299797361%
Common	590,200	43.18	R\$ per unit	8/17/2011	0.0463073548%
Common	546,000	44.04	R\$ per unit	8/17/2011	0.0428394031%
Common	120,000	41.30	R\$ per unit	8/18/2011	0.0094152534%
Common	578,000	41.08	R\$ per unit	8/18/2011	0.0453501374%
Common	330,000	41.15	R\$ per unit	8/19/2011	0.0258919469%
Common	496,900	41.29	R\$ per unit	8/22/2011	0.0389869952%
Common	879,100	41.59	R\$ per unit	8/23/2011	0.0689745774%
Common	632,100	42.08	R\$ per unit	8/24/2011	0.0495948474%
Common	488,600	42.15	R\$ per unit	8/25/2011	0.0383357735%
Common	498,900	42.32	R\$ per unit	8/26/2011	0.0391439161%
Common	480,000	43.71	R\$ per unit	8/29/2011	0.0376610137%
Common	323,200	43.95	R\$ per unit	8/30/2011	0.0253584159%
Common	215,200	43.39	R\$ per unit	9/05/2011	0.0168846878%
Common	1,140,300	43.99	R\$ per unit	9/06/2011	0.0894684457%
Common	1,429,600	46.42	R\$ per unit	9/07/2011	0.1121670525%
Common	700,000	45.61	R\$ per unit	9/08/2011	0.0549223117%
Common	1,122,700	44.27	R\$ per unit	9/09/2011	0.0880875419%
Common	78,100	44.77	R\$ per unit	9/09/2011	0.0061277608%
Common	656,500	45.66	R\$ per unit	9/14/2011	0.0515092823%
Common	776,100	46.58	R\$ per unit	9/15/2011	0.0608931516%
Common	390,400	46.71	R\$ per unit	9/16/2011	0.0306309578%
Common	619,400	47.02	R\$ per unit	9/19/2011	0.0485983998%
Common	190,000	47.63	R\$ per unit	9/20/2011	0.0149074846%
Common	1,114,000	48.19	R\$ per unit	9/20/2011	0.0874049360%
Common Common	481,300	47.93	R\$ per unit	9/21/2011	0.0377630123%
Common	766,980	46.56	R\$ per unit	9/21/2011	0.0601775923%
Common	240,000	44.91	R\$ per unit	9/22/2011	0.0188305069%
Johnnott	835,500	43.77	R\$ per unit	9/22/2011	0.0655537020%

Common	240,000	44.28	R\$ per unit	9/23/2011	0.0188305069%
Common	1,255,300	45.44	R\$ per unit	9/23/2011	0.0984913969%
Common	1,992,500	43.96	R\$ per unit	11/02/2011	0.1563324372%
Common	679,000	44.32 -	R\$ per unit	_ 11/03/2011	0.0532746423%
Common	422,700	45.23	R\$ per unit	11/04/2011	0.0331652302%
Common	540,600	45.06	R\$ per unit	11/09/2011	0.0424157167%
Common	437,100	45.14	R\$ per unit	11/10/2011	0.0342950606%
Common	240,000	45.54	R\$ per unit	11/11/2011	0.0188305069%
Common	180,000	45.29	R\$ per unit	11/14/2011	0.0141228801%
Common	1,927,000	45.81	R\$ per unit	11/15/2011	0.1511932780%
Common	450,000	45.76	R\$ per unit	11/16/2011	0.0353072004%
Common	700,000	44.93	R\$ per unit	11/17/2011	0.0549223117%
Common	2,434,000	43.97	R\$ per unit	11/18/2011	0.1909727237%
Common	300,000	44.04	R\$ per unit	11/18/2011	0.0235381336%
Common	625,000	42.97	R\$ per unit	11/21/2011	0.0490377783%
Common	960,000	43.41	R\$ per unit	11/21/2011	0.0753220274%
Common	616,300	43.64	R\$ per unit	11/22/2011	0.0483551724%
Common	410,700	43.64	R\$ per unit	11/22/2011	0.0322237049%
Common	320,000	42.64	R\$ per unit	11/23/2011	0.0251073425%
Common	82,300	42.34	R\$ per unit	11/24/2011	0.0064572946%
Common	230,000	41.82	R\$ per unit	11/25/2011	0.0180459024%

