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UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM 20-F**

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

For the fiscal year ended: **December 31, 2003**

Commission file number: **001-15030**

**COMPANHIA VALE DO RIO DOCE**

(Exact name of Registrant as specified in its charter)

**VALE OVERSEAS LIMITED**

(Exact name of Registrant as specified in its charter)

**Federative Republic of Brazil**

(Jurisdiction of incorporation or organization)

**Cayman Islands**

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

(Address of principal executive offices)

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

| <u>Title of Each Class</u>  | <u>Name of Each Exchange<br/>on Which Registered</u> |
|---|--|
| Preferred class A shares of CVRD, no par value per share  | New York Stock Exchange*                             |
| American depositary shares (as evidenced by American depositary receipts) each representing one preferred class A share of CVRD | New York Stock Exchange                              |
| Common shares of CVRD, no par value per share   | New York Stock Exchange*                             |
| American depositary shares (as evidenced by American depositary receipts) each representing one common share of CVRD            | New York Stock Exchange                              |

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

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

The number of outstanding shares of each class of stock of CVRD as of December 31, 2003 was:

**245,267,973 common shares, no par value per share  
138,571,729 preferred class A shares, no par value per share  
1 golden share, no par value per share**

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

Yes ☒ No ☐

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐ Item 18 ☒

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## GLOSSARY

|                          |   |
|--------------------------|---|
| Alumina .....            | Aluminum oxide. It is extracted from bauxite in a chemical refining process and is the principal raw material in the electro-chemical process from which aluminum is produced.  |
| Bauxite .....            | A rock composed primarily of hydrated aluminum oxides. It is the principal ore of alumina, the raw material from which aluminum is made.  |
| Beneficiation.....       | The process of separating, concentrating and classifying ore by particle size or some other characteristic ( <i>e.g.</i> , specific gravity, magnetic susceptibility, surface chemistry, etc.) in order to obtain the mineral or metal of interest.   |
| Concentration .....      | Physical, chemical or biological process to increase the grade of the metal or mineral of interest.   |
| Copper Concentrate ..... | Material produced by concentration of copper minerals contained in the copper ore. It is the raw material used by the smelters to produce copper metal.   |
| Copper .....             | A reddish brown metallic element. Copper is remarkably conductive, both thermally and electrically. It is highly malleable and ductile and is easily rolled into sheet and drawn into wire.   |
| DR .....                 | Direct Reduction. Process that converts iron ore into DRI or HBI using natural gas.   |
| DRI .....                | Direct Reduced Iron. Processed iron ore (lump or pellets) into Direct Reduction process, used as a scrap substitute in electric furnace steelmaking.  |
| DWT .....                | Deadweight ton. The measurement unit of a vessel's capacity for cargo, fuel oil, stores and crew, measured in metric tons of 1,000 kg. A vessel's total deadweight is the total weight the vessel can carry when loaded to a particular load line.  |
| Fe unit.....             | A measure of the iron content in the iron ore that is equivalent to 1% iron content in 1 ton of iron ore.   |
| Ferroalloys.....         | Ferroalloys are alloys of iron that contain one or more other chemical elements. These alloys are used to add these other elements into molten metal, usually in steelmaking. The principal ferroalloys are those of chromium, manganese ore, and silicon. Manganese ore is essential to the production of virtually all steels and is important to the production of cast iron. Manganese ore is used to neutralize the harmful effect of sulfur and as an alloying element. |
| FOB .....                | Free on Board. It indicates that the purchaser pays for shipping, insurance and all the other costs associated with transportation of the goods to their destination.   |
| Grade .....              | The proportion of metal or mineral present in ore or any other host material.   |
| HBI .....                | Hot Briquetted Iron. Direct reduced iron that has been processed into briquettes. Instead of using a blast furnace, the oxygen is removed from the ore using natural gas and results in a substance that is 90%-92% iron. Because DRI (direct reduced iron) may   |

|   |  |
|---|--|
|   | spontaneously combust during transportation, HBI is preferred when the metallic material must be stored or moved.  |
| Kaolin .....  | A fine white aluminum silicate clay used as a coating agent, filler, extender and absorbent in the paper, ceramics and pharmaceutical industries.  |
| Lump ore .....                                      | Iron ore or manganese ore with the coarsest particle size in the range of 6.35 mm to 50 mm diameter, but varying slightly between different mines and ores.  |
| Manganese ore .....                                 | A hard brittle metallic element found primarily in the minerals pyrolusite, hausmannite and manganate.   |
| Mineral deposit(s) or mineralized material(s) ..... | Refers to a mineralized body that has been intersected by a sufficient number of closely spaced drill holes and/or underground/surface samples to support sufficient tonnage and grade of metal(s) or mineral(s) of interest to warrant further exploration-development work. The deposit does not qualify as an ore body until it can be legally and economically extracted at the time of ore reserve determination. |
| Open pit mining .....                               | The extraction method by which surface or barren rock is removed so that ore may be removed using power shovels, front-end loaders, hydraulic excavators, draglines, etc.  |
| Oxides .....  | Compounds of oxygen with another element. For example, magnetite ( $\text{Fe}_3\text{O}_4$ ) is an oxide mineral formed by the chemical union of iron with oxygen.   |
| Pellet feed (Ultra-fine) .....                      | Ultra-fine (less than 0.15 mm) iron ore particles generated by the mining, grading, handling and transporting of iron ore, with no practical direct application in the steel industry, unless the material is aggregated into pellets through an agglomeration process.  |
| Pellets .....                                       | Agglomerated ultra-fine iron ore particles of a size and quality suitable for particular steelmaking processes. Our pellets range in size from 8 mm to 18 mm.  |
| Pig iron .....                                      | Melted iron produced in a blast furnace.   |
| Potash .....  | A potassium chloride compound, chiefly KCl, used in the production of fertilizer.  |
| Primary Aluminum .....                              | White metal that is obtained in the electro-chemical process of reduction of the aluminum oxide.   |
| Probable (indicated) reserves .....                 | Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.         |
| Proven (measured) reserves .....                    | Reserves for which (1) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; (2) grade and/or quality are computed from the results of detailed sampling; and (3) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that  |

|                           |   |
|---------------------------|---|
|                           | size, shape, depth and mineral content of reserves are well-established.  |
| Reserve .....             | Refers to that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination.   |
| Run-of-mine .....         | Ore in its natural (unprocessed) state, as mined, without having been crushed.  |
| Seaborne market .....     | Comprises the total ore trade (imports and exports) between countries using ocean bulk vessels.   |
| Sinter feed (Fines) ..... | Refers to iron ore with particles in the range of 0.15 mm to 6.35 mm diameter. Suitable for sintering.  |
| Sintering .....           | Refers to the agglomeration of small particles into a coherent mass by heating without melting.   |
| Slabs .....               | The most common type of semi-finished steel. Traditional slabs measure 10 inches thick and 30-85 inches wide (and average about 20 feet long), while the output of the recently developed “thin slab” casters is approximately two inches thick. Subsequent to casting, slabs are sent to the hot-strip mill to be rolled into coiled sheet and plate products. |
| Ton.....                  | Metric ton, equaling 1,000 kilograms.   |
| Troy ounce.....           | One troy ounce equals 31.103 grams.   |
| Underground Mining .....  | Mineral exploitation in which extraction operations are carried out beneath the earth’s surface.  |

## PRESENTATION OF FINANCIAL INFORMATION

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

- reports to Brazilian shareholders;
- filings with the CVM;
- determination of dividend payments; and
- determination of tax liability.

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

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

Unless otherwise specified, metric units have been used, *e.g.*, tons refer to metric tons.

References to “us” or “we” are to CVRD, its consolidated subsidiaries and its joint ventures and other affiliated companies. References to “CVRD” are to Companhia Vale do Rio Doce. References to “Vale Overseas” are to Vale Overseas Limited. References to “affiliated companies” are to companies in which Companhia Vale do Rio Doce has a minority investment, and exclude controlled affiliates that are consolidated for financial reporting purposes.

References to “ANEEL” are to *Agência Nacional de Energia Elétrica*, the Brazilian energy regulatory agency.

References to “ANTT” are to *Agência Nacional de Transportes Terrestres*, the Brazilian regulatory agency for the transportation sector.

References to our “ADSS” or “American depositary shares” include both our common American depositary shares (our common ADSSs), each of which represents one common share of CVRD, and our preferred American depositary shares (our preferred ADSSs), each of which represents one preferred class A share of CVRD. American depositary shares are represented by American depositary receipts (ADRs) issued by JPMorgan Chase Bank, as depositary.

## PRESENTATION OF INFORMATION CONCERNING RESERVES

The estimates of the proven and probable reserves at our mines and the estimates of mine life, as of December 31, 2003, included in this annual report have been calculated according to the technical definitions required by the U.S. Securities and Exchange Commission, or the SEC. We derived estimates of mine life described in this annual report from such reserve estimates. We have adjusted ore reserve estimates for extraction losses and metallurgical recoveries during extraction for manganese ore and bauxite deposits. Our reserve estimates of iron, kaolin, copper and potash are reported as *in situ* tons with adjustments for dilution and mining losses. See *Item 3. Key Information—Risk Factors—Risks Relating to Our Business* for a description of risks relating to reserves and reserves estimates. We have retained Golder Associates S.A., or Golder, to audit and verify most of our estimates of proven and probable reserves as of December 31, 2003.

## FORWARD-LOOKING STATEMENTS

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

- our direction and future operation;
- the implementation of our principal operating strategies, including our potential participation in privatization, acquisition or joint venture transactions or other investment opportunities;
- our acquisition or divestiture plans;
- the implementation of our financing strategy and capital expenditure plans;
- the exploration of mineral reserves and development of mining facilities;
- the depletion and exhaustion of mines and mineral reserves;
- the declaration or payment of dividends;
- industry trends, including the direction of prices and expected levels of supply and demand;
- other factors or trends affecting our financial condition or results of operations; and
- the factors discussed under *Item 3. Key Information—Risk Factors*.

We caution you that forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of various factors, including those identified under *Item 3. Key Information—Risk Factors*. These risks and uncertainties include factors relating to the Brazilian economy and securities markets, which exhibit volatility and can be adversely affected by developments in other countries, factors relating to the iron ore business and its dependence on the global steel industry, which is cyclical in nature, and factors relating to the highly competitive industries in which we operate. For additional information on factors that could cause our actual results to differ from expectations reflected in forward-looking statements, please see *Item 3. Key Information—Risk Factors*, and our reports filed with the SEC. Forward-looking statements speak only as of the date they are made, and we do not undertake any obligation to update them in light of new information or future developments.

## PART I

### Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

### Item 2. Offer Statistics and Expected Timetable

Not applicable.



### Item 3. Key Information

#### SELECTED FINANCIAL DATA

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

|   | For the Year Ended December 31, |            |            |            |            |
|---|---------------------------------|------------|------------|------------|------------|
|   | 1999                            | 2000       | 2001       | 2002       | 2003       |
|   | (in millions of US\$)           |            |            |            |            |
| <b>Statement of Income Data</b>   |                                 |            |            |            |            |
| Net operating revenues.....   | US\$ 3,076                      | US\$ 3,935 | US\$ 3,935 | US\$ 4,123 | US\$ 5,350 |
| Cost of products and services.....  | (1,806)                         | (2,429)    | (2,272)    | (2,263)    | (3,128)    |
| Selling, general and administrative expenses .....  | (138)                           | (225)      | (241)      | (224)      | (265)      |
| Research and development.....   | (27)                            | (48)       | (43)       | (50)       | (82)       |
| Employee profit sharing plan .....  | (24)                            | (29)       | (38)       | (38)       | (32)       |
| Other expenses.....   | (155)                           | (180)      | (379)      | (119)      | (199)      |
| Operating income .....  | 926                             | 1,024      | 962        | 1,429      | 1,644      |
| Non-operating income (expenses):  |                                 |            |            |            |            |
| Financial income (expenses).....  | (33)                            | (107)      | (200)      | (248)      | (249)      |
| Foreign exchange and monetary losses, net .....   | (223)                           | (240)      | (426)      | (580)      | 242        |
| Gain on sale of investments.....  | —                               | 54         | 784        | —          | 17         |
| Subtotal .....  | (256)                           | (293)      | 158        | (828)      | 10         |
| Income before income taxes, equity results and minority interests .....   | 670                             | 731        | 1,120      | 601        | 1,654      |
| Income taxes benefit (charge) .....   | (33)                            | 32         | 218        | 149        | (297)      |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments ..... | (227)                           | 322        | (53)       | (87)       | 306        |
| Minority interests .....  | 2                               | 1          | 2          | 17         | (105)      |
| Change in accounting practice for asset retirement obligations.....   | —                               | —          | —          | —          | (10)       |
| Net income.....   | US\$ 412                        | US\$ 1,086 | US\$ 1,287 | US\$ 680   | US\$ 1,548 |
| Total cash paid to shareholders(1) .....  | US\$ 452                        | US\$ 246   | US\$ 1,066 | US\$ 602   | US\$ 675   |

(1) Total cash paid to shareholders consists of cash paid during the period in respect to interest on shareholders' equity.

|  | For the Year Ended December 31,  |         |      |         |      |         |      |         |      |         |
|--|--|---------|------|---------|------|---------|------|---------|------|---------|
|  | 1999   |         | 2000 |         | 2001 |         | 2002 |         | 2003 |         |
|  | (in US\$ except recorded dividends and interest on shareholders' equity per share in Brazilian <i>reais</i> and share numbers) |         |      |         |      |         |      |         |      |         |
| <u>Per Share Data – Earnings and Dividends</u>                                     |  |         |      |         |      |         |      |         |      |         |
| Basic earnings per Common and Preferred Class A Share(1).....                      | US\$   | 1.07    | US\$ | 2.82    | US\$ | 3.34    | US\$ | 1.77    | US\$ | 4.03    |
| Distributions on shareholders' equity per share in US\$(2) .....                   | US\$   | 1.30    | US\$ | 0.66    | US\$ | 2.64    | US\$ | 1.69    | US\$ | 1.76    |
| Distributions on shareholders' equity per share in Brazilian <i>reais</i> (2)..... | R\$  | 2.26    | R\$  | 1.17    | R\$  | 5.64    | R\$  | 4.99    | R\$  | 5.04    |
| Weighted average number of shares outstanding (in thousands):                      |  |         |      |         |      |         |      |         |      |         |
| Common shares(1).....  |  | 249,983 |      | 249,983 |      | 249,864 |      | 249,864 |      | 245,268 |
| Preferred class A shares(1) .....  |  | 134,917 |      | 134,917 |      | 135,042 |      | 135,042 |      | 138,571 |
| Total .....  |  | 384,900 |      | 384,900 |      | 384,906 |      | 384,906 |      | 383,839 |

- (1) Each common American depositary share represents one common share and each preferred American depositary share represents one preferred class A share.
- (2) Our distributions to shareholders may take the form of dividends or of interest on shareholders' equity. Since 1997, all distributions have taken the form of interest on shareholders' equity. The amount shown represents distributions paid during the year.

|   | At December 31,       |       |      |       |      |       |      |       |      |        |
|---|-----------------------|-------|------|-------|------|-------|------|-------|------|--------|
|   | 1999                  |       | 2000 |       | 2001 |       | 2002 |       | 2003 |        |
|   | (in millions of US\$) |       |      |       |      |       |      |       |      |        |
| <b><u>Balance Sheet Data</u></b>  |                       |       |      |       |      |       |      |       |      |        |
| Current assets.....   | US\$                  | 2,490 | US\$ | 2,502 | US\$ | 2,638 | US\$ | 2,589 | US\$ | 2,474  |
| Property, plant and equipment, net.....   |                       | 3,943 |      | 3,955 |      | 3,813 |      | 3,297 |      | 6,484  |
| Investments in affiliated companies and joint ventures<br>and other investments ..... |                       | 1,203 |      | 1,795 |      | 1,218 |      | 732   |      | 1,034  |
| Other assets.....   |                       | 1,052 |      | 1,543 |      | 1,839 |      | 1,337 |      | 1,442  |
| Total assets .....  | US\$                  | 8,688 | US\$ | 9,795 | US\$ | 9,508 | US\$ | 7,955 | US\$ | 11,434 |
| Current liabilities .....   |                       | 2,072 |      | 2,136 |      | 1,921 |      | 1,508 |      | 2,253  |
| Long-term liabilities (1) .....   |                       | 601   |      | 1,061 |      | 772   |      | 774   |      | 1,201  |
| Long-term debt (2) .....  |                       | 1,321 |      | 2,020 |      | 2,170 |      | 2,359 |      | 2,767  |
| Total liabilities.....  |                       | 3,994 |      | 5,217 |      | 4,863 |      | 4,641 |      | 6,221  |
| Minority interest .....   |                       | 3     |      | 9     |      | 5     |      | 27    |      | 329    |
| Stockholders' equity:   |                       |       |      |       |      |       |      |       |      |        |
| Capital stock.....  |                       | 1,927 |      | 1,927 |      | 2,211 |      | 2,446 |      | 2,869  |
| Additional paid-in capital .....  |                       | 498   |      | 498   |      | 498   |      | 498   |      | 498    |
| Reserves and retained earnings.....   |                       | 2,266 |      | 2,144 |      | 1,931 |      | 343   |      | 1,517  |
| Total stockholders' equity .....  |                       | 4,691 |      | 4,569 |      | 4,640 |      | 3,287 |      | 4,884  |
| Total liabilities and stockholders' equity .....                                      | US\$                  | 8,688 | US\$ | 9,795 | US\$ | 9,508 | US\$ | 7,955 | US\$ | 11,434 |

(1) Excludes long-term debt.

