Vale S.A. Form 6-K June 02, 2011

United States
Securities and Exchange Commission
Washington, D.C. 20549
FORM 6-K
Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
of the
Securities Exchange Act of 1934
For the month of
May 2011

Avenida Graça Aranha, No. 26 20030-900 Rio de Janeiro, RJ, Brazil (Address of principal executive office)

Vale S.A.

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

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

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

(Check One) Yes o No b

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

(Check One) Yes o No b

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

(Check One) Yes o No b

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

## **TABLE OF CONTENTS**

Press Release Signature Page

#### **Table of Contents**

#### 1.1. Stament and Identification of the Responsible Individual

Name of the individual responsible for the content of the Reference Form Position of responsible individual

Murilo Pinto Ferreira
Executive Director

Name of the individual responsible for the content of the Reference Form Position of responsible individual

Guilherme Perboyre Cavalcanti
Director of Relationships with Investors

The above-mentioned directors stated that:

- a. They have reviewed the Reference Form;
- b. All the information contained in the Reference Form complies with InstructionCVM No. 480, in particular Articles 14 thru 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.

1

## 2.1 Independent Auditors:

#### 2.2 Remuneration of auditors

Does it have auditor? YES

CVM (Securities Commission) Code 3859

Type of Auditor Domestic

Name/Corporate name Deloitte Touche Tohmatsu, Independent Auditors

CPF/CNPJ 49,928,567/0002-00

Period of provision of services From 02/27/2007 to 07/22/2009

Description of the service contracted Provision of professional services for auditing the annual report from

Vale, its subsidiaries, and controlled companies; provision of services related to the audit; tax services related to legal requirements and other

services unrelated with the audit.

Total amount of the remuneration of independent auditors itemized per

service

For the fiscal year ended on December 31, 2008, the independent auditors received fees for a total of R\$4.5 million for services rendered

to Vale and its controlled companies.

Accounting Auditing R\$1.7 million Services related to the audit R\$0.4 million

Review of tax requirements (Brazil and abroad) R\$2.4 million

Service Total R\$4.5 million

Justification for replacement The period of five years of validity for the contract signed with

Deloitte Touche Tohmatsu Auditores Independentes (Deloitte Touche Tohmatsu, Independent Auditors) ended with the issuance of the report

regarding the Quarterly Reports of March 31, 2009, and the

management of Vale decided not to use the power of not replacing the independent auditors foreseen by Resolution CVM No. 549/2008, and in that way it voluntarily replaced its independent auditor with the consent of Deloitte Touche Tohmatsu Auditores. In agreement with Instruction CVM No. 308/99, Vale informed CVM about the change of auditor by mail Independentes. DICT/EXT-107/2009 dated

of auditor by mail independences. DIC 1/L/X1-10//20

06/29/2009.

Reason submitted by the auditor in case of disagreement with the issuer iustification

2

#### **Table of Contents**

Name of the supervisor

responsible Period of provision of service CPE Address

Marcelo Cavalcanti 02/27/2007 to 07/22/2009 335.905.597-72 Av. Presidente Wilson, 231/22

Almeida andar, Centro, Rio de Janeiro, RJ,

Brasil, CEP 20030-905

Does it have auditor? YES

CVM (Securities Commission) Code 2879

Type of Auditor Domestic

Name/Corporate name PricewaterhouseCoopers Auditores Independentes

(PricewaterhouseCoopers Independent Auditors)

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

According to Instruction CVM 381/2003, the following were the services contracted for a three-year period beginning June 2009, from the external auditors from PriceWaterHouseCoopers Auditores Independentes, for the fiscal year 2010 for Vale and its controlled companies:

Financial audit: R\$17,431.8 thousand [Seventeen billion, four hundred

thirty-one million, eight hundred thousand]

Audit Sarbanes Oxley Act: R\$2,795.8 thousand [Two billion, seven

hundred ninety-five million, eight hundred thousand]

Services related to the audit: R\$2,855.7 thousand [Two billion, eight hundred fivety-five million, seven hundred thousand] (They referred mainly to services coming from the listing of Vale at Hong Kong

Stock Exchange.

Tax Services: R\$235.6 thousand [Two hundred thirty-five million, six hundred thousand] Services not related with the Audit (including comfort letters for the issuance of debts and equities at the Brazilian

and international market): R\$691.9 thousandl

Total for the services: : R\$24,010.7 thousand [Twenty-four billion, ten

million, seven hundred thousand]

For the fiscal year ended on December 31, 2008, the independent auditors received fees for a total of R\$20,773 million for services rendered to Vale and its controlled companies and R\$331 for services rendered to companies jointly controlled by Vale.

Accounting Auditing R\$ R\$17,158.2 million Auditing Sarbanes Oxley Law: R\$2,951.1 million Services related to the audit R\$237.5 million Tax Services: R\$704.0 million Services not related to the Audit: R\$13.7 million Service Total R\$21,064.5 million

Justification for replacement

Reason submitted by the auditor in case of disagreement of the issuer justification

3

#### **Table of Contents**

Name of the supervisor

responsible Period of provision of service CPE Address

Marcos Donizete Panassol 07/24/2009 063.702.238-67 Rua da Candelaria, 65/11,14,15 andares, Centro, Rio de Janeiro, RJ,

Brasil, CEP 20091-020

#### 2.3 Other information that the Company deems relevant

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.

4

## 3.1 Selected Consolidated Financial Information

	Fiscal Year Ended December 31		
	2010	2009	
a. Shareholders equity (in R\$ thousand)	116,326,864	100,295,227	
b. Total Assets (in R\$ thousand)	214,662,114	177,738,189	
c. Net Revenue (R\$ thousand)	83,225,006	48,496,566	
d. Gross Income (in R\$ thousand)	49,468,940	20,746,174	
e. Net Income (in R\$ thousand)	30,070,051	10,336,950	
f. Number of Shares, excluding treasury	5,218,279,135	5,212,724,297	
g. Asset Value of Share (in R\$)	22.29	19.24	
h. Earnings per Share (in R\$)	5.76245	1.96614	
i. Other selected financial information	n/a	n/a	

### 3.2 Non-Accounting measurements

## a. value of non accounting measurements

The Company uses LAJIDA (EBITDA) as a non-accounting measurement. In 2010, the EBITDA of the Company was established in the amount of R\$46,378,648 thousand (forty-six billion, three hundred and seventy eight million and six hundred and forty-eight thousand reais). In 2009 and 2008, these values were R\$18,619,085 thousand (eighteen billion, six hundred and nineteen million, eighty-five thousand reais) and R\$34,959,255 thousand (thirty four billion, nine hundred and fifty-nine million, two hundred and fifty-five thousand reais), respectively.

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

In R\$ thousands  Operating profit EBIT	2010 40,490,339	2009 13,173,034	2008 27,399,809
	-	, ,	
Depreciation / Amortisation of goodwill	5,741,372	5,446,951	5,112,446
Reduction in recoverable value of intangible assets			
	46,378,649	18,619,085	34,959,255
Dividends received	146,938	21,318	63,260
EBITDA (LAJIDA)	46,378,649	18,641,303	35,022,515
Depreciation / Amortisation of goodwill	(5,741,372)	(5,446,951)	(5,112,446)
Dividends received	(146,938)	(21,318)	(63,260)
Reduction in recoverable value of intangible assets	, ,	, ,	, , ,
Corporate results	(48,081)	98,697	(1,324,580)
Proceeds from sale of investment		93,139	138,879
Net financial income	(2,763,399)	2,094,497	(3,837,534)
Income and social contribution	(7,035,659)	(4,954,488)	(664,728)
Minority interests	(351,441)	(167,929)	(432,217)
Net income	30,070,051	10,336,950	21,279,629

# 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.

5

## 3.3 Events subsequent to the latest financial statements for the closure of the fiscal year that substantially alter them

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, 2010 were issued and filed with the CVM on February 24, 2011. Below is a description of subsequent events, which were included in the financial statements in compliance with the rules in IAS 24, approved by CVM° 593/09.

There is no subsequent event disclosed in our financial statements

3.4 Policy for allocation of results

## Fiscal Year Ended December 31

2010 2009 2008

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\$36.073.218.330.41. R\$23,468,768,238.73 (65.1%) were destined to a Reserve for expansion /investment and R\$1.022.135.742.36 (2.8%) for the Tax Incentive Reserve. Of the total reserve for the expansion /investment, 50% was allocated based on statutory authorization and 15.1% was destined for the reserve based on the capital budget approved at the AGM.

Practice adopted by the **Company:** Of the total R\$10.287.467.859.00. R\$6,653,281,672.35 (64.7%) destined to a Reserve for expansion /investment and R\$119,652,582.99 (1.16%) for the Tax Incentive Reserve. Of the total for the Reserve expansion /investment, 50% was sent based on statutory authorization, and 14.7% was destined for the reserve based on the capital budget approved by the AGM.

Practice adopted by the **Company:** Of the total of R\$21.301.991.594.93. R\$15,178,507,589.28 (71.3%) was destined to a Reserve for Tax Incentives and R\$14,219,808,364.43 (70.9%) was destined to a Reserve for expansion /investment. Of the total for the Reserve expansion /investment, 50% was based on statutory authorization and 21.3% 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: 27% of annual net income was allocated to the payment of dividends

n/a

Practice adopted by the Company: 31% of annual net income was allocated to the payment of dividends

Practice adopted by the Company: 25% 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

6

Common

Preferred Class A

## 3.5 Distributions of dividends and retention of net income.

			Fiscal Year Ended December 31				
(Reais)			2010	2009		200	<b>)</b> 8
, ,	ne for dividend paym	ents (in					
R\$)			36,073,218,330.41	9,655,367,8	395.00	20,238,01	10,119.00
Percentage of divid	lend over the adjuste	d net					
profit			29.0		31.0		25.0
Rate of return in relation to equity (%)		27.0	11.0			22.0	
Dividend distributed (total)		9,778,653,432.80	3,002,086,223.00		5,059,50	5,059,502,530.00	
Net income retained	, ,		None	None			None
Date of approval of	the retention		None		None		None
		Payment		Payment			Payment
Net income retained	Amount (R\$)	date	Amount (R\$)	date	Amoun	t ( <b>R</b> \$)	date
<b>Interest on Capital</b>							
Common	1,029,923,339.00	10/30/2010	57,865,446.00	10/31/2009	1,281,51	0,820.00	10/31/2009
Common	1,952,075,334.00	04/30/2011	1,341,608,462.00	04/30/2010			
Preferred Class A	644,693,233.00	10/30/2010	36,937,363.00	10/31/2009	818,02	9,292.00	10/31/2009
Preferred Class A	1,221,924,666.00	04/30/2011	856,391,538.00	04/30/2010			
Common	1,013,746,000.00	1/31/2011	436,222,763.00	10/30/2010			
Preferred Class A	656,354,000.00	1/31/2011	273,059,651.00	10/30/2010			
Other							
Common	2,004,928,273.00	10/31/2011					
Preferred Class A	1,255,008,588.00	10/31/2011					
Mandatory							
Dividend							
Common					-	1,882.00	10/31/2008
Common						9,703.00	04/30/2009
Preferred Class A					_	8770536	10/31/2008
Preferred Class A					1,065,41	0,297.00	04/30/2009

## 3.6 Dividends declared on account of retained earnings or reserves set aside in the past 3 fiscal years

	Fiscal Year Ended December 31			
Dividends distributed to (in R\$ thousands):	2010	2009	2008	
Retained Earnings				
Constituted Reserves	513,050	370,507	580,124	

136,691,882.00 10/31/2008

7

## **3.7 Debt**

Fiscal year	Total amount of the debt (of any nature) 98,337,000,000.00	Type of index Debt ratio	Index of description and reason for the use of another index of indebtedness 84.5
			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.
12/31/2010		Other indexes	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.
			The debt ratio Gross Debt / EBITDA shows the approximate time necessary for a company to pay all its debt with its cash flow.
12/31/2010			22.86. 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.
			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.
2.0 OLU		and magazites 3	The interest coverage ratio (EBITDA / Interest expenses) is used to determine the ability of business to generate cash flow to service its debt

# 3.8 Obligations according to the nature and maturity date: Fiscal year (12/31/2010)

	Between 3 and					
Type of debt	Less than 1 year (R\$)	Between 1 and 3 years (R\$)	5 years (R\$)	Over 5 years (R\$)	Total (R\$)	
Collateral	3,025,071.00	10,151,120.00	19,151,691.00	272,955,987.00	305,283,869.00	
Floating						
Guarantee	0.00	0.00	0.00	0.00	0.00	
Unsecured						
obligations	31,380,974,929.00	4,047,979,657.00	0.00	62,602,761,545.00	98,031,716,131.00	

Total 31,384,000,000.00 4,058,130,777.00 19,151,691.00 62,875,717,532.00 98,337,000,000.00

**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.

For the categorization of the debts, it was taken into account the burdensome of the guaranty before the Company and not before third parties. A debt without collateral or floating guarantee, notwithstanding the fact of having a personal guarantee, has been classified as unsecured obligation.

The information herein given, refers to the Consolidated Financial Statements of the Company.

## 3.9 Other information that the Company deems relevant

As of January 1, 2010, and with retroactivity to January 1, 2009, Vale adopted all the pronouncements issued by the CPC. For this reason, the Financial Statements corresponding to the Fiscal Year ended December 31, 2010 are the first consolidated accounting statements submitted by the Company pursuant to the *International Financial Reporting Standards IFRS*. Thus, as the financial Statements regarding the fiscal year ended December 31, 2008 have been performed pursuant to several accounting patterns, they are not any more comparable to the financial statements of December 31, 2009 and December 31, 2010. For this reason, accounting information for the year 2008 has not been included in 3.1.

8

#### **Table of Contents**

# 4.1 Risk factors which may influence investment decisions, especially related risks: Risks relating to the Company

We may not be able to adjust our production volume to changes in demand in a timely or cost-efficient manner. During periods of high demand, our ability to rapidly increase production capacity is limited, which will render us unable to satisfy our customers—demand. Moreover, we may be unable to complete expansions and greenfield projects in time to take advantage of the steady global demand for iron ore. When customer demand exceeds our production capacity, we may meet excess customer demand by purchasing iron ore, iron ore pellets or nickel from joint ventures or unrelated parties and reselling it, which would increase our costs and reduce our operating margins. If we are unable to satisfy excess customer demand in this way, we may lose customers. In addition, operating close to full capacity may expose us to higher costs, including demurrage fees due to capacity restraints in our logistics systems. On the other hand, operating at significant idle capacity during periods of weak demand may expose us to higher unit production costs since a significant portion of our 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 could be limited by some labor regulations or collective bargaining or government agreements.

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

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

Some of our operations depend on joint ventures or consortia or even on the participation of our investors, and our business may be adversely affected if our partners fail to observe their commitments.

We currently operate important parts of our pelletizing, bauxite, nickel, coal, copper and steel businesses through joint ventures with other companies. Important parts of our electricity investments and all of our oil and gas projects are operated through consortia. Our forecasts and plans for these joint ventures and consortia assume that our partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide skilled and competent managerial personnel. If any of our partners fails to observe its commitments, the affected joint venture or consortium may not be able to operate in accordance with its business plans, or we may have to increase the level of our investment to implement these plans. For example, the company that owns our nickel project in New Caledonia has a minority shareholder, Sumic Nickel Netherlands B.V., with a put option to sell us 25%, 50%, or 100% of its shares. Sumic may exercise the put option if the cost of the project exceeds a certain value agreed between part of the shareholders and certain other conditions are met.

9

#### **Table of Contents**

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

We are investing to increase our production and logistics capabilities and to expand the scope of the minerals that we produce. Our projects are subject to some risks that may affect growth and profitability prospects, including the following:

We may encounter delays or higher than expected costs in obtaining the necessary equipment or services as well as to implement new technologies to design and operate a project.

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

We may fail to obtain in a timely or in any possible way the licenses required for the projects, or also incur higher than expected costs to obtain such licenses.

Changes in regulations or in market conditions may render our projects less profitable than expected at the initial planning stage.

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

Some of our development projects are located in regions where tropical diseases, AIDS, malaria, yellow fever and other contagious diseases are a major public health issue and pose health and safety risks to our employees. If we fail to guarantee the health and safety conditions of our employees, our business may be affected.

More frequent natural disasters may impose serious damage on our operations and projects in the countries where we operate and may cause a negative impact on our sales in countries adversely affected by such disasters.

The frequency of natural disasters such as storms, floods, earthquakes and tsunamis has been increasing all over the world and may adversely affect our operations and the projects that we operate, therefore leading to a drop in sales in the countries affected as a result of power outages and destruction of industrial facilities and infrastructure, among other factors. In the last quarter of 2010 and in the first quarter of 2011, our coal operations in Australia were adversely affected by floods in the state of Queensland. Our mining product sales in Japan will have to withstand the negative impact of the earthquake that affected the north-eastern area of the country.

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

Our reported ore reserves are estimated quantities of ore and minerals that can be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including factors beyond our control. Reserve engineering involves estimating deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. As a result, no assurance can be given that the indicated amount of ore will be recovered or that it will be recovered at the rates we anticipate. Estimates may vary, and results of our 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.

10

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

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

Drilling and production risks could adversely affect the mining process.

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

Establish mineral reserves through drilling;

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

Obtain environmental and other licenses;

Construct the necessary mining and processing facilities apart from creating 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 we are able to exploit it, we 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 delays and cost overruns that may render the project not economically feasible.

We face rising extraction costs over time as reserves deplete.

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

Labor disputes may disrupt our operations from time to time.

A substantial number of our employees and some of the employees of our subcontractors are represented by labor unions and are covered by collective bargaining agreements, which are subject to periodic negotiation. Negotiation may become more difficult in times of higher prices and ensuing higher profits for metal and mining industries, as unions may claim salary raises and other forms of additional compensation.

Strikes or work interruptions in any one of our operations could adversely affect the development of our operations as well as the duration and cost of new projects. We may also be affected by work interruptions involving the supply of goods or services:

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

The mining industry has faced worldwide shortages of mining and construction equipment, spare parts, contractors and other skilled personnel during periods of high demand for minerals and metals and intense development of mining projects. We may experience long lead-times for mining equipment and problems with the quality of contracted engineering, construction and maintenance services. We compete with other mining companies for highly skilled executives and staff with a large industrial and technical experience, and we may not be able to attract and retain such people. Shortages during peak periods could negatively impact our operations, resulting in higher production or capital expenditure costs, production interruptions, higher inventory costs, project delays and potentially lower production and revenues.

Higher energy costs or energy shortages would adversely affect our business.

Energy costs are a significant component of our cost of production, representing 17.4% of our total cost of goods sold in 2010. To meet our energy needs, we depend on the following sources, all measured in tons of oil equivalent (TOE): oil by-products, which represented 42% of total energy needs in 2010, electricity (29%), coal (15%), natural gas (10%) and other sources of energy (4%).

11

#### **Table of Contents**

Fuel costs represented 10.7% of our cost of goods sold in 2010. Increases in oil and gas prices adversely affect our logistics services, mining, iron ore pellets, nickel and aluminum businesses.

Electricity costs represented 6.6% of our total cost of goods sold in 2010. If we are unable to secure reliable access to electricity at acceptable prices, we may be forced to curtail production or may experience higher production costs, either of which would adversely affect our results of operations. There is risk of shortage in countries where we have operations or projects, due to excessive demand or climate conditions such as floods or droughts.

Electricity shortages have occurred in Brazil and there can be no assurance that the increase of power generation capacity in the countries where we operate will be enough to meet our future consumption increases. Future shortages and government efforts to respond to or prevent shortages may adversely impact the cost or supply of electricity in our operations.

Through our subsidiary PT International Nickel Indonesia Tbk (PTI), we process lateritic nickel ores by using a pyrometallurgical process, which is energy-intensive. Although PTI currently generates a majority of the electricity for its operations from its own hydroelectric power plants, low rainfall or other hydrological factors could adversely affect electricity production at PTI s plants in the future, which could significantly fuel the risk of higher costs or lower production volume at PTI.

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

A substantial portion of our revenues and debt is denominated in U.S. dollars, and changes in exchange rates may result in (i) losses or gains on our net U.S. dollar-denominated indebtedness and accounts receivable and (ii) fair value losses or gains on our currency derivatives used to stabilize our cash flow in U.S. dollars. In 2010, we had currency gains of US\$102 million; in 2009, we had currency gains of US\$665 million; and in 2008, we had currency losses of US\$1.011 billion. In addition, the price volatility of the Brazilian *real*, the Canadian dollar, the Indonesian rupiah and other currencies against the U.S. dollar affects our results since most of our costs of sold goods are denominated in currencies other than the U.S. dollar, principally the *real* (64% in 2010) and the Canadian dollar (11% in 2010), while our revenues are mostly U.S. dollar-denominated. We expect currency fluctuations to continue to affect our revenues, financial expenses and cash flow generation.

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

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

Our business is generally subject to a number of risks and hazards, which could result in damage to, or destruction of, mineral properties, facilities and equipment. The insurance we maintain against risks that are typical in our business may not provide adequate coverage. Insurance against some risks (including liability for environmental pollution or certain hazards or interruption of certain business activities) may not be available at a reasonable cost. As a result, accidents or other negative developments involving our mining, production or transportation facilities could have an adverse effect on our operations.

We are involved in several legal claims that may adversely affect our business if their result is unfavorable to us.

We are involved in a number of legal claims in which the plaintiff demands significant amounts. Although we have answered them firmly, the result of the claims is uncertain and may lead to obligations that may cause a substantial negative effect on our business and the value of our shares, American Depositary Shares (ADSs) e Hong Kong Depositary Shares (HDSs).

12

Concessions, authorizations, licenses and permits depend on renewal, which is uncertain, and we can only renew some of our mining concessions a limited number of times and for a certain period.

Some of our mining concessions outside Brazil have an expiration date and can only be renewed a limited number of times, for a limited period. Apart from mining concessions, we may need to obtain several authorizations, licenses and permits from governmental or regulatory agencies in connection with the operation of our mining properties, which can be subject to fixed expiration dates or to renewal or periodic revision. Although we expect that renewals will be granted as and when required, it cannot be asserted that such renewals will be actually granted and, besides, it cannot be assured that new conditions will not be imposed to obtain such renewals. Mining concession fees may substantially increase due to the period of time elapsed since the granting of each exploration license. If that were the case, our business targets may be affected by the cost of maintaining or renewing our mining concessions. In this respect, we must continuously assess the mining potential of each concession, mainly at the time of renewal, to define whether mining concession maintenance costs are justified by the results of operations up to now and, as the case might be, to let some of our concessions expire. It cannot possibly be assured that said concessions will be obtained in favorable terms, or even that they will be obtained at all, in line with the future mining and/or exploration aims that we pursue. *Inefficient project management and other operational problems could adversely affect our business and our financial performance*.

Inefficient project management and operational problems may force us to suspend or reduce production, which could generally result in a drop of our productivity. Inefficient project management may mean that logistics, including power plants, machinery and transportation, is not working as required to enable the ongoing operation of our activities. Operational failures may cause significant power plant and machinery failures. It cannot be assured that inefficient project management or other operational problems will not occur. Any damage to our projects or delay in our operations caused by inefficient project management or operational problems may adversely affect our business and the results of our operations.

Integrating our company and our acquisition assets, a key aspect in the strategy of our company, may be more difficult than initially expected.

We may not succeed in integrating the businesses acquired by us. We have partly expanded our business by means of acquisitions and part of our future growth may also rely on acquisitions. The integration process after completing any acquisition by the company may be more difficult than initially expected. Besides, if the focus on this post-acquisition process affects the performance of our current operations, the results and operations of the Group may be adversely affected. Integrating acquisition assets may take longer than expected and the costs related to acquisition assets integration may be higher than expected. Completed acquisitions may not result in increased revenues, cost economy or operational benefits as initially foreseen. Acquisitions may lead to a substantial increase of costs as a result, for example, of inconsistent standards, checks, procedures and policies between the Group and acquisition assets, which may adversely affect our financial condition and the results of operations. Management focus may be deviated from day-to-day responsibilities to integration-related issues.

It may be difficult for investors to enforce any judgment rendered outside Brazil against us or any one of our partners. Our investors can be located in jurisdictions outside Brazil and can attempt to file claims against us or our board members or officers with courts within their jurisdictions. Our company is Brazilian and most of our officers and board members are Brazilian residents. Most of our assets and the assets of our officers and board members will be probably located in jurisdictions other than the jurisdictions of our investors. Our investors may find it impossible to issue summons or to serve notices connected with suits dealt with in their jurisdictions to our board members and officers residing outside their jurisdictions. Additionally, judgments rendered abroad will be applicable in Brazilian courts, without reconsidering the merits of the case, provided that the judgment is previously confirmed by the Higher Court of Justice, whose 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; (e) establishes the payment of a fixed amount; and (f) is not contrary to the sovereignty of Brazil, its public policy or

morality. Therefore, investors may not enforce against our board members or officers the judgments passed by courts in their countries on the basis of the legislation in force in those jurisdictions.

13

#### Risks relating to our controlling shareholder or parent group

Our controlling shareholder exerts considerable influence over Vale and the Brazilian government holds certain veto rights.

On March 31, 2011, Valepar S.A. (Valepar) owned 53.5% of the outstanding common shares and 33.3% of our total outstanding capital. As a result of its stock ownership, Valepar can control the outcome of some actions requiring shareholder approval.

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

## Risks relating to our subsidiaries and related companies

We have a large number of subsidiaries and related companies (pursuant to 8.1), and many of them are subject to operational and market risks similar to ours, which may exert adverse effects on consolidated results.

A significant number of our subsidiaries and related companies is subject to risks similar to the ones that we are 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 us. Besides, potential adverse effects on the results of our subsidiaries and related companies may affect our results and even reduce the amount to be distributed to shareholders as dividends.

#### Risks relating to our suppliers

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

## Risks relating to our customers

Our business could be adversely affected by a lower demand for products manufactured by our customers, including steel (for our iron ore operations), stainless steel (for our nickel operations), and agricultural commodities (for our fertilizer operations).

Demand for iron ore and nickel depends on global demand for steel. Iron ore and pellets, which together accounted for 70.5% of our operating revenues in 2010, are used to produce carbon steel. Nickel, which accounted for 8.3% of our operating revenues in 2010, is mainly used to produce stainless and alloy steels. Demand for steel depends heavily on global economy 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 the business cycles of this industry affect the demand for and the prices of our products. Besides, the vertical backward integration of the steel industry could reduce the global seaborne trade of iron ore.

The global seaborne trade of iron ore could also be affected by competition from metallics, such as semi-finished steel and scrap. In some cases, it is more economical for steel makers to charge more scrap in basic oxygen furnaces (BOF) and electric arc furnaces (EAF) instead of producing pig iron. Semi-finished products such as billets and slabs may also be available from fully integrated steel mills at low cost, reducing overall demand for seaborne iron ore.

Demand for fertilizers is affected by the prices of agricultural commodities in the world market. A steady decline in the price of one or more agricultural commodities could have a negative impact on the fertilizer business.

## Risks relating to the fields of economy in which we operate

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

Mining provides raw materials for industries. Industrial production tends to be the most cyclical and volatile component of global economic activity, which affects demand for minerals and metals. At the same time, investment in mining requires a substantial amount of funds to replenish reserves, expand production capacity, build the necessary infrastructure and preserve the environment. These structural features are the most significant financial risk factors for the mining industry.

Table of Contents

23

#### **Table of Contents**

The change of iron ore prices based on quarterly short-term rates and the ensuing volatility of prices could adversely affect our iron ore operations.

We have closed agreements with our customers in the iron ore sector during the first half of 2010 to convert annual contacts to contracts with their values adjusted on a quarterly basis to better reflect market parameters. The previous annual price system for the iron ore sector was replaced by a new system, according to which iron ore prices are established every quarter, based on a quarterly average of price indices corresponding to the period closed one month prior to the commencement of the new quarter. Although the new price system defines the price more accurately according to the quality of the product, rewarding our 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 our cash flow.

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

Nickel, aluminum and copper are sold in an active global market and traded on commodity exchanges such as the London Metal Exchange and the New York Mercantile Exchange. Prices for these metals are subject to significant fluctuations and are affected by several factors, including actual and expected macroeconomic and political conditions, levels of demand and supply, availability and cost of substitutes, inventory levels, investments by commodity funds and other actions of participants in the commodity market.

Increased availability of alternative nickel sources or substitution of nickel in end use applications could negatively affect our 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 2010, the stainless steel scrap ratio remained unchanged, at 42% by comparison with 2009. 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 2010, estimated nickel pig iron production increased 61%, representing 11% 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 the production of 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 we operate

Regulatory, political, economic and social conditions in the countries in which we have operations or projects could adversely affect our business and the market prices of our securities.

Our financial performance may be negatively affected by regulatory, political, economic and social conditions in the countries where we have significant operations or projects, mainly in Argentina, Australia, Brazil, Canada, Colombia, Guinea, Indonesia, Liberia, Malawi, Mozambique, New Caledonia, Oman and Peru.

Our operations rely on authorizations and concessions from regulatory agencies in the countries where we operate. For further details about the authorizations and concessions that our operations rely on, please refer to *Company information Regulatory issues*. We are subject to laws and regulations in several jurisdictions that can experience changes at any time, and changes of laws and regulations may require modifications in our technologies and operations and result in unexpected capital expenditures.

Actual or potential political changes and changes in economic policy may undermine investor confidence and affect investments, therefore reducing economic growth and also generating a specific negative effect on our business.

#### **Table of Contents**

Demonstrators have already taken actions to disrupt our operations and projects and they may continue to do so in future. Although we defend ourselves vigorously against illegal acts and, at the same time, support the communities living near our operations, future attempts by protestors to cause harm to our operations could have a material adverse effect on our business.

Some of our operations and reserves are located next to or within indigenous, aboriginal or other community territories. These indigenous and aboriginal groups are entitled to take part in the management of natural resources and we negotiate with them access to their territories. Any disagreement or dispute with an indigenous or aboriginal group could affect our capacity to develop our reserves and to conduct our operations.

We may experience the adverse effect of changes in government policies, including the imposition of new taxes or royalties on our mining activities.

Mining is subject to government regulations in the form of specific taxes and royalties, which can have a significant impact on our operations. In the countries where we operate, governments may impose or change taxes or royalties, or modify the basis on which they are calculated, in a manner unfavorable to us.

Environmental, health and safety laws may adversely affect our business.

Our operations involve the use, handling, discharge and disposal of hazardous materials into the environment and the use of natural resources and almost all the aspects of our operations, products, services and projects all over the world are subject to environmental, health and safety laws, which may expose us to increased litigation and higher costs. These regulations require us to obtain environmental licenses, permits and other authorizations and to conduct environmental impact assessments in order to obtain approval for our projects and permission to start construction. Besides, all the changes required in existing operations must also undergo the same procedure. The difficulty to obtain operating licenses may cause construction delays or cost increases and, in some cases, lead us to postpone or even abandon a project. Environmental regulations also impose control standards on activities relating to exploration, mining, pelletizing, railway and maritime transportation services, decommissioning, refining, distribution and marketing of products. These regulations may give rise to significant costs and liabilities. Besides, activist groups and other stakeholders may increase their demands for environmentally sustainable and socially responsible development, which could entail significant cost increases and reduce our profitability. Litigation relating to these or other matters may adversely affect our financial condition or cause harm to our reputation.

In recent years, environmental regulations in many of the countries in which we operate have become stricter and more regulations or a more aggressive application of the regulations already in force are likely to affect us adversely by imposing restrictions on our activities and products and by establishing new requirements relating to the emission of pollutants and the renewal of environmental licenses, therefore increasing costs or demanding expensive regeneration ventures. Concern over the climate change and efforts to comply with international undertakings under the Kyoto Protocol could lead governments to impose limits on carbon emissions applicable to our operations, which could adversely affect our operating costs and our capital expenditure requirements. For example, the Brazilian government issued a decree within the scope of the National Climate Change Policy that foresees specific limits on carbon emissions to be determined at the end of 2011 and enforced up to 2020.

## Risks relating to the foreign countries in which we operate

An unfavorable economic scenario in China could cause a negative impact on our revenues, cash flow and profitability.

Over the last few years, China has been the main driver of global demand for minerals and metals. In 2010, Chinese demand represented 59% of global demand for seaborne iron ore, 37% of global demand for nickel, [sic] 38% of aluminum and 41% of global demand for aluminum. The percentage of our operating revenues attributable to sales to customers in China was 33.1% in 2010. Although China has not been affected by the recent global recession, the contraction of its economic growth could result in lower demand for our products, therefore leading to lower revenues, cash flow and profitability. The poor performance of the real estate sector, the main consumer of steel in China, could also cause a negative impact on our results.

#### Risks relating to our ADSs and HDSs (American Depositary Shares and Hong Kong Depositary Shares)

When exchanging ADSs or HDSs for underlying shares, ADS or HDS holders can lose their capacity to transfer foreign currencies abroad.

The custodian of the shares underlying our ADSs and HDSs is registered with the Central Bank of Brazil as authorized to transfer U.S. Dollars abroad by way of payment of dividend and other distributions relating to the shares underlying ADSs and HDSs or to the disposal of the underlying shares. In the event that an ADR or HDR holder decides to exchange ADSs or HDSs for underlying shares, he or she will be authorized to continue using the custodian s registration for only five business days starting from the date of exchange. From then on, the ADR or HDR holder may become unable to procure and transfer foreign currency abroad at the time of disposing of or distributing the underlying shares, unless he or she obtains a registration of his or her own, 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. In the event that an ADR or HDR holder tries to obtain a registration of his or her own, he or she may incur expenses and experience delays to receive dividend or distributions relating to the underlying shares or the timely return on his or her capital.

It is impossible to assure that the registration of an ADR or HDR holder or any other registration will not be affected by future legal modifications or even that in future additional and applicable restrictions will not be applied to ADR or HDR holders apart from taxation on underlying shares or on the repatriation of the proceeds from disposal.

It may not be possible for ADR and HDR holders to exercise their pre-emptive rights relating to their ADSs and HDSs.

ADR and HDR holders may not be able to exercise their pre-emptive or other rights relating to the underlying shares. It cannot be assured that ADR and HDR holders will be able to exercise their pre-emptive rights, especially if the legislation in force in the jurisdiction of the holder (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 requirements for registration be available relating those rights, as is the case in the United States, or for any document enabling pre-emptive rights to be registered as a prospectus, as is the case in Hong Kong. We are not bound to file a registration declaration relating to pre-emptive rights attached to underlying shares in the United States or to take any measures to enable exemption from registration and we cannot guarantee to ADR and HDR holders that we will notarize registration or adopt applicable measures. Nor are we bound to increase the offering of pre-emptive rights to HDR holders through the depositary.

ADR may encounter difficulties to exercise their voting rights.

ADR and HDR holders do not hold the same rights as shareholders. They only hold the contract rights established in their favor under deposit contracts. ADR and HDR holders cannot take part in shareholders meetings and can only vote by means of instructions delivered to the depositary. ADR and HDR holders will not be able to vote in the event that it is altogether impossible to provide the depositary, in a timely manner, with the material required to vote or even in the event that ADR and HDR holders do not have sufficient time to submit voting instructions. Regarding those ADSs and HDSs for which instructions have not been received, the depositary can, subject to certain limitations, empower a person appointed by us.

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

We are a global company with shares traded on different markets and with investors in different countries. The legal system for investors protection varies worldwide, sometimes in material aspects, and investors holding our securities must be aware that the protections and recourses available to them may be different from the ones to which they are accustomed in their local market. We are subject to securities legislation in different countries, with different rules, supervision and performance practices. The only applicable corporations law is the one in force in Brazil, with its specific rules and judicial procedures. We are subject to corporate governance rules in several jurisdictions where our shares are listed, but as a foreign private issuer, we are not bound to follow many of the corporate governance rules applied to domestic issuers in the United States relating to securities listed in the New York Stock Exchange (NYSE). Similarly, waivers and exemptions have been granted from some requirements contained in the rules governing the listing of securities with Hong Kong Limited Stock Exchange (HKEx Listing Rules), Codes on Mergers and

Acquisitions and Repurchase of Shares, Securities and Futures generally applicable to issuers registered in Hong Kong.

17

## 4.2 Vale s expectations for reduction or increase in exposure to the above-mentioned risks, if relevant

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 section 4.1.

4.3 Legal, administrative or arbitral suits in which Vale or its subsidiaries are a party, organized by labor, tax, civil and other suits: (i) which are not confidential, and (ii) which are significant for Vale s business and that of its subsidiaries.

(I) Labor

18

#### **Table of Contents**

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

Jurisdiction 6a Turma do 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, questioning Vale s outsourced activities. An unfavorable decision was given to Vale in the second instance, forcing the company in the region of Minas Gerais, to refrain from outsourcing some services allegedly linked to its main activity. Furthermore, it was decided that by way of indemnity for collective damage, the amount of R\$100,000 should be paid. Vale presented an appeal the Supreme Labor Tribunal,

which has not yet been assessed.

Chances of loss Probable

Analysis of impact in the case of losing the suit/ Reasons for importance for the

Company

In case of maintenance of the unfavorable decision, Vale is obliged, in Minas Gerais, to refrain from outsource services for operation of machinery and equipment for mining, such as back-hoes, excavators and drilling equipment, monitoring and reading of instruments at dams and waste stacks, drafting and implementation of the blasting plan detonation, thus having to perform such activities through its own employees; and to provide for the termination of contracts of outsourcing which may have as their purpose the services mentioned above.

Amount provisioned (if any) R\$161.9 million

Court 1a Vara Federal de Parauapebas Pará

Instance 1st Instance

Date of filing 07.03.2008

Parties in the suit Public Prosecutor for Labor matters (plaintiff), Vale and the following

companies (defendants): Accentum Manutenção e Serviços Ltda., ALTM S.A Tecnologia e Serviços de Manutenção, Atlântica Serviços Gerais Ltda., BMT- Engenharia Ltda., BRITAP Britagem Azevedo Ltda., Comau do Brasil Industria e Comercio Ltda., Consorcio Canaã, Consorcio Sossego, Consorcio VFC, Construtora Brasil Novo Ltda., Construtora Camilo e Empreendimentos Ltda., Construtora Mineira de

Engenharia Ltda., Construtora Norberto Odebrecht S A, Construtora Queiroz Galvão S/A, CRM Construtora Ltda., D Service Ltda., Dan Hebert S/A, Dinex Engenharia Mineral Ltda., E. S. Neres Transportes ME, 20. EME Serviços Gerais Ltda., Engepar Engenharia Ltda., Flapa Mineração e Incorporação Ltda., Geocret Engenharia e Tecnologia Ltda., Gesman Ltda., Integral Construções e Comercio Ltda., Intertek do Brasil Inspeções Ltda., Julio Simões Transportes e Serviços Ltda., Kaserge Serviços Gerais Ltda., Lubrin Lubrificacao Industrial Ltda., Metso Brasil Industria E Comercio Ltda., MIP Engenharia S/A, MSE-Servicos de Operação, Manutenção e Montagem Ltda., Progeo Engenharia Ltda., Rio Maguari Serviços e Transportes Rodoviario Ltda., Rip Serviços Industriais S/A, Salosergel Vigilância Ltda., Sital Sociedade Itacolomi de Engenharia Ltda., Sodexho do Brasil Comercial Ltda., T Q M Service Ltda., U & M Mineração e Construção S/A, and Vessoni Transportes Ltda.

Amounts, goods or rights involved

R\$108.6 million

Main facts

Public Civil Action proposed by the public prosecutor for labor matters against Vale and another 42 companies which provide services, requiring that defendants be condemned to pay for hours spent in transit (Carajás/Sossego), under the claim that the workplaces are difficult to access and not served by public transport. The action also asks for collective damages. Vale has presented its defense alleging the existence of public transport, that the locations are easily accessible and the validity of their collective agreements.

In 12.03.2010, the decree was published condemning only Vale to pay indemnity for damages to the amount of R\$100,000,000.00 and another R\$200,000,000.00 for practicing social dumping. Temporary relief was granted so that Vale could determine, immediately, how many hours travelling each of its employees used, with a penalty of a fine of R\$100,000.00 per worker if not done, as well as refrain from allowing contractors for Vale including on their cost worksheet expenses with hours paid travelling and allied costs.

As a result of a request for decisions by Odebrect, 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, 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. Requests to amend the decision were filed by Vale and other defendants. The requests to amend the decision of Vale lost their objective, and those of other companies were rejected. Some companies filed an appeal that is not in the second instance yet.

We stress that in July 2010 Vale reached an agreement to put an end to this suit, assuming obligations much lower than the amounts claimed in the suit, pursuant to the following terms:

- (i) Relating to *in itinere* hours: Vale will proceed to pay part of the time claimed, that is, 44 minutes/day for the employees of Carajás mine, 80 minutes/day for the employees of Azul mine, and 54 minutes/day for the employees of Sossego mine. Besides, following the same criteria, Vale will pay an amount equivalent to 42 months of in itinere hours. Term for implementation: 6 (six) months. Vale made the payment for the 42 months to the active employees and is taking steps to make the payments to the inactive employees.
- (ii) Relating to moral damages and alleged social dumping: claims were withdrawn by Vale undertaking to engage in social work in the area of Parauapebas in an amount of R\$26,000,000.00. Term for implementation: by March 2012.

Chances of loss

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company

Amount provisioned (if any)

Jurisdiction

Instance

Date of filing

Parties in the suit

Amounts, goods or rights involved

Main facts

Possible

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.

R\$79.5 million

2ª Vara do Trabalho de Vitória Espírito Santo

1st Instance

09.19.2001

Vale S.A. (defendant) and SINDFER Railroad union of ES and MG

(plaintiff)

Guarantee of the operational activities at the Tubarão Complex.

In 2001, 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 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 19/11/09, 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 between the parties, establishing a timeline for implementation of technical measures, with a deadline of 31.12.2011, which was duly approved by the court on 11 March 2010. In 24.01.11, 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 31/03/2012.

Chances of loss

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company

Amount provisioned (if any)

Probable

Any violation of the adjusted schedule between the parties may risk an embargo on Tubarão Complex activities, as well as the application of a monetary penalty.

None

20

#### **Table of Contents**

Jurisdiction Juízo do Trabalho de 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, aiming

to improve the suitability of the working conditions of employees in the underground mine to bring them up to regulatory standard NR 15, especially as regards the temperature of the mine. In the first instance, it was decided on the closing of the underground mine, but such determination was suspended by writ. Subsequently, partial success was granted to Vale s appeal to withdraw the order closing the mine, and determine the suitability of the working conditions of mine in relation to NR-15. Vale is still contesting the decision, to demonstrate compliance with the legal standards applicable to the activity. The increased risk of a conviction would be the closing of the mine, as determined by the 1st Degree Judge and rejected through an ordinary appeal. Vale is awaiting the result of an appeal before the TST, with the purpose of changed the decision as to the parts that were unfavorable. Evaluation of the appeal started in April 2011, though judgment was deferred because of the request to summon the Ministers

being.

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 final analysis the embargo of the activities of the underground mine for exploitation of Potassium Chlorate/Sergipe, as well as enforcement of a monetary penalty.

of the Appellate Court. The process has been suspended for the time

Amount provisioned (if any)

None

(II) Tax

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

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\$9,178 billion

Main facts

In 2003 Vale filed a judicial claim to challenge the provisions of section 74 of Provisional Measure 2,158-34/2001, which establishes payment in Brazil of Income and Social Contribution Tax on Net Profit relating to profits of foreign subsidiaries. Our defense is based on the following grounds: (i) section 74 of the Provisional Measure overlooks the treaties against double taxation signed between Brazil and the countries in which some of our subsidiaries are based; (ii) the National Tax Code forbids the aforementioned taxation as set forth by the Provisional Measure; (iii) even if section 74 of the Provisional Measure were valid, exchange variation should be excluded from the assessment of due taxes (according to the new accounting principles in force in Brazil and IFRS); and (iv) violation of the principle of prior taxation, in the event of taxation prior to December 2001. The first instance judgment was unfavorable to the Company and the recourse of appeal was received with suspensive effect. In March 2011, the Federal Regional Court of the 2<sup>nd</sup> Region objected to the prosecution of Vale s appeal. The court decision is awaited to be published to submit new recourses to the Higher Court of Justice and Federal Supreme Court. In April 2011, the Higher Court of Justice issued a favorable decision in a suit in which similar grounds to the ones proclaimed by Vale were submitted. The direct action for unconstitutionality (ADIN, according to the initials in Portuguese) proposed by the National Confederation of Industry (CNI, according to the initials in Portuguese) challenging the constitutionality of section 74 of the Provisional Measure is still awaiting judgment by the Federal Supreme Court. Even if ADIN is determined to be unfounded, we will continue challenging the requirement on legal terms based on other existing defense arguments. Vale was notified of IRPJ and CSLL requirements relating to profits earned by related and subsidiary companies abroad, enforcing a 75% penalty despite the suspensive effect granted to the appeal filed. At present, the decision issued by the Taxpayers Council is awaited to be published.

Chances of loss

Remote

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company In the event of a final unfavorable decision, the profits earned and retained by Company subsidiary or related companies based abroad will proceed to be charged with taxes.

Amount provisioned (if any)

None

21

#### **Table of Contents**

Main facts

Jurisdiction Administrative Council of Fiscal Resources

Instance 2<sup>nd</sup> administrative instance

Date of filing 10.12.2007

Parties in the suit Federal Revenue Secretariat (plaintiff) and Vale (defendant)

Amounts, goods or rights involved R\$2,673 billion

In 2003 Vale filed a judicial claim to challenge the provisions of section 74 of Provisional Measure 2,158-34/2001, which establishes payment in Brazil of Income and Social Contribution Tax on Net Profit relating to profits of foreign subsidiaries. Our defense is based on the following grounds: (i) section 74 of the Provisional Measure overlooks the treaties against double taxation signed between Brazil and the countries in which some of our subsidiaries are based; (ii) the National Tax Code forbids the aforementioned taxation as set forth by the Provisional Measure; (iii) even if section 74 of the Provisional Measure were valid, exchange variation should be excluded from the assessment of due taxes (according to the new accounting principles in force in Brazil and IFRS); and (iv) violation of the principle of prior taxation, in the event of taxation prior to December 2001. The first instance judgment was unfavorable to the Company and the recourse of appeal was received with suspensive effect. In March 2011, the Federal Regional Court of the 2<sup>nd</sup> Region objected to the prosecution of Vale s appeal. The court decision is awaited to be published to submit new recourses to the Higher Court of Justice and Federal Supreme Court.

In April 2011, the Higher Court of Justice issued a favorable decision in a suit in which similar grounds to the ones proclaimed by Vale were submitted. The direct action for unconstitutionality (ADIN, according to the initials in Portuguese) proposed by the National Confederation of Industry (CNI, according to the initials in Portuguese) challenging the constitutionality of section 74 of the Provisional Measure is still awaiting judgment by the Federal Supreme Court. Even if ADIN is determined to be unfounded, we will continue challenging the requirement on legal terms based on other existing defense arguments.

Vale was notified of IRPJ and CSLL requirements relating to profits earned by related and subsidiary companies abroad, enforcing a 75% penalty despite the suspensive effect granted to the appeal filed. At present, the decision issued by the Taxpayers Council is awaited to be published.

Chances of loss Remote

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company In the event of a final unfavorable decision, the profits earned and retained by Company subsidiary or related companies based abroad will proceed to be charged with taxes.

Amount provisioned (if any)

None

Jurisdiction

Federal Revenue Secretariat

Instance

1st administrative instance

Date of filing

12.02.2010

Parties in the suit

Federal Revenue Secretariat (plaintiff) and Vale (defendant)

Amounts, goods or rights involved

R\$3,095 billion

Main facts

In 2003 Vale filed a judicial claim to challenge the provisions of section 74 of Provisional Measure 2,158-34/2001, which establishes payment in Brazil of Income and Social Contribution Tax on Net Profit relating to profits of foreign subsidiaries. Our defense is based on the following grounds: (i) section 74 of the Provisional Measure overlooks the treaties against double taxation signed between Brazil and the countries in which some of our subsidiaries are based; (ii) the National Tax Code forbids the aforementioned taxation as set forth by the Provisional Measure; (iii) even if section 74 of the Provisional Measure were valid, exchange variation should be excluded from the assessment of due taxes (according to the new accounting principles in force in Brazil and IFRS); and (iv) violation of the principle of prior taxation, in the event of taxation prior to December 2001. The first instance judgment was unfavorable to the Company and the recourse of appeal was received with suspensive effect. In March 2011, the Federal Regional Court of the 2<sup>nd</sup> Region objected to the prosecution of Vale s appeal. The court decision is awaited to be published to submit new recourses to the Higher Court of Justice and Federal Supreme Court. In April 2011, the Higher Court of Justice issued a favorable decision in a suit in which similar grounds to the ones proclaimed by Vale were submitted. The direct action for unconstitutionality (ADIN, according to the initials in Portuguese) proposed by the National Confederation of Industry (CNI, according to the initials in Portuguese) challenging the constitutionality of section 74 of the Provisional Measure is still awaiting judgment by the Federal Supreme Court. Even if ADIN is determined to be unfounded, we will continue challenging the requirement on legal terms based on other existing defense arguments. Vale was notified of IRPJ and CSLL requirements relating to profits earned by related and subsidiary companies abroad, enforcing a 75% penalty despite the suspensive effect granted to the appeal filed. At present, the decision issued by the Taxpayers Council is awaited to be published

Chances of loss

Remote

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company In the event of a final unfavorable decision, the profits earned and retained by Company subsidiary or related companies based abroad will proceed to be charged with taxes.

Amount provisioned (if any)

None

22

#### **Table of Contents**

Main facts

Jurisdiction Federal Revenue Secretariat

Instance 1st administrative instance

Date of filing 11.01.2010

Parties in the suit Federal Revenue Secretariat (plaintiff) and Vale (defendant)

Amounts, goods or rights involved R\$11,763 billion

Timounts, goods of fights involved 11411,703 office

In 2003 Vale filed a judicial claim to challenge the provisions of section 74 of Provisional Measure 2,158-34/2001, which establishes payment in Brazil of Income and Social Contribution Tax on Net Profit relating to profits of foreign subsidiaries. Our defense is based on the following grounds: (i) section 74 of the Provisional Measure overlooks the treaties against double taxation signed between Brazil and the countries in which some of our subsidiaries are based; (ii) the National Tax Code forbids the aforementioned taxation as set forth by the Provisional Measure; (iii) even if section 74 of the Provisional Measure were valid, exchange variation should be excluded from the assessment of due taxes (according to the new accounting principles in force in Brazil and IFRS); and (iv) violation of the principle of prior taxation, in the event of taxation prior to December 2001. The first instance judgment was unfavorable to the Company and the recourse of appeal was received with suspensive effect. In March 2011, the Federal Regional Court of the 2<sup>nd</sup> Region objected to the prosecution of Vale s appeal. The court decision is awaited to be published to submit new recourses to the Higher Court of Justice and Federal Supreme Court. In April 2011, the Higher Court of Justice issued a favorable decision in a suit in which similar grounds to the ones proclaimed by Vale were submitted. The direct action for unconstitutionality (ADIN, according to the initials in Portuguese) proposed by the National Confederation of Industry (CNI, according to the initials in Portuguese) challenging the constitutionality of section 74 of the Provisional Measure is still awaiting judgment by the Federal Supreme Court. Even if ADIN is determined to be unfounded, we will continue challenging the requirement on legal terms based on other existing defense arguments. Vale was notified of IRPJ and CSLL requirements relating to profits earned by related and subsidiary companies abroad, enforcing a 75% penalty despite the suspensive effect granted to the appeal filed. At present, the decision issued by the Taxpayers Council is awaited to be published.

Chances of loss

Remote

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company In the event of a final unfavorable decision, the profits earned and retained by Company subsidiary or related companies based abroad will proceed to be charged with taxes.

Amount provisioned (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.

Jurisdiction 41<sup>a</sup> Vara Cível do Tribunal de Justiça do 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 losing the suit/ Reasons for importance for the

Company

The lawsuit was initiated in order to ensure the protection of the assets of the company and its operational activities. A possible unfavorable decision can increase the exposure of the company to MST attacks.

Amount provisioned (if any) None.

23

#### **Table of Contents**

Jurisdiction 30<sup>a</sup> Vara Federal da Justiça Federal do 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\$2.4 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. The lawsuit is at the phase of legal

discovery.

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

Jurisdiction 19a Câmara Civel do Tribunal de Justiça do Rio de Janeiro

Instance 2nd Instance

Date of filing 08.07.2009

Parties in the suit Vit Shoes Calçados (plaintiff) and Vale (defendant)

Amounts, goods or rights involved Ownership rights over the new logo launched by the company in

December 2007.

Main facts The plaintiff brought a compensation suit with request for early relief,

requesting an injunction to make the company refrain from using the logo of the Vale and its variations, and compensate for moral and material damages when the judgment is given. The preliminary injunction was rejected. Vale was awarded a favorable judgment of the merits, against which the plaintiff submitted a recourse to the Court of Justice of Rio de Janeiro. Said recourse was rejected by unanimous

decision. The pertinent decision is currently awaited to be published.

Chances of loss Remote.

Analysis of impact in the case of losing the suit/ Reasons for importance for the

Company

Any unfavorable decision in the lawsuit would generate financial losses for the Company and would harm its image, since Vale would lose the right to use its logo which is already widely known in Brazil and abroad.

Amount provisioned (if any)

None.

Jurisdiction

5<sup>a</sup> Turma do TRF da 2<sup>a</sup> Região

Instance

2nd Instance

Date of filing

10.11.1997

Parties in the suit

Federal Public Prosecutor Espírito Santo (plaintiff) and Federal Union, Gerdau, Açominas S.A., Companhia Siderúrgica de Tubarão, Usinas Siderúrgicas de Minas Gerais S.A., Vale, Odacir Klein, Luis Andre Rico Vicente, Jorge Eduardo Brada Donato, José Armando Figueiredo Campos, Rinaldo Campos Soares, João Jackson Amaral, Claudio José Anchieta de Carvalho Borges, Ivo Costa Serra and Companhia Docas do Espírito Santo CODESA (defendants)

Amounts, goods or rights involved

Incalculable amount application for annulment of the concession contract for use of port terminals for the Tubarão Complex.

Main facts

This is a Public Civil Action which aims to annul the authorization by which Vale and some of the other defendants operate the Port Terminal at Praia Mole, in the State of Espírito Santo. In November 2007, after 10 years of conducting the proceedings, Vale obtains a favorable decision judging the requests to be without foundation and recognizing the validity of contracts of accession that allow exploitation of port terminals located in Praia Mole. The Federal Public Prosecutor appealed on 01.04.08 and the lawsuit awaits

judgment in the Federal Regional Tribunal.

Chances of loss (probable, possible,

remote)

Remote

Analysis of impact in the case of losing the suit/ Reasons for importance for the

Company

Incalculable amount

Amount provisioned (if any)

None

24

#### **Table of Contents**

(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.

Jurisdiction 2a Vara Cível da Comarca de 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\$2.8 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 losing the suit/ Reasons for importance for the

Company

Any unfavorable decision in the lawsuit would generate financial

losses for the Company.

Amount provisioned (if any) None.

Jurisdiction 1<sup>a</sup> Vara Cível da Comarca de 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\$2.4 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 (15%) and remote loss (85%).

Analysis of impact in the case of losing the suit/ Reasons for importance for the

Any unfavorable decision in the lawsuit would generate financial losses for the Company.

Company

Amount provisioned (if any)

None.

4.4 Judicial, administrative or arbitral awards, which are not under confidentiality, in which the company or its subsidiaries are a party and whose Appellees are administrators or former administrators, owners or ex-owners or investors of the company or its subsidiaries

Jurisdiction Appeals Council of the National Financial System CRSFN

Instance 2nd Instance

08.23.2005 Date of filing

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 Praca 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 O. Bruggemann, Rinaldo Campos Soares, Roberto Gottschalk, Valter Luis de Sousaand 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. In December 2009, the CVM offered an automatic appeal to CRFSN, which has not yet been judged.

Chances of loss Remote.

Analysis of impact in the case of losing the suit/ Reasons for importance for the Company

The eventual reversal of the decision at the first instance can result in the application of a warning or fine for the company.

Amount provisioned (if any) None.

25

#### **Table of Contents**

Jurisdiction Prosecution in progress before 48a Vara Cível do Tribunal de Justiça

do Rio de Janeiro. Special Recourse under way before 3a Turma do

STJ and Extraordinary Recourse still not delivered to STF.

Instance 3rd Instance

Date of filing 09.05.2007

Parties in the suit Petros (plaintiff) and Vale (defendant)

Amounts, goods or rights involved A judicial deposit was made by Vale on 08.03.2010 for

R\$346,773,920.20 for the provisional execution by Petros. Until judgment has become final and binding, the amount will continue

judicially deposited and may not be withdrawn.

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. However, recourses can still be filed against this decision. 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

Any unfavorable decision could generate significant financial damage to Company, in light of the amounts under discussion. 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).

Amount provisioned (if any) R\$381.4 million

Jurisdiction 18<sup>a</sup> Vara Federal de 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. New expert evidence is in progress.

Chances of loss (probable, possible, remote)

Possible

Analysis of impact in the case of losing

the suit

Incalculable amount

Amount provisioned (if any)

None

Table of Contents 47

26

# Procedure No. 0529364272010.8.13.0145

7<sup>a</sup> Vara Cível de Juiz de Fora/MG Jurisdiction

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)

Incalculable Amounts, goods or rights involved

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.

Chances of loss (probable, possible,

remote)

Possible

Analysis of impact in the case of losing

the suit

Any unfavorable decision in the lawsuit would generate financial

losses for the Company and would damage its image.

Amount provisioned (if any) None

Procedure No. 0497166342010.8.13.0145

Jurisdiction 8th Civil Court of Juiz de Fora Minas Gerais

Instance 1st Instance

Date of filing August 2010.

Parties in the suit SUDFER (plaintiff) and Júlio Fontana Neto, Henrique Aché Pillar,

José Paulo de Oliveira Alves, Pablo Javier de La Quintana

Bruggemann, Lauro Henrique Campos Rezende, Wanderlei Viçoso Fagundes, Hugo Serrado Stoffel, Guilherme Frederico Escalhão, Delson de Miranda Tolentino, Marcus Jurandir de Araújo Tambasco, Chequer Hanna Bou-Habib, Roberto Gottschalk, Joaquim de Souza Gomes, Luiz Antônio Bonaguara, Companhia Siderúrgica Nacional S.A., Minerações Brasileiras Reunidas S.A., Usiminas Usinas

Siderúrgicas de Minas Gerais, Gerdau S.A., and Vale S.A. (defendant)

Amounts, goods or rights involved

Incalculable

Plaintiff requires payment for moral damage based on the fact that the Main facts

> image of Clube SUDFERwas enormously damaged for 9 years, and that said company did not receive dividends, and thus, was in pre-insolvency status. Plaintiff also requires shares to be sold under same conditions as it had the right to purchase at the time of the 2nd offer of shares made by MRS Logística, besides the loss of earnings by the dividends not received. MBR is also involved. 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

Chances of loss (probable, possible,

remote)

Possible

None

Analysis of impact in the case of losing

the suit

Any unfavorable decision in the lawsuit would generate financial

losses for the Company and would damage its image.

Amount provisioned (if any)

4.5 Impact analysis in case of loss of any relevant and sensitive cases that have not been disclosed in items 4.3 and 4.4 above, informing values involved

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

27

4.6 Judicial, administrative or arbitral lawsuits, repetitive or related, based on similar legal facts and causes, which are not under secrecy and which together are relevant, in which the company or its subsidiaries are a party, itemized as labor, tax, civil and other.

(i) Labor

Fact and/or legal cause

The more recurring objects are responsibility, subsidiary/joint liability,

overtime, additional payment for hazardous/unhealthy conditions,

hours in itinere and penalty.

Amounts involved R\$4.1 billion

Amount provisioned (if any) R\$688.8 million

Company practice or that of subsidiary which caused the contingency

Difference of interpretation given by the company, employees and unions to various facts, legal and regulatory instruments concerning

the issues above.

(ii) Tax

Fact and/or legal cause Determining the basis for the calculation of financial compensation for

exploitation of mineral resources CFEM, which in a simple way

means mining royalties.

Amounts involved R\$7,880 billion for various collections of Financial Compensation for

Mineral Resources Exploitation CFEM.

Amount provisioned (if any) R\$225 million

Company practice or that of subsidiary

which caused the contingency

Differences in values resulting from tax deductions and travel expenses, arbitration and prescription term for collection. Vale also questions non-compliance with the duly legal procedure, the incidence of CFEM on the sale of pellets and payment by CFEM on revenues generated by our subsidiaries abroad. We state that collections are inappropriate. The decisions pronounced in the 1st Instance were partially favorable to the Company, particularly as to the grounds on deduction of taxes, prescription term for collection, and arbitration.

(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.

Amounts involved R\$495.4 million

Amount provisioned (if any) R\$395.1 million

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

Not applicable. There are no other significant contingencies involving Vale and its subsidiaries.

4.8 Rules of the country of origin of foreign issuer and rules of the country in which the foreign Company s securities are held in custody, if different from the country of origin

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

28

# 5.1 Description, both quantitative and qualitative, of the main market risks to which the Company is exposed, including foreign exchange risk and interest rates

Considering the nature of the business and operations of Vale, the main factors of market risk to which the company is exposed are: (i) product prices, (ii) exchange rates, (iii), interest rates and (iv) inputs and other costs.

Risk of product prices

Vale is exposed to market risks associated with price volatility for its products in the international market. The Company s main products are: iron ore and pellets, nickel, copper products, aluminum products, fertilizers and coal. Nickel, aluminum, and copper are sold in an active global market and traded on commodity exchanges such as the London Metal Exchange and the New York Mercantile Exchange. The prices of these metals are subject to significant fluctuations and are affected by many factors, including macroeconomic conditions and real and expected policies, levels of supply and demand, availability and cost of substitutes, inventory levels, investments by commodity funds, and other actions by participants in the commodities market.

Exchange risk and interest rate

Vale s cash flow is subject to price volatility in various currencies. While commodity prices are mostly indexed to the U.S. dollar, most of the costs, expenses and investments are indexed to currencies other than U.S. dollar, mainly the Brazilian real and Canadian dollar.

Vale s cash flow is also exposed to interest rates on loans and financing. The debt linked to variable interest rates of the U.S. dollar consists mainly in loans including pre-payment of exports operations, loans at commercial banks and multilateral organizations. In general, these debts are indexed to the Libor rate (*London Interbank Offered Rate*). The natural hedge between fluctuations in interest rates and U.S. prices of metals reduces the volatility of Vale s cash flow. The percentages of the costs tied to various currencies are given in table below:

## SUMMARY OF CONSLIDATED COST PER CURRENCY

2010	BRL	USD	CAD	IDR	AUD	POC	<b>TOTAL</b>
BRGAAP	69%	15%	11%	1%	2%	1%	100%
USGAAP	64%	21%	11%	1%	2%	0%	100%

As regards revenue, 17.8% is denominated in Brazilian Reais and 82.2% are denominated in foreign currency, mainly U.S. dollars.

Regarding exposure to interest rate, after completion of hedge operations the company has 34% of its debt indexed to floating interest rates.

In December 31, 2010, the value of principal and interest on debt denominated in Brazilian Reais, and converted by swaps into U.S. dollars was R\$9.7 billion (US\$5.8 billion), and the value of the principal and interests of the debt denominated in euros and converted by swaps into U.S. dollars was 500 millions (US\$682 million.) The average cost of these transactions was 3.35% after the swap transactions. Due to market liquidity conditions, the average term of swap transactions may be lower than the average term of the debt.

Risk of inputs and other costs

Vale is exposed in various markets to risk factors related to cost items. Among them, the most important are: energy and purchase of intermediate or final products. For more details about risks to supply of equipment, services and labor, see item 4.1.

29

#### **Table of Contents**

Rising costs of energy or power failure can adversely affect the Company s business.

Energy costs are a major component of our production costs and represent 17.4% of our total cost of goods sold in 2010. To meet our energy demands, we depend on the following sources, measured in tons of oil equivalent (TOE): petroleum products, which accounted for 42% of total energy demand in 2010, electricity (29%), coal (15%), natural gas (10%), and other sources of energy (4%).

Costs with fuel represented 10.7% of the cost of goods sold in 2010. Price rises for oil and gas adversely affect our business interests in logistics, mining, pellets, nickel, and alumina.

Electrical energy costs represented 6.6% of the total cost of goods sold in 2010. If it is not possible to guarantee a reliable access to electricity at reasonable prices, we may be forced to reduce production or face higher production costs. Any of these alternatives would negatively affect the results of operations. There is the risk of shortage in countries where we operate and have projects, due to the excess of demand or weather conditions, such as flood or dry

There has been shortage of electricity in the world, and there is no assurance that the growth of power generation capacity in the countries where we operate, will be enough to meet our future increase of consumption. A future shortage and government policies to combat or avoid shortages can negatively affect the cost and supply of electricity in our operations.

In our subsidiary PT International Nickel Indonesia Tbk (PTI), we process lateritic nickel ore through a pyrometallurgical process, which requires high energy consumption. Although PTI currently generates most of the electricity used in their operations in their own hydroelectric power plants, some hydrological factors such as low rainfall are likely to negatively affect the production at PTI electric power plants, which may considerably increase the risk of increased costs or reduced production by PTI.

# 5.2 Policy for Management of market risks, including objectives, strategies, and instruments.

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 interest rates, exchange rates, commodity prices, and supplies and other costs on business results (market risk), but also the risk from the obligations assumed by third parties to the Company (credit risk) and those inherent to production processes (operational risk).

Vale believes that risk management is essential to support its growth strategy and financial flexibility. The risk reduction with regard to future cash flows improves the Company s credit, facilitating access to various markets, and reducing the cost of any borrowings. As a result, the Board established a policy of corporate risk management and an Executive Committee for Risk Management, to advise the Board on these issues.

The politicies of corporate risk management determine that Vale regularly assess the risk associated with cash flow, as well as proposals for risk mitigation. As already highlighted, these, when necessary, will be implemented in order to reduce the risks in relation to the implementation of commitments made by the Company, both with third parties as to their shareholders.

## a. Risks for which protection is sought

Vale conducts hedge operations with the goal of reducing the risk to commodity prices, foreign exchange, interest rates, costs, among others. These risks are detailed in item 5.2 c.

30

## 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 such events would have, considering the so-called hedges naturally occurring in the company s portfolio. Thus, in assessing the risk associated with Vale s business, one can observe the positive effect associated with the diversification of its portfolio of products and currencies. This diversification implies a natural reduction of risk levels for the company. Any strategy to mitigate risk, when necessary, will be implemented when it significantly contributes to reducing the volatility of cash flow beyond the levels initially observed and desired.

