

Vale S.A.
Form 424B2
September 04, 2012

Filed Pursuant to Rule 424(b)(2)
Registration Statement No. 333-162822

The information in this preliminary prospectus supplement and the prospectus to which it relates is not complete and may be changed. This preliminary prospectus supplement and the prospectus to which it relates are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION
PRELIMINARY PROSPECTUS SUPPLEMENT DATED SEPTEMBER 4, 2012

PROSPECTUS SUPPLEMENT
(To prospectus dated November 3, 2009)

Vale S.A.

US\$ % Notes due 2042

Vale S.A. ("Vale") is offering US\$ aggregate principal amount of its % Notes due 2042 (the "notes"). Vale will pay interest on the notes semi-annually on March and September of each year, beginning March , 2013. Vale will pay additional amounts related to the deduction of certain withholding taxes in respect of certain payments on the notes.

Vale may redeem the notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed and a "make whole" amount described under "Description of the Notes Optional Redemption" in this prospectus supplement plus accrued and unpaid interest on such notes to the date of redemption. Upon the imposition of certain withholding taxes, Vale may also redeem the notes in whole, but not in part, at a price equal to 100% of their principal amount plus accrued interest to the redemption date.

The notes will be unsecured obligations of Vale and will rank equally with Vale's unsecured senior indebtedness. The notes will be issued only in registered form in minimum denominations of US\$2,000 and integral multiples of US\$1,000 in excess thereof.

Vale will apply to list the notes on the New York Stock Exchange.

Investing in the notes involves risks that are described in the "Risk Factors" section beginning on page S-6 of this prospectus supplement.

	Per note	Total
Public offering price(1)	% US\$	
Underwriting discount	% US\$	
Proceeds, before expenses, to Vale	% US\$	

(1) Plus accrued interest from September , 2012, if settlement occurs after that date.

Edgar Filing: Vale S.A. - Form 424B2

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

ANY OFFER OR SALE OF THE NOTES IN ANY MEMBER STATE OF THE EUROPEAN ECONOMIC AREA WHICH HAS IMPLEMENTED DIRECTIVE 2003/71/EC (THE "PROSPECTUS DIRECTIVE") MUST BE ADDRESSED TO QUALIFIED INVESTORS (AS DEFINED IN THE PROSPECTUS DIRECTIVE).

The notes will be ready for delivery in book-entry form through The Depository Trust Company and its participants, including Euroclear and Clearstream, Luxembourg, on or about September , 2012.

Joint Lead Managers and Joint Bookrunners

BB Securities Ltd.

Bradesco BBI

Citigroup

J.P. Morgan

Santander

The date of this prospectus supplement is September , 2012.

TABLE OF CONTENTS

Prospectus Supplement

<u>Enforcement of Civil Liabilities</u>	ii
<u>Prospectus Supplement Summary</u>	S-1
<u>Recent Developments</u>	S-6
<u>Risk Factors</u>	S-6
<u>Use of Proceeds</u>	S-8
<u>Capitalization</u>	S-9
<u>Description of the Notes</u>	S-10
<u>Certain Tax Considerations</u>	S-20
<u>Underwriting</u>	S-24
<u>Experts</u>	S-34
<u>Validity of the Notes</u>	S-34
<u>Incorporation of Certain Documents by Reference</u>	S-35

Prospectus

About this Prospectus	1
Forward Looking Statements	2
Vale S.A.	3
Vale Overseas Limited	3
Use of Proceeds	3
Legal Ownership of Debt Securities	4
Description of the Debt Securities	6
Description of the Guarantees	19
Experts	19
Validity of the Securities	19
Where You Can Find More Information	19
Incorporation of Certain Documents by Reference	20

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of each of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

ENFORCEMENT OF CIVIL LIABILITIES

A final conclusive judgment for the payment of money rendered by any New York State or federal court sitting in New York City in respect of the notes would be recognized in the courts of Brazil and such courts would enforce such judgment without any retrial or reexamination of the merits of the original action only if such judgment has been ratified by the Brazilian Superior Court of Justice (*Superior Tribunal de Justiça*). This ratification is available only if:

the judgment fulfills all formalities required for its enforceability under the laws of the State of New York;

the judgment was issued by a competent court either after proper service of process on the parties, which service of process if made in Brazil must comply with Brazilian law, or after sufficient evidence of the parties' absence has been given, as established pursuant to applicable law;

the judgment is not subject to appeal;

the judgment has been authenticated by a Brazilian consulate in the State of New York;

the judgment has been translated into Portuguese by a certified sworn translator; and

the judgment is not against Brazilian public policy, good morals or national sovereignty.

In addition:

Civil actions may be brought before Brazilian courts in connection with this prospectus supplement based on the federal securities laws of the United States, and Brazilian courts may enforce such liabilities in such actions against Vale (provided that the relevant provisions of the federal securities laws of the United States do not contravene Brazilian public policy, good morals or national sovereignty and provided further that Brazilian courts can assert jurisdiction over the particular action).

The ability of a judgment creditor to satisfy a judgment by attaching certain assets of the defendant is limited by Brazilian law. In addition, a Brazilian or foreign plaintiff who resides abroad or is abroad during the course of a suit in Brazil must post a bond to cover the legal fees and court expenses of the defendant, unless there are real estate assets in Brazil to assure payment thereof, except in case of execution actions or counterclaims as established under Article 836 of the Brazilian Code of Civil Procedure.

Notwithstanding the foregoing, no assurance can be given that ratification would be obtained, that the process described above could be conducted in a timely manner or that a Brazilian court would enforce a monetary judgment for violation of the U.S. securities laws with respect to the notes.

Table of Contents**PROSPECTUS SUPPLEMENT SUMMARY**

This summary highlights key information described in greater detail elsewhere, or incorporated by reference, in this prospectus supplement and the accompanying prospectus. You should read carefully the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein before making an investment decision. In this prospectus supplement, unless the context otherwise requires, references to "Vale," "we," "us" and "our" refer to Vale S.A., its consolidated subsidiaries, its joint ventures and other affiliated companies, taken as a whole.

We are the second-largest metals and mining company in the world and the largest in the Americas, based on market capitalization. We are the world's largest producer of iron ore and iron ore pellets and the world's second-largest producer of nickel. We also produce copper, metallurgical and thermal coal, phosphates, potash, manganese ore, ferroalloys, cobalt and platinum group metals (PGMs). To support our growth strategy, we are actively engaged in mineral exploration efforts in 27 countries around the globe. We operate large logistics systems in Brazil and other regions of the world, including railroads, maritime terminals and ports, which are integrated with our mining operations. In addition, we have a maritime freight portfolio to transport iron ore. Directly and through affiliates and joint ventures, we have investments in energy and steel businesses.

The following table presents the breakdown of our total gross operating revenues attributable to each of our main lines of business.

		Year ended December 31,				Six months ended June 30,					
		2009		2010		2011		2011		2012	
		US\$ million				US\$ million (unaudited)					
Bulk materials:											
Iron ore	US\$	12,831	US\$	26,384	US\$	35,008	US\$	16,389	US\$	12,492	
Iron ore pellets		1,352		6,402		8,150		4,000		3,659	
Manganese		145		258		171		95		105	
Ferroalloys		372		664		561		307		253	
Coal		505		770		1,058		410		665	
Subtotal bulk materials	US\$	15,205	US\$	34,478	US\$	44,948	US\$	21,201	US\$	17,174	
Base metals:											
Nickel and other products(1)	US\$	3,947	US\$	4,712	US\$	8,118	US\$	4,081	US\$	3,099	
Copper(2)		682		934		1,126		515		457	
Aluminum(3)		2,050		2,554		383		383			
Subtotal base metals	US\$	6,679	US\$	8,200	US\$	9,627	US\$	4,979	US\$	3,556	
Fertilizer nutrients		413		1,846		3,547		1,654		1,752	
Logistics services		1,104		1,465		1,726		804		811	
Other products and services		538		492		541		255		196	
Total gross operating revenues	US\$	23,939	US\$	46,481	US\$	60,389	US\$	28,893	US\$	23,489	

(1) Includes nickel co-products and by-products (copper, precious metals, cobalt and others).

(2) Does not include copper produced as a nickel co-product.

(3)

Reflects aluminum operations sold in February 2011.

S-1

Table of Contents

Bulk materials:

Iron ore and iron ore pellets. We operate four systems in Brazil for producing and distributing iron ore, which we refer to as the Northern, Southeastern, Southern and Midwestern systems. The Northern and the Southeastern Systems are fully integrated, consisting of mines, railroads, a maritime terminal and a port. The Southern System consists of three mining sites and two maritime terminals. We operate 10 pellet plants in Brazil and two in Oman, which are ramping up. We also have a 50% stake in a joint venture that owns three integrated pellet plants in Brazil and a 25% stake in two pellet companies in China.

Manganese and ferroalloys. We conduct our manganese mining operations through subsidiaries in Brazil, and we produce several types of manganese ferroalloys through a wholly-owned subsidiary in Brazil.

Coal. We produce metallurgical and thermal coal through Vale Moçambique, which operates assets in Mozambique and Vale Australia Holdings, which operates coal assets in Australia through wholly-owned subsidiaries and unincorporated joint ventures. In Mozambique, we are ramping up operations in Moatize, which includes both metallurgical and thermal coal. We also have minority interests in Chinese coal and coke producers.

Base metals:

Nickel. Our main nickel mines and processing operations are conducted by our wholly-owned subsidiary Vale Canada, which has mining operations in Canada and Indonesia. We own and operate, or have interests in, nickel refining facilities in the United Kingdom, Japan, Taiwan, South Korea and China. We have temporarily interrupted the ramp-up of our nickel operations at Onça Puma, in Brazil, and in New Caledonia. For more information about these interruptions, see "Recent Developments."

Copper. In Brazil, we produce copper concentrates at Sossego in Carajás, in the state of Pará. In Canada, we produce copper concentrates, copper anodes and copper cathodes in conjunction with our nickel mining operations at Sudbury and Voisey Bay. In Chile, we produce copper cathodes at the Tres Valles operation, located in the Coquimbo region.

Aluminum. We hold a 22.0% interest in Norsk Hydro ASA (Hydro), a major aluminum producer. In the past, we engaged in bauxite mining, alumina refining and aluminum smelting through subsidiaries in Brazil, which we transferred to Hydro in February 2011. We still own interests in two bauxite mining businesses, Mineração Rio do Norte S.A. (MRN) and Mineração Paragominas S.A. (Paragominas). We will transfer our remaining interest in Paragominas to Hydro in two equal tranches in 2014 and 2016, each in exchange for US\$200 million, subject to certain contingent adjustments. Both MRN and Paragominas are located in Brazil.

Cobalt. We produce cobalt as a by-product of our nickel mining and processing operations in Canada and refine the majority of it at our Port Colborne facilities, in the Province of Ontario, Canada. We intend to produce cobalt as a by-product of our nickel operations in New Caledonia, which we expect to be commissioned and ready to operate by the fourth quarter of 2012.