(2) Excludes current portion. At December 31, 2003, we had extended guarantees for borrowings of joint ventures and affiliated companies in an aggregate amount of US\$ 283 million. These contingent liabilities do not appear on the face of our consolidated balance sheets, but are disclosed in Note 18(a) to our consolidated financial statements.

## EXCHANGE RATES

There are two principal foreign exchange markets in Brazil:

- the commercial rate exchange market, and
- the floating rate exchange market.

Most trade and financial foreign-exchange transactions are carried out on the commercial rate exchange market. These transactions include the purchase or sale of shares or the payment of dividends or interest with respect to shares. Foreign currencies may only be purchased through a Brazilian bank authorized to operate in these markets. In both markets, rates are freely negotiated but may be influenced by the Central Bank of Brazil intervention. In 1999, the Central Bank of Brazil placed the commercial rate exchange market and the floating rate exchange market under identical operational limits, which led to a convergence in the pricing and liquidity of both markets. Since February 1, 1999, the floating market rate has been the same as the commercial market rate. However, there is no guarantee that these rates will continue to be the same in the future. Despite the convergence in the pricing and liquidity of both markets, each market continues to be regulated differently.

Since 1999, the Central Bank of Brazil has allowed the *real*/U.S. dollar exchange rate to float freely, and during that period, the *real*/U.S. dollar exchange rate has fluctuated considerably. In the past, the Central Bank of Brazil has intervened occasionally to control unstable movements in foreign exchange rates. We cannot predict whether the Central Bank of Brazil or the Brazilian government will continue to let the *real* float freely or will intervene in the exchange rate market through a currency band system or otherwise. The *real* may depreciate or appreciate substantially in the future. For more information on these risks, see *Item 3. Key Information—Risk Factors—Risks Relating to Brazil*.

The following table sets forth the commercial selling rate, expressed in *reais* per U.S. dollar (R\$/US\$) for the periods indicated.

|  | Period-end | Average for Period | Low       | High      |
|--|------------|--------------------|-----------|-----------|
| <b>Year ended</b>                      |            |                    |           |           |
| December 31, 1999 .....                | R\$ 1.789  | R\$ 1.851(1)       | R\$ 1.208 | R\$ 2.165 |
| December 31, 2000 .....                | 1.955      | 1.835(1)           | 1.723     | 1.985     |
| December 31, 2001 .....                | 2.320      | 2.353(1)           | 1.936     | 2.801     |
| December 31, 2002 .....                | 3.533      | 2.998(1)           | 2.270     | 3.955     |
| December 31, 2003 .....                | 2.889      | 3.059(1)           | 2.822     | 3.662     |
| <b>Month ended</b>                     |            |                    |           |           |
| December 2003 .....                    | R\$ 2.889  | R\$ 2.916(2)       | R\$ 2.888 | R\$ 2.943 |
| January 2004 .....                     | 2.941      | 2.872(2)           | 2.802     | 2.941     |
| February 2004 .....                    | 2.914      | 2.946(2)           | 2.904     | 2.988     |
| March 2004 .....                       | 2.909      | 2.908(2)           | 2.875     | 2.941     |
| April 2004 .....                       | 2.945      | 2.913(2)           | 2.874     | 2.952     |
| May 2004 .....                         | 3.129      | 3.081(2)           | 2.957     | 3.205     |
| June 2004 (through June 8, 2004) ..... | 3.115      | 3.134              | 3.112     | 3.157     |

(1) Average of the rates of each period, using the average of the exchange rates on the last day of each month during each period.

(2) Average of the lowest and highest rates in the month.

Source: Central Bank of Brazil.

On June 8, 2004, the commercial selling rate was R\$3.115 per US\$ 1.00.

## RISK FACTORS

### Risks Relating to Our Business

***Due to our dependence on the global steel industry, fluctuations in the demand for steel could adversely affect our business.***

Sales prices and volumes in the seaborne iron ore mining industry depend on the prevailing and expected level of demand for iron ore in the world steel industry. The world steel industry is cyclical. A number of factors, the most significant of these being the prevailing level of worldwide demand for steel products, influence the world steel industry. During periods of sluggish or declining regional or world economic growth, demand for steel products generally decreases, which usually leads to corresponding reductions in demand for iron ore.

Driven primarily by strong demand from Chinese steelmakers, together with a modest expansion in other markets, the global seaborne iron ore market experienced high demand and rising iron ore and pellet prices in 2003. We cannot guarantee the length of time that demand will remain at current high levels or the direction of future prices. Sustained declines in world contract prices or sales volumes for iron ore could have a material adverse effect on our revenues.

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

Intense competition characterizes the worldwide iron ore industry. We compete with a number of large international mining companies. Some of these competitors possess substantial iron ore mineral deposits at locations closer to our principal Asian and European customers. Competition from foreign or Brazilian iron ore producers may result in our losing market share and revenues. Our aluminum, manganese ore, copper concentrate and other activities are also subject to intense competition and are subject to similar risks.

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

Our ability to rapidly increase production capacity to satisfy increases in demand for iron ore is limited. In periods where customer demand exceeds our production capacity, we generally satisfy excess customer demand by reselling iron ore and pellets purchased from joint ventures or third parties. If we are unable to satisfy excess customer demand by purchasing from joint ventures or third parties, we may lose customers. Similarly, because it takes time to increase production capacity, we may fail to complete our iron ore expansion projects in time to take

advantage of the current high levels of worldwide demand for iron ore. In addition, operating at or above full capacity may expose us to higher costs, including demurrage fees due to capacity restraints in our ports.

***Aluminum, gold and copper are actively traded on world commodity exchanges, and their prices are subject to fluctuations.***

Aluminum, gold and copper are sold in an active world market and traded on commodity exchanges, such as the London Metals Exchange and the Commodity Exchange, Inc. Prices for these metals are subject to wide fluctuations and are affected by many factors, including international economic and political conditions, levels of supply and demand, the availability and cost of substitutes, inventory levels maintained by producers and others, and actions of participants in the commodity markets. Prices for these metals are more volatile than iron ore and pellet prices because they respond more quickly to actual and expected changes in supply and demand. Sustained declines in world market prices for our aluminum-related products could have a material adverse effect on our revenues.

***Commencement of our copper operations will expose us to new risks.***

We recently began producing and marketing copper concentrate from our Sossego mine in Carajás. Copper is a new business for CVRD. Among others, risks involved with our expansion into the copper business include:

- copper concentrate is sold at prices determined by reference to copper prices on the London Metals Exchange, which are more volatile than prices in our core iron ore and pellet businesses;
- we may experience higher than expected treating and refining costs that decrease our margins;
- capacity increases by other copper producers may place downward pressure on copper prices; and
- we may encounter unexpected setbacks in launching and expanding our copper operations due to construction delays or difficulties obtaining required environmental licenses.

***Brazilian export products (e.g., grain and steel) could lose their international competitiveness, reducing the internal demand for logistics services.***

Agriculture and steel industries are currently the primary drivers of demand for logistics services. In 2003, almost 60% of our logistics revenues were attributable to these markets. A reduction in world demand for Brazilian steel or agriculture exports could reduce demand for our logistics services and harm the profitability of our logistics business.

***We are vulnerable to adverse developments affecting the world economy, especially China.***

The world economy is the primary driver of demand in the global seaborne market for iron ore and pellets. In recent years, China has been the main driver of our sales increases. In 2003, 14% of our iron ore and pellet gross revenues were attributable to customers in China, and customers in China accounted for 10.5% of our total consolidated net operating revenues. During the same period, 7.6% of our consolidated net revenues were attributable to Japanese customers and 32.2% were attributable to sales to European customers. A weakened global economy or a weakened economy in specific markets where we sell our products, such as China, could reduce demand, leading to lower revenues and profitability.

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

Our reported ore reserves and mineral deposits are estimated quantities of ore and minerals that have the potential to be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including many factors beyond our control. Reserve engineering is a subjective process of estimating underground deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. Estimates of different engineers may vary, and results of our mining and production subsequent to the date of an estimate may lead to revision of estimates. Reserve estimates may require revision based on actual production experience and other factors. For example, fluctuations in the market price of metals,

reduced recovery rates or increased production costs due to inflation or other factors may render proven and probable reserves containing relatively lower grades of mineralization uneconomic to exploit and may ultimately result in a restatement of reserves.

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

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

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

Once we discover minerals, it can take us a number of years from the initial phases of drilling until production is possible, during which the economic feasibility of production may change. It takes substantial time and expenditures to:

- establish ore reserves through drilling;
- determine appropriate metallurgical processes for optimizing the recovery of metal contained in ore;
- obtain environmental and other licenses;
- construct mining and processing facilities for greenfield properties; and
- obtain the ore or extract the metals from the ore.

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

***We face rising extraction costs as our deposits decrease.***

Ore reserves gradually decrease in the ordinary course of a given mining operation. As reserves decrease, it becomes necessary to use more expensive processes to extract the remaining ore. As a result, over time, we usually experience rising unit extraction costs with respect to each mine. Several of our mines have operated for long periods, and we will likely experience rising extraction costs per unit in the future at these operations.

***An increase in fuel costs may adversely affect our business.***

Our operations rely heavily on fuel sources. Oil and gas represented 11.2% of our cost of goods sold in 2003. Fuel costs are a major component of our total costs in our logistics and pellets businesses, and indirectly affect numerous other areas of our business, including our mining and aluminum-related businesses. An increase in oil and gas prices may lead to lower margins in our logistics, mining and aluminum-related businesses.

***We are subject to ongoing antitrust investigations.***

We are currently involved in 14 proceedings before the *Conselho Administrativo de Defesa Econômica*, or CADE, which is the primary Brazilian antitrust regulator. Most of these proceedings involve post-transaction review of acquisition or joint venture transactions, which is required for nearly all of our acquisitions and joint ventures. The remaining are administrative proceedings alleging that we have engaged in illegal anticompetitive conduct in connection with our logistics and aluminum businesses. We intend to defend these claims vigorously. We cannot predict the outcome of these proceedings. If CADE were to determine that undue concentration exists in any of our industries, it could impose measures to safeguard competition, which could include requirements that we divest operations or respect price restrictions. If CADE were to find that we have engaged in anticompetitive conduct, it could order us to cease the conduct and/or to pay fines, which could be substantial.

***Our principal shareholder could have significant influence over our company.***

Valepar, our principal shareholder, currently owns 53.3% of our outstanding common stock and 34.1% of our total outstanding capital. For a description of the ownership of our shares, see *Item 7. Major Shareholders and Related Party Transactions—Principal Shareholder*. As a result of its share ownership, Valepar can control the outcome of any action requiring shareholder approval. Further, the Brazilian government owns a golden share in us that gives it limited veto powers over certain actions that we could propose to take. For a detailed description of the veto powers granted to the Brazilian government by virtue of its ownership of this golden share, see *Item 10. Additional Information—Common Shares and Preferred Shares—General*.

***Many of our operations depend on joint ventures; our business could be adversely affected if our joint venture partners do not observe their commitments.***

We currently operate important parts of our pelletizing, energy, aluminum and steel businesses through joint ventures with other companies. Our forecasts and plans for these joint ventures assume that our joint venture partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide managerial talent. If any of our joint venture partners fails to observe its commitments, the affected joint venture may not be able to operate in accordance with its business plans or we may have to increase the level of our investment to give effect to these plans. For more information on our joint ventures, see *Item 4. Information on the Company—Lines of Business*.

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

We are exposed to fluctuations in interest rates, foreign currency exchange rates, and prices relating to our aluminum production, and since the start-up of our copper operations in Carajás, we are be subject to fluctuations in copper prices. In order to partially protect ourselves against unusual market volatility, we periodically enter into hedging transactions to manage these risks. See *Item 11. Quantitative and Qualitative Disclosures About Market Risk*. Our hedging strategy may not be successful in minimizing our exposure to these fluctuations. In addition, to the extent we hedge our commodity price exposure, we limit the upside benefits that we would otherwise experience if commodities prices were to increase. We do not hedge risks relating to iron ore price fluctuations.

***We may not have adequate, if any, insurance coverage for some business risks that could lead to economically harmful consequences to us.***

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

- industrial accidents;
- railroad accidents;
- labor disputes;
- slope failures;
- environmental hazards;
- electricity stoppages;
- equipment or vessel failures; and
- severe weather and other natural phenomena.

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

***Difficulties in implementing enterprise resource planning software may interfere with the normal functioning of our business.***

We are in the process of implementing enterprise resource planning software. If we are unable to replace, upgrade or modify our information technology systems to adapt to this new software in a timely and cost effective manner, our ability to capture and process financial transactions may be impacted. Implementing the software may prove more costly or take longer than expected, result in the loss of data or lead to system malfunctions that interfere with the normal functioning of our business. If we are unable to successfully manage the process of implementing the new software our results of operations may be adversely affected.

**Risks Relating to Brazil**

***The Brazilian government has historically exercised, and continues to exercise, significant influence over the Brazilian economy. Brazilian political and economic conditions have a direct impact on our business and the market price of our securities.***

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes substantial changes in policy, as often occurs in other emerging economies. The Brazilian government's actions to control inflation and carry out other policies have in the past involved wage and price controls, currency devaluations, capital controls and limits on imports, among other things. Our business, financial condition and results of operations may be adversely affected by factors in Brazil including:

- currency fluctuations;
- inflation;
- monetary policy and interest rates;
- fiscal policy;
- international trade policy;
- foreign exchange controls;
- energy shortages; and
- other political, social and economic developments in or affecting Brazil.

***Inflation and government measures to curb inflation may contribute significantly to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and, consequently, may adversely affect the market value of our securities.***

Brazil has in the past experienced extremely high rates of inflation, with annual rates of inflation reaching as high as 2,708% in 1993 (as measured by the *Índice Geral de Preços do Mercado* published by *Fundação Getúlio Vargas*, or IGP-M Index). More recently, Brazil's rates of inflation were 9.9% in 2000, 10.4% in 2001, 25.3% in 2002, 8.7% in 2003 and 5.3% in the five months ended May 31, 2004 (as measured by the IGP-M Index). Inflation, governmental measures to combat inflation and public speculation about possible future actions have in the past had significant negative effects on the Brazilian economy, and have contributed to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets. If Brazil experiences substantial inflation in the future, our costs may increase, our operating and net margins may decrease and, if investor confidence declines, the price of our securities may fall. Inflationary pressures may also curtail our ability to access foreign financial markets and may lead to further government intervention in the economy, which could involve the introduction of government policies that may adversely affect the overall performance of the Brazilian economy.

***Fluctuations in the value of the real against the U.S. dollar may result in uncertainty in the Brazilian economy and the Brazilian securities market and could have a material adverse effect on our net income.***

The Brazilian currency has historically suffered frequent devaluation. In the past, the Brazilian government has implemented various economic plans and exchange rate policies, including sudden devaluations, periodic mini-devaluations during which the frequency of adjustments has ranged from daily to monthly, floating exchange rate

systems, exchange controls and dual exchange rate markets. Although over long periods depreciation of the Brazilian currency generally is correlated with the differential in the inflation rate in Brazil versus the inflation rate in the U.S., depreciation over shorter periods has resulted in significant fluctuations in the exchange rate between the Brazilian currency and the U.S. dollar and other currencies.