Hedge programs seek to reduce the volatility of cash flow and reduce the likelihood of a breach of contract.

# 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:</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, indexed to the CDI and / or TJLP (long term interest rates) to U.S. dollars, in loans and financing contracts. In these operations, Vale pays fixed and / or floating rates in U.S. dollars and receives remuneration linked to the CDI, TJLP and / or fixed rates in Reais.

<u>Currency cash flow hedge program:</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>Program of exchange protection of cash flow</u>: In order to reduce the volatility of the cash flow, non deliverable forwards 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 (London Interbank Offered Rate).

<u>Protection program for loans and financing subject to floating rate in U.S. dollars</u>: 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 pays a fixed rate to the counterparty and receives a remunaration linked to the floating rate (Libor)

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

<u>Hedge program for cash flow of aluminum:</u> In order to protect cash flow for the year 2010, Vale carried out protection operations where it fixed the pricing of part of the sales of aluminum in the period. In this program, the Company used options and forwards contracts strategies.

<u>Strategic Protection program for cash flow of nickel:</u> The objective of this program is the protection of cash flows for the year 2010, whereby Vale carries out protection operations fixing the pricing of part of the sales of nickel in the period. In this program, the Company used forwards contracts.

31

Hedge program for the selling of nickel: The objective of this program is the protection of cash flows for the years 2010 and 2011, whereby Vale carries out protection operations fixing the pricing of part of the sales of nickel in the period. In this program, the Company used forwards contracts

Sales program for nickel at a fixed price: aiming to maintain its exposure to fluctuations in the price of nickel, it has been carried out derivative transactions to convert to a floating-price basis commercial nickel contracts with those clients seeking to fix the price. The operations are intended to ensure that prices for these sales are equivalent to the average price of the London Metal Exchange 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 (London Metal Exchange) 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 Strategic Protection program for cash flow of nickel or the Hedge program for selling of nickel are performed, the Sales program for nickel at a fixed price is discontinued. In this program, Vale used future contracts.

<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 (London Metal Exchange) or over-the-counter.

Protection Program for purchase of fuel oil Bunker Oil: The objective of this program is to reduce the impact of fluctuations in the price of fuel oil (Bunker Oil) when procuring freight, and hence reduce the volatility of Vale s cash flow. The operations were made by the contracting of future fuel oil purchases. Protection program for the contracting of freight charges: The objective of this program is to reduce the impact of price fluctuations of sea freight contracted to make viable the sale of products in CIF Cost, insurance and freight and CFR Cost and freight modalities, and hence reduce the volatility of the Company s cash flows. The transactions are made through FFA contracting Forward Freight Agreement (hedging transaction price for shipping).

<u>Protection program for the selling of coal</u>: The objective of this program is the protection of cash flows for the year 2010, whereby Vale carried out protection operations fixing the pricing of part of the sales of coal in the period. In this program, the Company used forwards contracts.

<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 over-the-counter

## 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 c; (ii) analysis 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 monthly monitoring based on our consolidated position, allows for the accompaniment of the financial results with the impact on the cash flow.

32

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

The Company has no financial instruments with other goals than asset protection (hedge).

# f. Organizational structure for risk management control

Beyond the normative framework of risk management, Vale also has a corporate structure with well defined responsibilities.

The Board is responsible for the evaluation and approval of risk mitigation strategies that were recommended by the Executive Committee for Risk Management. The Committee is responsible for issuing opinions on the principles and tools for risk management, as well as regularly reporting to the Executive Board on the process of managing and monitoring risks and on the major risks to which the Company is exposed, as well as the impact of these on cash flow. 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 and its subsidiaries. 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.

At Vale, the area that formally answers for the risk management is the Department of Corporate Risk Management, that reports directly to the Executive Board of Finance and Relationships with Investors.

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

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

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

# 5.3 Compared to last fiscal year, an indication of significant changes in key market risks to which the Company is exposed or the risk management policy adopted

There were no events that significantly alter the main market risks to which the Company is exposed.

## 5.4 Other information that the Company deems relevant

There is no further relevant information about this item 5.

33

## **Table of Contents**

## 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 Undetermined

**Date of Filing with CVM** 02.01.1970

# **6.3 Brief Company 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.

# **Table of Contents**

#### 1943

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

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

#### 1944

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

#### 1952

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

#### 1953

First shipment of iron ore to Japan.

#### 1954

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

## 1962

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

#### 1964

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

#### 1966

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

#### 1967

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

#### 1968

Vale shares become part of the IBOVESPA index.

#### 1969

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

#### 1970

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

#### 1972

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

#### 1974

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

#### 1975

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

#### 1976

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

#### 1977

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

35

## 1979

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

## 1980

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

#### 1982

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

#### 1984

Inauguration of Vale office in Japan.

## 1985

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

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

## 1986

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

#### 1987

The EFC begins operating on a commercial scale.

#### 1989

Implementation of the Profit Sharing Program for Vale employees.

## 1994

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

#### 1995

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

## 1996

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

## 1997

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

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

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

## 1998

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

#### 1999

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

## 2000

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

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

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

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

## 2001

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

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

In March, shareholdings involving Vale and CSN are unwound.

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

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

#### 2002

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

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

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

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

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

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

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

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

#### 2003

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

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

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

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

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

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

#### 2004

On July 02, the Sossego mine opens, the first copper mine in Brazil, in the State of Pará. This project, 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.

## 2006

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

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

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

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

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

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

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

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

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

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

# 2007

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

On January 30, the acquisition of Inco (now Vale Inco 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).

38

## 2008

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

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

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

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

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

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

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

On October 31, Vale announces a reduction in its rate of production of iron ore, pellets, nickel, manganese, ferro-alloys, aluminium 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 for CAD \$81 million.

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

## 2009

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

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

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

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

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

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

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

39

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

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

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

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

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

## 2010

On January 22, integrated subsidiary Valesul Alumínio S.A. (Valesul) enters intro 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. (formerly Fertilizantes Fosfatados S.A. Fosfertil) and Vale Fosfatados S.A. (formerly Bunge Participações and Investimentos S.A.). The total cost of these acquisitions was US\$5.829 billion. The sellers included Bunge Ltd., The Mosaic Company (Mosaic), Yara Brasil Fertilizantes S.A. and other Brazilian companies.

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

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

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

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

## 2011

On February 28, Vale announces the completion of the operation announced on 02.05.2010 with Norsk Hydro ASA (Hydro) to transfer all its interests in Albras Alumínio Brasileiro S.A. (Albras), Alunorte Alumina do Norte do Brasil S.A. (Alunorte) and Companhia de Alumina do Pará (CAP), receiving in return 22% of the outstanding common shares of Hydro and US\$503 million in cash.

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 8, Vale and Metorex Limited (Metorex) agree on the terms of Vale s offer to acquire the total capital of Metorex for US\$1.125 billion. Metorex produces copper and cobalt, has operations in the African copper belt, and operates two mines in Zambia and Ruashi. Moreover, Metorex has three projects in the Democratic Republic of Congo, one of them at a development stage and the other two at an exploration stage.

40

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 currently 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.

6.5 Description of main corporate events such as incorporations, mergers, split-offs, incorporation of shares, disposal and acquisition of corporate control, acquisition and disposal of major assets, undergone by the Company, its subsidiaries and related companies 2008

Jubilee Mines

On 12.02.2008, Vale sold its minority stake in Jubilee Mines, a nickel producing company in Australia, for US\$130 million (R\$232 million on the date of receipt), received in a one-time payment.

Incorporation of Ferro Gusa Carajás S.A. (FGC) and Mineração Onça Puma S.A. (MOP)

On 29.04.2008 and 29.12.2008 respectively, the incorporation of wholly owned FGC and MOP by Vale was approved, without issuing new shares and with no change in the capital of Vale. The asset values of FGC and MOP were evaluated, on 03.28.2008 and 28.11.2008 respectively, by Deloitte Touche Tohmatsu and ACAL Consulting and Audit S/S, for R\$386,733,909.42 and R\$2,916,326.00 respectively. The incorporations were intended to strengthen the strategic positioning of Vale to simplify and streamline administrative and financial operations.

Acquisition of Mining Rights of Mineração Apolo

On 05.05.2008 we acquired mining and surface rights belonging to Apolo in the municipalities of Rio Acima and Caeté, state of Minas Gerais. The total cost of acquisition, which added to Vale resources estimated at 1.1 billion metric tons of iron ore, was US\$154.3 million (equivalent to R\$255.8 million at the date of disclosure of acquisition), of which US\$9.3 million (equivalent to R\$15.4 million on the date of disclosure of the acquisition) was paid as a purchase option in May 2005 and US\$145 million (equivalent to R\$240.4 million at the date of disclosure of the acquisition) in 2008, in a one-time payment.

Global Offering

On 05.08.2008, Vale a held Primary Public Offering (recorded under N° CVM/SRE/REM/2008/010) of 256,926,766 common shares and 189,063,218 preferred class A shares, all nominative, without par value issued by Vale, including in the form of American Depositary Shares (ADSs), represented by American Depositary Receipts (ADRs), at the price of R\$46.28 per common share and US\$29.00 or 18.25 per ADS ordinary, and at R\$39.90 per class A preferred share and US\$25.00 and 15.74 per ADS or preferred, totalling R\$19,434,193,128.68. Under the International Offering were placed 63,506,751 preferred class A shares and 80,079,223 common shares in the form of ADSs represented by ADRs. The total number of shares contemplated in the Offer, also included 24,660,419 Class A preferred shares issued by Vale in respect of the exercise of the Supplementary Lot Option by the Lead Coordinator of the Offer, this option having been granted under Article 24 of CVM Instruction 400.

The implementation of the Global Offer, its terms and conditions and the capital increase for Vale were authorized at Vale Board meetings held on June 12, 2008, July 1, 2008, July 17, 2008 and August 5, 2008 and setting of the price per share was approved at a meeting of Vale Board held on July 16, 2008 and the issuance of shares for the Supplementary Lot Option was approved at a meeting of Vale Board held on August 5, 2008.

There was no significant impact on equity as the Global Offering was pulverized.

41

## 2009

Acquisition of potash assets

On 30.01.2009, Vale signed with Rio Tinto plc (Rio Tinto) a contract of sale and purchase for the acquisition, on a cash basis, 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 provinces of Mendoza and Neuquen, Argentina, and 100% of the Regina project, 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. Regina is at the exploration stage, with potential for an estimated annual production of 2.8 Mt of KCl. The project area includes 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. Approval of the acquisition by the Argentine antitrust authority is pending. *Acquisition of iron ore assets* 

On 30.01.2009, Vale enters into an agreement to acquire Corumbá iron ore operations located in Mato Grosso do Sul, belonging to Rio Tinto Plc (Rio Tinto) and other subsidiaries for US\$750 million (equivalent to R\$1,473 billion on the date of payment), by means of a one-time payment. 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 24.03.2009, 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.

Acquisition of coal assets in Colombia

On 01.04.2009, 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), in a one-time payment, 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. As Colombia is the third largest exporter of thermal coal of high quality in the world, given the low sulphur content and high calorific value, Vale aims to build a new platform for coal assets in the country in order to expand their options for growth in this segment. 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 21.09.2009, Vale concluded 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 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 CSA.

42

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 31.12.2009 for US\$34 million (equivalent to R\$59 million), received in a one-time payment, 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 Inco in Ellwood City, Pennsylvania, USA, is dedicated to the recycling of nickel, chromium and other metal by-products generated by the production of stainless steel and specialty metals. Jinco operates Chinese nickel facilities and produces nickel sulphate and nickel chloride. That same month, Vale entered into agreements to sell its stake of 76.7% in Inco Advanced Technology Materials (Dalian) Co. Ltd. (Iatm-D) and 77% of Inco Advanced Technology Materials (Shenyang) Co. Ltd. (Iatm-S), which operates manufacturing facilities for nickel foam in China for US\$7 million (equivalent to R\$16 million), received in a one-time payment, to partners of the remaining shareholders. Due to the above transactions, Vale no longer has any equity interest in Inmetco, in Jinco, in IATM-D and in IATM-S. 2010

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

On 22.01.2010 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 22.01.2010, 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 assets of Valesul included in the agreement are: (i) anode factory, (ii) reduction, (iii) foundry, (iv) industrial and administrative service area, and (v) inventories.

Disposal of minority interests in Bayóvar

On 07.07.2010, 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.

Acquisition of iron ore deposits (Simandou)

On 30.04.2010, 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 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 will be responsible for asset management, marketing and sales of the joint venture with the exclusive off-take of the iron ore produced.

43

## Acquisition of fertilizer assets

On 27.05.2010, 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 S.A. (Vale Fertilizantes) formerly known as Fertilizantes Fosfatados S.A. Fosfertil (Fosfertil) 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 BPI s Brazilian fertilizer asset portfolio, which includes mining of phosphate rock and phosphate production units but does not include distribution/retail operations.

Additionally, on 29.09.2010 Vale completed the acquisition, for US\$1,029,811,129.77 (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.

Sale of minority interest in Vale Oman Pelletizing Company

On 29.05.2010, 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 will be effected as follows: (i) US\$71 million paid by OOC against transfer of all the shares held by Vale Mauritius Limited; (e) 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 01.06.2010, 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 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.

44

## **Table of Contents**

Sale of interest in PPSA

On 29.06.2010, Vale sold 86.2% of its interest in Pará Pigmentos S.A. (PPSA) and other kaolin mining rights located in Pará. The assets were sold to Imerys S.A., a company listed on Euronext, for US\$74 million (equivalent to R\$131 million on the date of transaction), in a one-time payment.

Acquisition of interest in SCDN

On 21.09.2010, Vale acquired 51% of Sociedade de Desenvolvimento do Corredor Norte 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 the concession 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 (CDN) and Central East African Railway (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.

## 2011

Restructuring of aluminum assets portfolio

On 28.02.2011, Vale announced the completion of the operation, through subsidiary Vale Austria Holdings GmbH, with Norsk Hydro ASA (Hydro), as announced on 02.05.2010, 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.

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.

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 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.

Acquisition of copper assets in the African copper belt

On 08.04.2011, Vale and Metorex Limited (Metorex) agreed on the terms of Vales offer to acquire the whole capital of Metorex for US\$1.125 billion (equivalent to R\$1.765 billion on the date of agreement), to be settled in cash. Metorex shareholders will be summoned to consider the acquisition proposal, which will be implemented through a scheme of arrangement, as defined by corporate law in South Africa. Acquisition of 100% of the capital requires approval of at least 75% of the capital stock represented by the shareholders present at the shareholders meeting. We have already received the irrevocable commitment to do so by shareholders representing 25.8% of the voting capital of Metorex. In addition, the acquisition is also subject to (i) applicable governmental and regulatory approvals; (ii) approval by minority shareholders in Metorex subsidiaries; (iii) sale or transfer of Sable Zinco Kabwe Limited, an operation for cathode copper and cobalt processing in Zambia, from Metorex to third parties; (iv) no rejection to the purchase from the shareholders of Metorex representing 5% or more of the capital stock of Metorex, or if there is rejection of more than 5%, that the right of recess be not exercised with respect to the 5% or more of the total of shares of Metorex; and (v) statement of consent with respect to the purchase from the creditors of Metorex or the partnerships that belong to the Metorex Group that have rights with respect to the change of control of Metorex, including the rights arising from the change of control as a hypothesis of advanced maturity of the obligations. The acquisition must be submitted for approval before the antitrust authorities of Zambia, South Africa and China.

Metorex produces copper and cobalt from operations in the African copper belt. Metorex has two mines in operation Chibuluma, located in Zambia, in which it holds an 85% interest, and Ruashi, in the Democratic Republic of Congo, in which it holds a 75% interest. Besides, Metorex has three projects in the Democratic Republic of Congo, one of them at a development stage and the other two at an exploration stage.

Acquisition of an interest in Belo Monte power project

On 28.04.2011, the Board of Directors approved the acquisition, subject to certain conditions, of up to 9% of the capital of Norte Energia S.A. (NESA), a stake currently 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 will reimburse Gaia for its capital contributions to NESA and will undertake 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 our strategy to reduce operating costs and minimize the price of power and the risks of supply. The operation has not yet been completed and is subject to be submitted to the Administrative Board for Economic Defence (CADE) and other agencies belonging to the Brazilian System of Fair Competition (SBDC, according to the initials in Portuguese), as well as to approval by the National Agency of Electric Power (ANEEL, according to the initials in Portuguese). A Shareholders Agreement will be executed to regulate voting rights.

# 6.6 Bankruptcy filings based on relevant values, or judicial or extrajudicial recovery of the Company, and the current status of such requests, if applicable

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

# 6.7 Other information that the Company deems relevant

There is no further relevant information about this item 6.

46

#### **Table of Contents**

### 7.1 Summary of Company and Subsidiary activities

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, kaolin and platinum group metals (PGMs) and other products. To sustain its growth strategy, Vale is actively engaged in mineral exploration in 24 countries. The Company operates large logistics systems in Brazil integrated with its mining operations, including railroads, maritime terminals and a port. 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 Operational segment(s) disclosed in the consolidated financial statements for the past 3 fiscal years:

# 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, maritime terminals and ports, linked to these operations. Manganese ore, ferroalloys and coal 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 aluminum it involves aluminum marketing, alumina refining and smelting aluminum metals and investments in joint ventures and bauxite mining partnerships PGMs and other precious metals and cobalt.
- (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 rail transport, port 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.

47

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

	2010	2009		
In R\$ thousands		% of		% of
	Net		Net	
Segment	Revenue	total	Revenue	total
Bulk Materials	61,482,495	74	30,545,038	63
Base Metals	14,377,415	17	13,744,012	28
Fertilizers	3,013,814	4	777,991	2
Logistics	2,773,115	3	2,480,827	5
Other Investments	1,578,167	2	948,698	2
<b>Total Revenue</b>	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

	2010		2009	
In R\$ thousand		% of		% of
Segment	Profit/Loss	total	<b>Profit/Loss</b>	total
Bulk Materials	30,855,508	102	11,258,393	109
Base Metals	(739,403)	-2	(1,245,903)	-12
Fertilizers	(58,874)		333,627	3
Logistics	453,828	1	329,019	3
Other Investments	(440,508)	-1	(338,186)	-3
Net Total Profit/Loss	30,070,051	100	10,136,950	100

As of January 1, 2010, Vale adopted all resolutions issued by the CPC (Accounting Standards Committee) retroactively to January 1, 2009. Therefore, the financial statements related to fiscal year ending on December 31, 2010 are the first consolidated financial statements submitted by the Company pursuant to International Financial Reporting Standards IFRS. Thus, the financial statements regarding fiscal year ending on December 31, 2008, since they were prepared using different accounting standards, cannot be compared to financial statements for fiscal years ending on December 31, 2009 and December 31, 2010, and therefore, no financial statements related to fiscal year 2008 were included.

### 7.3 Products and services that correspond to the operating segments disclosed in item 7.2

- a. Characteristics of the production process
- b. Characteristics of the distribution process
- v. Characteristics of the markets, in particular:
  - i. competition conditions in the markets
  - i. participation in each market
- d. Possible seasonality
- e. Main supplies and raw materials, reporting:
  - i. description or relationships maintained with providers, including if they are subject to government control or regulation, indicating the applicable legislating body;

- ii. eventual dependence on fewer providers; and
- iii. eventual volatility in its prices.

# A. 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.

A.1 Iron Ore

48

#### A.1.1. Production Process

Vale runs the majority of its iron ore operations in Brazil directly and through its subsidiary Urucum Mineração S.A. (Urucum) and 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).

	Vale Participation						
Firm	System	Voting	Total	Vale Partners			
		(%)	)				
Vale	North, Southeastern, Southern and						
	Centralwestern						
Urucum	Centralwestern	100	100				
MCR	Centralwestern	100	100				
Samarco		50	50	<b>BHP</b> Billiton			
~ 1	~						

Southeastern System

The Southeastern System mines are located in the Iron Quadrangle region of the state of Minas Gerais, where they are divided into three mining complexes (Itabira, Minas Centrais and Mariana).

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, which is at least 63.5% average iron grade.

We conduct open-pit mining operations in the Southeastern System. At the three mining complexes, 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 2010, we produced 65.3% of the electric energy consumed in the Southeastern System at our hydroelectric power plants (Igarapava, Porto Estrela, Funil, Candonga, Aimorés, Capim Branco I and Capim Branco II).

We own and operate integrated railroad and terminal networks in the three mining complexes, which are accessible by road or by spur tracks of our EFVM railroad. The EFVM railroad connects these mines to the Tubarão port in Vitória, in the state of Espírito Santo. For a more detailed description of the network, please see *Logistics*.

### 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 use wet beneficiation processes to convert run-of-mine obtained from open-pit mining operations into sinter feed, lump ore and pellet feed. In 2010, we produced 63.3% 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 own a 41.5% 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.

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, with an average of 62.2%. In September of 2009, we concluded the acquisition of the mine of

level of hematite ore, with an average of 62.2%. 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 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.

### A.1.2. Production

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

	Production for fiscal year ended on				
		December 31			Recovery
Mine/Plant	Type	2008	2009	2010	Rate
		(m	illion metric tons)		(%)
Southeastern System					
Itabira					
Cauê(1)	Open pit	21.5	13.8	19.3	68.0
Conceição(1)	Open pit	20.3	17.3	19.4	75.2
Minas Centrais					
Água Limpa/Cururu(2)	Open pit	4.7	1.4	5.0	52.9
Gongo Soco	Open pit	5.0	2.7	6.8	90.1
Brucutu	Open pit	26.4	23.6	29.7	79.1
Andrade(3)	Open pit	1.4	0.7		
Mariana					
Alegria	Open pit	12.3	12.1	13.6	81.8
Fábrica Nova(4)	Open pit	14.0	13.7	12.5	66.9
Fazendão(5)	Open pit	9.8	3.1	10.6	100
Timbopeba	Open pit				
Total Southeastern System		115.4	88.5	116.9	

50

		Recovery			
Mine/Plant	Type	2008	2009	2010	Rate
		(mill	ion metric tons)	)	(%)
Southern System					
Minas Itabirito					
Segredo/João Pereira(6)	Open pit	12.1	8.4	12.4	73.5
Sapecado/Galinheiro(7)	Open pit	15.1	9.8	17.7	67.0
Vargem Grande					
Tamanduá(8)	Open pit	9.8	7.3	8.6	83.4
Capitão do Mato(8)	Open pit	9.7	8.0	8.2	83.4
Abóboras	Open pit	4.2	5.4	5.2	100.0
Paraopeba					
Jangada	Open pit	4.3		3.5	98.9
Córrego do Feijão	Open pit	8.4	5.6	6.8	79.3
Capão Xavier(9)	Open pit	13.5	10.9	9.3	82.3
Mar Azul	Open pit	3.5		3.0	100.0
Total Southern System		80.5	55.2	74.7	
Centralwestern System					
Corumbá	Open pit		0.4	2.8	62.9
Urucum	Open pit	1.0	0.5	1.4	55.3
Total Sistema do Centro-Oeste		1.0	1.0	4.2	
Northern System					
Serra Norte(10)					
N4W	Open pit	44.3	31	30.2	92.4
N4E	Open pit	13.2	16.9	34	92.4
N5	Open pit	39.1	36.8	37	92.4
Total Northern System		96.5	84.6	101.2	
Vale		293.4	229.3	297.0	
Samarco (11)		8.3	8.6	10.8	57.2
Total		301.7	238.0	307.8	

- (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 pocessed 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.

### A.2 Pellets

### **A.2.1 Production Process**

Directly and through joint ventures, Vale produces iron ore pellets in Brazil, in Omã and China, as shown in the table below. The estimated total nominal capacity is 45.3 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 and 1.2 million metric tons per year at Anyang. With the launching of our pelletizing units in Omã, we will increase our annual nominal capacity by 9.0 million metric tons.

51

		O	ur	
		Partic	ipation	
		Voting		
Firm	<b>Local Operation</b> <i>Brazil:</i>	(%)	Total	Our Partners
Vale	Tubarão, Fábrica, Vargem Grande e São Luís			
Hispanobras	Tubarão	51	50.9	Arcelor Mittal
Samarco	Mariana and Anchieta <i>China:</i>	50	50	BHP Billiton
Zhuhai YPM	Zhuhai, Guangdong	25	25	Zhuhai Yueyufeng Iron and Steel Co, Ltd, Pioneer Iron and Steel Group Co, Ltd.
Anyang Yu Vale Yongtong Pellet Co. Ltd.	Anyang, Henan  Omã:	25	25	Anyang Iron & Steel Co. Ltd.
W-1- O D-11-4'-'-		100	100(1)	
Vale Oman Pelletizing Company LLC (VOPC)	Complexo industrial de Sohar	100	100(1)	

(1) We signed an agreement to sell 30% of our voting stock and total capital in Oman Oil Companhia S.A.O.C. (OOC).

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 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. Iron ore from Alegria and from Fábrica Nova mine, 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 Yueyufeng Iron & Steel (YYS), which is also located in the Yueyufeng Steelmaking Complex. We also have a 25% participation in Anyang Yu Vale Yongtong Pellet Co. Ltd, 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.

We sell pellet feed to our pelletizing joint ventures at market prices. We have supplied all of the iron ore requirements of our wholly owned pellet plants and joint ventures, except for Samarco and Zhuhai YPM, to which we supply only part of their requirements. Of our total 2010 pellet production, 73.2% was blast furnace pellets, and the remaining

26.8% was direct reduction pellets, which are used in steel mills that employ the direct reduction process rather than blast furnace technology.

We sell iron ore to our pelletizing joint ventures. in 2010, we sold 4.2 million metric tons to Hispanobras, 12 million metric tons to Samarco and 1.1 million metric tons to Zhuhai.

52

#### A.2.2. Production

The table below provides information regarding our main pellet production.

	Production for fiscal year ending on December				
	31				
Firm	2008	2009	2010		
	(million metric tons)				
Vale(1)	26.6	15.3	36.3		
Hispanobras(5)	1.9	0.6	1.9		
Itabrasco(2)	2.9				
Kobrasco(3)	2.1				
Nibrasco(4)	2.7				
Samarco (5)	8.6	8.0	10.8		
Zhuhai (5)	0.2	0.3	0.3		
Total	45.0	24.2	49.3		

- (1) Figure includes actual production, including production from the four pellet plants we leased in 2008.
- (2) Production through September 2008. We signed a 10-year operating lease contract for Itabrasco s pellet plant in October 2008.
- (3) Production through May 2008. We signed a five-year operating lease contract for Kobrasco s pellet plant in June 2008.
- (4) Production through April 2008. 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.
- A. 3. Iron ore and pellets

### A.3.1. Market Characteristics

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 2010, China accounted for 42.9% of our iron ore and pellet shipments, and Asia, as a whole, accounted for 60.7%. Europe accounted for 20.7%, followed by Brazil with 13.7%. Our 10 largest customers collectively purchased 130.2 million metric tons of iron ore and pellets from us, representing 44% of our 2010 iron ore and pellet shipments and 45% of our total iron ore and pellet revenues. In 2010, no individual customer accounted for more than 10% of our iron ore and pellet shipments.

In 2010, the Asian market (mainly Japan and South Korea) 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, Dubai (UAE) and Shanghai (China), 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.

53

### A.3.2 Competition

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); Rio Tinto Ltd.; and BHP Billiton. 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. In 2009 and 2010, we had a 24.9 and 24.7% market share respectively of the total negotiated volume in the transoceanic market.

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) and Usiminas, 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.

### A.3.3 Seasonality

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.

A.4 Manganese Ore

### **A.4.1 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	Voting	Total	
		(%	)	
	Brazil:			
Vale Mangan <b>ês</b>	Pará and Minas Gerais	100	100	
Urucum	Mato Grosso do Sul	100	100	

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.

54

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. All of these mines obtain electrical power at market prices from regional electric utilities. The following table sets forth information about our manganese production.

		Productio	n for fiscal year	ending		
	December 31			Rate of		
Mine	Туре	2008	2009	2010	recovery	
	(Millions of metric tons) (%)					
Azul	Open pit	2.0	1.4	1.6	65.3	
Morro da Mina	Open pit	0.1	0.1	0.1	88.88	
Urucum	Underground	0.2	0.2	0.2	78.76	
Total		2.4	1.7	1.8		

### A.5 Ferroalloys

### A.5.1. Production Process

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

		Our Participation		
Firm	Location	Voting	Total	
		(%	)	
Vale Manganês	Minas Gerais and Bahia	100.0	100.0	
Urucum	Mato Grosso do Sul	100.0	100.0	
Vale Manganèse France	Dunkerque, France	100.0	100.0	
Vale Manganese Norway AS	Mo I Rana. Norway	100.0	100.0	

We produce several types of manganese ferroalloys, such as high carbon and medium carbon ferro-manganese and ferro-silicon manganese. Our facilities have nominal capacity of 651,000 metric tons per year. The production of ferroalloys consumes significant amounts of electricity, representing 4.8% of our total consumption in 2010. The electricity supply for our fLTrroalloy plant in Dunkerque, France and Mo I Rana, Norway is provided through long-term contracts.

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

	Production for fiscal year ending December 31				
Firm	2008	2009	2010		
	(Thousands of metric tons)				
Vale Manganês(1)	288	99	207		
Urucum(2)	20	0	0		
Vale Manganèse France(3)	55	45	138		
Vale Manganese Norway AS	112	79	106		
Total	475	223	451		

- (1) Vale Manganês has five plants in Brazil: Santa Rita, Barbacena and Ouro Preto in the state of Minas Gerais; and Simões Filho in the state of Bahia.
- (2) Urucum has one plant in Corumbá in the state of Mato Grosso do Sul.

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

55

### A.6 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, electricity, 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.

### A.7 Coal

#### A.7.1 Production Process

We produce thermal and metallurgical coal through 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 Companhia Ltd. (Yankuang), according to the following table.

			Our	
Empresa	Business	Location	Particip ation (%)	Our Partners
Vale Austrália Integra Coal	Thermal and metallurgical coal	Australia Hunter Valley, New South Wales	61,2	Nippon Steel (NSC), JFE Group (JFE), Posco, Toyota Tsusho Austrália, Chubu Electric Power Co. Ltd
Carborough Downs Isaac Plains Broadlea	Metallurgical coal Thermal and metallurgical coal Thermal and metallurgical coal	Bowen Basin, Queensland Bowen Basin, Queensland Bowen Basin, Queensland	80 50 100	NSC, JFE, Posco, Tata Aquila
Vale Colombia El Hatillo Longyu	Thermal coal Coal and other related products	Colombia Henan Province, China	100 25	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	Yankuang Grupo Co. Limited, Itochu Corporation

Integra Coal Operations (underground and open pit). 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 Bacia de Bowen Basin as well as the financial assets of Leichardt and Vermont. The two assets produce *coking* and can be beneficiated to produce metallurgical coal and PCI. The mine 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 Carborough Downs CHPP, 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 Isaac Plains CHPP and transported 172 km to the Dalrymple Bay Coal Terminal.

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

### A.7.2 Production

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

		Production during fiscal year ending December 31			
Operation:	Mine Type	2008	2009	2010	
		(mi	llion metric tons)	)	
Thermal coal:					
Vale Colombia					
El Hatillo(1)	open pit		1,143	2,991	
Vale Austrália					
Integra Coal(2)	open pit	557	702	305	
Isaac Plains(3)	open pit	147	551	371	
Broadlea	open pit	582	497	165	
Total Thermal coal		1,286	2,892	3,832	
Carvão metalúrgico:  Vale Austrália Integra Coal(3)		1,747	1,184	1,151	

Edgar Filing: Vale S.A. - Form 6-K

	Underground and open pit			
Isaac Plains(3)	open pit	382	487	590
Carborough Downs(4)	Underground	429	604	1,216
	and			
Broadlea	open pit	249	252	101
Total de carvão metalúrgico		2,808	2,527	3,057

- (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% in Isaac Plains, a joint venture constituted as a partnership.
- (4) These figures correspond to our participation of 80% in Carborough Downs, a joint venture constituted as a partnership.

57

#### **Table of Contents**

**Operation:** 

Broadlea

El Hatillo(1) Integra Coal(2) Isaac Plains(3) Carborough Downs(4) Mine type

open pit
Underground and open pit
open pit
Underground
open pit

- (5) Vale acquired El Hatillo on the first quarter of 2009. The figures for 2009 include only April through December production.
- (6) These figures correspond to our participation of 61.2% in Integra Coal, a joint venture constituted as a partnership.
- (7) These figures correspond to our participation of 50% in Isaac Plains, a joint venture constituted as a partnership.
- (1) These figures correspond to our participation of 80% in Carborough Downs, a joint venture constituted as a partnership.

Longyu produces coal and other related products. Yankuang, a metallurgical coal mine, has a production capacity of 2 million metric tons of coal per year and 200,000 metric tons of methanol per year.

### A.7.3 Market Characteristics

Coal sales at our operations in Australia are basically geared towards the oriental Asian market. In 2010, 32% of our sales were made to Japanese steel plants and power plants. In 2010, our Chinese coal joint ventures concentrated their sales mostly in the domestic Chinese market. Coal sales from our operations in Colombia were basically geared towards Europe and United States.

### A.7.4 Competition

The global coal industry, basically made up by the metallurgical and thermal 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 fleets 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. As a rule, 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, BMA (BHP Billiton Mitsubishi Alliance), PT Bumi Resources Tbk., Anglo Coal, Drummond Company, Inc., Rio Tinto Ltd., Teck Cominco, Peabody and the Shenhua Group.

#### **B. Base Metals:**

B.1 Nickel

### **B.1.1 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	by-products) Fully integrated mines, mill, smelter and refinery (producer of finished nickel and by-products)
	Canada Voisey Bay, Newfoundland and Labrador	Mine and mill (producer of nickel concentrates and by-products)
	U.K. Clydach, Wales	Stand-alone nickel refinery (producer of finished nickel)
Asia & the South Pacific	Indonesia Sorowako, Sulawesi(1)	Mining and processing operations (producer of nickel matte, an intermediate product)
	New Caledonia Southern Province (2)	Mining and processing operations (producer of nickel oxide and cobalt)
	Japan Matsuzaka(3)	Stand-alone nickel refinery (producer of finished nickel)
	Taiwan Kaoshiung(4)	Stand-alone nickel refinery (producer of finished nickel)
	China Dalian, Liaoning(5)	Stand-alone nickel refinery (producer of finished nickel)
	South Korea Onsan(6)	Stand-alone nickel refinery (producer of finished nickel)
South Atlantic	Brazil Ourilândia do Norte, Pará	Mining and processing operations (producer of ferronickel)

- (1) Operations conducted through our 59.2%-owned subsidiary PT International Nickel 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 49.9%-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 2010, we produced 9% 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 will remain out of commission for 16 weeks, and as a result, we have sustained a drop of 15,000 metric tons in the production of finished nickel.

In July 2010, a new five-year collective agreement was confirmed by representatives of production and maintenance workers in Sudbury and Port Colborne. This agreement marked the end to a strike that had started in July of 2009.

# Thompson operations

Our long-established mines in Thompson, Manitoba, are primarily underground operations with nickel sulfide ore bodies. The ore bodies also contain co-deposits of copper and cobalt. We have integrated mining, milling, smelting and refining operations to process ore into finished nickel at Thompson. We also smelt and refine an intermediate product, nickel concentrate, from our Voisey 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 mineral reserves at Thompson are not enough to run a full capacity smelting and finishing operation and do not support the significant capital investment required pursuant to new federal regulations regarding sulphur dioxide emissions which must go into effect in 2015.

59

### **Table of Contents**

### Voisey Bay operations

Our Voisey Bay operation in Newfoundland and Labrador is comprised of Ovoid, an open-pit mine, and deposits with the potential for underground operations at a later stage. We mine nickel sulfide ore bodies, which also contain co-deposits of copper and cobalt. We mill Voisey Bay ore on site and ship it as an intermediate product (nickel concentrates) primarily to our Sudbury and Thompson operations for final processing (smelting and refining). The electricity requirements of our Voisey Bay operations are supplied through diesel generators.

On January 31, 2011, we ratified a five-year collective bargaining agreement with our unionized employees at our Voisey Bay operations. This agreement marked the end of a strike that had started in August, 2009.

## 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 International Nickel Indonesia (PTI) operates open pit mines and a processing facility in Sorowako on the Island of Sulawesi, Indonesia. PTI 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, PTI sells 80% of its production to our wholly owned subsidiary Vale Canada and 20% of its production to Sumitomo Metal Mining Co., Ltd. (Sumitomo). PTI is a public company whose shares are traded on the Indonesia Stock Exchange. We hold 59.2% of its share capital, Sumitomo holds 20.1%. Other 20.1% is publicly held and 0.6% is held by other stockholders.

Energy costs are a significant component of our nickel production costs for the processing of lateritic and saprolite ores at our PTI operations in Indonesia. A major part of the electric furnace power requirements of PTI is supplied at low cost by its two hydroelectric power plants on the Larona River, Larona and Balambano. PTI 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 2010, the hydroelectric power plants provided 90% of the electric energy consumed at our Indonesian operations, and oil-powered generators provided the remainder.

### 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 PTI. Vale Japan is a private company controlled by Vale. A minority interest is held by Sumitomo (12.8%).

We also operate or have investments in nickel refining operations in Taiwan through our 49.9% 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 ). 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.

60

### New Caledonia operations

The commissioning stage of our VNC nickel operation in New Caledonia in the South Pacific is practically complete. VNC uses a High Pressure Acid Leach (HPAL) process to treat laterite ores. We expect to reach a nominal production capacity of 60,000 metric tons per year of nickel contained in nickel oxide and 4,600 metric tons of cobalt in three years, and therefore, the production of nickel oxide was initiated. 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), which is being sold to clients.

# South Atlantic

The commissioning stage of Onça Puma was already concluded and we already started the ramp-up period in Ourilândia do Norte, in the state of Pará. Onça Puma is a nickel mine built over a large deposit of laterite saprolite nickel and it has a nominal production capacity of 53,000 metric tons of nickel, in ferronickel, its final product.

#### **B.1.2 Production**

The following table sets forth our annual mine production by operating mine (or on an aggregate basis for PTI because it has mining areas rather than mines) and the average percentage grades of nickel and copper. The mine production at PTI represents the product from PTI s dryer kilns delivered to PTI 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.

		2008			2009			2010	
		(	thousands	s of metric	c tons, e	xcept per	centages)		
		Gr	ade		Gra	ade		Gr	ade
		<b>%</b>	<b>%</b>		<b>%</b>	<b>%</b>		<b>%</b>	%
	Production	Copper	NickelP	roduction	Copper	NickelP	roduction	Copper	Nickel
Ontario operating mines									
Copper Cliff North	1.165	1,01	1,01	524	0,96	1,06	326	1,13	1,13
Copper Cliff South(1)	771	1,67	1,48	78	1,45	1,40			
Creighton	1.001	1,56	2,14	395	1,57	1,82	426	2,65	3,10
Stobie	2.892	0,65	0,72	1.198	0,64	0,72	775	0,59	0,69
Garson	840	1,72	1,69	328	1,93	1,45	246	2,16	1,60
Coleman	1.425	2,66	1,62	624	3,28	1,64	786	2,74	1,73
Gertrude	124	0,29	0,72						
Total Ontario operations							86	0,56	0,75
Manitoba operating mines							16	2,54	1,74
Thompson	8.219	1,36	1,26	3.145	1,49	1,19	2.660	1,78	1,53
Birchtree	1.165	1,01	1,01	524	0,96	1,06	326	1,13	1,13
Total Manitoba operations	771	1,67	1,48	78	1,45	1,40			
Voisey Bay operating mines	1.001	1,56	2,14	395	1,57	1,82	426	2,65	3,10
Ovoid	2.892	0,65	0,72	1.198	0,64	0,72	775	0,59	0,69
Total Voisey Bay operations	840	1,72	1,69	328	1,93	1,45	246	2,16	1,60
Sulawesi operating mining areas Sorowako	1.425 124	2,66 0,29	1,62 0,72	624	3,28	1,64	786	2,74	1,73

Edgar Filing: Vale S.A. - Form 6-K

Pomalaa (2)	86	0,56	0,75
Total Sulawesi operations	16	2,54	1,74
Mine operations in New Caledonia VNC	326		1,31
New Caledonia total operations	326		1,31
Mine operations in Brazil Onça Puma	1.259		1,93
Total operations in Brazil	1.259		1,93

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

61

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

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

Production for fiscal year anding December

	Production for fiscal year ending Dece					
Mine	Туре	2008	31 2009	2010		
		(Thou	sands of metric to	ns)		
Sudbury (1)	Underground	85.3	43.6	22.4		
Thompson (1)	Underground	28.9	28.8	29.8		
Voisey Bay (2)	Open pit	77.5	39.7	42.3		
Sorowako (3)	Open pit	68.3	68.8	78.4		
External (4)		15.4	5.8	5.9		
Total (5)		275.4	186.7	178.7		

- (1) Primary nickel production only (i.e., does not include secondary nickel from unrelated parties).
- (2) Includes finished nickel produced at our Sudbury and Thompson operations, as well as some finished nickel produced by unrelated parties under toll-smelting and toll-refining arrangements.
- (3) We have a 59.2% interest in PTI, which owns the Sorowako mines, and these figures include the minority interests.
- (4) Finished nickel processed at our facilities using feeds purchased from unrelated parties.
- (5) Excludes finished nickel produced under toll-smelting and refining arrangements covering purchased intermediates with unrelated parties. Unrelated-party tolling of purchased intermediates was 7.5 thousand metric tons in 2008, 5.2 thousand metric tons in 2009 and none in 2010.

62

#### **Table of Contents**

### **B.1.3 Market Characteristics**

Our nickel customers are broadly distributed on a global basis. In 2010, 71% of our total nickel sales were delivered to customers in Asia, 19% to North America, 9% to Europe and 1% 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.

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 2010, the principal end-use applications for nickel were:

Austenitic stainless steel (64% of global nickel consumption);

Non-ferrous alloys, alloy steels and foundry applications (18% 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 2010, 65% 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), Hong Kong, Shanghai (China), Kaohsiung (Taiwan), Bangkok (Thailand) and Bridgetown (Barbados).

# **B.1.4 Competition**

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.

63

Our nickel deliveries, which were impacted by strikes in our units in Canada, represented 12% of global consumption for primary nickel in 2010. 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 53% of global finished primary nickel production in 2010.

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 42-49% of total nickel used for stainless steels, and primary nickel has accounted for about 51-58%. 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 2010, Chinese production of nickel pig iron and ferro-nickel exceeded 150,000 metric tons, representing 11% 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.

# B. 2 Copper

### **B.2.1 Production Process**

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

		Vale s participation		
Firm	Location	Voting	Total	
		(%)	1	
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 aiport 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 direcover 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.

### Operations in Chile

In December 2010, we launched the ramp up process in our Tres Valles copper mine, our first project in Chile. 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.

### **B.2.2 Production**

The following table provides information about our production of copper.

		Production during fiscal year ending Decem					
Mine	Type	<b>2008</b> (1	31 2009 million metric tons)	2010			
Brazil:							
Sossego	Open pit	126	117	117			
Canada:							
Sudbury	Underground	115	42	34			
Voisey Bay	Open pit	55	24	33			
Thompson	Underground	1	1	1			
Externo (1)		14	14	22			
Total		312	198	207			

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

### **B.2.3 Market Characteristics**

The copper concentrate from Sossego is sold under mid and long-term contracts executed with copper smelting plants in South America, Europe and Asia. We have long-term sale agreements to sell the entire first production phase of Salobo copper concentrate to smelting plants. We have long-term distribution agreements with Xstrata Copper Canada, to sell cathode copper and a significant part of copper concentrates 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.

# **B.2.4 Competition**

The cathode copper global market is highly competitive. It is produced by mining companies and smelting plants 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 smelting plants 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, BHP Billiton, Rio Tinto and Xstrata, operating at a parent company level and through subsidiaries. Our market share in 2010 was approximately 2.6% 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 smelting plants. The main competitors in the anode market are Codelco, Anglo American and Xstrata, operating at a parent company level or through its subsidiaries.

# B.2.5. Seasonality of the nickel and copper markets

Among the metals produced by Vale, there is seasonal demand for nickel and copper. Nickel demand is usually lower in the third quarter and copper demand is low during the entire second half of the year.

# **B.3 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, 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.

### **B.4 Bauxite**

### **B.4.1 Production Process**

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 40.0% of our joint venture in two equal amounts, in 2013 and 2015 each for US\$200 million in cash.

66

#### **Table of Contents**

The following table presents information on Vale s bauxite ore production.

	Production for fiscal year ending					
	December 31				Recovery	
Mine (1)	Type	2008	2009	2010	Rate	
		(mi	llion metric tons	)	(%)	
MRN						
Almeidas	Open pit	3.6	2.2	1.3		
Aviso	Open pit	14.5	13.5	15.2		
Saracá V	Open pit	2.3	0.9	0.7		
Saracá W	Open pit	3.9	4.1	4.2		
Bacaba	Open pit			0.4		
Total MRN		24.2	20.7	21.8	72-77	
Paragominas Miltonia 3	Open pit	7.3	10.1	10.8	60	

# (1) This figures represent ROM production.

The following table presents information about Vale s bauxite production.

	Production for fiscal year ending					
			Recovery			
Mine	Type	2008	2009	2010	Rate	
		(mi		(%)		
MRN	Open pit	18.1	15.6	17.0	72-77	
Paragominas	Open pit	4.4	6.2	7.5	60-64	
B.5. PGM and other precious metals						

### **B.5.1 Production Process**

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 toll-refined materials. In 2010, PGM concentrates from our Sudbury operations supplied about 8% of our PGM production, which also includes precious metals purchased from unrelated parties and toll-refined materials). Our base metal commercial department sells our PGMs and other precious metals, as well as unrelated parties and toll-refined products, on commission. The following table presents information on production of the Company s precious metals.

Mine (1)	Type	2008	2009	2010	
		(Thousand troy ounces)			
Sudbury:					
Platinum	Underground	166	103	35	
Palladium	Underground	231	152	60	
Gold	Underground	85	49	42	

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

67

#### **B.6 Cobalt**

### **B.6.1 Production Process**

We recover significant quantities of cobalt as a by-product of our Canadian nickel operations. In 2010, we produced 438 metric tons of refined cobalt metal at our Port Colborne refinery and 499 metric tons of cobalt in a cobalt-based intermediate at our Thompson nickel operations in Canada. Our remaining cobalt production consisted of 129 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, because the nickel laterite ore at this location contains significant co-deposits of cobalt.

We sell cobalt on a global basis. Our cobalt metal, which is electro-refined at our Port Colborne refinery, has very high purity levels (99.8%). 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.

Mine	Production for fiscal year ending Decemb					
	Туре	2007	31 2008	2009		
			(Metric tons)			
Sudbury	Underground	804	359	302		
Thompson	Underground	168	181	189		
Voisey Bay	Open pit	1,695	971	524		
External (1)		161	64	51		
Total		2,828	1,575	1,066		

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

C. Fertilizers

### C.1 Phosphates

### **C.1.1 Production Process**

In 2010, we acquired the assets of fertilizantes in Brazil, consolidated into 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	Vale s participation			
	Location	Voting	Total	Our partners
	(%)			
Vale Fertilizantes	Uberaba, Brasil	99.9%	84.3%	
	Bayóvar, Peru	51	40	Mosaic, Mitsui &
MVM Resources International, B.V				Co.

Vale Fertilizantes is a company that produces phosphate rock, phosphate fertilizers (P), (monoammonium phosphate (MAP), diammonium 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 nitrogren crop nutrients in Brazil and operates the following phosphate rock mines: Catalão, in the state of Goiás, Tapira and Patos de Minas and Araxá, all of them in the state of Minas Gerais, and Cajati, in the state of 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 until

2014. Bayovar has high grade resources with a low phosphate rock production cost.

68

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

Mine	Туре	Production for fiscal year ending December 31, 2010 (million metric tons)
Bayóvar	Open pit	791
Catalão	Open pit	626
Tapira	Open pit	2,068
Patos de Minas	Open pit	43
Araxá	Open pit	1,182
Cajati	Open pit	545
Total		5,255

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

	Production for fiscal year ending
Firm/product	<b>December 31, 2010</b>
•	(million metric tons)
Fosfato monoamônio (MAP)	898
Superfosfato triplo (TSP)	788
Superfosfato simples (SSP)	2,239
Fosfato bicálcico (DCP)	491
Amônia	508
Ureia	511
Ácido nítrico	454
Nitrato de amônio	447

#### C.2 Potash

# **C.2.1. Production Process**

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. The following table sets forth information on our potash production.

		Production	on for fiscal year	ending	
		December 31			Recovery
Mine	Type	2008	2009	2010	rate
		(Thou	sands of metric t	ons)	(%)
Taquari-Vassouras	Underground	607	717	662	85.7

# **C.3 Market Characteristics**

All potash sales from the Taquari-Vassouras mine are to the Brazilian market. in 2010, 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 66% of our sales allocated to four traditional clients.

Our phosphate products are sold to be used in fertilizer blenders and cooperatives. In 2010, Vale s production represented near 34% of the total phosphate consumption in Brazil, with imports representing a 44% of total supply. In the high concentration segment, Vale supplied over 36% of total consumption in Brazil, with products such as monoammonium phosphate (MAP), diammonium phosphate (DAP) and triple superphosphate (TSP). In the low concentration nutrients segment, Vale s production represented near 45% of total consumption in Brazil.

69

#### **Table of Contents**

#### **C.4 Competition**

Fertilizers have a 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.

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 95% 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, Russia and India) hold 80% of global production, of which a maximum of 20% is exported. Meanwhile, products with great added value, such as MAP and DAP are marketed instead of phosphate rock, due to cost-benefit relationship.

Brazil is one of the largest agribusiness markets in the world due to its high production 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 choloride) in 2010, 52% more than in 2009 from Russian, Belarusian, Canadian and German producers in descending order. The United States, Brazil, China and India are other important consumers of potash, representing close to 62% of total global consumption. Our projects portfolios are highly competitive in terms of cost and logistics with these regions.

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 39% 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 40% of the global market. The larger exporters are the Middle East, North Africa and Russia.

70

#### **D.** 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.

			Particip of V	_	
	Business	Location	Voting	Total	Vale Partners
			(%	)	
	Port, maritime and railroad operations (EFVM and EFC)	Brazil	100	100	
	Railway operations	Brazil	100	99.9	
1)	Railroad operations	Brazil	100	100	
	Railroad operations	Brazil	37.9	41.5	CSN, Usiminas and Gerdau
5	Maritime terminal operations and ports	Brazil	100	100	
n	Maritime terminal operations and ports	Brazil	31.3	31.3	Mitsui & Co., public investors
	Maritime terminal operations and ports	Indonesia	59.2	59.2	Sumitomo, public investors
1	Maritime terminal operations and ports	Colombia	100	100	
OCO	Railroad operations	Colombia	8.4	8.4	Drummond, Glencore and Coalcorp
Logística ntina	Port Operations	Argentina	100	100	
1	Maritime and railroad terminal Operations	Mozambique	51	51	NCI and GESTRA Gestão e Transportes, SARL; Consórcio de Cabo Delgado, SARL; GEDENA Gestão e Desenvolvimento, SARL; STP Sociedade de Tecnologias e Participações, S. Niassa Desenvolvimento, SARL; and Moçambique Gestores, SARL
Logistics BSGR tics)	Port and railroad operations	Liberia	51	51	BSG Resources (Guiné)
barge gación	Fluvial System in Paraguay and Paraná rivers (convoys)	Paraguay	100%	100%	

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

#### **D.1 Railroads**

Brazil

Vitória a Minas railroad ( EFVM ). The EFVM railroad links our Southeastern System mines in the Iron Quadrangle region in the Brazilian state of Minas Gerais to the Tubarão Port, in Vitória, in the state of Espírito Santo. We operate this 905-kilometer railroad under a 30-year renewable concession, which expires in 2027. The EFVM railroad consists of two lines of track extending for a distance of 601 kilometers to permit continuous railroad travel in opposite directions, and single-track branches of 304 kilometers. Large industrial manufacturers are located in this area and major agricultural regions are also accessible to it. The EFVM railroad has a daily capacity of 342,000 metric tons of iron ore. In 2010, the EFVM railroad carried a total of 78.9 billion ntk of iron ore and other cargo, of which 16.8 billion ntk, or 21.3%, consisted of cargo transported for customers, including iron ore for Brazilian customers. The EFVM railroad also carried one million passengers in 2010. In 2010, we had a fleet of 331 locomotives and 18,967 wagons at EFVM.

Carajás railroad ( EFC ). We operate the EFC railroad under a 30-year renewable concession, which expires in 2027. EFC is located in the Northern System, beginning at our Carajás iron ore mines, state of Pará, and extending 892 kilometers to our Ponta da Madeira maritime terminal complex facilities located near the Itaqui Port in the Brazilian state of Maranhão. Its main cargo is iron ore, principally carried for us. It has a daily capacity of 313,970 metric tons of iron ore. In 2010, the EFC railroad carried a total of 90.4 billion ntk of iron ore and other cargo, 3.0 billion ntk of which was cargo for customers, including iron ore for Brazilian customers. EFC also carried 341,583 passengers in 2010. 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. In 2010, EFC also had a fleet of 220 locomotives and 10,701 wagons.

71

Ferrovia Centro-Atlântica (FCA). Our subsidiary FCA operates the central-east regional railway network of the Brazilian national railway system under a 30-year renewable concession, which expires in 2026. The central east network has 8,023 kilometers of track extending into the states of Sergipe, Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro and Goiás and Brasília, the Federal District of Brazil. It connects with our EFVM railroad near the cities of Belo Horizonte, in the state of Minas Gerais and Vitória, in the state of Espírito Santo. FCA operates on the same track gauge as our EFVM railroad and provides access to the Santos Port in the state of São Paulo. In 2010, the FCA railroad transported a total of 11.4 billion ntk of cargo for customers. In 2010, FCA had a fleet of 500 locomotives and 12,000 wagons.

Ferrovia Norte-Sul railroad (FNS). In October 2007, we won the auction for the subconcession for commercial operation for 30 years of a 720-kilometer stretch of the FNS railroad, in Brazil. Since 1989, we have operated a segment of the FNS, which connects to the EFC railroad, enabling access to the port of Itaqui, in São Luís, where our Ponta da Madeira maritime terminal is located. A 452-kilometer extension was concluded in December 2008. In 2010, the FNS railroad transported a total of 1.52 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. In 2010, FNS had a fleet of 6 locomotives and 440 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 2010, the MRS railroad carried a total of 144.9 million metric tons of cargo, including 60.8 million metric tons of iron ore and other cargo from Vale.

Colombia

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

Argentina

In August 24, 2010, through our subsidiary, Potasio Rio Colorado S.A., we entered into an agreement with Ferrosur Roca, S.A. for a partial concession, pending government authorization, an administrative concession of a 756 km. railroad track which is important support to the potash Project in Rio Colorado and to our strategy to become a leader in the fertilizer industry.

72

#### Africa

In September, 2010, we exercised a purchase option of a 51% stake in Sociedade de Desenvolvimento do Corredor do Norte SA (SDCN) for US\$21 million. That acquisition will allow the Moatize expansion 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.

We signed agreements with the government of Liberia for the construction of an port-railroad integrated system to transport iron ore from Simandou, Guinea. Simandou is one of the two best deposits of iron ore that has not been developed in the world in terms of size and quality and, until the end of this decade, the logistic corridor will allow the transportation of up to 50 million metric tons per year of iron ore to our maritime terminal in the coast of Liberia.

#### **D.2** 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. See *Bulk materials-iron ore pellets-Operations*. We also use our port and terminals to handle customers cargo. In 2010, 1.2% of the cargo handled by our port and terminals represented cargo handled for customers.

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

The iron ore maritime terminal located in this area has two piers. Pier I can accommodate two vessels at a time, one of up to 170,000 DWT on the southern side and one of up to 200,000 DWT on the northern side. Pier II can accommodate one vessel of up to 365,000 DWT at a time, limited at 20 meters draft plus tide. In Pier I there are two ship loaders, which can load up to a combined total of 14,000 metric tons per hour. In Pier II there are two ship loaders that work alternately and can each load up to 16,000 metric tons per hour. In 2010, 100.4 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 2.8 million metric tons.

Praia Mole terminal is principally a coal terminal and handled 10.7 million metric tons in 2010.

Terminal de Produtos Diversos handled 6.6 million metric tons of grains and fertilizers in 2010.

Terminal de Granéis Líquidos handled 1.0 million metric tons of liquid bulk in 2010.

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 2010, 94.2 million metric tons were handled through the terminal for us and 5.4 million metric tons for customers. The Ponta da Madeira maritime terminal has a storage capacity of 6.2 million metric tons.

73

#### **Table of Contents**

Itaguaí maritime terminal Cia. Portuária Baía de Sepetiba (CPBS). CPBS is a wholly owned subsidiary that operates the Itaguaí terminal, in the Sepetiba Port, state of Rio de Janeiro. Itaguaí s maritime terminal has a pier that allows the loading of ships up to 18 meters of draft and up to 230,000 DWT. In 2010, the terminal loaded 22.6 million metric tons of iron ore.

*Guaíba Island maritime terminal.* We operate a maritime terminal on Guaíba Island in the Sepetiba Bay, state of Rio de Janeiro. The iron ore terminal has a pier that allows the loading of ships of up to 300,000 DWT. In 2010, the terminal loaded 37.9 million metric tons of iron ore.

*Inácio Barbosa maritime terminal (TMIB)*. We operate the Inácio Barbosa maritime terminal, located in the Brazilian state of Sergipe. The terminal is owned by Petrobras. Vale and Petrobras entered into an agreement in December 2002, which allows Vale to operate this terminal for a period of 10 years. In 2010, 600 hundred thousand 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 2010, the terminal loaded 2.1 million tons of ammonia and bulk solids, 10.2% more than in 2009.

#### 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. Argentina

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 2 million metric tons of iron ore and manganese through this port in 2011, which will reach Corumbá, Brazil, through the Paraguay and Paraná rivers to be transported to Asian and European markets. The loading rate at this port is 17 thousand tons per day and an unload rate of 12 thousand tons per day. *Indonesia* 

PTI 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 6,000 DWT.

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 39,000 DWT.

#### D.3 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.

74

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. In late 2010, 14 company-owned vessels were in operation. We have placed orders for the construction of 19 large vessels, each with a 400,000 DWT capacity, and four additional capesize vessels, each with a 180,000 DWT capacity. The first large iron ore vessel was delivered in March 2011. We believe this service to enhance our ability to offer our iron ore products in the Asian market at competitive prices and to increase our market share in China and the global seaborne market. In 2010, 72.1 million tons of iron ore and pellets were shipped to China on CFR basis.

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 1,335,210 tons in 2010 and our wholly-owned subsidiary, Vale Logistica Argentina, which loaded 1,629,000 tons of ore though the port of Saint Nicolas in seaborne vessels in 2010. In 2010, we also purchased two new convoys (two tugboats and 32 barges) which will start operating in 2011.

We also operate a fleet of 28 tugboats (23 owned and 5 chartered) 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 2010, Log-In s coastal shipping service transported 159,856 units equivalent to twenty-foot units (teus); TVV handled 249,072 teus and its express train service moved 38,684 teus.

#### E. Others

# E1. 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 seven hydroelectric power plants in operation. In addition, in December 2010, we received the operational license for the Estreito power plant, the first company-owned hydroelectric in the Northern region which began generating power in March 2011. In 2010, our total installed energy capacity in Brazil was 818 MW, similar to the previous year. 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 2010, our wholly-owned and operated hydroelectric power plants in Sudbury generated approximately 9% 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 2010, the power system operator distributed electricity at a rate of 117 MW to all surface plants and mines in the Sudbury area.

In 2010, 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 12 MW.

75

#### Indonesia

Energy costs are a significant component of our nickel production costs for the processing of saprolitic lateritic ores at PTI operations in Indonesia. Practically the entire electricity consumption of PTI s electric furnace power requirements are supplied at low-cost by its two hydroelectric power plants on the Larona River: (i) the Larona plant, which generates an average of 165 MW, and (ii) the Balambano plant, which generates an average of 110 MW. PTI has thermal generating facilities of 78 MW, of which 54 MW are generated by 24 Caterpillar diesel generators, with capacity of 1 MW each, five Mirrlees Blackstone diesel generators, and one 24 MW oil burning steam turbine generator with high sulphur levels, located in Sorowako. In addition, we are building a plant in Karebbe, which will be the third hydroelectric power plant on the Larona river, with an average electricity generating capacity of 90 MW. This plant will reduce production costs by replacing oil in the generation of power for hydroelectric power.

# E.2 Oil and natural gas

The use of natural gas in our energy matrix in Brazil is expected to increase from 1.7 million cubic meters per day (Mm3/day) in 2010 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. During 2009, we made two discoveries which are being analyzed. 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.

# E.3 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 produces about 1.8 million metric tons of flat rolled steel products per year. CSI successfully commissioned a second reheating furnace with state-of-the-art environmental technology at a cost of US\$ 71 million which will increase annual capacity to about 2.8 million metric tons of flat steel and pipes. The furnace will be fully operational by the second quarter in 2011.

Vale holds a 26.9% stake in TKCSA, an integrated producer of steel plates 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 produces the following products: Amazon SB, Amazon Premium and Amazon Plus. They are sold mainly in the European, Asian and Latin American markets. CADAM gets its electricity from its own thermal power plant. In 2010, CADAM produced 403,000 metric tons of Kaolin.

We are 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.

76

#### F. Key consumables and raw materials:

# F.1 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. Therefore, Vale uses as communication tools visits and talks at their operations, exchange programs and structured meetings.

In order to achieve continuous improvement and contribute to advances in the production chain, Vale s management of relationships with suppliers comprises four steps: (i) classification based on Vale s values, (ii) contracts taking into account the identification and analysis of environmental risks (iii) periodic performance evaluations to ensure compliance with applicable requirements and as defined in the contracting stage, and (iv) development.

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.

Every contract 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 Norm (Brazilian Institute of Renewable Natural Resources) 96/06.

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.

#### **Table of Contents**

#### F.2 Potential dependence on few suppliers

The main consumables purchased by Vale in 2009 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 18% of cost of goods sold (COGS) in 2010, (ii) fuel and gas, which contributed 10.7% to COGS, and electricity with 6.6% of COGS. Moreover, the rendering of various services, such as operational services, maintenance of equipment and facilities, and transportation services represented 13.7% of COGS in 2009.

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 2010 were Letourneau, Bucyrus International Inc., Sotreq CV, Amsted-Maxion and Komatsu, accounting jointly for 6% 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 Petrobras, which accounted for 86% of the purchase of fuels by Vale in 2010. The electricity supply is managed largely through contracts with regional electricity companies. The main suppliers of this consumable were Centrais Elétricas no Norte do Brasil S.A. (Eletronorte), CEMIG Distribuição S.A. and Espírito Santo Centrais Elétricas S.A., together accounting for 36% of purchases of electricity by Vale in 2010. In 2010, the 10 largest Vale comsumer, equipment and service providers represented 19% of Company s total purchases.

#### F.3 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 of the Company

There are no customers accounting 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.

78

# **Table of Contents**

The table below summarizes our principal mining concessions and other similar rights. In addition to the concessions described below, we have exploration licenses covering 10.1 million hectares in Brazil (out of which, 5.9 are already under application) and 17.8 million hectares in other countries.

		Approximate area covered	
Location	Concession or other right	(in hectares)	Expiration date
Brazil	Mining concessions	664,627	Undetermined
Canada			
Ontário	Leases	14,026	2011-2028
	Patented Lands	82.805	Undetermined
	Water rights	1,157	Undetermined
	Mining Licence of Occupation	2,952	Undetermined
Manitoba	Leases	109.043	2011-2028
	Other Leases	4.903	2013
Newfoundland and	Mining lease		2027
Labrador	C	1,599	
	Surface lease	4.015	2027
Indonesia			
	Single Work Contract	190.510	2025 (1)
Australia	6		( )
	Mining tenements	22,281	2011-2039
New Caledonia	<b>6</b>	, -	
	Mining concessions	20,332	2016-2051
	Mining Concessions Tiebaghi Nickel	936	2048
	Mining concessions outside VNC Project	13,586	2016-2040
Peru	Triming concessions outside the frequency	10,000	2010 20.0
1 0. 11	<b>Exploration Concession</b>	146.887	Undetermined (2)
Colombia	Exprerence concession	110.007	Chacterininea (2)
Cotomota	El Hatillo Exploration Concession	9.695	2027
	Cerro Largo Sur Exploration Concession	1.092	2032
Argentina	concession	1,0,2	_00_
Til gentina	<b>Exploration Concession (Prospection</b>		Undetermined (3)
	Statement)	80,889	Chacterininea (3)
Chile	Statement	00,007	
Chile	<b>Exploration Concession</b>	50,632	Undetermined (4)
Mozambique	Exploration Concession	30,032	Ondetermined (4)
mozumorque	Exploration Concession (Mining Concession)	23,780	2030
Guinea	Exploration Concession (Willing Concession)	25,760	2030
Guinea	Exploration Concession (Mining Concession)	102.400	2045
	Exploration Concession (withing Concession)	102.400	40 <del>4</del> 3

<sup>(1)</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.

<sup>(2)</sup> According to Peruvian mining law, there is only one type of license. The above represents merely licenses with exploration concession.

- (3) Of the 80,889 that it has in Argentina, only 40,274 represents activities in progress.
- (4) Of the 50,332 that it has in Chile, only 23,657 represents activities in progress.

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. Its 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 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.

79

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, which can affect it significantly. Among them we can mention:

The Ministry of Mines and Energy of Brazil is studying changes to the Mining Code which, if adopted, may have important implications on local operations or require unexpected investments. However, considering that it is not known what changes to the Mining Code will be effectively adopted, there is no way to accurately assess their implications on our local operations.

In January 2009, a new Mining Law went into effect in Indonesia, with new licensing rules. In 2010, some regulations were enacted for the Mining Code, not all yet implemented. PTI, along with its legal advisors from Indonesia, is studying the impacts of the new Mining Law on current and future operations of PTI exploration in Indonesia. Until all regulations are passed, Vale cannot evaluate how and to what extent the Employment Contract and PTI operations will be affected.

In New Caledonia, a 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. The Company will receive the authorization no later than April 2015. Vale believes it is unlikely that the authorization will be rejected, but there is always the risk that there will be new charges.

In Guinea, the government proposed a new Mining Code that would modify some of the regulations that currently govern mining operations. Among other regulations, there would be a mandatory participation of 15% for the State in all mining projects, which is currently applied only to projects involving diamonds, gold and precious stones.