#### 19.4 – Other relevant information

On February 19, 2001, there was approval, at the Extraordinary General Meeting, for the incorporation of shares held by minority shareholders in subsidiary Mineração da Trindade S.A ("Samitri"), without an increase in capital and without issuing new shares in Vale by using shares held in the Treasury, in accordance with the authorization by the CVM (Brazilian SEC) on December 13, 2000, pursuant to article 23 of the CVM Instruction No. 10 of February 14, 1980. As a result of the incorporation of Samitri shares into Vale's equity, the minority shareholders of Samitri received class A Vale preferred shares (PNA), issued by Vale and maintained in the Treasury by the Company, at a rate of one (1) share issued by Vale per lot of 628 (six hundred and twenty-eight) Samitri shares. With this operation. Samitri became a wholly owned subsidiary of Vale. Those holding Samitri shares in the name of the bearer, who contact Vale, will have their shares updated and converted into Vale PNA shares, in the proportion informed above. In this way, the Treasury shares have been disposed of in the period from 2009 to 2011 (43,888 PNA shares in 2009, 24 PNA shares in 2010, and no shares in 2011) on account of the upgrade of bearer bonds for the minority shareholders of Samitri.

The mandatorily convertible notes due June 15, 2010 of its wholly-owned subsidiary Vale Capital Limited ("Vale Capital"), series RIO and RIO P, were converted into common and preferred American Depositary Shares (ADSs), respectively. The conversion rate, which is the number of ADSs deliverable upon conversion of each note on the applicable date, was 1.9026 common ADSs per Series RIO and 2.2351 preferred ADSs per Series RIO P. The American Depositary Shares, into which the Series RIO Notes were converted, represented an aggregate of 49,305,205 common shares, and the Series RIO P Notes represented an aggregate of 26,130,033 preferred class A shares. Those shares were held in the treasury and were sold to be used in the conversion of the notes.

#### Item 20

#### 20.1 - Information about the securities trading policy

### Date of approval Office and/or function

#### 1/19/2011

The Company

Valepar S.A, (controller of the Company)

Representatives of the shareholders of Valepar S.A. Publicly-held companies controlled by the Company

Members of the Board of Directors of Valepar Members of the Board of Directors of Vale

Members of the Statutory Audit Committee of Vale

Members of the Advisory Committees to the Board of Directors of Vale, Executive Officers, global directors, department directors, general managers, executive coordinators, coordinators, managers, and other employees who, because of their office, function, or position in the Company and its subsidiaries, have knowledge of inside information.

#### **Main characteristics**

Vale's Trading Policy, formulated in accordance with the CVM Instruction No. 358/02 and Vale's Code of Ethical Conduct, aims to contribute to the orderly trading of securities issued by Vale, or its related companies, removing any suspected misuse of information concerning material events or facts about Vale ("Insider Information").

The Trading Policy also aims to contribute to compliance with laws and regulations of the United States and Hong Kong, where Vale shares are traded in the stock exchanges in the form of ADRs and HDRs, respectively, that prohibit insider trading / dealing (using insider information for their own benefit), including the practice of tipping (providing insider information for third parties to benefit from it).

For purposes of the laws and regulations of the United States, a person engages in practices of (i) insider trading if he buys or sells securities using relevant and not publicly-disclosed information (material non-public information) that has been obtained or used in breach of a duty of trust and confidentiality (duty of trust and confidence), and (ii) tipping if he provides the same type of information to third parties who end up taking advantage of this information to perform insider trading.

For purposes of the laws and regulations of Hong Kong, a person engages in practices of insider dealing when, having material non-public information, he negotiates or encourages third parties to negotiate Vale's securities, or he provides the same type of information to third parties knowing, or expecting, that they will, indeed, negotiate Vale's securities

The prohibitions contained in this Trading Policy cover any acquisition, sale, or transfer of securities issued or guaranteed by Vale.

Companies opened under the control of Vale shall adopt the Company's Trading Policy, applying, where appropriate, the same prohibitions and/or restrictions disciplined by the Company's Trading Policy.

Any violation of the provisions of the Company's Trading Policy shall be deemed a breach of the Code of Ethical Conduct of Vale and be subject to the penalties provided by law and responsibility for losses and damages caused to Vale and to third parties, in addition to any proceedings and penalties established in the Code of Ethical Conduct of Vale.