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

Table of Contents

Other precious metals. We produce gold and silver as by-products of our nickel and copper mining and processing operations in Canada, and gold as a by-product of our copper mining in Brazil. Some of the precious metals from Canadian operations are upgraded at our Port Colborne facilities, and all these precious metals are refined by unrelated parties in Canada.

Fertilizer nutrients: We produce potash in Brazil, with operations in Rosario do Catete, in the state of Sergipe. Our main phosphate operations are conducted by our subsidiary Vale Fertilizantes S.A. (Vale Fertilizantes), which holds the majority of our fertilizer assets in Brazil and is the largest Brazilian producer of phosphate rock, phosphate and nitrogen fertilizers. In addition, we are ramping up operations at Bayóvar, a phosphate rock mine in Peru.

Logistics: We are a leading operator of logistics services in Brazil and other regions of the world, with railroads, maritime terminals and ports. Two of our four iron ore systems incorporate an integrated railroad network linked to automated port and terminal facilities, which provide rail transportation for our mining products, general cargo and passengers, bulk terminal storage, and ship loading services for our mining operations and for customers. We also own a majority stake in Sociedade de Desenvolvimento do Corredor de Nacala S.A. (SDCN), with railroads in Malawi and Mozambique, and have plans to construct a world-class logistics infrastructure to support our operations in Central and Eastern Africa. In addition, we have a rail concession for a 756-kilometer railroad to provide support to our Rio Colorado potash project in Argentina. We conduct seaborne dry bulk shipping and provide tug boat services. We own and charter vessels to transport the iron ore that we sell on a cost and freight basis to customers. Our tug boat services provide an efficient and safe towing service at our terminals in Brazil. We also own a 31.3% interest in Log-In Logística Intermodal S.A. (Log-In), which provides intermodal logistics services in Brazil, Argentina and Uruguay, and a 45.8% interest in MRS Logística S.A. (MRS), which transports our iron ore products from the Southern System mines to our Guaíba Island and Itaguaí maritime terminals, in the state of Rio de Janeiro.

Table of Contents

The Offering

The following summary contains basic information about the notes and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the notes, please refer to the section entitled "Description of the Notes" in this prospectus supplement and the section entitled "Description of the Debt Securities" in the accompanying prospectus. In this description of the offering, references to Vale mean Vale S.A. only and do not include any of Vale's subsidiaries or affiliated companies.

Issuer	Vale S.A.
Notes offered	US\$ aggregate principal amount of % Notes due 2042.
Issue price	% of the principal amount.
Maturity	September , 2042.
Interest rate	The notes will bear interest at the rate of % per annum from September , 2012 based upon a 360-day year consisting of twelve 30-day months.
Interest payment dates	Interest on the notes will be payable semi-annually on March and September of each year, beginning March , 2013.
Ranking	The notes are general obligations of Vale and are not secured by any collateral. Your right to payment under these notes will be: junior to the rights of secured creditors of Vale to the extent of their interest in Vale's assets; equal with the rights of creditors under all of Vale's other unsecured and unsubordinated debt; and effectively subordinated to the rights of any creditor of a subsidiary of Vale over the assets of that subsidiary.
Covenants	The indenture governing the notes contains restrictive covenants that, among other things and subject to certain exceptions, limit Vale's ability to merge or transfer assets, and incur liens. For a more complete description of these covenants, see "Description of the Notes Covenants" in this prospectus supplement and "Description of the Debt Securities Certain Covenants" in the accompanying prospectus.
Further issuances	Vale reserves the right, from time to time, without the consent of the holders of the notes, to issue additional notes on terms and conditions identical to those of the notes, which additional notes shall increase the aggregate principal amount of, and shall be consolidated and form a single series with, the series of notes offered hereby; <i>provided</i> that, for U.S. federal income tax purposes, the additional notes either (i) are issued with no more than a <i>de minimis</i> amount of original issue discount or (ii) are issued in a qualified reopening. Vale may also issue other securities under the indenture which have different terms and conditions from the notes.

Edgar Filing: Vale S.A. - Form 424B2

Table of Contents

Payment of additional amounts	Vale will pay additional amounts in respect of any payments under the notes so that the amount you receive after Brazilian withholding tax will equal the amount that you would have received if no withholding tax had been applicable, subject to some exceptions as described under "Description of the Debt Securities Payment of Additional Amounts" in the accompanying prospectus.
Optional redemption	Vale may redeem the notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed and a "make whole" amount described under "Description of the Notes Optional Redemption" in this prospectus supplement plus accrued and unpaid interest on such notes to the date of redemption.
Tax redemption	If, due to changes in Brazilian law relating to withholding taxes applicable to payments of interest, Vale is obligated to pay additional amounts on the notes in respect of Brazilian withholding taxes at a rate in excess of 15%, Vale may redeem the notes in whole, but not in part, at any time, at a price equal to 100% of their principal amount plus accrued interest to the redemption date.
Use of proceeds	We intend to use the net proceeds of this offering for general corporate purposes. See "Use of Proceeds".
Listing	Application will be made to list the notes on the New York Stock Exchange
Form and denomination	The notes will be issued only in registered form in minimum denominations of US\$2,000 and integral multiples of US\$1,000 in excess thereof.
Risk factors	See "Risk Factors" and the other information included and incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before investing in the notes.
Governing Law Trustee and Agents	New York The Bank of New York Mellon, as trustee, registrar, paying agent and transfer agent; and The Bank of New York Mellon Trust (Japan), Ltd, as principal paying agent.
Common Code	
CUSIP	
ISIN	

Table of Contents

RECENT DEVELOPMENTS

For a discussion of our results of operations for the six-month period ended June 30, 2012 and recent material developments, see our report on Form 6-K furnished to the SEC on the date hereof, which is incorporated by reference in this prospectus supplement and other reports on Form 6-K listed under "Incorporation of Certain Documents by Reference".

RISK FACTORS

The following are certain risk factors relating to the notes and risks relating to our business. The risks relating to our business are more fully set forth in our annual report on Form 20-F for the year ended December 31, 2011, which is incorporated by reference in this prospectus supplement. You should carefully consider these risks and the risks described below, as well as the other information included or incorporated by reference in this prospectus supplement or the accompanying prospectus, before making a decision to invest in the notes.

Risks Relating to the Notes

Vale's subsidiaries, affiliated companies and joint ventures are not obligated under the notes, and these companies' obligations to their own creditors will effectively rank ahead of Vale's obligations under the notes.

Vale conducts a significant amount of business through subsidiaries, affiliated companies and joint ventures, none of which are obligated under the notes. At June 30, 2012, the subsidiaries were responsible for approximately 30% of Vale's consolidated U.S. GAAP revenues from operations and approximately 19% of Vale's consolidated U.S. GAAP net cash flows provided by operating activities. The claims of any creditor of a subsidiary, affiliated company or joint venture of Vale would rank ahead of Vale's ability to receive dividends and other cash flows from these companies. As a result, claims of these creditors would rank ahead of Vale's ability to access cash from these companies in order to satisfy its obligations under the notes. In addition, these subsidiaries, affiliated companies and joint ventures may be restricted by their own loan agreements, governing instruments and other contracts from distributing cash to Vale to enable Vale to perform its obligations under the notes. At June 30, 2012, 9% of Vale's consolidated U.S. GAAP liabilities were owed by subsidiaries of Vale, which is the only obligor under the notes, meaning that the creditors under these liabilities would rank ahead of investors in the notes in the event of Vale's insolvency. The indenture governing the notes contains restrictions on the conduct of business by Vale, including limits on its ability to grant liens over its assets for the benefit of other creditors. These restrictions do not apply to Vale's subsidiaries, affiliated companies and joint ventures, and these companies are not limited by the indenture in their ability to pledge their assets to other creditors.

There may not be a liquid trading market for the notes.

The notes are an issuance of new securities with no established trading market. There can be no assurance that a liquid trading market for the notes will develop or, if one develops, that it will be maintained. If an active market for the notes does not develop, the price of the notes and the ability of a holder of notes to find a ready buyer will be adversely affected.

Table of Contents

We may not be able to make payments in U.S. dollars.

In the past, the Brazilian economy has experienced balance of payment deficits and shortages in foreign exchange reserves, and the government has responded by restricting the ability of Brazilian or foreign persons or entities to convert reais into foreign currencies generally, and U.S. dollars in particular. The government may institute a restrictive exchange control policy in the future. Any restrictive exchange control policy could prevent or restrict our access to U.S. dollars, and consequently our ability to meet our U.S. dollar obligations and could also have a material adverse effect on our business, financial condition and results of operations. We cannot predict the impact of any such measures on the Brazilian economy.

In case of bankruptcy, we would be required to pay amounts only in reais.

Any judgment obtained against Vale in the courts of Brazil in respect of any of Vale's payment obligations under the notes would be expressed in the *real* equivalent of the U.S. dollar amount of such sum. Accordingly, in case of bankruptcy, all credits held against Vale denominated in foreign currency would be converted into *reais* at the prevailing exchange rate on the date of declaration of bankruptcy by the judge. Further authorization by the Central Bank of Brazil would be required for the conversion of such *real*-denominated amount into foreign currency and for its remittance abroad.

Developments in other countries may affect prices for the notes.

The market value of securities of Brazilian companies is, to varying degrees, affected by economic and market conditions in other countries. Although economic conditions in such countries may differ significantly from economic conditions in Brazil, investors' reactions to developments in any of these other countries may have an adverse effect on the market value of securities of Brazilian issuers. For example, in October 1997, prices of both Brazilian debt securities and Brazilian equity securities dropped substantially, precipitated by a sharp drop in the value of securities in Asian markets. The market value of the notes could be adversely affected by events elsewhere, especially in emerging market countries.

Table of Contents

USE OF PROCEEDS

The aggregate proceeds of this global offering are expected to be approximately US\$ million, after deducting underwriting fees and estimated expenses payable by us. We intend to use the net proceeds for general corporate purposes.

S-8

Table of Contents**CAPITALIZATION**

The table below sets forth Vale's consolidated capitalization as at June 30, 2012 on an actual basis and as adjusted to reflect additional indebtedness incurred by Vale after June 30, 2012 as described below, and to give effect to the issuance of the notes offered hereby. You should read this table together with our consolidated financial statements and the notes thereto incorporated by reference in this prospectus supplement and the accompanying prospectus.