# Environmental regulations

We are also subject to environmental regulations that apply to the specific types of mining and processing activities we conduct. We require approvals, licenses or permits from governmental authorities to operate, and in most jurisdictions the development of new facilities requires us to submit environmental impact statements for approval and often to make additional investments to mitigate environmental impacts. We must also operate our facilities in compliance with the terms of the approvals, licenses or permits.

Environmental regulations affecting our 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 we operate impose specific environmental requirements on our operations. Environmental regulations can sometimes change and ongoing compliance can require significant costs for capital expenditures, operating costs, reclamation costs and compliance. 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 we are required to modify installations, develop new operational procedures or purchase new equipment, our environmental compliance costs could increase. In particular, we expect heightened attention from various governments to reducing greenhouse gases. Some important regulatory environmental initiatives are described below, but we do 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:

Our operations in Canada and at PTI in Indonesia are subject to air emission regulations that address, among other things, sulfur dioxide (SO2), particulates and metals. We will be required to make significant capital expenditures to ensure compliance with these emissions standards. The imposition of more stringent standards in the future, especially for SO2 and nickel, could further increase our costs.

#### **Table of Contents**

The rhythm of the efforts by the Canadian government to legislate Greenhouse Gas (GHG) emissions targets has slowed down. The provinces of Manitoba, Ontario and Newfoundland will launch a 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. We are taking steps, in partnership with other stakeholders, to remediate the ecological impact of our activities.

The Australian government is seeking to introduce an environmental program as part of an overall strategy to address climate change and reduce greenhouse gas emissions in Australia. The Australian government stated that it has decided to impose mandatory targets to control greenhouse gas emission levelsby 2020. Thus, it is expected that a policy to set prices on carbon emissions will be imposed in the country within a short period of time.

In October 2009, Indonesia adopted new legislation on Environmental Protection and Management. It 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. Brazil adopted a National Policy on Climate Change in December 2009 which contemplates specific carbon emission limits to be set forth by the end of 2011 and 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 registered in 2005, and several regulated sectors, such the steel, forest, agriculture and energy industry to create projects to reduce greenhouse emissions. By the end of 2011, the government plans to publish regulations on specific limits on carbon emissions for other sectors of the economy, including the mining sector.

In December 2010, Brazil implemented the National Law on Solid Waste. The law set forth a strict regulatory structure with flexibility instruments to comply with management controls regarding solid waste, including mineral waste. Mining companies will have to submit a plan to manage solid mineral waste and will be subject to stricter controls by environmental authorities.

# Royalties and other taxes on mining activities

Vale pays royalties on revenues obtained from the extraction and sale of mineral products. The following royalties and taxes apply in some of the jurisdictions in which we have our 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 our products are: 2% for iron ore, kaolin, copper, nickel, fertilizers and other materials; 3% on bauxite, potash and manganese ore; and 1% on gold. The Brazilian government is considering changes in the CFEM regime. These changes will only be enforceable once a final proposal is issued by DNPM and approved by the National Congress. We are currently engaged in several administrative and legal proceedings alleging that we have failed to pay the proper amount of CFEM which we consider inadequate. For further information on the above proceedings, see Item 4 in this Reference Form.

81

#### **Table of Contents**

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 sale 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; 17% in Manitoba; and 16% in Newfoundland and Labrador.

In Indonesia, our subsidiary PTI pays a royalty fee on, among other items, its nickel production on the concession area and has made certain other commitments. Until March 2008 the royalty was equal to 1.1% of revenues from sales of nickel products. As of April 2008, the royalty payment was changed to a fixed amount based on sales volume (US\$78 per metric ton of nickel, based on overall production). In Australia, we pay royalties on the revenues from sales of minerals extracted pursuant to state laws. In Queensland, a 2/3 proportional payment is applied, under the terms that we pay 7% of the amount up to A\$100 per ton and 10% thereafter. The cost is after port fees and demurrage. In New South Wales, we pay royalties *ad valorem* on coal, on the production s value (revenues minus allowed deductions). Royalty rates are in the order of 6.2% for deep underground mines (coal extracted below 400 m), 7.2% for underground mines, and 8.2% for open pit mines. Taxed revenues is free of beneficiation costs and other taxes.

Currently, the Australian government is studying the possibility of applying a new mineral resource rent tax or MRRT . The MRRT will be applied on the profits generated from the exploration of coal and iron ore resources in Australia. The proposed tax would be paid as a proportional fee of 22.5% of the taxable profits and would be deductible from the company s income tax. The difference between the MRRT and royalties paid to each of the state governments is that royalties were calculated based on rent whereas MRRT is calculated on profits. Meanwhile, the government indicated that companies will receive a deductible credit from state royalties in the states where the MRRT is owed.

# 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 workers health and safety, safety and support of communities near mines, and other matters. Our 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 otherwise permitted 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. We continue to have some voting rights through the shareholdings of a subsidiary.

82

Our railroad concession contracts have a duration of 30 years and are renewable. The FCA and MRS concessions expire in 2026, and the concessions for EFC and EFVM expire in 2027. 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 connection with the approval in 2006 of our acquisition of Vale Canada, we made a number of undertakings to the Canadian Minister of Industry under the Investment Canada Act. We believe we are substantially in compliance with these undertakings, which include locating our global nickel business in Toronto, Canada; accelerating the Voisey Bay development project; 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. We have complied with registration requirements for the substances we import into or manufacture in the EU in 2010 and continue to take measures to manage our 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 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 and Morro da Mina, Vale Manganèse France and Vale Manganese Norway AS);

Nickel (Vale Inco Europe, Taiwan Nickel Refining Corporation, Vale Japan Limited and Vale Nickel Dalian (INNM))

Port of Tubarão;

Aluminum (Alunorte, Albras and Valesul) and

Kaolin (CADAM).

In many cases, Vale operates with higher levels of environmental requirements than is legally required. To run the Environmental Management System, Vale disbursed US\$ 1.99 billion 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.

83

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 customers allocated to Brazil and to foreign countries in the last fiscal year

Fiscal year December 31, 2010		% In total net income
	Revenue (R\$	0.3
Revenue from customers attributed to:	thousand)	of the Company
Brazil	14,306,162	16.8
China	27,581,351	32.3
Japan	9,302,640	10.9
United States	2,432,904	2.9
Germany	5,601,086	6.6
Canada	1,993,686	2.3
South Korea	3,358,630	3.9
Taiwan	2,168,423	2.5

84

Fiscal year December 31, 2010		% In total net income
	Revenue (R\$	
Revenue from customers attributed to:	thousand)	of the Company
England	2,051,857	2.4
France	1,338,550	1.6
Belgium	765,528	0.9
Italy	1,831,569	2.1
Other countries	12,612,867	14.8
Total income from abroad	71,039,091	83.2

# 7.7 Regulation of foreign countries in which the Company obtains relevant revenue

Vale is subject to a number of government regulations in all the jurisdictions in which it operates worldwide. Below, we will provide a summary of regulations that have the most significant impact in our operations.

# Direitos de mineração

De modo a realizar as nossas atividades de mineração, geralmente temos que obter certas licenças, que variam, segundo a jurisdição, mas que, geralmente incluem concessões, licenças, pedidos de exploração, alvarás, liberações ou franquias (que denominamos abaixo como Concessões). Algumas dessas Concessões têm prazo indefinido, mas muitas têm datas de vencimento específicas e não podem ser renovadas. O regime jurídico e regulatório que governa as Concessões varia, dependendo das jurisdições, de maneira por vezes bastante relevante. Por exemplo, em jurisdições não brasileiras, inclusive o Canadá, uma parte importante das nossas operações é realizada por meio de direitos de mineração que possuímos ou por meio de arrendamentos, em geral firmados com agências governamentais. A tabela abaixo indica as nossas principais Concessões de lavra e outros direitos afins. Além das Concessões indicadas abaixo, a Vale possui licenças de exploração que incluem 17,8 milhões de hectares em outros países.

		Approximate covered	
Loation	Concession or other right	area (in hectares)	<b>Expiration date</b>
Canada			
Ontário	Leases	14,026	2011-2028
	Patented Lands	82.805	Undetermined
	Water rights	1,157	Undetermined
	Mining Licence of Occupation	2,952	Undetermined
Manitoba	Leases	109.043	2011-2028
	Other Leases	4.903	2013
Newfoundland and	Mining lease	1,599	2027
Labrador			
	Surface lease	4.015	2027
Indonesia			
	Single Work Contract	190.510	2025 (1)
Australia			
	Mining tenements	22,281	2011-2039
New Caledonia			
	Mining concessions	20,332	2016-2051
	Mining Concessions Tiebaghi Nickel	936	2048
	Mining concessions outside VNC Project	13,586	2016-2040
Peru			

Edgar Filing: Vale S.A. - Form 6-K

	Exploration Concession	146.887	Undetermined (2)
Colombia			
	El Hatillo Exploration Concession	9.695	2027
	Cerro Largo Sur Exploration Concession	1.092	2032
Argentina			
	Exploration Concession (Prospection Statement)	80,889	Undetermined (3)
Chile			
	Exploration Concession	50,632	Undetermined (4)
Mozambique			
	Exploration Concession (Mining Concession)	23,780	2030
Guinea			
	Exploration Concession (Mining Concession)	102.400	2045

- (1) 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.
- (2) According to Peruvian mining law, there is only one type of license. The above represents merely licenses with exploration concession.
- (3) Of the 80,889 that it has in Argentina, only 40,274 represents activities in progress.
- (4) Of the 50,332 that it has in Chile, only 23,657 represents activities in progress.

85

Many concessions imposse some obligations on the concessionaire regulating these issues regarding how operations are carried out and what type of investments are necessary. To maintain mining rights, it is necessary to attend to these demands, which usually involve significant investments and high operating costs.

# Mining activities regulations

We are subject to a number of regulations that change according to the jurisdiction in which we are operating. Our operations depend on the legislation and regulations applicable to mining activities, which include, in many countries, state and local laws, as well as the federal laws. In addition, a significant part of our concessions, particularly in the case of large operations, imposes additional obligations on the concessionaire.

The jurisdictions in which Vale operates generally have government agencies responsible for granting mining licenses and supervising compliance with mining laws and regulations.

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, which can affect it significantly. Among them we can mention:

In January 2009, a new Mining Law went into effect in Indonesia, with new licensing rules. In 2010, some regulations were enacted for the Mining Code, not all yet implemented. PTI, along with its legal advisors from Indonesia, is studying the impacts of the new Mining Law on current and future operations of PTI exploration in Indonesia. Until all regulations are passed, Vale cannot evaluate how and to what extent the Employment Contract and PTI operations will be affected.

In New Caledonia, a 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. The Company will receive the authorization no later than April 2015. Vale believes it is unlikely that the authorization will be rejected, but there is always the risk that there will be new charges.

In Guinea, the government proposed a new Mining Code that would modify some of the regulations that currently govern mining operations. Among other regulations, there would be a mandatory participation of 15% for the State in all mining projects, which is currently applied only to projects involving diamonds, gold and precious stones.

# **Environmental regulations**

We are also subject to environmental regulations that apply to the specific types of mining and processing activities we conduct. We require approvals, licenses or permits from governmental authorities to operate, and in most jurisdictions the development of new facilities requires us to submit environmental impact statements for approval and often to make additional investments to mitigate environmental impacts. We must also operate our facilities in compliance with the terms of the approvals, licenses or permits.

Environmental regulations affecting our 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 we operate impose specific environmental requirements on our operations.

86

Environmental legislation is becoming stricter worldwide, which could lead to greater costs for environmental compliance. For instance, if we are required to modify installations, develop new operational procedures or purchase new equipment, our environmental compliance costs could increase. In particular, we expect heightened attention from various governments to reducing greenhouse gases. Some important regulatory environmental initiatives are described below, but we do 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:

Our operations in Canada and at PTI in Indonesia are subject to air emission regulations that address, among other things, sulfur dioxide (SO2), particulates and metals. We will be required to make significant capital expenditures to ensure compliance with these emissions standards. The imposition of more stringent standards in the future, especially for SO2 and nickel, could further increase our costs. The rhythm of the efforts by the Canadian government to legislate Greenhouse Gas (GHG) emissions targets has slowed down. The provinces of Manitoba, Ontario and Newfoundland will launch a 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. We are taking steps, in partnership with other stakeholders, to remediate the ecological impact of our activities.

The Australian government is seeking to introduce an environmental program as part of an overall strategy to address climate change and reduce greenhouse gas emissions in Australia. The Australian government stated that it has decided to impose mandatory targets to control greenhouse gas emission levels by 2020. Thus, it is expected that a policy to set prices on carbon emissions will be imposed in the country within a short period of time.

In October 2009, Indonesia adopted new legislation on Environmental Protection and Management. It sets out a broad regulatory structure and provides that many important details will be clarified in subsequently implemented regulations.

# Royalties and other taxes on mining activities

Vale pays royalties on revenues obtained from the extraction and sale of mineral products. The following royalties and taxes apply in some of the jurisdictions in which we have our largest operations:

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 sale 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; 17% in Manitoba; and 16% in Newfoundland and Labrador.

In Indonesia, our subsidiary PTI pays a royalty fee on, among other items, its nickel production on the concession area and has made certain other commitments. Until March 2008 the royalty was equal to 1.1% of revenues from sales of nickel products. As of April 2008, the royalty payment was changed to a fixed amount based on sales volume (US\$78 per metric ton of nickel, based on overall production). In Australia, we pay royalties on the revenues from sales of minerals extracted pursuant to state laws. In Queensland, a 2/3 proportional payment is applied, under the terms that we pay 7% of the amount up to A\$100 per ton and 10% thereafter. The cost is after port fees and demurrage. In New South Wales, we pay royalties *ad valorem* on coal, on the production s value (revenues minus allowed deductions). Royalty rates are in the order of 6.2% for deep underground mines (coal extracted below 400 m), 7.2% for underground mines, and 8.2% for open pit mines. Taxed revenues is free of beneficiation costs and other taxes.

87

Currently, the Australian government is studying the possibility of applying a new mineral resource rent tax or MRRT . The MRRT will be applied on the profits generated from the exploration of coal and iron ore resources in Australia. The proposed tax would be paid as a proportional fee of 22.5% of the taxable profits and would be deductible from the company s income tax. The difference between the MRRT and royalties paid to each of the state governments is that royalties were calculated based on rent whereas MRRT is calculated on profits. Meanwhile, the government indicated that companies will receive a deductible credit from state royalties in the states where the MRRT is owed.

# Regulation of other activities

In addition to mining and environmental regulations, 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 workers health and safety, safety and support of communities near mines, and other matters.

In connection with the approval in 2006 of our acquisition of Vale Canada, we made a number of undertakings to the Canadian Minister of Industry under the Investment Canada Act. We believe we are substantially in compliance with these undertakings, which include locating our global nickel business in Toronto, Canada; accelerating the Voisey Bay development project; 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. We have complied with registration requirements for the substances we import into or manufacture in the EU in 2010 and continue to take measures to manage our exposure to the authorization process.

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 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 and Morro da Mina, Vale Manganèse France and Vale Manganese Norway AS);

Nickel (Vale Inco Europe, Taiwan Nickel Refining Corporation, Vale Japan Limited and Vale Nickel Dalian (INNM))

Port of Tubarão;

Aluminum (Alunorte, Albras and Valesul) and

Kaolin (CADAM).

In many cases, Vale operates with higher levels of environmental requirements than is legally required. To run the Environmental Management System, Vale disbursed US\$ 1.99 billion 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.

88

#### **Table of Contents**

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.

**7.8** Description of long-term relationships relevant to the Company that are not listed elsewhere in this form As one of the leading global companies in the mining sector, Vale seeks to contribute to the promotion of good practices in sustainability. Vale sustainability strategy calls for the responsible management of economic, environmental, and social issues in an integrated manner. The goal is to promote its business, especially mining operations, producing local, regional and global wealth, but also to support the construction of a legacy of positive value over the lifecycle of its projects. To support this management, the Company carries out voluntary actions in partnership with various levels of government, public institutions, other businesses and society.

# 7.9 Other information that the Company deems relevant

No further relevant information about this item 7.

89

#### 8.1 Description of the group within which the Company functions

#### a. Direct and indirect control

Valepar S.A. is a holding company that has direct control of Vale, with a participation 32.4% of 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 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 participations, and Planning. The Advisory Board is composed of six members and their substitutes. Three are elected by the participants and users of the security, and three others are indicated by the Banco do Brasil. According to the Statutes of Previ, the Board of Directors is the body of the organizational structure 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 (6.80%); (iii) Nova Cidade de Deus Participações S.A., a holding company (0.65%), and (iv) Fundação Bradesco (Bradesco Foundation), a non-profit entity with the goal of providing education and professional training for children, youths, and adults (5.83%). 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%), Lia Maria Aguiar (7.01%) and Maria Ângela Aguiar (4.71%). NCF Participações S.A. is controlled by Bradesco Foundation (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 the Fundação Bradesco (73.32%) and BBD Participações S.A. (25.86%). BBD Participações S.A. has its capital dispersed among multiple shareholders, with Mr. Lazáro de Mello Brandão the largest of them, with 4.44% 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 Japanese trading company, 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 9.04% of the share capital; and (ii) Japan Trustee Services Bank, Ltd. (trust account) with 6.8% 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 Union.

Electron S.A. is a holding company controlled by Opportunity Anafi Participações S.A. (99.97%), a holding company controlled by Belapart S.A. (38.47%), Valetron S.A. (38.47%) and Opportunity Holding FIP (23.07%). Opportunity Holding FIP is an equity investment fund with the Fund Manager, Mr. Marco Nascimento Ferreira responsible for their investment decisions. Belapart S.A. and Valetron S.A. are corporate holdings controlled by Ms. Verônica Valente Dantas, who own 50.5% of the total share capital of each of the above mentioned companies.

90

#### b. subsidiaries and affiliates

For a detailed description of the subsidiaries and affiliates of the company which carry out activities for Vale, see Item 9 of this Reference Form

3254054 Canada Limited

Acos Laminados do Pará S.A.

Aegis Indemnity Ltd.

Anyang Yu Vale Yongtong Pellet Co., Ltd.

Associação Instituto Tecnologico Vale ITV

Associação Itakyra

Associação Memorial Minas Gerais Vale

Associação Vale para Desenvolvimento Sustentável Fundo Vale

**Baldertonn Trading Corporate** 

Baovale Mineração S.A.

Belcoal Pty Ltd

Belvedere Australia (BP) PTY Ltd

Belvedere Coal Management Pty Ltd. (ACN 112 868 461)

Belvedere JV (Unincorporate)

Bowen Central Coal JV (Unincorporate)

Bowen Central Coal Management Pty Limited (ACN 107 199 619)

Bowen Central Coal Pty Limited (ACN107 198 676)

Bowen Central Coal Sales Pty Limited (ACN 107 201 230)

Brasamerican Limited

Broadlea Coal Management Pty Limited (ACN 104 885 994)

Broadlea JV (Unincorporate)

Cadam Overseas Ltd.

Cadam S.A

Caemi Holding GmbH

California Steel Industries, Inc.

Camberwell Coal Pty Limited (ACN 003 825 018)

Canico Resources Corp.

Carborough Downs Coal Management Pty Ltd. (ACN 108 803 461)

Carborough Downs Coal Sales Pty Limited (ACN 108 803 470)

Carborough Downs JV (Unincorporate)

**CMM Overseas Limited** 

Compagnie Minière Trois Rivières CMTR

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 Italo-Brasileira de Pelotização ITABRASCO

Companhia Nipo-Brasileira de Pelotização NIBRASCO

Companhia Paulista de Ferro-Ligas CPFL

Companhia Portuaria Baia de Sepetiba CPBS

Companhia Siderúrgica Ubu

Compañia Minera Andino-Brasileira Ltda CMAB

Compañia Minera Miski Mayo S.Ac.

Consórcio AHE Porto Estrela

Consórcio Brasileiro de Produção de Óleo de Palma CBOP

Consórcio Candonga

Consórcio Capim Branco Energia CCBE
Consórcio da Hidrelétrica de Aimorés
Consórcio da Usina Hidrelétrica de Funil
Consórcio da Usina Hidrelétrica de Igarapava
Consórcio de Rebocadores da Baia de São Marcos CRBSM

91

Consórcio de Rebocadores da Barra dos Coqueiros CRBC

Consórcio Estreito Energia CESTE

Consórcio Gesai Geração Santa Isabel

Consórcio Machadinho

Consórcio Railnet

Corredor do Desenvolvimento do Norte SRL CDN

CPP Participações S.A

CSP Companhia Siderúrgica do Pecém

Cubatão Fertilizer B.V.

CVRD Overseas S.A.

CVRD Venezuela S.A

Docepar S.A.

Ellensfield Coal Management Pty Ltd. (ACN 123 542 754)

Empreendimentos Brasileiros de Mineração S.A. EBM

Empresa Brasileira de Reparos Navais S.A. RENAVE

Empresa de Mineração Curuá Ltda.

Exide Group Incorporated

Ferrovia Centro-Atlântica S.A. FCA

Ferrovia Norte Sul S.A

Ferteco Europa S.à.r.1

Fertilizantes Participações S.A

Florestas Rio Doce S.A

Fortlee Investiments Limited

Fosbrasil S.A

Fundação Caemi de Previdência Social

Fundação Centro de Estudos do Comércio Exterior FUNCEX

Fundação Estação do Conhecimento Moçambique

Fundação Vale do Rio Doce de Habitação e Desenvolvimento Social FVRD

Fundação Zoobotânica de Carajás

GEVALE Indústria Mineira Ltda.

Glennies Creek Coal Management Pty Ltd. (ACN 097 768 093)

Glennies Creek JV (Unincorporate)

Goro Funding, LLC

GREMBER Grêmio dos Empregados da MBR

Heckbert 8 Group Financing Limited Liability Company

Heckbert C8 Holdings Limited

Henan Longyu Energy Resources Co. Ltd.

Heron Resources Limited

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)

92

Isaac Plains JV (Unincorporate)

Itabira Internacional Serviços e Comércio Ltda. ITACO

Kaolin International BV KIBV

Kaolin International OY KIOY

Kaolin International S.A. KISA

Kaolin Overseas Limited

Kaserge Serviços Gerais Ltda. KSG

Kobrasco International Trading Co. Ltd. KOBIN

Korea Nickel Corporation

LOG-IN Logística intermodal S.A.

LOG-IN Mercosur

Machadinho Energética S.A

Maitland Main Collieries Pty Ltd. (ACN 000 021 652)

MBR Overseas Ltd.

Minas da Serra Geral S.A. MSG

Mineração Corumbaense Reunida S.A. MCR

Mineração Dobrados S.A. Indústria e Comércio

Mineração Guanhães Ltda.

Mineração Guariba S.A.

Mineração Japurá Ltda.

Mineração Manati LTDA

Mineração Mato Grosso S.A

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 Holding GmbH

Minerações Brasileiras Reunidas S.A. MBR

Minérios Metalúrgicos do Nordeste S.A. MMN

Monticello Insurance Ltd.

MRS Logística S.A

MS Empreendimentos e Participações Ltda. MSEP

MSE Serviços de Operação, Manutenção e Montagens Ltda.

MSL Minerais S.A.

MSL Overseas Ltd

Multiplex Resource (Kazakhstan) Limited MRK

MVM Resources International B.V

Mystery Lake Nickel Mines Limited

Namoi Coal Pty Ltd (ACN 065 759 882)

Namoi Highwall Pty Ltd (ACN 074 013 719)

Namoi Hunter Pty Ltd (ACN 080 537 006)

Nebo Central Coal Pty Ltd (ACN 079 942 377)

NH2 Pty Ltd (ACN 097 547 969)

NORPEL Pelotização do Norte S.A

Norsk Hidro ASA

NSW Coal Resources Pty Ltd (ACN 077 459 735)

93

Pineland Timber Company Limited

Ponta Ubu Agropecuária Ltda

Porto Norte S.A.

Potássio Rio Colorado S.A. PRC

Prairie Potash Mines Limited

Prony Branch

Prony Nickel S.A.S.

PSC Terminais Intermodais Ltda.

PT International Nickel Indonesia Tbk

PT Vale Eksplorasi Indonesia

Qld Coal Holdings Pty Ltd (ACN 081 724 129)

QUADREM International Holdings Ltd.

Queensland Coal Resources Pty Ltd (ACN 075 176 395)

Rio Doce Amsterdam BV

Rio Doce Australia Pty Ltd

Rio Doce International Finance Limited RDIF

Rio Doce International S.A

Rio Doce Netherlands BV

Rio Paranoá Participações Ltda.

Salobo Metais S.A

Samarco Mineração S.A.

Seamar Shipping Corporation

Shandong Yankuang Internatational Coking Company Limited

Sharcolle Investments Limited

SL Serviços Logísticos Ltda

Sociedad Contractual Minera Tres Valles

Sociedad Portuaria Rio Cordoba S.A

Sociedade de Desenvolvimento do Coredor de Nacala

Sociedade de Mineração Constelação de Apolo S.A.

Societe d Exploration Minière Vior Inc (VIOR)

Société Industrielle et Com. Brasilo-Luxemborgoise BRASILUX

SRV Insurance do Brasil S.A.

SRV Reinsurance Company S.A.

Swanbank Queensland Pty Ltd (ACN 108 563 373)

Taiwan Nickel Refining Corporation

Tao Sustainable Power Solutions (BVI)

Tao Sustainable Power Solutions (UK)

Tao Sustainable Power Solutions (US)

Teal Minerals (Barbados) Incorporated

Tecnored Desenvolvimentos Tecnológicos S.A

Terminal de Vila Velha S.A. TVV

**Tethys Mining LLC** 

The Central East African Railways Company Limited

ThyssenKrupp CSA Companhia Siderúrgica

ThyssenKrupp Slab International B.V

Tiebaghi Nickel S.A.S (Branch)

Tiebaghi Nickel S.A.S.

Transbarge Navegacion S.A. TBN

94

Transporte Ferroviario Concesionaria S.A. TFC

Transporte Ferroviário Inversora Argentina S.A. TFI

Turbo Power Systems Inc.

UF Distribuidora de Combustíveis Ltda

Ultrafértil S.A

Urucum Mineração S.A. UMSA

Vale Americas Inc

Vale Ásia Kabushiki Kaisha Vale Asia K.K.

Vale Australia (CQ) Pty Ltd (ACN 103 902 389)

Vale Australia (EA) Pty Ltd (ACN 081 724 101)

Vale Australia (EF) Pty Ltd (ACN 108 555 111)

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 Austria Holdings GmbH

Vale Austria Holdings GmbH (Oman Branch)

Vale Belvedere (BC) Pty Ltd

Vale Belvedere (SEQ) Pty Ltd

Vale Belvedere Pty Ltd (ACN 128 403 645)

Vale Canada Holdings Inc.

Vale Canadá Limited

Vale Canadian Nickel Holdings Inc.

Vale Capital II

Vale Capital Limited

Vale China Holdings (Barbados) Ltd.

Vale Coal Colombia Ltd

Vale Coal Exploration Pty Ltd (ACN 108 568 725)

Vale Colombia C.I. SAS

Vale Colombia Holdings Ltd.

Vale Colombia Port Ltd

Vale Colombia Transportation Ltd

Vale Comércio Internacional SE

Vale Cubatão Fertilizantes Ltda

Vale Emirates Limited

Vale Empreendimentos e Participações Ltda

Vale Energia Limpa S.A

Vale Energia Limpa Moçambique Ltd

Vale Energia S.A

Vale Europa S.A

Vale Europe Ltd.

Vale Europe Pension Trustees Ltd.

Vale Evate Moçambique Limitada

Vale Exploració Argentina S.A. VEA

Vale Exploraciones Chile Ltda

Vale Exploration Canada Inc.

Vale Exploration Peru SAC

Vale Exploration Philippines Inc

#### **Table of Contents**

Vale Exploration Pty Ltd (ACN 127 080 219)

Vale Explorations USA, Inc.

Vale Fertilizantes Moçambique Limitada

Vale Fertilizantes S.A.

Vale Fertilizer International Holding B.V

Vale Fertilizer Netherlands B.V

Vale Florestar Fundo de Deenvolvimento e Participações (FUNDO)

Vale Florestar S.A.

Vale Guinée S.A

Vale Holdings (Barbados) Limited

Vale Holdings AG

Vale Inco Asia Ltd.

Vale Inco Atlantic Sales Limited

Vale Inco Australia Ltd. Partnership

Vale Inco Europe Holdings

Vale Inco Management Advisory Services (Shangai) Co., Ltd.

Vale Inco Metals (Shangai) Co., Ltd

Vale Inco Nouvelle-Calédonie Branch

Vale Inco Pacific Ltd Branch (Taiwan)

Vale Inco Pacific Ltd Branch (Thailand)

Vale Inco Pacific Ltd.

Vale Inco Resources (Australia) Pty Ltd.

Vale India Private Limited

Vale International S.A

Vale International S.A. DIFC Branch

Vale International Singapore

Vale Investments Ltd.

Vale Japan Ltd.

Vale Kazakhstan Limited Liability Partinership

Vale Limited

Vale Logística da Argentina S.A VLA

Vale Logística do Uruguay S.A

Vale Logística Integrada S.A.

Vale Malaysia Manufacturing SDN. BHD.

Vale Manganês S.A

Vale Manganese France

Vale Manganese Norway AS

Vale Mauritius Ltd.

Vale Mina do Azul S.A

Vale Minerals China Co. Ltd

Vale Moçambique Ltda.

Vale Newfoundland & Labrador Ltd.

Vale Nickel (Dalian) Co. Ltd

Vale Nouvelle-Calédonie S.A.S.

Vale Óleo e Gás S.A

Vale Oman Distribution Center LLC

Vale Oman Pelletizing Company LLC

#### **Table of Contents**

Vale Operações Ferroviárias S.A

Vale Operações Portuárias S.A

Vale Overseas Ltd.

Vale Potash Canada Limited

Vale Potássio Nordeste S.A

Vale Projectos e Desenvolvimento Moçambique Limitada

Vale Proyectos Minerales S.A

Vale Republic Democratique Du Congo Vale Congo

Vale S.A

Vale Salzach GmbH

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

Vale South Africa (Proprietary) Ltd.

Vale Technology Development (Canada) Limited

Vale Zambia Limited

Valepar

ValeServe Malaysia Sdn. Bhd.

Valesul Alumínio S.A.

VBG Logistics (Vale BSGR Logistics) Corp.

VBG Vale BSGR BVI Limited

VBG Vvale BSG Guinea

VBG Vale BSGR Liberia Limited

VBG Vale BSGR Limited

VEL (ME) Ltd

**VEL Holdings GmbH** 

Vistaerea S.A

Zhuhai YPM Pellet Co. Ltd.

### c. Vale shareholdings in companies in the group

None

### d. Shareholdings in Vale held by companies in the group

As well as shareholdings by the direct controller Valepar in Vale, described in item a above, the following companies hold direct shares in Vale:

Company share (%)

### **Company in the Group**

BNDES Participações S.A Caixa de Previd.dos Func.do Banco do Brasil Previ 5.343% 0.073%

e. companies under common control

None.

97

### **Table of Contents**

### 8.3 Restructuring operations

Instructions for filling 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., 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 in the group in item 8.1(d).

98

### 9. RELEVANT ASSETS

### 9.1 Uncirculated assets for the relevant development activities of the Company for the last fiscal year

Items 9.1 (a), 9.1 (b) and 9.1(c) of this Reference Form, describe the main uncirculated assets of the Company. The main fixed assets of the Company consist of various buildings, facilities, equipment, IT equipment, railroads, and mining rights, pursuant to item 9.1 (a) of this Reference Form. The following table describes the book value of fixed assets of the Company in December 31, 2010 by category and geographic location:

•	TC1 1		D .
ln	Thousands	$\alpha$ t	Regie
111	Tilousanus	$\mathbf{o}_{\mathbf{I}}$	ixcais

			North				New		
2010	Brazil	Europe	America	Australia	Africa	Asia	Caledonia	Others	Total
D21.42	4.022.466	05.661	772 757		604	1 151 242	2 224 050		0.260.707
Buildings	4,923,466	95,661	773,757		604	1,151,343	2,324,958		9,269,787
Facilities	19,274,685	177,014	1,727,954		261,397	86,642	4,313,741	115,379	25,956,813
Equipment	13,281,680	91,139	1,249,755		153,435	1,744,529	108,303	347,994	16,976,836
Mining	15,975,825	2,000	17,501,001	1,128,844	2,357,850	2,060,257	994,721	651,735	40,672,233
Others	5,749,001	15,312	7,992,226	1,467,258	816,488	45,175	26,658	569,362	16,681,480
ongoing	10,066,919	1,803,144	1,120,531		2,911,559	1,967,797	1,939,457	720,277	20,529,685
Total	69,271,576	2,184,270	30,365,224	2,596,102	6,501,333	7,055,743	9,707,838	2,404,747	130,086,833

### a. Fixed assets, including those subject to rent or lease:

Brief Description of Asset	Location	State	Municipality
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
Iron ore mines various Central West system	Brazil	Mato Grosso do Sul	
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

# **Table of Contents**

Brief Description	of Asset	Location	State	Municipality
D-11-45-50 - 01-04	Company	Brazil	Espírito	Anchieta
Pelletizing plant	Samarco	CI :	Santo	<b>7</b> 1 1 1
Pelletizing plant	Zhuhai YPM	China		Zhuhai
		Brazil	Espírito	Vitória
Pelletizing plant	Hispanobras		Santo	
		Brazil	Espírito	Vitória
Pelletizing plant	Itabrasco		Santo	
		Brazil	Espírito	Vitória
Pelletizing plant	Kobrasco		Santo	
		Brazil	Espírito	Vitória
Pelletizing plant	Nibrasco		Santo	
Pelletizing plant	Oman	Oman		
	production system: mine, processing plant,	Canada		Sudbury
smelter, and nicke		Cultudu		Sudoury
·	production system: mine, processing plant,	Canada		Thompson
smelter, and nicke		Canada		Thompson
sincici, and mek	El Termery	Canada		Voisey's
Miakal mina and	ana aaasin a mlant	Callaua		•
Nickel mine and p	· · · · · · · · · · · · · · · · · · ·	Indonesia		Bay Sorowako
Nickel mine and p	processing plant	Indonesia		
NT: 1 1 : 1	. 1	New		Noumea
Nickel mine and p	processing plant	Caledonia		G 1
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
Carajás Railroad		Brazil	Various	Various
Vitória a Minas R	ailroad	Brazil	Various	Various
Centro-Atlântica	Railroad	Brazil	Various	Various
North-South Rails	road	Brazil	Various	Various
MRS Logistics		Brazil	Various	Various
Manganês Mines		Brazil	Various	Various
Paragominas min	e bauxite	Brazil	Pará	Various
C		Australia		Hunter
Thermal and meta	allurgical coalmine			Valley
111011111111111111111111111111111111111	and grown community	Australia		Bowen
Thermal and meta	allurgical coalmine	1100010110		Basin
	allurgical coalmine Moatize	Mozambique		Various
Thermal coalmine	· ·	Colômbia		Santa Marta
Phosphorite mine		Peru		Salamanca
•	and processing plant	Brazil	Various	Salamanca
•	elter of precious metals	Canadá	various	Ontario
	-		Vorious	Various
Plant of ferroallog		Brazil	Various	
Plant of ferroallog		France		Dunkirk Ma I Dana
Plant of ferroallo	yS	Norway		Mo I Rana

100

b Patents, trademarks, licenses, concessions, franchises and contracts for technology transfer:

Type of asset	Description/class		Territory affected (hectares)	Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concessions	Mining concessions in Brazil	Undetermined	664,627	Persistent breach of current Mining Legislation: predatory mining, mining stopped without notice to, and consent of, the Competent organ, not answering repeated requests for routine inspections.	Interruption and / or canceling of mining operations in Brazil
Concessions	Patented lands in Canada /Province of Ontario	Undetermined	89,732	Non-payment of taxes (mining tax)	Interruption and / or canceling of mining operations in Ontario, Canada
Concessions	Mining leases in Canada/Province of Ontario	2011-2028	14,026	Failure/refusal to make renewal request, failure to pay mining lease rent for more than 2 years.	Interruption and / or canceling of mining operations in Ontario
Licença	Mining license of occupation in Canada/ Province of Ontario	Undetermined	2,952	Non-payment of taxes (mining rent)	Interruption and / or canceling of mining operations in Ontario
Licença	OIC s (Order in Council Leases) in Canada/ Province of Manitoba	2011-2028	109,043	Failure to make renewal request for the area and non-payment of taxes (rental fee and mining claim tax)	Interruption and / or canceling of mining operations in Manitoba, Canada
Concessions	Mining leases in Canada/Province of Manitoba	2013	4,903	Failure to make renewal request for the area and non-payment of taxes (rental fee) and failure to present evaluation work	Interruption and / or canceling of mining operations in Manitoba
Concessions	Mining leases in Canada/Province of Newfoundland and Labrador	2027	1,599	Failure to present evaluation work and non-payment of taxes (rental fee).	Interruption and / or canceling of mining operations in Newfoundland and Labrador, Canada

Table of Contents 156

101

# **Table of Contents**

Type of asset	Description/class	Duration		Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concessions	Surface lease in Canada/Province of Newfoundland and Labrador	2027	4,015	Failure to present evaluation work and non-payment of taxes (rental fee).	Interruption and / or canceling of mining operations in Newfoundland and Labrador
Concessions	Work contract in Indonesia	2025	190,523	End of the contract; by cancellation due to errors or irregularity in the procedure or in the act of its granting and in case of bankruptcy or termination of the Concessionary.  Note: The Contract of Work of Vale mines in Indonesia expires in 2025.  However, and according to the new Mining Law, Vale can ask for an extension of at least 10 years	Interruption and / or canceling of mining operations in Indonesia
Concessions	Mining concessions in Australia	2011-2039	22,281	Non payment of lease/royalties, failure to submit report on activities	Interruption and /or canceling of mining operations in Australia
Concessions	Mining concessions in New Caledonia	2016-2051	20,332	Non payment of lease/royalties, failure to submit report on activities.	Interruption and / or canceling 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 (except for the area for the VNC project)	2016-2040	13,586	Non payment of lease/royalties, failure to submit report on activities	Interruption and / or canceling of mining operations in New Caledonia
Concessions	Mining concessions in Peru	Undetermined	1 146,778	Non-payment of annual fee for more than 2 consecutive years and non-payment of fine.	Interruption and / or canceling of mining operations in Peru

102

Type of asset	Description/class		Events which might cause a loss of	Possible Consequences of Loss of Rights for the Company
Concessions	El Hatillo concessions in Colombia	2027	Not performing the work and the works of exploration, construction and installation and operation on the terms and conditions set forth in the contract, no payment of royalties and other considerations of the contract, failure to submit the reports in the contract non-renewal or adjustment of policies breach of contract, breach of the obligation to maintain the area given in concession, non-payment of fines that are imposed by any authority mining, the suspension of work and works for more than 3 consecutive months or six months accrued in one year without prior authorization from the mining authority, not meeting standards of technical mining, non-compliance with environmental standards, carrying out works and mining activities in special areas without prior authority, violation of laws governing the sale and marketing of coal, the assignment, subcontracting or hiring of equipment without prior approval of the competent authority.	Consecutive fines, declaration of ending of the mining contract, and consequently, inability to execute this type of Contract with the State again.
Concessions	Concessions in de Cerro Largo Sur in Colombia	2032	Not performing the work and the works of exploration, construction and installation and operation on the terms and conditions set forth in the contract, no payment of royalties and other considerations of the contract, failure to submit the reports in the contract non-renewal or adjustment of policies breach of contract, breach of the obligation to maintain the area given in concession, non-payment of fines that are imposed by any authority mining, the suspension of work and works for more than 3 consecutive months or six months accrued in one year without prior	Consecutive fines, declaration of ending of the mining contract, and consequently, inability to execute \ this type of Contract with the State again.

authorization from the mining authority, not meeting standards of technical mining, non-compliance with environmental standards, carrying out works and mining activities in special areas without prior authority, violation of laws governing the sale and marketing of coal, the assignment, subcontracting or hiring of equipment without prior approval of the competent authority.

Concessions

Mining Undetermine On concessions
(Manifestación de Descubrimiento [Discovery Statement]) in Argentina

Undetermin&0,889 Failure to present request for measurement, failure to carry out de legal labor (LL), non-payment of fee ( canon minero [mining royalties])

Interruption and / or canceling of mining operations in Argentina

103

Network (Rede

Type of asset	Description/clas		•	Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concessions	Mining U concessions (Concesión de explotación [exploitation concession]) in Chile	Jndetermin	<b>50</b> ,632	Non-compliance with annual payment deadlines; lack of opposition from third parties to requests for areas by Vale.	Interruption and / or canceling of mining operations in Chile
Concessions	Mining concessions in Mozambique	2030 2	23,780	Lack of demarcation of the area, lack of payment of specific taxes, failure to submit work report and not carrying out work as per mining plan.	Interruption and / or canceling of mining operations in Mozambique
Concession	Rail concession for passenger an freight transport on the Carajás railroad	(prorogable) for (\$30 years)	the states of MG, SP, ES, RJ, GO, BA, SE and the Federal district	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.	Interruption and / or canceling of railroad operations which are part of Vale s Northern System.
Concession	Rail concession for passenger an freight transport on the Vitória a Minas railroad	dextendable for	MG.	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.	Interruption and / or canceling of railroad operations which are part of Vale s Southeast System.
Concession	Concession for the Center-East network belonging to the Federal Railroad Network (Rede Ferroviária Federal S.A.), granted to the Centro-Atlântica railroad	(extendable for 1 30 years)	PA.	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.	Interruption and / or canceling of railroad operations.
Concession	Concession for the South-East network belonging to the Federal Railroad	for a 30 years)		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	Interruption and / or canceling of railroad operations which are part of Vale s Southern System.

Table of Contents 161

closure of the Concessionary.

Ferroviária Federal S.A.), granted to MRS Logística

Concession

Subconcession 2037 720 km, between contract with lease of for (MA) and Palmas North-South 30 years)(TO)

railroad network

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 Sub-Concessionary.

Interruption and / or canceling of railroad operations.

104

Type of asset	Description/classD	uratio	•	Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concession	Concession for Use of Public property for electrical energy generation UHE Igarapava	2028	Igarapava (SP), Conquista(MG), Rifaina(SP) and Sacramento(MG)	(i) by reversal of the asset at the end of the contractual period; (ii) by expropriation.	Interruption and / or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Porto Estrela	2032	Joanésia(MG), Braúnas(MG) and Açucena(MG)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and / or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Capim Branco I and II	2036	Araguari(MG), Uberlândia(MG) and Indianópolis(MG)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and / or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Funil	2035	Lavras (MG), Perdões(MG), Ijaci(MG), Itumirim(MG), Ibituruna(MG), Bom Sucesso(MG)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and / or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Aimorés	2035	Aimorés (MG), Baixo Guandu(ES), Resplendor(MG) and Itueta(MG)	((i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and / or canceling of supply of energy generated by own plant.

Type of asset	Description/classD	uratio	•	Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concession	Concession for Use of Public property for electrical energy generation UHE Candonga	2035	Rio Doce(MG), Santa Cruz do Escalvado(MG)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and /or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Estreito	2037	Estreito and Carolina (MA) and Aguiarnópolis, Darcinópolis, Goiatins, Babaçulândia, Barra do Ouro, Palmeirante, Palmeiras do Tocantins, Tocantinópolis, Tupiratins, Itapiratinsm, and Filadélfia (TO)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and /or canceling of supply of energy generated by own plant.
Concession	Concession for Use of Public property for electrical energy generation UHE Santa Isabel	2037	Ananás, Araguanã, Riachinho, and Xambioá (TO) and Palestina do Pará, Piçarraand São Geraldo do Araguaia (PA)	(i) by the contractual period ending; (ii) by expropriation of the services; (iii) by expiration (iv) by recision; (v) the cancellation due to error or irregularity in procedure or found in the act of its granting, (vi) in the case of bankruptcy or dissolution of the Concessionary.	Interruption and /or canceling of supply of energy generated by own plant.
Concession	Shared concession for electrical energy generation  UHE Machadinho	2032	Anita Garibaldi, Celso Ramos, Campos Novos, Zortéa, Capinzal and Piratuba (RS) and Maximiliano de Almeida, Machadinho, Barracão and Pinhal da Serra (SC)	(i) by reversal of the asset at the end of the contractual period; (ii) by expropriation (iii) by expiration.	Interruption and /or canceling of supply of energy generated by own plant.

Concession	Concession for usage of hydro energy PCH Nova Maurício	2021	Leopoldina (MG)	(i) period of concession ending.	Interruption and /or canceling of supply of energy generated by own plant.
Concession	Concession for usage of hydro energy PCH Glória	2021	Muriaé (MG)	(i) period of concession ending.	Interruption and /or canceling of supply of energy generated by own plant.
Concession	Concession for usage of hydro energy PCH Ituerê	2021	Rio Pomba (MG)	(i) period of concession ending.	Interruption and /or canceling of supply of energy generated by own plant.
				106	

Type of asset	Description/cla	sDuratio	-	Events which might cause a loss of rights	Possible Consequences of Loss of Rights for the Company
Concession	Concession for usage of hydro energy PCH Mello	2025	Rio Preto (MG)	(i) period of concession ending.	Interruption and /or canceling of supply of energy generated by own plant.
Brand	Registry of the Mixed Brand Vale	2017 (extendab every 10 years		Within the administrative field (INPI), the registries of brands already granted may be contested by a nullity proceedings, or suffer requirements of partial or total expiration, in the event the brand is not being used in the way for which the registration was granted. Within the legal field, third parties may request the nullity of the registrations stating a violation of their intellectual property rights. The maintenance of the trademark registrations is made through the periodical payment of fees to INPI. The payment of the corresponding rates and the continuous use of the trademarks is necessary to avoid the end of the registration and the consequent expiration of the owner s rights.	The loss of the rights on the trademarks implies the impossibility to stop third parties from using the same or similar trademarks in order to name concurrent services or products, once the owner has no more the exclusive right of use on them. There is also the possibility for the owner to suffer legal claims within the criminal and civil field, based on unlawful use in case of violation of third parties rights; this may result in the impossibility to use the marks in his activities. It is not possible to quantify the impact of this hypothesis.

107

#### **Table of Contents**

Companies in which Vale has a share participation

Book value ( VC )

Increase or Decrease in and Market value

Value of

iv.

Share Share, according to in (VM) of Share book value and market value

compan©VM (R\$ mil) and market value (R\$)
CNPJ (%registration 2010 2010 2009 2008 2010 2009

ROLADAS 05.053.020/0001-44 AS MNIO

(%règistration 2010 2010 51 NOVC: 1,088,000,000.00 4.8%

9.5%

4.7%

Dividends Received

5.830.000.00

200

77,777.0

VM: N/A N/A N/A

Head Office: Rodovia PA 483 KM 21 Edifício 711 Ala C Distrito de Murucupi Barcarena PA Brazil Activities: Production and sale of alumina and other related industry products and trading of alumina, its raw materials and products derived there from; import and export of any products or goods necessary to carry out industrial and commercial activities of the Society, participation in ventures having similar objectives and purposes or otherwise related to the object of the Company, development of technology for alumina production and provision of technical services related thereto, an transportation and other services of any nature (including port operations), provided that they are related to the objectives above.

Reasons for Acquiring and Maintaining Share: Running aluminum operations in Brazil. Investment kept for sale.

05.848.387/0001-54 57.03 NOVC: 2,732,000,000.00 5.1% 4.8% 5.5% 31,000,000 8,087,000.00 79,027,0

ORTE IINA DO E DO IL S.A.

ILEIRO

VM: N/A N/A N/A N/A

Head Office: Rodovia PA 483 KM 12 Área 73 Barcarena PA Brazil

Activities: Production and sale of alumina and other related industry products and trading of alumina, its raw materials and products derived there from; import and export of any products or goods necessary to carry out industrial and commercial activities of the Society, participation in ventures having similar objectives and purposes or otherwise related to the object of the Company, development of technology for alumina production and provision of technical services related thereto, an transportation and other services of any nature (including port operations), provided that they are related to the objectives above.

Reasons for Acquiring and Maintaining Share: Running aluminum operations in Brazil. Investment kept for sale.

108

Book value ( VC )

Increase or Decrease in

and Market value

Value of

iv.

Share in (VM) of Share

Share, according to book

12.4% 0.23% -44.3%

value Dividends Received and market value (R\$)

company CVM **CNPJ** (%) registration 00.924.429/0001-75 15369 VC: 1,916,000,000.00 100

(R\$ mil) 2010

2009 2010

2010

0

2009

**ROVIA** ITRO LÂNTICA

VM: N/A

N/A N/A

N/A

N/A

2008

7° andar Belo Horizonte Head Office: Rua Sapucaí, 383 MG Brazil

Activities: To provide rail transport services; operate services for loading, unloading, warehousing and transshipment stations, yards and land within the range of existing railway lines which are object of the concession, exploring modal transport related to rail transport; serving as a port operator, running services and operations for moving and storage of go destined for or coming from water transport; participating in projects that aim to promote the development of the socio-economic areas of influence, seeking to expand rail services delivered; perform all similar or related activities as the described in the above, and engage in other activities that are based on the infrastructure of the Company. Reasons for the Acquisition and Maintenance of Share: Exploitation of the Centro-Atlantica railroad concession.

ROVIA RTE SUL

09.257.877/0001-37

100

SIM VC: 1,744,000,000.00

35.0

57.6%

10.9% 5,680,000.00

VM: N/A

N/A N/A

Head Office: Av. dos Portugueses s/nº Prédio DILN, 1º andar Sala 1 Itaqui-Pedrinhas Retorno de Itagui São Luiz

Brazil

Activities: Perform the operation of rail freight, under the regime of subconcession, through the following activities: (a) provision of the administration and operation of the North South Railroad, for the stretch in Açailândia, State of Maranhão, to Palmas, State of Tocantins (Stretch), including operation, 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 services mentioned in item (a) above, including associated projects, operational services and additional services, as well a support additional services and related acts provided that such activities are related to the objectives of the Company, und the terms of the Contract.

Reasons for the Acquisition and Maintenance of Share: Running of the North-South railroad concession.

19.443.985/0001-58 78.92

YES VC: 7,384,000,000.00

N/A

N/A

N/A

0

ilizantes S.A

VM: 4,829,000,000.00 N/A N/A N/A

Head Office: Estrada da Cana, Km 11, Distrito Industrial Delta, Uberaba, MG Brazil

Activities: the utilization of mineral resources, through research, mining and concentration of phosphate rocks; the industrial utilization of phosphate ores and associated ores, including the use of these and other ores and minerals associated or not these and also to obtain other chemical products; the manufacture of fertilizers and other products for agriculture and livestock; trade, transportation, exportation and importation of these products as well as brokering, by third parties; the

activity of providing industrialization services to third parties; and the participation in other commercial or civil companie domestic or foreign, as a partner, shareholder or quota holder.

Reasons for the Acquisition and Maintenance of Share: Expansion of fertilizer activities, in line with Vale s strategy to become a global leader in the fertilizer industry.

IERAÇÕES ASILEIRAS JNIDAS MBR

TERAÇÕES 33.417.445/0001-20 92.99 NO VC: 3,291,000,000.00 -3.88 -4.1% 28.3% 19,000,000.00

VM: N/A N/A N/A N/A

Head Office: Av. de Ligação No. 3.580, Águas Claras Nova Lima MG Brazil

Activities: The mineral extraction industry, including exploration and prospecting; provision of technical services especial for mining companies; transportation, beneficiation, shipping and sale of ores, from own production or third parties, the export and import of ores, shareholdings in other companies, especially those whose objective is mining or transportation, industrialization, shipping and sale of ores, the provision of transport services, port and fluvial support.

Reasons for the Acquisition and Maintenance of Share: Running iron ore operations in Brazil

109

Book value ( VC )

Increase or Decrease in

and Market value

Value of

iv.

Share in

( VM ) of Share (R\$ mil)

value and market value

Share, according to book Dividends Received (R\$)

compar@VM (% gistration **CNPJ** 

2010

2010 2009

2008 20100000008

SALOBO METAIS 33.931.478/0001-94 100 NO VC: 3,271,000,000.00 S.A.

104.5% 92.2% 39.9% 0 0 0

VM: N/A

N/A

N/A N/A

Head Office: Rua Santa Luzia, 651, 14° andar Parte, Rio de Janeiro RJBrazil Activities: Utilization of mineral resources in National Territory, particularly the Salobo deposit, located in the Serra dos Carajás, in the district and municipality of Maraba, in the State of Pará, the subject of Mining Ordinance No. 1121, of 7/14/87, including the mining, beneficiation, smelting, refining, transportation, and marketing of copper, gold, and their by-products.

Reasons for the Acquisition and Maintenance of Share: Running Salobo copper deposit operations in Brazil.

VALE CANADÀ LIMITED

100 NO VC: 9,250,000,000.00

13.34%

6.15% 12.1%

0 0 0

VM: N/A

N/A

N/A N/A

Head Office: 200 Bay Street, Royal Bank Plaza Suite 1600, South Tower, P.O. Box 70

Toronto Ontario Canada

N.A.

N.A.

Activities: Vale Inco s global activities are managed from headquarters in Toronto, in the Canadian state of Ontario, which continues its corporate functions and has significant local involvement.

Reasons for the Acquisition and Maintenance of Share: Running operations in nickel and by-products (copper, cobalt, platinum group metals, and other precious metals) in Canada, United Kingdom, and Indonesia.

**VALE** INTERNATIONAL S.A.

100 NO VC: 42.442.000.000.00

23.3% -18.3% 38.2%

0

0 0

VM: N/A

N/A N/A N/A

Head Office: Route de Pallatex 29 1162 St-Prex Switzerland

Activities: Acquire, own, manage, and sell direct or indirect holdings in companies or enterprises, especially abroad; trade and distribute the products of companies within the Vale group, develop relationships with customers and provide technical assistance, including product development and production planning, to customers and group companies worldwide; perform research and development activities in the sectors of mining, logistics and energy; finance companies and group companies and provide business, financial, administrative and legal services to other companies and other group companies in Switzerland and abroad. The company may conduct any activities that may be related to its objectives, 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; buy, hold and sell real estate on the company s own behalf or on behalf of other companies and group companies, except for transactions under the jurisdiction of Swiss federal law related to the acquisition of real estate by persons abroad.

Reasons for the Acquisition and Maintenance of Share: Financial transactions and business activities.

VALE MANGANÊS S.A. 15.144.306/0001-99 100 NO VC: 890,000,000.00 29.1% 14.8% 11.5% 0 0 0

VM: N/A N/A N/A

Head Office: Km 24 da Rodovia BR-324 Centro Industrial de Aratu Simões Filho BA Brazil Activities: The steel industry, metallurgy, industrialization, and sale of ferroalloys; exploitation, on its own account or in combination with other companies, of mineral deposits, including research, mining, beneficiation, 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 their production processes and their derivatives and by-products; import and export of goods related to or required for its activities, including equipment, supplies and miscellaneous materials; any other related activities that do not conflict with its stated purpose or with prevailing legislation.

Reasons for the Acquisition and Maintenance of Share: Running of ferroalloy and manganese operations in Brazil.

110

#### **Table of Contents**

O

Book value ( VC ) Increase or Decrease in and Market value Value of iv. Share Share, according to book value Dividends Received in ( VM ) of Share compan@VM (R\$ mil) and market value (R\$) **CNPJ** (% gistration 2010 2009 2010 2009 2010 2008 SUBSIDIARIES WITH SHARED CONTROL

04.932.216/0001-46 40 NOVC: 236,000,000.00 7.8% 8.3% 0.1% 18,000,000.00 86,373,000.00 172

VM: N/A N/A N/A

Head Office: Porto Trombetas, s/nº68.275-000 Oriximina PA Brazil

Activities: Carry out the activities of a mining company, including those of a company with industrial, commercial, and service of with the main objective of performing exploration and utilization of mineral deposits within national territory on its own account of including prospecting, exploration, extraction, beneficiation, manufacturing, sales, import, and export of bauxite and other ores and in general; generate and distribute electricity for own consumption or for third parties—, represent national or foreign companies; to other companies, either as partner or shareholder, practicing all acts appropriate to the protection and development of such shares; beneficiate, improve, manage, develop, exchange, lease, dispose of or deal in any form, any and all assets, properties or rights of the acquire and operate vessels for its exclusive use; undertake programs or implement projects for forestation / reforestation.

Reasons for the Acquisition and Maintenance of Share: Running of bauxite operations in Brazil.

01.417.222/0001-77 41,5 YESVC: 851,000,000.00 4.7% 307.2% 52.6% 126,000,000.00 54,063,000.00 27

VM: N/A N/A N/A

Head Office: Praia de Botafogo nº 228, 12º andar Sala 1.201-E Botafogo Rio de Janeiro RJ Brazil

Activities: To provide rail transport services; operate services for loading, unloading, warehousing and transshipment stations, yar within the range of existing railway lines which are object of the concession, running modal transport related to rail transport; services the law, as a port operator, running services and operations for moving and storage of goods destined for or coming from water transporting in projects that aim to promote the development of the socio-economic areas of influence, seeking to expand rail services; perform all similar or related activities to those described above, and engage in other activities that are based on the influence.

Reasons for the Acquisition and Maintenance of Share: Provision of logistics services for operation of iron ore and pellets.

16.628.281/0001-61 50 NOVC: 676,000,000.00 -25.05% 200.8% -27.1% 1,639,000,000.00 347,114,000.00 54

VM: N/A N/A N/A N/A

Head Office: Rua Paraíba nº 11229º e 10 andares Funcionários Belo Horizonte MG Brazil

Activities: Research, mining of ores throughout the country, industrialization and marketing of ores, transport and navigation with including for third parties, importation of equipment for its own use, spare parts and raw materials.

Reasons for the Acquisition and Maintenance of Share: Expansion of Vale s participation in the market for iron ore and pellets in

42.278.291/0001-24 31,33 YESVC: 224,000,000.00

2.7% -1.2% 16.6%

0

0

AL

VM: 890,4247,000.00 22.4% 68.3% -65.8%

Head Office: Praia de Botafogo, 501 Torre Corcovado sala 703 Botafogo Rio de Janeiro RJ Brazil

Activities: Operate own or third party boats for long-distance maritime commerce, coastal and river transport of general cargo; op terminals and ports, including port support navigation; carry out marketing and warehousing services and freight logistics and marvessels; provide transport services by road and rail, and carry out complementary, related or incidental activities, related to their number of the composition of the com

Reasons for the Acquisition and Maintenance of Share: Provide logistics solutions for clients.

111

			Book value ( VC )						
		Increase or Decrease in Value							
		;	and Market value	of					
		iv.							
		Share		Share, a	ccording t	o book			
		in	( VM ) of Share		value		D	ividends l	Received
	(	compa <b>6</b> WM	(R\$ mil)	and market value			(R\$)		
	CNPJ	(%gistration	n 2010	2010	2009	2008	2010	2009	2008
IINERAÇÃO	03.327.988/0001-96	100 NOVC	2: 1,225,000,000.00	-14.10%	N/A	N/A	0	0	
ORUMBAENSE									
EUNIDA S.A.									

VM: N/A N/A N/A Head Office: Rodovia Morro do Urucum, s/n° Corumbá MS Brazil

Activities: Investigation and research of ores and minerals, exploration, usage, and administration of mine and mineral resources in in general, obtaining research permits, mining concessions of all kinds of ores and minerals under the terms of the laws ruling these issues, purchase and lease of lands, equipment and facilities, including rights and interests in the subsoil and the surface; purchase, sale, beneficiation, processing, refining, industrialization, importation and exportation, commercialization and transport by rail, road and/or sea of ores, minerals and metals of any kind whatsoever, on its own or on behalf of third parties; purchase and sale of all and any manufactured products, machineries and equipment related with above listed activities; representation of other companies, either national or foreign, and participation in other commercial or civil companies, either as a partner, shareholder or quota holder.

N/A

Reasons for the Acquisition and Maintenance of Share: Expansion of Vale s participation in of granulated iron ores

OCIEDAD	90 NOVC: 394,000,000.00		N/A	N/A	N/A	N/A	N/.
CONTRACTUAL IINERA TRES	VM: N/A	N/A	N/A	N/A			
/ALLES							

Head Office: Rosário Norte, 615 - sala 1.201 Las Condes Santiago Chile Activities: The acquisition of mining rights and concessions in Chile or abroad; exploitation, development and usage of mineral deposits either in Chile or abroad; provision and hiring of all type of services and advisory services, development either in Chile or abroad of other activities related to the corporate purpose, either directly or not, including the investigation, industrialization, purchase and sale, import and export of all type of assets; participation in all types of companies, either in Chile or abroad, related with the corporate purpose; development of other activities agreed by the partners.

Reasons for the Acquisition and Maintenance of Share: Running of copper operations in Chile [ ]

JRUCUM MINERAÇÃO S.A. UMSA 03.553.344/0001-16 100 NO VC: 120,000,000.00 76.47% 78.95% -11.63% N/A N/A 100,000,00.00

VM: N/A N/A N/A N/A

Head Office: Rodovia Morro do Urucum, s/n° Corumbá MS Brazil

Activities: Production, beneficiation, agglomeration, and commercialization of manganese ore, iron ore and others, and any complementary and subsidiary activity, and the participation in any way with other companies and/or undertakings with purposes related or connected with their own purposes.

Reasons for the Acquisition and Maintenance of Share: Expansion of Vale s participation in the market of iron and manganese ores, [ ]

112

Book value ( VC )

				134 1 . 1		or Decre	ease in		
				and Market value	Value of Share, according to				
			iv. Share						
			in	( VM ) of Share	book value		Dividends Received		
			companyCVM	(R\$ mil)	and market value		(R\$)		
		CNPJ	(%)registration	on 2010	2010	2009	2008	2010	20029008
VALE	N/A		100,00 NOV	C: 826,000,00.00	21,83	N/A	N/A		$0 \ 0 \ 0$
COLOMBIA									
LTD.									

VM: N/A N/A N/A N/A

Head Office: CLL 113, n° 7-21, Torre A. OF. 907 Bogotá Colombia.

Activities: Prospecting, exploitation and exploitation of mines and quarries of all types of minerals and other non reneweable mineral resources, metallic or non metallic, including their extraction, processing, benefit or transformation, commercialization and/or exportation. In the development of its corporate purposes, the company can go forward and perform the following acts and contracts: acquire, sell, levy, administer, receive or lease or give in any other way all kind of assets; take part either as creditor or debtor, in credit operations, giving or receiving the corresponding guaranties, if this were the case; enter with credit agencies and insurance companies all kind of transactions that are typical of its purpose; transform, accept, endorse, insure, collect and negotiate, in general, titles, securities and any other class of credits; be part of other companies that intend to carry out activities that are similar, complementary and accessory to the company, that are convenient to the partners, or absorb such companies, enter into participation account agreement, either as active or non-active participation, and contracts of association and mining operation; turn into another type of company or merge with other companies; break, waive and appeal the arbitration or conciliators decisions in cases where it may have interests before third parties, its own partners, or its administrators and workers; to provide professional and advisory services; participate as bidder in public bids, private bids and reorganization proceedings, and comply with the required requisites, celebrate and execute, in general, all acts and agreements that are preparatory, complementary and additional to all the aforementioned ones, that are related with the existence and working of the company, and particularly, the concession agreements with the authorities that have competition with mining and/or the others that serve the performance of the corporate purposes well.

Reasons for the Acquisition and Maintenance of Share: Runing of operations of thermal coal in Colombia

VALE AUSTRIA HOLDINGS GMBH 11.698.030/0001-30 100 NO VC: 1,549,000,000.00 N/A N/A N/A 0 0 0 0

VM: N/A N/A N/A

Head Office: Sterneckstraße, 11, 5020 Salzburg Austria

Activities: Acquisition and management of shares and participations in companies/associations of any kind and investments in assets; control and management of one or more activities related to any of the participating companies or the assets in which it had investments; exercise of all and any activity which is necessary or useful in order to reach the above-mentioned purposes.

Reasons for the Acquisition and Maintenance of Share: Holding and holder of mineral exploitation company all over the world.

N/A 25% NO VC: 417,000,000.00 -4.14% 5.84% N/A 147,000,000.00 0 0

HENAN LONGYU ENERGY RESOURCES CO. LTD.

VM: N/A N/A N/A

Head Office: 25 Middle Section, Guangming Road Yongcheng Henan Province China Activities: exploitation, and development of coal resources; production washing, processing, trading and sales (including exportation) of coal and other related products, use, with different purposes, of the mining resources of coal; manufacturing and repair of mechanical and electrical products for mining, rental of equipment and waste treatment; and supply of post-sale technical and advisory services regarding above products. The company can adjust its corporate purpose, based on the needs of development of the business and its own capacity, through the approval by the general meeting of shareholders and the corresponding governmental authorities.

Reasons for the Acquisition and Maintenance of Share: Have participation in the Company that has coal assets in China

113

#### **Table of Contents**

Book value ( VC )

Increase or Decrease in Value

and Market value

of

iv.

Share Dividends in ( VM ) of Share Share, according to book value Received compan@VM (R\$ mil) and market value (R\$) (% gistration 2010 2009 2010 2008 20120029008

**CNPJ** THYSSENKRUPP 07.005.330/0001-19 26.87 NO VC: 3,065,000,000.00 -13.50% 243.04% 0 0 0 N/A

CSA -CIA **SIDERÚRGICA** DO **ATLÂNTICO** 

> VM: N/A N/A N/A N/A

Head Office: Avenida João XXIII, s/nº Distrito Industrial de Santa Cruz Rio de Janeiro RJ **Brazil** 

Activities: Construction and operation of an integrated steel plant for the production and transformation or iron and steel products, as well as the production, transformation and trading of all by-products related to the working of such plant, including the importation and exportation of all products, of the by-products, of inputs and of capital assets related to the working of the plant; construction, management, operation and exploitation of a commercial complex of port operations, even operating as a Brazilian shipping company in performing shipping services or port support and carrying out drainage services; construction, administration, operation and exploitation of a thermoelectrical plant; creation of subsidiaries as well as the participation in any other company, association, partnership, or entity either in Brazil or abroad for achieving the corporate purpose; and the development either within the Brazilian territory or abroad, of any other activity that is directly or indirectly related to the achievement of the corporate purpose of the company.

Reasons for the Acquisition and Maintenance of Share: Encourage the consumption of iron ore in Brazil through the investment in the company that manufactures steel sheets.