The *real* appreciated by 22.3% against the U.S. dollar in 2003, and depreciated by 8.3% during the first five months of 2004. The exchange rate between the *real* and the U.S. dollar may continue to fluctuate and may rise or decline substantially from current levels.

Depreciation of the *real* against the U.S. dollar reduces the U.S. dollar value of distributions and the dividends on our American depositary shares and may also reduce the market value of our securities. In addition, exchange rate variations often have a significant effect on our net income. Depreciation of the *real* relative to the U.S. dollar may require us to record substantial foreign exchange and monetary losses on our U.S. dollar-denominated debt, whereas appreciation of the *real* against the U.S. dollar generally leads to the opposite effect. These foreign exchange and monetary gains or losses can be substantial, which can make our earnings from one period to the next more volatile. Exchange rate variations also have a substantial impact on our revenues and costs, because most of our revenues are in U.S. dollars and most of our costs are in *reals*. As a result, appreciation of the *real* against the U.S. dollar generally results in lower revenues and higher costs, which can hurt our operating profitability. Exchange rate variations also influence the Brazilian economy and inflation rates, which may lead the Brazilian government to adopt policies that may have an adverse impact on our business. For additional information about historical exchange rates, see *Item 3. Key Information—Exchange Rates*.

***Access to and the cost of borrowing in international capital markets for Brazilian companies are influenced by investor perceptions of risk in Brazil and other emerging economies, which may hurt our ability to finance our operations at acceptable cost or reduce the trading price of our securities.***

International investors generally consider Brazil to be an emerging market. As a result, economic and market conditions in other emerging market countries, especially those in Latin America, influence the market for securities issued by Brazilian companies. Economic crises in one or more emerging market countries may reduce overall investor appetite for securities of emerging market issuers. Past economic crises in emerging markets, such as in Southeast Asia, Russia and Argentina, have resulted in significant outflows of U.S. dollars from Brazil and caused Brazilian companies to face higher costs for raising funds, both domestically and abroad, and have effectively impeded the access to international capital markets for extended periods. We cannot assure you that international capital markets will remain open to Brazilian companies or that prevailing interest rates in these markets will be advantageous to us. In addition, future financial crises in emerging market countries may have a negative impact on the Brazilian markets, which could adversely affect the trading price of our securities.

***Brazilian government policies in the energy sector may have an adverse impact on the cost or supply of electricity for our aluminum-related and ferroalloy operations.***

We are a significant consumer of Brazil's electricity production, and accounted for approximately 4.5% of total consumption in Brazil in 2003. Electricity costs are a significant component of the cost of producing aluminum and ferroalloys.

Brazil faced a shortage of energy during the second half of 2001, which led to an energy-rationing program that required a decrease in energy consumption by at least 20%. As a result of this program, we experienced a temporary reduction in our aluminum and ferroalloy production, both of which use significant amounts of electricity. Although the energy shortages ended in late 2001, and energy-use restrictions were lifted in March 2002, we cannot assure you that Brazil will not experience future energy shortages. Future shortages and government policies to respond to or prevent shortages may have an adverse impact on the cost or supply of electricity for our aluminum and ferroalloy operations.

The Brazilian power generation business depends on concessions granted by the government and is regulated and supervised by ANEEL. A new law for the electricity sector was recently approved by the Brazilian Congress and the Federal Government is studying other proposals for significant changes in many of the regulations that relate to the new sector law and govern the Brazilian electricity sector. Changes in the laws, regulations or governmental policies regarding the power sector or concession requirements could lower the returns we are expecting from our investments in power generation. For more information on the regulations governing our energy production, see *Item 4. Information on the Company—Regulatory Matters*.



***Our mining and logistics activities depend on authorizations of regulatory agencies, and changes in regulations could have an adverse effect on our business.***

Our mining and logistics activities in Brazil depend on authorizations and concessions by regulatory agencies of the Brazilian government. Our exploration, mining, mineral processing and logistics activities are also subject to Brazilian laws and regulations, which can change at any time. If these laws and regulations change in the future, modifications to our technologies and operations could be required, and we could be required to make unbudgeted capital expenditures, which could lead to an increase in our borrowing costs. For a more detailed discussion about the authorizations and concessions by regulatory agencies of the Brazilian government upon which our mining and logistics activities depend, see *Item 4. Information on the Company—Regulatory Matters*.

***Brazilian environmental laws may adversely affect our mining and energy businesses.***

Our operations often involve using, handling, disposing and discharging hazardous materials into the environment or the use of natural resources, and are therefore subject to the environmental laws and regulations of Brazil. Environmental regulation in Brazil has become stricter in recent years, and it is possible that more regulation or more aggressive enforcement of existing regulations will adversely affect us by imposing restrictions on our activities, creating new requirements for the issuance or renewal of environmental licenses, raising our costs or requiring us to engage in expensive reclamation efforts.

Our projects often require us to obtain or renew environmental licenses. Difficulties in obtaining those licenses may lead to construction delays or cost increases and in some cases may lead us to abandon a project.

We are also subject to recent Brazilian environmental legislation that requires companies undertaking projects with significant environmental impact to pay an “environmental compensation” fee in the amount of at least 0.5% of the total investment in the venture. There are numerous uncertainties about how this law will be applied in practice. If we were required to pay this fee with respect to past investments or if the level of the fees actually charged were increased above 0.5%, it would significantly increase our costs and, depending on the magnitude of the fees involved, could have a material adverse effect on our liquidity. Uncertainties regarding calculation and payment of these fees may strain our relations with the Brazilian environmental authorities or lead to delays in obtaining necessary environmental permits. See *Item 8. Financial Information—Legal Proceedings*.

Brazilian laws restricting development in the Amazon river basin and surrounding areas may place limits on our ability to expand certain of our operations and to fully exploit our mineral rights in those regions. See *Item 4. Information on the Company—Regulatory Matters—Environmental Matters*.

Several Brazilian states in which we operate are currently considering implementing water usage fees under the National Hydrological Resources Policy. This may require us to pay usage fees in the future for water rights that we currently use for free, which could considerably increase our costs in areas where water resources are scarce.

In addition, we are currently a defendant in an action brought by the municipality of Itabira, in the state of Minas Gerais, which alleges that our Itabira iron ore mining operations have caused environmental and social damages. If we do not prevail in this lawsuit, we could incur a substantial expense. For more information on environmental laws and the legal challenges we face, see *Item 4. Information on the Company—Regulatory Matters—Environmental Matters* and *Item 8. Financial Information—Legal Proceedings*.

**Risks Relating to the American Depositary Shares**

***Restrictions on the movement of capital out of Brazil may hinder your ability to receive dividends and distributions on American depositary shares, and the proceeds from any sale of American depositary shares.***

From time to time, the Brazilian government may impose restrictions on capital outflow that would hinder or prevent the custodian who acts on behalf of the depositary for the American depositary shares from converting proceeds from the shares underlying the American depositary shares into U.S. dollars and remitting those proceeds abroad. Brazilian law permits the government to impose these restrictions whenever there is a serious imbalance in Brazil’s balance of payments or reason to foresee a serious imbalance.

The Brazilian government imposed remittance restrictions for approximately six months in 1989 and early 1990. If enacted in the future, similar restrictions would hinder or prevent the conversion of dividends, distributions or the proceeds from any sale of shares from *reais* into U.S. dollars and the remittance of the U.S. dollars abroad. In

that event, the custodian, acting on behalf of the depositary, will hold the *reais* it cannot convert for the account of the holders of American depositary receipts who have not been paid. The depositary will not invest the *reais* and will not be liable for interest on those amounts. Furthermore, any *reais* so held will be subject to devaluation risk.

***If you exchange American depositary shares for the underlying shares, as a result of Brazilian regulations you risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.***

The Brazilian custodian for the shares underlying our American depositary shares will obtain an electronic registration from the Central Bank of Brazil to entitle it to remit U.S. dollars abroad for payments of dividends and other distributions relating to the shares underlying our American depositary shares or upon the disposition of the underlying shares. If you decide to exchange your American depositary shares for the underlying shares, you will be entitled to continue to rely, for five business days from the date of exchange, on the custodian's electronic registration. Thereafter, you may not be able to obtain and remit U.S. dollars abroad upon the disposition of, or distributions relating to, the underlying shares unless you obtain your own electronic registration by registering your investment in the underlying shares under Resolution No. 2,689 of the National Monetary Council, which entitles foreign investors to buy and sell securities on the São Paulo stock exchange, or BOVESPA. For more information regarding these exchange controls, see *Item 10. Additional Information—Exchange Controls and Other Limitations Affecting Security Holders*. If you attempt to obtain your own electronic registration, you may incur expenses or suffer delays in the application process, which could delay your ability to receive dividends or distributions relating to the underlying shares or the return of your capital in a timely manner. We cannot assure you that the custodian's electronic registration or any certificate of foreign capital registration obtained by you will not be affected by future legislative changes, or that additional restrictions applicable to you, the disposition of the underlying shares or the repatriation of the proceeds from disposition will not be imposed in the future.

***Because we are not obligated to file a registration statement with respect to preemptive rights relating to our shares, you may be unable to exercise those preemptive rights.***

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

***Holders of our American depositary shares may encounter difficulties in the exercise of voting rights.***

Holders of our common and preferred class A shares are entitled to vote on shareholder matters. You may encounter difficulties in the exercise of some of your rights as a shareholder if you hold our American depositary shares rather than the underlying shares. For example, if we fail to provide the depositary with voting materials on a timely basis, you may not be able to vote by giving instructions to the depositary on how to vote for you.

Our corporate affairs are governed by our bylaws and the Brazilian Corporate Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States or elsewhere outside Brazil. Under the Brazilian Corporate Law, holders of our common and preferred class A shares may have fewer and less well-defined rights to protect their interests relative to actions taken by our board of directors or the holders of common shares than under the laws of some jurisdictions outside Brazil.

Although Brazilian law imposes restrictions on insider trading and price manipulation, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or markets in certain other jurisdictions. In addition, rules and policies against self-dealing and regarding the preservation of minority shareholder interests may be less well developed and enforced in Brazil than in the United States, which could potentially disadvantage you as a holder of the underlying shares and American depositary shares. For example, when compared to Delaware general corporation law, Brazilian corporate law and practice has less detailed and well-established rules and judicial precedents relating to the review of management decisions against duty of care and duty of loyalty standards in the context of corporate restructurings, transactions with related parties, and sale-of-

business transactions. In addition, shareholders in Brazilian companies ordinarily do not have standing to bring a class action.

In addition, as a foreign private issuer, we are not required to follow many of the corporate governance rules that apply to U.S. domestic issuers with securities listed on the New York Stock Exchange. For more information concerning our corporate governance policies, see *Item 6. Directors, Senior Management and Employees*.

## Item 4. Information on the Company

### BUSINESS OVERVIEW

#### General

We are the world's largest producer and exporter of iron ore and pellets, the largest diversified mining company in the Americas by market capitalization and one of the largest companies in Latin America. We hold exploration claims that cover 9.8 million hectares (24.1 million acres) in Brazil, and 395.8 thousand hectares (977.9 thousand acres) outside Brazil in Gabon, Chile and Peru. We operate large logistics systems including railroads and ports that are integrated with our mining operations. Directly and through affiliates and joint ventures, we have major investments in the aluminum-related, energy and steel businesses. We are investing heavily in copper exploration, and our first copper mine began operations in June 2004.

Our main lines of business are:

- *Ferrous minerals (69.4% of 2003 consolidated gross operating revenues).* We operate two fully integrated world-class systems in Brazil for producing and distributing iron ore (the Northern System and the Southern System), consisting of mines, railroads and port and terminal facilities, and a third system consisting of mines and port facilities. At December 31, 2003, we had a total of 4,926 million tons of proven and probable iron ore reserves in our two fully integrated systems in Brazil, with an average grade of 53.57% iron in our Southern System and 66.56% in our Northern System. We also operate ten pellet-producing facilities, six of which are joint ventures with international partners, and have a 50% stake in a joint venture that owns and operates two pelletizing plants. We are one of the world's largest producers of manganese ore and ferroalloys.
- *Non-ferrous minerals (3.8% of 2003 consolidated gross operating revenues).* We are Brazil's largest producer of kaolin and potash. Our non-ferrous minerals business also includes our exploration efforts related to copper and gold. We are in the process of completing our Sossego copper mining project in Carajás, where we began production of copper concentrate (with gold as a by-product) in 2004.
- *Logistics (10.9% of 2003 consolidated gross operating revenues).* We are a leading provider of logistics services in Brazil, with operations in the railroad, coastal shipping and port operations industries. Each of the iron ore complexes of our Northern and Southern Systems incorporates an integrated railroad network linked to automated port and terminal facilities, and is designed to provide iron ore, freight and passenger rail transportation, bulk terminal storage and ship loading services to us and third parties. In 2003, our railroads transported approximately 68% of the total freight tonnage transported by Brazilian railroads, or approximately 201 million tons of cargo, of which 149 million tons were our iron ore and pellets.
- *Aluminum-related operations (15.4% of 2003 consolidated gross operating revenues).* Through subsidiaries and joint ventures, we conduct major operations in the production of aluminum-related products. They include:
  - *Bauxite mining*, which we conduct through our 40.0% interest in Mineração Rio do Norte S.A., or MRN, which holds substantial bauxite reserves with a low strip ratio and high recovery rate. MRN, one of the largest bauxite producers in the world, has a nominal production capacity of 16.3 million tons per year and produced 14.4 million tons of bauxite in 2003. We also own substantial bauxite mining rights in the Paragominas region, in the state of Pará.
  - *Alumina refining*, which we conduct via our alumina refining subsidiary, Alunorte-Alumina do Norte do Brasil S.A., or Alunorte, which currently has a nominal production capacity of 2.4 million tons of alumina per year. In July 2003, Alunorte began work on a capacity expansion designed to increase its annual capacity to 4.2 million tons per year. We are also exploring a potential joint venture with the Aluminum Corporation of China Limited (Chalco) to construct a new alumina refinery in the state of Pará, Brazil.
  - *Aluminum metal smelting*, which we conduct through two aluminum smelting joint ventures, Albras - Alumínio Brasileiro S.A., or Albras, which produces aluminum ingots and in which we have a 51.0% interest, and Valesul Alumínio S.A., or Valesul, which produces aluminum ingots, slabs, bars, billets

and alloys and in which we have a 54.5% interest. These joint ventures currently have a combined production capacity of approximately 530,000 tons of aluminum per year.

- *Other investments.* In addition to our core mining activities, we currently have investments in four steel companies, and are in the process of conducting a feasibility study to determine whether to implement a joint venture with Baosteel Shanghai Group Corporation (Baosteel) to construct and operate a steel slab plant in São Luis, state of Maranhão. We also hold stakes in nine hydroelectric power generation projects with a total projected capacity of 3,364 MW (of which our share is 1,333.5 MW), three of which have already begun operations, and the remainder of which are scheduled to start operations within the next five years. Negotiations are currently underway to return the concession for the Santa Isabel hydroelectric project to the Brazilian government.

Through our mineral prospecting and development activities in Brazil, we have acquired extensive experience in exploration techniques and processes specifically designed for use in tropical areas of the world, and maintain an active mineral exploration program in Brazil and overseas. In 2003, our mineral exploration efforts were focused on copper, gold, nickel, manganese ore, kaolin, bauxite and platinum group metals. We spent US\$ 82 million on research and development in 2003, including mineral exploration expenses of US\$ 69 million (of this amount, US\$ 56.6 million, or 82%, consisted of expenditures for mineral exploration in Brazil). International mineral exploration included activities in Chile, Gabon and Peru.

## **Incorporation of CVRD and Vale Overseas**

### ***Vale Overseas***

Vale Overseas is a finance company wholly owned by CVRD. It was registered and incorporated as a Cayman Islands exempted company with limited liability on April 3, 2001 (registration number 113637). Vale Overseas is incorporated for an indefinite period of time. Its registered office is at Walker House, P.O. Box 908 GT, Mary Street, Georgetown, Grand Cayman, Cayman Islands.

Vale Overseas' business is to issue debt securities to finance CVRD's activities. It has no other operations or employees. Vale Overseas has issued three series of debt securities, including its US\$ 300 million 8.625% Notes due 2007, which were issued in March 2002, its US\$ 300 million 9.0% Notes due 2013, which were issued in August 2003 and its US\$ 500 million 8.25% Notes due 2034, which were issued in January 2004. We used the proceeds of these securities for general corporate purposes.