	At June 30, 2012			
	Actual		As adjusted	
	(US\$ million)		(unaudited)	
Debt included in current liabilities:				
Current portion of long-term debt		1,503		1,503
Short-term debt		503		503
Total debt included in current liabilities	US\$	2,006	US\$	2,006
Debt included in long-term liabilities:				
Long-term debt (excluding current portion):				
Secured		1,088		1,088
Unsecured		22,344		
Total long-term debt (excluding current portion)		23,432		
Total debt	US\$	25,438	US\$	
Stockholders' equity:				
Preferred shares 7,200,000,000 shares authorized and 2,108,579,618 issued		16,728		16,728
Common shares 3,600,000,000 shares authorized and 3,256,724,482 issued		25,837		25,837
Treasury shares 71,071,482 common and 140,857,692 preferred shares		(4,447)		(4,447)
Additional paid-in capital		(369)		(369)
Mandatorily convertible notes common shares				
Mandatorily convertible notes preferred shares				
Retained earnings:				
Undistributed		39,300		39,300
Unappropriated		10,973		10,973
Other cumulative comprehensive income (loss)		(7,698)		(7,698)
Total Company stockholders' equity		80,294		80,294
Non-controlling interests		1,613		1,613
Total stockholders' equity		81,907		81,907
Total capitalization (total stockholders' equity plus total debt included in long-term and current liabilities)	US\$	107,345	US\$	

Additional Indebtedness Incurred by Vale after June 30, 2012

On July 10, 2012, Vale issued €750,000,000 of 3.750% Notes due 2023.

Table of Contents

DESCRIPTION OF THE NOTES

The following description of the particular terms of the notes supplements the description of the general terms set forth in the accompanying prospectus under the heading "Description of the Debt Securities." It is important for you to consider the information contained in the accompanying prospectus and this prospectus supplement before making a decision to invest in the notes. If any specific information regarding the notes in this prospectus supplement is inconsistent with the more general terms of the notes described in the accompanying prospectus, you should rely on the information contained in this prospectus supplement. In this description and in the related section entitled "Description of the Debt Securities" in the accompanying prospectus, references to "Vale" mean Vale S.A. only and do not include any of Vale's subsidiaries or affiliated companies.

General

Vale will offer the notes under an indenture between Vale and The Bank of New York Mellon, as trustee, dated as of March 24, 2010, and a third supplemental indenture dated on or about the delivery date of the notes, among Vale and The Bank of New York Mellon, as trustee, registrar, paying agent and transfer agent and The Bank of New York Mellon Trust (Japan), Ltd., as principal paying agent. The notes will be issued only in fully registered form without coupons in minimum denominations of US\$2,000 and integral multiples of US\$1,000 in excess thereof. The notes will be unsecured and will rank equally with all of Vale's other existing and future unsecured and unsubordinated debt.

Principal and Interest

The % Notes due 2042 will be issued in an initial aggregate principal amount of US\$. The notes will mature on September , 2042. The notes will bear interest at % per annum from September , 2012. Interest on the notes will be payable semi-annually on March and September of each year, beginning March , 2013, to the holders in whose names the notes are registered at the close of business on , or , immediately preceding the related interest payment date.

Vale will pay interest on the notes on the interest payment dates stated above and at maturity. Each payment of interest due on an interest payment date or at maturity will include interest accrued from and including the last date to which interest has been paid or made available for payment, or from the issue date, if none has been paid or made available for payment, to but excluding the relevant payment date. Vale will compute interest on the notes on the basis of a 360-day year of twelve 30-day months.

If any payment is due on the notes on a day that is not a business day, Vale will make the payment on the day that is the next business day. Payments postponed to the next business day in this situation will be treated under the indenture as if they were made on the original due date. Postponement of this kind will not result in a default under the notes or the indenture, and no interest will accrue on the postponed amount from the original due date to the next day that is a business day.

Business day means each Monday, Tuesday, Wednesday, Thursday and Friday that is not a day on which banking institutions in New York City, São Paulo, Rio de Janeiro or Tokyo generally are authorized or obligated by law or executive order to close. With respect to notes in certificated form, the reference to business day will also mean a day on which banking institutions generally are open for business in the location of each office of a transfer agent, but only with respect to a payment or other action to occur at that office.

Table of Contents

Payment of Additional Amounts

Subject to the limitations and exceptions described in "Description of the Debt Securities Payment of Additional Amounts" in the accompanying prospectus, Vale will pay such additional amounts as may be necessary to ensure that the net amounts receivable by holders after withholding or deduction for taxes will equal the amounts that would have been payable in the absence of such withholding or deduction. See "Description of the Debt Securities Payment of Additional Amounts" in the accompanying prospectus.

Optional Redemption

We will not be permitted to redeem the notes before their stated maturity, except as set forth below. The notes will not be entitled to the benefit of any sinking fund, meaning that we will not deposit money on a regular basis into any separate account to repay your notes. In addition, you will not be entitled to require us to repurchase your notes from you before the stated maturity.

Optional Redemption with "Make-Whole" Amount

We will have the right at our option to redeem the notes, in whole at any time, or in part from time to time, prior to their maturity, on at least 30 days' but not more than 60 days' notice, at a redemption price equal to the greater of (1) 100% of the principal amount of the notes and (2) the sum of the present values of each remaining scheduled payment of principal and interest thereon (exclusive of interest accrued to the date of redemption) discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus basis points (the "Make-Whole Amount"), plus accrued interest on the principal amount of the notes to the date of redemption.

"Comparable Treasury Issue" means the U.S. Treasury security or securities selected by an Independent Investment Banker as having an actual or interpolated maturity comparable to the remaining term of the series of notes to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of a comparable maturity to the remaining term of such notes.

"Comparable Treasury Price" means, with respect to any redemption date (1) the average of the Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest such Reference Treasury Dealer Quotation or (2) if the Independent Investment Banker obtains fewer than four such Reference Treasury Dealer Quotations, the average of all such quotations.

"Independent Investment Banker" means one of the Reference Treasury Dealers appointed by us.

"Reference Treasury Dealer" means each of Citigroup Global Markets Inc. and J.P. Morgan Securities LLC, or their affiliates, which are primary United States government securities dealers and one other leading primary U.S. government securities dealer in New York City reasonably designated by us; provided, however, that if any of the foregoing shall cease to be a primary U.S. government securities dealer in New York City (a "Primary Treasury Dealer"), we will substitute therefor another Primary Treasury Dealer.

"Reference Treasury Dealer Quotation" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Independent Investment Banker, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Independent Investment Banker by such Reference Treasury Dealer at 3:30 pm New York time on the third business day preceding such redemption date.

Table of Contents

"Treasury Rate" means, with respect to any redemption date, the rate per annum equal to the semi-annual equivalent yield to maturity or interpolated maturity (on a day count basis) of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (such price expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

On and after the redemption date, interest will cease to accrue on the notes or any portion of the notes called for redemption (unless we default in the payment of the redemption price and accrued interest). On or before the redemption date, we will deposit with the trustee money sufficient to pay the redemption price of and (unless the redemption date shall be an interest payment date) accrued interest to the redemption date on the notes to be redeemed on such date. If less than all of the notes of any series are to be redeemed, the notes to be redeemed shall be selected by the trustee by such method as the trustee shall deem fair and appropriate.

Optional Tax Redemption

The notes are redeemable prior to maturity, upon the occurrence of certain changes in the tax laws of Brazil as a result of which Vale becomes obligated to pay additional amounts on the notes in respect of withholding taxes at a rate in excess of 15%, in which case Vale may redeem the notes in whole but not in part at a redemption price equal to 100% of the principal amount of the notes plus accrued interest to the redemption date. See "Description of the Debt Securities Optional Tax Redemption" in the accompanying prospectus.

Covenants

Holders of the notes will benefit from certain covenants contained in the indenture and affecting the ability of Vale to incur liens and merge with other entities. You should read the information under the heading "Description of the Debt Securities Certain Covenants" in the accompanying prospectus and the description below, which supersedes the section "Description of the Debt Securities Certain Covenants" Limitation on Liens" contained in the accompanying prospectus.

Limitation on Liens

Vale will not create, incur, issue or assume any mortgage, charge, pledge, lien, hypothecation, security interest or other encumbrance (each, a "lien") on or over any Restricted Property (as defined below) to secure Indebtedness (as defined in the accompanying prospectus), except for Permitted Liens (as defined below), without securing the outstanding notes equally and ratably therewith at the same time or prior thereto.

For the purposes of this covenant, "Permitted Liens" means any mortgage, charge, pledge, lien, hypothecation, security interest or other encumbrance:

granted upon or with regard to any Restricted Property acquired by Vale after the date of the issuance of the notes to secure the purchase price of such Restricted Property or to secure Indebtedness incurred solely for the purpose of financing the acquisition of such Restricted Property; *provided, however*, that the maximum sum secured thereby shall not exceed the purchase price of such Restricted Property or the Indebtedness incurred solely for the purpose of financing the acquisition of such Restricted Property;

Table of Contents

granted upon or with regard to any Restricted Property (including any improvements on or to an existing Restricted Property) after the date of the issuance of the notes to secure the payment of all or any part of the cost of development, expansion or construction of or improvement on or to such Restricted Property or to secure Indebtedness incurred solely for the purpose of financing all or any part of the cost of development, expansion or construction of or improvements on or to such Restricted Property; *provided, however*, that the maximum sum secured thereby shall not exceed the higher of cost or fair market value of that development, expansion, construction or improvement;

in existence on the date of the issuance of the notes and any extension, renewal or replacement thereof; *provided, however*, that the total amount of Indebtedness so secured shall not exceed the amount so secured on the date of the issuance of the notes;

arising by operation of law, such as tax, merchants', maritime or other similar liens arising in the ordinary course of business of Vale;

arising in the ordinary course of business in connection with the financing of export, import or other trade transactions to secure Indebtedness of Vale;

securing or providing for the payment of Indebtedness incurred for the purpose of financing all or a part of the ownership, acquisition, construction, development or operation of any project by Vale, any subsidiary of Vale or any consortium or other venture in which Vale has any ownership or other similar interest; provided that such lien only extends to (a) Restricted Properties (which may include existing Restricted Properties at any pre-existing site selected for expansion and any concession, authorization or other legal right granted by any governmental authority) which are the subject of such project financing, (b) any revenues from such Restricted Properties, (c) any proceeds from claims belonging to Vale, any subsidiary of Vale or any consortium or other venture in which Vale has any ownership or other similar interest which arise from the operation, failure to meet specifications, failure to complete, exploitation, sale or loss of, or damage to, such Restricted Property, or (d) shares or other ownership interest in, and any subordinated debt claims against, the project entity whose principal assets and business are constituted by such project;

granted upon or with regard to any present or future Restricted Property of Vale to secure borrowings from, or funded directly or indirectly by, or effected indirectly through intermediaries by, (i) any Brazilian governmental credit agency (including, but not limited to the Brazilian National Treasury, Banco Nacional de Desenvolvimento Econômico e Social, BNDES Participações S.A., Financiadora de Estudos e Projetos and Agência Especial de Financiamento Industrial); (ii) any Brazilian official financial institutions (including, but not limited to Banco da Amazônia S.A. BASA and Banco do Nordeste do Brasil S.A. BNB); (iii) any non-Brazilian official export-import bank or official export-import credit insurer; or (iv) the International Finance Corporation or any non-Brazilian multilateral or government-sponsored agency;

existing on any asset prior to the acquisition thereof by Vale, whether by merger, consolidation, purchase of assets or otherwise, and not created in contemplation of such acquisition;

created over funds reserved for the payment of principal, interest and premium, if any, due in respect of the notes; or

granted after the date of the indenture upon or in respect of any asset of Vale other than those referred to above, provided that the aggregate amount of Indebtedness secured pursuant to this exception shall not, on the date any such Indebtedness is incurred, exceed an amount equal to 10% of Vale's stockholders' equity (calculated on the basis of Vale's latest quarterly unaudited or annual audited non-consolidated financial statements, whichever is the most recently prepared, in accordance with accounting principles generally accepted in Brazil and currency exchange rates prevailing on the last day of the period covered by such financial statements).