Blackout periods for trading and description of the oversight procedures Related Persons cannot, in addition to what is already provided for in the CVM Instruction n ° 358/02, trade securities issued by Vale and publicly quoted companies controlled by it:

- i. Thirty (30) days prior and two (2) days after the dissemination or publication of the quarterly and annual financial statements of Vale;
- ii. In the period between the decision taken by the shareholders of Valepar S.A., controller of Vale, to: (i) modify Vale capital by means of share subscription; (ii) approve a program of acquisition or disposal of Vale shares issued by Vale itself; and (iii) distribute dividends or interest on equity, bonuses in shares or their derivatives, or splits, and the publication of the respective public notices and/or advertisements or newsletters; and
- iii. During any other period designated by the Executive Director responsible for Vale investor relations, with the prior authorization by the Chairman of the Board of Directors at the request of the CEO.

Related Persons may trade securities issued by Vale, as long as they observe the blackout periods mentioned above, with the goal of long-term investment, it being recommended they maintain ownership of securities issued by the Company for a minimum period of six (6) months.

#### 20.2 - Other relevant information

The provisions of Vale's Trading Policy are also applied when the trading of Related Persons is carried out for their own direct and/or indirect benefit using, for example:

- A partnership directly or indirectly controlled by Related Persons;
- Third parties who have a management, a trust or financial asset investment portfolio management agreement with Related Persons;
- · Proxies or agents of Related Individuals; and
- Spouses who are not legally separated, partners and any other dependant included in the annual tax return of Related Persons.

Related Persons must guarantee, whenever possible and if they are forbidden from trading, that the above-mentioned natural and legal persons will also refrain themselves from trading securities issued by the Company.

Besides the Related Parties, the Company's Trading Policy also applies to any director who leaves before the public disclosure of business or event initiated during his administration, and will extend for six months thereafter.

The restrictions contained above shall not apply to transactions made by investment funds where the Related Persons are shareholders provided that the (a) investment funds are not exclusive, and (b) trading decisions of the administrator of the fund may not be influenced by the shareholders.

Members of the Board, its advisory committees, the Executive Board and the Supervisory Board of Vale must communicate in writing pursuant to Article 11 of CVM Instruction 358/02, to the Executive Director of Investor Relations and through him to the CVM and the stock exchanges where Vale shares are listed for trading (a) the amount of securities issued by Vale and subsidiaries or their parent-held companies, as well as the property of his spouse, unless it is actually or legally separated, of a partner, any dependent included in the annual income tax and partnerships directly or indirectly controlled by them, and (b) changes in the above-mentioned positions.

The announcement referred to in the above paragraph above shall be made (a) on the first business day after taking office, and (b) within 5 (five) days after each trading and must contain at least the following information (i) name and identification of the sender, indicating the registration number in the National Registry of Legal Entities or the Roll of Individual Taxpayers if they are domiciled for tax purposes in Brazil, (ii) quantity of each type and class, in case of shares, and the other characteristics for other securities, as well as the identification of the issuer and the balance of the position held before and after the negotiation, and (iii) form, price and date of the transactions.

The Executive Director of Investor Relations, in turn, shall submit to the CVM and the stock exchanges the information received, on an individual and consolidated basis, as the case may be, within 10 (ten) days after the end of the month when the changes to the positions held take place, or on the month when the taking of office takes place.

The Related Persons must sign their Declaration of Compliance, pursuant to article 16, § 1 of the CVM Instruction 358/02, in accordance with the model contained as an annex to the Company's Trading Policy, which will remain filed at Vale's headquarters while they continue their relationship with Vale, and at least for five years after their departure.

# 21.1 - Description of the rules, bylaws, or internal procedures regarding the disclosure of information

On 5/25/2012, the Board of Directors of Vale approved the amendment of its Policy on Disclosure of Relevant Event or Fact ("Disclosure Policy"). The policy governs the disclosure of information, which by its nature may generate relevant events or facts and is based on the following basic principles: (i) transparency, balanced information, fair treatment, and respect for the rights of investors; (ii) adherence to the best global practices in investor relations; and (iii) obedience to specific legislation of Brazil, the United States, France, and Hong Kong; to the regulations of the Brazilian Securities and Exchange Commission (CVM), the U.S. Securities and Exchange Commission (SEC) of the United States of America, the Autorité des Marchés Financiers (AMF) of France, and the Securities and Futures Commission (SFC) of Hong Kong, hereinafter referred to as "regulatory agencies"; and to the rules of the stock exchanges where the securities issued by Vale are listed and traded.