### ***CVRD***

CVRD's legal and commercial name is Companhia Vale do Rio Doce. CVRD is a stock corporation, or *sociedade por ações*, duly organized on January 11, 1943, and existing under the laws of the Federative Republic of Brazil.

CVRD was privatized in three stages between 1997 and 2002, beginning with the sale by the Brazilian government of a controlling stake in CVRD to Valepar in 1997. The last stage of the privatization took place in 2002, when the Brazilian government sold a remaining minority stake through a global equity offering. It is organized for an unlimited period of time. CVRD's principal executive offices are located at Avenida Graça Aranha, No. 26, 20030-900 Rio de Janeiro, RJ, Brazil, and our telephone number is 55-21-3814-4540.

## Acquisitions, Asset Sales and Significant Changes in 2003 and 2004

### *Mining*

*Caemi.* In September 2003, we purchased Mitsui & Co. (Mitsui)'s remaining stake in Caemi Mineração e Metalurgia S.A. (Caemi) for US\$ 426.4 million. Together with the 50% stake in Caemi's voting shares acquired in 2001, this acquisition gives us 60.2% of Caemi's total capital, with 100% of Caemi's common shares and 40% its preferred shares. The acquisition of Caemi strengthens our position as a leading producer in the iron ore market by giving us majority control of Minerações Brasileiras Reunidas S.A. (MBR), the second largest producer and exporter of iron ore in Brazil and also gives us a majority stake in Cadam S.A., Brazil's largest producer and exporter of kaolin. MBR also owns 32.93% of MRS Logística S.A. (MRS Logística), a railway company.

*Rio Doce Manganese Norway.* In February 2003, we acquired for US\$ 17.6 million 100% of Elkem Rana AS, a Norwegian ferroalloy producer, which we subsequently renamed Rio Doce Manganese Norway AS (RDMN). RDMN has a plant located in an industrial park in Mo I Rana, Norway, where ferrochrome was produced until June 2002. In 2003, we invested US\$ 16.7 million to convert the plant to allow the production of ferro manganese alloys, including by revamping one of its electrical furnaces and the plant's environmental protection and safety procedures. The plant started operations with one furnace in June 2003 and brought its second furnace online in November 2003. The ferroalloy plant, which consumes manganese ore fines from our Azul mine in Carajás, has a production capacity of 110,000 tons per year and produces ferro silicon manganese and high carbon ferro manganese alloys. The acquisition of RDMN expands our ferroalloy business in continental Europe, where our wholly owned subsidiary Rio Doce Manganese Europe has operated a manganese ferroalloy plant since 1992.

*Restructuring of MSG – Minas da Serra Geral S.A.* In July 2003, we and JFE Steel Corporation (JFES) signed an agreement to restructure the shareholding composition of Minas da Serra Geral S.A. (MSG), a joint venture created in 1982 to develop the Capanema iron ore mine, which was discontinued in 2003. The restructuring involved the purchase by JFES of a 1% equity stake in MSG previously owned by us and a 24.5% equity stake previously owned by a Japanese group of companies. Following the restructuring, each of CVRD and JFES now owns 50% of MSG's equity. CVRD and JFES will continue the MSG joint venture, whose purpose will now be to provide equipment for use in the development of our wholly-owned Fábrica Nova iron ore mine, located in the central region of the Iron Ore Quadrangle, in the state of Minas Gerais, 25 km east of Capanema. Fábrica Nova is expected to start operations by 2005, producing 10 million tons of iron ore per year, and is expected to reach full-scale production of 15 million tons by 2007. We currently estimate capital expenditures for the development of Fábrica Nova at US\$ 85 million.

*Rio Doce Manganês.* On October 15, 2003, our subsidiary SIBRA – Eletrosiderúrgica Brasileira S.A. (SIBRA) was renamed Rio Doce Manganês S.A. (RDM). In February 2004, all of the operational assets of our subsidiaries Sociedade Mineira de Mineração, S.A., Companhia Paulista de Ferro Ligas (CPFL), Minérios Metalúrgicos do Nordeste S.A., and Mineração Urandi S.A., were consolidated into RDM.

*Simplification of corporate structure.* In August 2003, our wholly-owned subsidiaries Ferteco Mineração S.A. (Ferteco) and Celmar S.A. — Indústria de Celulose e Papel (Celmar) were merged into CVRD. The merger of Ferteco, which provides us with direct control over Ferteco's stake in MRS Logística, should allow us to achieve synergies between the two companies via cost reduction and greater operational flexibility in iron ore production and logistics. Celmar's 30,000 hectares of renewable eucalyptus forest have been contributed to our Ferro Gusa Carajás (Ferro Gusa) pig iron joint venture, as described below.

In December 2003, the following wholly-owned subsidiaries were merged and consolidated into CVRD: Rio Doce Geologia e Mineração S.A. — Docegeo (Docegeo), Mineração Serra do Sossego S.A. (Sossego), Vale do Rio Doce Alumínio S.A. — Aluvale (Aluvale) and its subsidiary, Mineração Vera Cruz S.A. (MVC). CVRD assumed all of these subsidiaries' assets and obligations. The consolidations were implemented to simplify our organizational structure.

### *Logistics*

*Coastal shipping.* In May 2003, we signed a stock purchase agreement with Mitsui, a major Japanese participant in the global logistics market. Under the agreement, our wholly-owned subsidiary Navegação Vale do Rio Doce S.A.-Docenave, or Docenave, will own 79% of the total shares of a new company, DCNDB Overseas S.A., or DCNDB, established to develop the intermodal coastal shipping business. Mitsui will own the remaining 21% of the shares of DCNDB. All approvals have been obtained, except the license to operate long haul services,

which is expected during the first half of 2004. We expect the association with Mitsui to allow Docenave to offer service between the ports of Salvador and Itajai, a line which is currently not serviced by any other major carriers, as well as service between other ports in Argentina. We believe this joint venture will help increase Docenave's share in the coastal shipping market and enable it to attract additional domestic and international customers.

*Restructuring of certain logistics holdings.* In April 2003, we, Companhia Siderúrgica Nacional (CSN), and others signed an agreement for the purchase and sale of shares in logistics companies. The agreement involved three principal transactions:

- our acquisition of CSN's stake in Ferrovia Centro-Atlântica S.A. (FCA), the largest railroad in Latin America;
- the sale to CSN of our indirect stake in Sepetiba Tecon S.A. (STSA), a company that operates a terminal at the Port of Sepetiba in the state of Rio de Janeiro; and
- the transfer to CSN and Taquari Participações S.A. of our stake in Companhia Ferroviária do Nordeste - CFN (CFN), a railroad company with no significant synergies with other CVRD assets.

In the second half of 2003, ANTT authorized these transactions, and we, CSN and the other parties concluded the transactions contemplated in the April agreement. We expect the consummation of these transactions to allow us to focus on and promote new investments in railroad infrastructure and equipment and increase the supply and quality of general cargo transportation services to our clients.

After receiving authorization from ANTT, a capital increase of FCA was carried out. CVRD fully subscribed to the capital increase, for a total of R\$ 1,003 million, of which R\$ 789.3 million corresponded to the conversion of advance payments for future capital increases already made, and the remaining R\$ 204.9 million were paid in four cash installments. Upon completion of the capital increase, CVRD became the controlling shareholder of FCA.

### ***Aluminum-Related Operations***

*Alunorte capacity expansions.* In April 2003, Alunorte inaugurated its third production line, which has a capacity of 825,000 tons of alumina per year. With this third line, Alunorte increased its production capacity to 2.4 million tons of alumina per year. Alunorte's total investment in this project amounted to approximately US\$ 300 million.

In July 2003, Alunorte began work on a new capacity expansion for its alumina refinery in Barcarena, in the state of Pará. This brownfield project involves the construction of stages 4 and 5 of the plant, and is expected to increase its annual capacity from 2.4 million to 4.2 million tons of alumina per year. Alunorte's total investment in this project is expected to be approximately US\$ 583 million.

*ABC Refinery Project.* In May 2004, we signed a framework agreement with Chalco that sets forth a general outline of some of the principal terms for a joint investment in an alumina refinery in Brazil (ABC refinery). Under the agreement, we and Chalco have agreed to develop a joint study for the construction of a greenfield refinery in the state of Pará, Brazil near the existing facilities of Alunorte. The alumina refinery is expected to have an initial capacity of 1.8 million tpy, and to reach a final capacity of 7.2 million tpy by gradual expansions. The refinery project would form part of a series of related transactions involving mining, transportation, shipping and port development in Brazil. The framework agreement contemplates that bauxite for the project would be supplied from our Paragominas bauxite mines. The initial phase of the refinery project is preliminarily estimated to have a capital expenditure cost of approximately US\$ 1 billion. The first stage of the refinery is expected to be completed and operational in 2007. The project remains subject to further discussion and to the negotiation of final documentation and a number of other conditions, including receipt of board and governmental approvals.

### ***Steel***

*Companhia Siderúrgica Tubarão.* In April 2003, we completed the acquisition of shares of Companhia Siderúrgica de Tubarão (CST) from Acesita S.A. (Acesita) that are not subject to the CST controlling shareholders' agreement. We acquired 4.42% of the common shares and 5.64% of the preferred shares of CST, representing 5.17% of CST's total capital, for US\$ 59.7 million. Following this transaction, we now own 24.93% of CST's common shares and 29.96% of CST's preferred shares, totaling 28.02% of CST's capital. Subject to the renewal of the controlling shareholders agreement in 2005, we expect to acquire, jointly with other parties, the remaining shares

of CST held by Acesita. We expect that the cost of acquiring the stake in CST will be US\$ 22.66 per block of thousand shares (equivalent to US\$ 33 million as of March 27, 2003) plus 4.25% a year, less distributed dividends. We have also entered into agreements with Arcelor to guarantee the liquidity of our position, under which we have the right to decrease our participation in CST between 2007 and 2009 to 20% of the CST shares owned by the controlling group. Between 2009 and 2015, we have the option to sell our remaining stake in CST to Arcelor. The prices of both divestments will be determined based on a valuation performed by two investment banks.

A CST expansion project, involving the construction of a third blast furnace, a third continuous casting and a new coke plant, is scheduled to come onstream in 2006. The project will not require capital injections and/or financial guarantees from its shareholders.

*Ferro Gusa pig iron joint venture.* In April 2003, we signed an investment agreement with Nucor Corporation, a North American steelmaker, in order to form a joint venture in Brazil, Ferro Gusa, in which approximately 78% and 22% of the voting shares will be held by CVRD and Nucor Corporation (or one of its affiliates), respectively. The main purpose of Ferro Gusa is the production and sale of pig iron. In September 2003, we contributed to Ferro Gusa the forest assets once held by Celmar, a wholly-owned subsidiary of CVRD which was merged into CVRD in August 2003. The cultivated forest assets, now owned by Ferro Gusa, will be used as an energy source for its pig iron production. On May 3, 2004 Nucor Brasil Participações Ltda. ("Nucor") an affiliate of Nucor Corporation, subscribed to a capital increase of Ferro Gusa for US\$ 5 million. As a result, CVRD currently has 88% and Nucor currently has 12% of the voting shares of Ferro Gusa. Nucor is expected to invest an additional US\$ 5 million to increase its participation in the capital of Ferro Gusa to approximately 22%, as contemplated in the investment agreement.

*Steel slab plant feasibility study.* In February 2004 we agreed with Baosteel, a major Chinese steelmaker, to commence a study to assess the feasibility of implementing a joint venture to build and operate an integrated steel plant in São Luis, in the state of Maranhão, Brazil. An Engineering Service Agreement has been signed authorizing the basic engineering and formal feasibility study for the project. If the project is implemented, it would be the largest investment in the Brazilian steel industry in many years. As currently planned, the plant is expected to produce approximately 3.7 million tons of steel slabs per year, with a possible future capacity expansion to 7.5 million tons per year. If the project is implemented, we expect it to further increase demand for our iron ore products. We and Baosteel are currently negotiating with Arcelor regarding its possible participation in the project. The capital expenditures required for the development of the plant have not yet been determined.

## **Coal**

*Mozambique coal mine pre-feasibility study.* In June 2003, we, the Industrial Development Corporation of South Africa, and Iscor, a major South African steel producer, signed a non-binding Memorandum of Understanding to undertake a feasibility study for the development of the Moatize coal deposit in Mozambique. The group expects to spend US\$ 3 million in updating the pre-feasibility study which was first undertaken in the 1980s by CVRD and others. It is anticipated that the project will involve the development of the mine to produce coking and steam coal for export and domestic consumption in Mozambique, the rebuilding of the Sena railway line and the development of a port near Beira for coal export. If the pre-feasibility study is positive, the group intends to carry out a formal feasibility study and to implement the project. The project is subject to the Mozambican government's concession of rights for mining, railroad and port operations and to multi-lateral and government agencies' support for the related infrastructure investments. The size of the mine and capital expenditures required for its development have not yet been determined.

*Yongcheng Coal Project.* In May 2004, we entered into an agreement with Shanghai Baosteel Group Corporation (Baosteel), the largest steelmaker in China, and with Yongcheng Coal & Electricity Group (Yongcheng), one of the largest coal producers in China. The agreement contemplates the establishment of a joint venture for anthracite and coal production in China. The agreement contemplates that we will have guaranteed off-take rights to a portion of the production of the mines, which we intend to consume at our pelletizing plants and to sell to clients in the Brazilian market. The project remains subject to further discussion and to the negotiation of final documentation, as well as to other conditions including receipt of board and governmental approvals.

*Yankuang Coke and Coal Projects.* In May 2004, we entered into an agreement with the Yankuang Group (Yankuang), one of the largest coal producers in China, to explore the possibility of participating in a joint venture for the purpose of developing, owning and operating a plant in Jining City, Shandong Province, China that would produce 2,000,000 tons of coke and 200,000 tons of methanol per year. As currently planned, the plant would begin operations in 2006 and approximately 25% of the plant's production would be exported mainly to Brazil. We are also exploring with Yankuang the possibility of participating in a joint venture to develop new coal mines in the city



of Zhaolou, Shandong province, China. The planned production capacity of the first mine to be developed would be three million tons per year and, if the project proceeds, the mine is expected to start operations in 2007. Each of the coke plant and coal mine projects remains subject to further discussion, negotiation of final documentation and a number of other conditions, including receipt of board and governmental approvals.

### ***Dispositions and Asset Sales***

In line with our focus on mining and logistics, we have continued to pare down our holdings of non-strategic assets. We summarize below our key dispositions and asset sales since the beginning of 2003.

*Sale of Docenave vessels.* In the transportation industry, we continued in 2003 the divestiture of our dry-bulk shipping business begun in 2001, by continuing to sell the fleet of vessels owned by Docenave. In June 2003, we sold two additional ships of Docenave to Magna Marine, Inc. for US\$ 36 million. As a result of the sale, Docenave now remains with three ships which we intend to sell in the near future.

*Sale of Fazenda Brasileiro gold mine.* In August 2003, we sold our one remaining gold mine, Fazenda Brasileiro, which was near full exhaustion, to Yamana Resources Inc., a Canadian mining company, for US\$ 20.9 million. With the sale of Fazenda Brasileiro, our gold production has been discontinued, and we do not expect to begin producing gold again except in connection with the start-up of the copper projects we are currently developing in Carajás, where we expect to produce gold as a by-product of the copper mining process. We continue to invest in mineral exploration aiming at the discovery of new gold reserves.

*Sale of our stake in Fosfertil.* In October 2003, we sold our interest in Fertilizantes Fosfatados S.A. (Fosfertil) shares to Bunge Fertilizantes S.A. for US\$ 84 million. The sale involved 10.96% of Fosfertil's voting capital, 11.19% of its preferred capital and 11.12% of its total capital. This transaction is consistent with CVRD's focus in mining and logistics and with its strategy of selling portfolio investments.

*Santa Isabel hydroelectric power project.* Negotiations are currently underway with ANEEL to return the concession for the Santa Isabel hydroelectric project due to difficulties related to environmental issues.

### **Business Strategy**

Our goal is to strengthen our competitiveness among the world's leading mining companies by focusing on diversified growth in mining (mainly based on the exploitation of organic growth opportunities) and developing our logistics business. We are pursuing disciplined capital management, looking to maximize return on invested capital and total return to shareholders. Although we are emphasizing organic growth in our core businesses, we will continue to pursue selective acquisitions in order to create value for our shareholders.