Table of Contents

For the purposes of this covenant, "Restricted Property" means (a) the interest of Vale in any (i) mineral property or concession, authorization or other legal right granted in respect of minerals by any governmental authority, (ii) manufacturing or processing plant, building, structure or other facility used in connection with the processing, refining or manufacturing of minerals, metals or fertilizer nutrients, together with the land upon which it is erected and fixtures comprising a part thereof, or (iii) railroad, marine terminal or port, whether owned as of the date of the issuance of the notes or thereafter acquired or constructed and (b) any shares of capital stock owned by Vale of a subsidiary that has interests in the kinds of property described in clauses (i), (ii) or (iii) of (a) above.

For the purposes of this covenant, "subsidiary" means an entity of which Vale directly or indirectly owns more than 51% of the outstanding voting shares and Vale has the ability to elect a majority of the members of the board of directors or other governing body.

Events of Default

Holders of the notes will have special rights if an event of default occurs. You should read the information under the heading "Description of the Debt Securities Events of Default" in the accompanying prospectus along with the descriptions below that supersede the corresponding information in the accompanying prospectus.

In the second bullet under the heading "Description of the Debt Securities Events of Default What Is an Event of Default?", the reference to "US\$50 million" is replaced by "US\$100 million", as follows:

in relation to Vale, its significant subsidiaries and (in the case of securities issued under the Vale Overseas indenture) Vale Overseas: any default or event of default occurs and is continuing under any agreement, instrument or other document evidencing outstanding Indebtedness in excess of US\$100 million in aggregate (or its equivalent in other currencies) and such default or event of default results in the actual acceleration of such Indebtedness;

In the fifth bullet under the heading "Description of the Debt Securities Events of Default What Is an Event of Default?", the reference to "US\$50,000,000" is replaced by "US\$100 million", as follows:

any illegality event occurring and continuing under any of Vale Overseas's debt securities outstanding as of November 13, 2006 in excess of US\$100 million in aggregate, which results in the actual acceleration of such debt securities;

In the second paragraph under the heading "Description of the Debt Securities Events of Default Waiver of Default", the sentence "In addition, Vale and Vale Overseas, as applicable, will notify the trustee within 15 days after becoming aware of the occurrence of any event of default (Section 10.4)" is deleted.

Further Issuances

Vale reserves the right to issue, from time to time, without the consent of the holders of the notes, additional notes on terms and conditions identical to those of the notes, which additional notes shall increase the aggregate principal amount of, and shall be consolidated and form a single series with, the notes; *provided* that for U.S. federal income tax purposes the additional notes either (i) are issued with no more than a *de minimis* amount of original issue discount or (ii) are issued in a qualified reopening.

Vale may also issue other securities under the indenture that have different terms from the notes. Vale has the right, without the consent of the holders, to guarantee debt of its subsidiaries.

Table of Contents

Governing Law

The indenture and the notes will provide that they shall be governed by New York Law.

Transfer Agent

Vale may appoint one or more financial institutions to act as its transfer agents, at whose designated offices the notes in certificated form must be surrendered before payment is made at their maturity. Each of those offices is referred to as a transfer agent. The initial transfer agent is the trustee, at its corporate trust office. Vale may add, replace or terminate transfer agents from time to time, provided that if any notes are issued in certificated form, so long as such notes are outstanding, Vale will maintain a transfer agent in New York City. Vale must notify you of changes in the transfer agents pursuant to the provisions described under "Description of the Debt Securities Notices" in the accompanying prospectus. If Vale issues notes in certificated form, holders of notes in certificated form will be able to transfer their notes, in whole or in part, by surrendering the notes, with a duly completed form of transfer, for registration of transfer at the office of the transfer agent. Vale will not charge any fee for the registration for transfer or exchange, except that Vale may require the payment of a sum sufficient to cover any applicable tax or other governmental charge payable in connection with the transfer.

Book-Entry Ownership, Denomination and Transfer Procedures for the Notes

The following description of the operations and procedures of DTC, Euroclear and Clearstream, Luxembourg supplements the description contained under the heading "Legal Ownership of Debt Securities" in the accompanying prospectus and is provided to you solely as a matter of convenience. You should read this section in conjunction with the information provided in the accompanying prospectus. These operations and procedures are solely within the control of the respective settlement systems and are subject to change from time to time. Vale takes no responsibility for these operations and procedures and urges you to contact the systems or their participants directly to discuss these matters.

Vale will make an application to DTC for acceptance in its book-entry settlement system of the notes, which will be in global form. The notes will be deposited with The Bank of New York Mellon, as custodian. The custodian and DTC will electronically record the principal amount of the notes held within the DTC system. Investors may hold such interests directly through DTC if they are participants in such system, or indirectly through organizations that are participants in DTC, such as Euroclear and Clearstream, Luxembourg.

Ownership of beneficial interests in the notes will be limited to persons who have accounts with DTC, whom we refer to as DTC participants, or persons who hold interests through DTC participants. We expect that under procedures established by DTC:

upon deposit of the notes with DTC's custodian, DTC will credit portions of the principal amount of the notes to the accounts of the DTC participants designated by the underwriters, and

ownership of beneficial interests in the notes will be shown on, and transfer of ownership of those interests will be effected only through records maintained by DTC (with respect to interests of DTC participants) and the records of DTC participants (with respect to other owners of beneficial interests in the notes).

Table of Contents

As long as DTC or its nominee is the registered holder of the notes, DTC or its nominee will be considered the sole owner and holder of the notes for all purposes under the indenture and the notes. Except as described above, if you hold a book-entry interest in the notes in global form, you:

will not have notes registered in your name,

will not receive physical delivery of notes in certificated form, and

will not be considered the registered owner or holder of an interest in the notes under the indenture or the notes.

As a result, each investor who owns a beneficial interest in the notes must rely on the procedures of DTC to exercise any rights of a holder under the indenture (and, if the investor is not a participant or an indirect participant in DTC, on the procedures of the DTC participant through which the investor owns its interest).

Payments of the principal of, and interest on, the notes registered in the name of DTC's nominee will be to the order of its nominee as the registered owner of such notes. It is expected that the nominee, upon receipt of any such payment, will immediately credit DTC participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the notes as shown on the records of DTC or the nominee. Vale also expects that payments by DTC participants to owners of beneficial interests in the notes held through such DTC participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such DTC participants. Neither Vale, the trustee nor any agent of the trustee will have any responsibility or liability for any aspect of the records relating to or payments made on account of ownership interests in the notes or for maintaining, supervising or reviewing any records relating to such ownership interests.

Because DTC or its nominee will be the only registered owner of the notes, Euroclear and Clearstream, Luxembourg will hold positions through their respective U.S. depositaries, which in turn will hold positions on the books of DTC.

Cross-market transfers between DTC, on the one hand, and directly or indirectly through Euroclear or Clearstream, Luxembourg accountholders, on the other, will be effected through DTC in accordance with DTC rules on behalf of Euroclear or Clearstream, Luxembourg, as the case may be, by their respective U.S. depositaries. However, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, Luxembourg, as the case may be, by the counterparty in such system in accordance with its rules and procedures and within its established deadlines. Euroclear or Clearstream, Luxembourg, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its respective U.S. depositary to take action to effect final settlement on its behalf by delivering or receiving beneficial interests in the notes to or from DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to DTC. Euroclear and Clearstream, Luxembourg accountholders may not deliver instructions directly to the U.S. depositaries for Euroclear or Clearstream, Luxembourg.

On or after the Closing Date, transfers between accountholders in Euroclear and Clearstream, Luxembourg and transfers between participants in DTC will generally have a settlement date three business days after the trade date (T+3). The customary arrangements for delivery versus payment will apply to such transfers.

Table of Contents

Cross-market transfers between accountholders in Euroclear or Clearstream, Luxembourg and DTC participants will need to have an agreed settlement date between the parties to such transfer. However, as a result of time-zone differences, securities received in Euroclear or Clearstream, Luxembourg as a result of a transaction with a DTC participant will be credited to the relevant account at Euroclear or Clearstream, Luxembourg during the securities settlement processing day that is the fourth business day (T+4) following the DTC settlement date. Similarly, cash received in Euroclear or Clearstream, Luxembourg as a result of a sale of securities by or through a Euroclear or Clearstream, Luxembourg accountholder to a DTC participant will be available in the relevant Euroclear or Clearstream, Luxembourg cash account only on the fourth business day (T+4) following the DTC settlement date. In the case of cross-market transfers, settlement between Euroclear or Clearstream, Luxembourg accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately.

DTC has advised us that it will take any action permitted to be taken by a holder of notes (including, without limitation, the presentation of notes for exchange as described above) only at the direction of one or more participants in whose account with DTC interests in notes are credited and only in respect of such portion of the aggregate principal amount of the notes as to which such participant or participants has or have given such direction. However, in the circumstances described below, DTC will surrender the notes for exchange for individual definitive notes.

DTC has advised us as follows: DTC is a limited purpose trust company organized under the laws of the State of New York, a "banking organization" under the laws of the State of New York, a member of the U.S. Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC was created to hold securities for its participants and facilitate the clearance and settlement of securities transactions between participants through electronic computerized book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of certificates. Direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Indirect access to DTC is available to others, such as banks, securities brokers, dealers and trust companies, that clear through or maintain a custodial relationship with a DTC direct participant, either directly or indirectly.

Clearstream, Luxembourg

Clearstream, Luxembourg was incorporated as a limited liability company under Luxembourg law. Clearstream, Luxembourg holds securities for its customers and facilitates the clearance and settlement of securities transactions between Clearstream, Luxembourg customers through electronic book-entry changes in accounts of Clearstream, Luxembourg customers, thus eliminating the need for physical movement of certificates. Clearstream, Luxembourg provides to its customers, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream, Luxembourg interfaces with domestic markets in a number of countries. Clearstream, Luxembourg has established an electronic bridge with Euroclear Bank S.A./N.V., the operator of the Euroclear System, to facilitate settlement of trades between Euroclear and Clearstream, Luxembourg.