**ACOS** LAMINADOS DO PARÁ

10.335.963/0001-08

VM: N/A N/A N/A N/A

740%

N/A

N/A

0 0 0

Head Office: Avenida Graça Aranha, 26, salão 1601 Centro Rio de Janeiro RJ Brazil Activities: 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 ( Project ), State of Pará, that shall produce steel either to export or to sell in the domestic market, considering one or more plants of sintering, coking, high furnace, steel mill and machines of ingot casting/ending for the Project, including market, engineering and environmental assessments, budgets and fiscal and economic analysis (the Project Study ); acquire the premises where the Project shall be placed 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

Table of Contents 179

100 NOVC: 84,000,000.00

supply of ores of iron/pellets, contracts for the supply of coal, of ferroalloys, contracts for the supply of logistic services, building contracts, maintenance and operation contracts, off-take contracts and financing contracts; implant, operate and exploit a steel integrated plant for the production and commercialization of iron and steel products, as well as their by-products, including the production, transformation, import and export of all products and by-products related with the working of such steel plant; implement, operate and exploit port terminals necessary to serve the logistics of their plants, and develop either within the Brazilian territory or abroad, any other activity which is directly or indirectly related to the achievement of the corporate purpose of the company.

Reasons for the Acquisition and Maintenance of Share: Encourage the consumption of iron ore in Brazil through investment in the siderurgical company.

**BSGR LIMITED** N/A 51 NO VC: 833,000,000.00

N/A N/A

0 0 0 N/A

VM: N/A

N/A

N/A N/A

Head Office: Akara Building., 24 de Castro Street Wickhams Cay I Road Town Tortola British Virgin Islands

Activity: All and any activity not prohibited by law.

Reasons for the Acquisition and Maintenance of Share: Investment of iron ores in Guinea.

CADAM S.A

04.788.980/0001-90

100 NOVC: 124,000,000.00

-12.06%

-9.62% -17.89% 0 0 0

VM: N/A

N/A

N/A N/A

Head Office: Km 07, s/n° Estrada da Ponta da Montanha Distrito de Vila do Conde Barcarena PA Brazil.

Activities: The utilization of the industry for the extraction of ores, including research and mining; provision of technical services to mining companies, transportation, beneficiation, shipping and trading of ores either by its own or on behalf of third parties; export and import of ores; and the company participation in other companies, especially in those that have as purpose the industry of extraction, or the transportation, the beneficiation, the shipping and/or trading of ores. Reasons for the Acquisition and Maintenance of Share: Running of operations of kaolinite in Brazil. Investment kept for sale.

114

# **Table of Contents**

			Book value ( VC					
			_		or Decrease	e in Value		
			and Market value		of			
		iv.			according	to book	D	<b>.</b> .
		Share in	(VM) of Shar		value	•	Dividend	
		companyCVM	(R\$ mil)		l market va		·	R\$)
TT TT A	CNPJ	(%)egistratio		2010	2009	2008 58.75%	2010	200
THIA O-BRASILEIRA	33.931.494/0001-87	30 NO v	C: 208,000,000.0	0 38.07%	18.11%	58.75%	18,000,000.00	
AÇÃO CO								
		V	M: N/A	N/A	N/A	N/A		
	Head Office: Avenida	a Dante Michel	ini, 5.500 Parq	ue Industrial	Vitória	ES Braz	zil	
	Activities: Production	n and commerc	ialization of iron	ore pellets, as	s well as th	he performa	nce of other activi	ties direct
	indirectly related to it			export, and p	provision o	of services o	of any nature, being	g also abl
	participate, in any wa							
	Reasons for the Acqu	isition and Ma	intenance of Shar	e: Expansion	of Vale s	s participation	on in the market of	f pellets ir
IHIA D-BRASILEIRA	27.240.092/0001-33	50.89 NOV	C: 212,000,000.0	0 45.21%	85.88%	123.68%	0	
AÇÃO )BRÁS								
			M: N/A	N/A	N/A	N/A		
	Head Office: Avenida Activities: Production production and sale of correlated with its ma Reasons for the Acqu	n and sale of iron ore pelle ain purpose, as	on ore pellets and ets. The company well as participate	the performi may also part e in any other	ticipate in r way in th	activity dire any other in ne other und	ndustrial and/or co ertakings in Brazil	mmercial l.
IHIA RASILEIRA DE AÇÃO SCO	27.063.874/0001-44	50.9 NOV	C: 143,000,000.0	0 -10.06%	16.91%	65.85%	45,000,000.00	
		V	M: N/A	N/A	N/A	N/A		
	Head Office: Avenida	a Dante Michel	ini, 5.500 Parq	ue Industrial	Vitória	ES Braz	zil.	
	Activities: Production		_	_	-			
	production and sale o							
	correlated with its ma Reasons for the Acqu			-	-		-	
IHIA	27.251.842/0001-72	51.00 NOV	C: 333,000,000.0	00 30.59	-0.77%	137.96%	5,000,000.00	46,000,0
ASILEIRA DE AÇÃO CO								

Table of Contents 181

Head Office: Avenida Dante Michelini, 5.500 Parque Industrial Vitória ES Brazil.

N/A

N/A

N/A

VM: N/A

Activities: Production and sale of iron ore pellets and the performing of any activity directly or indirectly related to production and sale of iron ore pellets. The company may also participate in any other industrial and/or commercial correlated with its main purpose, as well as participate in any other way in the other undertakings in Brazil.

Reasons for the Acquisition and Maintenance of Share: Expansion of Vale s participation in the market of pellets in

IHIA RIA . DE SEPETIBA 72.372.998/0001-66 100.00 NO VC: 347,000,000.00

6.7% 17

17.09% 147,000,000.00

00.00 46,000,0

VM: N/A N/A N/A N/A

Head Office: Avenida Graça Aranha, 26, salão 1601 Centro Rio de Janeiro RJ Brazil

Activity: The construction and utilization of a port facility for private, mixed use, located within the area of Porto de Rio de Janeiro, specialized in moving and storage of iron ore and its derivatives. Subsidiarily and with a complem character, the company may carry out port operations with other dry bulks, whenever these complementary operatio damage the main operations. It is forbidden to the company to perform any activity different from its purpose, except express authorization of Companhia Docas do Rio de Janeiro CDRJ.

Reasons for the Acquisition and Maintenance of Share: Supply of port services for operations of iron ores.

115

Book value ( VC )

Increase or Decrease in

and Market value

Value of

iv.

Share in

( VM ) of Share

Share, according to book value and market value

Dividends Received (R\$)

compan@VM

(R\$ mil)

2010 2009 2008 20102002008

MINAS DA

**CNPJ** 33.137.654/0001-10 (%registration 2010 50 NO VC: 58,000,000.00

13.73% 4.08% -7.55% 0  $0 \quad 0$ 

SERRA GERAL S.A. MSG

VM: N/A

N/A N/A

N/A

Head Office: Rua Sapucaí, 383, 2º andar Belo Horizonte MG **Brazil** 

Activities: Exploitation and/or direct or indirect usage of mineral deposits, including research, prospections, extraction, mining, production, beneficiation, transportation, industrialization and commercialization of all and any mineral substance, being also able to participate in the distribution and commercialization of its products, derivatives and by-products in Brazil, and the import and export of inputs and raw material, either in natura or beneficiated and industrialized; the performing of studies, projects and technological investigations and the rental of equipment. The company may also participate, directly or indirectly, under any way, of other companies related to its corporate purposes, either in Brazil or abroad.

Reasons for the Acquisition and Maintenance of Share: Expansion of Vale s participation in the market of iron ores in Brazil.

# **MINERAÇÃO PARAGOMINAS**

12.094.570/0001-77 100 NO VC: 1,813,000,000.00 N/A N/A N/A

0 0 0

VM: N/A

N/A N/A

N/A

Head Office: Avenida Lameira Bittencourt, 123 Centro Paragominas PA Brazil Activities: (a) Mining development, industrial and commercial activities, having as main purpose the mining within the national territory, including prospection, drilling, search, production, operation, beneficiation, industrialization, import, export and commercialization of bauxite and other minerals and mineral substances in general; (b) The performance, either in Brazil or abroad, of any other activity directly or indirectly related to the attainment of the purpose set forth in (a) above, including the development of technology for the production of bauxite and the rendering of technical services or of any other kind, including the transportation related to (a) above. Participation in other companies, either in Brazil or abroad, with a corporate purpose similar or related to those listed in (a) and (b) above.

Reasons for the Acquisition and Maintenance of Share: Running of bauxite operations in Brazil.

**VALE FOSFATADOS** S.A.

100 NO VC: 3,217,000,000.00 08.404.776/0001-89

N/A

N/A N/A

0 0 0

VM: N/A N/A N/A N/A

Head Office: Avenida das Nações Unidas, 12.551, 24º andar, cj. 2407, Novo Brooklin, Prédio WTC, São Paulo SP

Activities: Search, mining, exploitation and usage of mineral resources within the national territory; extraction, manufacturing, beneficiation, industrialization, importation, exportation and, commercialization of fertilizers or other materials, including minerals, such as phosphates, raw materials, product and by-products for agriculture and livestock; utilization of all type of activities related to the agriculture and livestock area, or compatible activities, among which, the commercialization of agricultural and livestock products, provision of services and transportation of raw materials, materials, products and by-products that are directly or indirectly used in the industry of fertilizers and in the agriculture and livestock area in general, manufacturing and commercialization of pigments for the industry of inks, plastics and paper, and participation in other companies.

Reasons for the Acquisition and Maintenance of Share: Expansion of the activities of phosphate fertilizers, aligned with Vale s strategy to become a global leader in the industry of fertilizers.

116

#### **Table of Contents**

Book value ( VC )

Increase or Decrease in

and Market value

Value of

iv.

**CNPJ** 

Share

Share, according to book

( VM ) of Share value Dividends Received in compan@VM (R\$ mil) and market value (R\$) (% gistration 2010 2009 2008 2010 2009 2008 2010 11.985.056/0001-69 100 NO VC: 235,000,000.00 0 0 0 N/A N/A N/A

**FLORESTAR** S.A.

**VALE** 

VM: N/A

N/A N/A N/A

0

Head Office: Rua Lauro Muller, 116, sala 1802 Botafogo Rio de Janeiro RJ Activities: To take part directly or indirectly, and develop projects in the areas of afforestation, forest management, rendering of environmental services, usage of carbon credits, rendering of services related to forest activities and supply of activities related either to the forest or timber sector. Reasons for the Acquisition and Maintenance of Share: Promote the reforestation of depleted areas.

**VALE SOLUÇÕES EM ENERGIA** 

09-327.793/0001-22 52.77 NO VC: 198.000.000.00 15.12% 75.51% N/A

VM: N/A N/A N/A N/A

Head Office: Avenida Rio Branco, 138, sala 1.602 Centro Rio de Janeiro RJ Brazil. Activities: Research and development of technologies in order to obtain systems and products eco-efficient for the generation of energy, as well as the development and test of prototypes; development of studies of techno economic viability related to the purpose of the company, as well as market studies, business plans and other related studies; participation either as partner or shareholder in other simple or business companies, and in business undertakings of any nature, including partnerships, in Brazil and/or abroad; development, industrialization, 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 eco-efficient products for generating energy and rendering services for the assembly, maintenance and technical assistance of machines and equipment for the generation of energy.

Reasons for the Acquisition and Maintenance of Share: Develop energy generation systems

#### 9.2 OTHER INFORMATION WHICH THE COMPANY DEEMS RELEVANT

At present, Vale has a total of 5,482 processes all over the world (in 98 countries), considered as intangibles of Intellectual Property (376 patents in Brazil and 1,360 abroad, 837 processes of trademarks in Brazil and 1,310 abroad, 1,251 domain names and 348 abroad).

117

#### Item 10

# 10.1. General Financial and Equity Conditions

Vale adopted on January 1<sup>st</sup>, 2010, retroactive to January 1<sup>st</sup>, 2009, all the resolutions issued by CPC. Therefore, the financial statements for the fiscal year ending at December 31, 2010 are the first consolidated financial statements submitted by the Company pursuant to the *International Financial Reporting Standards IFRS*. Thus, the financial statements for the fiscal year ending at December 31, 2008, having been prepared based on different accounting standards, are no longer comparable to the financial statements at December 31, 2009 and December 31, 2010, and therefore 2008 accounting information was not included in item 10.1.

# a. General Financial and Equity Conditions

The year 2009 was characterized as a transition period, marked by operational and financial performance at a lower threshold than the previous two years, however quite robust.

2010 was a year of strong recovery and of extraordinary performance resulting from the convergence of the actions of two main forces. On the 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.

As a consequence, 2010 recorded the best financial performance in the history of Vale, registering records of revenues, operational profit, operational margin, generation of cash and profit. The quality of financial performance is highlighted by the record value of investments, which build new platforms to support the growth in the long run.

The net operational revenue of Vale reached the record value of R\$ 83,225 billion, having recorded growth of 71.6% in 2009.

Bulk materials sales made up of iron ore, pellets, manganese ore and iron-alloy, thermal and metallurgical and thermal coal represented 73.4% of the 2010 operating revenues, increasing the 62.7% from 2009. Participation of base metals in total revenue decreased from 27.6% to 17.0% in 2010 due to the strike in Canada. Participation in revenue for fertilizers sale was of 3.8% in 2010 with an increase of 1.6% compared to the previous year. Logistics services contributed with 2.4% and other products with 2.0%.

<b>Business segments</b>	2009	2010
Bulk Materials	62.7%	73.4%
Base Metals	27.6%	17.0%
Fertilizers	1.6%	3.8%
Logistics services	5.7%	3.8%
Others	2.4%	2.0%

In 2010, operating profit, measured by EBIT<sup>1</sup>, reached R\$ 40,490 billion and was constituted as a new record. The operating margin was also record, with 48.7%, against 27.2% in 2009.

Cash generation, measured by EBITDA<sup>2</sup>, reached R\$ 46,378 billion, marking thus a new record. Net profit, R\$ 30,070 billion, was the highest in the history of Vale.

1 Profit before interest and taxes.

<sup>2</sup> Profit before interest, taxes, depreciation and amortization and exhaustion and accreted of dividends received, also known as LAJIDA.

118

in R\$ million	2009	2010
Net Operating revenue	48,496	83.225
EBIT	13,173	40,490
EBIT margin (%)	27.2%	48.7%
EBITDA	18,641	46,378
Net profit	10,337	30,070
Remuneration to shareholder (parent company)	5,299	5,095
ROE (%)*	10.8%	26.8%

#### \* Return on equity

# b. Capital Structure

The shareholders equity of Vale, on the 3\mathbb{I} of December 2010, was R\mathbb{1}12.116 billion. On the same date, the gross debt added to obligations with third parties totaled R\mathbb{1}43,789 billion, with a cash position of R\mathbb{1}16,456 billion, including R\mathbb{1}2,987 billion invested in net assets of fixed income of low risk, with maturity varying between 91 and 360 days and average maturity of 135 days. The gross debt index and obligation with third parties /shareholders equity and participation of non controlling shareholders was 37.6\% compared to 42.0\% on 31\structure{structu

On 31st December, 2009, the shareholders equity was R\$ 95,758 billion, the gross debt was R\$ 42,088 billion, and the cash position R\$ 19,746 billion.

# i. Hypotheses of Redemption

#### ii. Redemption Value Method

The Bylaws of the Company does not authorize the application of profits or reserves in the redemption or amortization of shares. Additionally, on the date of this Reference Form, Vale s Administration does not have the intention of calling a special shareholders meeting with this purpose.

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

Vale enjoys a healthy financial position, supported by strong cash generation, ample liquidity, availability of short and long term credit facilities and portfolio of debt with low risk. Such position gives us comfort in connection with the capacity to pay our financial commitments.

The leverage, measured by the relation total debt /EBITDA, decreased to 0.9x on December 31st 2010, compared to 2.3x on December 31st 2009. The reduction in leverage reflects the effects of the global economy recovery on our financial performance.

The total debt ration /EV<sup>4</sup> was equal to 13.7% on December 31<sup>st</sup> 2010, while the index of interest coverage, measured by the indicator EBITDA / payment of interest, was 22.86 times.

in R\$ million	2009	2010
Gross debt	42,088	43,789
Cash position *	19,746	16,456
Net debt	22,342	27,333

<sup>&</sup>lt;sup>3</sup> Includes cash and cash equivalent and short-term investments

119

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

#### d. Source of financing for working capital and investments in non-current assets

The sources of funds utilized by Vale were generation of operational cash, loans and financing, and issue of bonds and securities, convertible or not, launched in the capitals market. Additionally, in 2008, we made a global offering of shares that permitted net funding of R\$ 19,273 billion.

In September 2010, Vale issued R\$ 1.7 billion in bonuses, maturing on 2020 and R\$1.3 billion in bonuses maturing on 2039. The bonus of 2020 will have a coupon of 4.625% per year, semi annually paid, at the price of 99.030% of the face value of the instrument. The 2039 bonus issued at the price of 110.872% of the face value of the instrument, were consolidated with the bonus of US\$ 1 billion issued by Vale Overseas in November 2009 with coupon of 6.875% and maturity in 2039, forming a single series. In March 2010, Vale captured R\$ 1.8 billion in eurobonus of 8 years at the price of 99.564% of the face value of the instrument. The notes with maturity in 2018, will have coupon of 4.375% per year, paid annually.

The operational activities generated cash flows of R\$ 35,375 billion in 2010, in view of R\$ 11,517 billion and R\$ 32,187 billion in 2009. The operational cash flows grew significantly in the last years up to 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.

Among other more relevant operation in the three-year period, the following are highlighted:

In January 2011 (subsequent period), Vale signed an agreement with some commercial banks with the guarantee of the Italian credit agency Servizi Assicurativi Del Commercio Estero S.p.A (Sace) for the supply of a line of credit of US\$ 300 million (equivalent to R\$ 500 million) for 10 years.

In October 2010, Vale signed an agreement with Export Development Canada (EDC), official agency of credit for export of Canada, for the financing of the package of Vale s Investments Program. According to the contract, EDC shall supply a credit facility of 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) will be available for financing of purchases of Vale from Canadian companies for the supply of our operations outside Canada. At December 31st, 2010, Vale had used US\$ 250 million (equivalent to R\$ 417 million) of this line of credit.

In September 2010, Vale issued US\$ 1.75 billion (equivalent to R\$ 3 billion), US\$ 1 billion in bonus with maturity in 2020 and coupon of 4.65%, with semi annual payments and US\$ 750 million through the reopening of the 2039 bonus, with yield to the investor of 6.074%. The bonus of 2039 is part of the bonus of US\$ 1 billion issued in November 2009.

In September 2010, Vale signed a contract with The Export-Import Bank of China and the Bank of China Limited for the financing of the construction of 12 ships, with capacity of 400,000 dwt, in the total value of up to US\$ 1.229 billion (equivalent to R\$ 2,048 billion). The financing has a total period for payment of 13 years and Value will receive the funds in the next 3 years according to the schedule of construction of ships. At December 31st, 2010, US\$ 291 million had been disbursed (equivalent to R\$ 485 million) from the facility.

In June 2010, Vale agreed with the National Bank for Economic and Social Development BNDES some credit facilities totaling R\$ 774 million, to finance the acquisition of certain equipment. At December 31st, 2010, R\$ 205 million had been disbursed in this agreement.

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 captured 750 million (equivalent to R\$1.8 billion) through eurobonus of 8 years at the price of 99.564% of the face value of the instrument. The notes with maturity in March 2018, shall have a coupon of 4.375% per year, paid semi annually.

In November 2009, Vale made a public global offering of 30 year bonus 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, totally and unconditionally guaranteed by Vale, with maturity in November 2039, and coupon of 6.875% per annum, paid semi annually.

In September 2009, Vale made a public global offering of 10 year bonus 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, totally and unconditionally guaranteed by Vale, with maturity in September 2019, and coupon of 5.625% per annum, paid semi annually.

120

#### **Table of Contents**

In July 2009, Vale issued US\$ 942 million (equivalent to R\$ 1.858 billion on the date of the transaction) in notes compulsorily swappable with maturity in 2012 through its wholly owned subsidiary Vale Capital II. The notes are divided into 2 series: Vale 2012 and Vale P 2012. Both series have maturity in June 2012 and shall be compulsorily swappable by American Depositary Shares (ADS). The series Vale 2012 shall be swapped by ADS in connection with common shares issued by Vale, and the series Vale P 2012 shall be swapped by ADS in connection with preferred Class A shares issued by Vale. Additional remuneration shall be paid to the holders of notes by Vale, based on the net value of the dividends distributed by Vale to the holders of ADS.

In May 2008, Vale signed agreements with the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI) for the financing of projects that are part of the investment program for 2008-2012. Vale s projects to be financed shall follow the criteria required by the Japanese financial institutions. The JBIC may provide funds of up to US\$3 billion (equivalent to R\$5.0 billion on the date of execution of the contract) and NEXI shall provide debt insurance on loans of up to US\$ 2 billion (equivalent to R\$ 3.3 billion on the date of execution of the contract). In November 2009, Vale, through its subsidiary PT International Nickel Indonesia Tbk (PTI), contracted a facility in the amount of US\$300 million (equivalent to R\$525 million on the date of execution of the contract) with Japanese financial institutions, using insurance of NEXI, for the financing of the construction of the hydroelectric plant of Karebbe, in Indonesia, from which US\$150 million were drawn (equivalent to R\$ 249.9 million on December 31st 2010) to the end of 2010.

In April 2008, Vale signed with BNDES a facility transaction in the amount of R\$7.3 billion (equivalent to US\$ 4.2 billion on the date of execution of the contract) to be used to finance projects that are part of Vale investment program for 2008-2012. At December 31st 2010, Vale had used R\$ 1.92 billion (equivalent to US\$ 1,153 billion on December 31st 2010) of this facility with BNDES.

In January 2008, Vale contracted with a Brazilian commercial bank, a transaction for financing of working capital of R\$ 2 billion (equivalent to US\$ 1.1 billion on the date of execution of the contract), fully used.

# 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, the principal need for funds of Value refers to capital investments, payments of dividends and debt service. The sources of funds frequently used are: operating cash flow and financing, which we complemented in 2008-2010 with a global offering of shares and an issue of notes compulsorily convertible into shares.

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, rotary credit facilities available which may be used at the option of the debtor. On December 31<sup>st</sup>, 2010, the amount available involving credit facilities was US\$1.6 billion (equivalent to R\$ 2,666 billion on December 31<sup>st</sup>, 2010), where US\$ 850 million (equivalent to R\$1.416 billion on the transaction date) was made available to our indirect subsidiary Vale International and the remainder to our indirect subsidiary Vale Canada Limited (Vale Canada). At December 31<sup>st</sup>, 2010, no value had been drawn by Vale International or by Vale Canada, but letters of credit were issued in the value of US\$114 million (equivalent to R\$190 million on December 31<sup>st</sup>, 2010) related to the credit facility of Vale Canada.

121

#### f. Indebtedness levels and composition of such debts

On December 31st, 2010, our total debt was R\$ 43,789 billion, with a portion of R\$ 3 million guaranteed by assets of Vale, with average period of maturity of 9.9 years and average cost of 4.9% per year in US dollars.

In R\$ million	2009	2010
Gross debt	42,088	43,789
Tranche guaranteed by assets of Vale	4%	0%
Average term of maturity (in years)	9.2	9.9
Average cost (in US dollars)	5.3%	4.9%

Since July 2005, Vale has been considered investment grade. Currently, Vale has the following credit risk ratings: BBB+ (Standard & Poor s), Baa2 (Moody s), BBB high (Dominion Bond Ratings) e BBB+ (Fitch).

# i. Relevant loan and financing contracts

The short term debt consists principally of financing for export (trade financing) and import expressed in US dollars, with financial institutions. On December 31<sup>st</sup>, 2010 the short term debt was R\$ 1,144 billion, as compared to R\$ 646 million and R\$ 1,088 billion in 2009 and 2008, 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 dollar (R\$ 10.7 billion, R\$14.5 billion and R\$16.3 billion on 31<sup>th</sup> of December 2010, 2009 and 2008, respectively). These loans include credit facilities for export, financing of import of the export credit agencies and loans from commercial banks and multilateral organizations. The main credit facility is a prepayment of export, linked to future exports, originally in the amount of US\$ 6.0 billion (equivalent to R\$10.4 billion), captured as part of the refinancing of the debt for the acquisition of Inco. On December 31<sup>st</sup>, 2010, the outstanding balance was US\$ 2.7 billion (equivalent to R\$4.4 billion)

Fixed income papers expressed in US dollars (R\$ 17.1 billion, R\$ 12.9 billion and R\$ 15.2 billion on December 31<sup>st</sup>, 2010, 2009 and 2008, respectively). Vale issued several debt instruments in the capital market through its wholly owned subsidiary Vale Overseas in the total amount of US\$ 9.1 billion (equivalent to R\$ 15.2 billion). The subsidiary Vale Canada issued debt instruments in the amount of US\$ 1.1 billion (equivalent to R\$ 1.9 billion).

Fixed income papers in euros (R\$ 1.7 billion on 31 December 2010). Vale issued a debt instrument in the capital market in the total amount of Euros 750 million (equivalent to R\$ 1.7 billion).

Instruments expressed in US dollars guaranteed by receivables of future exports (R\$ 0.3 billion and R\$ 0.5 billion on December 31<sup>st</sup>, 2009 and 2008, respectively). 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 15 January 2010, Vale liquidated in advance the remaining balance of the securitization program.

Non-convertible debentures expressed in reais (R\$4.7 billion, R\$ 6.0 billion and R\$ 6.0 billion on December 31<sup>st</sup>, 2010, 2009 and 2008, respectively). In November 2006, we issued non convertible debentures in the value of approximately US\$ 3.2 billion (equivalent to R\$5.5 billion), in two series, with maturities of four and seven years. The first series, of US\$862 million (equivalent to R\$ 1.5 billion), fell due in 2010, with interest of 101.75% of the accrued 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), with maturity on 2013 has interest of variation of the CDI plus 0.25% per year.

Perpetual instruments (R\$ 0.1 billion, R\$ 0.1 billion and R\$ 0.2 billion on December 31<sup>st</sup>, 2010, 2009 and 2008, respectively). We issued perpetual instruments which are negotiable for 48.0 billion preferred shares of Mineração Rio do Norte S.A (MRN). The interest is paid on the instruments in a value equal to the dividends paid to the underlying preferred shares.

122

#### **Table of Contents**

# 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 of the country, according to the usual practices of the financial market.

Other debts totaled R\$ 7.8 billion, R\$ 7.2 billion and R\$5.4 billion on December 31<sup>st</sup>, 2010, 2009 and 2008, respectively. We have several loans contracted in Brazil, especially with 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. Eventual restrictions imposed on the issuer especially, in relation to limits of indebtedness and contracting of new debts, to the distribution of dividends, to the disposal of assets, to the issue of new securities and to the disposal of corporate control

Some of the long term financial instruments contain obligations related to financial indicators. The main indicators are debt on shareholders—equity, 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 shall not significantly restrict the capacity to contract new debts to meet capital needs. Additionally, none of the clauses restricts directly our capacity to distribute dividends or interest on net current assets.

# g. Limits of use of financing already contracted

Certain financing contracts signed by Vale establish restrictions in connection with the use of funds. There follows the description of the relevant financing contracts:

Date	Counterparty	Allocation	Value	Disbursement of funds
11/23/2010	BNDES	Supplementation of funds related to the implementation of the Hydroelectric Plant Estreito (UHE)	R\$ 208.03 million	The credit is provided in tranches according to the schedule of the projects
10/272010	BNDES	Credit allocated to financing of equipment and expansion of production capacity	R\$ 246.6 million	The credit is provided in tranches according to the schedule of the projects
09/09/2010	Exim and Bank of China Limited	Credit allocated to financing for the acquisition of ships from shipyard Rongsheng	R\$ 2.119 billion	The credit is provided in tranches according to the schedule of payments contemplated in the construction contract
06/30/2010	Banco Votorantim	Credit allocated to financing of equipment	R\$ 57.2 million	The credit is provided in tranches according to the schedule of the projects
06/30/2010	Banco do Brasil	Credit allocated to financing of equipment	R\$ 16.8 million	The credit is provided in tranches according to the schedule of the projects
06/30/2010	Banco do Brasil	Credit allocated to financing of equipment	R\$ 59.8 million	The credit is provided in tranches according to the schedule of the projects

06/30/2010	Banco do Brasil	Credit allocated to financing of equipment	R\$ 17.8 million	The credit is provided in tranches according to the schedule of the projects
06/30/2010	Banco Santander and Banco Bradesco	Credit allocated to financing of equipment	R\$ 135.1 million	The credit is provided in tranches according to the schedule of the project
06/30/2010	Banco do Brasil	Credit allocated to financing of equipment	R\$ 175.8 million	The credit is provided in tranches according to the schedule of the projects
06/29/2010	BNDES	Credit allocated to financing of equipment	R\$ 135.1 million	The credit is provided in tranches according to the schedule of the projects
06/29/2010	BNDES	Credit allocated to financing of equipment	R\$ 175.8 million	The credit is provided in tranches according to the schedule of the projects
04/01/2008	BNDES	Credit allocated to investments made in Brazil	R\$ 7.3 billion	The credit is provided in tranches according to the schedule of the projects
03/11/2008	BNDES	Credit allocated to the construction of Hydroelectric Plant UHE Estreito, its transmission lines and several social investments	R\$ 808.4 million	The credit is provided in tranches according to the schedule of the projects
		123		

# h. Significant alterations in each item of the financial statements Analysis of the Results of Operations

The table below presents the values for the consolidated statements of results for the fiscal years ended on 31 December 2009 and December 31st, 2010:

			ecember 31st n R\$ billion)
Income Statement	2008	$\mathbf{AV}$	2010
Net Operating Revenue	48,496	71.6%	83,225
Cost of products and services	(27,750)	21.6%	(33,756)
Administrative and sales expenses	(2,347)	36.4%	(3,201)
Research and Development	(1,964)	-20.2%	(1,567)
Reduction of the recoverable value of intangible assets			
Other expenses	(3,262)	29.1%	(4,211)
Operating Revenue	13,173	207.4%	40,490
Result of corporate participations	99	-148.5%	(48)
Amortization of premium			
Net financial income	2,094	-231.9%	(2,763)
Gain (loss) in the realization of assets	93		
Profit 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)
Participation of minority holders	(168)	109.5%	(352)
Net Profit	10,337	190.9%	30,070

Fiscal year ended on December 31st, 2009 compared to the fiscal year ended on December 31st, 2010

124

#### **Table of Contents**

#### Revenues

The net operating revenue reached R\$ 83,225 billion in 2010 versus R\$ 48,496 billion in 2009, an increase of 71.6% compared to 2009.

In 2010, the increase in revenue was due basically to the largest volume sold and to the increase in prices of the principal products sold by the Company, which contributed to an increase in revenue of R\$7,366 billion and R\$ 28.167 billion, respectively, compared to 2009.

The expansion in revenue was determined mainly by higher prices of iron ore, R\$ 17,953 billion, pellets R\$6,880 billion, and by the purchase of Vale Fosfatados and Vale Fertilizantes, which contributed with revenue of R\$ 2.419 billion.

Iron ore

Revenues from iron ore sales increased by 80%, from R\$ 5,234 billion in 2009 to R\$ 45,419 billion in 2010, due to a 71.1% increase in the average sale price and an 8.8% in volumes sold. The increase in prices reflects strong demand. *Pellets* 

Revenues from pellet shipments increased 266% from R\$3,887 billion in 2009 to R\$ 14,227 billion in 2010 due to a 177.8% variation in average sales prices and an 89.3% increase of volumes sold. Higher prices are explained by the same methodology applied in iron ore, while higher volumes are explained by the increased use of plants due to market recovery.

Manganese ore

Revenues from manganese ore increased 66.5%, from R\$ 275 million in 2009 to R\$ 458 million in 2009 due to prices positive variation of 53.1% as a result of the impact of global economic conditions and to the increase in volumes sold of 13.5% due to demand recovery.

Iron alloys

Revenues from iron alloys sales increased by 57.4%, from R\$ 693 billion in 2010 to R\$ 1,091 billion in 2009, due to a 58.5% increase in volumes sold due to the recovery of steel industry. The alloys average price remained stable by the variation of mix of alloys sold.

Nickel and other products

Revenues from this segment increased by 4.3%, from R\$ 7,868 billion in 2009 to R\$ 8,204 billion in 2010, mainly due to the following factors:

Revenues from nickel sales increased by 3.7%, from R\$ 6,457 billion in 2009 to R\$ 6,698 billion in 2010, due to a 26.4% increase in average nickel prices. Nickel volume sold declined by 22.8% due to the shutdown of our Sudbury and Voisey Bay operations as a result of labor strikes beginning in the second half of 2009; and

Revenue from copper sales increased 28% from R\$ 903 million in 2009 to R\$ 1,156 billion in 2010, primarily due to an increase of 33.8% in average selling prices in part offset by a 5.7% drop in volumes sold due to the shutdowns described above.

Copper concentrate

Revenues from copper concentrate sales increased 23.3%, from R\$ 1,329 billion in 2009 to R\$ 1,638 billion in 2010, due to a 25.8% increase in average sale prices.

Aluminum

Revenues from our aluminum business increased 10.6%, from R\$ 4,217 billion in 2009 to R\$ 4,663 billion in 2010 mainly due to LME price variation.

125

#### **Table of Contents**

Potash

Revenues from potash sales decreased 39.3%, from R\$ 810 billion in 2009 to R\$ 492 million in 2010, due to 13.9% drop in sales volumes, explained by recuperation of internal inventory and by reduction of average prices in 25.3%. *Phosphate* 

Sales revenue is attributed to the acquisition of Vale Fosfatados (formerly known as Bunge Participações e Investimentos S.A.) and Vale Fertilizantes (formerly known as Fosfertil).

Nitrogen

Sales revenue is attributed to the acquisition of Vale Fosfatados and Vale Fertilizantes.

#### Logistics services

Revenue from logistics services increased 14%, from R\$ 2,838 billion in 2009 to R\$ 3,236 billion in 2010 mainly due to the mix of products transported.

Other products and services

Revenues from other products and services increased from R\$ 1,190 billion in 2009 to R\$ 1,664 billion in 2010. This occurred mainly because of higher revenues from steel products.

# Services Costs and Expenses

Costs related to services and goods sold by Vale are detailed below:

Comments on Cost by Type of Product

Our total cost of goods sold increased from R\$ 27,750 billion in 2009 to R\$ 33,756 billion in 2010, a 21.6% increase, due to higher volumes sold. The following were the main factors that contributed to this variation:

Outsourced services. Outsourced services costs increased by 8.6% in 2010, from R\$ 4,274 billion in 2009 to R\$ 4,640 billion in 2010, due to higher volumes sold.

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 there was the anticipation of maintenance reflecting in the consumption of inputs in this period.

Costs of energy and fuels. Energy costs decreased by 2.9% in 2010, from R\$ 6,034 billion in 2009 to R\$ 5,858 billion in 2010. This increase reflected higher volumes sold and prices.

Staff costs. Staff costs decreased 3.8%, from R\$ 4,077 billion in 2009 to R\$ 3,921 billion in 2010, reflecting the temporary interruption that occurred in nickel, impacting on the reduction volumes sold, partially offset by an adjustment of 7% in payroll in Brazil.

Acquisition of products. The cost of products purchased from third parties increased by 56.1%, from R\$ 1,219 billion in 2009 to R\$ 1,903 billion in 2010 mainly due to higher volumes sold of pellets.

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. Part of the increase is due to acquisition of fertilizer companies.

Other costs. Increased 110.8% in 2010, from R\$ 3,058 billion in 2009 to R\$ 6,447 billion in 2010, mainly due to allocation of fertilizer costs of this nature Vale Fosfatados and Vale Fertilizantes.

#### Sales and administrative expenses

Sales and administrative expenses increased by 36.3%, from R\$ 2,347 billion in 2009 to R\$ 3,201 billion in 2010. The increase was explained by increased expenses in services, advertising and personnel related to increased level of product commercialization.

126

# 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 decrease in research on gas and energy is due to the economic feasibility of some of these projects.

#### Other operating costs and expenses

Other operating expenses increased from R\$ 3,262 billion in 2009 to R\$ 4,211 billion in 2010, an increase of 29.1% due to provision for loss of materials, increased distribution of variable compensation (profit sharing) and review of mining rights.

# Result of equity investments

The company share in non-controlled companies decreased 148.5% from R\$ 99 million of revenue in 2009 to an expense of R\$ 48 million in 2010. The reduction was due to losses from the startup of the Companhia Siderúrgica do Atlântico.

#### Net Financial result

The financial result varied 231.9%, from an income of R\$ 2,094 billion in 2009 to an expense of R\$ 2,763 billion in 2010. The main factors that contributed to the negative result was the lower positive monetary and exchange variation recorded in 2009, market marking of shareholders debentures and expenses with tax on financial operations due to the redemption of securities convertible into shares.

#### Gain (loss) on realization of assets

The gain (loss) on asset realization was of R\$ 93 million in 2009, mainly due to the sale of the remaining of our stake in Usiminas with a gain of R\$ 288 million partially offset by a loss in Valesul of R\$ 147 million in 2009. In 2010 there have been no gains/losses.

#### Income taxes and Social Security Contributions

For 2010 we recorded a net income tax expense of R\$ 7,035 billion, compared with R\$ 4,954 million in 2009 due to a higher tax basis.

#### Net income

Net profit increased by 190.9%, from R\$ 10,337 billion in 2009 to R\$ 30,070 billion in 2010 and is due primarily to factors explained previously.

#### Analysis of equity accounts

	2010	AV	2009
Current Assets			
Cash and cash equivalents	13,469	1.9	13,221
Short-term investments	2,987	(54.2)	6,525
Derivatives at fair price	87	(52.5)	183
Financial assets available for sale	21	(25.0)	28
Accounts Receivable	13,962	147.4	5,643
Related parties	90	2.150.0	4
Inventory	7,592	28.4	5,913
Taxes to be refunded	2,796	4.1	2,685
Advances to suppliers	318	(63.5)	872
Other	1,070	(37.8)	1,719
	42,392	15.2	36,793
Non-current assets held for sale	11,876		
	54,268	47.5	36,793

# **Table of Contents**

Non-current	2010	AV	2009
		(O= =)	<i>c</i> 1
Related Parties	8	(87.5)	64
Loans and financing	274	(4.2)	286
Advanced expenses	254	(13.9)	295
Legal deposits	3,062	1.5	3,109
Advances to energy suppliers	• 440	(44.6)	889
Income tax and social sec. payments deferred	2,440	(11.6)	2,760
Taxes to be refunded	612	(60.3)	1,540
Derivatives at fair price	502	(66.7)	1,506
Other	936	71.4	546
	8,088	(26.4)	10,995
Investments	3,945	(13.5)	4,562
Intangibles	18,274	11.2	16,440
Fixed Assets	130,087	19.4	108,948
118001188008	150,007	15	100,510
	160,394	13.8	140,945
	214,662	20.8	177,738
	2010		2009
Liabilities and equity			
Current			
Accounts Payable to suppliers and contractors	5,804	50.8	3,849
Salaries and employment taxes	1,966	26.3	1,556
Derivatives at fair price	92	(65.2)	264
Portion of long term current loans	4,866	(8.4)	5,310
Loans and financing	1,144	77.1	646
Related Parties	24	(27.3)	33
Taxes, contributions and royalties	442	72.7	256
Allowance for income tax	1,310	257.9	366
Pension and retirement benefits	311	6.5	292
Sub-concession Ferrovia Norte Sul	117	(76.4)	496
Allowance for asset retirement	128	(18.5)	157
Dividends and interest over own capital		·	• • • •
*	8,104	178.8	2.907
Other		·	2.907 1.338
*	8,104	178.8	
*	8,104 1,736	178.8 29.7	1.338

# Non current

Derivatives at fair price	103	157.5	40
Loans and financing	37,779	4.6	36,132
Related Parties	3	(97.1)	103
Pension and retirement benefits	3,224	4.0	3,101
Contingency Allowances	3,712	(11.7)	4,202
Income tax and social sec, payments deferred	12,947	39.1	9,307
Allowance for asset retirement	2,463	27.6	1,930
Participation Debentures	2,140	63.9	1,306
Non-controlling shareholders redeemable share	1,186	(6.8)	1,273
Other	3,396	31.6	2,581
	66,953	11.6	59,975
Equity			
Class A preferred shares- 7,200,000,000 authorized, no par value			
shares and 2,108,579,618 (2009 2,108,579,618) issued	19,650	6.4	18,469
Common shares 3,600,000,000 authorized, no par shares and			
3,256,724,482 (2009 3,256,724,482) issued	30,350	4.8	28,965
Mandatorily convertible securities in common shares	445	(82.8)	2,584
Mandatorily convertible securities in preferred shares	996	(50.3)	2,003
Treasury shares 99,649,571(2009 77,581,904) preferred shares and			
47,375,394 (2009 - 74,997,899) common shares	(4,826)	95.4	(2,470)
Operating P&L with non-controlling shareholders	685		
Shares conversion/issuance P&L	1,867	1,259.6	(161)
Equity valuation adjustment	(25)	19.0	(21)
Accrued conversion adjustment	(9,512)	7.0	(8,886)
Profit reserves	72,486	47.1	49,272
Accrued profits			6,003
Total controlling shareholders equity	112,116	17.1	95,758
Non-controlling shareholders interest	4,209	(7.2)	4,535
Total equity	116,325	15.9	100,293
Total liabilities and equity	214,662	20.8	177,738

#### Position on December 31st, 2009 compared with the position at December 31st, 2009

Vale has assets and debts referenced to different currencies, the main ones being the real, U.S. dollar and Canadian dollar. On December 31<sup>st</sup>, 2009, we had 57% of our assets related to Brazilian reais, 14% to U.S. dollars, 25% to Canadian dollars and 4% to other currencies, while the majority of our debt was expressed in U.S. dollars. Consequently, the effects of changes in exchange rates impact the financial statements, especially the U.S. dollar, which in 2009 devalued by 4.3% against the real.

#### Current assets

Cash and cash equivalents.

An increase of 1.9% from R\$ 13,221 billion on December 31<sup>st</sup>, 2009, to R\$ 13,469 billion on December 31<sup>st</sup>, 2010. Although the company has made funding during 2010 that amounted to R\$ 4,771 billion, significant disbursements were made to face repayment of loans, including debentures due in 2010, and investments in structure as well as companies acquisitions.

Short-term investments.

The reduction of 54.2%, from R\$ 6,525 billion on December 31<sup>st</sup>, 2009, to R\$ 2,987 billion on December 31<sup>st</sup>, 2010, refers mainly to investments maturity.

Accounts receivable from customers.

The increase of 147.4%, from R\$ 5,643 billion at December 31st, 2009 to R\$ 13,962 billion on December 31st, 2010, refers mainly to the increase in price and sales.

**Inventories** 

The increase in inventories of 28.4%, from R\$ 5,913 billion at December 31st, 2009, to R\$ 7,592 billion on December 31st, 2010, refers mainly to operations commencement of project Vale Canada in New Caledonia.

Non-current assets held for sale

The R\$ 11,876 billion in 2010 refer to aluminum sector assets and kaolin assets. There was no execution in 2009.

#### Non-current assets

Advances to energy suppliers

The R\$ 889 million in 2009 refer to the availability of aluminum assets for sale. There was no execution in 2010. *Derivatives at fair price* 

The 66.7% reduction in derivatives at fair value, from R\$ 1,506 billion at December 31<sup>st</sup>, 2009 to R\$ 502 million on December 31<sup>st</sup>, 2010, refers basically to the market marking of floating debt swap derivative transactions, called in reais, as a result of the variations in the U.S. dollars.

129

#### Investments

The reduction of 23.4%, from R\$ 4,562 billion at December 31, 2009 to R\$ 3,495 billion on December 31st, 2010, refers mainly to the loss in ThyssenKrupp CSA Siderúrgica do Atlântico.

#### Fixed assets

The increase in fixed assets of 19.4%, from R\$ 108,948 billion at December 31, 2009, to R\$130,087 billion on December 31st, 2010, refers mainly to the acquisition of companies in the fertilizer sector as well as projects for infrastructure expansion.

#### Current liabilities

#### Accounts payable to suppliers and contractors

The decrease in accounts payable to suppliers and contractors of 50.8%, from R\$ 3,849 billion on December 31st, 2009, to R\$ 5,804 billion on December 31st, 2010, was basically due to the consolidation of fertilizer companies.

#### Portion of liabilities of long-term loans

The reduction in the portion of long-term loans under the item liabilities of 8.4%, from R\$ 5,310 billion on December 31st, 2009, to \$ 4,866 billion on December 31st, 2010, is due to settlements of the year.

# Loans and financing

The increase of 77.1%, from R\$ 646 million at December 31<sup>st</sup>, 2009 to R\$ 1,144 billion on December 31<sup>st</sup>, 2010 is due to new lines of credit available for the Vale group.

# Allowance for income tax

The increase of 257.9% from R\$ 366 million in 2009 to R\$ 1,310 billion in 2010 refers to the balance of tax loss existing in 2009 and was fully used to that date. In addition to this impact, there is the increase of net profit.

#### Proposed dividends and interest on capital

The increase of 178.8% from R\$ 2,907 billion on December 31st, 2009, to \$ 8,104 billion on December 31st, 2010, is due mainly to increased net profits by 190%.

# Liabilities related to non-current assets held for sale

The R\$ 5,340 billion in 2010 refers to the commitments linked to the assets available for sale of aluminum sector and kaolin companies. There was no execution in 2009.

#### Non-current liabilities

#### Loans and financing

The increase in loans and financing in 4.6%, from R\$ 36,132 billion on December 31<sup>st</sup>, 2009, to R\$ 37,779 billion on December 31<sup>st</sup>, 2010, is due to security issuing occurred in 2010, partially offset by the transfer of short-term debt installments.

#### Provisions for contingencies

The reduction of 11.7%, from R\$ 4,202 billion on December 31st, 2009 to R\$ 3,712 billion on December 31, 2010, is due to settlement of contingencies for which the Company had made legal deposits.

130

Deferred Income taxes and social security contribution

The increase of 39.1%, from R\$ 9,307 billion in 2009 to R\$ 12,947 million in 2010 refers to the allocation of surplus value due to the acquisition of fertilizer companies.

Provision with obligations for asset retirement

The increase of 27.6%, from R\$ 1,930 billion in 2009 to R\$ 2,463 million in 2010 was due to the adjustment of adoption of IFRS in the controlled Vale Canada and acquisition of fertilizer companies.

Shareholder Debentures

The increase of 63.9% from R\$ 1,306 billion in 2009 to R\$ 2,140 billion in 2010 refers to the marking to market of shareholder debentures.

Stockholder equity

The stockholders equity increased by 17.1%, R\$ 95,758 billion on December 34, 2009, to R\$ 112,117 billion on December 31st, 2010. The increase in profit reserves came from the capitalization of net income.

#### Non-current assets

# 10.2) Operating and Financial Results

Vale adopted on January 1<sup>st</sup>, 2010, retroactive to January 1<sup>st</sup>, 2009, all the resolutions issued by CPC. Therefore, the financial statements for the fiscal year ending at December 31, 2010 are the first consolidated financial statements submitted by the Company pursuant to the *International Financial Reporting Standards IFRS*. Thus, the financial statements for the fiscal year ending at December 31, 2008, having been prepared based on different accounting standards, are no longer comparable to the financial statements at December 31, 2009 and December 31, 2010, and therefore 2008 accounting information was not included in item 10.2.

# a) Results of Vale Operations, in particular:

# i. Description of key components of revenue

Net operating revenues totaled R\$ 83,225 billion in 2010, increasing by 71.6% compared to 2009. Compared to 2009. Individually, the most important products in terms of revenue generation (i) in 2010 and 2009 were: iron ore, nickel, pellets and copper:

REVENUES BY PRODUCT						
R\$ million	2009	<b>%</b>	2010	<b>%</b>		
Bulk materials	31,214	62.7	62,661	73.4		
Ferrous minerals	30,212	60.7	61,322	71.9		
Iron ore	25,234	50.7	45,419	53.2		
Pellet plant operation services	18		22			
Pellets	3,869	7.8	14,205	16.6		
Manganese	275	0.6	458	0.5		
Ferroalloys	693	1.4	1,091	1.3		
Others	123	0.2	127	0.1		
Coal	1,002	2	1,339	1.6		
Thermal Coal	400	0.8	515	0.6		
Metallurgical Coal	602	1.2	824	1		

# REVENUES BY PRODUCT

R\$ million	2009	%	2010	<b>%</b>
Non-ferrous metals	13,414	26.9	14,505	17
Nickel	6,457	13	6,698	7.8
Copper	2,232	4.5	2,794	3.3
PGMs	291	0.6	174	0.2
Precious metals	133	0.3	124	0.1
Cobalt	84	0.2	52	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
Potash	810	1.6	492	0.6
Phosphate			2,085	2.4
Nitrogen			593	0.7
Others			31	
Logistics services	2,838	5.7	3,236	3.8
Railroads	2.322	4.7	2,605	3,1
Ports	516	1	631	0,7
Others	1.537	3.1	1,742	2
Gross Revenues	49.812	100.0	85,345	100.0
Taxes	(1.316)	(2.6)	(2,120)	(2.5)
Net Revenues	48.496	97.4	83,225	97.5

In 2010, in terms of geographical distribution of our sales destination, although China has decreased its revenue participation, it continued to be responsible for the main destination of our sales, followed by Brazil, Japan, Germany and South Korea.

# **REVENUE PER REGION**

R\$ million	2009	<b>%</b>	2010	<b>%</b>
North America	4,138	8.3	4,556	5.3
USA	2,264	4.5	2,433	2.9
Canada	1,832	3.7	1,994	2.3
Others	42	0.1	130	0.2
South America	8,507	17.1	16,148	18.9
Brazil	7,758	15.6	14,306	16.8
Others	749	1.5	1,842	2.2
Asia	27,709	55.6	44,544	52.2
China	18,379	36.9	27,581	32.3
Japan	4,709	9.5	9,303	10.9
South Korea	1,783	3.6	3,359	3.9
Taiwan	1,365	2.7	2,168	2.5
Others	1,474	3.0	2,133	2.5
Europe	8,081	16.2	16,217	19.0
Germany	2,118	4.3	5,601	6.6
Belgium	661	1.3	766	0.9
France	661	1.3	1,339	1.6
United Kingdom	1,103	2.2	2,052	2.4
Italy	650	1.3	1,832	2.1

Edgar Filing: Vale S.A. - Form 6-K

Others	2,888	5.8	4,628	5.4
Around the World	1,377	2.8	3,879	4.5
<b>Gross Revenues</b>	49,812	100.0	85,345	100.0
Taxes	(1,316)	<b>(2.6)</b>	(2,120)	(2.5)
Net Revenues	48,496	97.4	83,225	97.5

132

#### ii. Factors that affected materially the operational outcomes

The Company s operating results are affected mainly by demand and prices for our main products and services; and exchange rates.

#### Demand and prices

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

	2009	2010	
	\$/metric ton,	\$/metric ton, except when	
	indica	ıted <sup>5</sup>	
Iron ore	111.68	182.09	
Pellets	147.10	283.76	
Manganese	293.33	405.03	
Ferroalloys	2,782.99	2,723.11	
Coal			
Thermal coal	132.84	123.85	
Metallurgical Coal	230.48	263.82	
Nickel	29,114.28	38,669.75	
Copper	10,430.54	13,599.55	
Platinum (US\$ /oz)	2,142.16	2,922.55	
Cobalt (US\$ /lb)	20.01	26.55	
Aluminum	3,364.63	3,837.07	
Alumina	451.70	498.92	
Bauxite	68.12	55.66	
Potash	1,040.10	722.30	
Phosphate			
MAP		843.44	
TSP		782.29	
SSP		383.28	
DCP		987.79	
Nitrogen		793.16	

Amounts converted at the average exchange rate in each period: R\$ 1.8375/US\$ in 2008, R\$ 1.9935/US\$ in 2009 and R\$ 1.7593/US\$ in 2010.

#### Iron ore and pellets

The demand for iron ore and pellets is a result of the global demand for high carbon steel. The demand for high carbon steel, in turn, is highly influenced by global industrial production. There are several quality levels of iron ore and pellets, as well as, several physical characteristics. Several factors affect the prices of different types of iron ore, such as the iron content of specific ore deposits, the size of particles, the humidity content 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 April 2010, all of our iron ore clients have agreed to move from annual reference contracts to price index-based contracts. The former benchmark pricing system was replaced with a new system, as agreed with our clients, which determines a quarterly price for the iron ore, based on the three-month average of the index prices for the period ended a month before the start of the new quarter.

Fine iron ore prices are determined based on the iron content, and calculated according to the system described above. The lump ore and pellet prices contain premiums in relation to fine iron ore prices and are determined based on client negotiations. Our average prices for iron ore in 2010 increased by 84.9%, and our pellet prices were 118.7% higher than in 2009.

#### **Table of Contents**

Chinese iron ore imports reached 619.1 million metric tons in 2010, just under the 627.8 million metric tons in 2009, mainly due to the strong increase in the Chinese steel production in 2010.

We expect China s growth to remain above 10% in the first semester of 2011, driven mainly by internal demand, and to decrease slightly in the second semester. The demand for minerals and metals is expected to remain high, not only due to the rapid economic growth, but also due to restocking.

Manganese and ferroalloys

The prices of manganese ore and ferroalloys are mainly influenced by trends in the high 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 negotiations are based on the spot market or calculated on a quarterly basis. Ferroalloys prices are determined on a quarterly basis.

Coal

The demand for metal coal is driven by the demand for steel, especially in Asia. The demand for thermal coal is directly related to electrical energy consumption, which will continue to be driven by the worldwide economic growth, especially in emerging economies. Since April 2010, the prices of metallurgical coal are set on a quarterly basis for most volumes sold in the transoceanic market. The prices of thermal coal are set in spot negotiations and/or through annual contracts.

Nickel

Nickel is traded in the London Metal Exchange (LME). It is mainly used to produce stainless steel, corresponding on average to 64% of global nickel consumption. Most nickel products are priced according to a discount or a premium to the LME price, depending on the technical and physical characteristics of the nickel product. Nickel demand, from sources other than stainless steel production, represents 36% 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 for non-stainless steel applications (high nickel alloys, steel alloys, forging, plating, batteries and special applications), provide stable demand for a significant portion of our annual production. In 2010, 65% 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, renders our sales volume more steady. 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 and nickel cathode) and secondary nickel (scrap) are competing sources of nickel for stainless steel production. The choice between the different types of primary and secondary nickel is largely driven by its relative prices and availability. Over the past years, secondary nickel accounted for about 42-49% of the overall nickel used in stainless steel production, and primary nickel accounted for 51-58%. In 2010, the Chinese nickel pig iron production and iron-nickel production is estimated to have been higher than 150,000 metric tons, representing 11% of the global offer of primary nickel, compared to 7% in 2009.

Nickel s foundations are expected to remain strong in the near future. Stainless steel consumption is strongly correlated with consumer spending and oscillation in relation to income growth. This helps explaining why nickel consumption rates, measured as consumption per US\$ from the GDP, is still lower in emerging economies than in more advanced economies; unlike other metals, such as steel and copper. We expect emerging economies to keep the momentum of rapid increase in individual income, as in previous years, leading the expansion of consumer spending worldwide; this implies significant growth potential for nickel demand in the medium term.

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 producer 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 used to be determined by a formula linked

134

to the price of aluminum for three-month futures contracts on the LME and to the price of alumina FOB Australia.

#### Copper

Growth in copper demand has been driven primarily by Chinese imports. Copper prices are determined on the basis of: (i) copper metal prices on end markets, such as the LME and the NYMEX; and (ii) for intermediate products, such as cooper concentrate and copper anode (which represent the majority of our sales), 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.

Copper consumption is rapidly increasing, partly as a result of further recovery in the global economy. Due to structural limitations to the growth of the supply of concentrates, there are strong factors driving relatively high prices. *Fertilizer nutrients* 

The demand for fertilizers is driven on the long run by agricultural production, which is dependent on the demand for food, which in turns depends on the level of growth of income per capita, population age structure, food preferences and technological innovation. The demand for fertilizers has recently been influenced by the biofuel production, which is determined by economic growth, competition with fossil fuels and environmental regulations.

In the short term, the demand for fertilizers is affected by the agriculture economic cycles, which are mostly determined by offer, and vary depending on weather conditions and credit availability, unlike the mining cycles which are influenced mainly by the fluctuations in demand. The demand for fertilizers has a strong seasonal component, derived from the planting seasonal periods, which result in prices fluctuations within the same year.

Fertilizers are sold mainly on a cash-basis, based on international reference prices; although certain large importers, such as China and India, often sign annual contracts.

# 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 on 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 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 Rate**

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

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

#### Exchange rate variations

The increase in the value of the US dollar in relation to the Brazilian Real tends to result in higher operating margins and lower financial results. This is due to exchange gains on our liabilities in US dollars and fair market value gains on our currency derivatives.

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 (69% in 2010), and also, including but not limited to the US dollar (15% in 2010), Canadian dollar, Indonesian rupees, Australian dollars and Euros. As a result, changes in exchange rates affect our operating margins.

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.

135

On December 31st, 2010 our debt expressed in Brazilian Reais was R\$ 13.3 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 semester, and its revaluation in the second half, in relation to the US dollar, the net exchange rate and monetary variation caused a positive impact on our net profits of R\$ 442 million in 2010. The net result of the currency and interest rate swaps, structured mainly to convert the debt expressed in Brazilian Reis into US dollars to protect our cash flow from currency price volatility, produced a positive effect of R\$ 1,290 billion in 2010, of which R\$ 2,240 billion generated a positive impact on the cash flow.

# Variations in the rates of inflation

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 revenues are not significantly affected by inflation rates.

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 is accountable for the following effects 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 s results.

# 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 impact of inflation, price variations of 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 North American 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 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 is expressed in Brazilian Reais and is linked to a floating interest rate; the remaining 70% is expressed in other currencies.

Energy costs are an important component of our production cost and represent 17.4% of the total cost of products sold in 2010. Increases in the price of oil and gas negatively impact our logistics, mining, pellets, and nickel and alumina businesses. Electricity costs represented 6.7% of the total cost of products sold in 2010.

136

#### **Table of Contents**

#### 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 s results.

Vale does not provide advisory forecasts regarding its future financial performance. The company 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 participants in the capital market a sound basis for their expectations regarding its performance in the medium and long term.

# a. Introduction or disposal of operating segment

In 2010, the fertilizer segment was introduced and its contribution to the revenue was of 3.8%.

# b. Incorporation, acquisition or divestiture of equities

# Events following the Accounting Statements from the 31st of December, 2010

The following events have not had significant impacts on Vale s financial statements or its results in 2010. *Acquisition 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 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 2011, expecting 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 the B20 (mixture containing 20% biodiesel and 80% common diesel).

#### Portfolio management

In February 2011, Vale announced completion of its transaction with Norsk Hydro ASA (Hydro), a company listed in the Oslo Stock Exchange and in the London Stock Exchange (ticker symbol: NHY), to transfer all of its shares with Albras Alumínio Brasileiro S.A. (Albras), Alunorte Alumina do Norte do Brasil S.A. (Alunorte) and Companhia de Alumina do Pará (CAP), as well as, respective exclusivity rights, business contracts and net debt of US\$ 655 million; in exchange for 22% of Hydro s outstanding common shares, following today s issuance, and US\$ 503 million in cash, following adjustments.

Additionally, Vale has incorporated a new company, Mineração Paragominas S.A (Paragominas), and transferred the Paragominas bauxite mine and all of its remaining bauxite mining rights in Brazil. As part of this transaction, Vale has sold 60% of Paragominas to Hydro for US\$ 578 million in cash, after working capital adjustments. The remaining 40% shall be sold in two equal shares of 20% in 2013 and 2015, for US\$ 200 million in cash each.

Under the terms of the agreement, Vale, through its fully owned subsidiaries, has transferred 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 will sell (d) 60% of the total capital of Paragominas Vale will hold 40% of the capital until it is completely sold in 2015. Vale, through its fully owned subsidiaries, has subscribed 447,834,465 Hydro shares, or 22% of the 2,035,611,206 outstanding shares, approximately US\$ 3.5 billion according to Hydro s closing price and the exchange rate NOK/US\$ on the 25th of February, 2011. Under the terms of the transaction, Vale shall not sell its shares for a 2-year lock-up period and shall not own more than the 22% of Hydro.

137

#### **Table of Contents**

#### **Main Acquisitions**

2010

Acquisition of iron ore assets in Africa

In April 2010, Vale acquired from BSG Resources Ltd. (BSGR) 51% equity 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 and the remaining US\$ 2 billion in installments subject to the fulfillment of specific goals. Simandou Blocks 1 & 2 and Zogota are among the best 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. The joint venture between Vale and BSGR will implement the Zogota project and conduct 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 renewing 660 km of the Trans- Guinea railway for passenger and light cargo. Vale will be responsible for asset management, marketing and sales of the joint venture with the exclusive off-take of the iron ore produced.

Acquisition of coal assets in Australia

In June 2010, Vale acquired from AMCI Investments Pty Ltd (AMCI), for US\$ 92 million, additional holdings of 24.5% in the Belvedere (Belvedere) coal project. 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 reach production capacity of up to 7.0 million metric tons of metallurgical coal per year. Acquisition of assets of fertilizer

In line with our strategy of becoming global leaders in the fertilizer industry, in May 2010 we acquired 58.6% of the capital of Fertilizantes Fosfatados S.A. (Fosfertil), currently Vale Fertilizantes S.A.; as well as, the Brazilian fertilizer assets of Bunge Participações e Investimentos S.A. (BPI), currently Vale fosfatados, for R\$ 8,692 billion (corresponding 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 equity for R\$ 1,762 billion (corresponding to a price per share of US\$ 12.0185) and, in December, we disclosed the result of the public offering for the acquisition of the company s common shares held by minority shareholders. In December 2010, we held 78.92% of the total capital and 99.83% of the voting capital of Vale Fertilizantes, and 100% of the capital of Vale Fosfatados.

Acquisition of equity on SDCN

In September 2010, we acquired 51% of the Sociedade de Desenvolvimento do Corredor Norte S.A. (SDCN) for US\$ 21 million (equivalent to R\$ 36.6 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.

#### Main investment disposals and asset sales

Sale of Valesul assets

In January 2010, our fully owned subsidiary, Valesul Alumínio S.A., signed a sale agreement of its aluminum assets for US\$ 31.2 million. Valesul assets, located in the State of Rio de Janeiro, comprising the agreement included the anode, reduction and melting factory, as well as, industrial, administrative and stocking services.

138

#### **Table of Contents**

Sale of kaolin assets

In the second quarter of 2010, Vale sold 86.2% of its equity 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 in the Euronext, by US\$ 72 million. Sale of equities in the Bayóvar project

In July 2010, Vale completed the sale of its minority equities in the Bayóvar project, in Peru, through a newly incorporated Company, namely MVM Resources International BV (MVM). The Company sold 35% of MVM s total equity 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 by the 30th of June 2010 were approximately US\$ 550 million (equivalent 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 net equity, as per gain/ loss regulations applicable to when the control of a company is held. Sale of equities in Vale Oman Pelletizing Company LLC

In May 2010, Vale signed an agreement with the Oman Oil Company SAOC (OOC), a company controlled by the Sultanate of Oman, to sell 30% of Oman Pelletizing Company LLC (VOPC), for US\$ 125 million (equivalent to R\$ 212 million on September 30<sup>th</sup>, 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.

# **Main Acquisitions**

#### 2009

Iron ore assets in Corumbá

In September 2009, Vale concluded the acquisition of the open pit iron ore mining exploration operations in Corumbá, Brazil, along with its respective logistics infrastructure for US\$ 750 million (equivalent to R\$ 1,473 billion on the date of disbursement) from Rio Tinto Plc. The Corumbá iron ore mine is a world class asset, defined by its high iron content, with lump reserves. The logistics assets support 70% of the operation s transport needs. The purchase of the Corumbá assets is subject to Federal Government approval.

Potash deposits in Argentina and Canada

In January 2009, Vale purchased the Rio Colorado project from Rio Tinto Plc, in the Mendoza and Neuquén provinces, in Argentina, and the Regina project in the Saskatchewan province, in Canada, for US\$ 850 million (equivalent to R\$ 1,995 billion on the date of disbursement). The Rio Colorado project includes the development of a mine with initial rated capacity of 2.4 Mtpy of potash, with potential for expansion up to 4.35 Mtpy. The project also includes 350 km of railway connections, port facilities and a power plant. The Regina project is still in its exploration phase, with potential for annual production of approximately 2.8 Mt of potash. The current local infrastructure will enable the final product to be transported to Vancouver, facilitating access to the expanding markets in Asia.

Copper exploitation assets in the African copper belt

In the first quarter of 2009 Vale purchased a 50% equity in a joint venture with African Rainbow Minerals Limited, for future development of TEAL Exploration & Mining Incorporated (TEAL) assets, for US\$ 60 million (equivalent to R\$ 139 million on the date of disbursement); thus, expanding the strategic options for growth in the African copper market.

TEAL has two copper projects in the African copper belt already at feasibility and approval stage. Over the next few years, these projects together may represent a nominal production capacity of 65,000 metric tons of copper per year, as well as, an extensive and highly promising portfolio of copper exploitation assets.

139

#### **Table of Contents**

#### Coal assets in Colombia

In the first quarter of 2009 Vale completed its acquisition of the coal exploitation assets from Cementos Argos S.A. (Argos), in Colombia, for US\$ 306 million (equivalent to R\$ 695 million on the date of disbursement). Assets acquired were: the El Hatillo coal mine, in the Cesar department; Cerro Largo, a coal deposit under exploration; a minority stake in the Fenoco consortium, which holds the concession and operation of the railroad linking the coal operations to the Córdoba River port SPRC; and 100% of the port s concession.

#### Increased holdings in TKCSA

In the third quarter of 2009, Vale agreed with ThyssenKrupp Steel AG to increase our holdings in ThyssenKrupp CSA Siderúrgica do Atlântico Ltda. (TKCSA), from the current 10% to 26.87%, through capital input of EUR 965 million (equivalent to R\$ 2,532 billion on the date of disbursement). By the end of 2008, Vale s contributions to TKCSA amounted to US\$ 478 million (equivalent to R\$ 930 million on the date of disbursement). TKCSA is building an integrated steel slab plant, with rated capacity of five million metric tons of steel slab per year in the state of Rio de Janeiro. Production commenced in the third quarter of 2010. As a strategic partner of ThyssenKrupp, Vale is the exclusive supplier of iron ore to TKCSA.

#### 2008

### Acquisition of mining rights

In the second quarter of 2008 Vale purchased the iron ore mining rights owned by Mineração Apolo S.A., located in the municipalities of Rio Acima and Caeté, in Minas Gerais. The total cost of the acquisition, which increased Vale s estimated resources in 1.1 billion metric tons of iron ore, was US\$ 154.3 million (equivalent to R\$ 255.8 million on that date of disclosure of the acquisition), whereby US\$ 9.3 million (equivalent to US\$ 15.4 million on the date of acquisition) were paid as a call option in May 2005, and US\$ 145 million (equivalent to R\$ 240.4 million on the date of disclosure of the acquisition) in 2008.