The Disclosure Policy applies to the controlling shareholder, to members of the Board of Directors, Audit Committee, and Advisory Committees, to the Executive Officers and executives of Vale, to the administrators of its controlled companies, and to any person who, by virtue of his office, function, or position in Vale and/or its controlled companies, has knowledge of information regarding a Relevant Event or Fact about Vale.

In addition, Vale has an Information Disclosure Board, chaired by the Chief Executive Officer of Vale and comprised of the following members: Executive Director for Finances and Investor Relations (DRI); the General Consul, Director of the Investor Relations Department, and the Director General of the Controller. The main functions of the Information Disclosure Board are: to verify the existence of a Relevant Event or Fact to be disclosed and to ensure its full, simultaneous, broad and immediate general disclosure, especially in markets trading securities issued by Vale; to supervise and approve communication to general capital markets of a Relevant Event or Fact, as well as evaluate the need of eventual correction or revision; to give an opinion as to the possibility of delaying the disclosure of a Relevant Event or Fact, if its immediate disclosure puts a legitimate interest of Vale at risk; to oversee the developments or changes in the business of Vale or its controlled companies to determine if there is need for disclosure of a Relevant Event or Fact; and to analyze possible rumors and speculation in the market about Vale to evaluate the need to publish a response and/or a statement.

Open capital companies under Vale control should adopt this Policy, with adjustments that might be required by local legislation and regulation applicable to such companies and markets where the respective securities are traded.

# 21.2 – Description of the disclosure policy for relevant events or facts and of the procedures for maintaining confidentiality of relevant information not disclosed

In accordance with the Disclosure Policy, Vale will make public information of strategic, administrative, technical, business, financial, or economic nature that might affect prices of its securities and/or influence decisions by investors to hold them, buy them, sell them, or exercise any rights inherent in the position of holders of securities (Relevant Event or Fact) according to applicable legislation and regulation.

The shareholders controlling Vale, the members of the Board of Directors, the Audit Committee, and the Advisory Committees, the Executive Officers and executives of Vale, shall report any information regarding a Relevant Event or Fact of which they have knowledge to (DRI), who will make arrangements for its prompt disclosure.

All relevant information that is not yet public knowledge and is disclosed, intentionally or not, to analysts, investors, journalists or any person who is not (i) member of Vale Board of Directors, Fiscal Council or Executive Committees; (ii) member of the Executive Board; or (ii) employee of Vale and its subsidiaries directly engaged with the matter, should be immediately made public according to applicable rules and regulations.

The disclosure of a relevant event or fact should be made before the opening or after the close of the trading sessions of the stock exchanges where the securities issued by Vale are traded. If disclosure is imperative during a trading session, the Executive Director for Finances and Investor Relations (DRI) shall request the relevant regulatory agencies and the stock exchanges, where the securities issued by Vale are listed and traded, to suspend trading until adequate disclosure occurs.

Access to information about Relevant Events or Facts, before their public disclosure, is limited to professionals directly involved with the matter under consideration. These professionals shall store this information in an adequate manner, maintain its confidentiality until its public disclosure, and insure that their subordinates and service providers subject to obligations of confidentiality do so, as well, and assume joint responsibility with them if this is not complied with. The professionals referred to are, in addition, subject to the agreement of confidentiality maintained with Vale.

Events or facts may, exceptionally, not be disclosed if the controlling shareholders or the directors of Vale view that disclosure endangers legitimate company interests. In this case, the administrators can submit to the CVM, their decision to keep material facts or events confidential, on an exception basis, because the company understands they present a risk, if disclosed, to the legitimate interests of the organization.

All rumors and/or speculation in the market about Vale and/or its controlled companies, which have as their topic possible Relevant Events or Facts, shall be reported to the Information Disclosure Board. If some information about a Relevant Event or Fact escapes control or if there is an abnormal oscillation of the quote, price, or volume traded of securities, the DRI shall disclose that information publicly and immediately.