Over the past several years, we have developed a more efficient governance structure and a robust long-term strategic planning process. Now we are building on these changes with ambitious long-range plans in each of our principal business areas. We are planning substantial capital expenditures for organic growth through 2010. The following paragraphs highlight specific major strategies.

#### ***Maintaining Our Leadership Position in the Seaborne Iron Ore Market***

In 2003, we consolidated our leadership in the seaborne iron ore trade market, achieving an estimated 32.9% of the total 537 million tons traded in the year. We are committed to maintaining our position in the world iron ore market by strengthening relationships with clients, focusing our product line to capture industry trends, increasing our production capacity in line with demand growth and controlling costs. We believe that our strong relationships with major customers (reinforced through long term contracts), tailored product line and high quality products will enable us to achieve this goal.

#### ***Growing Our Logistics Business***

We believe that the quality of our railway assets and our many years of experience as a railroad and port operator, together with the lack of efficient transportation for general cargo that Brazil faces, position us to establish ourselves as a leading Brazilian logistics company serving both domestic and export markets. In 2003, the Brazilian regulatory authorities authorized us to increase our stake in FCA, the largest Brazilian railroad, becoming the owner of 99.99% of its capital. This railroad is a component of our Southern Logistics System, comprising the Estrada de Ferro Vitória a Minas (EFVM) railroad and the complex of Vitória ports (Tubarão, Praia Mole, TPD – Terminal de

Produtos Diversos and Terminal de Vila Velha). We are focusing on the maximization of asset utilization by means of increasing railroad traffic and port handling, improving levels of service offered and developing new logistics solutions for our clients.

### ***Developing Our Copper Resources***

We believe that our copper projects, which are all situated in the Carajás region, can be among the most competitive in the world in terms of investment cost per ton of ore. Our copper mines will benefit from our transportation facilities serving the Northern System. Sossego, our first copper project, began commercial production in June 2004, and will have an average annual capacity of 140,000 tons of copper in concentrate. We have a Mineral Risk Contract with BNDES providing for the joint development of certain unexplored mineral resources in approximately two million identified hectares of land in the Carajás region, as well as proportional participation in any financial benefits earned from the development of those resources. In April 2004, the Mineral Risk Contract was renewed for an additional period of five years.

### ***Increasing Our Aluminum-Related Activities***

We plan to develop and increase production capacity in our aluminum-related operations, focusing on the upstream of the production chain, developing low cost bauxite and alumina projects. Our bauxite joint venture, MRN and our alumina subsidiary, Alunorte, each increased their production capacity in 2003. We are currently building a new capacity expansion at Alunorte and expect to begin developing a new bauxite mine, Paragominas, which is wholly owned by CVRD. The expansion of Alunorte is expected to be completed by 2006. We are also studying the possibility of a joint venture with Chalco to build a new alumina plant in the state of Pará that would further increase our alumina production. We may pursue acquisitions and/or partnerships in the production of primary aluminum to guarantee demand for our alumina.

### ***Globalization of Multi- Commodity Exploration Efforts***

We are engaged in an active mineral exploration program, with efforts in several countries around the globe, including Brazil, Peru, Chile, Mongolia, Gabon, Angola and China. We are mainly seeking new copper, gold, manganese ore, nickel, kaolin, bauxite and platinum group metals deposits. Mineral exploration is an important part of our organic growth strategy.

### ***Developing Power Generation Projects***

Energy management and efficient supply has become a priority for us, driven both by structural changes in the industry and regulatory uncertainties, which could increase the risk of rising electricity prices and energy shortages, such as Brazil experienced in the second half of 2001. We have invested in nine consortia to develop hydroelectric power generation projects and we plan to use the electricity from these projects for our internal needs. As a large consumer of electricity, we expect that investing in power projects will help protect us against volatility in the price and supply of energy.

## LINES OF BUSINESS

Our principal lines of business consist of mining and logistics. For internal management purposes, we group our aluminum-related operations together with our other significant equity participations in other companies.

### Mining

#### *Ferrous Minerals*

Our ferrous minerals business segment includes iron ore mining, pellet production, manganese ore mining and ferroalloy production.

The table below sets forth our ferrous minerals gross revenues by geographic market and by category for the periods indicated as reflected in our consolidated financial statements.

|  | For the Year ended December 31, |         |      |         |         |         |
|--|---------------------------------|---------|------|---------|---------|---------|
|  | 2001                            |         | 2002 |         | 2003(1) |         |
|  | (in millions of US\$)           |         |      |         |         |         |
| <b>Gross revenues classified by geographic destination</b> |                                 |         |      |         |         |         |
| Export sales:  |                                 |         |      |         |         |         |
| America, except United States .....                        | US\$                            | 238     | US\$ | 392     | US\$    | 526     |
| United States.....   |                                 | 247     |      | 340     |         | 337     |
| Europe.....  |                                 | 1,469   |      | 1,799   |         | 2,214   |
| Middle East/Africa/Oceania .....                           |                                 | 216     |      | 239     |         | 292     |
| Japan .....  |                                 | 525     |      | 488     |         | 569     |
| China(2).....  |                                 | —       |      | 574     |         | 897     |
| Asia, other than Japan and China (2) .....                 |                                 | 863     |      | 368     |         | 422     |
| Subtotal .....   |                                 | 3,558   |      | 4,200   |         | 5,257   |
| Domestic sales.....  |                                 | 1,083   |      | 996     |         | 1,142   |
| Subtotal.....  |                                 | 4,641   |      | 5,196   |         | 6,399   |
| Eliminations(3).....                                       |                                 | (1,782) |      | (2,093) |         | (2,550) |
| Total.....   | US\$                            | 2,859   | US\$ | 3,103   | US\$    | 3,849   |
| <b>Gross revenues classified by category</b>               |                                 |         |      |         |         |         |
| Iron ore .....   |                                 | 2,003   |      | 2,147   |         | 2,662   |
| Pellets .....  |                                 | 597     |      | 673     |         | 838     |
| Manganese ore and ferroalloys .....                        |                                 | 259     |      | 283     |         | 349     |
| Total.....   | US\$                            | 2,859   | US\$ | 3,103   | US\$    | 3,849   |

(1) The operations of Caemi are reflected in the above table as of September 2003, the date on which we acquired and began consolidating its operations.

(2) In 2001, China was classified within Asia.

(3) Eliminations of transactions between consolidated figures.

#### *Iron Ore*

We conduct our iron ore business primarily at the parent company level and through our subsidiaries Urucum Mineração S.A., or Urucum and Caemi.

#### *System Structure*

The table below sets forth information regarding our proven and probable iron ore reserves and projected exhaustion dates as of December 31, 2003. The estimates of mineral reserves have been audited and verified by Golder, experts in geology, mining and ore reserve determination. The projected exhaustion dates are estimated based on our estimates of future production levels.

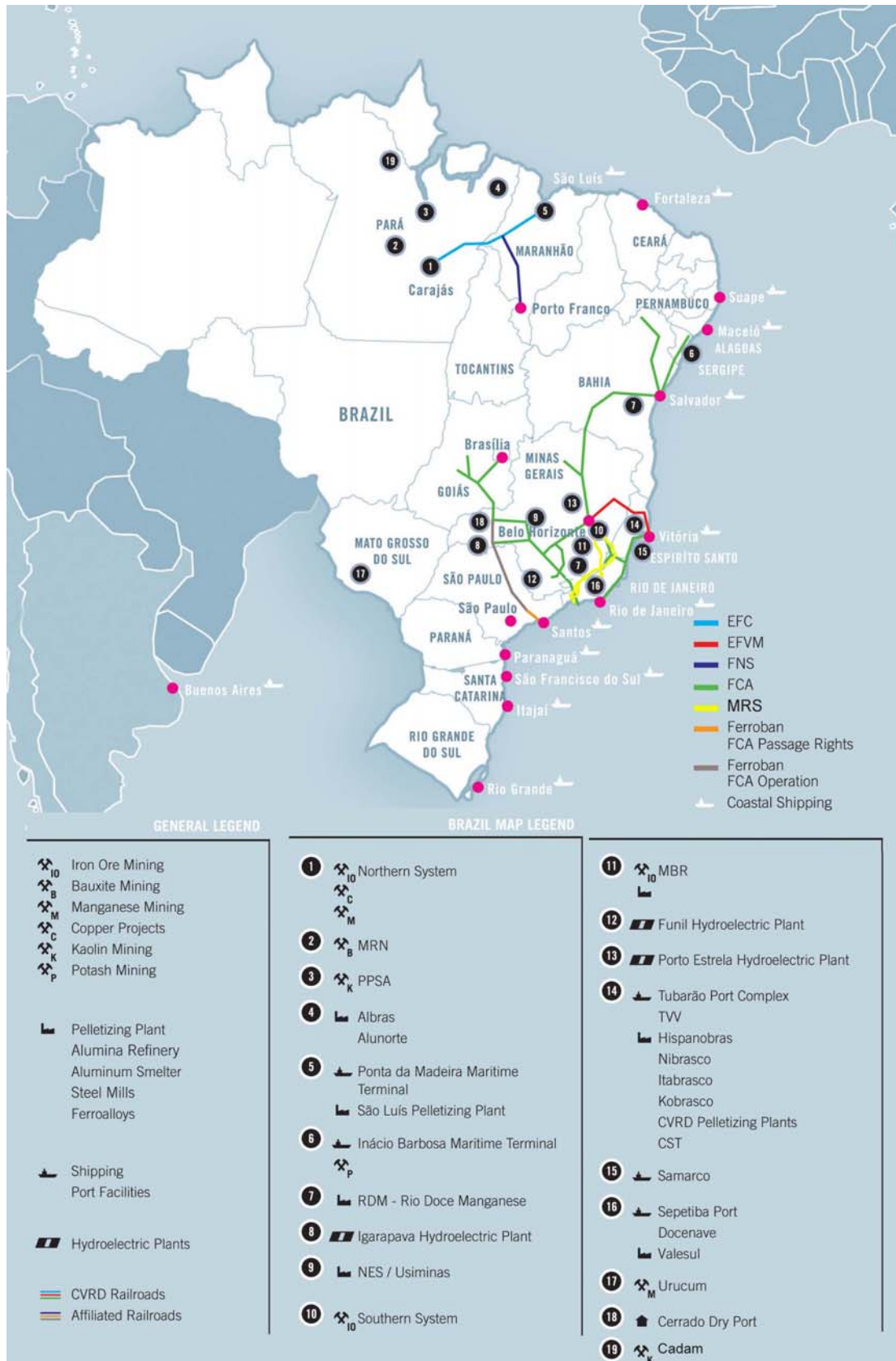
Given the recent nature of our acquisition of Caemi, we have not yet completed the process of establishing proven and probable reserves for Caemi under the applicable SEC requirements.

| Mine(1)                                   | Began Operations | Projected/Actual Exhaustion Date | Production For the Year Ended December 31, |       |       | Proven and Probable Reserves at December 31, 2003 |              |
|---|------------------|----------------------------------|--|-------|-------|---|--------------|
|   |                  |                                  | 2001                                       | 2002  | 2003  | Ore Tonnage (in millions of tons)                 | Grade (% Fe) |
|   |                  |                                  |  |       |       |   |              |
| Southern System                           |                  |                                  |  |       |       |   |              |
| Itabira Complex:                          |                  |                                  |  |       |       |   |              |
| Cauê(2) .....                             | 1942             | 2004                             | 19.7                                       | 20.7  | 22.3  | —   | —            |
| Conceição(3).....                         | 1957             | 2022                             | 19.2                                       | 20.0  | 20.8  | 449.6   | 54.7         |
| Minas do Meio(4) .....                    | 1976             | 2022                             | —  | —     | —     | 621.1   | 53.5         |
| Minas Centrais Complex                    |                  |                                  |  |       |       |   |              |
| Água Limpa / Cururu(5).....               | 2000             | 2014                             | 2.5  | 3.2   | 4.0   | 77.7  | 45.2         |
| Gongo Soco (6).....                       | 2000             | 2017                             | 6.7  | 6.8   | 3.2   | 118.4   | 59.4         |
| Brucutu(7).....                           | 1994             | 2030                             | —  | 0.1   | 1.6   | 772.4   | 52.1         |
| Baú(8) .....                              | 1978             | 2020                             | —  | —     | —     | 36.7  | 55.5         |
| Maquiné(9) .....                          | 2003             | 2030                             | —  | —     | —     | 148.7   | 59.2         |
| Córrego do Meio (10).....                 | 2000             | 2005                             | 1.2  | 1.2   | 1.2   | —   | —            |
| Mariana Complex                           |                  |                                  |  |       |       |   |              |
| Alegria(11).....                          | 2000             | 2024                             | 9.7  | 9.9   | 9.9   | 223.0   | 53.5         |
| Fábrica Nova(11).....                     | 2000             | 2025                             | —  | —     | —     | 440.5   | 54.3         |
| Morro da Mina(11) .....                   | 2000             | 2004                             | —  | —     | —     | 1.3   | 65.1         |
| Fazendão(12) .....                        | 1976             | 2028                             | 1.0  | 0.8   | 0.3   | 357.3   | 50.1         |
| Timbopeba(13) .....                       | 1984             | 2008                             | 5.5  | 5.2   | 5.8   | 101.8   | 54.4         |
| Capanema/Ouro Fino(14).....               | 1982             | 2003                             | 3.9  | 4.0   | 6.4   | —   | —            |
| Minas do Oeste Complex                    |                  |                                  |  |       |       |   |              |
| Córrego do Feijão(15) .....               | 2003             | 2008                             | 5.8  | 6.3   | 7.2   | 27.0  | 65.7         |
| João Pereira(16).....                     | 2003             | 2009                             | 5.6  | 5.2   | 9.9   | 58.1  | 54.9         |
| Área 10, Segredo, Ponto 2 and 3(16) ..... | 2003             | 2008                             | —  | —     | —     | 11.6  | 61.1         |
| Total Southern System .....               |                  |                                  | 80.8                                       | 83.4  | 92.6  | 3,445.2   | 53.6         |
| Urucum(17) .....                          | 1993             | —                                | 0.6  | 0.8   | 0.8   | —   | —            |
| Northern System (18)                      |                  |                                  |  |       |       |   |              |
| N4W                                       | 1994             | 2020                             | 14.9                                       | 12.8  | 13.2  | 654.7   | 66.5         |
| N4E                                       | 1984             | 2015                             | 26.1                                       | 17.8  | 21.4  | 427.4   | 66.9         |
| N5W                                       | 1998             | 2030                             | 1.9  | 6.3   | 6.1   | 296.6   | 66.1         |
| N5E                                       | 1998             | 2007                             | 9.5  | 17.0  | 17.9  | 79.4  | 67.5         |
| N5E-N                                     | 2003             | 2020                             | —  | —     | 0.3   | 22.9  | 65.5         |
| Total Northern System.....                |                  |                                  | 52.4                                       | 53.9  | 58.9  | 1,481.0   | 66.6         |
| Caemi System(19)                          |                  |                                  |  |       |       |   |              |
| Pico .....                                | 1942             | —                                | 11.6                                       | 11.7  | 12.6  | —   | —            |
| Tamanduá .....                            | 1996             | —                                | 11.2                                       | 14.9  | 20.4  | —   | —            |
| Jangada .....                             | 2001             | —                                | 2.8  | 2.5   | 3.0   | —   | —            |
| Mutuca .....                              | 1962             | 2001                             | 2.2  | 0.0   | 0.0   | —   | —            |
| Águas Claras.....                         | 1973             | 2002                             | 2.6  | 1.5   | 0.0   | —   | —            |
| Total Caemi System.....                   |                  |                                  | 30.4                                       | 30.6  | 36.0  | —   | —            |
| Total CVRD.....                           |                  |                                  | 164.2                                      | 168.7 | 188.3 | —   | —            |

- (1) CVRD's equity interest in mines is 100% unless otherwise noted.
- (2) Average product recovery after beneficiation was 74%. Reserves were not reported for 2003 due to the mine's depleted state.
- (3) Average product recovery after beneficiation is 78%.
- (4) Average product recovery after beneficiation is 72%. The run of mine is sent to Cauê Concentration Plant and Conceição Concentration Plant. The production is declared in Cauê and Conceição.
- (5) CVRD ownership is 60%. Average product recovery after beneficiation is 51%.
- (6) Average product recovery after beneficiation is 84%.
- (7) Average product recovery is 100% (direct shipping).
- (8) Average product recovery is 84%.
- (9) Average product recovery is 84%.
- (10) Average product recovery is 100% (direct shipping). Reserves were not reported for 2003 due to the mine's depleted state.
- (11) Average product recovery after beneficiation is 73%.
- (12) Average product recovery is 100% (direct shipping). It produces lump ore only.
- (13) Average product recovery after beneficiation is 77%.
- (14) CVRD's ownership interest is 51%. Average product recovery after beneficiation is 84%. Reserves were not reported for 2003 due to the mine's depleted state.
- (15) Average product recovery after beneficiation is 80%.
- (16) Average product recovery is 70%. The run of mine is sent to Fábrica Concentration Plant.
- (17) There are no proven and probable iron ore reserves at Urucum.
- (18) Average product recovery after beneficiation is 92%.
- (19) Proven and probable reserves have not yet been established for Caemi.