#### Main investment disposals and asset sales

In line with our strategy, we continue to reduce our holdings in non-essential assets. The following is a summary of the main disposals and sales of assets in the three-year period.

#### 2010

# Sale of Valesul assets

In January 2010, our fully owned subsidiary, Valesul Alumínio S.A. entered into an agreement for the sale of its aluminum assets for US\$ 31.2 million. Valesul assets included in the agreement, and located in the State of Rio de Janeiro, included the anode, reduction and melting factory, as well as, industrial, administrative and stocking services.

### 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.

#### PTI

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

# 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 84.7 thousand hectares, including conservation areas of eucalyptus forest located in the southwest of Maranhão. The agreed value of this negotiation was R\$ 235 million.

140

#### **Table of Contents**

#### 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.

#### 2008

#### Jubilee Mines

In the first quarter of 2008, Vale sold its minority holdings in Jubilee Mines, a nickel producer in Australia, for US\$ 130 million (R\$ 232 million on the date of disbursement).

#### c. Unusual events or operations

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

141

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

## a. Significant changes in accounting practices

There have been no significant changes in the consolidated accounting statements for the year ending on December 31<sup>st</sup>, 2010 except for those relating to the first annual consolidated accounting statements in accordance with the Accounting Pronouncements Committee (CPC) and the *International Financial Reporting Standards* - IFRSs. The Company applied the CPC Pronouncements 37 and 43 and IFRS 1 in preparing these consolidated accounting statements. For more details, see Note 5 in the accounting statements.

The individual accounting statements of the Parent Company for the year ending on December 31<sup>st</sup>, 2010 are the first annual individual statements in accordance with the CPC. The Company applied CPCs 37 and 43 when preparing these individual accounting statements.

The transition date is January 1, 2009. The administration prepared balance sheets in accordance with the CPCs and the IFRS at that date.

In preparing those accounting statements, the Company applied all the relevant mandatory exceptions and certain optional exemptions regarding the full retrospective application.

- I) The Company chose to apply the following exemptions in relation to retrospective application:
  - a) Retirement benefit obligations The Company elected to recognize all actuarial gains and losses cumulatively passed on January 1<sup>st</sup>, 2009.
  - b) Provision for Asset Retirement The Company adopted exemption from this pronouncement in relation to historical rates of long-term interest before income tax that reflects the assessment of market conditions prevailing at the time and the specific risks associated with the liabilities and used in previous principles, and remeasurement provided in the new principles, in order to calculate the present value discount bonds with assets retirement.
  - c) Business combinations the Company adopted exemption from business combinations as described in IFRS 1 and CPC 37 and therefore did not restate business combinations that occurred before January 1, 2009, the transition date.
  - d) Cumulative conversion adjustments The Company made the initial recording of cumulative transition adjustments on January 1st, 2009, in retained earnings, applying this exemption on the transition date to all controlled companies, according to the pronouncement.
- II) Reconciliation between IFRS/CPCs with past practices:
  - a) The Company immediately made initial records in employee benefit plans and acknowledged an increase in liabilities reflecting on deferred income tax assets and on shareholders equity. These adjustments are included in gains and losses relating to the previous accounting policy, which would fall within the limits of the corridor (see definition in note 2 (t) of the Accounting Statements). The company will continue using the corridor as an accounting practice.
  - b) Asset Retirement Provision The Company already recognized in its financial statements the provision for retirement in accordance with IFRS, except for the remeasurement of the historical rate of long-term interest before income tax that reflects the assessment of market conditions prevailing at the time used to calculate the present value of the bonds, which according to IFRS standards should be reviewed/remeasured on the date of the balance sheet.
  - c) Deferred income tax adjustments in this regard basically refer to the transfer of shares registered as non-current to current, according to new principles and compensation between assets and liabilities of the same nature.
  - d) Investment the adjustment relates to the impact of transition from previous practice to CPC pronouncements in the invested and captured in the line of equity in the Parent DRE.
  - e) Legal deposits refers to the reclassification of funds that during the previous practices were presented as a reduction of the contingent liabilities.

### **Table of Contents**

- f) Minor equity this accounting category is now to be called Interest of Non-controlling Shareholders and was reassigned to the equity. The participation of non-controlling shareholders, recorded in the accounting prominently under equity requires that the movement of assets for these shareholders occur similarly to those given to the controlling shareholders.
- g) Redeemable non-controlling shareholders shares the participation of non-controlling shareholders is redeemable upon the occurrence of certain events beyond the control of the Company, and was classified as redeemable non-controlling shareholders shares in non-current liabilities.
- h) Intangible Assets In the railway concessions in which the Company participates, the investment in permanent ways should be resumed to the granting authority at the conclusion of the concession agreement, and was reclassified from fixed assets to intangible assets.

## b. Significant effects of changes in accounting practices

The effects of adopting these new accounting practices in the fiscal year on the net income and shareholders equity are the following. Please see further details in the explanatory notes #5 of the accounting statements:

Adjustments in the Adoption of New Practices, Accounting Estimates and Reclassifications

Consolidated

		Results on
R\$ million		12/31/2009
Balance prior to the adoption of the new practices		10,249
Adjustments		88
Net earnings in the period		10,337
Net earnings attributable to non controlling shareholders		168
Net earnings in the period		10,505
	Equity on	Equity on
R\$ million	12/31/2009	01/01/2009

	Equity on	Equity on
R\$ million	12/31/2009	01/01/2009
Balance prior to the adoption of the new practices	95,737	96,275
Adjustments	21	33
Non controlling shareholders equity	4,535	4,691
Equity	100,293	100,999

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

There were no corrections or remarks on the opinions relating to the financial statements for 2008, 2009 and 2010.

143

### 10.5 Critical Accounting Policies

The criteria listed below refer to the critical accounting policies that are adopted and reflected in the consolidated financial statements.

We considered an accounting policy critical when it is important to the financial condition and operations results and requires significant judgments and estimates by the Vale management. The summary of most important accounting policies can be found in Note 3 of the accounting statements.

The presentation of accounting statements in accordance with the principles of recognition and measurement by the accounting standards issued by the CPC and the *International Accounting Standards Board* (<u>IASB</u>) requires the Company management to make judgments, estimates and assumptions that may affect the value of assets and liabilities presented.

These estimates are based on the best information available in each period and the actions planned and are constantly reviewed based on available information. Changes in facts and circumstances may lead to revision of estimates, so the actual future results could differ from estimates.

Significant estimates and assumptions used by the company management in preparing the 2010 accounting statements are thus presented:

Mineral reserves and mine life

The estimates of proven reserves and probable reserves are regularly evaluated and updated. Proven and probable reserves are determined using techniques generally accepted geological estimates. The calculation of reserves requires the Company to assume positions of future conditions that are uncertain, including future ore prices, exchange rates, 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 exhaust portion of the mines, and the estimated mine life 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 life of assets linked to them may have significant impact on charges for depreciation, depletion and amortization recognized in financial statements as cost of goods sold. Changes in estimated mine life could cause significant impact on estimates of the provision for environmental costs of recovery after write-down of fixed assets and impairment analysis.

Environmental costs and recuperation of areas degraded

Expenses related to compliance with environmental regulations are recorded in income or are capitalized. These programs were designed to minimize the environmental impact of activities.

The Company recognizes an obligation under the market value for disposal of assets during the period in which they occur, according to Note 2 (s) in the financial statements.

The Company believes the accounting estimates related to reclamation and closure costs of a mine are a critical accounting policy because it involves significant values for the provision and it is expected to involve several assumptions, such as interest rate, inflation, life the asset, considering the current stage of exhaustion and the projected date of exhaustion of each mine. Although the estimates are reviewed each year, this provision requires that the premises are assumed to project cash flows applicable to the operations.

Income tax and social security contribution

The determination of the provision for income taxes or deferred income tax assets and liabilities and any valuation allowance on tax credits requires estimates from Management. For each income tax asset, the Company assesses the likelihood of part or the entire asset not being recovered. The valuation allowance made with respect to accumulated tax losses depends on the assessment by the Company, the probability of generating future taxable profits in the deferred income tax asset was recognized based on production and sales planning, commodity prices, costs of operational plans, restructuring costs, reclamation costs and planned capital.

144

### **Table of Contents**

The Company recognizes, where applicable, provision for losses in cases where tax credits may not be fully recoverable in the future.

Contingencies

Contingent liabilities are recorded and/or disclosed unless the possibility of loss is considered remote by our legal advisors. These contingencies are arranged in notes to the financial statements, Notes 2 (s) and 20 of the financial statements.

The record of the contingencies of a given liability on the date of the financial statements is done when the value of these losses can be reasonably estimated. By their nature, contingencies will be resolved when one or more future events occur or fail to occur. Typically, the occurrence of such events depends not on our performance, which makes it difficult to give precise estimates about the exact date on which such events are recorded. Assessing such liabilities, particularly in the uncertain legal environment in Brazil, and in other jurisdictions, involves exercising significant estimates and judgments from management regarding the results of future events.

Post-retirement benefits for employees

The Company sponsors various plans for post-retirement benefits to employees in Brazil and abroad, the parent company and entities in the Group, as described in note 2 (t) and 22 of the financial statements.

The values reported in this section depend on a number of factors that are determined based on actuarial calculations using several assumptions in order to determine the costs and liabilities, among others. One of the assumptions used in determining the amounts to be recorded in accounting is the interest rate to discount and upgrade. Any changes in these assumptions will affect the accounting records made.

The Company, together with external actuaries, reviews at the end of each fiscal year, which assumptions should be used for the following year. These premises are used for upgrades and discounts to fair value of assets and liabilities, costs and expenses and determination of future values of estimated cash outflows, which are needed to settle the obligations with the plans.

Reduction in recoverable value of assets

The Company annually tests the recoverability of its tangible and intangible assets with indefinite useful lives that are mostly of the portion of premium for expected future earnings arising from processes of the business combination. The accounting policy in respect of an item is presented in Note 2 (n) of the financial statements and the possible values and procedures used for the calculations and records are presented in Note 18 of the financial statements.

Recoverability of assets based on the criterion of discounted cash flow depends on several estimates, which are influenced by market conditions prevailing at the time that such impairment is tested and thus management believes it is not possible to determine whether new impairment losses will occur in the future.

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 assessments to choose the various methods and assumptions set which are mainly based on market conditions existing at balance sheet date. See note 24 in the financial statements.

The impact analysis if actual results are different from the management estimate is presented in note 26 of the financial statements on the topic of sensitivity analysis.

Conversion of foreign currency transactions

The rights and monetary obligations denominated in foreign currencies are converted at exchange rates prevailing at the balance sheet date, being US\$ 1.00 is equivalent to R\$ 1.6662 on December 31, 2010 (US\$ 1.00 equivalent to R\$ 1.7412 on December 31, 2009 and R\$ 2.3370 on December 31, 2008).

Sales revenues, costs and expenses denominated in foreign currencies are converted using the average exchange rates for the month of their occurrence.

145

### **Table of Contents**

### 10.6 Internal Controls

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

Vale 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 with statistical process mapping and risk assessment to identify applicable controls in order to mitigate the risks affecting the company s ability to start, authorize, record, process and disseminate relevant information in financial statements.

At the end of fiscal year, based on tests performed by the administration 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 managers understand that the process mapping and risk assessment methodology used is adequate to ensure efficiency, accuracy and reliability on our internal controls.

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

The auditors reported no deficiencies or recommendations about the effectiveness of internal controls adopted by Vale.

146

### 10.7 Public Offerings of Securities

## a. How resources resulting from the offering were used

2010

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

In September 2010, Vale issued US\$ 1 billion (equivalent to R\$ 1,694 billion) in bonds maturing in 2020 and US\$ 750 million (equivalent to R\$ 1,271 billion) in bonds maturing in 2039. Bonds for 2020 will have a coupon of 4.625% per annum, payable semiannually at a price of 99.030% of the title s face value. The bonds issued for 2039 at a price of 110.872% of face value of the title, will be consolidated with the bonus of US\$ 1 billion issued by Vale Overseas in November 2009 with 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 (equivalent to R\$ 1.806 billion) of eight years Eurobonds at a price of 99.564% of face value of the title. The notes maturing in March 2018, will have a coupon of 4.375% per annum, payable annually.

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

#### 2009

Global public offering of US\$ 942 million in mandatorily exchangeable notes maturing in 2012

On July 7, 2009, Vale announced offering of US\$ 942 million (R\$ 1,858 billion on the transaction date) of notes due 2012 (VALE-2012 Series and VALE.P-2012 Series) through its subsidiary Vale Capital II.

Notes in the VALE-2012 and VALE.P-2012 Series, bear interest at 6.75% per annum, and are payable quarterly. In their maturity on June 15, 2012, or before it, upon certain events, Notes of the VALE-2012 series will be mandatorily exchanged for *ADSs*, each representing one common share or preferred class A shares of Vale. Additional remuneration will be paid based on the net amount of cash distributions paid to holders of ADSs.

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

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

Global public offering of US\$ 1 billion in bonds maturing in 2019

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

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

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

Global 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 at the transaction date) in bonds maturing in thirty years, through its wholly owned subsidiary Vale Overseas Limited.

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

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

147

### **Table of Contents**

### 2008

Global public offering of primary shares

On July 17, 2008, Vale priced a global public offering of 256,926,766 shares and 189,063,218 preferred class A shares, all nominative, without par value shares of Vale, including in the form of ADSs represented by *American Depositary Receipts* (ADRs), at the price of US\$ 46.28 per common share and US\$ 29.00 or 18.25 per common ADS, and R\$ 39.90 per preferred class A and US\$ 25.00 or 15.74 per preferred ADS, totaling R\$ 19,434 billion.

Vale used the net proceeds of this offering for general corporate purposes, which will include financing its program of organic growth, strategic acquisitions and increased financial flexibility, as disclosed at the time.

b. Whether there have been deviations between the effective application of resources and the proposals disclosed in the offering memoranda of the same distribution

There have not.

c. In case there were deviations, reasons for such deviations

There have not.

148

### 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

Regarding the agreement on tax incentive for lease financing sponsored by the French government, we provided in December 2004 some guarantees in favor of Vale New Caledonia S.A.S. (VNC) for which we guarantee payments due from VNC of up to a maximum amount of U\$ 100 million (the equivalent to R\$ 167 million on December 31, 2010) (Maximum Amount) in connection with the indemnity. This guarantee was provided to BNP Paribas on behalf of tax investors from Gnifi, a special purpose entity that owns a portion of assets of our nickel cobalt processing plant in New Caledonia (Girardin Assets). We also provide an additional guarantee covering the payments due to VNC of (a) amounts exceeding the Maximum Amount in connection with the indemnity and (b) other amounts payable by VNC under a lease agreement covering the Girardin Assets. This guarantee was provided to BNP Paribas on behalf of GniFi.

Another commitment related to VNC was that the Girardin Assets would be substantially completed by December 31, 2009. Due to the delay, the Administration proposed a term extension to December 31, 2010, which was accepted. Consequently, the benefits of the financing structure are highly probable and we do not anticipate losses from the tax advantages provided under this financing structure.

In 2009 two new bank guarantees totaling U\$ 58 million (43 million) (the equivalent to R\$ 97 million on December 31, 2010) were established by the Company on behalf of VNC in favor of the South Province of New Caledonia in order to guarantee the performance of VNC with respect to certain environmental obligations in relation to the metallurgical plant and the Kwe West residue storage facility.

Sumic Nickel Netherlands B.V. (Sumic), a 21% shareholder of VNC, has a put option to sell to Vale 25%, 50%, or 100% of the shares they own of VNC. The put option can be exercised if the initial cost of the nickel-cobalt development project exceeds U\$ 4.2 billion (the equivalent to R\$ 7 billion on December 31, 2010) and an agreement cannot be reached. On February 15, 2010, we formally added our agreement with Sumic to raise the limit to approximately U\$ 4.6 billion (the equivalent to R\$ 7.7 billion on December 31, 2010). On May 27, 2010 the limit was reached and on October 22, 2010 an agreement was signed to extend the put option date for the first half of 2011. On January 25, 2011 a new agreement was signed extending the put option date for the second half of 2011.

We provided a guarantee covering certain termination payments due from VNC to the supplier, under an electricity supply agreement (ESA) entered into in October 2004 for the project. The amount of the termination payments depends upon a number of factors, including whether any termination of the ESA is a result of a default by VNC and the date on which an early termination of the ESA were to occur. During the first quarter of 2010, the supply of electricity by ESA started and the guaranteed amounts decreased over the life of the ESA based on the maximum amount. On December 31, 2010, the guarantee was U\$ 169 million (126 million) (the equivalent to R\$ 282 million on December 31, 2010).

In February 2009, Vale and Vale Newfoundland, Vale s subsidiary, and Labrador Limited (VINL) entered into a fourth amendment to the Voisey s Bay Development agreement with the Government of Newfoundland and Labrador Canada, which permits VNL to ship up to 55,000 metric tons of nickel concentrate from the Voisey s Bay area mines. As part of the agreement, letters of credit were provided to the Government of Newfoundland and Labrador in the amount of U\$ 16 million (CAD\$ 16 million) (the equivalent to R\$ 27 million on December 31, 2010) for each shipment of nickel concentrate shipped out of the province from January 1, 2009 to August 31, 2009. The amount of this financial assurance was U\$ 110 million (CAD\$ 112 million).

As at December 31, 2010, there was an additional of U\$ 114 million (the equivalent to R\$ 190 million on December 31, 2010) of letters of credit issued and not paid pursuant to our union of revolving credit line as well as an additional of U\$ 39 million (the equivalent to R\$ 65 million on December 31, 2010) in letters of credit and U\$ 57 million (the equivalent to R\$ 95 million on December 31, 2010) in bank guarantees issued and not paid. These are associated with environmental complaints and other operational items attached, such as insurance, electricity commitments and import and export duties.

149

### **Commercial Leasing**

The table below shows the minimum value of future annual payments of operating leasing at December 31, 2010. Years ended on December 31 and in millions of reais:

2011	178
2012	178
2013	178
2014	178
2015 onwards	1,820
Total	2,532

The total cost of operating leasing on December 31, 2010 and 2009 was R\$ 178 million and R\$ 198 million, respectively.

## Concessions and sub-concessions agreements

## (a) Railway transportation companies

The Company and certain Group Companies entered into with the Union, through the Ministry of Transport, concession agreements 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 sub-concessions are shown in notes 16 and 23 of the financial statements.

The concession terms for the railroad are:

	Termination of
	the
	concession
Railroad	period
Vitória to Minas and Carajás (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 our subsidiaries are treated for accounting purposes as operational leases and have the following characteristics:

Railroads	FNS	FCA	MRS
1) Total installments	3	112	118
2) Frequency of payment	(*)	Quarterly	Quarterly
3) Correction index	IGP-DI FGV	IGP-DI FGV	IGP-DI FGV
4) Total installment paid	2	47	50
5) Current value of installment			
Concession	R\$0	R\$2	R\$3
Leasing	R\$0	R\$29	R\$49
Sub-concession	R\$496	R\$0	R\$0

(\*) According to the delivery of each part of railroad

150

## **Table of Contents**

## (b) Ports

The Company owns specialized port terminals, as follows:

			Termination
			of the
			concession
Terminal	Location		period
Tubarão, Praia Mole and Granéis Líquidos Terminals	Vitória	ES	2020
Praia Mole Terminal	Vitória	ES	2020
Produtos Diversos Terminal	Vitória	ES	2020
Granéis Líquidos Terminal	Vitória	ES	2020
Vila Velha Terminal	Vila Velha	ES	2023
Maritime Terminal of Ponta da Madeira Pier I and III	São Luís	MA	2018
Maritime Terminal of Ponta da Madeira Pier II	São Luís	MA	2010(*)
Inácio Barbosa Maritime Terminal	Aracaju	SE	2012
	Rio de Jane	eiro	
Ore Export Terminal Port of Itaguaí		RJ	2021
	Rio de Jane	eiro	
Ilha Guaíba Maritime Terminal TIG Mangaratiba		RJ	2018

<sup>(\*)</sup> Extension of validity 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.

151

### 10.9 Comments on items not shown

Vale managers do not expect relevant effects on the operations described at item 10.8 of this reference form and not recorded in financial statements that would change the revenues, expenses, operating income, financial expenses or other items of accounting information of the Company.

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) investments financing sources and (iii) relevant ongoing and planned divestments.
- b. already disclosed acquisition of plant, equipment, patents or other assets which must materially affect Vale s productive capacity
- c. new products and services, including: (i) description of ongoing researches already published; (ii) the total amounts spent by the issuer in researches 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
- In 2010, investments excluding acquisitions amounted R\$ 22,352 billion, with R\$ 14,494 billion allocated for project development, R\$ 1,998 billion for R&D after adjustments on 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 reached 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.

During 2008, Vale invested R\$ 18,961 billion, of which R\$ 11,865 billion were spent on organic growth, consisting of R\$ 6,457 billion in projects and R\$ 1,953 billion in research and development, while R\$ 4,910 billion were invested in maintaining existing operations.

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

In 2010, we continued to explore opportunities for organic growth through implementation of world-class projects. Vale completed six projects: (A) Additional 20 Mtpy, high-quality low-cost brown field project in Carajás; (b) Bayóvar, phosphate rock mine in Peru; (c) Onça Puma, ferronickel operation in the state of Pará, Brazil; (d) Tres Valles, copper operation in Chile; (e) Oman, pelletizing operation in the Middle East; and (f) TKCSA, a steel plant in the state of Rio de Janeiro, Brazil.

In February 2011, Vale announced that it completed the transaction with Norsk Hydro ASA (Hydro), the company listed on Oslo Stock Exchange and London Stock Exchange (ticker symbol: NHY), to transfer all its shares in Albras Alumínio Brasileiro S.A. (Albras), Alunorte Alumina do Norte do Brasil S.A. (Alunorte) and Companhia de Alumina do Pará (CAP), together with the exclusive rights, commercial contracts and net debt of U\$ 655 million, for 22% of Hydro outstanding common shares, after issuing held today, and U\$ 503 million in cash, after adjustments.

Moreover, Vale has created a new company, Mineração Paragominas S.A. (Paragominas) and transferred the bauxite mine of Paragominas and all its other bauxite mining rights in Brazil. As part of this transaction, Vale sold 60% of Paragominas to Hydro for U\$ 578 million in cash, after adjustments for working capital. The remaining installment of 40% will be sold in two equal installments of 20% in 2013 and 2015, for U\$ 200 million in cash each.

Under the terms of the agreement, Vale transferred to Hydro, through its wholly owned subsidiaries: (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 will sell (d) 60% of the total capital of Paragominas; Vale will still own 40% of the capital until it is fully sold in 2015.

152

Vale, through its wholly owned subsidiaries, endorsed 447,834,465 shares of Hydro or 22% of the 2,035,611,206 outstanding shares, approximately U\$ 3.5 billion, according to Hydro s closing price and NOK/US\$ exchange rate on February 25<sup>th</sup>, 2011. Under the terms of the transaction, Vale cannot sell its shares during the 2 years lock-up and it cannot increase its stake at Hydro beyond 22% either.

NOTE: To convert the values of investments, we used the average exchange rate for the periods for conversion.

			Performed million of R			lget <sup>5</sup>			
Amoo	Duoinat	2000	2000		•	Total	Status		
Area Bulk Materials / Logistics	Project Carajás additional 40 Mtpy	<b>2008</b> 919	<b>2009</b> 766	<b>2010</b> 635	<b>2011</b> 823	<b>Total</b> 5,079	Status The previous Carajás Additional 30 Mtpy project was expanded to 40 Mtpy and, consequently, our Board of Directors approved the additional budget of U\$ 490 million. Investments include the construction of a dry processing plant. Investments to increase the capacity of Ponta da Madeira Maritime Terminal were completed in 2010. Vegetation removal license and installation license obtained. Start-up expected for the second half of 2012.		
	Carajás Serra Sul (mine S11D)	N/A	N/A	371	1,740	11,595	Located on the Southern range of Carajás, in the Brazilian state of Pará, this project will develop a mine complex and processing plant with capacity to produce 90 Mtpy, using the truckless mining concept. Start-up expected for 2S14.		
	CLN S11D	N/A	N/A	32	265	TBA	The project will expand the EFC railroad and the port terminal of Ponta da		

						Madeira in the North System to increase the flow capacity in line with the expansion of Carajás, as well as the construction of a railway spur connecting the EFC railroad to the mine S11D (Serra Sul). Start-up expected for 2S14. The project is still subject to approval by the Board of Directors.
Apolo	4	18	12	645	TBA	Project in the Southeastern System with a production capacity of 24 Mtpy of iron ore. Start-up expected for 1S14. The project is still subject to approval by the Board of Directors.
Conceição Itabiritos	0	14	294	703	2,009	This project in the Southeastern System will add 12 Mtpy of iron ore to current capacity. It involves investment in a new concentration plant, which will receive ROM from the Conceição mine. Start-up expected for 2S13.
CLN 150 Mtpa	N/A	N/A	1.033	2.206	5,110	The project includes investments in railroads and in the terminal of Ponta da Madeira in Maranhão, Brazil, including the construction of Píer IV. It will increase the flow capacity of the railway and of the port to 150 Mtpy. Start-up expected for 2S12.

153

			Perform				
				million of			
Area	Project Vargem Grande Itabiritos	<b>2008</b> 0	<b>2009</b> 0	<b>2010</b> 99	<b>2011</b> 609	<b>Total</b> 2,603	Status This project in the Southeastern System will add 10 Mtpy of iron ore to current capacity. It involves investment in a new iron ore treatment plant, which will receive low grade iron ore from the Abóboras, Tamanduá and Capitão do Mato mines. Start-up expected for 2S13.
	Tubarão VIII	151	415	232	317	1,425	Pelletizing plant to be built at the port of Tubarão, in the Brazilian state of Espírito Santo, with a 7.5 Mtpy capacity. <i>Start-up</i> expected for 2S12.
	Simandou Phase 1	0	0	55	1.473	2,156	The first phase of Simandou in Guinea has an estimated capacity of 15 Mtpy. The project includes the development of Zogota mine (located in southern Simandou), the construction of a dry processing plant and the construction of approximately 100km railway to link the operation to a pre-existing railroad in Liberia. Scheduled to start producing 2 Mtpy and to reach the end of its ramp-up, 15 Mtpy in 2014.
	Serra Leste	0	0	26	469	TBA	The project includes investments in mining equipment, a new

						treatment plant and logistics to meet the additional production of 10 Mtpy in 2013. The ore flow will be conducted by EFC railroad. Start-up expected for 1S12. The project is still subject to approval by the Board of Directors.
Moatize	263	602	1.101	722	2.837	This project is located in Mozambique and will have an annual production capacity of 11 Mtpy, of which 8.5 million tons of metallurgic coal and 2.5 million tons of thermal coal.  Completion is scheduled for 1S11.
Moatize II	0	0	0	276	TBA	The project includes investments to open a new <i>pit</i> , duplication of the <i>Coal Handling Preparation Plant</i> (CHPP) and infrastructure, increasing production to 22 Mtpy. Start-up expected for 2S13. The project is still subject to approval by the Board of Directors.
Nacala Corridor	0	0	116	510	TBA	Project to develop Nacala Corridor, involving the construction of a 200 km railway connecting Moatize mine to Malawi, a new marine terminal for coal in Nacala, Mozambique and an extension of 21 km railway that will connect the existing railway to the new marine terminal for coal and the recovery of the existing railway

in Malawi and Mozambique. Start-up expected for 2014. The project is still subject to approval by the Board of Directors.

154

		]	Perform				
				million of			
Area	Project	2008	2009	2010	2011	Total	Status
	Teluk Rubiah	0	8	76	253	2,346	Teluk Rubiah project, in Malaysia, involves the construction of a maritime terminal that will be able to receive 400,000 dwt vessels and a distribution center with a capacity to handle up to 30 million metric tons of iron ore in this first phase. It has the possibility to expand it up to 100 million Mtpy in the future. The start-up is expected for first half
							of 2014.
Non-Ferrous Minerals	Totten	75	112	148	1.398	4,827	Mine in Sudbury, Canada, aiming to produce 8,200 tpy of nickel, copper and precious metals as by-products. Project being implemented and conclusion planned for 1S11.
	Long-Harbour	125	201	934	253	2,346	Nickel processing facility in the province of Newfoundland and Labrador, Canada, to produce 50.000 metric tons of finished nickel per year, together with up to 5.000 metric tons of copper and 2.500 metric tons of copper and cobalt, using the ore from the Ovoid mine in our Voisey s Bay mining site. The start-up is scheduled for 1S13.
	Salobo	410	870	1.147	695	3,094	The project will have an annual production

Salobo II	0	4	137	471	1,754	capacity of 100.000 metric tons of copper in concentrate. Start-up expected for 2S11. The project will expand the Solobo mine annual production capacity from 100.000 to 200,000 metric tons of copper in concentrate.
Cristalino	0	0	0	457	ТВА	Conclusion is estimated for 2S13. Project located in the Carajás region, with a nominal capacity of 95.000 tpy of copper in concentrate. Start-up expected for 2S14. The project is still subject to
Konkola North	0	0	29	137	342	approval by the Board of Directors. Located in the Zambian copper belt, this is an underground mine and will have an estimated nominal production capacity of 45,000 tpy of copper in concentrate. This project is part of our 50/50 joint venture with ARM in Africa. In addition to the budget of U\$ 400 million approved by JV, we estimate investment of U\$ 70 million in additional contingencies, social and environmental investments. The start-up is scheduled for 2013.

		Performed			Budget <sup>5</sup>		
				million o	f R\$		
Area	Project	2008	2009	2010	2011	Total	Status
	Bayóvar II	0	0	0	171	TBA	Bayóvar project brown field expansion in northern Peru, seeking additional production of 1.9 million tons of phosphate rock. Start-up expected for 2S12. The project is still subject to approval by the Board of Directors.
	Fertilizers Salitre	0	0	44	590	TBA	Project located in Minas Gerais, Brazil, which includes the opening of a new phosphate mine with a production capacity of 2.2 Mtpy of phosphate concentrate and the implementation of fertilizer production plant with capacity of 560,000 tpy of P2O5, interconnected by a 18-kilometer pipeline. <i>Start-up</i> scheduled for 2014. The project is still subject to approval by the Board of
	Rio Colorado	0	0	359	2,096	TBA	Directors. The project includes the development of a mine with an initial nominal capacity of 2.4 Mtpy of potash - KCl, with potential for a future expansion to 4.35 Mtpy, construction of a railway spur of 350 km, port facilities and a power plant. Start-up expected for 2S13. The project is still subject to approval by the Board of Directors.

Fertilizer Nutrients Energy	Estreito	292	566	410	68	1.203	The hydroelectric power plant on the Tocantins river, between the states of Maranhão and Tocantins, has already obtained the implementation license, and is being built. Vale has a 30% share in the consortium that will build and operate the plant, which will have a capacity of 1,087 MW. Completion is planned for 1H11.					
	Karebbe	110	106	209	164	702	Karebbe hydroelectric power plant in Indonesia, aims to supply 130 MW for the Indonesian operations, targeting production cost reduction by substitution of oil as fuel and enabling the potential expansion to 90.000 tpy of nickel in matte. Work started and main equipment purchased. Scheduled					
	Biofuel	0	92	157	79	830	to start-up in 2S11. Project to invest in biodiesel to supply our mining and logistics operations in the Northern region of Brazil, using the B20 mix (20% of biodiesel and 80% of ordinary diesel), from 2014 onwards. The oil production related to our stake will be used to feed our own biodiesel plant, with estimated capacity of 160.000 metric tons of biodiesel per year.					

156

## **Table of Contents**

Amounts converted at the exchange rate on 10/28/2010, date of disclosure of the investment budget available on our website <a href="https://www.vale.com">www.vale.com</a>

## 10.11) Other factors with relevant influence

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

157

### 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:

a. 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

b. 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

c. 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

158

### 12.1 Administrative Structure

## a. Powers of each body and committee

## **Board of Directors:**

Under provisions of the Bylaws of the company, 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 Company;
- 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 Company, making decisions on the setting-up of companies or their 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 Company 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 Company;
- 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;

159

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 them on the basis of accrued profits or existing profit reserves shown on the most recent annual or intermediate balance sheet;

XXV. [sic: missing]

XXVI. 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

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

## **Advisory Committees:**

In order to confer greater efficiency and quality in its decisions, the Board of directors shall have ford advice 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.

### **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.

160

### **Finance Committee**

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

- I Issuing reports on the corporate risks and 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 Company 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 company 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 Company s 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:

- I. 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 company s strategic guidelines and the strategic plan, and executing the approved strategic plan;

161

### **Table of Contents**

- IV. Preparing and submitting the Company s annual and multi-annual budgets to the Board of Directors, and executing the approved budgets;
- V. Planning and conducting the company 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 company is a party, as well as share purchases, and conducting the approved mergers, split-offs, incorporations and purchases;
- VIII. Preparing and submitting the company 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 Company s Code of Ethics, established by the Board of Directors;
- XI. Preparing and submitting to the Board of Directors the company s policies on corporate responsibility, such as the environment, health, safety and social responsibility, and implementing the approved policies;
- XII. [skipped in original]
- XIII. [skipped in original]
- XIV. 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 Company participates, as well as suggesting the signing of new agreements and consortia contracts that address subjects of this nature;
- XV. 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;
- XVI. 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
- XVII. 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;
- XVIII. 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;

- XIX. Establishing rules and delegating powers, within the limits of the Executive Board as established by the Board of Directors;
- XX. 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 Company participates, directly or indirectly, respecting the investment opportunities of the Company, 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.

162

### **Disclosure Committee**

The primary attributes of the Disclosure Committee are the evaluation of the relevance of acts or events that have occurred and are related to the business of the Company and 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 of this Reference Form.

### **Risk Management Committee**

The primary responsibilities of the Risk Management Committee are: (a) issuing an opinion on the Company s principles and instruments of risk management; and (b) periodic reporting to the Executive Board on (i) 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; (ii) how the risks are being monitored and managed, and (iii) 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, these By-Laws, and as regulated by its own Internal Rules to be approved by its members, as well as those contemplated in applicable American law, especially the Sarbanes-Oxley Act and applicable standards that regulate listing of securities on the Hong Kong Stock Market, in accordance with waiver requests granted (Regulation on Listing), so long as not in conflict with Brazilian law.

The Internal Rules of the Fiscal Council regulates, besides the powers already set forth by the Law of Joint Stock Companies, the following:

The primary responsibilities of the Fiscal Council are:

- (i) Setting forth the procedures to be used by the company to receive process and deal with complaints or claims related to accounting and auditing matters, as well as to guarantee that the mechanisms to receive complaints guarantee the confidentiality and unknown identity of the individual making the complaint;
- (ii) Recommending and help the Board of Directors in the selection, remuneration, and dismissal of external auditors of the partnership;
- (iii) Deliberating on the contracting of new services that may be rendered by the external auditors of the partnership; as well as mediating eventual disputes between management and external auditors regarding the financial statements of the partnership.

## 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 of the Board of Directors were formed by the Board of Directors itself on 12/19/2001, and pursuant to resolutions of the Extraordinary General Assembly held on 12/27/2002, upon which date their existence became part of the Bylaws.

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

163

### 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 Company shall have knowledge of the self-evaluation conducted by the members of the Fiscal Council.

As of December 31, 2010, 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(e) 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:

- I. 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 Company 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 them;
- 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 Company;
- 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 they are responsible;
- II Participating in meetings of the Executive Board, contributing to the definition of the policies to be followed by the company and 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.

164

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, 2010, 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 Company 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 the Company (www.vale.com), the CVM (www.cvm.gov.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 Company 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 Company 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.

165

# f. Necessary formalities to accept powers-of-attorney granted for shareholders, indicating whether the Company 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 Company 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 Company 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
12/31/2010	Financial Statements	Diário Comércio Indústria & Serviços SP	3/16/2011
		Diário Oficial do Estado RJ	3/16/2011
		Jornal do Commercio RJ	3/16/2011
	Call to Ordinary General Assemblies to	Diário Comércio Indústria & Serviços	3/18/2011;
	consider the Financial Statements	SP	3/21/2011
			&
			3/22/2011
		Diário Oficial do Estado RJ	3/18/2011;
			3/21/2011
			&
			3/22/2011
		Jornal do Commercio RJ	3/18/2011;
			3/21/2011
			&
			3/22/2011
	Minutes of Ordinary General Assemblies		4/20/2011
	that considered the Financial Statements		4/20/2011
		Jornal do Commercio RJ	4/20/2011

166

Fiscal Year	Publication	Newspaper State or Territory	Dates
12/31/2009	Financial Statements	Diário Comércio Indústria & Serviços SP	3/4/2010
		Diário Oficial do Estado RJ	3/4/2010
		Jornal do Commercio RJ	3/4/2010
	Call to the Ordinary General Assembly	Diário Comércio Indústria & Serviços	3/26/2010;
	that considered the Financial Statements	SP	3/27/2010
			& 3/30/2010
		Diário Oficial do Estado RJ	3/26/2010;
		Biarro Official do Estado - 10	3/29/2010
			&
			3/30/2010
		Jornal do Commercio RJ	3/30/2010
	Minutes of Ordinary General Assemblies		4/28/2010
	that considered the Financial Statements	Diário Oficial do Estado SP	4/28/2010
12/21/2000	E' and a' al Chatananata	Jornal do Commercio RJ	4/28/2010
12/31/2008	Financial Statements	Diário Comércio Indústria & Serviços SP	3/14/2009
		Diário Oficial do Estado RJ	3/16/2009
		Jornal do Commercio RJ	3/16/2009
		Gazeta Mercantil SP	3/16/2009
		Valor Econômico SP	3/16/2009
	Call to the Ordinary General Assembly	Diário Comércio Indústria & Serviços	3/14/2009;
	that considered the Financial Statements	SP	3/17/2009 &
			& 3/18/2009
		Diário Oficial do Estado RJ	3/16/2009;
		Biarro Official do Estado - 10	3/17/2099
			&
			3/18/2009
		Jornal do Commercio RJ	3/16/2009;
			3/17/2009
			& 2/10/2000
	Minutes of Ordinary Conoral Assemblies	Diário Comárcio Indústrio la Comisco	3/18/2009
	Minutes of Ordinary General Assemblies	SP	4/18/2009
	that considered the Financial Statements	Diário Oficial do Estado RJ	4/22/2009
		Jornal do Commercio RJ	4/20/2009

## 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 extraordinary 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 Company 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 they 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 they 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 Company in the matter in question, immediately disclosing the conflict to his immediate superior.

167

Violations of the Code of Ethics, rules, and disciplinary standards of the Company 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 Company human resources rules and applicable law

# 12.5 Description of binding clause, if applicable, in the Bylaws for the resolution of conflicts by and between shareholders and the Company through arbitration

There are no binding clauses in the Bylaws for the resolution of conflicts by and between shareholders and the Company through arbitration.

# 12.6 For manager and members of the Fiscal Council, indicate the following information: **Board of Directors**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term	Elected by the Controller
Ricardo José da Costa		Economist	Chairman /	4/19/2011	AUG	Yes
Flores 285.080.334-00	<i>J</i>		Member of the	4/19/2011	2013	
			Strategic			
			Committee			
José Ricardo Sasseron	55 years	Banker	Member of the	4/19/2011	AUG	Yes
003.404.558-96	•		Board /	4/19/2011	2013	
			Member of the			
			Executive			
			Development			
			Committee			
Robson Rocha	52 years	Manager	Member of the	4/19/2011	AUG	Yes
298.270.436-68		-	Board / N/A	4/19/2011	2013	
Nelson Henrique Barbosa	41 years	Economist	Member of the	4/19/2011	AUG	Yes
Filho 009.073.727-08			Board /	4/19/2011	2013	
			N/A			
Renato da Cruz Gomes	58 years	Engineer	Member of the	4/19/2011	AUG	Yes
426.961.277-00			Board / Member	4/19/2011	2013	
			of the			
			Governance and			
			Sustainability			
			Committee			
Mário da Silveira Teixeira	55 years	Banker	Vice Chairman /	4/19/2011	AUG	Yes
Júnior 113.119.598-15			Member of the	4/19/2011	2013	
			Strategic			
			Committee			
Fuminobu Kawashima	59 years	Economist	Member of the	4/19/2011	AUG	Yes
N/A			Board /	4/19/2011	2013	
			N/A			
Oscar Augusto de	73 years	Attorney	Member of the	4/19/2011	AUG	Yes
Camargo Filho			Board / Member	4/19/2011	2013	
030.754.948-87			of the Strategic			
			Committee and			
			the Executive			
			Development			
			Committee			

Luciano Galvão Coutinho 636.831.808-20	64 years	Economist	Member of the Board / Member of the Strategic Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Paulo Soares de Souza 541.150.276-49	47 years	Electrician	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	No
José Mauro Mettrau Carneiro da Cunha 299.637.297-20	61 years	Engineer	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Marco Geovanne Tobias da Silva 263.225.791-34	45 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Sandro Kohler Marcondes 485.322.749-00	47 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Deli Soares Pereira 369.030.198-04	61 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Eustáquio Wagner Guimarães Gomes 009.513.746-72	63 years	Manager	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
João Moiséis de Oliveira 090.620.258-20	66 years	Economist	Member of the Board (Alternate) / Member of the Executive Development Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Luiz Carlos de Freitas 659.575.638-20	58 years	Accountant	Member of the Board (Alternate) / Member of the Accounting Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Hajime Tonoki 628.127.266-87	51 years	Manager	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Eduardo de Oliveira Rodrigues Filho 442.810.487-15	56 years	Engineer	Member of the Board (Alternate)  / Member of the Finance Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Paulo Sérgio Moreira da Fonseca 268.745.477-04	60 years	Economist	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
	52 years					No

Edgar Filing: Vale S.A. - Form 6-K

AUG

2013

Raimundo Nonato Alves
Electro-mechanical Member of the 4/19/2011
Morim 147.611.573-72
Technician
Board (Alternate)
/
N/A

168

# **Executive Officers**

Name / Federal Tax No.	<b>A</b>	D	Elected Position/		T	Elected by the
(CPF) Vânia Lucia Chaves	Age 51 years		Other Positions Officer / N/A	<b>Date of Entry</b> 5/26/2011	Term May/2013	Controller No
Somavilla 456.117.426-53 Eduardo de Salles Bartolomeo 845.567.307-91	47 years	Engineer Engineer	Officer / N/A	5/26/2011 5/26/2011 5/26/2011	May/2013	No
Eduardo Jorge Ledsham 542.689.406-00	48 years	Geologist	Officer / N/A	5/26/2011 5/26/2011	May/2013	No
Guilherme Perboyre Cavalcanti 010.981.437-10	42 years	Economist	Officer / Permanent Member of the Finance Committee, Member of the Disclosure Committee, and Permanent Member of the Risk Management Committee	5/26/2011 5/26/2011	May/2013	No
José Carlos Martins 304.880.288-68	61 years	Economist	Officer / Permanent Member of the Risk Management Committee	5/26/2011 5/26/2011	May/2013	No
Mário Alves Barbosa Neto 269.275.278-34	64 years	Engineer	Officer / N/A	5/26/2011 5/26/2011	May/2013	No
Murilo Pinto de Oliveira Ferreira 212.466.706-82	57 years	Manager	Chief Executive Officer; Superintendent / Permanent Member of the Strategic Committee and Member of the Disclosure Committee	19/05/2011 20/05/2011	May/2013	
Tito Botelho Martins Junior 501.888.956-04	48 years	Economist	of the Risk Management	5/26/2011 5/26/2011	May/2013	No
Fiscal Council			Committee			

Name / Federal Tax No. Elected Position/ Date of Election the

Edgar Filing: Vale S.A. - Form 6-K

(CPF) Aníbal Moreira dos Santos 011.504.567-87	<b>Age</b> 72 years	<b>Profession</b> Accounting Technician	Other Positions Member of Fiscal Committee / N/A	<b>Date of Entry</b> 4/19/2011 4/19/2011	Term AUG 2012	Controller Yes
Cícero da Silva 045.747.611-72	60 years	Accountant	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Marcelo Amaral Moraes 929.390.077-72	43 years	B.S. in Economics	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Oswaldo Mário Pêgo de Amorim Azevedo 005.065.327-04	69 years	Engineer	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Arnaldo José Vollet 375.560.618-68	62 years	B.S. in Mathematics	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Antônio Henrique Pinheiro Silveira 010.394.107-07	46 years	Economist	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	No
Marcus Pereira Aucélio 393.486.601-87	44 years	Engineer	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	No

169

12.7 Provide information mentioned in item 12.6 for members of the statutory committees, as well as for the auditing, risk, financial, compensation committees, whether those committees are statutory or not.

## **ADVISORY COMMITTEES**

## **Executive Development Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	Date of Entry	Term
João Moisés de Oliveira	66 years	Economist	Committee Member (Full) /	12/19/2001	AUG 2013
090.620.258-20			Alternate Member of the Board of	12/192001	
			Directors		
José Ricardo Sasseron	55 years	Banker	Committee Member (Full) /	5/24/2007	AUG 2013
003.404.558-96			Full Member of the Board of	5/24/2007	
			Directors		
Oscar Augusto de Camargo	73 years	Attorney	Committee Member (Full) /	11/19/2003	AUG 2013
Filho			Full Member of the Board of	11/19/2003	
030.754.948-87			Directors and Full Member of the		
			Strategic Committee		

## **Strategic Committee**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term
Luciano Galvão Coutinho	64 years	Economist	Committee Member (Full) /	5/21/2009	AUG 2013
636.831.808-20			Full Member of the Board of	5/21/2009	
			Directors		
Mário da Silveira Teixeira	65 years	Banker	Committee Member (Full) /	3/6/2006	AUG 2013
Júnior			Full Member of the Board of	3/6/2006	
113.119.598-15			Directors		
Oscar Augusto de Camargo	73 years	Attorney	Committee Member (Full) /	3/6/2006	AUG 2013
Filho			Full Member of the Board of	3/6/2006	
030.754.948-87			Directors and Member of the		
			Executive Development		
			Committee		
Ricardo José da Costa	47 years	Economist	Committee Member (Full) /	11/25/2010	AUG 2013
Flores			Chairman of the Board of Directors	11/25/2010	
285.080.334-00					
Murilo Pinto de Oliveira	57 years	Manager	Committee Member (Full) /	5/19/2011	MAY/2013
Ferreira			Chief Executive Officer and	5/20/2011	
212.466.706-82			Member of the Disclosure		
			Committee		

# **Finance Committee**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term
Eduardo de Oliveira	56 years	Engeneer	Committee Member (Full)	5/28/2011	AUG 2013
Rodrigues Filho			Alternate Member of the Board of	5/28/2011	
442.810.487-15			Directors		
Guilherme Perboyre	42 years	Economist	Permanent Member	8/26/2010	MAY/2013
Cavalcanti			Chief Financial Officer and	8/26/2010	
010.981.437-10			Investor Relations, Permanent		

Edgar Filing: Vale S.A. - Form 6-K

			Member of the Risk Management Committee and Member of the Disclosure Committee		
Luciana Freitas Rodrigues 759.395.847-72	44 years	Statistician and Actuary	Committee Member(Full) N/A	4/28/2011 4/28/2011	AUG 2013
Luiz Maurício Leuzinger 009.623.687-68	69 years	3	Committee Member(Full) N/A	5/24/2007 5/24/2007	AUG 2013

170

# **Accounting Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
Luiz Carlos de Freitas	58 years	Accountant	Committee Member (Full)	5/24/2007	AUG 2013
659.575.638-20			Alternate Member of the Board of	5/24/2007	
			Directors		
Paulo Ricardo Ultra Soares	50 years	B.A. in	Independent Member N/A	5/21/2008	AUG 2013
599.057.437-15		Law		5/21/2008	
Paulo Roberto Ferreira de	69 years	Manager	Independent Member N/A	12/17/2003	AUG 2013
Medeiros				12/17/2003	
024.772.117-49					

# **Governance and Sustainability Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
Gilmar Dalilo Cezar	31 years	Banker	Committee Member(Full) N/A	4/28/2001	AUG
Wanderley 084.489.987-90				4/28/2001	2013
Renato da Cruz Gomes	58 years	Engineer	Committee Member(Full) Full Member	12/19/2001	AUG
426.961.277-00			of the Board of Directors	12/19/2001	2013
Ricardo Simonsen	49 years	Mechanical	Independent Member N/A	12/19/2001	AUG
733.322.167-91		Engineer		12/19/2001	2013

# **NON-STATUTORY COMMITTEES**

# **Disclosure Committee**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term
Fabio Eduardo de Pieri	38 years	Attorney	Committee Member(Full)	05/19/2011	05/08/2013
Spina 153.084.478-96			General Legal Advisor and	05/19/2011	
			Institutional Relations		
Guilherme Perboyre	42 years	Economist	Committee Member(Full)	8/26/2010	MAY/2013
Cavalcanti			Chief Financial Officer and	8/26/2010	
010.981.437-10			Investor Relations and		
			Permanent Member of the		
			Finance Committee and of the		
			Risk Management Committee		
Murillo Pinto de Oliveira	57 years	Administrator	Committee Member(Full)	2/6/2006	Indeterminate
Ferreira			Chairman and Member of the	2/6/2006	
212.466.706.83			Strategic Committee		
Roberto da Cunha Castello	66 years	Economist	Committee Member(Full)	6/19/2002	Indeterminate
Branco			Director of Investor Relations	6/19/2002	
031.389.097-87					

## **Risk Management Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
Guilherme Perboyre	42 years	Economist	Permanent Member Chief	8/26/2010	MAY/2013
Cavalcanti 010.981.437-10			Financial Officer and Investor	8/26/2010	
			Relations, Permanent Member of		

Edgar Filing: Vale S.A. - Form 6-K

			the Finance Committee and		
			Member of the Disclosure		
			Committee		
José Carlos Martins	61 years	Economist	Permanent Member Chief	5/27/2010	MAY/2013
304.880.288-68			Director of Marketing, Sales,	5/27/2010	
			and Strategy		
Mauro Neves de Moraes	37 years	Mechanical	Committee Member(Full)	8/2/2010	Indeterminate
028.790.477-65		Engineer	Director of Planning and	8/2/2010	
			Engineering Center of		
			Excellence		
Pedro Zinner	37 years	Economist	Committee Member(Full) Global	8/2/2010	Indeterminate
034.007.097-86			Director of Treasury and Finance	8/2/2010	
Tito Botelho Martins Junior	48 years	Economist	Committee Member(Full)	8/2/2010	MAY/2013
501.888.956-04			Executive Director of Base	8/2/2010	
			Metals Operations		

171

# 12.8 FOR EVERY OFFICER AND MEMBER OF THE FISCAL COUNCIL, PLEASE PROVIDE: Board of Directors

Ricardo José da Costa Flores Chairman of Vale s Board of Directors and Member of the Strategic Committee (since November 2010). His main professional experiences over the last 5 years include: Chief Executive Officer of Caixa de Previdência dos Funcionários do Banco do Brasil (PREVI) (since 2010), a complementary pension fund; (ii) Chief Executive Officer of Valepar S.A. (since November 2010), a privately-held holding company and controlling shareholder of Vale, where he serves as Chairman of the Board of Directors (since December 2010); (iii) Vice-President for Credit, Controlling and Global Risk Management of Banco do Brasil S.A. (2009 to 2010), a financial institution where he also held the position of Vice-President of Government Affairs (2008 to 2009), Director of Insurance, Pension Plans, and Capitalization (2007 to 2008) and Director of Operational Assets Restructuring (2004 to 2007); (iv) Chairman of the Board of Directors of (a) Banco Nossa Caixa S.A. (January to November 2009); (b) Brasilcap Capitalização S.A. (since 2007); and (c) Ativos S.A. Securitizadora de Créditos Financeiros (2004 to 2007), all private financial institutions; (v) Regular Member of the Board of Directors of (a) Brasilveículos Companhia de Seguros S.A. (2007 to 2008); (b) Brasilprev Seguros e Previdência S.A. (2007 to 2008); and (c) Brasilsaúde Companhia de Seguros S.A. (2007 to 2008), all private companies engaged in the insurance sector; (vi) Member of the 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 e Luz (both from 2002 to 2004), all publicly-held companies engaged in the energy sector. He also holds the position of (vii) Deputy Director of the Deliberative Council of CODEFAT Amparo ao Trabalhador (Ministry of Labor and Employment), representative of Federação Nacional das Empresas de Seguros Privados e Capitalização (FENASEG) (since 2010); (viii) Executive Officer of Federação Brasileira de Bancos (FEBRABAN) (2009 to 2010); (ix) Chief Executive Officer of FENACAP Federação Nacional de Capitalização (since 2008); (x) Vice-President of Confederação Nacional das Empresas de Seguros Gerais, Previdência Privada e Vida, Saúde Complementar e Capitalização ( CNSEG ) (since 2008). He holds a degree in Economics from Centro de Ensino de Brasília ( CEUB ), School of Economic Sciences, Accounting and Management of the Federal District, in Brasilia (March, 1990); a Master s degree in General Basic Training for Top Executives from Universidade de São Paulo ( USP ), concluded in December 1994 and a in Controller from FIPECAFI/USP (December 1996). Mr. Ricardo José da Costa Flores has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous

José Ricardo Sasseron Regular Member of Vale s Board of Directors and Member of the Executive Development Committee (since 2007). His main professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors of Valepar S.A. (since 2007), a privately-held holding company and controlling shareholder of Vale); (ii) Social Security Officer of Caixa de Previdência dos Funcionários do Banco do Brasil (PREVI) (since 2006), a complementary pension fund, where he also held the position of Member of the Deliberative Council (2004 to 2006); (iii) Chairman of the Board of Directors of Sauípe S.A. (in 2005), a publicly-held company engaged in the hospitality and tourism sector; (iv) Officer of Litel Participações S.A. (since 2007), a publicly-held holding company and shareholder of Valepar S.A.; (v) Officer of LitelB Participações S.A. (since 2008), a privately-held holding company and (vi) Officer of Litela Participações S.A. (since 2007), a private holding company and shareholder of Valepar S.As). He holds a degree in History from Universidade de São Paulo (USP) (November 1983). Mr. José Ricardo Sasseron has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Robson Rocha Regular Member of Vale s Board of Directors (since 2011). He acts as Vice-President for Human Resources Management and Sustainable Development of Banco do Brasil S.A., (since 2009), a public financial institution, where he also served as Executive Officer (2008 to 2009). His main professional experiences over the last 5 years include: (i) Vice-Chairman of the Board of Directors of CPFL Energia S.A. (since 2010), a publicly-held holding company engaged in the energy sector; and (ii) Member of the Board of Directors of Banco Nossa Caixa S.A. (from May to November 2009), a financial institution that went private in 2009. Mr. Rocha holds a degree in Business Administration from UNICENTRO Newton Paiva, Belo Horizonte, (December 1998), General Basic Information Course for Executives from UFMG (December 1997), a graduate certification in Strategic Management from Universidade Federal de Minas Gerais ( UFMG ) (concluded in December 2000); a Master s degree in Finance from Fundação Dom Cabral (December 2000), and a Master s degree in Marketing from Fundação Ciências Humanas Pedro Leopoldo (December 2002). Mr. Robson Rocha has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Nelson Henrique Barbosa Filho Regular Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Chairman of Banco do Brasil S.A. (since 2009), a publicly-held financial institution; (ii) Regular Member of the Board of Directors of BrasilVeículos Cia de Seguros (since 2011), a privately-held company engaged in insurance; (iii) Regular Member of the Board of Directors of Brasilcap Capitalização S.A., (2010 to 2011), a privately-held company engaged in the commercialization of capitalization bonds); (iv) Executive Secretary of the Ministry of Finance (since 2011), where he also served as Secretary of Economic Policy (2008 to 2010), Secretary of Economic Monitoring (2007 to 2008) and Assistant Secretary of Economic Policy (2006 to 2007); (v) Member of the Board of Directors of EPE Empresa de Pesquisa Energética (2007 TO 2009), a private research energy company; and (vi) Advisor to the Presidency of Banco Nacional de Desenvolvimento Econômico Social (BNDES), a Brazilian development bank, (2005 a 2006). He holds a degree in Economics from Universidade Federal do Rio de Janeiro (UFRJ) (March 1992), and Master's degree in Economics from the same university (concluded in March 1995), and a Ph.D. in Economics from New School for Social Research, concluded in January 2001. Mr. Nelson Henrique Barbosa Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Renato da Cruz Gomes Regular Member of Vale s Board of Directors and Member of the Governance and Sustainability Committee (since 2001). His main professional experiences over the last 5 years include the positions of Officer and Regular Member of the Board of Directors of Valepar S.A. (since 2001), a privately-held holding company and controlling shareholder of Vale, and Officer of Investor Relations of Bradespar S.A. (since 2000), a publicly-held holding company and shareholder of Valepar S.A. He also acted as Officer in the following publicly-held companies: (i) Regular Member of the Board of Directors of Aracruz Celulose S.A., now known as Fibria S.A., a privately-held company engaged in the production of bleached eucalyptus kraft pulp; (ii) Regular Member of the Board of Directors of Iochpe-Maxion S.A., a publicly-held manufacturing company of parts and accessories for automotive vehicles; (iii) Regular Member of the Board of Directors of Bahia Sul Celulose S.A., currently known as Suzano Celulose S.A., a publicly-held manufacturing company of pulp and other products for the production of paper; (iv) Regular Member of the Board of Directors of Globo Cabo S.A., now known as Net Serviços de Comunicação S.A., a publicly-held company engaged in cable television services and (v) Alternate Member of the Board of Directors of Latasa Alumínio S.A., now known as Rexam Beverage Can South America S.A., a privately-held company that manufactures metallic packagings. He holds a degree in Engineering from Universidade Federal do Estado do Rio de Janeiro ( UFRJ ) (December 1976) and a graduate certification in Management Development from Sociedade de Desenvolvimento Empresarial ( SDE / IBMEC ). Mr. Renato da Cruz Gomes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any

administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

173

Mário da Silveira Teixeira Júnior Vice-Chairman of Vale s Board of Directors (since 2003) and Member of the Strategic Committee (since 2006). His main professional experiences over the last 5 years include: (i) Vice-Chairman of the Board of Directors of Valepar S.A. (since 2003), a privately-held holding company and controlling shareholder of Vale; (ii) Member of the Board of Directors of Banco Bradesco S.A. (since 1999), a financial institution, where he also holds the position of Member and Coordinator of the Internal Controls and Compliance Committee and Member of the Remuneration Committee (since 2004), and where he also served as Member and Coordinator of the Audit Committee (2004 to 2009); (iii) Member of the Board of Directors of Bradesco Leasing S.A. Arrendamento Mercantil (since 2004), a privately-held company engaged in the leasing; (iv) Member of the Board of Directors of Bradespar S.A. (since 2002), a publicly-held holding company and shareholder of Valepar S.A.; (v) Member of the Board of Directors of Cidade de Deus Companhia Comercial de Participações (since 2002), a privately-held holding company; (vi) Officer and Member of the Board of Directors of Elo Participações e Investimentos S.A. (since 2006), a privately-held holding company; (vii) Executive Managing Officer and Member of the Mesa Regedora of Fundação Bradesco (since 2002, a Federal, State and Municipal public interest entity; (viii) Officer of NCF Participações S.A. (since 2002), a privately-held holding company and (ix) Officer of Nova Cidade de Deus Participações S.A. (since 2002), a privately-held holding company; (x) Voting Member of the Board of Directors Banco Espírito Santo de Investimento S.A. (2002 to 2009), a financial institution; (xi) Regular Member of the Board of Directors of Cia. Paulista de Força e Luz (CPFL) (2001 to 2005), a publicly-held company engaged in the energy sector; (xii) Regular Member of the Board of Directors of CPFL Energia S.A., (2003 to 2006), a publicly-held holding company; (xiii) Regular Member of the Board of Directors of CPFL Geração de Energia S.A., (2003 to 2005), a publicly-held company of energy sector; (xiv) Regular Member of the Board of Directors of Companhia Piratininga de Força e Luz (2003 to 2005), a publicly-held company of energy sector; (xv) Member of the Board of Directors of VBC Energia S.A. (2003 to 2005), a publicly-held holding company. He also served as Member of the Board of Directors of the following publicly-held companies: (xvi) Companhia Siderúrgica Nacional (1996 to 2000), a steelmaking company; (xvii) Latas de Alumínio S.A. LATASA (1992 to 2000), currently known as Rexam Beverage Can South America S.A., which went private and is engaged in the manufacturing of metallic packagings; (xviii) São Paulo Alpargatas S.A. (1997 to 1999), company engaged in cotton processing and spinning; and (xix) Tigre S.A. Tubos e Conexões (1997 to 1998), currently a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Civil Engineering (1970) and Business Administration from Universidade Presbiteriana Mackenzie (December 1980). Mr. Mário da Silveira Teixeira Júnior has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Fuminobu Kawashima Regular Member of Vale s Board of Directors (since 2001). His main professional experiences over the last 5 years include: (i) Executive Managing Officer responsible for the operation of Marine & Aerospace Business Unit of Mitsui & Co., Ltd. (since 2010), a publicly traded company and controlling shareholder of Valepar S.A. He also held the position of Chief Operating Officer responsible for the operation of the energy unit (2007 to 2010), General Manager of Energy Operations (2005 to 2007) and General Manager of Natural Gas & Energy (from May to September 2005). He also served as Member of the Board of Directors of the following privately-held companies: (ii) Japan Australia LNG (MIMI) Pty Ltd., (2005 to 2007), an Oil and Gas company; (iii) Mitsui Oil Co., Ltd., (2007 to 2009), a company engaged in the sales of oil-derived products; and (iv) Kyokuto Petroleum Industries, Ltd., (2007 to 2009), an oil refinery. He holds a degree in Economics from Hitotsubashi University, Japan (March 1976), and a graduate certification in Economic Development from Keble Collegue, Oxford (June 980). Mr. Fuminobu Kawashima has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Oscar Augusto de Camargo Filho Regular Member of Vale s Board of Directors (since 2003), Member of the Strategic Committee (since 2006), and Member of the Executive Development Committee (since 2003). His main

professional experiences over the last 5 years include: (i) Sitting Member of the Board of Directors of Valepar S.A. (since 2003), a private holding company and controlling shareholder of Vale; and (ii) Partner of CWH Consultoria Empresarial (since 2003), a consulting company. He also held the position of Officer in the following publicly-held companies: (iii) Chairman of the Board of Directors of MRS Logística S.A., (1999 to 2003), a publicly-held cargo railway company; and (iv) Chief Executive Officer and Member of the Board of Directors of Caemi Mineração e Metalurgia S.A. (1996 to 2003), a publicly-held mining and metallurgy company that merged with Vale in 2006. He holds a Law degree from Universidade de São Paulo (USP) (December 1963) and a graduate certification in International Marketing from Cambridge University (September 1970). Mr. Oscar Augusto de Camargo Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

174

Luciano Galvão Coutinho Regular Member of Vale s Board of Directors (since 2007) and Member of the Strategic Committee (since 2009), which position he previously held from 2005 to 2006. His main professional experiences over the last 5 years include: (i) Chief Executive Officer of Banco Nacional de Desenvolvimento Econômico e Social (BNDES) (since 2007), a Brazilian development bank; (ii) Member of the Board of Directors of Petróleo Brasileiro S.A. PETROBRAS (since 2009), a publicly-traded company connected to the activities of exploration and production of oil and gas and refining and production of oil-derivates; (iii) Partner of LCA Consultores (1995 to 2007), a consulting company;; (iv) Partner of Macrotempo Consultoria (1990 to 2007), a consulting company; (v) Member of the Board of Directors of Ripasa S.A. Celulose e Papel (2002 to 2005), a publicly-held company in the manufacturing of pulp and paper. He also served as (vi) Member of the Board of Directors of Guaraniana, now known as Neoenergia S.A. (2003 to 2004), a publicly-held electricity holding company; (vii) Member of the International Advisory Council of Fundação Dom Cabral (since 2009), an educational institution focused on improving the skills of executives, entrepreneurs and corporations; (viii) Member of the Curator Council of Fundação Nacional da Qualidade (since 2009), an entity focused in promoting the development of the basics of management excellence; and (ix) Member of the Director Council of Fundo Nacional de Desenvolvimento Científico e Tecnológico (since 2007), a financial assistance entity. He holds a degree in Economics from Universidade de São Paulo ( USP ) (June 1969), a Master s degree in Economics from Instituto de Pesquisas Econômicas (USP), (June 1970) and a Ph.D also in Economics from Cornell University (January 1975). Mr. Luciano Galvão Coutinho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Paulo Soares de Souza He served as Alternate Member of Vale s Board of Directors of Vale (2007 to 2009). His main professional experiences over the last 5 years include: (i) Union leader (since 1997); (ii) President of Itabira s Employees Union (Sindicato dos Trabalhadores nas Indústrias de Extração Mineral e de Pesquisa, Prospecção, Extração e Beneficiamento do Ferro e Metais Básicos e demais Minerais Metálicos e não Metálicos de Itabira e região) (Sindicato Metabase de Itabira e Região) (since 2003). He holds a technical degree from Serviço Social da Indústria (SESI) (December 1988) Mr. Paulo Soares de Souza has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

José Mauro Mettrau Carneiro da Cunha Regular Member of Vale s Board of Directors (since 2010). His main professional experiences over the last 5 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 publicly-held telecommunications companies, (ii) Chairman of the Board of Directors of (a) Coari Participações S.A. (since 2007) and (b) Calais Participações S.A. (since 2007), both publicly-held holding companies. He also serves as (iii) Sitting Member of the Board of Directors of Santo Antonio Energia S.A. (since 2008), a privately-held energy producer, and (iv) Alternate member of the Board of Directors of Telemar Participações S.A, a publicly-held telecommunication company (since 2008); (v) Chairman of the Board of Directors of TNL PCS S.A. (since 2007), a telecommunications company, and (vi) Sitting Member of the Board of Directors of Log-In Logística Intermodal S/A (since 2007), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the stockholder s capital; and (vii) Sitting Member of the Board of Directors of Lupatech S/A (since 2006), a publicly-held energy products, flow control and metallurgy company. In addition to the companies mentioned hereinabove, he also served as (viii) Sitting Member of the Board of Directors of the following publicly-held companies: (a) Braskem S.A. (2007 to 2010), a petrochemical company, where he previously served as Vice-President of Strategic Planning (2003 to 2005); (b) LIGHT Serviços de Eletricidade S/A (1997 to 2000), an energy distributor; (c) Aracruz Celulose S.A. (1997 to 2002), a paper plant; (d) Politeno Indústria e Comércio S/A (2003 to 2004), a petrochemical company; (e) BANESTES S.A. - Banco do Estado do Espírito Santo (2008 to 2009), a financial institution; and (f) TNL (1999 to 2003), where he served as Alternate Member of the Board

of Directors (2006). He holds a degree in Mechanical Engineering from Universidade Católica de Petrópolis, RJ (December 1971), and attended an Executive Program in Management at Anderson School, University of California, (United States), December 2002. Mr. José Mauro Mettrau Carneiro da Cunha has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