Also, under pertinent laws and regulations of the regulatory agencies and the stock exchanges, where the shares issued by Vale are listed and traded, Vale will make simultaneous disclosures of information to the capital market using the following communication channels:

- Publication of Relevant Events or Facts in newspapers of general circulation habitually used by Vale;
- Circulation of press releases, simultaneously in Portuguese, English, and Chinese, immediately filing them in accordance with the specific rules of the regulatory agencies and stock exchanges, where the shares issued by Vale are listed and traded (as well as posted in the web sites of the regulatory agencies and/or stock exchanges), with custodial agents, escrow agents for *American Depositary Receipts* (ADRs) and *Hong Kong Depositary Receipts* (HDRs), capital market participants, and news agencies;
- Telephone conferences and "webcasts" held regularly every quarter for the disclosure of results and at other times in exceptional cases if that becomes necessary. The realization of these events will be announced in advance, publicly, to capital markets, indicating the date, time, and telephone numbers for connection. Such conferences and "webcasts" will be recorded and available on the web site of Vale (<a href="https://www.vale.com">www.vale.com</a>) in the Investor Relations section, for ninety (90) following the event;
- Public meetings at the discretion of the administration of Vale. Vale will publicly announce in advance the date, time, and place of such events;
- Intensive use of the Investor Relations section of the Vale web site, with versions in Portuguese, English, and Chinese, for the immediate availability of press releases, presentations at meetings and conferences, operational information, corporate events, payments of shareholder compensation and issuance of debt securities, annual reports, quarterly and annual financial statements and documents filed with regulatory agencies and stock exchanges, where the shares issued by Vale are listed and traded, quotes for Vale stock and Depositary Receipts, and answers to frequently asked questions compiled by participants in the capital market;
- Active participation in investor conferences held in Brazil and abroad.

## 21.3 - Administrators responsible for implementation, maintenance, evaluation, and supervision of the information disclosure policy

The Executive Director for Finances and Investor Relations is the one responsible for the disclosure of information regarding relevant events or facts, although the other Associated Persons respond jointly in cases of non-compliance with the rules on disclosure.

#### 21.4 - Other relevant information

The Information Disclosure Committee may, occasionally, approve the disclosure of forecasts for the behavior of the markets where it operates, presenting with clarity, the assumptions that support such estimates, together with the following note:

"This communication may contain statements that express Vale's expectations about future events or results. All statements, when based on future expectations rather than on historical facts, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. Such risks and uncertainties include factors relating to: (a) countries where we have operations, principally Brazil and Canada; (b) the world economy; (c) capital markets; (d) the price of minerals and metals and their dependence on global industrial production, which is cyclical by nature; and (e) the degree of global competition in the markets in which Vale operates. For additional information about factors that could cause results to differ from those estimated by Vale, please consult the reports filed with the Brazilian Securities and Exchange Commission (CVM), the French Autorité des Marchés Financiers (AMF), the U.S. Securities and Exchange Commission (SEC), at the Stock Exchange of Hong Kong Limited, and, in particular, the factors discussed in the sections "Estimates and projections" and "Risk factors" in the Annual Report - Form 20F of Vale."

The controlling shareholders, direct or indirect, the shareholders who elect members of the Board of Directors or of the Audit Committee, and any other natural or legal person, or group of persons, acting jointly or representing the same interest, who purchase or sell a share participation that corresponds, directly or indirectly, to a variation, for increase or decrease, of five percent (5%) or more of the kind or class of shares representative of the capital stock of Vale, shall, under the terms of Article 12 of Instruction CVM 358, immediately sent to Vale correspondence with the information required in the cited Article 12.

The Executive Director for Finances and Investor Relations shall immediately inform the respective regulatory agencies and stock exchanges of the information received, as well as update the section corresponding of the Reference Form, within a maximum of seven (7) business days.

#### Item 22

# 22.1 - Acquisition or disposal of any significant assets that do not belong to the normal operations of the issuer

There were no acquisitions or disposals of any significant assets that do not belong to the normal operations of the Company during the last 3 financial years

#### 22.2 - Significant changes in the running of the issuer

There were no significant changes in the running of the Company's business during the last three financial years

# 22.3 - Significant contracts concluded by the issuer and its subsidiaries which are not directly connected to its operations.

There were no significant contracts executed by the Company and/or its subsidiaries with third parties, nor directly connected to its operations in the last three financial years.

#### 22.4 - Other information that the Company deems relevant

There is no other relevant information for this item "22"