## Integrated Systems

The following map shows the location of our current principal operations.



Our iron ore mining and related operations are concentrated in three systems in Brazil, the Southern System, the Northern System and the Caemi System. The Southern System is located in the states of Minas Gerais and Espírito Santo, and the Northern System is located in the states of Pará and Maranhão. Caemi's iron ore mining area is concentrated in the Iron Ore Quadrangle region in the state of Minas Gerais. Each our Northern and Southern Systems includes iron ore reserves and other mineral deposits, mines, ore processing facilities and integrated railroad and terminal transportation facilities. Our railroads connect the Northern System mines to the Ponta da Madeira Maritime Terminal Complex and the Southern System mines to the Tubarão Maritime Terminal Complex. The operation of these separate systems, each with transportation capability, enhances reliability and consistency of service to our customers. The Caemi System does not include a wholly owned railroad. Instead, we contract freight services from MRS Logística, a railway company in which we have a minority interest, to transport products from mines in the Caemi System to the Guaíba Maritime Terminal Complex, in the state of Rio de Janeiro.

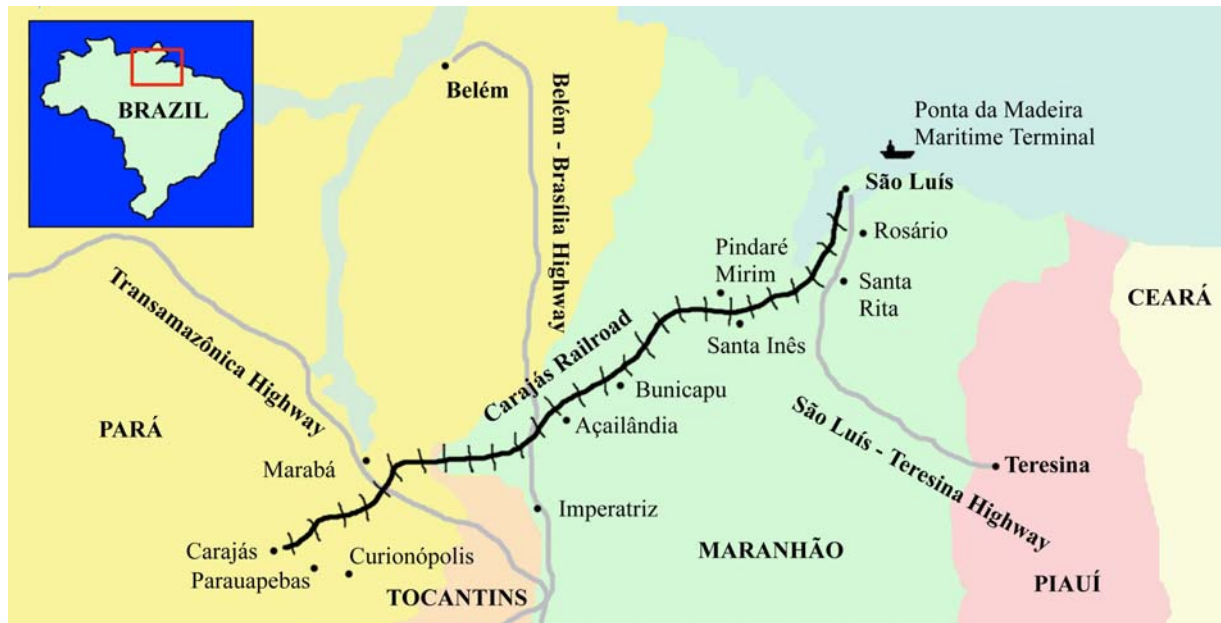
#### *Southern System*



The Southern System is an integrated system consisting of iron ore mines, the Vitória a Minas railroad, and the Tubarão Maritime Terminal Complex (located in Vitória, in the state of Espírito Santo). The iron ore mines of the Southern System are located in a region called the Iron Ore Quadrangle in the state of Minas Gerais, in the southeast of Brazil. The Southern System is accessible by road or by spur tracks of the Vitória a Minas railroad. The iron ore from our Southern System mines is also transported through MRS Logística's railroad to our Port of Sepetiba, in the state of Rio de Janeiro. Transportation of the iron ore concentrate, lump and natural pellet ore produced in the Southern System is discussed below in *Item 4. Information on the Company—Line of Business—Logistics*.

Iron ore in the Southern System is mined by open pit methods. These ore reserves have high ratios of itabirite ore relative to hematite ore. Itabirite is a quartz-hematite rock with an average iron content ranging from 35% to 65%, requiring concentration to achieve shipping grade, which is above a 64% average iron content. Hematite is a high grade ore with an average iron content around 66%. Mines in the Southern System generally process their run-of-mine by means of standard crushing, classification and concentration steps, producing sinter feed, lump ore and pellet feed.

### Northern System



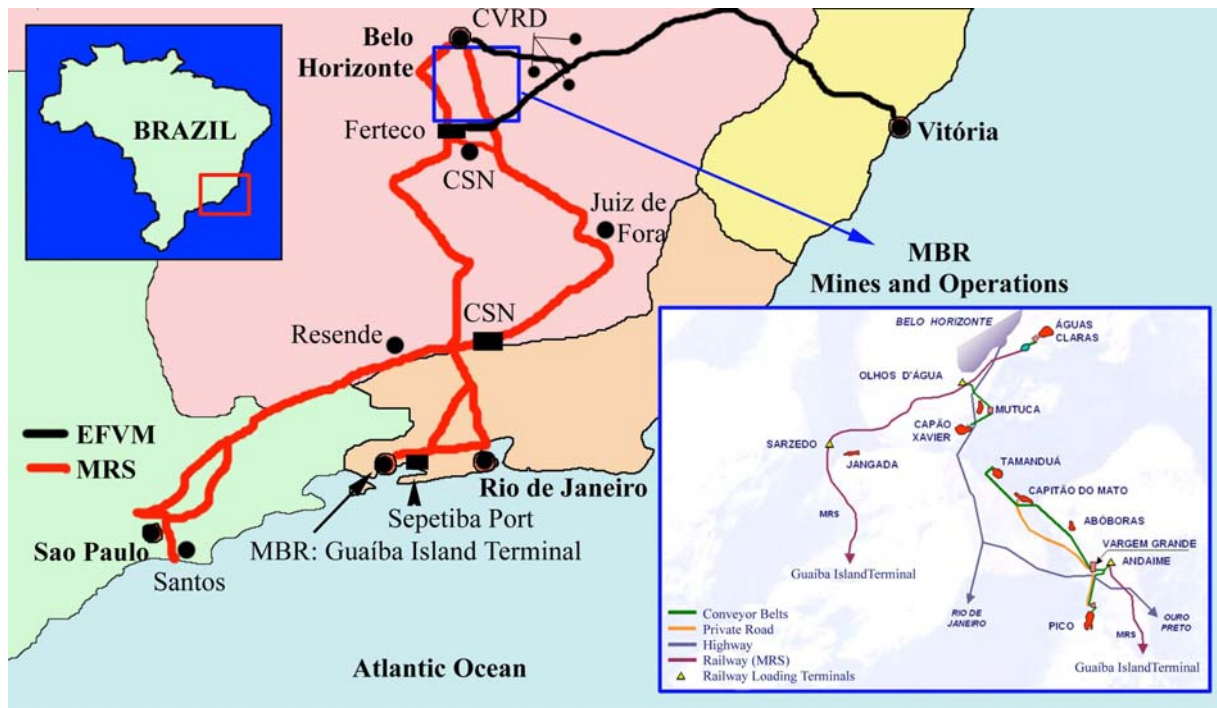
The Northern System is an integrated mine, railroad and port system, including open pit mines and an ore processing complex. The Northern System is located in the Carajás region, in the states of Pará and Maranhão in the north of Brazil (in the Amazon River basin), on public lands for which we hold mining concessions. The Northern System's reserves are among the largest iron ore deposits in the world. These reserves are divided into two main ranges (north and south), situated approximately 35 kilometers apart. Iron ore mining activities in the Northern System are currently being conducted in the northern range, which is divided into six main mining bodies (N4E, N4WC, N4WN, N5W, N5E and N5EN).

The N4E deposit is the largest operational pit in the Northern Region. Industrial scale mining operations began at this mine in 1985. We selected the N4E mine as the first iron body to be developed in the Northern System because development of the N4E would facilitate access to the N4W and N5 deposits, which could share the N4E beneficiation complex and train-loading terminal. We began mining operations at N4W in 1994, opening two pits (N4WC and N4WN). We completed the construction of two in-pit crushing systems located at N4E and N4WN mines in late December 1998. The N4E and N4W mines use conventional open pit benching, with drilling and blasting to open a free face followed by shovel loading. During 1998, we also started operations in the N5 mines (N5W and N5E). Operations in the N5EN mine commenced in 2003.

Because of the high iron content (66.6% on average) in the Northern System, we do not have to operate a concentration plant at Carajás. The beneficiation process consists simply of sizing operations, including screening, hydrocycloning, crushing and filtration. This allows us to produce marketable iron ore in the Northern System at a lower cost than in the Southern System. Output from the beneficiation process consists of sinter feed, pellet feed, special fines for direct reduction processes and lump ore, which is sampled regularly before storage at the Carajás stockyard by automatic sampling systems that conform to ISO 9002 standards. After the beneficiation process, our Carajás railroad transports Northern System iron ore to the Ponta da Madeira Maritime Terminal Complex located at São Luís in the state of Maranhão.

Our complex in Carajás is accessible by road, air and rail. It obtains electrical power at market rates from regional utilities. To support our Carajás operations and to reduce turnover of mining personnel, we have housing and other facilities in a nearby township.





Caemi operates its iron ore activities through its subsidiary MBR. MBR operates in the Iron Ore Quadrangle in the state of Minas Gerais and exports through its own maritime terminal on Guaíba Island, in Sepetiba Bay, state of Rio de Janeiro.

MBR presently operates three mines: Tamanduá, Pico and Jangada. Iron ore is mined by the open pit method in each of the mines. Lump ore, sinter feed fines and pellet feed fines are produced from iron ore extracted from each mine after beneficiation.

The Pico Complex (which includes the mine and the surrounding area which supports the mine) has a beneficiation plant that contains concentration columns. Concentration columns are used to isolate pellet feed fines from silica, resulting in an improved product grade. The Tamanduá Complex has a beneficiation plant at Vargem Grande. MBR transports its iron ore to the Guaíba Island Maritime Terminal at market rates via the MRS Logística railway, in which we currently have a minority interest. The Jangada Complex has a beneficiation plant near the mine and its ore is transported through MRS Logística railway to the Guaíba Island Maritime Terminal.



## Pellets

The table below sets forth information regarding our share ownership and joint venture partners as of April 30, 2004 and total pellet production by us and our joint ventures for the periods indicated.

|                   | System                | Our Direct or Indirect Share of Capital |       | Partners   | Total Pellet Production(1)(2) for the Year Ended December 31, |      |      | Nominal Capacity |
|-------------------|-----------------------|---|-------|--|---|------|------|------------------|
|                   |                       | Voting                                  | Total |  | 2001  | 2002 | 2003 |                  |
|                   |                       | %                                       |       |  | (in millions of tons)   |      |      |                  |
| CVRD(3) .....     | Northern/<br>Southern | n.a.                                    | n.a.  | n.a.   | 8.6   | 10.3 | 13.0 | 15.2             |
| GIIC.....         | Bahrain               | 50.0                                    | 50.0  | GIC  | 2.7   | 3.1  | 3.7  | 4.0              |
| Hispanobrás ..... | Southern              | 51.0                                    | 50.9  | Aceralia   | 3.7   | 3.7  | 3.6  | 3.8              |
| Itabasco .....    | Southern              | 51.0                                    | 50.0  | Ilva   | 3.3   | 3.3  | 3.3  | 3.3              |
| Kobrasco .....    | Southern              | 50.0                                    | 50.0  | Posco  | 4.2   | 4.1  | 4.4  | 4.3              |
| Nibrasco .....    | Southern              | 51.1                                    | 51.0  | Nippon Steel<br>Sumitomo<br>JFE Steel<br>Kobe Steel<br>Nisshin Steel<br>SOJITZ Corp. | 7.1   | 7.1  | 7.7  | 8.4              |
| Samarco .....     | Ponta do<br>Ubú       | 50.0                                    | 50.0  | BHP Billiton   | 9.9   | 11.6 | 13.3 | 14.0             |
| Total .....       |                       |   |       |  | 39.5  | 43.2 | 49.0 | 53.0             |

(1) Total production by joint venture entity.

(2) Production figures are for the full year beginning the year of acquisition by CVRD of an equity interest in the entity even if acquired during the year.

(3) Production and capacity figures include CVRD I and II in Tubarão, the São Luiz pelletizing plant and the former operations of Ferteco, the Fábrica pelletizing plant. Ferteco operated as a separate subsidiary of CVRD until August 2003.

Our pellet activities increase our market for fine and ultrafine iron ore products. We sell pellet feed to our pellet joint ventures at market-based prices. Historically, we have supplied all of the iron ore requirements of our joint ventures located in the Southern System. Besides BF pellets, some of the pellets we and our joint ventures produce are DR pellets, which are used in steel mills that use electric arc furnace rather than blast furnace technology.

The table below sets forth information regarding iron ore shipments to our pellet joint ventures for the periods indicated.

|                       | For the Year Ended December 31, |      |      |
|-----------------------|---------------------------------|------|------|
|                       | 2001                            | 2002 | 2003 |
| (in millions of tons) |                                 |      |      |
| GIIC.....             | 1.7                             | 2.6  | 2.7  |
| Hispanobrás.....      | 3.9                             | 3.7  | 3.8  |
| Itabasco .....        | 3.6                             | 3.6  | 3.5  |
| Kobrasco .....        | 4.5                             | 4.4  | 4.7  |
| Nibrasco .....        | 7.8                             | 7.3  | 7.1  |
| Samarco.....          | 1.9                             | 2.0  | 2.0  |
| Total .....           | 23.4                            | 23.6 | 23.9 |

## Customers, Sales and Marketing (Iron Ore and Pellets)

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

Historically, we have exported more than two-thirds of our iron ore shipments. We export iron ore and pellets primarily to Asia and Europe, with customers in China, Japan, South Korea, France and Germany accounting for approximately 44.8% of our total iron ore and pellets export shipments in 2003. Our 10 largest customers collectively purchased 70.6 million tons of iron ore and pellets from us, representing 38% of our 2003 iron ore and pellet shipments and 41% of our total iron ore and pellets revenues. No individual customer accounted for more than 11% of our sales of iron ore and pellets for any of the three years ended December 31, 2003.

We strongly emphasize customer service in order to improve our competitiveness. We work with our customers to understand their principal objectives and then tailor our iron ore to meet specific customer needs. To provide a tailored product, we take advantage of our large number of iron ore mines in order to produce multiple iron ore products possessing different grades of iron, silica and alumina, and varying physical properties, including grain size. We believe that we offer our customers more variety than our competitors. This variety helps us offset disadvantages in relation to competitors who may be more conveniently located geographically. In addition to offering technical assistance to our customers, CVRD operates sales support offices in Tokyo, Brussels, New York and Shanghai. These offices allow us to stay in close contact with our customers, monitor their requirements and our contract performance, and ensure that our customers receive deliveries on schedule. Our central sales office in Rio de Janeiro coordinates the activities of these offices. Caemi's sales support offices are located in Connecticut (USA), Den Haag (The Netherlands), Hong Kong and Shanghai.

### ***Distribution (Iron Ore and Pellets)***

Our ownership and operation of transportation systems designed for the efficient transportation of iron ore products complement our iron ore mining business in the Northern and Southern Systems. We operate an integrated railroad and terminal network in each of our Northern and Southern Systems. These networks transport our iron ore products from interior mining locations to the maritime terminal and domestic customers. A more detailed description of the networks is provided in the section below entitled *Logistics*.