175

Marco Geovanne Tobias da Silva Alternate Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Investor Relations Manager of Banco do Brasil S.A. (1999 to 2010), a publicly-held financial institution; (ii) Participation s Officer of Caixa de Previdência dos Funcionários do Banco do Brasil ( PREVI ) (since 2010), a complementary pension fund; (iii) Member of the Fiscal Council of Companhia de Energia Elétrica da Bahia (Coelba) (2002 to 2010), a publicly-held company of distribution and commercialization of energy; (iv) Chairman of the Board of Directors of Neoenergia S.A. (since 2011), a publicly-held holding company engaged in the electricity sector. He holds a degree in Economics from Universidade de Brasília (1990) and a graduate certification in Marketing from COPPEAD/Universidade Federal do Rio de Janeiro (March 1997). Mr. Marco Geovanne Tobias da Silva has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years. Sandro Kohler Marcondes Regular Member of Vale s Board of Directors (since 2007). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2009), a privately-held holding company and controlling shareholder of Vale; (ii) Officer of Banco do Brasil S.A. (since 2005), a financial institution; (iii) Officer of BB Leasing S.A. Arrendamento Mercantil (since 2005), a privately-held company engaged in the leasing activity; (iv) Chairman of the Board of Directors of Banco do Brasil A.G., Viena, (2008 to 2009), a subsidiary of Banco do Brasil S.A. in Austria; (v) Member of the Board of the Directors of BB Securities Ltd London (since 2005), a brokerage company abroad; (vi) Regular Member of the Board of Directors of BB Securities LLC New York (since 2005), also a brokerage firm abroad; (vii) Member of the Deliberative Council of BBTur Viagens e Turismo Ltda, a corporate travel agency (since 2005); and (viii) Alternate Member of the Board of

2005), a financial institution; (iii) Officer of BB Leasing S.A. Arrendamento Mercantil (since 2005), a privately-held company engaged in the leasing activity; (iv) Chairman of the Board of Directors of Banco do Brasil A.G., Viena, (2008 to 2009), a subsidiary of Banco do Brasil S.A. in Austria; (v) Member of the Board of the Directors of BB Securities Ltd London (since 2005), a brokerage company abroad; (vi) Regular Member of the Board of Directors of BB Securities LLC New York (since 2005), also a brokerage firm abroad; (vii) Member of the Deliberative Council of BBTur Viagens e Turismo Ltda, a corporate travel agency (since 2005); and (viii) Alternate Member of the Board of Directors of Banco Patagônia S.A. (since 2011.), a publicly-held financial institution. He holds a degree in Business Administration from Universidade Estadual Centro Oeste Paraná (December 1986) and a Master s degree from Fundação Getulio Vargas (FGV) in São Paulo (April 1994). Mr. Sandro Kohler Marcondes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Deli Soares Pereira Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2009), a privately-held holding company and controlling shareholder of Vale; (ii) Sitting Member of the Board of Directors of (a) Cia. Piratininga de Força e Luz (2004 to 2006); (b) Cia. Paulista de Força e Luz CPFL Paulista (2004 to 2006) e (c) CPFL Geração de Energia S.A. (2004 to 2006), all publicly-held companies in the electricity sector; (iii) Sitting Member of the Board of Directors of CPFL Energia S.A. (2004 to 2006), a publicly-held electric energy holding company; (iv) Sitting Member of the Board of Directors of SOLPART Participações S.A. (2006 to 2008), a privately-held holding company; (v) Executive Officer of the Confederação Nacional dos Bancários (2003 to 2006), a labor union; and (vi) Member of the Board of Directors of Tigre S.A. Tubos e Conexões (2001 to 2003), now a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Social Sciences from Universidade de São Paulo ( USP ) (November 1979) and a graduate certification in Economics and Management of Labor Relations from Pontifícia Universidade Católica ( PUC ) in São Paulo (March 2010). Mr. Deli Soares Pereira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years. Eustáquio Wagner Guimarães Gomes Alternate Member of Vale s Board of Directors (since 2011). His main

professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors of the following publicly-held companies: (a) Companhia de Energia Elétrica da Bahia Coelba, (1998 to 1999), a company involved in the distribution and commercialization of energy sector; (b) Companhia Energética do Rio Grande do Norte COSERN (1998 to 1999), a company involved in the distribution and commercialization of energy sector; (c)

Guaraniana, currently known as Neoenergia S.A. (1998 to 1999), an electrical energy holding company; (d) Centrais Telefônicas de Ribeirão Preto S.A. (1999 to 2000), acquired by Telesp S.A., a telecommunications holding company); and (e) Cia de Armazéns e Silos do Estado de Minas Gerais- CASEMG (2002 to 2003), a privately-held company engaged in the grain warehousing sector. He also held the position of (ii) Member of the Fiscal Council of the following companies: (a) Telesp Participações S.A. (200 to 2001), a publicly-held telecommunications holding company; (b) Banco do Brasil S.A. (2006 to 2010), a publicly-held financial institution); (c) Cia de Seguros Aliança Brasil (2007 to 2010), a private insurance company; (d) Banco Popular do Brasil (2008 to 2010), a privately-held financial institution; (e) BESC Financeira S.A., Crédito, Financiamento e Investimentos BESCREDI (2008 to 2010), a publicly-held financial institution; (f) BB Investimentos (since 2003), a privately-held investment bank; (g) Fundação Banco do Brasil (since 2006), an association for the development and management of sustainable actions for social inclusion and social change; and (h) BB Corretora de Seguros (since 2010), a privately-held insurance company. He holds a degree in Business Administration from the School of Economic Sciences of Universidade Federal de Minas Gerais (UFMG) (July 1977). Mr. Eustáquio Wagner Guimarães Gomes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

176

João Moisés de Oliveira Alternate Member of Vale s Board of Directors (since 2003) and Member of the Executive Development Committee (since 2001), where he also served as Regular Member (2001 to 2003) and as Alternate Member of the Board of Directors (2000 to 2001). His main professional experiences over the last 5 years include: (i) Sitting Member of the Board of Directors of Valepar S.A. (since 2003), a privately-held holding company and controlling shareholder of Vale; (ii) Chief Executive Officer of Bradespar S.A. (since 2003), a public holding company and controlling shareholder of Valepar S.A.; (v) Officer and Chief Executive Officer of Bradesplan Participações S.A. (2000 to 2006), a privately-held holding company); (iv) Officer of Millennium Security Holding Corp. (since 2003), a privately-held holding company; and (v) Chief Executive Officer of (a) Brumado Holdings Ltda. and (b) Antares Holdings Ltda. (in both since 2006), privately-held holding companies). He also held Officer positions in the following publicly-held companies: (vi) Officer of Banco Bradesco S.A. (1992 to 2000), a publicly-held financial institution; (vii) Sitting Member of the Board of Directors of COFAP Companhia Fabricadora de Peças (1999), a manufacturer of parts and accessories for automotive vehicles; (viii) Sitting member of the Board of Directors of Companhia Siderúrgica Belgo Mineira, currently known as Arcelor Brasil S.A. (1999 to 2001), a holding company; (ix) Member of the Board of Directors of Companhia Siderúrgica Nacional (1996 to 2001), a steelmaking company); (x) Sitting Member of the Board of Directors of Indústrias Romi S.A. (1998 to 2000), a manufacturing company of machinery and machine tools, parts and accessories; (xi) Sitting Member of the Board of Directors of Mahle Metal Leve S.A. (1998 to 2001), a manufacturing company engaged in the manufacturing of parts and accessories for the engine system of automotive vehicles; (xii) Sitting Member of the Board of Directors of São Paulo Alpargatas S.A. (1999 to 2001), a company engaged in cotton processing, spinning, weaving and fabric finishing; (xiii) Regular Member of the Board of Directors of Telecelular Sul Participações S.A., now known as Tim Participações S.A. (1998 to 1999), a holding company engaged in telecommunications; and (xiv) Alternate Member of the Board of Directors of Tigre S.A. Tubos e Conexões (1998 to 2001), now a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Economics from the School of Economics, Accounting and Actuarial Studies of Pontifícia Universidade Católica ( PUC ) (March 1972) and a graduate certification in Finance Management from Faculdades Metropolitanas Unidas (concluded in July 1978). Mr. João Moisés de Oliveira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Luiz Carlos de Freitas Alternate Member of Vale s Board of Directors and Member of the Accounting Committee (since 2007). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2005), a privately-held holding company and controlling shareholder of Vale; (ii) Chief Executive Officer of Bradespar S.A. (2000 to 2007), a publicly-held holding company and controlling shareholder of Valepar S.A. He holds a degree in Accounting Sciences from Faculdade de Ciências Econômicas e Administrativas de Osasco (December 1990). Mr. Luiz Carlos de Freitas has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Hajime Tonoki Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors and Director and Executive Vice-President of Mitsui & Co. (Brasil) S.A. (since 2009), a privately-held trading company; (ii) General International Corporate Department Manager for Strategy and Planning of Mitsui & Co., Ltd. (2008 to 2009), a publicly-held holding company and controlling shareholder of Valepar S.A.; and (iii) Officer responsible for the Steel Products Department of Mitsui Brasileira Imp. e Exp. S.A. (2004 to 2008), a privately-held trading company. He holds a degree in Economics from Keio University (in March 1983). Mr. Hajime Tonoki has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the

177

Eduardo de Oliveira Rodrigues Filho Alternate Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2008), a privately-held holding company and controlling shareholder of Vale; (ii) Partner or CWH Consultoria Empresarial (since 2008), a consulting company; (iii) Commercial Director of Rio Tinto Brasil Ltda. (a company that merged with Vale in 2009, now known as Mineração Corumbaense Reunida S.A.), a privately-held mining company (1994 to 2008). He holds a degree in Civil Engineering from Pontifícia Universidade Católica do Rio de Janeiro (1978) and a graduate certification in Transport Planning from PCL Politechnic of Central London (October 2000). Mr. Eduardo de Oliveira Rodrigues Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years. Paulo Sérgio Moreira da Fonseca Alternate Member of Vale s Board of Director (since May 2008). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (2005 to 2008), a privately-held holding company and controlling shareholder of Vale; (ii) Chief of Base Industry Department of Banco Nacional de Desenvolvimento Econômico e Social (BNDES) (2005 to 2010), a Brazilian development bank and (iii) Alternate Member of the Board of Directors of Aços Villares S.A. (2003 to 2006), a publicly-held steelmaking company. He holds a degree in Economics from Universidade Federal do Rio de Janeiro ( UFRJ ) (December 1973) and a Master s degree in Finance from COPPEAD/Universidade Federal do Rio de Janeiro (September 1975). Mr. Paulo Sérgio Moreira da Fonseca has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Raimundo Nonato Alves Amorim Currently an Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include the positions of President of the iron ore and basic metals employees union in Marabá, Paraupebas, Curionópolis and Canaãn dos Carajás (since 2001). He holds a technical degree in Electrotechnics from the Teaching Department of High School equivalency Education DESU/SEDUC (1992). Currently he is attending a Management Technical Program at Universidade da Amazônica (UNAMA). Mr. Raimundo Nonato Alves Amorim has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

## **Executive Board**

Eduardo de Salles Bartolomeo Executive Officer responsible for the Integrated Operations of Vale (since May 2010). Previously he had served as Executive Officer of Logistics, Project Management and Sustainability (from April 2009 to May 2010); Executive Officer of Logistics, Engineering and Project Management (from November 2008 to March 2009), Executive Officer of Logistics (from January 2007 to October 2008) and Officer of the Logistics Operations Department (from January 2004 to July 2006). His main professional experiences over the last 5 years within Vale s group include: (i) Chairman of the Board of Directors of Ferrovia Norte Sul S.A. (since 2007), a publicly-held cargo transport company, wherein directly or indirectly Vale holds 100% of the total capital; (ii) Chairman of the Board of Directors of Log-In Logística Intermodal S.A. (since 2007), a public company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the total capital; and (iii) Sitting Member of the Board of Directors of MRS Logística S.A. (from 2008 to 2009), a publicly-held cargo railroad company, wherein Vale holds 41.50% of the total capital. In addition to the hereinabove, Mr. Bartolomeo has held the following positions in publicly-held companies: (iv) Chief Executive Officer of Petroflex Indústria e Comércio S.A. (from August to December 2006), a company engaged in the production of rubber; and (v) Regional Plant Director of Cia. de Bebidas das Américas AmBev, (2003 to 2004), a company engaged in the production of beverages. He holds a degree in Metallurgical Engineering from Universidade Federal Fluminense ( UFF ), Rio de Janeiro, a Master s degree in Business Administration from Katholieke Universiteit Leuven, in Belgium. Mr. Eduardo de Salles Bartolomeo as

declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years

178

Eduardo Jorge Ledsham Executive Officer responsible for Vale s Exploration, Energy, and Projects since 2010. Previously, Mr. Ledsham served as Global Officer of Exploration and Development of Energy and Fertilizer Projects (2008 to 2010) and Officer of Exploration and Development of Mineral Projects Brazil, the Americas, Africa, Asia and Oceania (2005 to 2007). His main professional experiences over the last 5 years within Vale s group include: (i) Chairman of the Board of Directors of Vale Óleo e Gás S.A. (since May 2009), Vale s subsidiary that develops practices related to research, prospection, exploration and development and production of marine and land deposits of hydrocarbons and derived products; (ii) Chairman of the Board of Directors of CADAM S.A. (since December 2009), a privately-held company involved in the mineral extraction sector - kaolin; (iii) Member of the Board of Directors of Pará Pigmentos S.A. (since 2009), a privately-held company engaged in the exploration, production, and, sale of kaolin for paper coating sector; (iv) Member of the Board of Directors of Rio Doce Australia Pty Ltd. (since 2006;), a privately-held company engaged in the business coal exploration sector; and (v) Member of the Board of Directors of Vale Australia (EA) Pty Ltd. (since April 2010), a privately-held company engaged in coal exploration. He holds a degree in Geology from Universidade Federal de Minas Gerais ( UFMG ), and has a graduate certification in Finance from Instituto Brasileiro de Mercado de Capitais (IBMEC), in Enterprise and Project Evaluation from Fundação Getúlio Vargas (FGV) and in Management from Fundação Dom Cabral. He is also a graduate certification in M&A from Harvard Business School and in Management from IMD and MIT. Mr. Eduardo Jorge Ledsham has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Guilherme Perboyre Cavalcanti Chief Financial and Investor Relations Officer (since August 2010) and Regular Member of Vale s Finance Committee (since August 2010), Member of Vale s Risk Management and Disclosure Committee (since August 2010) and Permanent Member of the Risk Management Executive Committee (since August 2010). His main professional experiences over the last 5 years include: (i) Vale s Global Officer of Corporate Finance Director (from 2005 to 2010), (ii) Sitting Member of the Board of Directors of Log-In Logística Intermodal S.A. (since 2007), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the total capital; (iii) Member of the Board of Directors of Net Serviços de Comunicação (from 2002 to 2005), a publicly-held telecommunications company; and (iv) Treasury officer of Globo Comunicações e Participações S.A., a publicly-held media company. He holds a degree and Master s degree in Economics from Pontifícia Universidade Católica of Rio de Janeiro. Mr. Guilherme Perboyre Cavalcanti has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

José Carlos Martins Executive Officer for Marketing, Sales, and Strategy of Vale (since May 2010), where he also served as Executive Officer for Ferrous Minerals (from 2005 to May 2010), Executive Officer for Business Development (from April 2004 to May 2005) and Permanent Member of the Risk Management Executive Committee (since May 2010). His main professional experiences in the past 5 years including companies wherein Vale holds direct or indirect participation are: (i) Vice-Chairman of the Board of Directors of Baosteel CSV Companhia Siderúrgica de Vitória, now Companhia Siderúrgica Ubu (from 2008 to 2009), a privately-held steelmaking company, wherein Vale holds 100% of the total capital; (ii) Chairman of the Board of Directors of Samarco Mineração S.A. (since 2005), a privately-held company engaged in the activities of mining and pelletizing, wherein Vale holds 50% of the total capital; (iii) Vice-President of the Deliberative Council of Thyssenkrupp CSA Siderúrgica do Atlântico Ltda., a limited liability steel making company (since 2008), wherein Vale holds 25.94% of the total capital; and (iv) Chairman of the Board of Directors of Vale International SA (since 2006), Vale s subsidiary that develops practices related to trading and holding. In addition to the companies mentioned hereinabove, he also held the following positions in the publicly-held companies: (v) Sitting Member of the Board of Directors of Usinas Siderúrgicas de Minas Gerais S.A. USIMINAS, (2005 to 2006 / 2008 to 2009), a publicly-held steel manufacturing company; (vi) Officer for Steel Production of Companhia Siderúrgica Nacional, a steel making company; (vii) Chief

Executive Officer of Latas de Alumínio S.A. LATASA, now known as Rexam Beverage Can South America S.A., and which went private, is engaged in the production of metallic packaging; and (viii) Chief Executive Officer and Officer of Aços Villares S.A., a special steelmaking company. He holds a degree in Economics from Pontifícia Universidade Católica de São Paulo (PUC/SP). Mr. José Carlos Martins has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

179

Mário Alves Barbosa Neto Executive Officer of Fertilizers (since May 2010). His main professional experiences over the last 5 years include: (i) Chief Executive Officer of Bunge Fertilizantes S.A. (from 2000 to 2010), which company went private and conducts business related to the production of pesticides, manure harvests, fertilizers and soil correctives, and Member of the Advisory Board (since 2005); (ii) Chief Executive Officer of ANDA Associação Nacional para Difusão de Adubos (from 1992 to 2010), an entity responsible for marketing and the correct use of fertilizers; (iii) Chairman of the Board of Directors of Fosbrasil S.A. (from 1996 to 2010), a privately-held chemical company; (iv) Chairman of the Board of Directors of Fertifos Administração e Participações S.A. (from 1997 to 2009), a privately-held holding company; (v) Chairman of the Board of Directors of Fertilizantes Fosfatados S.A. Fosfertil (since 2005), a publicly-held company that develops practices related to the production of fertilizers and other products for agriculture and livestock), where he also held the position of Chief Executive Officer and Officer of Market (from 1992 to 1996); (vi) Chairman of the Board of Directors or Ultrafertil S.A. (since 2007), which went private and conducts business related to the production of intermediaries for fertilizaers; (vii) Member of the Board of Director and Chief Executive Officer of Bunge Brasil S.A. (1996 to 2005), formely known as Serrana S.A., and before that, S.A. Moinho Santista Indústrias Gerais, a holding company that went private; (viii) Executive Officer of BPI Bunge Participações e Investimentos S.A. (from 2006 to 2010), a privately-held holding company; (ix) Member of the Board of Directors of Santista Têxtil S.A. (from 1996 to 2000) now known as Tavex Brasil Participações S.A., a company that went private and is specialized in cotton fabrics and (x) Chief Financial Officer and Market Relations Officer of Manah S.A.. (from 1980 to 1992), a company that produced fertilizers and was merged into Bunge in 2000). He holds a degree in Production Engineering from Escola Politécnica da Universidade de São Paulo ( USP ) and a graduate certification in Business Management from Fundação Getúlio Vargas (FGV). Mr. Mário Alves Barbosa Neto has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Murilo Pinto de Oliveira Ferreira 285.080.334-00, Vale s Chief Executive Officer and Member of the Strategic and Disclosure Committees (since May 2011). He started his professional career at Vale in 1977, where he held various positions as Officer of the Aluminum Department (2003 to 2005), Executive Officer for Business Development (2005 to 2006) and Executive Officer of Niquel and Commercialization of Base Metals (2007 to 2008) He was also partner of Studio Investimentos (from October 2009 to March 2011), management company focused on Brazilian stock market. His main professional experiences over the last 5 years include the positions of (i) Chairman of the Board of Directors of Alunorte (2005 to 2008), a privately-held alumina producer; (ii) Member of the Advisory Council of Albrás (2005 to 2007), a privately-held company engaged in the production of aluminum, in which companies Vale s participation has been transferred to Hydro on February 2011; (iii) Advisor at CSA Companhia Siderúrgica do Atlântico (2005 to 2007), a privately-held steelmaking company; (iv) Chairman of Ferro Gusa Carajás S.A. (2005 to 2006), a privately-held company engaged in the production of pig iron and merged into Vale in 2008; (v) Chief Executive Officer of Vale do Rio Doce Energia S.A., currently known as Vale Energia S.A., (2005 to 2007), a privately-held energy company; (vi) Chairman of the Board of Directors of Mineração Rio do Norte S.A. (2006 to 2008), a privately-held company, engaged in bauxite exploration, wherein Vale holds 40% of the voting capital; (vii) Advisor of Mineração Onça Puma Ltda. (2007 to 2008), a privately-held nickel mining company merged into Vale in 2008; (viii) Chairman of the Board of Directors of Valesul Alumínio S.A. (2006 to 2008), a privately-held company related to the activity of producing aluminum and its alloys in primary form; (ix) Chief Executive Officer of Vale Canada Limited (2007 to 2008), a nickel producing company, which went private in 2007, and where he also served as Advisor (2006 to 2007); (x) Advisor of Vale Canada Holdings (2006 to 2008), a privately-held holding company, where he held the positions of Officer and Vice-President of the Executive Committee (2007 to 2008); (xi) Member of the Board of Commissioners of PT International Nickel Indonesia Tbk (2007 to 2008), a publicly-held mining company, wherein Vale holds 59.14% of the stockholder s capital; (xii) Officer and Chairman of the Board of Directors of Vale Nouvelle-Calédonie S.A.S. (2007 to 2008); (xiii) USIMINAS Advisor (2006 to 2008), a publicly-held steelmaking company; and (xiv) Financial Manager of Caraíba Metais S.A. (1978 to 1980), a company that went private in 2009 and is engaged in metallurgy of copper and derived products. He holds a degree in Business

Management from Fundação Getúlio Vargas of São Paulo on 08/16/1977, a graduate certification in Management and Finance from Fundação Getúlio Vargas of Rio de Janeiro (concluded on 05/04/1982) and a graduate certification in Senior Executive from IMD Business School, Lausanne, Switzerland (concluded on 12/09/2007. Mr. Murilo Pinto de Oliveira Ferreira has declared for all lawful purposes that he was not convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, or has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

180

Tito Botelho Martins Junior Executive Officer of Base Metals Operations (since May 2010) and Member of the Risk Management Executive Committee (since 2008) of Vale, where he also held the following positions: Executive Officer of Non-Ferrous (December 2008 to May 2010); Executive Officer of Non-Ferrous and Energy (from April to November 2008); Executive Officer of Corporate Affairs and Energy (2007-2008); Executive Officer for Corporate Affairs (2006-2007) and Manager Officer of Corporate Finance(1999-2003). His main professional experiences in the past 5 years including companies wherein Vale holds direct or indirect participation are: (i) Chief Executive Officer and President of Vale Inco (since 2008), one of Vale s privately-held subsidiaries established in Canada; (ii) Chief Executive Officer and Investor Relations Officer of Caemi (2003-2006), a publicly-held mining and metallurgy company that merged with Vale in 2006; (iii) Chairman of the Board of Directors of Albras (since 2008), a privately-held company engaged in aluminum operations, wherein Vale holds 51% of the total capital; (iv) Chairman of the Board of Directors of Alunorte (since 2008), a privately-held company that produces aluminum, wherein Vale holds 57% of the total capital; (v) Chairman of the Board of Directors of Cia de Alumina do Pará (since 2008), a privately-held company that produces aluminum, wherein Vale holds 61% of the total capital); (vi) Vice-Chairman of the Board of Directors of FNS (2007-2008), a publicly-held railroad company, wherein Vale holds directly and indirectly 100% of the total capital; (vii) Member of the Board of Directors of MRS (2004-2006), privately-held cargo transport company, wherein Vale holds 41.50% of the total capital; (viii) Chairman of the Board of Directors of Fundação Vale (2007), a foundation supported by Vale; and (ix) Chief Financial Officer and Member of the Board of Directors of FCA, a publicly-held company engaged in logistics (2002-2003), wherein Vale holds 99.99% of the total capital. In addition to the companies mentioned hereinabove, he also held the following positions in publicly-held companies as: (x) Sitting member of the Board of Directors of FERROBAN, currently known as Brasil Ferrovias S.A., a cargo transport company and which capital went private; and (xi) Acominas, now known as Gerdau Acominas S.A., a siderurgical company which capital went private. He holds a degree in Economic Sciences from Universidade Federal of Minas Gerais ( UFMG ), a graduate certification in Business Management from IEAD, a Master s degree from Kellogg School of Management Northwestern University in the United States and from INSEAD, in France. Mr. Tito Botelho was convicted (i) on January 17, 2007 to pay a fine of R\$500,000.00 for not disclosing promptly a Fato Relevante [Relevant Fact] regarding the execution of loan agreements with related parties. The appeal to the CRSFN Conselho de Recursos do Sistema Financeiro Nacional for reversal of this decision is still pending; (ii) on August 22, 2006, all the officers of Ferrovia Centro-Atlântica FCA ) including Mr. Botellho as as Chief Financial Officer were reprimanded for not observing the provision contained in §7° of article 170 of the Brazilian Corporate Law 6.404/76, in the context that the capital increase proposed by FCA s Executive Officers did not contain a detailed economic basis determining the issuance of FCA s shares. The decision has been confirmed by CRSFN. Vânia Lucia Chaves Somavilla She is the Executive Director of Human Resources and Corporate Services for Vale (since May 2011). She started her professional career at Vale in August 2001 as a General Manager for Energy Marketing, and was responsible for the administration of the energy portfolio. Later, she became the Area Manager in March 15, 2004, where she acted as Manager of the Department of Sustainable Development of the Environment in April 01, 2010. Her main professional experience for the past 5 years include (i) Member of the Board of Directors of several consortia within the energy sector, such as: (a) Consórcio Energético Foz do Chapecó (2004 to 2007); (b) Consórcio Estreito Energia CESTE (2006 to 2010); (c) Consórcio Geração Santa Isabel GESAI (2006) and (2008) to 2010); (d) Consórcio Capim Branco Energia (2006 to 2008); (e) Consórcio da Usina Hidrelétrica de Aimorés (2007 to 2010); and (e) Consórcio Brasileiro de Produção de Óleo de Palma CBOP, of the oil and natural gas sector (alternate since 2010); (ii) Member of the Board of Directors Vale Soluções Energia S.A. VSE, a private company that belongs to the energy sector (2007 to 2009); (iii) Administrator (since 2008) of PGT Petroleum Geoscience Technology Ltda, currently Vale Óleo e Gás S.A., a private company devoted to the exploration and development of maritime and ground mineral quarries, research and development of technologies related to exploration activities, where she was also

181

Managing Director and Member of the Board of Directors (2009 to 2010); (iv) Director (2005 to 2009) and Managing Director (2009 to 2010) for Vale Energia S.A., a private company that belongs to the energy sector; (v) Member of the Board of Directors of Albrás Alumínio Brasileiro S.A. (since 2009), a private company that engages in the production of aluminium, companhia de capital fechado que desenvolve a atividade de produção de alumínio, with participation of Vale in this company it was sold to Norsk Hydro ASA (Hydro) in Feb/2011; (vi) Alternate Member of the Board of Directors of Ultrafértil S.A. (2010 a 2011), a private company devoted to the production, industrialization and commercialization of fertilizers and similar products, pesticides, soil treatment and other agricultural and livestock products; (vii) Managing Director of Vale Florestar S.A. (since 2010), a private company devoted to developing forestry projects; (viii) Managing Director of the Instituto Ambiental Vale (since 2010). This institute is devoted to biodiversity defense, preservation and conservation and to the promotion of sustainable development; (ix) Alternate Member of the Board of Directors of S.A. (since 2011), a public company devoted to commerce, transportation, exportation and importation of phosphate ores and related minerals; (x) Coordinator of Development of New Businesses in the area of energy generation and Generation and Monitoring Projects for the implementation of small and large hydroelectric plants for Companhia Energética de Minas Gerais CEMIG (1995 to 2001), a public company devoted to the operation and exploration of generation, transmission, distribution and commercialization of electric energy; and (xi) Managing Director of Associação Vale para o Desenvolvimento Sustentável (since 2010), an association devoted to the monitoring and the conservation of the environment and the creation of new conservation areas in biomes relevant to sustaintability. She graduated as a Civil Englineer at Universidade Federal de Minas Gerais (UFMG), on April 28, 1984. She has post graduate studies in Engineering for Dams, Universidade Federal de Ouro Preto, which she concluded on April 13, 1990; Extension Course in Management of Hydro Power Utilities offered by SIDA, Stockholm, concluded in November 1996, amd MBA in Business Finance obtained at IBMEC Business School, Belo Horizonte, concluded on July 16, 1998. She took part of the Transformational Leadership Programa offered by MIT in March 2005 and the Mastering Leadership Program offered by IMD on December 15, 2006.

### **Fiscal Council**

Aníbal Moreira dos Santos Sitting Member of Vale s Fiscal Council since 2005 and Alternate Member from April to July 2005. Her main professional experiences over the last 5 years include: (i) Chief Accounting Manager of Caemi Mineração e Metalurgia S.A. ( Caemi ) (1981 to 2003), a company that merged with Vale in 2006; (ii) Officer of various of Caemi s subsidiaries abroad; (iii) Alternate Member of the Board of Directors of Minerações Brasileiras Reunidas S.A. (1998 a 2003), a privately-held company. MBR, a privately-held mining company e Empreendimentos Brasileiros de Mineração S.A. EBM, a privately-held holding company; and (iv) Sitting Member of the Fiscal Council of Log-In Logística Intermodal S.A. (since April 2009), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of total capital He attended a technical course in Accounting at Escola Técnica de Comércio da Fundação Getúlio Vargas (April 1962). Mr. Aníbal Moreira dos Santos has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Cícero da Silva Alternate Member of Vale s Fiscal Council (since 2009). Mr. da Silva joined Banco do Brasil S.A. (in 1986), a publicly-held financial institution, where he held various positions including in the Internal Audit. His main professional experiences over the last years include: (i) Chief of Division at PREVISUL Instituto de Previdência Social do Mato Grosso (1999 to 2000); and (ii) Alternate Member of the Board of Directors of CPFL Cia. Paulista de Força e Luz, a company engaged in the energy sector. Degree in Accounting Sciences from Universidade Federal do Mato Grosso do Sul (UFMS) (December 1980), and a Law degree from Anhanguera Centro Universitário de Campo Grande (June 2008). He holds a Master s degree in Auditing from FIPECAFI/USP (January 1997) and a graduate certification in Investigative, Accounting, Finance and Corporate Forensic from Universidade Católica Dom Bosco (September 2002). Mr. Cícero da Silva has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the

regulatory authorities from practicing any professional or commercial activities for the previous five years. Marcelo Amaral Moraes Sitting Member of Vale s Fiscal Council since 2004. He also served as an Alternate Member of Vale s Board of Directors in 2003. His main professional experiences over the last 5 years include: (i) Investments manager at Bradespar S.A. (2000 a 2006), a publicly-held holding company and controlling shareholder of Valepar S.A.; (ii) Alternate Member of the Board of Directors of Net Serviços de Comunicação S.A., a cable television operating company, (2004 a 2005); and (iii) Executive Officer of Stratus Investimentos Ltda. (2006 a 2010), a private equity management firm. He holds a degree in Economics from Universidade Federal do Rio de Janeiro, (January 1991), a Master s degree from COPPEAD/UFRJ (November 1993), and a graduate certification in Corporate Law and Arbitration from Fundação Getúlio Vargas (FGV) (November 2003). Mr. Marcelo Amaral Moraes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

182

Oswaldo Mário Pêgo de Amorim Azevedo Alternate Member of Vale s Fiscal Council since 2005. He served as Sitting Member of Vale s Fiscal Council (2004 to 2005), and Engineer of the Industrial Procurement (Pelletizing) (1964 to 1976). He also holds the position of (i) Officer of Sul América Cia de Seguros Gerais (since 2008), a privately-held insurance company. His main professional experiences over the last 5 years include: (ii) Ombusdman of Conglomerado Sul America Seguros, an insurance company (since 2005), where he also served as (a) Vice-President of Institutional Relations and Branches Abroad (1990 to 2010); (b) Officer (1980 to 1990) and (c) Deputy Officer (1976 to 1980). He also held the positions as (iii) Vice-President of Federação Nacional das Empresas de Seguros Privados e de Capitalização (2004 to 2007); (iv) Vice-President of Sindicato das Empresas de Seguros Privados, de Capitalização e de Resseguros do Rio de Janeiro (since 2007), where he also held the position of Chief Executive Officer (2001 to 2004); (v) Alternate Member of the Board of Directors of (a) BrasilVeículos Cia de Seguros (2006 to 2010) and (b) BrasilSaúde Cia de Seguros (2006 to 2010), both privately-held insurance companies; (vi) Vice-President of Sul América S.A., a publicly-held company engaged in the asset management and participation interest sector (2006 to 2007); (vii) Officer and Vice-President of Sul America Cia. Nacional de Seguros, an insurance company that went private in 2008 (1980 to 2010); (viii) Executive Officer and Vice-President of Nova Ação Participações S.A., a publicly-held engaged in asset management and especially financial investment (2008 to 2010); (ix) Officer and Vice-President of Sul América Terrestres, Marítimos e Acidentes Cia de Seguros, a company that went private and then merged with Sul America Cia. Nacional de Seguros (1980 to 1998); (x) Officer of Sul América Cia de Seguros S.A., a publicly-held insurance company headquartered in Lima, Peru (1996 to 2003); (xi) Officer of Corcovado S.A., a real state company established in Lima, Peru, which went private in 2004 (2003 to 2009); and (xii) Officer of Sul América Capitalização S.A., a privately-held company engaged in the commercialization capitalization bonds (1987 to 1998). He holds a degree in Industrial and Production Engineering from Pontifícia Universidade Católica do Rio de Janeiro ( PUC ) January 1964). Mr. Oswaldo Mário Pêgo de Amorim Azevedo has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Arnaldo José Vollet Member of Vale s Fiscal Council (since 2011). His main professional experiences over the last 5 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. He holds a degree in Mathematics from Universidade de São Paulo (USP) (December 1975), and a Master s degree in Finance from Instituto Brasileiro de Mercado de Capitais ( IBMEC /RJ) in June 1992. Mr. Arnaldo José Vollet has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Antônio Henrique Pinheiro Silveira He was elected as Member of Vale s Fiscal Council on April 19, 2011. He is 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). He is also a Regular Member of the Board of Directors of Companhia de Seguros Aliança do Brasil (since March 2010), a privately-held insurance company; and of Norte Energia S.A (since July 2010), a privately-held energy company. His main professional experiences over the last 5 years include: (i) Chairman of Banco Nordeste do Brasil (2008 to 2010), a privately-held financial institution; (ii) Member of the Board of Directors of Empresa Gestora de Ativos EMGEA (2007 to 2008), a private asset management institution; (iii) Deputy-Head of the Economic Advisor to the Ministry of Planning, Budget and

Management (2004 to 2007); (iv) he was also took part of the administration of Cia Docas do Estado da Bahia, a port services entity (2005 to 2007). He holds a degree in Economic Sciences from Universidade Federal do Rio de Janeiro (UFRJ) (January 1987). He also holds a graduate certification, a Master s and Ph.d degree in Economics from UFRJ, concluded respectively in December 1992 and October 2000. Mr. Antônio Henrique Pinheiro Silveira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

183

Alternate Member of Vale s Fiscal Council, elected on April 27, 2010. Previously he had already held the position of Alternate Member of Vale s Fiscal Council from April 16, 2009 to October 3rd., 2009, replacing Mr. Bernard Appy after his resignation. His main professional experiences over the last years include: (i) Sitting Member of the Fiscal Council of Eletropaulo Metropolitana Eletricidade de São Paulo S.A. (AES Eletropaulo), a distributor of electric energy, since May 2009; (ii) Subsecretary of Fiscal Policy of the National Treasury Secretariat since January 2007; (iii) Head of the General Coordination of the Fiscal Operation Funds Management from June 2002 to July 2006; (iv) Member of the Fiscal Council of Banespa S.A., a financial institution; (v) Member of the Fiscal Council of Banco do Brasil S.A., a financial institution; (vi) Member of the Fiscal Council of Caixa de Consórcios, ia financial institution; (vii) Member of the Board of Directors of Centrais Elétricas Brasileiras S.A. Eletrobrás, an energy company; (viii) Member of the Fiscal Council of Petrobras Petróleo Brasileiro S.A., a company engaged in the petroleum sector. He holds a degree in Forest Engineering Universidade de Brasília, a Master s degree in Finance from Instituto Brasileiro de Mercado de Capitais and a graduate certification in Public Sector Economics from Fundação Getúlio Vargas (FGV). Mr. Marcus has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

- 12.9 Relationship (as a spouse or significant other) or kinship to the second degree between:
- a. Managers of the Company;
- b. (i) Managers of the Company and (ii) members of management of entities controlled by Vale, either directly or indirectly;
- c. (i) Managers of the Company or members of management of entities controlled by Vale, either directly or indirectly; and (ii) Vale s direct or indirect controlling shareholders; and
- d. (i) Managers of the Company and (ii) Managers of Vale s direct or indirect controlling shareholders. Justification for not completing the chart:

Each and every member of the Board of Directors, Executive Board and Fiscal Council 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 Company have declared individually for all lawful purposes that they 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 for the previous three years between directors/officers and:
- a. Entities controlled by Vale, either directly or indirectly;
- b. Direct or indirect controlling shareholders of Vale; and
- c. In case it is relevant, Vale s or its subsidiaries or controlling shareholders material supplier, client, debtor, or creditor.

184

#### 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 them 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 Insurance for Managers

Vale maintains a liability insurance policy with Zurich Brasil Seguros S/A, valid from 01/12/10 to 01/12/11, through payment of a premium of US\$1,158,891.00, plus the amount of US\$85,526 as IOF [Tax on Financial Transactions], and with an upper limit of compensation of US\$150 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 Company, 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 coverages 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 information that the Company considers relevant

All information that the Company considers relevant in regard to the Assembly and Management of the Company has been disseminated in items 12.1 through 12.11 in this Form of Reference.

185

#### 12.1 Administrative Structure

# a. Powers of each body and committee

## **Board of Directors:**

Under provisions of the Bylaws of the company, 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 Company;
- 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 Company, making decisions on the setting-up of companies or their 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 Company 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 Company;
- 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;

186

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 it own capital on the basis of the profits shown on these balance sheets, as well as declaring them on the basis of accrued profits or existing profit reserves shown on the most recent annual or intermediate balance sheet;

XXV. [sic: missing]

XXVI. 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

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

## **Advisory Committees:**

In order to confer greater efficiency and quality in its decisions, the Board of directors shall have ford advice 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.

### **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.

187

#### **Finance Committee**

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

- I Issuing reports on the corporate risks and 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 Company 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 company 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 Company s 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:

- I. 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 company s strategic guidelines and the strategic plan, and executing the approved strategic plan;

188

#### **Table of Contents**

- IV. Preparing and submitting the Company s annual and multi-annual budgets to the Board of Directors, and executing the approved budgets;
- V. Planning and conducting the company 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 company is a party, as well as share purchases, and conducting the approved mergers, split-offs, incorporations and purchases;
- VIII. Preparing and submitting the company 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 Company s Code of Ethics, established by the Board of Directors;
- XI. Preparing and submitting to the Board of Directors the company s policies on corporate responsibility, such as the environment, health, safety and social responsibility, and implementing the approved policies;
- XII. [skipped in original]
- XIII. [skipped in original]
- XIV. 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 Company participates, as well as suggesting the signing of new agreements and consortia contracts that address subjects of this nature;
- XV. 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;
- XVI. 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
- XVII. 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;
- XVIII. 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;

- XIX. Establishing rules and delegating powers, within the limits of the Executive Board as established by the Board of Directors;
- XX. 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 Company participates, directly or indirectly, respecting the investment opportunities of the Company, 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.

189

#### **Disclosure Committee**

The primary attributes of the Disclosure Committee are the evaluation of the relevance of acts or events that have occurred and are related to the business of the Company and 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 of this Reference Form.

#### **Risk Management Committee**

The primary responsibilities of the Risk Management Committee are: (a) issuing an opinion on the Company s principles and instruments of risk management; and (b) periodic reporting to the Executive Board on (i) 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; (ii) how the risks are being monitored and managed, and (iii) 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, these By-Laws, and as regulated by its own Internal Rules to be approved by its members, as well as those contemplated in applicable American law, especially the Sarbanes-Oxley Act and applicable standards that regulate listing of securities on the Hong Kong Stock Market, in accordance with waiver requests granted (Regulation on Listing), so long as not in conflict with Brazilian law.

The Internal Rules of the Fiscal Council regulates, besides the powers already set forth by the Law of Joint Stock Companies, the following:

The primary responsibilities of the Fiscal Council are:

- (i) Setting forth the procedures to be used by the company to receive process and deal with complaints or claims related to accounting and auditing matters, as well as to guarantee that the mechanisms to receive complaints guarantee the confidentiality and unknown identity of the individual making the complaint;
- (ii) Recommending and help the Board of Directors in the selection, remuneration, and dismissal of external auditors of the partnership;
- (iii) Deliberating on the contracting of new services that may be rendered by the external auditors of the partnership; as well as mediating eventual disputes between management and external auditors regarding the financial statements of the partnership.

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 of the Board of Directors were formed by the Board of Directors itself on 12/19/2001, and pursuant to resolutions of the Extraordinary General Assembly held on 12/27/2002, upon which date their existence became part of the Bylaws.

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

190

#### 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 Company shall have knowledge of the self-evaluation conducted by the members of the Fiscal Council.

As of December 31, 2010, 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(e) 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:

- I. 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 Company 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 them;
- 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 Company;
- 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 they are responsible;
- II Participating in meetings of the Executive Board, contributing to the definition of the policies to be followed by the company and 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.

191

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, 2010, 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 Company 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 the Company (www.vale.com), the CVM (www.cvm.gov.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 Company 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 Company 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.

192

# f. Necessary formalities to accept powers-of-attorney granted for shareholders, indicating whether the Company 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 Company 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 Company 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	<b>Dates</b>
12/31/2010	Financial Statements	Diário Comércio Indústria & Serviços	3/16/2011
		SP	
		Diário Oficial do Estado RJ	3/16/2011
		Jornal do Commercio RJ	3/16/2011
	Call to Ordinary General Assemblies to	Diário Comércio Indústria & Serviços	3/18/2011;
	consider the Financial Statements	SP	3/21/2011 e
			3/22/2011
		Diário Oficial do Estado RJ	3/18/2011;
			3/21/2011 e
			3/22/2011
		Jornal do Commercio RJ	3/18/2011;
			3/21/2011 e
	Minutes of Ordinary General Assemblies		3/22/2011
		Diário Oficial do Estado RJ	4/20/2011
	that considered the Financial Statements		
		Diário Oficial do Estado SP	4/20/2011
		Jornal do Commercio RJ	4/20/2011
		193	
		193	

Fiscal Year	Publication	Newspaper State or Territory	Dates
12/31/2009	Financial Statements	Diário Comércio Indústria & Serviços SP	3/4/2010
		Diário Oficial do Estado RJ	3/4/2010
		Jornal do Commercio RJ	3/4/2010
	Call to the Ordinary General Assembly	Diário Comércio Indústria & Serviços	3/26/2010;
	that considered the Financial Statements	SP	3/27/2010 e
			3/30/2010
		Diário Oficial do Estado RJ	3/26/2010;
			3/29/2010 e
			3/30/2010
		Jornal do Commercio RJ	3/30/2010
	Minutes of Ordinary General Assemblies that considered the Financial Statements	Diário Oficial do Estado RJ	4/28/2010
		Diário Oficial do Estado SP	4/28/2010
		Jornal do Commercio RJ	4/28/2010
12/31/2008	Financial Statements	Diário Comércio Indústria & Serviços SP	3/14/2009
		Diário Oficial do Estado RJ	3/16/2009
		Jornal do Commercio RJ	3/16/2009
		Gazeta Mercantil SP	3/16/2009
		Valor Econômico SP	3/16/2009
	Call to the Ordinary General Assembly	Diário Comércio Indústria & Serviços	3/14/2009;
	that considered the Financial Statements	SP	3/17/2009 e
			3/18/2009
		Diário Oficial do Estado RJ	3/16/2009;
			3/17/2099 e
			3/18/2009
		Jornal do Commercio RJ	3/16/2009;
			3/17/2009 e
			3/18/2009
	Minutes of Ordinary General Assemblies that considered the Financial Statements	Diário Comércio Indústria & Serviços SP	4/18/2009
		Diário Oficial do Estado RJ	4/22/2009
		Jornal do Commercio RJ	4/20/2009

### 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 extraordinary 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 Company 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 they 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 they 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 Company in the matter in question, immediately disclosing the conflict to his immediate superior.

194

Violations of the Code of Ethics, rules, and disciplinary standards of the Company 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 Company human resources rules and applicable law.

# 12.5 Description of binding clause, if applicable, in the Bylaws for the resolution of conflicts by and between shareholders and the Company through arbitration

There are no binding clauses in the Bylaws for the resolution of conflicts by and between shareholders and the Company through arbitration.

# 12.6 For manager and members of the Fiscal Council, indicate the following information: Board of Directors

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term	Elected by the Controller
Ricardo José da Costa Flores 285.080.334-00		Economist	Chairman / Member of the Strategic Committee	4/19/2011 4/19/2011	AUG 2013	Yes
José Ricardo Sasseron 003.404.558-96	55 years	Banker	Member of the Board / Member of the Executive Development Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Robson Rocha 298.270.436-68	52 years	Manager	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Nelson Henrique Barbosa Filho 009.073.727-08	41 years	Economist	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Renato da Cruz Gomes 426.961.277-00	58 years	Engineer	Member of the Board / Member of the Governance and Sustainability Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Mário da Silveira Teixeira Júnior 113.119.598-15	55 years	Banker	Vice Chairman / Member of the Strategic Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Fuminobu Kawashima N/A	59 years	Economist	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Oscar Augusto de Camargo Filho 030.754.948-87	73 years	Attorney	Member of the Board / Member of the Strategic Committee and the Executive Development	4/19/2011 4/19/2011	AUG 2013	Yes

Luciano Galvão Coutinho 636.831.808-20	64 years	Economist	Committee Member of the Board / Member of the Strategic Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Paulo Soares de Souza 541.150.276-49	47 years	Electrician	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	No
José Mauro Mettrau Carneiro da Cunha 299.637.297-20	61 years	Engineer	Member of the Board / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Marco Geovanne Tobias da Silva 263.225.791-34	45 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Sandro Kohler Marcondes 485.322.749-00	47 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Deli Soares Pereira 369.030.198-04	61 years	Banker	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Eustáquio Wagner Guimarães Gomes 009.513.746-72	63 years	Manager	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
João Moiséis de Oliveira 090.620.258-20	66 years	Economist	Member of the Board (Alternate) / Member of the Executive Development Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Luiz Carlos de Freitas 659.575.638-20	58 years	Accountant	Member of the Board (Alternate) / Member of the Accounting Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Hajime Tonoki 628.127.266-87	51 years	Manager	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes
Eduardo de Oliveira Rodrigues Filho 442.810.487-15	56 years	Engineer	Member of the Board (Alternate) / Member of the Finance Committee	4/19/2011 4/19/2011	AUG 2013	Yes
Paulo Sérgio Moreira da Fonseca 268.745.477-04	60 years	Economist	Member of the Board (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2013	Yes

Edgar Filing: Vale S.A. - Form 6-K

Raimundo Nonato Alves 52 years Electro-mechanical Member of the 4/19/2011 AUG 2013 No Morim Board (Alternate) 4/19/2011 147.611.573-72 /

N/A

195

# **Executive Officers**

						<b>Elected by</b>
Name / Federal Tax No. (CPF) Vânia Lucia Chaves	Age 51 years	<b>Profession</b> Civil Engineer	<b>Elected Position/ Other Positions</b> Officer /	Date of Election Date of Entry 5/26/2011	Term May/2013	the Controller No
Somavilla 456.117.426-53	•	C	N/A	5/26/2011	·	
Eduardo de Salles Bartolomeo 845.567.307-91	47 years	Engineer	Officer / N/A	5/26/2011 5/26/2011	May/2013	No
Eduardo Jorge Ledsham 542.689.406-00	48 years	Geologist	Officer / N/A	5/26/2011 5/26/2011	May/2013	No
Guilherme Perboyre Cavalcanti 010.981.437-10	42 years	Economist	Officer / Permanent Member of the Finance Committee, Member of the Disclosure Committee, and Permanent Member of the Risk Management Committee	5/26/2011 5/26/2011	May/2013	No
José Carlos Martins 304.880.288-68	61 years	Economist	Officer / Permanent Member of the Risk Management Committee	5/26/2011 5/26/2011	May/2013	No
Mário Alves Barbosa Neto 269.275.278-34	64 years	Engineer	Officer / N/A	5/26/2011 5/26/2011	May/2013	No
Murilo Pinto de Oliveira Ferreira 212.466.706-82	57 years	Manager	Chief Executive Officer; Superintendent / Permanent Member of the Strategic Committee and Member of the Disclosure Committee	19/05/2011 20/05/2011	May/2013	
Tito Botelho Martins Junior 501.888.956-04	48 years	Economist	Officer / Member of the Risk Management Committee	5/26/2011 5/26/2011	May/2013	No
Fiscal Council			Committee			

Edgar Filing: Vale S.A. - Form 6-K

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term	Elected by the Controller
Aníbal Moreira dos Santos 011.504.567-87	72 years	Accounting Technician	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Cícero da Silva 045.747.611-72	60 years	Accountant	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Marcelo Amaral Moraes 929.390.077-72	43 years	B.S. in Economics	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Oswaldo Mário Pêgo de Amorim Azevedo 005.065.327-04	69 years	Engineer	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Arnaldo José Vollet 375.560.618-68	62 years	B.S. in Mathematics	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	Yes
Antônio Henrique Pinheiro Silveira 010.394.107-07	46 years	Economist	Member of Fiscal Committee / N/A	4/19/2011 4/19/2011	AUG 2012	No
Marcus Pereira Aucélio 393.486.601-87	44 years	Engineer	Member of Fiscal Committee (Alternate) / N/A	4/19/2011 4/19/2011	AUG 2012	No

196

12.7 Provide information mentioned in item 12.6 for members of the statutory committees, as well as for the auditing, risk, financial, compensation committees, whether those committees are statutory or not.

# **ADVISORY COMMITTEES**

# **Executive Development Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	Date of Entry	Term
João Moisés de Oliveira	66 years	Economist	Committee Member (Full) /	12/19/2001	AUG 2013
090.620.258-20			Alternate Member of the Board of	12/192001	
			Directors		
José Ricardo Sasseron	55 years	Banker	Committee Member (Full) /	5/24/2007	AUG 2013
003.404.558-96			Full Member of the Board of	5/24/2007	
			Directors		
Oscar Augusto de Camargo	73 years	Attorney	Committee Member (Full) /	11/19/2003	AUG 2013
Filho			Full Member of the Board of	11/19/2003	
030.754.948-87			Directors and Full Member of the		
			Strategic Committee		

# **Strategic Committee**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term
Luciano Galvão Coutinho	64 years	Economist	Committee Member (Full) /	5/21/2009	AUG 2013
636.831.808-20			Full Member of the Board of	5/21/2009	
			Directors		
Mário da Silveira Teixeira	65 years	Banker	Committee Member (Full) /	3/6/2006	AUG 2013
Júnior			Full Member of the Board of	3/6/2006	
113.119.598-15			Directors		
Oscar Augusto de Camargo	73 years	Attorney	Committee Member (Full) /	3/6/2006	AUG 2013
Filho			Full Member of the Board of	3/6/2006	
030.754.948-87			Directors and Member of the		
			Executive Development		
			Committee		
Ricardo José da Costa	47 years	Economist	Committee Member (Full) /	11/25/2010	AUG 2013
Flores			Chairman of the Board of Directors	11/25/2010	
285.080.334-00					
Murilo Pinto de Oliveira	57 years	Manager	Committee Member (Full) /	5/19/2011	MAY/2013
Ferreira			Chief Executive Officer and	5/20/2011	
212.466.706-82			Member of the Disclosure		
			Committee		

# **Finance Committee**

Name / Federal Tax No. (CPF)	Age	Profession	Elected Position/ Other Positions	Date of Election Date of Entry	Term
Eduardo de Oliveira	56 years	Engeneer	Committee Member (Full)	5/28/2011	AUG 2013
Rodrigues Filho			Alternate Member of the Board of	5/28/2011	
442.810.487-15			Directors		
Guilherme Perboyre	42 years	Economist	Permanent Member Chief	8/26/2010	MAY/2013
Cavalcanti			Financial Officer and Investor	8/26/2010	
010.981.437-10			Relations, Permanent Member of		

Edgar Filing: Vale S.A. - Form 6-K

the Risk Management Committee and Member of the Disclosure Committee

			Committee		
Luciana Freitas Rodrigues	44 years	Statistician	Committee Member(Full)	4/28/2011	AUG 2013
759.395.847-72		and	N/A	4/28/2011	
		Actuary			
Luiz Maurício Leuzinger	69 years	Engineer	Committee Member(Full)	5/24/2007	AUG 2013
009.623.687-68			N/A	5/24/2007	
	759.395.847-72 Luiz Maurício Leuzinger	759.395.847-72  Luiz Maurício Leuzinger 69 years	759.395.847-72 and Actuary Luiz Maurício Leuzinger 69 years Engineer	Luciana Freitas Rodrigues 44 years Statistician Committee Member(Full) 759.395.847-72 and N/A Actuary Luiz Maurício Leuzinger 69 years Engineer Committee Member(Full)	Luciana Freitas Rodrigues 44 years Statistician Committee Member(Full) 4/28/2011 759.395.847-72 and N/A 4/28/2011 Actuary Luiz Maurício Leuzinger 69 years Engineer Committee Member(Full) 5/24/2007

197

# **Accounting Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
Luiz Carlos de Freitas	58 years	Accountant	Committee Member (Full)	5/24/2007	AUG 2013
659.575.638-20			Alternate Member of the Board of	5/24/2007	
			Directors		
Paulo Ricardo Ultra Soares	50 years	B.A. in	Independent Member N/A	5/21/2008	AUG 2013
599.057.437-15		Law		5/21/2008	
Paulo Roberto Ferreira de	69 years	Manager	Independent Member	12/17/2003	AUG 2013
Medeiros			N/A	12/17/2003	
024.772.117-49					

# **Governance and Sustainability Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	Date of Election	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
Gilmar Dalilo Cezar	31 years	Banker	Committee Member(Full)	4/28/2001	AUG 2013
Wanderley			N/A	4/28/2001	
084.489.987-90					
Renato da Cruz Gomes	58 years	Engineer	Committee Member(Full)	12/19/2001	AUG 2013
426.961.277-00			Full Member of the Board of	12/19/2001	
			Directors		
Ricardo Simonsen	49 years	Mechanical	Independent Member	12/19/2001	AUG 2013
733.322.167-91		Engineer	N/A	12/19/2001	

# **NON-STATUTORY COMMITTEES**

# **Disclosure Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	Profession	Other Positions	Date of Entry	Term
Fabio Eduardo de Pieri	38 years	Attorney	Committee Member(Full)	05/19/2011	05/08/2013
Spina			General Legal Advisor and	05/19/2011	
153.084.478-96			Institutional Relations		
Guilherme Perboyre	42 years	Economist	Committee Member(Full)	8/26/2010	MAY/2013
Cavalcanti			Chief Financial Officer and	8/26/2010	
010.981.437-10			Investor Relations and		
			Permanent Member of the		
			Finance Committee and of the		
			Risk Management Committee		
Murillo Pinto de Oliveira	57 years	Administrator	Committee Member(Full)	2/6/2006	Indeterminate
Ferreira 212.466.706.83			Chairman and Member of the	2/6/2006	
			Strategic Committee		
Roberto da Cunha Castello	66 years	Economist	Committee Member(Full)	6/19/2002	Indeterminate
Branco			Director of Investor Relations	6/19/2002	
031.389.097-87					

# **Risk Management Committee**

Name / Federal Tax No.			<b>Elected Position/</b>	<b>Date of Election</b>	
(CPF)	Age	<b>Profession</b>	Other Positions	<b>Date of Entry</b>	Term
	42 years	Economist			MAY/2013

Guilherme Perboyre Cavalcanti 010.981.437-10			Permanent Member Chief Financial Officer and Investor Relations, Permanent Member of the Finance Committee and Member of the Disclosure Committee	8/26/2010 8/26/2010	
José Carlos Martins	61 years	Economist	Permanent Member Chief	5/27/2010	MAY/2013
304.880.288-68			Director of Marketing, Sales, and Strategy	5/27/2010	
Mauro Neves de Moraes	37 years	Mechanical	Committee Member(Full)	8/2/2010	Indeterminate
028.790.477-65		Engineer	Director of Planning and	8/2/2010	
			Engineering Center of		
			Excellence		
Pedro Zinner	37 years	Economist	Committee Member(Full)	8/2/2010	Indeterminate
034.007.097-86			Global Director of Treasury and Finance	8/2/2010	
Tito Botelho Martins Junior	48 years	Economist	Committee Member(Full)	8/2/2010	MAY/2013
501.888.956-04			Executive Director of Base	8/2/2010	
			Metals Operations		

198

# 12.8 FOR EVERY OFFICER AND MEMBER OF THE FISCAL COUNCIL, PLEASE PROVIDE: Board of Directors

Ricardo José da Costa Flores Chairman of Vale s Board of Directors and Member of the Strategic Committee (since November 2010). His main professional experiences over the last 5 years include: Chief Executive Officer of Caixa de Previdência dos Funcionários do Banco do Brasil (PREVI) (since 2010), a complementary pension fund; (ii) Chief Executive Officer of Valepar S.A. (since November 2010), a privately-held holding company and controlling shareholder of Vale, where he serves as Chairman of the Board of Directors (since December 2010); (iii) Vice-President for Credit, Controlling and Global Risk Management of Banco do Brasil S.A. (2009 to 2010), a financial institution where he also held the position of Vice-President of Government Affairs (2008 to 2009), Director of Insurance, Pension Plans, and Capitalization (2007 to 2008) and Director of Operational Assets Restructuring (2004 to 2007); (iv) Chairman of the Board of Directors of (a) Banco Nossa Caixa S.A. (January to November 2009); (b) Brasilcap Capitalização S.A. (since 2007); and (c) Ativos S.A. Securitizadora de Créditos Financeiros (2004 to 2007), all private financial institutions; (v) Regular Member of the Board of Directors of (a) Brasilveículos Companhia de Seguros S.A. (2007 to 2008); (b) Brasilprev Seguros e Previdência S.A. (2007 to 2008); and (c) Brasilsaúde Companhia de Seguros S.A. (2007 to 2008), all private companies engaged in the insurance sector; (vi) Member of the 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 e Luz (both from 2002 to 2004), all publicly-held companies engaged in the energy sector. He also holds the position of (vii) Deputy Director of the Deliberative Council of CODEFAT Amparo ao Trabalhador (Ministry of Labor and Employment), representative of Federação Nacional das Empresas de Seguros Privados e Capitalização (FENASEG) (since 2010); (viii) Executive Officer of Federação Brasileira de Bancos (FEBRABAN) (2009 to 2010); (ix) Chief Executive Officer of FENACAP Federação Nacional de Capitalização (since 2008); (x) Vice-President of Confederação Nacional das Empresas de Seguros Gerais, Previdência Privada e Vida, Saúde Complementar e Capitalização ( CNSEG ) (since 2008). He holds a degree in Economics from Centro de Ensino de Brasília ( CEUB ), School of Economic Sciences, Accounting and Management of the Federal District, in Brasilia (March, 1990); a Master s degree in General Basic Training for Top Executives from Universidade de São Paulo ( USP ), concluded in December 1994 and a in Controller from FIPECAFI/USP (December 1996). Mr. Ricardo José da Costa Flores has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous

José Ricardo Sasseron Regular Member of Vale s Board of Directors and Member of the Executive Development Committee (since 2007). His main professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors of Valepar S.A. (since 2007), a privately-held holding company and controlling shareholder of Vale); (ii) Social Security Officer of Caixa de Previdência dos Funcionários do Banco do Brasil (PREVI) (since 2006), a complementary pension fund, where he also held the position of Member of the Deliberative Council (2004 to 2006); (iii) Chairman of the Board of Directors of Sauípe S.A. (in 2005), a publicly-held company engaged in the hospitality and tourism sector; (iv) Officer of Litel Participações S.A. (since 2007), a publicly-held holding company and shareholder of Valepar S.A.; (v) Officer of LitelB Participações S.A. (since 2008), a privately-held holding company and (vi) Officer of Litela Participações S.A. (since 2007), a private holding company and shareholder of Valepar S.As). He holds a degree in History from Universidade de São Paulo (USP) (November 1983). Mr. José Ricardo Sasseron has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Robson Rocha Regular Member of Vale s Board of Directors (since 2011). He acts as Vice-President for Human Resources Management and Sustainable Development of Banco do Brasil S.A., (since 2009), a public financial institution, where he also served as Executive Officer (2008 to 2009). His main professional experiences over the last 5 years include: (i) Vice-Chairman of the Board of Directors of CPFL Energia S.A. (since 2010), a publicly-held holding company engaged in the energy sector; and (ii) Member of the Board of Directors of Banco Nossa Caixa S.A. (from May to November 2009), a financial institution that went private in 2009. Mr. Rocha holds a degree in Business Administration from UNICENTRO Newton Paiva, Belo Horizonte, (December 1998), General Basic Information Course for Executives from UFMG (December 1997), a graduate certification in Strategic Management from Universidade Federal de Minas Gerais ( UFMG ) (concluded in December 2000); a Master s degree in Finance from Fundação Dom Cabral (December 2000), and a Master s degree in Marketing from Fundação Ciências Humanas Pedro Leopoldo (December 2002). Mr. Robson Rocha has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Nelson Henrique Barbosa Filho Regular Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Chairman of Banco do Brasil S.A. (since 2009), a publicly-held financial institution; (ii) Regular Member of the Board of Directors of BrasilVeículos Cia de Seguros (since 2011), a privately-held company engaged in insurance; (iii) Regular Member of the Board of Directors of Brasilcap Capitalização S.A., (2010 to 2011), a privately-held company engaged in the commercialization of capitalization bonds); (iv) Executive Secretary of the Ministry of Finance (since 2011), where he also served as Secretary of Economic Policy (2008 to 2010), Secretary of Economic Monitoring (2007 to 2008) and Assistant Secretary of Economic Policy (2006 to 2007); (v) Member of the Board of Directors of EPE Empresa de Pesquisa Energética (2007 TO 2009), a private research energy company; and (vi) Advisor to the Presidency of Banco Nacional de Desenvolvimento Econômico Social (BNDES), a Brazilian development bank, (2005 a 2006). He holds a degree in Economics from Universidade Federal do Rio de Janeiro (UFRJ) (March 1992), and Master's degree in Economics from the same university (concluded in March 1995), and a Ph.D. in Economics from New School for Social Research, concluded in January 2001. Mr. Nelson Henrique Barbosa Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Renato da Cruz Gomes Regular Member of Vale s Board of Directors and Member of the Governance and Sustainability Committee (since 2001). His main professional experiences over the last 5 years include the positions of Officer and Regular Member of the Board of Directors of Valepar S.A. (since 2001), a privately-held holding company and controlling shareholder of Vale, and Officer of Investor Relations of Bradespar S.A. (since 2000), a publicly-held holding company and shareholder of Valepar S.A. He also acted as Officer in the following publicly-held companies: (i) Regular Member of the Board of Directors of Aracruz Celulose S.A., now known as Fibria S.A., a privately-held company engaged in the production of bleached eucalyptus kraft pulp; (ii) Regular Member of the Board of Directors of Iochpe-Maxion S.A., a publicly-held manufacturing company of parts and accessories for automotive vehicles; (iii) Regular Member of the Board of Directors of Bahia Sul Celulose S.A., currently known as Suzano Celulose S.A., a publicly-held manufacturing company of pulp and other products for the production of paper; (iv) Regular Member of the Board of Directors of Globo Cabo S.A., now known as Net Serviços de Comunicação S.A., a publicly-held company engaged in cable television services and (v) Alternate Member of the Board of Directors of Latasa Alumínio S.A., now known as Rexam Beverage Can South America S.A., a privately-held company that manufactures metallic packagings. He holds a degree in Engineering from Universidade Federal do Estado do Rio de Janeiro ( UFRJ ) (December 1976) and a graduate certification in Management Development from Sociedade de Desenvolvimento Empresarial ( SDE / IBMEC ). Mr. Renato da Cruz Gomes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any

administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

200

Mário da Silveira Teixeira Júnior Vice-Chairman of Vale s Board of Directors (since 2003) and Member of the Strategic Committee (since 2006). His main professional experiences over the last 5 years include: (i) Vice-Chairman of the Board of Directors of Valepar S.A. (since 2003), a privately-held holding company and controlling shareholder of Vale; (ii) Member of the Board of Directors of Banco Bradesco S.A. (since 1999), a financial institution, where he also holds the position of Member and Coordinator of the Internal Controls and Compliance Committee and Member of the Remuneration Committee (since 2004), and where he also served as Member and Coordinator of the Audit Committee (2004 to 2009); (iii) Member of the Board of Directors of Bradesco Leasing S.A. Arrendamento Mercantil (since 2004), a privately-held company engaged in the leasing; (iv) Member of the Board of Directors of Bradespar S.A. (since 2002), a publicly-held holding company and shareholder of Valepar S.A.; (v) Member of the Board of Directors of Cidade de Deus Companhia Comercial de Participações (since 2002), a privately-held holding company; (vi) Officer and Member of the Board of Directors of Elo Participações e Investimentos S.A. (since 2006), a privately-held holding company; (vii) Executive Managing Officer and Member of the Mesa Regedora of Fundação Bradesco (since 2002, a Federal, State and Municipal public interest entity; (viii) Officer of NCF Participações S.A. (since 2002), a privately-held holding company and (ix) Officer of Nova Cidade de Deus Participações S.A. (since 2002), a privately-held holding company; (x) Voting Member of the Board of Directors Banco Espírito Santo de Investimento S.A. (2002 to 2009), a financial institution; (xi) Regular Member of the Board of Directors of Cia. Paulista de Força e Luz (CPFL) (2001 to 2005), a publicly-held company engaged in the energy sector; (xii) Regular Member of the Board of Directors of CPFL Energia S.A., (2003 to 2006), a publicly-held holding company; (xiii) Regular Member of the Board of Directors of CPFL Geração de Energia S.A., (2003 to 2005), a publicly-held company of energy sector; (xiv) Regular Member of the Board of Directors of Companhia Piratininga de Força e Luz (2003 to 2005), a publicly-held company of energy sector; (xv) Member of the Board of Directors of VBC Energia S.A. (2003 to 2005), a publicly-held holding company. He also served as Member of the Board of Directors of the following publicly-held companies: (xvi) Companhia Siderúrgica Nacional (1996 to 2000), a steelmaking company; (xvii) Latas de Alumínio S.A. LATASA (1992 to 2000), currently known as Rexam Beverage Can South America S.A., which went private and is engaged in the manufacturing of metallic packagings; (xviii) São Paulo Alpargatas S.A. (1997 to 1999), company engaged in cotton processing and spinning; and (xix) Tigre S.A. Tubos e Conexões (1997 to 1998), currently a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Civil Engineering (1970) and Business Administration from Universidade Presbiteriana Mackenzie (December 1980). Mr. Mário da Silveira Teixeira Júnior has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Fuminobu Kawashima Regular Member of Vale s Board of Directors (since 2001). His main professional experiences over the last 5 years include: (i) Executive Managing Officer responsible for the operation of Marine & Aerospace Business Unit of Mitsui & Co., Ltd. (since 2010), a publicly traded company and controlling shareholder of Valepar S.A. He also held the position of Chief Operating Officer responsible for the operation of the energy unit (2007 to 2010), General Manager of Energy Operations (2005 to 2007) and General Manager of Natural Gas & Energy (from May to September 2005). He also served as Member of the Board of Directors of the following privately-held companies: (ii) Japan Australia LNG (MIMI) Pty Ltd., (2005 to 2007), an Oil and Gas company; (iii) Mitsui Oil Co., Ltd., (2007 to 2009), a company engaged in the sales of oil-derived products; and (iv) Kyokuto Petroleum Industries, Ltd., (2007 to 2009), an oil refinery. He holds a degree in Economics from Hitotsubashi University, Japan (March 1976), and a graduate certification in Economic Development from Keble Collegue, Oxford (June 980). Mr. Fuminobu Kawashima has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Oscar Augusto de Camargo Filho Regular Member of Vale s Board of Directors (since 2003), Member of the Strategic Committee (since 2006), and Member of the Executive Development Committee (since 2003). His main

professional experiences over the last 5 years include: (i) Sitting Member of the Board of Directors of Valepar S.A. (since 2003), a private holding company and controlling shareholder of Vale; and (ii) Partner of CWH Consultoria Empresarial (since 2003), a consulting company. He also held the position of Officer in the following publicly-held companies: (iii) Chairman of the Board of Directors of MRS Logística S.A., (1999 to 2003), a publicly-held cargo railway company; and (iv) Chief Executive Officer and Member of the Board of Directors of Caemi Mineração e Metalurgia S.A. (1996 to 2003), a publicly-held mining and metallurgy company that merged with Vale in 2006. He holds a Law degree from Universidade de São Paulo (USP) (December 1963) and a graduate certification in International Marketing from Cambridge University (September 1970). Mr. Oscar Augusto de Camargo Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