As a registered bank in Luxembourg, Clearstream, Luxembourg is subject to regulation by the Luxembourg Commission for the Supervision of the Financial Sector. Clearstream, Luxembourg customers are recognized financial institutions around the world, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. In the United States, Clearstream, Luxembourg customers are limited to securities brokers and dealers and banks. Clearstream, Luxembourg customers may include the underwriters. Other institutions that maintain a custodial relationship with a Clearstream, Luxembourg customer may obtain indirect access to Clearstream, Luxembourg. Clearstream, Luxembourg is an indirect participant in DTC.

Table of Contents

Distribution with respect to the notes held beneficially through Clearstream, Luxembourg will be credited to cash accounts of Clearstream, Luxembourg customers in accordance with its rules and procedures, to the extent received by Clearstream, Luxembourg.

The Euroclear System

The Euroclear System was created in 1968 to hold securities for participants of the Euroclear System and to clear and settle transactions between Euroclear participants through simultaneous electronic book-entry delivery against payment, thus eliminating the need for physical movement of certificates and risk from lack of simultaneous transfers of securities and cash. Transactions may now be settled in many currencies, including United States dollars and Euros. The Euroclear System provides various other services, including securities lending and borrowing and interfaces with domestic markets in several countries in a manner generally similar to the arrangements for cross-market transfers with DTC described above.

The Euroclear System is operated by Euroclear Bank S.A./N.V. (the "Euroclear Operator"), under contract with Euroclear Clearance System, S.C., a Belgian cooperative corporation (the "Cooperative"). The Euroclear Operator conducts all operations, and all Euroclear securities clearance accounts and Euroclear cash accounts are accounts with the Euroclear Operator, not the Cooperative. The Cooperative establishes policy for the Euroclear system on behalf of Euroclear participants. Euroclear participants include banks (including central banks), securities brokers and dealers and other professional financial intermediaries and may include the underwriters. Indirect access to the Euroclear System is also available to other firms that clear through or maintain a custodial relationship with a Euroclear participant, either directly or indirectly. Euroclear is an indirect participant in DTC.

The Terms and Conditions Governing Use of Euroclear and the related Operating Procedures of the Euroclear System and applicable Belgian law govern securities clearance accounts and cash accounts with the Euroclear Operator. Specifically, these terms and conditions govern:

transfers of securities and cash within the Euroclear System;

withdrawal of securities and cash from the Euroclear System; and

receipts of payments with respect to securities in the Euroclear System.

All securities in the Euroclear System are held on a fungible basis without attribution of specific certificates to specific securities clearance accounts. The Euroclear Operator acts under the Terms and Conditions only on behalf of Euroclear participants and has no record of or relationship with persons holding securities through Euroclear participants.

Distributions with respect to notes held beneficially through Euroclear will be credited to the cash accounts of Euroclear participants in accordance with the Euroclear Terms and Conditions, to the extent received by the Euroclear Operator.

The foregoing information about DTC, Euroclear and Clearstream, Luxembourg has been provided by each of them for information purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

Table of Contents

Although DTC, Euroclear and Clearstream, Luxembourg have agreed to the foregoing procedures in order to facilitate transfers of beneficial interests in the notes among participants and accountholders of DTC, Euroclear and Clearstream, Luxembourg, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither Vale, nor the trustee nor any of the trustee's agents will have any responsibility for the performance by DTC, Euroclear or Clearstream, Luxembourg or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations.

While a note in global form is lodged with DTC or the custodian, notes represented by individual definitive notes will not be eligible for clearing or settlement through DTC, Euroclear or Clearstream, Luxembourg.

Individual Definitive Notes

Registration of title to notes in a name other than DTC or its nominee will not be permitted unless (i) DTC has notified us that it is unwilling or unable to continue as depositary for the notes in global form or the depositary ceases to be a clearing agency registered under the Securities Exchange Act of 1934, as amended, at a time when DTC is required to be so registered in order to act as depositary, and, in each case, we do not or cannot appoint a successor depositary within 90 days or (ii) Vale decides in its sole discretion to allow some or all book-entry notes to be exchangeable for definitive notes in registered form. In such circumstances, Vale will cause sufficient individual definitive notes to be executed and delivered to the registrar for completion, authentication and dispatch to the relevant holders of notes. Payments with respect to definitive notes may be made through the transfer agent. A person having an interest in the notes in global form must provide the registrar with a written order containing instructions and such other information as the registrar and we may require to complete, execute and deliver such individual definitive notes.

If Vale issues notes in certificated form, holders of notes in certificated form will be able to transfer their notes, in whole or in part, by surrendering the notes, with a duly completed form of transfer, for registration of transfer at the office of the transfer agent, The Bank of New York Mellon. Vale will not charge any fee for the registration or transfer or exchange, except that it may require the payment of a sum sufficient to cover any applicable tax or other governmental charge payable in connection with the transfer.

All money paid by Vale to the paying agents for the payment of principal and interest on the notes which remains unclaimed at the end of two years after the amount is due to a holder will be repaid to Vale, and thereafter holders of notes in certificated form may look only to Vale for payment.

Table of Contents

CERTAIN TAX CONSIDERATIONS

The following discussion summarizes certain Brazilian and U.S. federal income tax considerations that may be relevant to the ownership and disposition of the notes acquired in this offering for the original price. This summary is based on the tax laws and regulations now in effect in Brazil and laws, regulations, rulings and decisions now in effect in the United States, any of which may change. Any change could apply retroactively and could affect the continued accuracy of this summary.

This summary does not describe all of the tax considerations that may be relevant to you or your situation, particularly if you are subject to special tax rules. You should consult your tax advisors about the tax consequences of holding the notes, including the relevance to your particular situation of the considerations discussed below, as well as of state, local and other tax laws.

Brazilian Tax Considerations

The following discussion is a general description of certain Brazilian tax aspects of an investment in the notes applicable to a holder who is an individual, a company, a trust, an organization or any other entity considered as resident or domiciled outside Brazil for tax purposes (a "Non-resident Holder"). The information set forth below is intended to be a general discussion only and does not address all possible tax consequences relating to an investment in the notes. Prospective investors should consult their own tax advisers as to the consequences of purchasing the notes, including, without limitation, the consequences of the receipt of interest and the sale, redemption or repayment of the notes.

Payments under the Notes

Generally, Non-resident Holders are taxed in Brazil when their income is derived from Brazilian sources. The applicability of Brazilian taxes with respect to payments on the notes will depend on the origin of such payments and on the domicile of the beneficiaries thereof.

Interest, fees, commissions (including any original issue discount and any redemption premium) and any other income payable by Vale to a Non-resident Holder in respect of the notes are subject to Brazilian withholding income tax at a rate of 15%, unless (i) another lower rate is provided for in a tax treaty between Brazil and the country where the Non-resident Holder is domiciled; or (ii) the Non-resident Holder is domiciled in a country or jurisdiction that does not impose any income tax or that imposes an income tax at a maximum rate of less than 20% or where the local legislation imposes restrictions on disclosing the shareholding composition or the ownership of the investment, in which case the applicable rate is 25% (a "Low Tax Jurisdiction").

Brazil and Japan are signatories to a treaty for the avoidance of double taxation that provides for a rate of 12.5% for withholding income tax in respect of interest payable pursuant to debt obligations. For this purpose, the principal paying agent must be granted discharge powers and be authorized to receive payments on behalf of the holders of the notes, which would release Vale from the payment obligations. If Vale is not entitled to rely on this treaty in connection with payments of interest under the notes, any such payments will be subject to Brazilian withholding income tax at the rates indicated in the previous paragraph.

Law No. 11,727, enacted in June 2008, broadened the concept of Low Tax Jurisdiction, also known as a "privileged tax regime", in the context of transactions subject to Brazilian transfer pricing rules. Due to the recent enactment of this law and the fact that implementing regulations have not been promulgated, it is not clear whether this privileged tax regime concept will also be applied to interest payments in respect of notes made to Non-resident Holders. Non-resident Holders are encouraged to consult their own tax advisors from time to time about the changes implemented by Law No. 11,727 and by any Brazilian tax law or regulation relating to the concept of a Low Tax Jurisdiction. If payments of interest on the notes made to a Non-resident Holder were subject to the privileged tax regime rules, the applicable rate on such payments would be 25%.

Table of Contents

Vale will, subject to certain exceptions, pay additional amounts in respect of such withholding or deduction so that the net amount received by the Non-resident Holder after such withholding or deduction equals the amount of principal or interest that would have been received in the absence of such withholding or deduction. However, Vale may redeem the notes in the event that it is obligated, as a result of a change in law, to pay additional amounts in respect of Brazilian withholding taxes at a rate in excess of 15%; see "Description of the Notes Payment of Additional Amounts" in this prospectus supplement and "Description of the Debt Securities Payment of Additional Amounts" in the accompanying prospectus.

Sale of the Notes

According to Article 26 of Law No. 10,833, enacted on December 29, 2003, capital gains realized on the disposition of assets located in Brazil by a non-resident to another non-resident made outside Brazil are subject to taxation in Brazil at a rate of 15% or 25%, depending on whether the beneficiary is resident of a Low Tax Jurisdiction under Brazilian law. Based on the fact that the notes are issued abroad and, therefore, may not fall within the definition of assets located in Brazil for purposes of Law No. 10,833, gains on the sale or other disposition of such notes made outside Brazil by a Non-resident Holder, other than a branch or a subsidiary of a Brazilian resident, to another non-resident might not be subject to Brazilian taxes. However, considering the general scope of Law No. 10,833 and the absence of judicial guidance in respect thereof, it is impossible to predict whether such interpretation will ultimately prevail in the Brazilian courts. If the position mentioned above does not prevail, gains realized by a Non-resident Holder from the sale or other disposition of the notes could be subject to Brazilian withholding income tax at a rate of 15% (or 25%, if the Non-resident Holder is domiciled in a Low Tax Jurisdiction).

Other Brazilian Taxes

Generally, there are no inheritance, gift, succession, stamp, or other similar taxes in Brazil with respect to the ownership, transfer, assignment or any other disposition of the notes by a Non-resident Holder, except for gift inheritance taxes imposed by some Brazilian states on gifts or bequests by individuals or entities not domiciled or residing in Brazil to individuals or entities domiciled or residing within such states.

United States Tax Considerations

The following summary sets forth certain U.S. federal income tax consequences of the purchase, ownership and disposition of the notes. This summary is based upon existing U.S. federal income tax law as of the date of this prospectus supplement, which is subject to change, possibly with retroactive effect, and different interpretations. This summary does not purport to discuss all aspects of U.S. federal income taxation which may be relevant to the particular circumstances of investors, and does not apply to investors subject to special tax rules, such as financial institutions, insurance companies, dealers in securities or currencies, traders in securities or currencies electing to mark their positions to market, regulated investment companies, U.S. expatriates, tax-exempt organizations, persons holding notes as part of a position in a "straddle" or as part of a hedging transaction, constructive sale or conversion transaction for U.S. tax purposes, or U.S. Holders (as defined below) whose functional currency is not the U.S. dollar. In addition, this summary does not discuss any foreign, state or local tax considerations, or any aspect of U.S. federal tax law other than income taxation. This summary only applies to holders that purchase notes at the initial issuance hereunder for an amount of cash equal to their issue price hereunder and that hold the notes as "capital assets" (generally, property held for investment) within the meaning of the U.S. Internal Revenue Code of 1986, as amended (the "Code").