We do not own or operate an integrated transportation system for our Caemi System. Instead we enter into freight contracts with MRS Logistica, a railway company in which we own a minority interest, to transport our iron ore products at market rates from MBR's mines to its maritime terminal on Guaiba Island and to its domestic customers.

### ***Competition (Iron Ore and Pellets)***

In general, the international iron ore market is highly competitive. Several large producers operate in this market. The principal factors affecting competition are price, quality, range of products offered, reliability and transportation costs. In 2003, the European market and the Asian market (primarily China, Japan and South Korea) were the primary markets for our iron ore.

Our biggest competitors in the Asian market are located in Australia and include subsidiaries and affiliates of BHP Billiton PLC and Rio Tinto Ltd. Although the transportation costs of delivering iron ore from Australia to Asian customers are generally lower than ours as a result of Australia's geographical proximity, we believe we are able to remain competitive in the Asian market for two principal reasons. First, steel producers generally seek to obtain the types (or blends) of iron ore which can produce the intended final product in the most economic and efficient manner. Our iron ore has low impurity levels, which generally lead to lower processing costs. For example, the alumina content of our iron ore is very low compared to Australian ore. Our ore also has high iron grade, which improves productivity in blast furnaces, which is important during periods of high demand. Second, steel mills often develop sales relationships based on a reliable supply of a specific mix of iron ore. We have a customer-oriented marketing policy of meeting our clients' needs to the extent possible, including placing specialized personnel in direct contact with our clients to determine the blend that best suits each particular client. We sell most of our products FOB from our ports, which means that the invoice price includes delivery at our expense to our ports and no further. In general, in the Northern and Southern Systems our ownership of the process of producing and transporting iron ore to our ports makes it easier for us to ensure that our products get to our ports on schedule and at competitive costs.

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

- Rio Tinto PLC (UK), Rio Tinto Ltd (Australia) subsidiaries and affiliates,
- BHP Billiton (Australia) and affiliates,
- Kumba Resources (South Africa),
- Luossavaara Kiirunavaara AB - LKAB (Sweden), and
- Société Nationale Industrielle et Minière - SNIM (Mauritania).

The Brazilian iron ore market is highly competitive with a wide range of smaller producers. Although pricing is relevant, quality and reliability are important competitive factors as well. We believe that our integrated transportation systems, high-quality ore and technical services make us a strong competitor in domestic sales. Prevailing export market prices, with adjustments negotiated to compensate for lower transport costs to domestic customers, influence iron ore sales in the domestic market.

### ***Manganese Ore and Ferroalloys***

We conduct our manganese ore and ferroalloy business primarily through the following subsidiaries and joint ventures, as of April 30, 2004:

|   | <b>Our Direct or Indirect<br/>Share of Capital</b> |              | <b>Partners</b>         |
|---|--|--------------|-------------------------|
|   | <b>Voting</b>                                      | <b>Total</b> |                         |
|   | <b>(%)</b>   |              |                         |
| Nova Era Silicon S.A. (NES).....          | 49.0%  | 49.0%        | Mitsubishi<br>JFE Steel |
| Rio Doce Manganèse Europe (RDME) .....    | 100  | 100          |                         |
| Rio Doce Manganese Norway AS (RDMN) ..... | 100  | 100          |                         |
| Rio Doce Manganês S.A. (RDM).....         | 100  | 100          |                         |
| Urucum Mineração S.A. (Urucum) .....      | 100  | 100          |                         |

In 2003, we were the largest manganese ore producer in the Americas and one of the largest players in the global seaborne market, with total shipments of approximately 885 thousand tons of manganese ore and 502 thousand tons of ferroalloys. We had US\$ 349 million in revenues in 2003 from manganese ore and ferroalloy sales.

We produce manganese ore products from the Azul mine in the Carajás region in the state of Pará and from the Urucum mine in the Pantanal region in the state of Mato Grosso do Sul. We operate on-site beneficiation plants at both the Azul and Urucum mines. Both mines are accessible by road and obtain electrical power at market rates from regional electric utilities. We also operate five minor mines, Morro da Mina, Coribe, Barnabé, Cobra and São Desidério, in the states of Minas Gerais and Bahia.

Our manganese ore mines produce three types of manganese ore products:

- metallurgical ore used primarily for the production of ferroalloys;
- natural manganese dioxide suitable for the manufacture of electrolytic batteries; and
- chemical ore used in several industries for the production of fertilizer, pesticides and animal food, and used as a pigment in the ceramics industry.

The production of ferroalloys consumes significant amounts of electricity. For information on the risks associated with potential energy shortages, see *Item 3. Key Information—Risk Factors*.

The table below sets forth information regarding our manganese ore mines and recent manganese ore production for the periods indicated. The estimates of mineral reserves of Urucum and Azul have been audited and verified by Golder. We own 100% of all mines. For our small mines in Minas Gerais and Bahia, geological surveys are under way in order to assess reserves and resources.

|  | Began Operations | Projected Exhaustion Date | Production For the Year Ended December 31, |      |      | Proven and Probable Reserves |                 |          |
|--|------------------|---------------------------|--|------|------|------------------------------|-----------------|----------|
|  |                  |                           | 2001                                       | 2002 | 2003 | Type                         | Ore Tonnage (1) | Grade(2) |
| Azul .....                                     | 1986             | 2012                      | 1.4  | 1.8  | 1.5  | Open Pit                     | 17.2            | 46.4     |
| Urucum(3) .....                                | 1976             | 2018                      | 0.3  | 0.3  | 0.4  | Underground                  | 6.9             | 46.9     |
| Morro da Mina .....                            | 1902             | n.a.                      | 0.1  | 0.1  | 0.1  | Open Pit                     | n.a.            | n.a.     |
| Coribe, Barnabé, Cobra and São Desidério ..... | 1972             | n.a.                      | 0.1  | 0.1  | 0.2  | Open Pit                     | n.a.            | n.a.     |
| Total .....                                    |                  |                           | 1.9  | 2.3  | 2.2  |                              | n.a.            | n.a.     |

(1) Reported as recoverable wet product tons, in millions of tons.

(2) Reported as wet recoverable product grade.

(3) Underground mine with reserves based on vertical channel samples at a nominal 25 meter spacing and extensions to these for approximately 360 meters (3 mining panels).

We currently operate eight mills that produce ferroalloys – Santa Rita, Barbacena, Ouro Preto, São João del Rey (all located in Minas Gerais state), Simões Filho (in the state of Bahia), Corumbá (in the state of Mato Grosso do Sul), Rio Doce Manganese Europe (in Dunkerque, France) and RDMN (in Mo I Rana, Norway). The table below sets forth information regarding our ferroalloy production in 2003:

|   | Production Capacity<br>(In thousands of tons per year) | Production in 2003<br>(In thousands of tons) |
|---|--|--|
| Rio Doce Manganese Europe (RDME) .....    | 130  | 128  |
| Rio Doce Manganese Norway (RDMN)(1) ..... | 110  | 21   |
| Rio Doce Manganês S.A. (RDM) .....        | 310  | 313  |
| Urucum Mineração S.A. ....                | 20   | 18   |
| Nova Era Silicon S.A. (NES) .....         | 45   | 38   |
| Total .....                               | 615  | 511  |

(1) RDMN's furnaces started up in July and November 2003 after conversion from chrome production to manganese ferroalloy production.

### ***Competition (Manganese Ore and Ferroalloys)***

The markets for manganese ore and ferroalloys are highly competitive. Competition in the manganese ore market takes place in two sectors. High-grade (40% Mn or more) manganese ore competes on a seaborne basis, while low grade ore competes on a regional basis. For some ferroalloys high-grade ore is mandatory, while for some others high and low grade ores are complementary. Besides manganese ore content, cost and physical-chemical features play an important role in competition (e.g. moisture, impurities). The main suppliers of high-grade (HG) ores are South Africa, Gabon and Australia. The main producers of low-grade (LG) ores are Ukraine, China, Ghana, Kazakhstan, India and Mexico. CVRD is the second largest worldwide supplier of manganese ores, with HG ores in Carajás and Urucum mines, and LG ores in the smaller mines in Minas Gerais and Bahia states.

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

## Non-Ferrous Minerals

Our non-ferrous minerals business segment includes the production of non-ferrous minerals, such as kaolin and potash. We also include our former gold production and our current copper, gold and nickel exploration efforts in the non-ferrous category. The table below sets forth information regarding our non-ferrous gross revenues and sales by geographic market for the periods indicated.

|  | For the Year Ended December 31, |     |                       |     |      |     |
|--|---------------------------------|-----|-----------------------|-----|------|-----|
|  | 2001                            |     | 2002                  |     | 2003 |     |
|  |                                 |     | (in millions of US\$) |     |      |     |
| <b>Gross revenues classified by geographic destination</b> |                                 |     |                       |     |      |     |
| Export sales:  |                                 |     |                       |     |      |     |
| United States.....   | US\$                            | 139 | US\$                  | 35  | US\$ | 8   |
| Europe.....  |                                 | 33  |                       | 100 |      | 76  |
| China (1).....   |                                 | —   |                       | 4   |      | 7   |
| Japan.....   |                                 | —   |                       | 3   |      | 13  |
| Asia, other than Japan and China.....                      |                                 | 1   |                       | 1   |      | 1   |
| Subtotal.....  |                                 | 173 |                       | 147 |      | 105 |
| Domestic sales.....  |                                 | 78  |                       | 96  |      | 106 |
| Total.....   | US\$                            | 251 | US\$                  | 239 | US\$ | 211 |
| <b>Gross revenues classified by category</b>               |                                 |     |                       |     |      |     |
| Gold.....  | US\$                            | 139 | US\$                  | 103 | US\$ | 21  |
| Potash.....  |                                 | 71  |                       | 91  |      | 94  |
| Kaolin.....  |                                 | 41  |                       | 45  |      | 96  |
| Total.....   | US\$                            | 251 | US\$                  | 239 | US\$ | 211 |

(1) 2001 data not available.

## Kaolin

Kaolin is a fine white aluminum silicate clay used in the paper, ceramic and pharmaceutical industries as a coating agent and filler. We conduct our kaolin business through our controlling stake in Pará Pigmentos S.A. (PPSA), which began operations in August 1996, and our controlling stake in Cadam, which we obtained when we acquired control of Caemi in September 2003. Our total and voting interests in PPSA are 82.04% and 85.57%, respectively. Our partners in PPSA are Mitsubishi Corporation and International Finance Corporation. Our partners in Cadam are Banco do Brasil S.A. and BNDES. PPSA has proven and probable reserves of 10.3 million tons as presented in the table below. Due to the recent nature of our acquisition of Caemi, we have not established the proven and probable reserves of Cadam.

PPSA sold approximately 423,000 tons of kaolin in 2003. Cadam sold approximately 686,000 tons of kaolin in 2003, of which 231,000 tons were sold since CVRD acquired control of Cadam in September 2003.

PPSA's Rio Capim mine and beneficiation plant are located in Ipixuna, in the state of Pará. These operations are linked to the dry and port facilities in Barcarena, also in the state of Pará, via a 180km pipeline. The beneficiated kaolin is pumped through the pipeline, which helps preserve the environment, guarantee the product quality and meet delivery schedules.

PPSA produces three products: Century HC, Century S and Paraprint, which are sold mainly in the European and Asian markets.

Cadam is located on the border of the states of Pará and Amapá, in the Amazon area in Northern Brazil. Due to the quality and logistics of its products, it has gained a solid competitive global position in its market segment. Cadam's reserves are principally concentrated in the Felipe Mine, in Mazagão, state of Amapá. The beneficiation plant and private port are situated on the west bank of the Jari River, in Munguba, state of Pará. Cadam extracts kaolin from its open-pit mine. The kaolin is mixed with water and chemicals to create a liquid, which is pumped to a degritting station where natural impurities are removed.

Cadam's production process is unique: after extracting the raw ore and removing sand, the product is dispersed in water and transported by gravity through a 6 km ore pipeline to the beneficiation plant on the opposite side of the Jari River. After desanding, centrifuging, removing iron by magnetic separation and chemical bleaching, the resulting material is filtered, evaporated and dried to produce lump or spray-dried kaolin, which is then shipped from Cadam's private port, situated near the beneficiation plant on the west bank of the Jari River.

Coating kaolin is loaded onto ships at Cadam's port in Munguba. Some of the lump production is also processed into slurry form by Cadam's subsidiary located in Antwerp, Belgium. In Holland, an advanced Technical Assistance Center is constantly researching the use of kaolin, offering technical and commercial support to European and Asian customers.

|                    | Began Operations | Projected Exhaustion Date | Production For the Year Ended December 31, |         |         | Proven and Probable Reserves |             |            |      |      |
|--------------------|------------------|---------------------------|--|---------|---------|------------------------------|-------------|------------|------|------|
|                    |                  |                           | (in tons per year)                         |         |         | Type                         | Ore Tonnage | Grade      |      |      |
|                    |                  |                           | 2001                                       | 2002    | 2003    |                              |             | Brightness | Grit | PSD  |
| Felipe.....        | 1976             | —                         | 767.2                                      | 710.7   | 711.2   | Open Pit                     | —           | n.a.       | n.a. | n.a. |
| Rio Capim (1)..... | 1996             | 2008                      | 363.0                                      | 330.0   | 423.0   | Open Pit                     | 10.3        | 85.0%      | 26.8 | 61.9 |
| Total .....        |                  |                           | 1,130.2                                    | 1,040.7 | 1,134.2 |                              | —           |            |      |      |

(1) Recovery is 37%.

### Potash

Potash is an important raw material used in the production of fertilizers. We lease a potash mine (Taquari – Vassouras mine) in Rosario do Catete, in the state of Sergipe, from Petrobras – Petróleo Brasileiro S.A. (Petrobras), the Brazilian oil company. The lease was signed in 1991 for a period of 25 years, and is renewable for another 25 years. The mine is the only potash mine in Brazil and has a current nominal capacity of 600,000 tons per year. Taquari – Vassouras is an underground mine with a depth that varies from 430 to 640 meters. In 2003, we produced 658,000 tons of potash with total shipments of 675,000 tons, which included shipments of our 2002 inventories, and we had gross revenues of US\$ 94 million. All sales from Taquari – Vassouras mine are destined for the domestic market.

We have budgeted US\$ 67 million in capital expenditures to expand the mine capacity to 850,000 tons per year by 2005. Our proven and probable reserves should be sufficient to ensure the estimated production for the next 7 years.

|                             | Began Operations | Projected Exhaustion Date | Production For the Year Ended December 31, |      |      | Proven and Probable Reserves |             |       |
|-----------------------------|------------------|---------------------------|--|------|------|------------------------------|-------------|-------|
|                             |                  |                           | (in thousands of tons per year)            |      |      | Type                         | Ore Tonnage | Grade |
|                             |                  |                           | 2001                                       | 2002 | 2003 |                              |             |       |
| Taquari – Vassouras(1)..... | 1992 (2)         | 2010                      | 595  | 627  | 658  | Underground                  | 19.2        | 31.0  |
| Total .....                 |                  |                           |  |      |      |                              | 19.2        | 31.0  |

(1) CVRD leases the Taquari – Vassouras mine. Drill spacing is on nominal 200 meter intersections from vertical and subhorizontal drilling. Tons are expressed as ROM dry metric tons. Recovery is 90%.

(2) The mine began operations in 1986.

### Gold

In August 2003, we sold the assets of our one remaining gold mine, Fazenda Brasileiro, which was near full exhaustion, to Yamana Resources Inc., a Canadian mining company, for US\$ 20.9 million. As a result of the sale, our gold operations have been interrupted. We have discontinued our gold operations except as a by-product of the copper projects we are currently developing in Carajás. We expect these projects to produce gold as a by-product of their copper mining operations. We also continue to invest in mineral exploration aiming at the discovery of gold reserves.