201

Luciano Galvão Coutinho Regular Member of Vale s Board of Directors (since 2007) and Member of the Strategic Committee (since 2009), which position he previously held from 2005 to 2006. His main professional experiences over the last 5 years include: (i) Chief Executive Officer of Banco Nacional de Desenvolvimento Econômico e Social (BNDES) (since 2007), a Brazilian development bank; (ii) Member of the Board of Directors of Petróleo Brasileiro S.A. PETROBRAS (since 2009), a publicly-traded company connected to the activities of exploration and production of oil and gas and refining and production of oil-derivates; (iii) Partner of LCA Consultores (1995 to 2007), a consulting company;; (iv) Partner of Macrotempo Consultoria (1990 to 2007), a consulting company; (v) Member of the Board of Directors of Ripasa S.A. Celulose e Papel (2002 to 2005), a publicly-held company in the manufacturing of pulp and paper. He also served as (vi) Member of the Board of Directors of Guaraniana, now known as Neoenergia S.A. (2003 to 2004), a publicly-held electricity holding company; (vii) Member of the International Advisory Council of Fundação Dom Cabral (since 2009), an educational institution focused on improving the skills of executives, entrepreneurs and corporations; (viii) Member of the Curator Council of Fundação Nacional da Qualidade (since 2009), an entity focused in promoting the development of the basics of management excellence; and (ix) Member of the Director Council of Fundo Nacional de Desenvolvimento Científico e Tecnológico (since 2007), a financial assistance entity. He holds a degree in Economics from Universidade de São Paulo ( USP ) (June 1969), a Master s degree in Economics from Instituto de Pesquisas Econômicas (USP), (June 1970) and a Ph.D also in Economics from Cornell University (January 1975). Mr. Luciano Galvão Coutinho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Paulo Soares de Souza He served as Alternate Member of Vale s Board of Directors of Vale (2007 to 2009). His main professional experiences over the last 5 years include: (i) Union leader (since 1997); (ii) President of Itabira s Employees Union (Sindicato dos Trabalhadores nas Indústrias de Extração Mineral e de Pesquisa, Prospecção, Extração e Beneficiamento do Ferro e Metais Básicos e demais Minerais Metálicos e não Metálicos de Itabira e região) (Sindicato Metabase de Itabira e Região) (since 2003). He holds a technical degree from Serviço Social da Indústria (SESI) (December 1988) Mr. Paulo Soares de Souza has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

José Mauro Mettrau Carneiro da Cunha Regular Member of Vale s Board of Directors (since 2010). His main professional experiences over the last 5 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 publicly-held telecommunications companies, (ii) Chairman of the Board of Directors of (a) Coari Participações S.A. (since 2007) and (b) Calais Participações S.A. (since 2007), both publicly-held holding companies. He also serves as (iii) Sitting Member of the Board of Directors of Santo Antonio Energia S.A. (since 2008), a privately-held energy producer, and (iv) Alternate member of the Board of Directors of Telemar Participações S.A, a publicly-held telecommunication company (since 2008); (v) Chairman of the Board of Directors of TNL PCS S.A. (since 2007), a telecommunications company, and (vi) Sitting Member of the Board of Directors of Log-In Logística Intermodal S/A (since 2007), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the stockholder s capital; and (vii) Sitting Member of the Board of Directors of Lupatech S/A (since 2006), a publicly-held energy products, flow control and metallurgy company. In addition to the companies mentioned hereinabove, he also served as (viii) Sitting Member of the Board of Directors of the following publicly-held companies: (a) Braskem S.A. (2007 to 2010), a petrochemical company, where he previously served as Vice-President of Strategic Planning (2003 to 2005); (b) LIGHT Serviços de Eletricidade S/A (1997 to 2000), an energy distributor; (c) Aracruz Celulose S.A. (1997 to 2002), a paper plant; (d) Politeno Indústria e Comércio S/A (2003 to 2004), a petrochemical company; (e) BANESTES S.A. - Banco do Estado do Espírito Santo (2008 to 2009), a financial institution; and (f) TNL (1999 to 2003), where he served as Alternate Member of the Board

of Directors (2006). He holds a degree in Mechanical Engineering from Universidade Católica de Petrópolis, RJ (December 1971), and attended an Executive Program in Management at Anderson School, University of California, (United States), December 2002. Mr. José Mauro Mettrau Carneiro da Cunha has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

202

Marco Geovanne Tobias da Silva Alternate Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Investor Relations Manager of Banco do Brasil S.A. (1999 to 2010), a publicly-held financial institution; (ii) Participation s Officer of Caixa de Previdência dos Funcionários do Banco do Brasil ( PREVI ) (since 2010), a complementary pension fund; (iii) Member of the Fiscal Council of Companhia de Energia Elétrica da Bahia ( Coelba ) (2002 to 2010), a publicly-held company of distribution and commercialization of energy; (iv) Chairman of the Board of Directors of Neoenergia S.A. (since 2011), a publicly-held holding company engaged in the electricity sector. He holds a degree in Economics from Universidade de Brasília (1990) and a graduate certification in Marketing from COPPEAD/Universidade Federal do Rio de Janeiro (March 1997). Mr. Marco Geovanne Tobias da Silva has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Sandro Kohler Marcondes Regular Member of Vale s Board of Directors (since 2007). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2009), a privately-held holding company and controlling shareholder of Vale; (ii) Officer of Banco do Brasil S.A. (since 2005), a financial institution; (iii) Officer of BB Leasing S.A. Arrendamento Mercantil (since 2005), a privately-held company engaged in the leasing activity; (iv) Chairman of the Board of Directors of Banco do Brasil A.G., Viena, (2008 to 2009), a subsidiary of Banco do Brasil S.A. in Austria; (v) Member of the Board of Directors of BB Securit

2005), a financial institution; (iii) Officer of BB Leasing S.A. Arrendamento Mercantil (since 2005), a privately-held company engaged in the leasing activity; (iv) Chairman of the Board of Directors of Banco do Brasil A.G., Viena, (2008 to 2009), a subsidiary of Banco do Brasil S.A. in Austria; (v) Member of the Board of the Directors of BB Securities Ltd London (since 2005), a brokerage company abroad; (vi) Regular Member of the Board of Directors of BB Securities LLC New York (since 2005), also a brokerage firm abroad; (vii) Member of the Deliberative Council of BBTur Viagens e Turismo Ltda, a corporate travel agency (since 2005); and (viii) Alternate Member of the Board of Directors of Banco Patagônia S.A. (since 2011.), a publicly-held financial institution. He holds a degree in Business Administration from Universidade Estadual Centro Oeste Paraná (December 1986) and a Master s degree from Fundação Getulio Vargas (FGV) in São Paulo (April 1994). Mr. Sandro Kohler Marcondes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Deli Soares Pereira Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2009), a privately-held holding company and controlling shareholder of Vale; (ii) Sitting Member of the Board of Directors of (a) Cia. Piratininga de Força e Luz (2004 to 2006); (b) Cia. Paulista de Força e Luz CPFL Paulista (2004 to 2006) e (c) CPFL Geração de Energia S.A. (2004 to 2006), all publicly-held companies in the electricity sector; (iii) Sitting Member of the Board of Directors of CPFL Energia S.A. (2004 to 2006), a publicly-held electric energy holding company; (iv) Sitting Member of the Board of Directors of SOLPART Participações S.A. (2006 to 2008), a privately-held holding company; (v) Executive Officer of the Confederação Nacional dos Bancários (2003 to 2006), a labor union; and (vi) Member of the Board of Directors of Tigre S.A. Tubos e Conexões (2001 to 2003), now a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Social Sciences from Universidade de São Paulo ( USP ) (November 1979) and a graduate certification in Economics and Management of Labor Relations from Pontifícia Universidade Católica ( PUC ) in São Paulo (March 2010). Mr. Deli Soares Pereira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Eustáquio Wagner Guimarães Gomes Alternate Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors of the following publicly-held companies: (a) Companhia de Energia Elétrica da Bahia Coelba, (1998 to 1999), a company involved in the distribution and commercialization of energy sector; (b) Companhia Energética do Rio Grande do Norte COSERN (1998 to 1999), a company involved in the distribution and commercialization of energy sector;

(c) Guaraniana, currently known as Neoenergia S.A. (1998 to 1999), an electrical energy holding company; (d) Centrais Telefônicas de Ribeirão Preto S.A. (1999 to 2000), acquired by Telesp S.A., a telecommunications holding company); and (e) Cia de Armazéns e Silos do Estado de Minas Gerais- CASEMG (2002 to 2003), a privately-held company engaged in the grain warehousing sector. He also held the position of (ii) Member of the Fiscal Council of the following companies: (a) Telesp Participações S.A. (200 to 2001), a publicly-held telecommunications holding company; (b) Banco do Brasil S.A. (2006 to 2010), a publicly-held financial institution); (c) Cia de Seguros Alianca Brasil (2007 to 2010), a private insurance company; (d) Banco Popular do Brasil (2008 to 2010), a privately-held financial institution; (e) BESC Financeira S.A., Crédito, Financiamento e Investimentos BESCREDI (2008 to 2010), a publicly-held financial institution; (f) BB Investimentos (since 2003), a privately-held investment bank; (g) Fundação Banco do Brasil (since 2006), an association for the development and management of sustainable actions for social inclusion and social change; and (h) BB Corretora de Seguros (since 2010), a privately-held insurance company. He holds a degree in Business Administration from the School of Economic Sciences of Universidade Federal de Minas Gerais ( UFMG ) (July 1977). Mr. Eustáquio Wagner Guimarães Gomes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

203

João Moisés de Oliveira Alternate Member of Vale s Board of Directors (since 2003) and Member of the Executive Development Committee (since 2001), where he also served as Regular Member (2001 to 2003) and as Alternate Member of the Board of Directors (2000 to 2001). His main professional experiences over the last 5 years include: (i) Sitting Member of the Board of Directors of Valepar S.A. (since 2003), a privately-held holding company and controlling shareholder of Vale; (ii) Chief Executive Officer of Bradespar S.A. (since 2003), a public holding company and controlling shareholder of Valepar S.A.; (v) Officer and Chief Executive Officer of Bradesplan Participações S.A. (2000 to 2006), a privately-held holding company); (iv) Officer of Millennium Security Holding Corp. (since 2003), a privately-held holding company; and (v) Chief Executive Officer of (a) Brumado Holdings Ltda. and (b) Antares Holdings Ltda. (in both since 2006), privately-held holding companies). He also held Officer positions in the following publicly-held companies: (vi) Officer of Banco Bradesco S.A. (1992 to 2000), a publicly-held financial institution; (vii) Sitting Member of the Board of Directors of COFAP Companhia Fabricadora de Peças (1999), a manufacturer of parts and accessories for automotive vehicles; (viii) Sitting member of the Board of Directors of Companhia Siderúrgica Belgo Mineira, currently known as Arcelor Brasil S.A. (1999 to 2001), a holding company; (ix) Member of the Board of Directors of Companhia Siderúrgica Nacional (1996 to 2001), a steelmaking company); (x) Sitting Member of the Board of Directors of Indústrias Romi S.A. (1998 to 2000), a manufacturing company of machinery and machine tools, parts and accessories; (xi) Sitting Member of the Board of Directors of Mahle Metal Leve S.A. (1998 to 2001), a manufacturing company engaged in the manufacturing of parts and accessories for the engine system of automotive vehicles; (xii) Sitting Member of the Board of Directors of São Paulo Alpargatas S.A. (1999 to 2001), a company engaged in cotton processing, spinning, weaving and fabric finishing; (xiii) Regular Member of the Board of Directors of Telecelular Sul Participações S.A., now known as Tim Participações S.A. (1998 to 1999), a holding company engaged in telecommunications; and (xiv) Alternate Member of the Board of Directors of Tigre S.A. Tubos e Conexões (1998 to 2001), now a privately-held company engaged in the manufacturing of plastic pipes and fittings for civil construction. He holds a degree in Economics from the School of Economics, Accounting and Actuarial Studies of Pontifícia Universidade Católica ( PUC ) (March 1972) and a graduate certification in Finance Management from Faculdades Metropolitanas Unidas (concluded in July 1978). Mr. João Moisés de Oliveira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Luiz Carlos de Freitas Alternate Member of Vale s Board of Directors and Member of the Accounting Committee (since 2007). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2005), a privately-held holding company and controlling shareholder of Vale; (ii) Chief Executive Officer of Bradespar S.A. (2000 to 2007), a publicly-held holding company and controlling shareholder of Valepar S.A. He holds a degree in Accounting Sciences from Faculdade de Ciências Econômicas e Administrativas de Osasco (December 1990). Mr. Luiz Carlos de Freitas has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Hajime Tonoki Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include: (i) Regular Member of the Board of Directors and Director and Executive Vice-President of Mitsui & Co. (Brasil) S.A. (since 2009), a privately-held trading company; (ii) General International Corporate Department Manager for Strategy and Planning of Mitsui & Co., Ltd. (2008 to 2009), a publicly-held holding company and controlling shareholder of Valepar S.A.; and (iii) Officer responsible for the Steel Products Department of Mitsui Brasileira Imp. e Exp. S.A. (2004 to 2008), a privately-held trading company. He holds a degree in Economics from Keio University (in March 1983). Mr. Hajime Tonoki has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the

204

Eduardo de Oliveira Rodrigues Filho Alternate Member of Vale s Board of Directors (since 2011). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (since 2008), a privately-held holding company and controlling shareholder of Vale; (ii) Partner or CWH Consultoria Empresarial (since 2008), a consulting company; (iii) Commercial Director of Rio Tinto Brasil Ltda. (a company that merged with Vale in 2009, now known as Mineração Corumbaense Reunida S.A.), a privately-held mining company (1994 to 2008). He holds a degree in Civil Engineering from Pontifícia Universidade Católica do Rio de Janeiro (1978) and a graduate certification in Transport Planning from PCL Politechnic of Central London (October 2000). Mr. Eduardo de Oliveira Rodrigues Filho has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years. Paulo Sérgio Moreira da Fonseca Alternate Member of Vale s Board of Director (since May 2008). His main professional experiences over the last 5 years include: (i) Alternate Member of the Board of Directors of Valepar S.A. (2005 to 2008), a privately-held holding company and controlling shareholder of Vale; (ii) Chief of Base Industry Department of Banco Nacional de Desenvolvimento Econômico e Social (BNDES) (2005 to 2010), a Brazilian development bank and (iii) Alternate Member of the Board of Directors of Aços Villares S.A. (2003 to 2006), a publicly-held steelmaking company. He holds a degree in Economics from Universidade Federal do Rio de Janeiro ( UFRJ ) (December 1973) and a Master s degree in Finance from COPPEAD/Universidade Federal do Rio de Janeiro (September 1975). Mr. Paulo Sérgio Moreira da Fonseca has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Raimundo Nonato Alves Amorim Currently an Alternate Member of Vale s Board of Directors (since 2009). His main professional experiences over the last 5 years include the positions of President of the iron ore and basic metals employees union in Marabá, Paraupebas, Curionópolis and Canaãn dos Carajás (since 2001). He holds a technical degree in Electrotechnics from the Teaching Department of High School equivalency Education DESU/SEDUC (1992). Currently he is attending a Management Technical Program at Universidade da Amazônica (UNAMA). Mr. Raimundo Nonato Alves Amorim has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

## **Executive Board**

Eduardo de Salles Bartolomeo Executive Officer responsible for the Integrated Operations of Vale (since May 2010). Previously he had served as Executive Officer of Logistics, Project Management and Sustainability (from April 2009 to May 2010); Executive Officer of Logistics, Engineering and Project Management (from November 2008 to March 2009), Executive Officer of Logistics (from January 2007 to October 2008) and Officer of the Logistics Operations Department (from January 2004 to July 2006). His main professional experiences over the last 5 years within Vale s group include: (i) Chairman of the Board of Directors of Ferrovia Norte Sul S.A. (since 2007), a publicly-held cargo transport company, wherein directly or indirectly Vale holds 100% of the total capital; (ii) Chairman of the Board of Directors of Log-In Logística Intermodal S.A. (since 2007), a public company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the total capital; and (iii) Sitting Member of the Board of Directors of MRS Logística S.A. (from 2008 to 2009), a publicly-held cargo railroad company, wherein Vale holds 41.50% of the total capital. In addition to the hereinabove, Mr. Bartolomeo has held the following positions in publicly-held companies: (iv) Chief Executive Officer of Petroflex Indústria e Comércio S.A. (from August to December 2006), a company engaged in the production of rubber; and (v) Regional Plant Director of Cia. de Bebidas das Américas AmBev, (2003 to 2004), a company engaged in the production of beverages. He holds a degree in Metallurgical Engineering from Universidade Federal Fluminense ( UFF ), Rio de Janeiro, a Master s degree in Business Administration from Katholieke Universiteit Leuven, in Belgium. Mr. Eduardo de Salles Bartolomeo as

declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

205

Eduardo Jorge Ledsham Executive Officer responsible for Vale s Exploration, Energy, and Projects since 2010. Previously, Mr. Ledsham served as Global Officer of Exploration and Development of Energy and Fertilizer Projects (2008 to 2010) and Officer of Exploration and Development of Mineral Projects Brazil, the Americas, Africa, Asia and Oceania (2005 to 2007). His main professional experiences over the last 5 years within Vale s group include: (i) Chairman of the Board of Directors of Vale Óleo e Gás S.A. (since May 2009), Vale s subsidiary that develops practices related to research, prospection, exploration and development and production of marine and land deposits of hydrocarbons and derived products; (ii) Chairman of the Board of Directors of CADAM S.A. (since December 2009), a privately-held company involved in the mineral extraction sector - kaolin; (iii) Member of the Board of Directors of Pará Pigmentos S.A. (since 2009), a privately-held company engaged in the exploration, production, and, sale of kaolin for paper coating sector; (iv) Member of the Board of Directors of Rio Doce Australia Pty Ltd. (since 2006;), a privately-held company engaged in the business coal exploration sector; and (v) Member of the Board of Directors of Vale Australia (EA) Pty Ltd. (since April 2010), a privately-held company engaged in coal exploration. He holds a degree in Geology from Universidade Federal de Minas Gerais ( UFMG ), and has a graduate certification in Finance from Instituto Brasileiro de Mercado de Capitais (IBMEC), in Enterprise and Project Evaluation from Fundação Getúlio Vargas (FGV) and in Management from Fundação Dom Cabral. He is also a graduate certification in M&A from Harvard Business School and in Management from IMD and MIT. Mr. Eduardo Jorge Ledsham has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Guilherme Perboyre Cavalcanti Chief Financial and Investor Relations Officer (since August 2010) and Regular Member of Vale s Finance Committee (since August 2010), Member of Vale s Risk Management and Disclosure Committee (since August 2010) and Permanent Member of the Risk Management Executive Committee (since August 2010). His main professional experiences over the last 5 years include: (i) Vale s Global Officer of Corporate Finance Director (from 2005 to 2010), (ii) Sitting Member of the Board of Directors of Log-In Logística Intermodal S.A. (since 2007), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of the total capital; (iii) Member of the Board of Directors of Net Serviços de Comunicação (from 2002 to 2005), a publicly-held telecommunications company; and (iv) Treasury officer of Globo Comunicações e Participações S.A., a publicly-held media company. He holds a degree and Master s degree in Economics from Pontifícia Universidade Católica of Rio de Janeiro. Mr. Guilherme Perboyre Cavalcanti has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

José Carlos Martins Executive Officer for Marketing, Sales, and Strategy of Vale (since May 2010), where he also served as Executive Officer for Ferrous Minerals (from 2005 to May 2010), Executive Officer for Business Development (from April 2004 to May 2005) and Permanent Member of the Risk Management Executive Committee (since May 2010). His main professional experiences in the past 5 years including companies wherein Vale holds direct or indirect participation are: (i) Vice-Chairman of the Board of Directors of Baosteel CSV Companhia Siderúrgica de Vitória, now Companhia Siderúrgica Ubu (from 2008 to 2009), a privately-held steelmaking company, wherein Vale holds 100% of the total capital; (ii) Chairman of the Board of Directors of Samarco Mineração S.A. (since 2005), a privately-held company engaged in the activities of mining and pelletizing, wherein Vale holds 50% of the total capital; (iii) Vice-President of the Deliberative Council of Thyssenkrupp CSA Siderúrgica do Atlântico Ltda., a limited liability steel making company (since 2008), wherein Vale holds 25.94% of the total capital; and (iv) Chairman of the Board of Directors of Vale International SA (since 2006), Vale s subsidiary that develops practices related to trading and holding. In addition to the companies mentioned hereinabove, he also held the following positions in the publicly-held companies: (v) Sitting Member of the Board of Directors of Usinas Siderúrgicas de Minas Gerais S.A. USIMINAS, (2005 to 2006 / 2008 to 2009), a publicly-held steel manufacturing company; (vi) Officer for Steel Production of Companhia Siderúrgica Nacional, a steel making company; (vii) Chief

Executive Officer of Latas de Alumínio S.A. LATASA, now known as Rexam Beverage Can South America S.A., and which went private, is engaged in the production of metallic packaging; and (viii) Chief Executive Officer and Officer of Aços Villares S.A., a special steelmaking company. He holds a degree in Economics from Pontifícia Universidade Católica de São Paulo (PUC/SP). Mr. José Carlos Martins has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

206

Mário Alves Barbosa Neto Executive Officer of Fertilizers (since May 2010). His main professional experiences over the last 5 years include: (i) Chief Executive Officer of Bunge Fertilizantes S.A. (from 2000 to 2010), which company went private and conducts business related to the production of pesticides, manure harvests, fertilizers and soil correctives, and Member of the Advisory Board (since 2005); (ii) Chief Executive Officer of ANDA Associação Nacional para Difusão de Adubos (from 1992 to 2010), an entity responsible for marketing and the correct use of fertilizers; (iii) Chairman of the Board of Directors of Fosbrasil S.A. (from 1996 to 2010), a privately-held chemical company; (iv) Chairman of the Board of Directors of Fertifos Administração e Participações S.A. (from 1997 to 2009), a privately-held holding company; (v) Chairman of the Board of Directors of Fertilizantes Fosfatados S.A. Fosfertil (since 2005), a publicly-held company that develops practices related to the production of fertilizers and other products for agriculture and livestock), where he also held the position of Chief Executive Officer and Officer of Market (from 1992 to 1996); (vi) Chairman of the Board of Directors or Ultrafertil S.A. (since 2007), which went private and conducts business related to the production of intermediaries for fertilizaers; (vii) Member of the Board of Director and Chief Executive Officer of Bunge Brasil S.A. (1996 to 2005), formely known as Serrana S.A, and before that, S.A. Moinho Santista Indústrias Gerais, a holding company that went private; (viii) Executive Officer of BPI Bunge Participações e Investimentos S.A. (from 2006 to 2010), a privately-held holding company; (ix) Member of the Board of Directors of Santista Têxtil S.A. (from 1996 to 2000) now known as Tavex Brasil Participações S.A., a company that went private and is specialized in cotton fabrics and (x) Chief Financial Officer and Market Relations Officer of Manah S.A. . (from 1980 to 1992), a company that produced fertilizers and was merged into Bunge in 2000). He holds a degree in Production Engineering from Escola Politécnica da Universidade de São Paulo (USP) and a graduate certification in Business Management from Fundação Getúlio Vargas (FGV). Mr. Mário Alves Barbosa Neto has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Murilo Pinto de Oliveira Ferreira 285.080.334-00, Vale s Chief Executive Officer and Member of the Strategic and Disclosure Committees (since May 2011). He started his professional career at Vale in 1977, where he held various positions as Officer of the Aluminum Department (2003 to 2005), Executive Officer for Business Development (2005 to 2006) and Executive Officer of Niquel and Commercialization of Base Metals (2007 to 2008) He was also partner of Studio Investimentos (from October 2009 to March 2011), management company focused on Brazilian stock market. His main professional experiences over the last 5 years include the positions of (i) Chairman of the Board of Directors of Alunorte (2005 to 2008), a privately-held alumina producer; (ii) Member of the Advisory Council of Albrás (2005 to 2007), a privately-held company engaged in the production of aluminum, in which companies Vale s participation has been transferred to Hydro on February 2011; (iii) Advisor at CSA Companhia Siderúrgica do Atlântico (2005 to 2007), a privately-held steelmaking company; (iv) Chairman of Ferro Gusa Carajás S.A. (2005 to 2006), a privately-held company engaged in the production of pig iron and merged into Vale in 2008; (v) Chief Executive Officer of Vale do Rio Doce Energia S.A., currently known as Vale Energia S.A., (2005 to 2007), a privately-held energy company; (vi) Chairman of the Board of Directors of Mineração Rio do Norte S.A. (2006 to 2008), a privately-held company, engaged in bauxite exploration, wherein Vale holds 40% of the voting capital; (vii) Advisor of Mineração Onça Puma Ltda. (2007 to 2008), a privately-held nickel mining company merged into Vale in 2008; (viii) Chairman of the Board of Directors of Valesul Alumínio S.A. (2006 to 2008), a privately-held company related to the activity of producing aluminum and its alloys in primary form; (ix) Chief Executive Officer of Vale Canada Limited (2007 to 2008), a nickel producing company, which went private in 2007, and where he also served as Advisor (2006 to 2007); (x) Advisor of Vale Canada Holdings (2006 to 2008), a privately-held holding company, where he held the positions of Officer and Vice-President of the Executive Committee (2007 to 2008); (xi) Member of the Board of Commissioners of PT International Nickel Indonesia Tbk (2007 to 2008), a publicly-held mining company, wherein Vale holds 59.14% of the stockholder s capital; (xii) Officer and Chairman of the Board of Directors of Vale Nouvelle-Calédonie S.A.S. (2007 to 2008); (xiii) USIMINAS Advisor (2006 to 2008), a publicly-held steelmaking company; and (xiv) Financial Manager of Caraíba Metais S.A. (1978 to 1980), a company that went private in 2009 and is engaged in metallurgy of copper and derived products. He holds a degree in Business

Management from Fundação Getúlio Vargas of São Paulo on 08/16/1977, a graduate certification in Management and Finance from Fundação Getúlio Vargas of Rio de Janeiro (concluded on 05/04/1982) and a graduate certification in Senior Executive from IMD Business School, Lausanne, Switzerland (concluded on 12/09/2007. Mr. Murilo Pinto de Oliveira Ferreira has declared for all lawful purposes that he was not convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, or has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

207

Tito Botelho Martins Junior Executive Officer of Base Metals Operations (since May 2010) and Member of the Risk

## **Table of Contents**

Management Executive Committee (since 2008) of Vale, where he also held the following positions: Executive Officer of Non-Ferrous (December 2008 to May 2010); Executive Officer of Non-Ferrous and Energy (from April to November 2008); Executive Officer of Corporate Affairs and Energy (2007-2008); Executive Officer for Corporate Affairs (2006-2007) and Manager Officer of Corporate Finance(1999-2003). His main professional experiences in the past 5 years including companies wherein Vale holds direct or indirect participation are: (i) Chief Executive Officer and President of Vale Inco (since 2008), one of Vale s privately-held subsidiaries established in Canada; (ii) Chief Executive Officer and Investor Relations Officer of Caemi (2003-2006), a publicly-held mining and metallurgy company that merged with Vale in 2006; (iii) Chairman of the Board of Directors of Albras (since 2008), a privately-held company engaged in aluminum operations, wherein Vale holds 51% of the total capital; (iv) Chairman of the Board of Directors of Alunorte (since 2008), a privately-held company that produces aluminum, wherein Vale holds 57% of the total capital; (v) Chairman of the Board of Directors of Cia de Alumina do Pará (since 2008), a privately-held company that produces aluminum, wherein Vale holds 61% of the total capital); (vi) Vice-Chairman of the Board of Directors of FNS (2007-2008), a publicly-held railroad company, wherein Vale holds directly and indirectly 100% of the total capital; (vii) Member of the Board of Directors of MRS (2004-2006), privately-held cargo transport company, wherein Vale holds 41.50% of the total capital; (viii) Chairman of the Board of Directors of Fundação Vale (2007), a foundation supported by Vale; and (ix) Chief Financial Officer and Member of the Board of Directors of FCA, a publicly-held company engaged in logistics (2002-2003), wherein Vale holds 99.99% of the total capital. In addition to the companies mentioned hereinabove, he also held the following positions in publicly-held companies as: (x) Sitting member of the Board of Directors of FERROBAN, currently known as Brasil Ferrovias S.A., a cargo transport company and which capital went private; and (xi) Acominas, now known as Gerdau Acominas S.A., a siderurgical company which capital went private. He holds a degree in Economic Sciences from Universidade Federal of Minas Gerais ( UFMG ), a graduate certification in Business Management from IEAD, a Master s degree from Kellogg School of Management Northwestern University in the United States and from INSEAD, in France. Mr. Tito Botelho was convicted (i) on January 17, 2007 to pay a fine of R\$500,000.00 for not disclosing promptly a Fato Relevante [Relevant Fact] regarding the execution of loan agreements with related parties. The appeal to the CRSFN Conselho de Recursos do Sistema Financeiro Nacional for reversal of this decision is still pending; (ii) on August 22, 2006, all the officers of Ferrovia Centro-Atlântica FCA ) including Mr. Botellho as as Chief Financial Officer were reprimanded for not observing the provision contained in §7° of article 170 of the Brazilian Corporate Law 6.404/76, in the context that the capital increase proposed by FCA s Executive Officers did not contain a detailed economic basis determining the issuance of FCA s shares. The decision has been confirmed by CRSFN. Vânia Lucia Chaves Somavilla She is the Executive Director of Human Resources and Corporate Services for Vale (since May 2011). She started her professional career at Vale in August 2001 as a General Manager for Energy Marketing, and was responsible for the administration of the energy portfolio. Later, she became the Area Manager in March 15, 2004, where she acted as Manager of the Department of Sustainable Development of the Environment in April 01, 2010. Her main professional experience for the past 5 years include (i) Member of the Board of Directors of several consortia within the energy sector, such as: (a) Consórcio Energético Foz do Chapecó (2004 to 2007); (b) Consórcio Estreito Energia CESTE (2006 to 2010); (c) Consórcio Geração Santa Isabel GESAI (2006) and (2008) to 2010); (d) Consórcio Capim Branco Energia (2006 to 2008); (e) Consórcio da Usina Hidrelétrica de Aimorés (2007 to 2010); and (e) Consórcio Brasileiro de Produção de Óleo de Palma CBOP, of the oil and natural gas sector (alternate since 2010); (ii) Member of the Board of Directors Vale Soluções Energia S.A. VSE, a private company that belongs to the energy sector (2007 to 2009); (iii) Administrator (since 2008) of PGT Petroleum Geoscience Technology Ltda, currently Vale Óleo e Gás S.A., a private company devoted to the exploration and development of maritime and ground mineral quarries, research and development of technologies related to exploration activities, where she was also Managing Director and Member of the Board of Directors (2009 to 2010); (iv) Director (2005 to 2009) and Managing Director (2009 to 2010) for Vale Energia S.A., a private company that belongs to the energy sector; (v) Member of the Board of Directors of Albrás Alumínio Brasileiro S.A. (since 2009), a private company that engages in the production of aluminium, companhia de capital fechado que desenvolve a atividade de produção de alumínio, with participation of Vale in this company it was sold to Norsk Hydro ASA (Hydro) in Feb/2011;

(vi) Alternate Member of the Board of Directors of Ultrafértil S.A. (2010 a 2011), a private company devoted to the production, industrialization and commercialization of fertilizers and similar products, pesticides, soil treatment and other agricultural and livestock products; (vii) Managing Director of Vale Florestar S.A. (since 2010), a private company devoted to developing forestry projects; (viii) Managing Director of the Instituto Ambiental Vale (since 2010). This institute is devoted to biodiversity defense, preservation and conservation and to the promotion of sustainable development; (ix) Alternate Member of the Board of Directors of S.A. (since 2011), a public company devoted to commerce, transportation, exportation and importation of phosphate ores and related minerals; (x) Coordinator of Development of New Businesses in the area of energy generation and Generation and Monitoring Projects for the implementation of small and large hydroelectric plants for Companhia Energética de Minas Gerais CEMIG (1995 to 2001), a public company devoted to the operation and exploration of generation, transmission, distribution and commercialization of electric energy; and (xi) Managing Director of Associação Vale para o Desenvolvimento Sustentável (since 2010), an association devoted to the monitoring and the conservation of the environment and the creation of new conservation areas in biomes relevant to sustaintability. She graduated as a Civil Englineer at Universidade Federal de Minas Gerais (UFMG), on April 28, 1984. She has post graduate studies in Engineering for Dams, Universidade Federal de Ouro Preto, which she concluded on April 13, 1990; Extension Course in Management of Hydro Power Utilities offered by SIDA, Stockholm, concluded in November 1996, amd MBA in Business Finance obtained at IBMEC Business School, Belo Horizonte, concluded on July 16, 1998. She took part of the Transformational Leadership Programa offered by MIT in March 2005 and the Mastering Leadership Program offered by IMD on December 15, 2006.

208

#### **Fiscal Council**

Aníbal Moreira dos Santos Sitting Member of Vale s Fiscal Council since 2005 and Alternate Member from April to July 2005. Her main professional experiences over the last 5 years include: (i) Chief Accounting Manager of Caemi Mineração e Metalurgia S.A. (Caemi) (1981 to 2003), a company that merged with Vale in 2006; (ii) Officer of various of Caemi s subsidiaries abroad; (iii) Alternate Member of the Board of Directors of Minerações Brasileiras Reunidas S.A. (1998 a 2003), a privately-held company. MBR, a privately-held mining company e Empreendimentos Brasileiros de Mineração S.A. EBM, a privately-held holding company; and (iv) Sitting Member of the Fiscal Council of Log-In Logística Intermodal S.A. (since April 2009), a publicly-held company engaged in intermodal logistics activities, wherein Vale holds 31.3% of total capital He attended a technical course in Accounting at Escola Técnica de Comércio da Fundação Getúlio Vargas (April 1962). Mr. Aníbal Moreira dos Santos has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Cícero da Silva Alternate Member of Vale s Fiscal Council (since 2009). Mr. da Silva joined Banco do Brasil S.A. (in 1986), a publicly-held financial institution, where he held various positions including in the Internal Audit. His main professional experiences over the last years include: (i) Chief of Division at PREVISUL Instituto de Previdência Social do Mato Grosso (1999 to 2000); and (ii) Alternate Member of the Board of Directors of CPFL Cia. Paulista de Força e Luz, a company engaged in the energy sector. Degree in Accounting Sciences from Universidade Federal do Mato Grosso do Sul (UFMS) (December 1980), and a Law degree from Anhanguera Centro Universitário de Campo Grande (June 2008). He holds a Master s degree in Auditing from FIPECAFI/USP (January 1997) and a graduate certification in Investigative, Accounting, Finance and Corporate Forensic from Universidade Católica Dom Bosco (September 2002). Mr. Cícero da Silva has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Marcelo Amaral Moraes Sitting Member of Vale s Fiscal Council since 2004. He also served as an Alternate Member

Marcelo Amaral Moraes Sitting Member of Vale's Fiscal Council since 2004. He also served as an Alternate Member of Vale s Board of Directors in 2003. His main professional experiences over the last 5 years include: (i) Investments manager at Bradespar S.A. (2000 a 2006), a publicly-held holding company and controlling shareholder of Valepar S.A.; (ii) Alternate Member of the Board of Directors of Net Serviços de Comunicação S.A., a cable television operating company, (2004 a 2005); and (iii) Executive Officer of Stratus Investimentos Ltda. (2006 a 2010), a private equity management firm. He holds a degree in Economics from Universidade Federal do Rio de Janeiro, (January 1991), a Master s degree from COPPEAD/UFRJ (November 1993), and a graduate certification in Corporate Law and Arbitration from Fundação Getúlio Vargas (FGV) (November 2003). Mr. Marcelo Amaral Moraes has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

209

Oswaldo Mário Pêgo de Amorim Azevedo Alternate Member of Vale s Fiscal Council since 2005. He served as Sitting Member of Vale s Fiscal Council (2004 to 2005), and Engineer of the Industrial Procurement (Pelletizing) (1964 to 1976). He also holds the position of (i) Officer of Sul América Cia de Seguros Gerais (since 2008), a privately-held insurance company. His main professional experiences over the last 5 years include: (ii) Ombusdman of Conglomerado Sul America Seguros, an insurance company (since 2005), where he also served as (a) Vice-President of Institutional Relations and Branches Abroad (1990 to 2010); (b) Officer (1980 to 1990) and (c) Deputy Officer (1976 to 1980). He also held the positions as (iii) Vice-President of Federação Nacional das Empresas de Seguros Privados e de Capitalização (2004 to 2007); (iv) Vice-President of Sindicato das Empresas de Seguros Privados, de Capitalização e de Resseguros do Rio de Janeiro (since 2007), where he also held the position of Chief Executive Officer (2001 to 2004); (v) Alternate Member of the Board of Directors of (a) BrasilVeículos Cia de Seguros (2006 to 2010) and (b) BrasilSaúde Cia de Seguros (2006 to 2010), both privately-held insurance companies; (vi) Vice-President of Sul América S.A., a publicly-held company engaged in the asset management and participation interest sector (2006 to 2007); (vii) Officer and Vice-President of Sul America Cia. Nacional de Seguros, an insurance company that went private in 2008 (1980 to 2010); (viii) Executive Officer and Vice-President of Nova Ação Participações S.A., a publicly-held engaged in asset management and especially financial investment (2008 to 2010); (ix) Officer and Vice-President of Sul América Terrestres, Marítimos e Acidentes Cia de Seguros, a company that went private and then merged with Sul America Cia. Nacional de Seguros (1980 to 1998); (x) Officer of Sul América Cia de Seguros S.A., a publicly-held insurance company headquartered in Lima, Peru (1996 to 2003); (xi) Officer of Corcovado S.A., a real state company established in Lima, Peru, which went private in 2004 (2003 to 2009); and (xii) Officer of Sul América Capitalização S.A., a privately-held company engaged in the commercialization capitalization bonds (1987 to 1998). He holds a degree in Industrial and Production Engineering from Pontifícia Universidade Católica do Rio de Janeiro ( PUC ) January 1964). Mr. Oswaldo Mário Pêgo de Amorim Azevedo has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Arnaldo José Vollet Member of Vale s Fiscal Council (since 2011). His main professional experiences over the last 5 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. He holds a degree in Mathematics from Universidade de São Paulo (USP) (December 1975), and a Master s degree in Finance from Instituto Brasileiro de Mercado de Capitais ( IBMEC /RJ) in June 1992. Mr. Arnaldo José Vollet has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

Antônio Henrique Pinheiro Silveira He was elected as Member of Vale s Fiscal Council on April 19, 2011. He is 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). He is also a Regular Member of the Board of Directors of Companhia de Seguros Aliança do Brasil (since March 2010), a privately-held insurance company; and of Norte Energia S.A (since July 2010), a privately-held energy company. His main professional experiences over the last 5 years include: (i) Chairman of Banco Nordeste do Brasil (2008 to 2010), a privately-held financial institution; (ii) Member of the Board of Directors of Empresa Gestora de Ativos EMGEA (2007 to 2008), a private asset management institution; (iii) Deputy-Head of the Economic Advisor to the Ministry of Planning, Budget and

Management (2004 to 2007); (iv) he was also took part of the administration of Cia Docas do Estado da Bahia, a port services entity (2005 to 2007). He holds a degree in Economic Sciences from Universidade Federal do Rio de Janeiro (UFRJ) (January 1987). He also holds a graduate certification, a Master s and Ph.d degree in Economics from UFRJ, concluded respectively in December 1992 and October 2000. Mr. Antônio Henrique Pinheiro Silveira has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

210

[missing name of the member] Alternate Member of Vale s Fiscal Council, elected on April 27, 2010. Previously he had already held the position of Alternate Member of Vale s Fiscal Council from April 16, 2009 to October 3rd., 2009, replacing Mr. Bernard Appy after his resignation. His main professional experiences over the last years include: (i) Sitting Member of the Fiscal Council of Eletropaulo Metropolitana Eletricidade de São Paulo S.A. (AES Eletropaulo), a distributor of electric energy, since May 2009; (ii) Subsecretary of Fiscal Policy of the National Treasury Secretariat since January 2007; (iii) Head of the General Coordination of the Fiscal Operation Funds Management from June 2002 to July 2006; (iv) Member of the Fiscal Council of Banespa S.A., a financial institution; (v) Member of the Fiscal Council of Banco do Brasil S.A., a financial institution; (vi) Member of the Fiscal Council of Caixa de Consórcios, ia financial institution; (vii) Member of the Board of Directors of Centrais Elétricas Brasileiras Eletrobrás, an energy company; (viii) Member of the Fiscal Council of Petrobras Petróleo Brasileiro S.A., a company engaged in the petroleum sector. He holds a degree in Forest Engineering Universidade de Brasília, a Master s degree in Finance from Instituto Brasileiro de Mercado de Capitais and a graduate certification in Public Sector Economics from Fundação Getúlio Vargas (FGV). Mr. Marcus [complete name missing] has declared for all lawful purposes that, in the last five (5) years, he has not been convicted by any criminal court or any administrative proceeding conducted by the Brazilian Securities and Exchange Commission, nor has ever been disqualified or suspended by a final decision of either a judicial court or the regulatory authorities from practicing any professional or commercial activities for the previous five years.

## 12.9 Relationship (as a spouse or significant other) or kinship to the second degree between:

- a. Managers of the Company;
- b. (i) Managers of the Company and (ii) members of management of entities controlled by Vale, either directly or indirectly;
- c. (i) Managers of the Company or members of management of entities controlled by Vale, either directly or indirectly; and (ii) Vale s direct or indirect controlling shareholders; and
- d. (i) Managers of the Company and (ii) Managers of Vale s direct or indirect controlling shareholders. Justification for not completing the chart:

Each and every member of the Board of Directors, Executive Board and Fiscal Council 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 Company have declared individually for all lawful purposes that they 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 for the previous three years between directors/officers and:
- a. Entities controlled by Vale, either directly or indirectly;
- b. Direct or indirect controlling shareholders of Vale; and
- c. In case it is relevant, Vale s or its subsidiaries or controlling shareholders material supplier, client, debtor, or creditor.

211

#### **Table of Contents**

## 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 them 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 Insurance for Managers

Vale maintains a liability insurance policy with Zurich Brasil Seguros S/A, valid from 01/12/10 to 01/12/11, through payment of a premium of US\$ 1,158,891.00, plus the amount of US\$ 85,526 as IOF [Tax on Financial Transactions], and with an upper limit of compensation of US\$ 150 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 Company, 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 coverages 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 information that the Company considers relevant

All information that the Company considers relevant in regard to the Assembly and Management of the Company has been disseminated in items 12.1 through 12.11 in this Form of Reference.

212

#### **Table of Contents**

#### **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\$176.3 billion, over 500,000 shareholders on every continent, and around 70,000 employees and 48,000 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 term. 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 term, 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; (ii) proportion of each element in the total compensation, (iii) the method for calculating and adjusting each of the elements in the compensation packages; and (iv) reasons that justify the composition of the compensation.

#### **Executive Board**

Fixed Compensation

Pró-labore

The compensation for the regular 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 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, variable compensation, after employment benefits, benefits for reason of termination of the exercise of their position, or compensation based on shares.

213

#### **Table of Contents**

Fiscal Board

Fixed 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.

Members of the Fiscal Board do not have right to direct or indirect benefits, variable compensation, after employment benefits, benefits for reason of termination of the exercise of their position, or compensation based on shares.

## **Advisory Committees**

Fixed Compensation

Compensation due to 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.

Members of the Advisory Committees do not have right to direct or indirect benefits, other type of variable compensation, after employment benefits, benefits for reason of termination of the exercise of their position, or compensation based on shares.

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

Fixed 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.

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.

After 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.

214

#### **Table of Contents**

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 Managers 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 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

Variable compensation

Bonus

Variable annual payment (bonus) 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 bonus 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 above stated.

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.

215

#### 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.

## After employment benefits

Non Statutory Directors may have medical healthcare, hospital and dental care paid by the Company until 6 (six) months after their termination, in order to allow them to look for alternatives outside the corporative plan. Benefits for reason of termination of the exercise of their position

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

## **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 2010 were as shown in the table below:

% of	total	compe	nsation	package	paid	as:

					Compensa	tion based	
			Variable	Variable	Ol	n	
	Fix	ed					
	Comper	nsation	compensation	compensation	sha	res	
	_	Direct	_	_			
		or					
	Wage						
	or	indirect		Participation	Long-term		
				in			
	Pró-labore	benefits	Bonus	meetings	incentive	Matching	Total
<b>Executive Board</b>	100%						100%
Statutory Board	20.0%	10.0%	30.0%		40.0%		100%
Non-Statutory Board	30.0%	30.0%	30.0%		10.0%		100%
Fiscal Board	100%						100%
<b>Advisory Committees</b>				100%			100%

## (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 researches made by specialized companies where the effect of the concession of benefits for the participating companies 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 has to 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.

217

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 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 aligned with the readjustment of wages, because the base 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 has to 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 significative 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.

218

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.

## 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 With respect to compensation acknowledged in the results of the last 3 accounting periods and the estimated compensation for the current accounting period for the Executive Board, the Statutory Board and the Fiscal Board:

Estimates for the Fiscal year to be ended on December 31, 2010

	E	Executive	9	Statutory		
		Board		Board	Fiscal Board	Total
Number of members		11 regular members and 10 deputy members		10	5 regular members and 3 deputy members	39
Annual fixed compensation (in R\$)						
Salaries or pro-labore fees	R\$	4,673,600	R\$	20,933,415	R\$ 1,373,520	R\$ 26,980,535
Direct and indirect benefits			R\$	9,903,284		R\$ 9,903,284
Compensation for participation in						
Committees						
Other	R\$	934,720	R\$	4,940,286	R\$ 274,704	R\$ 6,149,710
Variable Compensation (in R\$)						
Bonus			R\$	34,464,477		R\$ 34,464,477
Profit share						
Compensation for participation in						
meetings						
Commissions						
Other			R\$	12,383,237		
Post-employment benefits						
Employment termination benefits						

Stock-based compensation			R\$	$17,975,954_1$		R\$ 17,975,954 <sub>1</sub>
Amount of compensation per board or						
committee	R\$	4,673,600	R\$	83,277,130	R\$ 1,373,520	R\$ 89,324,250

## Notes:

1 Taking into account values of ILP Program (actually paid) and Matching (estimated) described under item 13.1 (b).

2 Values submitted do not take into consideration the INSS incidence.

219

## Fiscal year ended on December 31, 2010

			9	Statutory			
	Executiv	e Board		Board	Fisca	l Board	Total
Number of members	-	ar members		$7.00_{1}$	_	lar members	35.00
		0 deputy				3 deputy	
Annual fixed compansation	me	mbers			III	embers	
Annual fixed compensation (in BRL)							
Salaries or pro-labore fees	R\$	1,790,070	R\$	15,203,831	R\$	913,600	R\$ 17,907,501
Direct and indirect benefits			R\$	5,687,041			R\$ 5,687,041
Compensation for							
participation in Committees							
Other	R\$	358,014	R\$	3,618,549	R\$	182,720	R\$ 4,159,283
Variable Compensation (in							
BRL)							
Bonus			R\$	24,703,612			R\$ 24,703,612
Profit share							
Compensation for							
participation in meetings							
Commissions							
Other			R\$	10,988,646			R\$ 10,988,646
Post-employment benefits							
Employment termination							
benefits			R\$	3,584,2512,			R\$ 3,584,251
Stock-based compensation			R\$	30,239,6193			R\$ 30,239,619
Amount of compensation per			_,		- +		
board or committee	R\$	2,148,084	R\$	94,025,550	R\$	1,096,320	R\$ 97,269,954

## Notes:

- The criterion adopted was the annual average number of members of the Statutory Board as per the monthly records. For the other boards and committees, the number of members remained constant throughout the year.
- 2 Payment made to 1 former Executive Manager who left the Company during the fiscal year ended in 2010.
- 3 Amounts paid within the scope of the ILP Program, as described under item 13.1.

## Fiscal year ended on December 31, 2010

		Statutory		
	<b>Executive Board</b>	Board	Fiscal Board	Total
Number of members	11 regular members and 10 deputy members	6.331	4 regular members and 3 deputy members	34.33
Annual fixed compensation (in R\$)				
Salaries or pro-labore fees Direct and indirect benefits	3,249,794.00	13,763,807.00 2,975,951.00	824,000.00	17,837,601.00 2,975,951.00

Compensation for participation in				
Committees				
Other				
Variable Compensation (in R\$)				
Bonus		19,057,843.00		19,057,843,00
Profit share				
Compensation for participation in				
meetings				
Commissions				
Other				
Post-employment benefits		282,556.79		282,556.79
Employment termination benefits		2,981,751.002		2,981,751.00
Stock-based compensation		3,985,738.003		3,985,738.00
Amount of compensation per				
board or committee	3,249,794.00	43,047,646.79	824,000.00	47,121,440.79

#### Notes:

- The criterion adopted was the annual average number of members of the Statutory Board as per the monthly records. For the other boards and committees, the number of members remained constant throughout the year.
- This amount includes payments made to 2 Executive Managers whose contracts were rescinded in Dec 2008 and Mar 09, respectively.
- Amounts paid within the scope of the ILP Program, as described under item 13.1. Pursuant to the provisions of art. 67 of CVM directive no. 480/09, no information concerning fiscal years 2007 and 2008 shall be submitted.

220

# 13.3 With respect to variable compensation in the last 3 fiscal years and compensation estimated for the current fiscal year for the Executive Board, the Statutory Board and the Fiscal Board:

## Estimates for the fiscal year to be ended on December 31, 2011

		5	Statutory		
	<b>Executive Board</b>		Board	Fiscal Board	Total
Number of members	11 regular		10	5 regular members	39
	members and 10			and 3 deputy	
	deputy members			members	
Bonus (in R\$)	• •				
Minimum amount estimated by					
compensation plan			0		0
Maximum amount estimated by					
compensation plan		R\$	34,464,4771		R\$ 34,464,477
Amount estimated by the					
compensation plan if					
pre-established goals are met		R\$	21,675,7712		R\$ 21,675,771
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					

#### Notes:

- 1 Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.
- 2 Amount represents 100% of Fixed Annual Compensation paid to.

	Fiscal year ended	on De	ecember 31, 201	10	
		5	Statutory		
	<b>Executive Board</b>		Board	Fiscal Board	Total
Number of members	11 regular members and 10 deputy members		73	4 regular members and 3 deputy members	37
Bonus (in R\$)					
Minimum amount estimated by					
compensation plan			0		0
Maximum amount estimated by					
compensation plan		R\$	26,615,4141		R\$ 26,615,414
Amount estimated by the					
compensation plan if					
pre-established goals are met		R\$	17,743,6092		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 Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.
- 2 Amount represents 100% of Fixed Annual Compensation paid to.
- 3 Average number of Members of the Statutory Board during the year.

221

		on December 31, 2009	T. 1	
Number of members	Executive Board 11 regular members	Statutory Board 71	Fiscal Board 4 regular members	<b>Total</b> 37
	and 10 deputy members		and 3 deputy members	
Bonus (in R\$)				
Minimum amount estimated by				
compensation plan		0		0
Maximum amount estimated by				
compensation plan		BRL 23,153,617.00 <sub>2</sub>		BRL 23,153,617.00
Amount estimated by the				
compensation plan if pre-established				
goals are met		BRL 15,435,745.00 <sub>3</sub>		BRL 15,435,745.00
Amount actually acknowledged in				
the formal results		BRL 19,057,843.00		BRL 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:

- Taking into consideration one Executive manager whose contract was rescinded during the accounting reference period of 2009.
- 2 Amount represents 150% of Fixed Annual Compensation paid to the Statutory Board.
- Amount represents 100% of Fixed Annual Compensation paid to the Statutory Board.

Pursuant to the provisions of art. 67 of CVM directive no. 480/09, no information concerning 2007 and 2008 accounting reference period shall be submitted.

# 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 extended 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. The program was introduced in 2007, the first payment having been made in January 2010.

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 should 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 to join 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.

222

#### 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 term 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 within the scope of either the ILP or the Matching Plan. Once assessed, the amount owed to executives within the scope of either Plan 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.

223

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.

### l. 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 no t renewed by the Company, the participant shall receive the values he had purchased prior to the contract rescission or termination date.

#### 13.5

(a) the number of stocks or direct or indirectly quotas of stocks issued by Vale either in Brazil or overseas held by its Board of Directors members, Executive Officers and Fiscal Council members, grouped by board or committee, on the closing day of the last accounting reference period:

#### VALE S.A.

Stockholders		
12/31/10	Common	Preferred
Board of Directors	1,050	54,399
Executive Officers	256,244(*)	1,090,938(*)
Fiscal Council	0	0
Total	257,294	1,145,337

(\*) Including 20.00 VALE shares and 70.560 VALE.P shares owned as *American Depositary Receipts* (ADRs), at the New York Stock Exchange.

224

(b) the number of stocks or direct or indirect shares of stocks issued by Vale either in Brazil or overseas held by its Board of Directors members, Executive Officers and Fiscal Council members, grouped by board or committee, on the closing day of the last accounting reference period:

## VALEPAR S.A.

Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council  Total	Common 13 0 0 13	Preferred 0 0 0 0
LITEL PARTICIPAÇÕES S.A.		
Stockholders 12/ 31/10 Board of Directors Executive Officers Fiscal Council	ON 2 0 0	PN 0 0 0 0
Total	2	0
BRADESPAR S.A.		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	Common 8 0 0	Preferred 1,656 0 4,760
Total	8	6,416
BNDES PARTICIPAÇÕES S.A. BNDESPAR		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	Non-convertible Debentures (BNDP-41)  0 0 10	Convertible Debentures (BNDP-42) 0 0 1
Total	10	1
MITSUI & CO., LTD		
Stockholders 12/31/10 Board of Directors	Common 55,049	Preferred 0
Table of Contents		358

Executive Officers	0	0
Fiscal Council	0	0
Total	55,049	0
225		

#### **ELETRON S.A**

Stockholders 12/31/10	Common	Preferred
Board of Directors	Common 0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0
OPPORTUNITY ANAFI PARTICIPAÇÕES S.A		
Stockholders	<b>C</b>	D C
12/31/10 Board of Directors	Common 0	Preferred 0
Executive Officers	0	0
Fiscal Council	0	0
2.000.200	v	· ·
Total	0	0
BELAPART S.A		
Stockholders		
12/31/10	Common	Preferred
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0
VALETRON S.A		
Stockholders		
12/31/10	Common	Preferred
Board of Directors	0	0
Executive Officers	0	0
Fiscal Council	0	0
Total	0	0

(c) number of stocks or direct or indirect shares of stocks and other securities that might be converted in stocks or shares of stocks issued either in Brazil or overseas by Vale s affiliates and subsidiaries held by its Board of Directors members, Executives Officers, and Fiscal Council members, grouped by board or committee on the closing day of the last accounting reference period:

## FERROVIA CENTRO ATLÂNTICA S.A.

α.	1	1	1 1	
NT.	$\gamma c \nu$	'n	าเก	ers
OU	$\sigma$	ш	JΙU	$\mathbf{c}$

12/31/10	Common	Preferred
Board of Directors	0	0

Executive Officers Fiscal Council		0	0
Total		0	0
	226		

Table of Contents

## FERROVIA NORTE SUL S.A.

Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	ON 0 1 0	PN 0 0 0 0 0
LOG-IN LOGÍSTICA INTERMODAL S/A		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	Common  1 3 0	Preferred 0 0 0
Total	4	0
MRS LOGÍSTICA S.A.		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	Common 0 0 0	Preferred 0 0 0
Total	0	0
PT INTERNATIONAL NICKEL INDONESIA TBK		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council	Common 0 0 0 0	Preferred 0 0 0
Total	0	0
VALE FERTILIZANTES S.A.		
Stockholders 12/31/10 Board of Directors Executive Officers Fiscal Council  Total	Common 0 7 0 7	Preferred 0 0 0 0

362

# 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 in April 2011. 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.

227

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.

## Estimates for the fiscal year to be ended on December 31, 2011 Executive

	Laccative			
	Board		Statutory Board	Total
Number of members			10	10
With respect to each option grant				
Grant date			January and April 2008 <sub>1</sub>	
Number of granted options				
Deadline for options to become redeemable			January and April 2011 <sub>2</sub>	
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\$	17,975,9543	R\$ 17,975,954 <sub>3</sub>
Potential dilution in case all granted				
options were redeemed				

## Notes:

- 1 In January, 2008 the ILP cycle began and in April, 2008 the Matching cycle began.
- 1 In January, 2011 the ILP cycle ended and in April, 2011 the Matching cycle ended.
- 1 Paid values regarding the ILP Program (cycle ended in January, 2011) and values estimated for the future payment of the Matching Program

## Fiscal year ended on December 31, 2010

	Executive		
	Board	Statutory Board	Total
Number of members		7	7
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
Fair option price on grant date
Potential dilution in case all granted options

R\$ 30,239,619<sub>1</sub> R\$ 30,239,619<sub>1</sub>

#### Note:

were redeemed

1 Values paid regarding the ILP cycle ended in January, 2010.

228

## Fiscal year ended on December 31, 2009

	Executive		
	Board	<b>Statutory Board</b>	Total
Number of members		7	7
With respect to each option grant			
Grant date		February 2009	
Number of granted options			
Deadline for options to become redeemable		January 2012	
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\$ 14,566,434.00 <sub>1</sub>	R\$ 14,566,434.00
Potential dilution in case all granted options were			
redeemed			

#### Note:

1 Calculation performed upon bonus % (profit share) as paid on February, 2009

Pursuant to the provisions of art. 67 of CVM directive no. 480/09, no information concerning fiscal years 2007 and 2008 shall be submitted.

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. See items 13.4 and 13.6 above.

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. See items 13.4 and 13.6 above.

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 above.

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.

229

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 Valor do Rio Doce de Seguridade Social

	Statutory			
	<b>Executive Boa</b>	ard	Board	Total
Number of members	11 regular men and 10 depu members		8	29
Plan name	Benefits Plan	Vale Mais	(Plano de Bene	efícios Vale Mais)
Number of managers that are eligible for retirement				
benefits			5	5
Eligibility for early retirement				
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\$	7,331,786	R\$ 7,331,786
Total accumulated amount of contributions paid				
throughout the last accounting reference period,				
minus amounts paid by managers		R\$	1,039,644	R\$ 1,039,644
Eligibility for advanced redemption and conditions				

One of the members of the Statutory Board is a member of a private pension fund managed by Bradesco Vida e Previdência S.A., which is described below:

#### Bradesco Vida e Previdência S.A.

Plan name	BD Plan (Pre-established Benefits) and PGBL Plan
	(Pre-established Contribution)
Number of managers that are eligible for retirement	
benefits	1
Eligibility for early retirement	1- To have no bounds with Bradesco Organizations
	2- To be more than 10 years in a private pension plan
	3- To be at least, 50 years old
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\$5,428,019
Total accumulated amount of contributions paid	
throughout the last accounting reference period, minus	
amounts paid by managers	R\$475,512
Eligibility for advanced redemption and conditions	

## 13.11 Managers` Average Compensation

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 Executive Managers. Indemnity payment is made in four quarterly payments and conditioned to a non-compete agreement to be in force for the following 12 months.

230

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.

	Fiscal year ended on December	
Board or Committee	31, 2010	
Executive Board	90,00%	
Statutory Board	0.00%	
Fiscal Board	14.00%	

Fiscal year ended on December

Board or Committee

31, 2009

Executive Board

Statutory Board

Fiscal Board

25.00%

Pursuant to the provisions of art. 67 of CVM directive no. 480/09, no information concerning 2007 and 2008 accounting reference period shall be submitted.

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 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 o	on 12/31/2010		
	executive		fiscal	
	board	statutory board	board	Total
direct and indirect controlling entities	0	0	0	0
companies controlled by the company	0	R\$961,667 mil <sup>1</sup> (Fixed annual compensation: R\$698,809 mil/ Direct and indirect benefits: R\$262,858 mil)	0	R\$961,677 mil
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.

231

Fiscal year ended on 12/31/2009				
	executive		fiscal	
	board	statutory board	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

#### Note:

companies under common control

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

0

0

Pursuant to the provisions of art. 67 of CVM directive no. 480/09, no information concerning fiscal years 2007 and 2008 shall be submitted.

#### 13.16 Other information that the Company might judge relevant

The proposal for global compensation of the managers for the fiscal year 2011 and submitted to the General Annual Meeting intended to fix as a global sum the amount of up to R\$ 108,961,196.00 (one hundred and eight million, nine hundred and sixty-one thousand, one hundred and ninety-six 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\$6.967.120,00 (six million, nine hundred and sixty-seven thousand, one hundred and twenty reais) corresponding to the fixed compensation of the members of the Executive Board, of the Advisory Committees, pursuant to art. 15, paragraph 2 of the bylaws, and of the members of the Fiscal Board, under the terms of Act No. 6404/76, Art. 163; (b) up to R\$73,373,846.00 (seventy-three million, three hundred and seventy-three thousand, eight hundred and forty-six reais) corresponding to the fixed and variable compensation of the Executive Directors, which takes into account an Executive Board comprised by 10 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; and (c) up to R\$ 28,620,231.00 (twenty-eight million, six hundred and twenty thousand, two hundred and thirty-one reais) corresponding to taxes and charges that have an incidence over the compensation and the responsibility of Vale, and also, benefits of any nature.

The difference between the value of the proposal above mentioned and the one stated in item 13.2 total compensation of the executive board, statutory board and fiscal board, is due to the fact that in item 13.2 it was roughly considered the compensation value to be approved for the members of the Executive Board, the Advisory Boards and the Fiscal Boards of Vale, whilst the proposal of annual global value to be submitted to consideration of the shareholders during their General Annual Meeting, comprises also the compensation of the members of the Advisory Committees (R\$1,104,000.00), social charges of Vale s responsibility (R\$18,716,947.00).

## 14.1 Description of the Company s Human Resources

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

The chart below shows the number of employees of the Company and its controlled companies in the financial years closed December 31, 2008, 2009 and 2010, by activity and by geographic location:

	Financial Year ended 31st December of		
	2008	2009	2010
Total number of company employees	62,490	60,036	70,785
Per business area			
Ferrous	25,871	25,006	25,465
Non ferrous	21,267	19,358	17,765
Coal	901	1,103	1,776
Logistics	14,539	14,620	14,116
Fertilizers	1,276	1,576	6,284
Others	2,138	1,798	5,379
Per geographical area			
Brazil	50,080	48,600	56,012
Canada	7,994	6,757	6,390
Indonesia	3,800	3,467	3,144
New Caledonia	790	856	950
Australia	833	834	893
USA	623	572	0
China	580	517	136
Mozambique	107	125	570
Peru	213	297	523
Colombia	6	177	361
Chile	56	58	183
Others	910	1,201	1,623

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

the chart below shows the number of outsourced of the Company and its controlled companies in the financial years closed December 31, 2008, 2009 and 2010, by activity and by geographic location:

	Financial Year ended 31st December of		
	2008	2009	2010
Total number of outsourced employees	83,204	80,571	103,300
Per business area			
Ferrous	23,481	20,551	12,674
Non ferrous	27,490	30,139	16,024
Coal	2,273	5,535	1,194
Logistics	15,560	12,932	10,392
Fertilizers			10,043

	Financial Yea	r ended 31st De	cember of:
	2008	2009	2010
Others	15,861	14,195	52,973
Per geographical area			
Brazil	71,693	63,229	74,857
Canada	2,261	1,189	3,583
Indonesia	3,584	2,710	3,169
New Caledonia	3,291	3,756	4,701
Australia	669	842	437
USA	22	16	0
China	2	5	0
Mozambique	1,631	4,104	7,729
Peru	786	3,027	575
Colombia	3	606	860
Chile	391	877	1,056
Others	332	2,991	6,333

### c. employee turnover index

The index of employee turnover (churning index) in financial years ending in 2008, 2009 and 2010 was 8.0%, 10.5% and 6.0%, respectively.