Table of Contents

Prospective investors should consult their own tax advisers regarding the U.S. federal, state and local, as well as foreign income and other, tax considerations of investing in the notes.

For purposes of this summary, a U.S. Holder means a beneficial owner of notes who is (i) an individual who is a citizen or resident of the United States, (ii) a corporation created or organized in or under the laws of the United States, or any State thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, (iv) a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust or certain electing trusts that were in existence on August 20, 1996, and were treated as domestic trusts on August 19, 1996, or (v) otherwise subject to U.S. federal income tax on a net income basis.

If an entity treated as a partnership for U.S. federal income tax purposes holds notes, the tax treatment of a partner will generally depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold notes and partners in such partnerships should consult their tax advisers about the U.S. federal income tax consequences of purchasing, holding and disposing of notes.

Payments of Stated Interest

Payments of stated interest on the notes (including any additional amounts and withheld taxes) generally will be taxable to a U.S. Holder as ordinary income at the time that such payments are received or accrued in accordance with the U.S. Holder's usual method of accounting for U.S. federal income tax purposes. Interest income in respect of the notes generally will constitute foreign-source income for purposes of computing the foreign tax credit allowable under the U.S. federal income tax laws. The limitation on foreign income taxes eligible for credit is calculated separately with respect to specific classes of income. In this regard, interest income in respect of the notes will constitute "passive category income" for most U.S. Holders for foreign tax credit purposes.

Subject to generally applicable restrictions and conditions, if any foreign income taxes are withheld on interest payments on the notes, a U.S. Holder generally will be entitled to a foreign tax credit in respect of any such foreign income taxes. Alternatively, the U.S. Holder may deduct such taxes in computing taxable income provided that the U.S. Holder does not elect to claim a foreign tax credit for any foreign income taxes paid or accrued for the relevant taxable year. The rules regarding foreign tax credits and deduction of foreign income taxes are complex, so U.S. Holders should consult their own tax advisors regarding the availability of foreign tax credits or deductions in respect of foreign income taxes based on their particular circumstances.

Disposition of Notes

A U.S. Holder will generally recognize taxable gain or loss upon the sale, exchange, redemption, retirement or other taxable disposition of a note in an amount equal to the difference between the amount realized upon such sale, exchange, retirement or other disposition (reduced by an amount attributable to accrued but unpaid stated interest, which is taxable in the manner described above under " Payments of Stated Interest") and such U.S. Holder's adjusted tax basis in the note. A U.S. Holder's adjusted tax basis in a note will generally equal the cost of the note to such holder.

Gain or loss upon the sale, exchange, redemption, retirement or other taxable disposition of a note will generally be long-term capital gain or loss if the note is held for more than one year. Certain U.S. Holders (including individuals) may be eligible for preferential tax rates in respect of long-term capital gain. The deductibility of capital losses by U.S. Holders is subject to limitations.

Table of Contents

If any foreign income tax is withheld on the sale or other taxable disposition of a note, the amount realized by a U.S. Holder will include the gross amount of the proceeds of that sale or other taxable disposition before deduction of such tax. Capital gain or loss, if any, realized by a U.S. Holder on the sale or other taxable disposition of the notes generally will be treated as U.S.-source gain or loss for U.S. foreign tax credit purposes. Consequently, in the case of a gain from the disposition of a note that is subject to foreign income tax, the U.S. Holder may not be able to benefit from a foreign tax credit for the tax unless the U.S. Holder can apply the credit against U.S. federal income tax payable on other income from foreign sources. Alternatively, the U.S. Holder may take a deduction for the foreign income tax if the U.S. Holder does not elect to claim a foreign tax credit for any foreign income taxes paid during the taxable year.

Backup Withholding and Information Reporting

Payments of interest on the notes and sales or redemption proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting and to backup withholding unless (i) the holder is an exempt recipient or (ii) in the case of backup withholding, the holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

Any amounts withheld under the backup withholding rules from a payment to a holder will be refunded (or credited against such holder's U.S. federal income tax liability, if any), provided the required information is timely furnished to the U.S. Internal Revenue Service.

The U.S. federal income tax discussion set forth above is included for general information only and may not be applicable depending on a holder's particular situation. Holders should consult their tax advisers with respect to the tax consequences to them of the beneficial ownership and disposition of the notes, including the tax consequences under state, local, and foreign income and other tax laws and the possible effects of changes in U.S. federal and other tax laws.

Table of Contents

UNDERWRITING

Vale intends to offer the notes through BB Securities Ltd., Banco Bradesco BBI S.A., Citigroup Global Markets Inc., J.P. Morgan Securities LLC and Santander Investment Securities Inc., the underwriters. Subject to the terms and conditions contained in a terms agreement between the underwriters and Vale, Vale has agreed to sell to the underwriters and the underwriters have agreed to purchase, severally and not jointly, from Vale, the principal amount of the notes listed below opposite each of their names.

Underwriter	Principal Amount of Notes (US\$)
BB Securities Ltd.	
Banco Bradesco BBI S.A.	
Citigroup Global Markets Inc.	
J.P. Morgan Securities LLC	
Santander Investment Securities Inc.	

Total

The underwriters have agreed to purchase all of the notes sold pursuant to the terms agreement if any of these notes are purchased. If the underwriters default, the terms agreement provides that the purchase agreement may be terminated.

Neither Banco Bradesco BBI S.A. nor BB Securities Ltd. is a broker-dealer registered with the SEC, and therefore neither may make sales of any notes in the United States or to U.S. persons except in compliance with applicable U.S. laws and regulations. To the extent that Banco Bradesco BBI S.A. intends to effect sales of the notes in the United States, Banco Bradesco BBI S.A. will do so only through Bradesco Securities Inc., its selling agent, or one or more U.S. registered broker-dealers or otherwise as permitted by applicable U.S. law. Banco Bradesco BBI S.A. and Bradesco Securities Inc. are affiliates of Banco Bradesco S.A. To the extent that BB Securities Ltd. intends to effect sales of the notes in the United States, BB Securities Ltd. will do so only through Banco do Brasil Securities LLC, its selling agent, or one or more U.S. registered broker-dealers or otherwise as permitted by applicable U.S. law.

Vale has agreed to indemnify the underwriters against certain liabilities, including liabilities under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or to contribute to payments the underwriters may be required to make in respect of those liabilities.

Vale has agreed that it will not, during a period of 30 days from the date of this prospectus supplement, without the written consent of the underwriters, directly or indirectly, issue, sell, offer or contract to sell, grant any option or warrant for the sale of, or otherwise transfer or dispose of, any debt securities of Vale.

The underwriters are offering the notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the notes, and other conditions contained in the terms agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Table of Contents

We expect that delivery of the notes will be made against payment therefor on or about September , 2012, which will be the business day following the date of pricing of the notes (this settlement cycle being referred to as "T+ "). Under Rule 15c6-1 of the SEC under the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade on the date of pricing or the next succeeding business day will be required, by virtue of the fact that the notes initially will settle in T+ , to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of the notes who wish to trade the notes on the date of pricing or the next succeeding business day should consult their own advisor.

Commissions and Discounts

The underwriters have advised Vale that they propose initially to offer the notes to the public at the public offering price on the cover page of this prospectus supplement. After the initial public offering, the public offering price may be changed. The expenses of the offering, not including the underwriting discount, are estimated to be US\$ and are payable by Vale. The underwriters may offer and sell the notes through certain of their affiliates.

Trading Market

Application will be made to list the notes on the New York Stock Exchange in accordance with the rules and regulations of the New York Stock Exchange, subject to the satisfaction of its minimum listing standards. Vale does not intend to apply for listing of the notes on any other securities exchange or for quotation of the notes on any automated dealer quotation system. The underwriters have advised us that they presently intend to make a market in the notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of any trading market for the notes or that an active public market for the notes will develop. If an active public trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected.

Price Stabilization and Short Positions

In connection with the offering, the underwriters are permitted to engage in transactions that stabilize the market price of the notes. Such transactions consist of bids or purchases to peg, fix or maintain the price of the notes. If the underwriters create a short position in the notes in connection with the offering, i.e., if they sell more notes than are on the cover page of this prospectus, the underwriters may reduce that short position by purchasing notes in the open market. Purchases of a security to stabilize the price or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases.

Such stabilizing, if commenced, may be discontinued at any time and, if begun, must be brought to an end after a limited period. Any stabilization action must be conducted by the relevant dealers (or any persons acting on behalf of any dealers) in accordance with all applicable laws and rules.

Neither the underwriters nor we make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes. In addition, neither the underwriters nor we make any representation that the underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Selling Restrictions

The distribution of this prospectus supplement and the accompanying prospectus may be restricted by law in certain jurisdictions. Persons into whose possession this prospectus supplement and the accompanying prospectus come must inform themselves of and observe any of these restrictions.

Table of Contents

This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer or solicitation by anyone in any jurisdiction in which an offer or solicitation is not authorized or in which the person making an offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make an offer or solicitation.

EEA Selling Restrictions

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive (each, a "relevant member state"), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive (as defined below) is implemented in that relevant member state (the "relevant implementation date") it has not made and will not make an offer of the notes to the public in that relevant member state prior to the publication of a prospectus in relation to the notes which has been approved by the competent authority in that relevant member state or, where appropriate, approved in another relevant member state and notified to the competent authority in that relevant member state, all in accordance with the Prospectus Directive and the 2010 PD Amending Directive to the extent implemented, except that it may, with effect from and including the relevant implementation date, make an offer of the notes to the public in that relevant member state at any time:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented;
- (b) to fewer than (i) 100 natural or legal persons per relevant member state (other than qualified investors as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented) or (ii) if the relevant member state has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons per relevant member state (other than qualified investors as defined in the Prospectus Directive or the 2010 PD Amending Directive if the relevant provision has been implemented), subject to obtaining the prior consent of the relevant dealer or dealers nominated by the issuer for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive or Article 3(2) of the 2010 PD Amending Directive to the extent implemented.

For the purposes of this provision, the expression an "offer of the notes to the public," in relation to any notes in any relevant member state, means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe the notes, as the same may be varied in that member state by any measure implementing the Prospectus Directive in that member state, references to the "Prospectus Directive" means Directive 2003/71/EC, and include any relevant implementing measure in the relevant member state, and references to the "2010 PD Amending Directive" mean Directive 2010/73/EC.

Austria

Neither this prospectus supplement nor the accompanying prospectus has been or will be approved and/or published pursuant to the Austrian Capital Markets Act (Kapitalmarktgesetz) as amended. None of this prospectus supplement, the accompanying prospectus or any other document connected therewith constitutes a prospectus according to the Austrian Capital Markets Act and none of this prospectus supplement, the accompanying prospectus or any other document connected therewith may be distributed, passed on or disclosed to any other person in Austria, save as specifically agreed with the underwriters. No steps may be taken that would constitute a public offering of the notes in Austria and the offering of the notes may not be advertised in Austria. Each underwriter has represented and agreed that it will offer the notes in Austria only in compliance with the provisions of the Austrian Capital Markets Act and all other laws and regulations in Austria applicable to the offer and sale of the notes in Austria.

Table of Contents

Belgium

This prospectus supplement and the accompanying prospectus are not intended to constitute a public offer in Belgium and may not be distributed to the public in Belgium. The Belgian Commission for Banking, Finance and Insurance has not reviewed nor approved this prospectus supplement and the accompanying prospectus or commented as to their accuracy or adequacy or recommended or endorsed the purchase of the notes.

Each underwriter has agreed that it will not:

(a) offer for sale, sell or market in Belgium the notes by means of a public offer within the meaning of the Law of 16 June, 2006 on the public offer of investment instruments and the admission to trading of investment instruments on a regulated market; or

(b) sell notes to any person qualifying as a consumer within the meaning of Article 1.7 of the Belgian law of 14 July, 1991 on consumer protection and trade practices unless such sale is made in compliance with this law and its implementing regulation.

Ireland

Each underwriter has represented and agreed that it will not underwrite or place the notes in or involving Ireland otherwise than in conformity with the provisions of the Intermediaries Act 1995 of Ireland (as amended) including, without limitation, Sections 9 and 23 (including advertising restrictions made thereunder) thereof and the codes of conduct made under Section 37 thereof.

Italy

The offering of the notes has not been registered with the Commissione Nazionale per le Società e la Borsa (the "CONSOB") pursuant to Italian securities legislation and, accordingly, each underwriter has represented that it has not offered, sold or delivered any notes or distributed copies of this prospectus supplement, the accompanying prospectus or any other document relating to the notes in the Republic of Italy and will not offer, sell or deliver any notes or distribute copies of this prospectus supplement, the accompanying prospectus or any other document relating to the notes in the Republic of Italy other than to professional investors (*operatori qualificati*), as defined in Article 31, second paragraph, of CONSOB Regulation No. 11522 of 1st July, 1998, as amended.

Any offer, sale or delivery of the notes or distribution of copies of this prospectus supplement, accompanying prospectus or any other document relating to the notes in the Republic of Italy must be (a) made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with the Legislative Decree No. 58 of February 24, 1998 (Financial Services Act) and Legislative Decree No. 385 of 1st September, 1993 (the Banking Act); (b) in compliance with Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy; and (c) in compliance with any other applicable laws and regulations.

In any case the notes shall not be placed, sold or offered either in the primary or the secondary market to individuals residing in Italy.

Table of Contents

Portugal

Each underwriter has represented and agreed that:

no document, circular, advertisement or any offering material in relation to the notes has been or will be subject to approval by the Portuguese Securities Market Commission (*Comissão do Mercado de Valores Mobiliários*, the "CMVM");

it has not directly or indirectly taken any action or offered, advertised or sold or delivered and will not directly or indirectly offer, advertise, sell, re-sell, re-offer or deliver any notes in circumstances which could qualify as a public offer (*oferta pública*) pursuant to the Portuguese Securities Code (*Código dos Valores Mobiliários*), and/or in circumstances which could qualify the issue of the notes as an issue or public placement of securities in the Portuguese market;

it has not, directly or indirectly, distributed and will not, directly or indirectly, distribute to the public this prospectus supplement or accompanying prospectus, or any document, circular, advertisements or any offering material;

all offers, sales and distributions of the notes have been and will only be made in Portugal in circumstances that, pursuant to the Portuguese Securities Code, qualify as a private placement of notes (*oferta particular*), all in accordance with the Portuguese Securities Code;

pursuant to the Portuguese Securities Code the private placement in Portugal or to Portuguese residents of notes by public companies (*sociedades abertas*) or by companies that are issuers of securities listed on a market must be notified to the CMVM for statistical purposes; and

it will comply with all applicable provisions of the Portuguese Securities Code and any applicable CMVM Regulations and all relevant Portuguese laws and regulations, in any such case that may be applicable to it in respect of any offer or sales of the notes by it in Portugal.

Each underwriter has represented and agreed that it shall comply with all applicable laws and regulations in force in Portugal and with the Prospectus Directive regarding the placement of any notes in the Portuguese jurisdiction or to any entities which are resident in Portugal, including the publication of a prospectus, when applicable, and that such placement shall only be authorized and performed to the extent that there is full compliance with such laws and regulations.

United Kingdom

Each underwriter has represented, warranted and agreed that:

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any notes in circumstances in which Section 21(1) of the FSMA does not apply to Vale; and

it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the notes in, from or otherwise involving the United Kingdom.

Table of Contents

Switzerland

The offering and sale of the notes will be made in Switzerland on the basis of a private placement, not as a public offering. The notes will not be listed on the SWX Swiss Exchange. Neither this prospectus supplement nor the accompanying prospectus, therefore, constitutes a prospectus within the meaning of Art. 652a or 1156 of the Swiss Federal Code of Obligations or Arts. 32 et seq. of the Listing Rules of the SWX Swiss Exchange.

Hong Kong

This prospectus supplement and the accompanying prospectus have not been approved by or registered with the Securities and Futures Commission of Hong Kong or the Registrar of Companies of Hong Kong. No person may offer or sell in Hong Kong, by means of any document, any notes other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No person may issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the notes which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to notes which are or are intended to be disposed of only to persons outside Hong Kong or to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance or to any persons in the circumstances referred to in clause (b) above.

Singapore

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore, and the notes will be offered in Singapore pursuant to the exceptions under Section 274 and Section 275 of the Securities and Futures Act of Singapore, Chapter 289 (the "SFA"). Accordingly, this prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes may not be circulated or distributed, nor may the notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor specified in Section 274 of the SFA, (ii) to a sophisticated investor, and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

None of this prospectus supplement, the accompanying prospectus or any other offering material distributed by any of the underwriters relating to the notes has been or will be registered as a prospectus with the Monetary Authority of Singapore, and the notes will be offered in Singapore pursuant to the exemptions under Section 274 and Section 275 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA. Accordingly, this prospectus supplement, the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for the subscription or purchase, of the notes may not be circulated or distributed, nor may the notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (1) to an institutional investor under Section 274 of the SFA, (2) to a relevant person under Section 275(1) and/or any person under Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Table of Contents

Brazil

The underwriters have not offered or sold, and will not offer or sell any notes in Brazil, except in circumstances that do not constitute a public offering or unauthorized distribution under Brazilian laws and regulations. The notes have not been, and will not be, registered with the Comissão de Valores Mobiliários.

Cayman Islands

None of the notes may be offered, sold or delivered, directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in the Cayman Islands.

Canada

Resale Restrictions

This prospectus supplement constitutes an offering of the securities described herein only in the Province of Ontario and to those persons where and to whom they may be lawfully offered for sale, and therein only by persons permitted to sell such securities. This prospectus supplement is not, and under no circumstances is, to be construed as an advertisement or a public offering of the securities described herein in Canada. No securities commission or similar authority in Canada has reviewed or in any way passed upon this prospectus supplement or the merits of the securities described herein, and any representation to the contrary is an offence. The distribution of the notes in the Province of Ontario is made on a private placement basis only and is exempt from the requirement that we prepare and file a prospectus with the relevant Canadian securities regulatory authorities. Accordingly, any resale of interests in the notes must be made in accordance with applicable securities laws, which may require resales to be made in accordance with an exemption from the prospectus requirements. Prospective purchasers of the notes are advised to seek legal advice prior to any resale of such interests.

We are not a "reporting issuer", as such term is defined under applicable Canadian securities legislation, in any province or territory of Canada. Prospective Canadian investors are advised that we currently do not intend to file a prospectus or similar document with any securities regulatory authority in Canada qualifying the resale of the notes to the public, or to make us a reporting issuer, in any province or territory of Canada.

Representations of Purchasers

By virtue of placing an order to purchase the notes, each prospective Canadian investor who purchases the notes will be deemed to have represented to us and the dealer with whom the order was placed that such purchaser (i) is an "accredited investor" as defined in section 1.1 of National Instrument 45-106 Prospectus and Registration Exemptions ("NI 45-106"); (ii) where required by law, such purchaser is purchasing as principal; (iii) has not been created or used solely to purchase or hold securities as an accredited investor; (iv) has reviewed and acknowledges the terms referred to above under "Resale Restrictions"; and (v) in the case of an investor resident in Ontario, that such investor, or any ultimate investor for which such investor is acting as agent (1) is an "accredited investor", other than an individual, as defined in section 1.1 of NI 45106 and is purchasing the notes from a dealer registered in the province of Ontario as an international dealer within the meaning of section 98 of the Regulation to the Securities Act (Ontario) or (2) is an "accredited investor", including an individual as defined in section 1.1 of NI 45-106 and is purchasing the notes from a registered investment dealer or limited market dealer registered in Ontario within the meaning of section 98 of the Regulation to the Securities Act (Ontario).

Table of Contents

In addition, each purchaser resident in Ontario, by placing an order to purchase the notes will be deemed to have represented to us and the dealer with whom such order was placed, that such purchaser: (a) has been notified (i) that we may be required to provide information ("personal information") pertaining to the purchaser as required to be disclosed in Schedule I of Form 45-106F1 (including its name, address, telephone number and the number and value of the notes purchased), which is required to be filed by us under NI 45-106; (ii) that such personal information will be delivered to the OSC in accordance with NI 45-106; (iii) that such personal information is being collected indirectly by the OSC under the authority granted to it under the securities legislation of Ontario; (iv) that such personal information is being collected for the purposes of the administration and enforcement of the securities legislation of Ontario; and (v) that the public official in Ontario who can answer questions about the OSC's indirect collection of such personal information is the Administrative Assistant to the Director of Corporate Finance at the OSC, Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8, Telephone: (416) 593-8086; and (b) by purchasing the notes, such purchaser has authorized the indirect collection of the personal information by the OSC. Further, the purchaser acknowledges that its name, address, telephone number and other specified information, including the number of notes that it has purchased and the aggregate purchase price to the purchaser, may be disclosed to other Canadian securities regulatory authorities and may become available to the public in accordance with the requirements of applicable laws. By placing an order to purchase the notes the purchaser consents to the disclosure of such information.

Prospective Canadian investors should consult with their own legal and tax advisers with respect to the tax consequences of an investment in the notes in their particular circumstances and with respect to the eligibility of the notes for investment by such prospective investor under relevant Canadian legislation and regulations.

Statutory Right of Action

Securities legislation in certain Canadian provinces provides purchasers of securities offered under this prospectus supplement and the accompanying prospectus (the "Offering Documents") with certain rights of action if the Offering Documents contain a misrepresentation. For these purposes, a "misrepresentation" means an untrue statement of a material fact or an omission to state a material fact that is necessary in order to make any statement not misleading in light of the circumstances in which it was made.