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

The company is a defendant in 22,102 labor and pension related lawsuits, involving the total value of R\$ 7.87 billion, for which there is a provision for R\$ 1.12 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.

## 14.2 Comments about any relevant change that occurred with regard to the figures in the item 14.1 above.

There has been no material change that occurred with regard to the figures in the previous item.

## 14.3 Description of Company employee remuneration policies

## a. Salary and variable remuneration policy

The policy for salaries and variable remuneration for statutory and non-statutory Directors is described in item 13 of this reference form.

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

In Vale s own units, performance assessment is based on annual goals aligned to business strategy. These evaluations are conducted through an interactive process between employees and their managers, as well as 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 job expectations.

#### **Table of Contents**

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

Since November 2007, Vale is signing collective agreements of two years validity with all trade unions of workers in Brazil representing 100% of the total number of employees. As a result of the agreements, there was a salary increase of 7% in each year, completing a total of 14.49% of readjustment for each period of the Agreement; such periods are 2007/2009 and 2009/2011. In Canada, Australia, Indonesia, New Caledonia, Mozambique, Peru, England, France, Norway, and Argentina, Vale negotiates collective agreements with workers trade unions, with a duration between one and five years.

Certain employees who are part of the management framework of Vale participate in incentive programs, and may also receive deferred bonuses with periods of three years based on the performance of the Company, in which one of these programs is evaluated by total shareholder return relative to a group of similar businesses (peers) during the reference period.

## b. Benefits policy

The benefits are part of the total rewards 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 HR philosophy and corporate strategy, in addition to the legal requirements of the country and the given local market conditions.

Benefits considered essential are welfare, 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 globalization of the benefits offered, Vale implemented an offshore pension fund. This Fund is for foreign employees admitted in countries where their participation in a local plan is not viable and where it is possible to include them in the global plan. To be effective, a global pension plan needs to provide a sufficient number of benefits which permit close monitoring of performance of investments and a wide choice of funds, in addition to a simple and efficient administration

#### c. Characteristics of compensation plans based on actions of non-administrator employees

Compensation plans based on actions described in item 13.4 of this Reference Form 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 Company and trade unions

Vale builds a harmonious relationship with trade unions all around the world. In Brazil, in 68 years of Vale s existence, employees only went on strike once (in 1989) and also only once was no understanding reached with the unions, leaving the decision to the Labor Courts (collective salary increase-1988). In all other years Vale signed collective agreements.

235

#### **Table of Contents**

In Brazil, Vale negotiates with approximately 50 trade unions and in the rest of the world with over 15 unions. The Company has collective agreements with their unionized employees in its operations in Brazil, Australia, Canada, Indonesia, New Caledonia, France, Norway, the United Kingdom, Peru, and Argentina. Currently, Vale is negotiating the first labor collective agreement in Mozambique.

Vale has been a pioneer in Brazil, in the conclusion of Collective Agreements with duration of two years (the maximum allowed in Brazilian legislation), without annual wage increase clauses, or indexing, which demonstrates not only the confidence of trade unions, but also that of its employees. This experience is being extended to other companies in the Vale System in Brazil.

Vale (Brazil) also negotiated the Agreement of the Program of Participation in the earnings with a duration of two years (2010 and 2011). This is unprecedented in Brazil.

After a strike, Vale signed two collective agreements in Canada, with a duration of 5 years (Ontario, Newfoundland, and Labrador). Up to that moment the practice was to sign agreements with a duration of 5 years.

236

#### **Table of Contents**

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.

	Common sha	ires		Pı	refer	red shares		<b>e</b>	Total number shares	r of
			Class A		_	ecial Class	Total number			Sha
y CPF/CNPJ	Quantity	<b>%</b>	Quantity	% Qu	ıantit	ty %	Quantity	<b>%</b>	Quantity	aş
1.772.413/0001-57	1,716,435,045	52.7	20,340,000	1.0	0	0.0%	20,340,000	1.0	1,736,775,045	32.
0.383.281/0001-09	218,386,481	6.7	69,432,771	3.3	0	0.0%	69,432,771	3.3	287,819,252	5.
	47,375,394	1.5	99,649,571	4.7	0	0.0%	99,649,571	4.7	147,024,965	2.
	1,274,527,562	39.1	1,919,157,264	91.0	12	100.0%	1,919,157,276	91.0	3,193,684,838	59.
	3,256,724,482	100.0	2,108,579,606	100.0	12		2,108,579,618	100.0	5,365,304,100	100.

237

# 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, 2010:

## Valepar S.A.

To

Common sha	ares				Preferr	ed shares				
		Class A	4	Class l	В	C	Total number of preferred shares			
Qty.	%	Qty.	%	Qty.	%	Qty	%	Qty.	%	Ç
637,443,857	49.00	200,864,272	71.41					200,864,272	78.51	838
275,965,821	21.21					16,137,193	18.25	16,137,193	6.31	292
237,328,059	18.24					20,402,587	23.08	20,402,587	7.98	257
149,787,385	11.52					18,394,143	20.80	18,394,143	7.19	168
380,708	0.03	80,416,931	28.59	47,601,522	100.00	32,729 33,449,068	0.04 37.83	32,729 161,467,521	0.01 38.69	161
1,300,905,830	100.0	281,281,203	28.39 <b>100.00</b>	47,601,522 <b>47,601,522</b>	100.00 100.00	<b>88,415,720</b>	100.00	1,718,204,275	38.09 <b>100.00</b>	161 <b>1,718</b>

238

## **Table of Contents**

The following table presents information on Litel Participações S.A., direct controlling entity of Valepar S.A. at December 31, 2010:

## Litel Participações S.A.

	Common sh	ares				Prefe	rred shares		Total numl	er of	Total numb
			Cla	ss A	Class I	3	Class	C	preferred s		
F/CNPJ	Qty.	%	Qty.	%	Qty.	%	Qty	<b>%</b>	Qty.	%	Qty.
476/0001-77	193,740,121	78.40	103	14.11	28,385,274	100			28,385,377	78.50	222,125,498
	53,388,224	21.60	627	85.89			7,772,020	100.00	7,772,604	21.50	61,160,871
	247,128,345	100.0	<b>730</b>	100.0	28,385,274	100.0	7,772,020	100.0	36,158,024	100.0	283,286,369
TTI C	11 ' . 1 1			. •	D 1 C	A 1.			7 1 0 4	. D	1 21

The following table presents information on Bradespar S.A., direct controlling entity of Valepar S.A. at December 31, 2010:

Brad	lespar	S.A.
------	--------	------

						Total numb	er of	Date of
		Common sl	nares	Preferred s	hares	shares	Sha <b>tebotde</b> l	l <b>s</b> nglast
Shareholdeationa	lity CPF/CNPJ	Qty.	<b>%</b>	Qty	<b>%</b>	Qty.	%agreemtit	y change
Nova Cidade								
de Deus								
Participações								
S.A. Brazilian	04.866.462/0001-47	1,637,008	1.34	650,032	0.29	2,287,040	0.65 NoYes	12/30/10
NCF								
Participações								
S.A. Brazilian	04.233.319/0001-18	23,767,944	19.40			23,767,944	6.80 NoYes	12/30/10
Cidade de								
Deus Cia.								
Cial. de								
Participações								
S.A. Brazilian	61.529.343/0001-32	44,883,224	36.63	300,960	0.13	45,184,184	12.93 NoYes	12/30/10
Fundação								
Bradescorazilian	60.701.521/0001-06	18,179,304	14.84	2,210,984	0.97	20,390,288	5.83 NoYes	12/30/10
Others		34,055,569	27.80	223,862,920	98.61	257,918,489	73.79	12/30/10
Total		122,523,049	100.00	227,024,896	100.00	349,547,945	100.00	

239

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, 2010:

	Cidade de	Deus	Cia.	Cial.	de	Partici	pacões	S.A.
--	-----------	------	------	-------	----	---------	--------	------

					Total numb	er of	Date of
				Preferre	d		
		Common sh	ares	shares	shares	Sha <b>tebotde</b> l	l <b>i</b> nglast
Shareholdationa	lity CPF/CNPJ	Qty.	%	Qty.%	Qty.	%agree <b>mtit</b> t	y change
Nova Cidade							
de Deus							
Participações							
S.A. Brazilian	04.866.462/0001-47	2,875,821,893	44.9	1	2,875,821,893	44.91 NoYes	12/30/10
Fundação							
Bradescon Brazilian	60.701.521/0001-06	2,126,303,394	33.20	)	2,126,303,394	33.20 NoYes	12/30/10
Lina Maria							
Aguiar Brazilian	017.080.078-49	545,065,640	8.5	1	545,065,640	8.51 NoYes	12/30/10
Lia Maria							
Aguiar Brazilian	003.692.768-68	448,931,586	7.0	1	448,931,586	7.01 NoYes	12/30/10
Maria Angela							
Aguiar Brazilian	000.548.238-03	301,985,187	4.7	1	301,985,187	4.71 NoYes	12/30/10
Others		106,084,359	1.60	6	106,084,359	1.66	12/30/10
Total		6,404,192,059	100.00	)	6,404,192,059	100.00	

240

#### **Table of Contents**

Sharehold Nationality CPF/CNPJ

07.838.611/0001-52

**BBD** 

S.A.

**Total** 

Participações

Fundação

Brazilian

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 March 16, 2011:

Nova Cidade de Deus Participações S.A.

				Total numbe	r of Date o
Common s	shares	Preferred	shares	shares	Sha <b>febotdelli</b> nglast
Qty.	<b>%</b>	Qty.	<b>%</b>	Qty.	%agreementity change

100.00

131,373,281

508,085,837

25.86 NoYes

100.00

03/16/11

Bradesd razilian 60.701.521/0001-06 259,240,518 03/16/11 113,277,179 46.30 98.41 372,517,697 73.32 NoYes Shares in treasury 4,194,859 1.59 0.83 4,194,859 03/16/11

53.70

100.00

131,373,281

244,650,460

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, 2010:

263,435,377

### BBD Participações S.A.

						Total numb	er of	Date of
		Common sl	nares	Preferred s	hares	shares	Sha <b>Æhntde</b> l	d <b>s</b> nglast
Shareho Nationa	lit <b>CPF/CNPJ</b>	Qty.	<b>%</b>	Qty.	%	Qtde	%agree <b>mtit</b>	y change
Lázaro de								
Mello								
Brandã <b>B</b> razilian	004.637.528-72	10,997,761	6.24			10,997,761	4.44 NoYes	03/16/11
Shares in								
treasury		42,963,095	24.38	19,324,582	26.94	62,287,677	25.12	03/16/11
Others		122,245,443	69.98	52,413,954	73.06	174,659,397	70.44	03/16/11
Total		176,206,299	100.00	71,738,536	0	247,944,835	100.00	

241

## **Table of Contents**

The following table presents information on NCF Participações S.A., direct controlling entity of Bradespar S.A., at January 28, 2011:

NCF Participações S.A.	NCF	Partici	nacões	S.A.
------------------------	-----	---------	--------	------

		- ' '		-I3				
		Common sl	nares	Preferred s	hares	Total numb shares	er of Sha <b>tehotde</b> l	Date of singlast
Shareholdear	tionality CPF/CNPJ	Qty	%	Qty.	<b>%</b>	Qty.	%agree <b>entiit</b>	y change
Fundação								
Bradesco B	3razilia60.701.521/0001-06	157,787,040	25.13	559,621,223	100.00	717,408,263	60.41 NoYes	03/16/11
Cidade de								
Deus Cia.								
Cial. De								
Participações	3							
S.A. B	Brazilia61.529.343/0001-32	469,186,416	74.72	0	0	469,186,416	39.51 NoYes	03/16/11
Nova Cidade								
de Deus								
Participações	3							
S.A. B	3razilia <b>0</b> 4.866.462/0001-47	939,388	0.15	0	0	939,388	0.08 NoYes	03/16/11
Total		176,206,299	100.00	71,738,536	100.00	247,944,835	100.00	

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, 2010:

## BNDES Participações S.A.

				T 3		. 1 0		Date of
				nmon ares		tal of ares	Shareholderatrolling	last
Shareholder	Nationality	CPF/CNPJ	Qty.	<b>%</b>	Qty.	<b>%</b>	agreement entity	change
Banco Nacional o	de							
Desenvolvimento	)							
Econômico e Soc	ial							
BNDES	Brazilian	33.657.248/0001-89	1	100.00	1	100.0	Yes	12/31/10
Total			1	100.00	1	100.0	00	
			242	2				

The following table presents information on Eletron S.A., direct controlling entity of Valepar S.A. at December 31, 2010:

#### Elétron S.A.

						Total numb	Date of		
			Common		Preferred shares	shares		re <b>Golder</b> dli	U
Sharehol	d <b>ea</b> tionali	ty CPF/CNPJ	Qty.	<b>%</b>	Qty. %	Qty	% ag	reem <b>ent</b> ity	change
Opportuni	ity								
Anafi									
Paticipaçõ	ões –								
S.A. B	razilian	02.992.366/0001-10	3,957,768	99.97	7	3,957,768	99.97	No Yes	12/31/10
Others			1,087	0.03	3	1,087	0.03		12/31/10
Total			3,958,855	100.00	)	3,958,855	100.00		

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.

		•	· ·		1 ,	Total numb	er of		Date of
					Preferred				
			Common	shares	shares	shares	Sha	re6ohtendli	ng last
Shareh	ol <b>d&amp;a</b> tional	ity CPF/CNPJ	Qty.	<b>%</b>	Qty. %	Qty.	% ag	reem <b>emt</b> ity	change
Belapar	rt								
S.A.	Brazilian	01.608.571/0001-76	1,236,116	38.47		1,236,116	38.47	No Yes	12/31/10
Opport	unity								
Holding	g <b>BFH2P</b> zilian	08.277.553/0001-06	741,264	23.06		741,264	23.07	No Yes	12/31/10
Valetro	n								
S.A.	Brazilian	01.772.313/0001-20	1,236,116	38.47		1,236,116	38.47	No Yes	12/31/10
Others			6	0.00		6	0.00		12/31/10
Total			3,213,502	100.00		3,213,502	100.00		
				243					

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, 2010:

				Valetro	n S.A.						
					Prefe			umber f			Date of
				n shares	sha		sha		reha <b>Tabents</b>	_	
Sharehol Verônica Valente		ty CPF/CNPJ	Qty.	%	Qty	%	Qtde	% ag	greementn	tity c	hange
Dantas	Brazilian	262.853.205-00	505	50.50	0	0	505	50.50	No Y		2/31/10
Others <b>Total</b>			495 <b>1,000</b>	49.50 <b>100.00</b>			495 <b>1,000</b>	49.50 <b>100.00</b>		1	2/31/10
				Belapar	t S.A.						
								umber f		Б	Date of
					Prefe						
				n shares	sha				rehæ <b>dents</b>	_	
Sharehol Verônica Valente		ty CPF/CNPJ	Qty	%	Qty.	%	Qty.	% ag	greemendn	tity c	hange
Dantas	Brazilian	262.853.205-00	505	50.50	0	0	505	50.50	No Y		2/31/10
Others <b>Total</b>			495 <b>1,000</b>	49.50 <b>100,00</b>			495 <b>1,000</b>	49.50 <b>100.00</b>		1	2/31/10
15.3 Dist	ribution of (	Capital									
Date of la	ast meeting									0:	5/18/11
		shareholders								1	171,555
	of corporate										2,470
Number (	of institution	al investors									3,336
				24	4						

#### **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)	1.274.270,212	39.1%
Quantity of class A preferred shares (Units)	1,914,932.776	90.8%
Quantity of special class preferred shares (Units)	0	0.0%
Total	3,189,202,988	59.4%

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 a 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

245

#### **Table of Contents**

#### 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;

246

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) .

247

## 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, 2010 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 (Diretor of Security). The Audit Committee was composed of the following members: Romildo Gouveia Pinto (President), Fabiano Félix do Nascimento, Renato Donatello Ribeiro and Lúcio Tameirão Machado; and by their corresponding substitutes: Francisco de Assis Chaves Costa, Aldo Bastos Alfano, Sérgio Iunes Brito e Rudinei dos Santos. 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.

248

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, 2011:

#### Mitsui & Co. Ltd.

			<b>Total number of</b>					
			Preferred					
	Common sha		shares	shares		rehoCden	trøllir	ıg last
Shareholder	Qty	<b>%</b>	Qty. %	Qty	% agı	reemen <b>e</b>	ntity	change
The Master Trust Bank								
of Japan, Ltd. (trust								
account)	165,510,000	9.05%		165,510,000	9.05%	No	No	03/31/11
Japan Trustee Services								
Bank, Ltd. (trust								
account)	124,499,000	6.81%		124,499,000	6.81%	No	No	03/31/11
Sumitomo Mitsui								
<b>Banking Corporation</b>	38,500,000	2.10%		38,500,000	2.10%	No	No	03/31/11
SSBT OD05 Omnibus								
Account (Treaty								
Clients)	36,662,000	2.00%		36,662,000	2.00%	No	No	03/31/11
Nippon Life Insurance								
Company	35,070,000	1.92%		35,070,000	1.92%	No	No	03/31/11
Japan Trustee Services								
Bank, Ltd.(Trust								
account 9)	30,509,000	1.67%		30,509,000	1.67%	No	No	03/31/11
State Street Bank and								
Trust Company	30,491,000	1.67%		30,491,000	1.67%	No	No	03/31/11
Others	1,367,912,527	74.78%		1,367,912,527	74.78%			03/31/11
Total	1,829,153,527	100,0%		1,829,153,527	100.0%			

<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.

249

<sup>5)</sup> 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.

#### 16.1 Rules, Policies, and Practices for 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.

Finally, according to the Rules of Corporate Governance Practice Level I, the Company will send to the BM & F BOVESPA Exchange, and disseminate information of any contract between the Company and its subsidiaries and affiliates, directors, controlling shareholders, and also between the Company and subsidiaries and affiliates of its directors and controlling shareholders, as well as other firms with any of these people forming part of the same group de facto or de jure, whenever, in any single contract or successive contracts, with or without the same purpose in any one year an amount equal to or more than R\$ 200 thousand, or an amount greater than or equal to 1.0% of equity, whichever is the greater, is proposed. These disclosures should identify the purpose of the contract, the term, the value, the conditions for recision or termination of the contract and its potential influence on the administration or conduct of the Company s affairs.

#### 16.2 Information on Transactions with Related Parties

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\$) (12/31/2010)** 629,407,154.71

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

Highlighted text not in the Portuguese version

250

#### **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 quorum 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;
- 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, 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 reason for the transaction/other relevant information

Applicable interest rate is: TJLP (long-term interest rate) +1.8% a.a. 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\$) (12/31/2010)** 885,193,114.09

Amount of related party Not applicable

**Duration** 09/15/2029

Loan or other type of debt YES

Interest rate 1.46% p.a.

**Relationship with the Company**Indirect controlling shareholder

**Purpose of the contract** Financing for installation of the UHE Estreito Hydroelectric Power

Plant

Guaranties and insurance None

251

#### **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% p.a. (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\$) (12/31/2010)** 1,667,733,748.42

Amount of related party Not applicable

**Duration** 04/15/2019

Loan or other type of debt YES

Interest rate 1.5% p.a.

**Relationship with the Company**Indirect controlling shareholder

Purpose of the contract Credit line

**Guaranties and insurance** None

**Conditions of termination or expiration H** 

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 Vale 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 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;

252

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.

Nature and Reasons for the operation / other relevant information

The applicable interest rates are: Libor 3M+1.5% p.a. (subcredit A), TJLP (subcredits B4 and B11), TJLP + 1.36% p.a. (subcredits B2, B3, B6, B7, B9, and B10). TJLP + 1.76% p.a. (subcredits B1, B5, and B8). This is a credit line for financing Projects Salobo, Mineração Onça Puma, and Usina VIII.

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\$) (12/31/2010)** 

64,332,888.76

**Amount of related party** 

Not applicable

**Duration** 

01/15/2013

Loan of other type of debt YES

Interest rate 4.35% p.a.

**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 quorum 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 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.

253

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 / other relevant information

MC + 4.35% p.a. (tranche in USD) and TJLP + 3% (tranche in URTJLP).

This is financing for investments in the railway system of the Federal Railway leased by Ferrovia Centro Atlantica SA.

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\$) (12/31/2010)** 15,992,846.07

Amount of related party Not applicable

**Duration** 05/15/2013

Loan or other type of debt YES

Interest rate 1.2% p.a.

**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 quorum 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.

254

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% p.a. 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 \$) (12/31/2009)** 

150,510,500.95

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 quorum 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.

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 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.

255

The contract will also expire, with the enforceability of the debt and immediate suspension of any disbursement, at the date of installlation 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% p.a.

This is financing for supplementation of resources relative to installation of the (UHE) Estreito Hydroelectric Power Plant.

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\$) (12/31/2010)** 83,865,435.35

Amount of related party Not applicable

**Duration** 07/15/2020

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 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 quorum 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. 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.

256

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% p.a. 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 party

Banco Nacional de Desenvolvimento Econômico e Social BNDES

Date of transaction

03/31/1997

Amount (R\$)

Not applicable

**Current balance (R\$) (12/312010)** 

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 taks 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 BNDES Participações SA BNDESPAR

**Date of Transaction** 12/17/2007

**Amount (R\$)** 1,050,300,000.00

**Current balance (R\$) (12/31/2010)** 232,071,382.73

Amount of related party Not applicable

**Duration** 12/17/2027

**Interest rate** 0.8% p.a.

Loand or any other debt YES

**Relationship with the Company**Indirect controlling shareholder

**Purpose of the contract** Private issuance of debentures for financing of the expansion project

of the Norte-Sul Railroad

**Conditions of termination or expiration** 

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:

- a) Vale non-compliance of any financial obligation related to DEBENTURES not remedied within 10 (ten) business days from the date of maturity;
- 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 bankruptcy by Vale;
- c) dissolution and liquidation of Vale;
- d) the breach of any non-monetary obligation under this Deed not being remedied within 45 (forty five) days;
- 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;

257

- f) inclusion in the statutes or bylaws by Vale and FNS of a mechanism by which a *quorum* 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 DEED.
- g) If the effective direct controlling shareholding of Vale or FNS is modified in any way, unless previously approved by DEBENTURE holders;
- h) acquisition by FNS of the controlling interest or capital stock in other companies, joint ventures or consortia consisting of non-complementary activities to the normal development of FNS s corporate goals and a move away from these, unless approved in advance 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, 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;
- j) non-compliance by Vale of any provision for interchangeability of the debentures;
- k) 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;
- l) 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;
- m) 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

Vale should redeem all of the outstanding debentures within 30 (thirty) days from the occurrence of the following events:

a) termination of the subconcession contract between Vale and FNS due to expiry, expropriation, rescision, contract between the parties, cancellation of concession or subconcession, or declaration of nullity of the administrative proceeding for the bidding, 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

Transacton for financing the Norte-Sul railroad expansion project. Two issuances of debentures: 17/12/2007 (1st issuance), and 15/10/2009 (2nd issuance). The amount reported above is the sum of both issuances. The interest rate is of TJLP+0.8% p.a.

Banco Bradesco S.A. Name of related party

**Date of transaction** 01/28/2008

Amount (R\$) 658,028,999.52

**Current balance (R\$) (12/31/2010)** 470,193,559.60

**Amount of related party** Not applicable

**Duration** Maturites between 01/12/2011 and 12/31/2020

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** 87CDs issued by Banco Bradesco S.A. and contracted by Vale in the

period from 01/28/2008 to 12/30/2010. Financial investment 100.75%

of CDI (average open transactions)

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

258

### **Table of Contents**

Name of related party

Banco Bradesco S.A. Grand Cayman Branch

**Date of transaction** 11/16/2010

**Amount (R\$)** 333,080,000.00

**Current balance (R\$) (12/31/2010)** 333,446,388.73

Amount of related party Not applicable

**Duration** Expiry date on 02/25/2011

Loand 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** Investments in Time Deposits contracted by Vale on 11/16/2010.

Financial investment 0.88% p.a.

**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\$) (12/31/2010)** 1,366,257,270.50

**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.

259

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 fulfilment of this Contract, either party may opt for termination, mutually satisfying obligations due until the date of this impediment

Nature and reasons for the operation / other relevant information

Name of related party Banco Bradesco S.A.

**Date of transaction** 04/12/10

**Amount (R\$)** 554.464.602.61

Current balance (R \$) (12/31/2010) 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, ocurrence 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 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:

- (i) Arrears exceeding 60 (sixty) days;
- (ii) 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
- (iii) 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.

260

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\$)** 239,168,659.06

**Current balance (R \$) (12/31/2010)** 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\$)** 382,118,565.16

**Current balance (R\$) (12/31/2010)** 435,330,920.75

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\$)** 122,821,857.01

**Current balance (R \$) (12/31/2009)** 0.00

Amount of related party Not applicable

**Duration** 12/31/2008

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

Name of related party Mineração Rio de Norte S.A. (MRN) e Alumina do Norte do

Brasil S.A.

**Date of transaction** 05/29/1995

Amount (R\$) Not applicable

**Current balance (R\$) (31/12/2010)** 297,248,790.00

Amount of related party Not applicable

**Duration** 01/01/2022

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Subsidiary

**Purpose of the contract** Purchase of bauxite

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation / other relevant information

261

### **Table of Contents**

Name of related party Albras Alumínio Brasileiro S.A.

**Date of transaction** 03/01/2009

Amount (R\$) Not applicable

**Current balance (R\$) (31/12/2010)** 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 Calcined alumina supply

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation  $\!\!/$ 

other relevant information

Name of related party Albras Alumínio Brasileiro S.A.

**Date of transaction** 04/31/2010

Amount (R\$) Not applicable

**Current balance (R\$) (12/31/2010)** 158,555,862.00

Amount of related party Not applicable

**Duration** 12/31/2010

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Subsidiary

**Purpose of the contract**Calcined alumina supply

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party Alumorte Alumina do Norte in Brazil S.A.

**Date of transaction** 03/01/2009

Amount (R\$) Not applicable

**Current balance (R\$) (12/31/2010)** 150,807,220.85

Amount of related party Not applicable

**Duration** 12/31/2010

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Subsidiary

Purpose of the contract Purchase of Alunorte calcined alumina

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party Alumina do Norte in Brazil S.A.

**Date of transaction** 01/01/2009

Amount (R\$) Not applicable

**Current balance (R\$) (12/31/2010)** 283,503,330.00

Amount of related party Not applicable

**Duration** 2027

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Subsidiary

**Purpose of the contract**Bauxite supply for Alunorte.

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party

Alumina do Norte in Brazil S.A.

**Amount (R\$)** 25,406,935.49

Current balance (R\$) (12/31/2010) Not applicable

262

### **Table of Contents**

Amount of related party Not applicable

**Duration** 12/31/2008

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Subsidiary

**Purpose of the contract** Power Supply. In 2008, 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

Name of related party Alumina do Norte in Brazil S.A.

**Date of transaction** 12/16/1996

**Amount (R\$)** 284,492,600.00 (equivalent to USD 200,000,000.00)

**Current balance (R\$) (12/31/2010)** 16,713,333.37 (equivalent to USD 10,030,808.65)

Amount of related party Not applicable

**Duration** 03/23/2011

Loan or other type of debt YES

Interest rate 0.625% p.a.

**Relationship with the Company** Subsidiary

**Purpose of the contract** Funds transfer contract for Alunorte entered into between Vale and

Nippon Amazon Aluminium Co., Ltd. (NAAC).

**Guaranties and insurance** None

**Conditions of termination or expiration** ALUNORTE may not prepay principal of the funds transfer contract,

in whole or in part, except as expressly authorized by Vale and NAAC, plus a price of 0.5% of the pre-paid value, the contractual provisions

being observed.

Vale will consider the funds transfer contract has expired after simple notice to ALUNORTE, in following cases, namely:

- (a) Failure by ALUNORTE to settle, in whole or in part, the principal, interests or other rates resulting from the tansfer, provided such situation is not remedied within 14 days after notice has been given to Vale:
- (b) Failure to fulfill, in whole or in part, any of the obligations undertaken by ALUNORTE pursuant to the Contract in question or to any other Contract where it is an integral part thereof, provided such situation is not remedied within 30 days after notice has been given to Vale:
- (c) Dissolution, merger, liquidation or disposition of a substantial portion of ALUNORTE assets without the prior consent of NAAC, which in turn may not unjustifiably deny it.
- (d) Suspension by ALUNORTE of their business;
- (e) In the event Vale is considered non-compliant by NACC regarding the funds transfer contract (base contract) with the resulting acceleration of expirations provided for in the basic contract.

Nature and reasons for the operation / other relevant information

Transfer of the loan signed between NAAC and Vale for Alunorte, for the purpose of financing expansion of Alunorte production capacity from 800,000 tons to 1,100,000 tons. Interest rate: Libor 6M 0.625% p.a.

Name of related party

Companhia Portuária Baía de Sepetiba (CPBS)

Date of transaction

01/01/2004

Amount (R\$)

2,808,894,097.76

**Current balance (R \$) (12/31/2010)** 

1,016,901,786.41

Amount of related party

Not applicable

Duration

2014. 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

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

263

### **Conditions of termination or expiration**

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 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 to the collection, judicial or extrajudicial, of the credits that might be owed in relation to the services.

Nature and reasons for the operation / other relevant information

Name of related party

Ferrovia Centro Atlântica S.A.

**Date of transaction** 01/01/2009

Amount (R\$) Not applicable

**Current balance (R\$) (12/31/2010)** 1,604,258.46

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 the Company** Subsidiary

**Purpose of the contract**Leasing of BB-36 locomotives

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation

/other relevant information

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 12/28/2007

Amount (**R** \$) Not applicable

**Current balance (R \$) (12/31/2010)** 4,235,512.27

264

#### **Table of Contents**

Amount of related party Not applicable

**Duration** 12/28/2011

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company**Controlled

Purpose of the contract Regulate cooperation between the parties for development of support

processes by Vale and share costs.

Compensate Vale for costs incurred in accordance with the terms of

the Contract, to ensure the physical availability of shared

infrastructure, provide clarification for Vale and take steps necessary for the development of support processes, including procurement and

management of third parties

**Guaranties and insurance** None

**Conditions of termination or expiration** This contract will be valid for twelve (12) months from 01/01/2008, or

until the fulfillment of all obligations arising from the contract. Without prejudice to the possibility of termination, this Contract will be automatically extended to the end of its term for successive periods of twelve (12) months unless either party sends written notice to the other 90 (ninety) days in advance of the expected completion of the contract. The contract may be resolved by law in the event of default by either party of its obligations, provided that the party owed the obligation in arrears send written notice to the party in default and that the breach is not solved for a period of fifteen (15) days. Either party may terminate it by written notice, with a minimum advance warning of 180 (one hundred and eighty) days. In this case, neither of the parties will be due for indemnity or compensation on account of the termination, with all other obligations set forth in the instrument

maintained until the termination of the original term of the contract.

Nature and reasons for the operation /other relevant information

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 07/18/2008

**Business amount (R\$)** 5,053,647.24

**Current balance (R\$) (12/31/2010)** 374,068.21

Amount of related party Not applicable

**Duration** Until expiration of last installment, which will occur on 12/28/2012.

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Issuer** Subsidiary

**Purpose of the contract**Sale of FCA locomotives and wagons to Vale

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 12/28/2007

**Business amount (R\$)** 50,160,697.43

**Current balance (R\$) (12/31/2010)** 32,574,859.73

Amount of related party Not applicable

**Duration** Until expiration of last installment, to occur on 12/28/2011.

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Issuer** Subsidiary

**Purpose of the contract** Sale of Vale locomotives and wagons to FCA.

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

265

### **Table of Contents**

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 07/18/2008

**Business amount (R\$)** 38,093,560.34

**Current balance (R\$) (12/31/2010)** 28,648,642.43

Amount of related party Not applicable

**Duration** Until expiration of last installment, to occur on 12/28/2012.

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Issuer** Subsidiary

**Purpose of the contract**Sale of Vale locomotives and wagons to FCA.

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 04/07/2009

**Business amount (R\$)** 25,116,584.45

**Current balance (R\$) (12/31/2010)** 20,666,011.85

Amount of related party Not applicable

**Duration** Until expiration of last installment, to occur on 01/31/2013.

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Issuer** Subsidiary

**Purpose of the contract** Sale of Vale locomotives and wagons to FCA.

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation / other relevant information

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 08/31/2005

Business amount (R\$) N/A

**Current balance (R\$)** 9,279,578.47

Amount of related party Not applicable

**Duration** 12/31/2010

Loan or other type of debt YES

**Interest rate** 94% of CDI

**Relationship with the Issuer** Subsidiary

Purpose of the contract Credit facility contract (financial aid)

**Guaranties and insurance** None

**Conditions of termination or expiration** 

The Contract may be terminated by complaint filed by any of the parties by giving notice 60 days in advance. On the date the contract is closed, any outstanding obligations must be fulfilled by the parties. In addition, regardless of the notice or communication, the parties may consider the contract automatically cancelled, and therefore, the debt expired, and payment of principal, interests, and obligations is required, in the case of (i) any plan of judicial or extrajudicial recovery existing against any party, or liquidation or bankruptcy; /(ii) contractual non-compliance not remedied within 60 days after receipt of notice; (iii) any party is overdue by at least 5 business days regarding payment of any amount owed.

Nature and reasons for the operation /other relevant information

Financial Aid Contract. The seventh and last addition to the contract was signed on 15.01.10. Pursuant to the seventh addition, Vale understakes to supply FCA as a loan the amunt of up to R\$ 130,000,000.00 as requested by FCA and approved by Vale. In addition, FCA will provide Vale as loan, the amount of up to R\$ 39,000,000.00 as set forth by FCA and approved by Vale, All disbursements will be payable to variations of 94% of the CDI. This is a loan between Vale and FCA without intervention of a financial institution.

266

### **Table of Contents**

Name of related party Ferrovia Centro Atlântica S.A.

**Date of transaction** 06/10/2004

Business amount (R\$) Not applicable

**Current balance (R\$)** 3,220,746.80

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** 1.- By defining technical, operational, and administrative procedures,

regulate and standardize performance of mutual carriage of goods in cargo trains, exchange of wagons and locomotives, and repairs of

wagons, locomotive and permanent ways.

2.- Streamline the organization and procedures related to activities of

mutual traffic and exchange of railway rolling stock

**Guaranties and insurance** None

**Conditions of termination or expiration** None

Nature and reasons for the operation /

other relevant information

Name of related party Ferrovia Centro Atlântica S.A. e Vale Fertilizantes

**Date of transaction** 01/01/2010

**Business amount (R\$)** R\$ 48,213,580.86

**Current balance (R\$) (12/31/2010)** R\$ 1,491,930.69

Amount of related party Not applicable

**Duration** One year

Loan or other type of debt No

**Interest rate** 

Relationship with the Issuer Subsidiary

**Purpose of the contract** Acquisition of transportation services by train. The existing balance

refers to advancements made.

**Duration** None

**Conditions of termination or expiration** a) None

Nature and reasons for the operation / other relevant information

Name of related party Ferrovia Centro Atlântica S.A. and Log-in Logística Intermodal S.A.

**Date of transaction** 03/01/2007

**Business amount (R\$)** Undetermined

0.00 **Current balance (R\$) (12/31/2009)** 

Could not be assessed. **Amount of related party** 

**Duration** 10 years

Loan or other type of debt No

**Interest rate** 

**Relationship** with the Company Subsidiary

Providing railway transportation services of various products in **Purpose of the contract** 

> 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

#### **Table of Contents**

Name of related party Ferrovia Centro Atlântica S.A. and Companhia Hispano-brasileira de

Pelotização HISPANOBRAS

**Relationship with the Company**Subsdiaries and affiliates

**Date of transaction** 01/01/2010

**Purpose of the contract**Supply railroad transport service

**Business amount** Undetermined

Current balance None

**Amount of related party**Could not be assessed

**Guaranties and insurance** The contract foresees indemnization 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

This agreement may be terminated by any of the Partires, 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, indemnization 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 correspoding 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** 01/01/2010

**Purpose of the contract**Supply railroad transport service

Business amount Undetermined

Current balance None

Amount of related party Could not be assessed

Guaranties and insurance The contract foresees indemnization 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 Partires, through

written notification to the other Party. The Party by reason of which the Resolution was requested, will have no right to any claim,

indemnization 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

correspoding 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

N/A

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.

Business amount Undetermined.

**Current balance** None.

268

#### **Table of Contents**

**Amount of related party**Could not be assessed.

Guaranties and insurance The contract foresees indemnization 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  $60 \, (\text{sixty})$  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.

**Relationship with the Company** Subsidiary

Date of transaction 08/13/2010

**Purpose of the contract**Railroad transportation of empty conteineres.

**Business amount** Undetermined

Current balance None

**Amount of related party**Could not be assessed

**Guaranties and insurance**The contract foresees indemnization 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** 1 (one) month

**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.

**Relationship with the Company** Subsidiary

**Date of transaction** 07/28/2010

**Purpose of the contract** Railroad transportation of empty conteineres.

**Business amount** Undetermined

Current balance None

**Amount of related party**Could not be assessed

**Guaranties and insurance** The contract foresees indemnization 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** 1 (one) month

**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.

**Relationship with the Company** Subsidiary

Date of transaction 11/05/2009

**Purpose of the contract**Railroad transportation of empty conteineres.

Business amount Undetermined

Current balance None

Amount of related party Could not be assessed

269

#### **Table of Contents**

Guaranties and insurance The contract foresees indemnization 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** 3 (three) 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.

**Relationship with the Company** Subsidiary

**Date of transaction** 12/23/2009

Purpose of the contract Railroad transportation of miscellaneous goods arranged in

containers.

**Business amount** Undetermined

Current balance None

Amount of related party Could not be assessed

Guaranties and insurance The contract foresees indemnization 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** 6 (six) 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.

**Relationship with the Company**Subsidiary

**Date of transaction** 12/23/2009

**Purpose of the contract**Railroad transportation of miscellaneous goods arranged in containers

Business amount Undetermined

Current balance None

Amount of related party Could not be assessed

Guaranties and insurance The contract foresees indemnization 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** 3 (three) 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.

**Relationship with the Company** Subsidiary

**Date of transaction** 02/02/2010

**Purpose of the contract** 

Railroad transportation of miscellaneous goods arranged in containers

and trasportation of empty containers

Business amount Undetermined

Current balance None

**Amount of related party**Could not be assessed

Guaranties and insurance The contract foresees indemnization 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

270

#### **Table of Contents**

**Duration** 6 (seis) meses

**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.

**Relationship with the Company** Subsidiary

Date of transaction 02/07/2010

**Purpose of the contract**Railroad transportation of miscellaneous goods arranged in containers

and trasportation of empty containers

Business amount Undetermined

Current balance None

Amount of related party Could not be assessed

Guaranties and insurance The contract foresees indemnization 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** 3 (three) 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.

**Relationship with the Company**Controlada

**Date of transaction** 02/24/2010

**Purpose of the contract**Railroad transportation of empty containers.

**Business amount** Undetermined

Current balance None

**Amount of related party**Could not be assessed

Guaranties and insurance The contract foresees indemnization 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** 1 (one) month

**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.

**Relationship with the Company** Subsidiary

**Date of transaction** 02/10/2010

**Purpose of the contract**Railroad transportation of miscellaneous goods arranged in containers

and trasportation of empty containers

Business amount Undetermined

Current balance None

Amount of related party

Could not be assessed

**Guaranties and insurance** 

The contract foresees indemnization 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

271

### **Table of Contents**

**Duration** 3 (three) 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 Fundação Vale do Rio Doce de

Seguridade Social VALIA

**Relationship with the Company** Subsidiary

**Date of transaction** 10/01/2009

**Purpose of the contract**Transfer of surveillance expenses of the premises where Valia is

Business amount 5,455.87

**Current balance** 5,455.87 in 12/31/2010

**Amount of related party**Could not be assessed

**Guaranties and insurance** None

**Duration** Undetermined

**Conditions of termination or expiration** None

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 PASA Plano de Assistência à

Saúde do Aposentado da Vale (Healthcare plan for Vale s retired

personnel)

**Relationship with the Company** Subsidiary

**Date of transaction** 12/01/2009

**Purpose of the contract**Supply of Management of Supplementary Medical Assistance (SMA)

Business amount N/A

**Current balance** 2,352,606.48 in 12/31/2010

**Amount of related party**Could not be assessed

**Guaranties and insurance** None

**Duration** Undetermined

**Conditions of termination or expiration** None

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 Fundação Vale do Rio Doce de

Habitação e Desenvolvimento Social FVRD (Vale Foundation of Rio

Doce of Dwelling and Social Development)

**Relationship with the Company** Subsidiary

**Date of transaction** 09/01/2008

**Purpose of the contract**Supply of services Turistic train

Business amount N/A

**Current balance** 162,201.60 in 12/31/2010

**Amount of related party**Could not be assessed

**Guaranties and insurance** None

**Duration** Undetermined

**Conditions of termination or expiration** None

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** 11/11/2010

Purpose of the contract Supply of railroad transport service

272

#### **Table of Contents**

Business amount Undetermined

Current balance None

Amount of related party Could not be assessed

**Guaranties and insurance** None

**Duration** 2 (two) years

**Conditions of termination or expiration** 

This agreement may be terminated by any of the Partires, through written notification to the other Party. The Party by reason of which the Resolution was requested, will have no right to any claim, indemnization 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 judgement, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnization 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 judgement, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnization or compensation whatsoever, in any of the following cases:

- (i) delay in the payments for a period higher than 90 (ninety) days;
- (ii) dealy 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

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**Supply of railroad transport service

Business amount Undetermined

**Current balance** None

**Amount of related party**Could not be assessed

**Guaranties and insurance** None

**Duration** 4 (four) years

**Conditions of termination or expiration** None

**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** 04/30/2010

**Purpose of the contract**Supply of railroad transport service

**Business amount** Undetermined

Current balance None

Amount of related party Could not be assessed

**Guaranties and insurance** None

**Duration** 9 (nine) months.

273

#### **Table of Contents**

### **Conditions of termination or expiration**

This agreement may be terminated by any of the Partires, through written notification to the other Party. The Party by reason of which the Resolution was requested, will have no right to any claim, indemnization 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 judgement, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnization 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 judgement, through a previous and written notification of 30 (thirty) days given to the Company, without the Company having the right to any claim, indemnization or compensation whatsoever, in any of the following cases:

- (i) delay in the payments for a period higher than 90 (ninety) days;
- (ii) dealy 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

No

Nature and reasons for the operation / other relevant information

Rate of interest

Name of related party Ferrovia Centro Atlântica S.A. and MRS Logística S.A. MRS

**Relationship with the Company**Subsidiary and affiliate

**Date of transaction** 02/26/2010

**Purpose of the contract** Assignment of 16 locomotives type GE U 23C, by MRS to FCA

Business amount 8,859.504.00

**Current balance** 2,953,168.11 in 12/31/2010

Amount of related party N/A

Guaranties and insurance FCA shall contract, keep and renew with a first line institution

approved by MRS, na insurance coverage insuring a total financial coverage for indemnization to MRS, according to the terms set forth in this Sixth Clause, for any accident or disaster regarding the locomotives; the insurance coverage will be in agreement with the support conditions of FCA, which will be the only responsible for the expenses of contracting, keeping and renewing said insurance

coverage.

**Duration** As from the moment of receiving the first locomotive up to

02/28/2011

**Conditions of termination or expiration** Clause 4.3.1 If

Clause 4.3.1 If MRS wishes to receive back before November 30, 2010, any of the locomotives granted, MRS has to give FCA a previous written notification, and has to pay FCA a compensation for an amount of R\$37,687.50, for month or month fraction, for the term that is missing between the date of effective withdrawal and November 30, 2010 per locomotive withdrawn. The same value has to be paid by FCA to MRS in case it decides to return the locomotives before November 30, 2010. This payment has to be made by the party that anticipated the withdrawal or the return of the locomotives to the other party in up to 15 consecutive days after the date of effective delivery or return.

Clause 4.5 In addition to the hypothesis of the end of assign set forth in this instrument, MRS can request the return of the locomotives granted, before December 01, 2010, without indemnization due to FCA, by reason of judicial decision or formal decision of the Grantor, based and written pursuant to the law, whenever such decisions are written verified by MRS to FCA.

**Loan or other type of debt** No

#### **Table of Contents**

Nature and reasons for the operation /

other relevant information

N/A

Rate of interest N/A

Name of related party Ferrovia Centro Atlântica S.A. and MRS Logística S.A. MRS

**Relationship with the Company**Subsidiary and affiliate

**Date of transaction** 04/15/2008

**Date of transaction** Establishment of commercial and operative conditions for the

interchange of load between FCA and MRS under the way of a Right of Way or Mutual Traffic pursuant to Resolution 433 of ANTT, of 02/17/2004. Use of courtyards of MRS by the Companhia and vice-versa for the circulation and crossing of loading trains

**Purpose of the contract**Undetermined

**Business amount** 406,607,.24 in 12/31/2010

Current balance Could not be assessed

**Amount of related party** None

**Guaranties and insurance** 60 (sixty) months

**Duration** Without prejudice of the other termination hypothesis set forth in the

contract, it can also be ended in the event of the following (either if the occur together or not): declaration of bankruptcy, assignment of judicial or extrajudicial recovery of anu of the parties, since the moment of the final sentence, extintion, suspension or interruption of the federal concession for exploitation of the service of railroad transport of loads or the hiring connected to the concession and the failure to comply with the clause or conditon of the contract, not solved within a maximum term of 30 (thirty) consecutive days, to be counted from the date when the infringing party received the written notification from the other party. In the event of an unilateral termination, without reason or due to the failure to comply with the clause or condition of the contract, not solved within a maximum term of 30 (thirty) consecutive days, to be counted from the date when the infringing party received the written notification from the other party, it can be demanded to the infringing party as indemnization the value corresponding to the annual volume, of the year of termination, as per the definition of item 14.1 and its sub-paragraphs, multiplied by the weighted mean of the tariff of the right of way in force at the time of

termnation.

**Conditions of termination or expiration** No

Loan or other type of debt

Nature and reasons for the operation / other relevant information

Name of related party Docepar S.A. (DOCEPAR)

**Date of transaction** 01/02/2006

**Amount (R\$)** 49,030,201.87

**Current balance (R\$) (12/31/2010)** 376,227.91

Amount of related party Not applicable

**Duration** 06/30/2011

Loan or other type of debt YES

**Interest rate** 94% of the CDI

**Relationship with the Company** Subsidiary

**Purpose of the contract** Loan

**Guaranties and insurance** None

Conditions of termination or expiration PREPAYMENT

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.

275

#### **Table of Contents**

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 Minas da Serra Geral SA (MSG)

**Date of transaction** 03/28/2008

**Amount (R\$)** 27,878,191.00

**Current balance (R\$) (12/31/2010)** 0.00

Amount of related party Not applicable

**Duration** 12/30/2010

Loan or other type of debt YES

Interest rate 94% CDI

**Relationship with the Company** Subsidiary

**Purpose of the contract** Loan

**Guaranties and insurance** None

Conditions of termination or expiration PREPAYMENT

Vale may prepay the amount, in whole or in part, including principal and interest calculated from March 28 (twenty-eight), 2008 until the date of actual payment. VALE should notify its intention to make the

prepayment at least 3 (three) days in advance.

**EARLY TERMINATION** 

If Vale fails to meet any of its obligations, MSG 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.

Cash centralization. The company is the creditor.

Name of related party Florestas Rio Doce SA (FRDSA)

**Date of transaction** 10/30/2008

**Amount (R\$)** 3,848,783.00

**Current balance (R\$) (12/31/2010)** 0.00

Amount of related party Not applicable

**Duration** 12/30/2010

Loan or other type of debt YES

**Interest rate** 94% of the CDI

**Relationship with the Company** Subsidiary

Purpose of the contract Loan

**Guaranties and insurance** None

276

#### **Table of Contents**

### Conditions of termination or expiration PREPAYMENT

Vale may prepay the amount, in whole or in part, including principal and interest calculated from October 30 (thirty), 2008 until the date of actual payment. Vale should notify its intention to make the prepayment at least 3 (three) days in advance.

### **EARLY TERMINATION**

If Vale fails to meet any of its obligations, FRDSA 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. The company is

the debtor.

Name of related party

Instituto Ambiental Vale do Rio Doce (IAVRD)

**Date of transaction** 11/12/2007

**Amount (R\$)** 367,494.00

**Current balance (R\$) (12/31/2010)** 0.00

Amount of related party Not applicable

**Duration** 12/30/2010

Loan or other type of debt YES

**Interest rate** 94% of the CDI

**Relationship with the Company** Subsidiary

**Purpose of the contract** Loan

**Guaranties and insurance** None

Conditions of termination or expiration PREPAYMENT

Vale may prepay the amount, in whole or in part, including principal and interest calculated from November 12 (twelve), 2007 until the date of actual payment. Vale should notify its intention to make the

prepayment at least 3 (three) days in advance.

### EARLY REDEMPTION

If Vale fails to meet any of its obligations, IAVRD 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. The Company is

the debtor.

Name of related party Vale Operações Ferroviárias S/A (formerly, Mineração Tacumã

Ltda.)

**Date of transaction** 01/02/2006

**Amount (R\$)** 5,162,101.00

**Current balance (R\$) (12/31/2010)** 13,536,715.10

Amount of related party Not applicable

**Duration** 06/30/2011

Loan or other type of debt YES

**Interest rate** 94% of the CDI

**Relationship with the Company** Subsidiary

**Purpose of the contract** Loan

**Guaranties and insurance** None

Conditions of termination or expiration PREPAYMENT

TACUMÃ 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. TACUMÃ should notify its intention to make the prepayment at least 3 (three) days in advance.

EARLY REDEMPTION

If TACUMÃ 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. The Company is the debtor.

Name of related party CVRD Overseas Ltd.

**Date of transaction** 07/24/2003

**Amount (R\$)** 724,025,000.00 (equivalent to USD 250,000,000.00)

**Current balance (R\$) (12/31/2010)** 0.00

Amount of related party Not applicable

**Duration** 01/15/2010

Loan or other type of debt YES

**Interest rate** 4.43% p.a.

**Relationship with the Company** Subsidiary

Purpose of the contract Export prepayment Long term

**Guaranties and insurance** None

**Conditions of termination or expiration** Vale has the right to prepay the amount, without premium or penalty,

in whole or in part, at any time and as of the date of the Contract, by prior written notification of up to 3 (three) business days to CVRD

Overseas.

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 CVRD Overseas Ltd.

**Date of transaction** 10/19/2000

**Amount (R\$)** 280,710,000.00 (equivalent to USD 150,000,000.00)

**Current balance (R\$) (12/31/2010)** 0.00

277

#### **Table of Contents**

Amount of related party Not applicable

**Duration** 01/15/2010

Loan or other type of debt YES

Interest rate 8.926% p.a.

**Relationship with the Company** Subsidiary

**Purpose of the contract** Export prepayment

**Guaranties and insurance** None

**Conditions of termination or expiration** Vale may prepay the amount, without premium or penalty, in whole

or in part, at any time and as of the date hereof, by prior written notification of up to 3 (three) business days to CVRD Overseas.

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 CVRD Overseas Ltd.

**Date of transaction** 08/15/2000

Amount (R\$) Not applicable

**Current balance (R\$) (12/31/2010)** 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\$) (12/31/2010)** 26,583,154,909.17 (equivalent to USD 15,954,360,166.35)

Amount of related party Not applicable

**Duration** 12/21/2026

Loan or other type of debt YES

**Interest rate** 2.66% p.a. (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\$) (12/31/2010)** 314,187,170.49 (equivalent to USD 1,809,018,827.57)

Amount of related party Not applicable

**Duration** 04/29/2014

Loan or other type of debt YES

**Interest rate** 3.37% p.a. (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 / other relevant information

This is an import financing for the optimization of the import area (streamlining import processes, with reduction of the number of

exchange contracts).

278

#### **Table of Contents**

Name of related party Vale International S.A.

**Date of transaction** 03/01/2006

Amount (R\$) Not applicable

**Existing balance (R\$) (12/31/2010)** 1,553,000,000.00

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** Purchase of agglomerated and non-agglomerated iron ore, copper

concentrate and copper cathode 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

Name of related party Baovale Mineração S.A.

**Date of transaction** 03/01/2002

Amount (**R**\$) Not applicable

**Current balance (R\$) (12/31/2010)** 3,000,000.00

Amount of related party Not applicable

**Duration** 2022

**Loan or other type of debt** No

**Relationship with the Company**Subsidiary, joint control

**Purpose of the contract**Purchase of agglomerated and non-agglomerated iron ore pellets

**Guaranties and insurance** None

Conditions of termination or expiration The contract may be terminated upon the occurrence of the following

events by the:

(I) Complaining party, if the other party commits a material breach of any of its obligations under the current contract and if such violation is not resolved within sixty (60) days after being given notice of the violation, requesting its solution;

(II) Vendor, if the Purchaser fails to pay the amount equivalent to 1,000,000 tons from the last fiscal through the next fiscal year;

(III) If Purchaser fails to meet the accumulated tonnage and exceeds 1,500,000 tons in any fiscal year;

(IV) Vendor or Purchaser, if applicable, in case of insolvency, bankruptcy or liquidation of the other party;

(V) Vendor or Purchaser after termination of the Shareholders Contract:

(VI) Vendor or Purchaser, after mutual consent;

(VII) Purchaser, if the Vendor fails to fulfill its obligations;

(VIII) Vendor or Purchaser, at the end of the term of the Contract.

279

### **Table of Contents**

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**\$) Not applicable

Current balance (R\$) (12/31/2010) 312,847,945.36

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\$) Not applicable

**Current balance (R\$) (12/31/2010)** 263,773,811.82

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\$) Not applicable

**Current balance (R\$) (12/31/2010)** 88,450,437.13

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\$) Not applicable

**Current balance (R\$) (12/31/2010)** 206,825,246.19

Amount of related party Not applicable

**Duration** 2013

Loan or other type of debt NO

**Interest rate** 

280

#### **Table of Contents**

**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\$) Not applicable

Current balance (R\$) (12/31/2010) The balance of all transactions made with Samarco on 12/31/10 was

88 million, as stated in Vale s financial statements.

Amount of related party Not applicable

**Duration** 04/12/2024 (contracted). The first addition was signed on 05/25/2006;

the second addition was signed on 008/07/2006 valid until

01/01/2027.

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.

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

Name of related party Samarco Mineração S.A.

**Date of transaction** 05/01/2001

Amount (R\$) Not applicable

Current balance (R\$) (12/31/2010) Not applicable. The balance of all transactions made with Samarco on

12/31/10 was 88 million, as stated in Vale s financial statements.

Amount of related party Not applicable

**Duration** 02/30/2006 (contracted). The first addition was entered into on

09/08/2005. The second addition was entered into on 07/04/2008 to

12/31/2010.

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 concentrate produced by Vale for Samarco.

**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.

281

#### **Table of Contents**

#### **Conditions of termination or expiration**

The contract may be terminated by operation of law, by the innocent party, without prior notice or judicial or extrajudicial communication, 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;
- b) Bankruptcy, judicial or extrajudicial recovery, insolvency, or judicial or extrajudicial liquidation;
- c) Suspension by the competent authorities of the supplies 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

Name of related party MRS Logística S.A.

**Date of transaction** 09/30/2007

**Amount (R\$)** 7,200,000,000.00

**Current balance (R\$) (12/31/2010)** 3,697,520,470.00

Amount of related party Not applicable

**Duration** 10/01/2007 to 09/30/2012

Loan or other type of debt NO

**Interest rate** 

**Relationship with the Company** Affiliate

**Purpose of the contract**Regulating the provision of rail transport services for iron ore, from

iron ore loading terminals identified as Terminal Andaime, Terminal Sarzedo, Terminal Olhos D Água, Terminal Água Santa, Terminal Sarzedo Novo TCS (Terminal de Carga de Sarzedo), Terminal Córrego do Feijão, Terminal Alberto Flores and Terminal Souza Noscheses, located in the state of Minas Gerais, and certain other terminals for shipping from the ports of Guaíba and Sepetiba, in Rio

de Janeiro.

#### **Guaranties and insurance**

Assuming that the annual volume to be transported, informed by Vale to MRS, is not observed, the party in default will compensate for any losses arising from this default. 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.

#### **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:

- 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.
- 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;
- d) When the fines provided for in Clause Ten reach 10% (Ten Percent) of the value of its cargo transported and delayed, even in a cumulative way;
- e) 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;
- f) Suspension of service due to the occurrence of *force majeure* or unforeseeable circumstances for a period exceeding sixty (60) days;
- g) If a party assigns this contract without prior knowledge and written consent of the other party.

In the event of expiration or termination of the Contract, both parties should return to the other any documentation that is in their possession. This return must be made within 24 (twenty four) hours from the date of termination.

In case of cancellation it will apply only until the date on which the termination takes place, with no effects for the remainder of the term originally established.

Nature and reasons for the operation / other relevant Information

282

#### **Table of Contents**

Name of related party MRS Logística S.A.

Date of transaction 09/04/2008

Amount (R\$) 74,487,455.00

**Current balance (R\$) (12/31/2010)** 30,659,974.36

**Amount of related party** Not applicable

Duration 12/31/2011

Loan or other type of debt NO

**Interest rate** 

**Relationship** with the Company **Affiliate** 

Provision of rail transport services for iron ore, from iron ore loading **Purpose of the contract** 

> terminals identified as Terminal de Olhos D agua, Sarzedo, Sarzedo Novo, Córrego Feijão, Alberto Flores, Souza Noschese, Andaime, Juiz de Fora and Casa de Pedra, and certain other terminals which

might be used up to the PATRAG transhipping terminal.

**Guaranties and insurance** Vale will guarantee MRS the minimum payment based on volume,

> equivalent to 85% of the amount stipulated for 2008, and the equivalent of 80% of the amounts stipulated for the years 2009, 2010 and 2011 of the planned shipments by Vale to MRS. If MRS fails to meet the set volume, it should compensate for the difference six

months as of the date of default.

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.

**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:

1) 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.

2) bankruptcy, judicial or extrajudicial recovery, dissolution or, judicial or extrajudicial liquidation, declared or approved;

3) suspension by the competent authorities of the implementation of

the Services:

- 4) when the fines provided for in Clause Ten reach 10% (Ten Percent) of the value of its cargo transported and delayed, even in a cumulative way;
- 5) If the contracted party 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;
- 6) Occurrence of *force majeure* or unforeseeable circumstances regularly proven, which results in suspension of execution of this contract for more than 30 days.

Nature and reasons for the operation / other relevant Information

Name of related party Ferrovia Norte Sul S.A.

Date of transaction 12/19/2008

Amount (R\$) None

**Current balance (R \$) (12/31/2010)** 18,424,508.44

Amount of related party None

**Duration** In effect for thirty (30) years or until the end of the subcontract. The

current balance above corresponds to the total value paid for the fiscal year ended on 31.12.2010. There is no way to determine the global value of the contract, since it depends on the quantity and type of individual services required by FNS and provided by Vale over the period. Prices for each service are specified in the contract based on its characteristics, and are readjusted on an annual basis as per

IGP-DI.

**Loan or other type of debt** No

**Interest rate** 

**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.

283

#### **Table of Contents**

**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 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\$) (12/31/2010)** 320,000,000.00

**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 Minerações Brasileiras Reunidas S.A. MBR

**Date of transaction** 10/29/2007

**Amount (R\$)** 697,000,000.00

**Current balance (R\$) (12/31/2010)** 7,283,583.70 (Vale is creditor)

**Amount of related party** None

**Duration** 12/31/2010. The fourth addition was entered into on 01/15/10, and

may be renewed on an annual basis.

Loan or other type of debt YES

**Interest rate** 94% of the CDI rate.

**Relationship with the Company** Subsidiary

**Purpose of the contract**Loan. In accordance with the fourth addition, Vale undertakes to

provide as loan to MBR up to R\$697,000,000.00, as requested by

MBR, and approved by Vale, which may be changed.

**Guaranties and insurance** None

**Conditions of termination or expiration** The Contract may be terminated by complaint filed by any of the

parties by giving notice 60 days in advance. On the date the contract is closed, any outstanding obligations must be fulfilled by the parties. In addition, regardless of the notice or communication, the parties may consider the contract automatically cancelled, and therefore, the debt expired, and payment of principal, interests, and obligations is required, in the case of (i) any plan of judicial or extrajudicial recovery existing against any party, or liquidation or bankruptcy; (ii) contractual non-compliance not remedied within 60 days after receipt of notice; (iii) any party overdue by at least 5 business days on

payment of any amount owed.

Nature and reasons for the operation /

other relevant Information

All disbursements to be paid to variation of 94% of CDI. This is a

loan to cover cash needs.

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) 158,110,308.51 (equivalent to USD 94.892,755.08) (Vale

International is creditor).

Amount of related party 50%

**Duration** 04/01/14

Loan or other type of debt YES

284

#### **Table of Contents**

**Interest rate** Prime rate + 2% a.a.

**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% a.a. 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 Manganês S.A.

**Date of transaction** 01/01/2006

**Amount (R\$)** 2,901,223.99

**Current balance (R\$) (12/31/2010)** 1,739,853.79

Amount of related party None

**Duration** 12/31/2010

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 Energy

**Date of transaction** 01/01/2005

**Amount (R\$)** 1,283,486.40

**Current balance (R\$) (12/31/2010)** 916,776.00

**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

**Conditions of termination or expiration** 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.

**Date of transaction** 05/01/2010

**Amount (R\$)** 52,343,509.14

**Current balance (R\$) (12/31/2010)** 47,245,998.64

**Amount of related party** None

**Duration** 12/31/2014. 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 carried by and for Vale Manganês by

railway Estrada de Ferro Vitória a Minas and Ferrovia

Centro-Atlântica.

**Guaranties and insurance** None

#### **Table of Contents**

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.

**Date of transaction** 

09/01/2008

Amount (R\$)

179,236,548.75

**Current balance (R\$)** 

(12/31/2010)

9,468,794.22

**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 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.

Amount (R\$)

1,944,926.24

**Current balance (R\$)** 

(12/31/2010)

Not applicable

**Amount of related party** 

Not applicable

**Duration** 

12/31/2008

Loan or other type of debt

NO

**Interest rate** 

Relationship with the

**Company** 

Subsidiary

**Purpose of the contract** 

Power supply. Over the year 2008, short-term contracts were entered into at market

prices to meet demand for RDM 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

Name of related party Vale Canada Ltd

Relationship with the

**Company** 

Subsidiary

**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\$ thousand)

It could not be assessed.

**Current balance (R\$** 

thousand)

19,292,883.30

**Amount of related party** 

N/A

**Guaranties and insurance** 

None

**Duration** 

12/31/2011. The current balance reported above corresponds to the total value paid by the Company to Vale S.A. for the services rendered during the fiscal year ended on 31.12.2010. There is no way to determine the global value of the contract, since it

depends on the quantity and type of individual services required by the Company and provided by Vale over the period. Prices for each service are individually specified in the contract based on its characteristics, and are readjusted on an annual basis as per IGP-DI.

286

#### **Table of Contents**

Conditions of termination or expiration

This contract may be terminated by operation of law if either party fails to fulfill its obligations, provided that a written notice has been given by the non-defaulting party to the party in default, and provided that the non-compliance has 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\$)** 6,499,210.58

**Current balance (R\$)** (12/31/2010)

6,499,210.58

**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

Name of related party Salobo Metais S.A.

**Date of transaction** 03/10/2010

**Amount (R\$)** 6,870,933.60

 $Current\ balance\ (R\$)$ 

(12/31/2010)

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.

287

#### **Table of Contents**

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\$)** 3.933.206.29

Current balance (R\$)

(12/31/2010)

3,933,206.29

**Amount of related party** Not applicable

**Duration** 11/01/2010

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

The contract may 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** 

Salobo Metais S.A. Name of related party

**Date of transaction** 07/24/2009

Amount (R\$) 256,560.45

**Current balance (R\$)** 

(12/31/2010)

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

The contract may 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** 

MRC Serviços Ferroviários CBRJ-AL Ltda.

**Date of transaction** 02/24/2010

Amount (R\$) 40,275,360.00

**Current balance (R\$)** 

Name of related party

(12/31/2010)

Not applicable

**Amount of related party** Not applicable

**Duration** 12/31/2016

Loan or other type of debt NO

288

#### **Table of Contents**

**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 contrat 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 IGPM (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

Mitsui & Co. Ltd. and Vale Fertilizers

**Date of transaction** 

Name of related party

01/01/2011

Amount (R\$)

29,263,380.00

**Current balance (R\$)** 

(12/31/2010)

Not applicable

**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

Ultrafértil S.A. and Vale Fertilizers

**Amount (R\$)** 22,764,553.72

**Current balance (R\$)** 

Name of related party

**Date of transaction** 

(12/31/2010)

1,130,296.29

01/01/2010

**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 brank ULTRAPRILL PLUS.

**Guarantees and insurances** None

**Conditions of termination** 

or expiration

Not applicable

Nature and reasons for the operation /other relevant Information

289

#### **Table of Contents**

Name of related party Ultrafertil S.A. and Vale Fertilizantes

**Date of transaction** 01/01/2010

**Amount (R\$) (R\$)** 303,014,775.01

**Current balance (R\$)** 

(12/31/2010)

37,387.475.57

**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** 01/01/2010

**Amount (R\$)** 5,527.928.45

**Current balance (R\$)** 

(12/31/2010)

5,527,928.45

**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** 01/01/2010

**Amount (R\$)** 175,855.788.54

**Current balance (R\$)** 

(12/31/2010)

21,740,622.61

**Amount of related party** Not applicable

**Duration** 1 year

**Loan or other type of debt** No

Rate of interest

Relationship with the

**Issuer** 

Subsidiary o 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** 01/01/2010

**Amount (R\$)** 1,830,433.78

**Current balance (R\$)** 

(12/31/2010)

1,830,433.78

Not applicable

Amount of related party

**Duration** 1 year

**Loan or other type of debt** Yes

Rate of interest 0.00

Relationship with the

**Issuer** 

Subsidiary of Vale Fertilizantes

**Purpose**