Ontario

Section 130.1 of the Securities Act (Ontario) provides that if the Offering Documents, together with any amendment thereto, contains a misrepresentation, a prospective investor in the Province of Ontario who has purchased a security offered by the Offering Documents during the period of its distribution shall have, without regard to whether such prospective investor relied upon the misrepresentation, a right of action for damages against us or, at the election of the investor, a right of rescission against us (in which case such investor shall cease to have a right of action for damages against us), provided that: no action may be commenced to enforce a right of action: (i) for rescission more than 180 days after the date of the purchase; and (ii) for damages later than the earlier of: (A) 180 days after the investor first had knowledge of the facts giving rise to the cause of action; and (B) three years after the date of purchase;

(a) we will not be liable if it proves that the investor purchased the security with knowledge of the misrepresentation;

(b) in an action for damages, we will not be liable for all or any portion of such damages that it proves do not represent the depreciation in value of the security as a result of the misrepresentation;

Table of Contents

- (c) in no case shall the amount recoverable exceed the price at which the securities were offered; and
- (d) this right of action is in addition to and without derogation from any other right the investor may have at law.

The foregoing rights do not apply if the investor is: (a) a Canadian financial institution (as defined in NI 45-106) or a Schedule III bank; (b) the Business Development Bank of Canada incorporated under the Business Development Bank of Canada Act (Canada); or (c) a subsidiary of any person referred to in paragraphs (a) and (b), if the person owns all of the voting securities of the subsidiary, except the voting securities required by law to be owned by directors of that subsidiary.

The foregoing summary is subject to the express provisions of the Securities Act (Ontario) and the rules, regulations and other instruments thereunder, and reference is made to the complete text of such provisions contained therein. Such provisions may contain limitations and statutory defenses on which we may rely.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Forward-Looking Information

These Offering Documents may contain "forward looking information" ("FLI") as such term is defined in section 1.1 of the Securities Act (Ontario), FLI is disclosure regarding possible events, conditions or results of operations that is based on assumptions about future economic conditions and courses of action and includes future oriented financial information ("FOFI") with respect to prospective results of operations, financial position or cash flows that is presented either as a forecast or a projection. "FOFI" is FLI about prospective results of operations, financial position or cash flows, based on assumptions about future economic conditions and courses of action, and presented in the format of a historical balance sheet, income statement or cash flow statement. Similarly, a "financial outlook" is FLI about prospective results of operations, financial position or cash flows that is based on assumptions about future economic conditions and courses of action that is not presented in the format of a historical balance sheet, income statement or cash flow statement. Actual results may vary from the FLI contained in the Offering Documents as such information is subject to a variety of risks, uncertainties and other factors that could cause actual results to differ materially from expectations. Material risk factors that could affect actual results are identified under the heading "Risk Factors". Investors are also cautioned that FLI is based on a number of factors and assumptions, including current plans, estimates opinions and analysis made in light of its experience, current conditions, and expectations of future developments, as well as other relevant factors.

This offering is being made by a non-Canadian issuer using disclosure documents prepared in accordance with non-Canadian securities laws. Prospective purchasers should be aware that these requirements may differ significantly from those in Ontario. The FLI included or incorporated by reference herein may not be accompanied by the disclosure and explanations that would be required of a Canadian issuer under Ontario securities law.

Table of Contents

Canadian investors should not rely on any FLI that may be contained within these Offering Documents as such information is subject to a variety of risks, uncertainties and other factors that could cause actual results to differ materially from expectations. Upon receipt of these Offering Documents, each Canadian investor will be deemed to have acknowledged and agreed that any FLI included herein should not be considered material for the purposes of and may not have been prepared and/or presented consistent with National Instrument 51-102 Continuous Disclosure Obligations ("NI 51-102") and that the investor will not receive any additional information regarding such FLI during any period that Vale is not a "reporting issuer" in any province or territory in Canada, other than as required under applicable securities laws in the province of Ontario.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Other Relationships

Certain of the underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities.

Certain of the underwriters and their affiliates have performed, and may perform in the future, certain investment banking, advisory or general financing and banking services for us and our affiliates from time to time, in the ordinary course of their business. These companies receive standard fees for their services.

A group that controls Banco Bradesco BBI S.A. also controls Bradespar S.A., which holds 21.21% of the common equity of Valepar S.A. ("Valepar"), Vale's controlling shareholder. In addition, a pension fund of Banco do Brasil S.A. employees holds the majority of the common equity in Litel Participações S.A., which holds 49% of the common equity of Valepar. Banco do Brasil S.A. is the indirect controlling shareholder of BB Securities Ltd.

Table of Contents

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus supplement by reference to our annual report on Form 20-F for the year ended December 31, 2011 have been so incorporated in reliance on the report of PricewaterhouseCoopers Auditores Independentes, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. PricewaterhouseCoopers Auditores Independentes is registered with the Regional Accounting Council of Rio de Janeiro.

Our unaudited condensed consolidated balance sheet as of June 30, 2012 and the related condensed consolidated statements of income, comprehensive income, cash flows and changes in stockholders' equity for the three-month periods ended June 30, 2012, March 31, 2012 and June 30, 2011 and for the six-month periods ended June 30, 2012 and June 30, 2011, incorporated by reference herein, were reviewed by PricewaterhouseCoopers Auditores Independentes. PricewaterhouseCoopers Auditores Independentes has reported that it has applied limited procedures in accordance with professional standards for a review of such information. However, its reports included in our current report on Form 6-K furnished to the SEC on July 25, 2012, and incorporated by reference herein, state that it did not audit and does not express an opinion on that interim financial information. Accordingly, the degree of reliance on such information should be restricted in light of the limited nature of the review procedures applied. PricewaterhouseCoopers Auditores Independentes is not subject to the liability provisions of Section 11 of the Securities Act for its reports on the unaudited interim financial information because those reports are not "reports" or a "part" of the registration statement prepared or certified by the accountants within the meaning of Sections 7 and 11 of the Securities Act.

VALIDITY OF THE NOTES

The validity of the notes offered and sold in this offering will be passed upon for Vale by Cleary Gottlieb Steen & Hamilton LLP and for the underwriters by Gibson, Dunn & Crutcher LLP. Certain matters of Brazilian law relating to the notes will be passed upon by Mr. Clovis Torres, the general counsel of Vale. Pinheiro Guimarães Advogados will pass upon certain matters of Brazilian law relating to the notes for the underwriters.

Table of Contents

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference herein is considered to be part of this prospectus supplement, and certain later information that we file with the SEC will automatically update and supersede earlier information filed with the SEC or included in this prospectus supplement. We incorporate by reference the following documents:

our current report on Form 6-K furnished to the SEC on the date hereof containing: (i) our operating and financial review for the six-month periods ended June 30, 2012 and June 30, 2011; (ii) our ratios of earnings to fixed charges; and (iii) some recent developments on certain legal proceedings and involving interruptions to our nickel operations;

our current report on Form 6-K furnished to the SEC on August 31, 2012, announcing that we signed an agreement to sell ten large ore carriers to Polaris Shipping Co. Ltd., in the aggregate amount of US\$600 million, which will be leased back by Vale from Polaris under long-term contracts;

our current report on Form 6-K furnished to the SEC on August 27, 2012, announcing that we lifted force majeure on our metallurgical coal operations at Carborough Downs, one of our metallurgical coal operations in Australia;

our current report on Form 6-K furnished to the SEC on August 27, 2012, announcing that Banco Nacional do Desenvolvimento Econômico e Social (BNDES) approved a credit line of R\$3.9 billion to finance the expansion of our logistics capacity in the Northern System in Brazil;

our current report on Form 6-K furnished to the SEC on July 25, 2012, containing our unaudited condensed consolidated interim financial statements for the three-month periods ended June 30, 2012, March 31, 2012 and June 30, 2011 and for the six-month periods ended June 30, 2012 and June 30, 2011, prepared in accordance with U.S. generally accepted accounting principles;

our current report on Form 6-K furnished to the SEC on July 24, 2012, announcing the appointment of Mr. Luciano Siani as our new Chief Financial Officer;

our current report on Form 6-K furnished to the SEC on July 19, 2012, containing our production report for the three-month period ended June 30, 2012;

our current report on Form 6-K furnished to the SEC on July 11, 2012, announcing the sale of our ferroalloy operations in Europe;

our current report on Form 6-K furnished to the SEC on June 27, 2012, announcing that Vale has obtained the preliminary environmental license to the iron ore project Carajás S11D;

our current reports on Form 6-K furnished to the SEC on May 29 and June 26, 2012, announcing the sale of our thermal coal assets in Colombia;

our current report on Form 6-K furnished to the SEC on June 1, 2012, announcing that Carborough Downs, one of our metallurgical coal operations in Australia, declared force majeure under certain contracts due to the detection of abnormal levels of carbon monoxide;

Edgar Filing: Vale S.A. - Form 424B2

our current report on Form 6-K furnished to the SEC on May 29, 2012, containing our new Disclosure Policy;

our current report on Form 6-K furnished to the SEC on May 11, 2012, announcing that we declared force majeure under certain nickel contracts due to an incident at the New Caledonia acid plant;

S-35

Edgar Filing: Vale S.A. - Form 424B2

Table of Contents

our current report on Form 6-K furnished to the SEC on May 8, 2012, announcing the sale of our stake in CADAM S.A. to KaMin LLC's kaolin business;

our current report on Form 6-K furnished to the SEC on May 2, 2012, announcing the appointment of Mr. Roger Allan Downey as the Executive Officer responsible for Fertilizer and Coal Operations and Marketing;

our current report on Form 6-K furnished to the SEC on April 23, 2012, announcing the execution of a leasing contract with Petrobras for potash assets and mining rights in the Brazilian state of Sergipe; and

our annual report on Form 20-F for the year ended December 31, 2011, filed with the SEC on April 17, 2012.

We will provide without charge to each person to whom a copy of this prospectus supplement is delivered, upon the written or oral request of any such person, a copy of any or all of the documents referred to above which have been or may be incorporated herein by reference, other than exhibits to such documents (unless such exhibits are specifically incorporated by reference in such documents). Requests should be directed to Vale's Investor Relations Department, Avenida Graça Aranha, No. 26, 12th floor, 20030-900 Rio de Janeiro, RJ, Brazil (telephone no: 55 21-3814-4540). Additionally, for so long as any notes shall be outstanding, copies of our financial statements for the then current fiscal year may be inspected on the Web site of the U.S. Securities and Exchange Commission at <http://www.sec.gov/> or on our Web site at <http://www.vale.com/>. The information on our Web site is not part of this prospectus supplement nor is it incorporated herein by reference.

S-36

Vale S.A.

US\$ % Notes due 2042

PROSPECTUS SUPPLEMENT

Joint Lead Managers and Joint Bookrunners

BB Securities Ltd.

Bradesco BBI

Citigroup

J.P. Morgan

Santander

September , 2012