From January 2003 to August 2003, we produced 51.3 thousand troy ounces of refined gold in Fazenda Brasileiro mine, and from January 2003 to December 2003, we produced 2.3 thousand troy ounces as a by-product of iron ore in Itabira mine. We were responsible for approximately 3% of all gold produced on an industrial scale in Brazil in 2003. Gold sales generated US\$ 21 million of revenues in 2003. The table below sets forth information regarding our gold mines and recent gold production for the periods indicated. The projected exhaustion date is

based on 2003 production levels. The average total cash cost of production (US\$ per troy ounce) was US\$ 146 in 2001, US\$ 141 in 2002 and US\$ 307 in 2003.

|                                   | <b>Began<br/>Operations</b> | <b>Exhaustion Date</b> | <b>Production</b>                      |             |             |
|-----------------------------------|-----------------------------|------------------------|--|-------------|-------------|
|                                   |                             |                        | <b>For the Year Ended December 31,</b> |             |             |
|                                   |                             |                        | <b>2001</b>                            | <b>2002</b> | <b>2003</b> |
| <b>(thousands of troy ounces)</b> |                             |                        |  |             |             |
| Almas.....                        | 1985                        | 2001                   | 0.6                                    | —           | —           |
| Caeté.....                        | 1996                        | 2001                   | 0.4                                    | —           | —           |
| Fazenda Brasileiro.....           | 1984                        | (1)                    | 165.2                                  | 153.2       | 51.3 (2)    |
| Igarapé Bahia.....                | 1991                        | 2002                   | 328.3                                  | 148.2       | —           |
| Itabira (3).....                  | 1984                        | n.a.                   | 18.8                                   | 13.1        | 2.3         |
| Total.....                        |                             |                        | 513.3                                  | 314.5       | 53.6 (1)    |

(1) Fazenda Brasileiro was sold in August 2003.

(2) Includes production prior to the sale of Fazenda Brasileiro.

(3) Gold in Itabira mine is produced together with iron ore. These are small gold bodies and they depend on the iron ore works.

## Copper

### Sossego

Sossego is our first copper project and began commercial production of copper concentrate in June 2004. The Sossego copper project is located in the Carajás Mineral District, in the Southeastern portion of the state of Pará, in northern Brazil. We conduct our Sossego operation primarily at the parent company level and we are investing an estimated US\$ 413 million to develop it.

The Sossego copper project has two main ore bodies (Sossego and Sequeirinho). The copper ore is mined by open pit method and the run-of-mine is processed by means of standard primary crushing and conveying, SAG and ball milling, copper concentrate flotation, tailings disposal, concentrate thickening, filtration and load out. Projected annual operating capacity is 15 million tons of run-of-mine, to produce an average of 140,000 tons of copper in concentrate. The concentrate will be trucked to the Parauapebas storage terminal and then transported via our existing Carajás railroad to the Ponta da Madeira maritime terminal in São Luís, Maranhão state, situated about 890 km from Carajás. The following table shows Sossego's proven and probable reserves.

|                           | <b>Began Operations</b> | <b>Projected<br/>Exhaustion Date</b> | <b>Proven and Probable Reserves</b> |                |              |
|---------------------------|-------------------------|--------------------------------------|-------------------------------------|----------------|--------------|
|                           |                         |                                      | <b>Type</b>                         | <b>Ore</b>     | <b>Grade</b> |
|                           |                         |                                      |                                     | <b>Tonnage</b> |              |
| Sossego Complex (1) ..... | 2004                    | 2020                                 | Open pit                            | 244.7          | 0.97         |

(1) Recovery for Sossego complex copper reserves is 88% of metal in concentrate. Drill spacing is on nominal 80 meter centres.

We have constructed an 85-kilometer road to link Sossego to the Carajás air and rail facilities and a power line to allow us to get electrical power at market rates. We have an energy supply contract with Eletronorte, which will sell to us energy from Tucuruí Hydroelectric Power Plant, located on the Tocantins River.

### *Copper exploration projects*

The table below sets forth information, at April 30, 2004, regarding our joint ventures and the status and potential productivity of our principal copper (Cu) prospects, all but one of which features a gold (Au) by-product.

|                 | <b>Our Direct or<br/>Indirect Share<br/>of Capital<br/>(Voting and<br/>Total) (1)</b> | <b>Status</b>                  | <b>Total<br/>Expected<br/>Mineral<br/>Deposits<br/>(Millions of<br/>tons)</b> | <b>Total<br/>Expected<br/>Capital<br/>Expenditures<br/>(In millions of<br/>US\$)</b> | <b>Anticipated<br/>Start-up Date</b> |
|-----------------|---|--------------------------------|---|--|--------------------------------------|
| 118.....        | 50.0  | Feasibility<br>concluded       | 64 at 0.80% Cu  | 185  | 2006                                 |
| Salobo.....     | 100.0   | Feasibility in<br>progress     | 784 at 0.96%<br>Cu and 0.6 g/t<br>Au  | n.a.   | n.a.                                 |
| Cristalino..... | 50.0  | Pre-feasibility<br>in progress | 250 at 0.79%<br>Cu and 0.15 g/t<br>Au   | n.a.   | n.a.                                 |
| Alemão.....     | 67.0  | Pre-feasibility<br>in progress | 200 at 1.60%<br>Cu and 0.90 g/t<br>Au   | n.a.   | n.a.                                 |

(1) Where the project is not wholly-owned, our partner in the project is BNDES.

In addition, we and BNDES are prospecting the Carajás region for new copper exploration projects. See *Item 4. Information on the Company—Lines of Business—Mining—Mineral Risk Contract*.

### *Exploration*

As part of our mineral prospecting and development activities in Brazil, we have acquired extensive experience in exploration techniques and processes specifically designed for use in tropical areas of the world. Our current mineral exploration efforts are mainly in Brazil, Peru, Chile, Mongolia, Gabon and China and focus primarily on copper, gold, nickel, manganese ore, kaolin, bauxite and platinum group metals. Exploration costs are recorded as expenses until viability of mining activities is established (see Note 3(d) to our financial statements). Expenditures in 2003 for research and development were US\$ 82 million, including our mineral exploration program, which amounted to US\$ 69 million. The budget for 2004 is US\$ 78 million.

Since 1998, we have focused our exploration efforts in Brazil on areas where geological knowledge was more advanced, focusing primarily on gold and copper, and let lapse those claims we did not consider economically attractive. As a result, our undeveloped acreage claims decreased from approximately 31.2 million hectares as of December 31, 1997, to 9.8 million hectares as of December 31, 2003.

### *Mineral Risk Contract*

We and BNDES entered into a Mineral Risk Contract in March 1997, relating to prospecting authorizations for mining regions where drilling and exploration are still in their early stages. The Mineral Risk Contract provides for the joint development of certain unexplored mineral deposits in approximately two million identified hectares of land in the Carajás region, which is part of the Northern System, as well as proportional participation in any financial benefits earned from the development of such resources. Iron ore and manganese ore deposits already identified and subject to development were specifically excluded from the Mineral Risk Contract.

Pursuant to the Mineral Risk Contract, we and BNDES each agreed to provide US\$ 205 million, which represents half of the US\$ 410 million in expenditures estimated as necessary to complete geological exploration and mineral resource development projects in the region over a period of five years, which was extended for an additional period of two years. We will oversee these projects and BNDES will advance us half of our costs on a quarterly basis. Under the Mineral Risk Contract, as of December 31, 2003, the remaining contributions towards exploration and development activities totaled US\$ 87 million. In the event that either of us wishes to conduct



further exploration and development after having spent such US\$ 205 million, the contract provides that each party may either choose to match the other party's contributions, or may choose to have its financial interest proportionally diluted. If a party's participation in the project is diluted to an amount lower than 40% of the amount invested in connection with exploration and development projects, then the Mineral Risk Contract provides that the diluted party will lose all the rights and benefits provided for in the Mineral Risk Contract and any amounts previously contributed to the project.

Under the Mineral Risk Contract, BNDES has agreed to compensate us for our contribution of existing development and ownership rights in the Carajás region through a finder's fee production royalty on mineral resources that are discovered and placed into production. This finder's fee is equal to 3.5% of the revenues derived from the sale of gold, silver and platinum group metals and 1.5% of the revenues derived from the sale of other minerals, including copper, except for gold and other minerals discovered at Serra Leste, for which the finder's fee is equal to 6.5% of revenues.

In April 2004, the Mineral Risk Contract was renewed for an additional period of five years or until the total value of US\$ 410 million is spent (including disbursements already made, which amount to US\$ 332.8 million) whichever occurs first.

### Logistics

We operate our logistics business, which is comprised of the transportation of third-party products and passengers, through the following subsidiaries and joint ventures as of April 30, 2004:

|  | Principal Activity  | Our Direct or Indirect Share of Capital |         | Partners   |
|--|---------------------|---|---------|--|
|  |                     | Voting                                  | Total   |  |
|  |                     | (%)                                     |         |  |
| Cia. Portuária Baía de Sepetiba (CPBS) .....                     | Ports and Terminals | 100.00%                                 | 100.00% |  |
| DCNDB Overseas S.A. (DCNDB) .....                                | Shipping            | 100.00                                  | 100.00  | Mitsui (1)                                       |
| Navegação Vale do Rio Doce S.A.- Docenave (Docenave).....        | Shipping            | 100.00                                  | 100.00  |  |
| Ferrovia Centro-Atlântica S.A. (FCA).....                        | Railroad            | 99.99                                   | 99.99   | Employees<br>Others                              |
| Terminal de Vila Velha S.A. (TVV).....                           | Ports and Terminals | 99.89                                   | 99.89   | Employees  |
| MRS Logística S.A. (MRS)<br>(includes CVRD and MBR stakes) ..... | Railroad            | 34.14                                   | 38.76   | CSN<br>Usiminas<br>Gerdau<br>Employees<br>Others |
| Ferroban-Ferrovias Bandeirantes S.A. (Ferroban).....             | Railroad            | 0.00                                    | 3.75    | Nova Ferroban<br>Others                          |

(1) It is contemplated that Mitsui will take a 21% stake in DCNDB at or prior to the time DCNDB commences operations. See *Item 4 Information on the Company—Acquisitions, Asset Sales and Significant Changes in 2003 and 2004—Logistics—Coastal Shipping*.

The table below sets forth information regarding our third-party logistics gross revenues and sales by geographic market for the periods indicated.

|   | For the Year Ended December 31, |     |      |     |      |     |
|---|---------------------------------|-----|------|-----|------|-----|
|   | 2001                            |     | 2002 |     | 2003 |     |
|   | (in millions of US\$)           |     |      |     |      |     |
| <b>Revenues classified by geographic destination:</b> |                                 |     |      |     |      |     |
| Export sales:   |                                 |     |      |     |      |     |
| America, except United States .....                   | US\$                            | 65  | US\$ | 25  | US\$ | 38  |
| United States .....                                   |                                 | 21  |      | 3   |      | —   |
| Europe .....  |                                 | 44  |      | 9   |      | 30  |
| Middle East .....                                     |                                 | 4   |      | —   |      | 4   |
| Japan .....   |                                 | 10  |      | 1   |      | —   |
| Asia, other than Japan .....                          |                                 | 3   |      | 3   |      | 3   |
| Subtotal .....  |                                 | 147 |      | 41  |      | 75  |
| Domestic sales .....                                  |                                 | 344 |      | 374 |      | 472 |
| Subtotal .....  |                                 | 491 |      | 415 |      | 547 |
| Eliminations(1) .....                                 |                                 | 117 |      | 43  |      | 57  |
| Total .....   | US\$                            | 608 | US\$ | 458 | US\$ | 604 |
| <b>Revenues classified by category</b>                |                                 |     |      |     |      |     |
| Railroads .....                                       |                                 | 299 |      | 286 |      | 373 |
| Ports .....   |                                 | 104 |      | 107 |      | 144 |
| Ships .....   |                                 | 205 |      | 65  |      | 87  |
| Total .....   | US\$                            | 608 | US\$ | 458 | US\$ | 604 |

(1) Eliminations of transactions between consolidated entities.

## Railroads

*Vitória a Minas railroad.* The Vitória a Minas railroad, in the Southern System, links our Southern System mines in the Iron Ore Quadrangle in the state of Minas Gerais with the Tubarão Port complex, in Vitória, Espírito Santo state. We operate this railroad under a 30-year renewable concession, which expires in 2027. This railroad extends 905 kilometers to our Tubarão Maritime Terminal Complex located near the port of Vitória in the state of Espírito Santo. The Vitória a Minas railroad consists of two lines of track extending for a distance of 601 kilometers to permit continuous railroad travel in opposite directions, and single-track branches of 304 kilometers. Industrial manufacturers are located near this area and major agricultural regions are adjacent and accessible to the Vitória a Minas railroad. The Vitória a Minas has a daily capacity of 300,000 tons of iron ore. In 2003, the Vitória a Minas railroad carried a total of 116.3 million tons of iron ore and other cargo (of which 43.2 million tons, or 37%, consisted of cargo transported for third parties). The Vitória a Minas railroad also carried approximately 1.1 million passengers in 2003.

The principal cargo of the Vitória a Minas railroad consists of:

- iron ore and pellets, carried for us and third parties,
- steel, coal, pig iron, limestone and other raw material carried for steel manufacturers located along the railroad,
- agricultural products, such as grains soybean and soybean meal, and
- other general cargo such as building materials, pulp and fuel and chemical products.

We charge market rates for third-party freight, including pellets originating from joint ventures and other enterprises in which we do not own 100% of the equity interest. Market rates vary based upon the distance traveled, the kind of product and the weight of the freight in question.

*Carajás railroad.* We operate the Carajás railroad under a 30-year renewable concession, which expires in 2027. This railroad, located in the Northern System, starts at our Carajás iron ore mine in the state of Pará, and extends 892 kilometers to our Ponta da Madeira Maritime Terminal Complex facilities located near the Port of São Luís in the state of Maranhão. The Carajás railroad consists of one line of track, with spur tracks and turnouts to permit the passage of trains in opposite directions. The Carajás railroad has a daily capacity of 130,000 tons of iron ore. In 2003, the Carajás railroad carried a total of 62.9 million tons of iron ore and other cargo (of which 7.7

million tons, or 12%, consisted of cargo transported for third parties). The Carajás railroad also carried approximately 441,000 passengers in 2003. The principal cargo of the Carajás railroad consists of iron ore, principally carried for us.

*Ferrovias Centro-Atlântica.* Our subsidiary FCA operates the central east regional railway network of the Brazilian national railway system under a 30-year renewable concession granted in 1996. The central east network contains approximately 7,000 kilometers of track extending into the states of Sergipe, Bahia, Espírito Santo, Minas Gerais, Goiás, Rio de Janeiro and Distrito Federal. It connects with our Vitória a Minas railroad near the cities of Belo Horizonte and Vitória. FCA operates on the same track gauge as our Vitória a Minas railroad. The section of the network of Ferrobán-Ferrovias Bandeirantes S.A. (Ferrobán) between Araguari and Valefertil railstation, near the city of Uberaba, in the state of Minas Gerais, has been operated by FCA since 1998 and in January 2002, FCA began operating the section between Valefertil in the state of Minas Gerais and Boa Vista in the state of São Paulo. This connection allows FCA to reach the port of Santos, in the state of São Paulo. In 2003, the FCA railroad transported a total of 23.8 million tons of cargo for third parties.

*Other investments.* We currently hold 3.75% of the total capital and none of the voting capital of Ferrobán. Ferrobán operates a 4,236 kilometer railroad linking the states of São Paulo, Minas Gerais, Paraná and Mato Grosso do Sul. In 2003, Ferrobán reported net revenues of US\$ 43 million and a net loss of US\$ 43 million.

We own directly and indirectly 38.76% of the total capital and 34.14% of the voting capital in MRS Logística. MRS Logística is a 1,612-kilometer railroad, which links the states of Rio de Janeiro, São Paulo and Minas Gerais with a capacity to transport 85 million tons per year. MRS Logística operates under a 30-year renewable concession granted in 1996. Under the terms of the concession bid rules, no person may directly or indirectly own more than 20% of the voting capital of MRS Logística, unless approved by the ANTT. We are currently discussing the shareholding structure with ANTT and our partners in MRS Logística in order to comply with the applicable requirements.

### ***Ports and Terminals***

We operate ports and terminals principally as a means to complete the distribution of our iron ore and pellets to seaborne vessels serving the export market. See *Item 4. Information on the Company—Lines of Business—Mining—Ferrous Minerals—Pellets—Distribution (Iron Ore and Pellets)*. We also use our ports and terminals to handle third-party cargo. In 2003, 25% of the cargo handled by our ports and terminals represented cargo handled for third parties.

*Tubarão Maritime Terminal Complex.* The Tubarão Maritime Terminal Complex, which covers an area of approximately 18 square kilometers, is located near the Port of Vitória in the state of Espírito Santo. The iron ore maritime terminal located in this area has two piers. Pier I can accommodate two vessels at a time, one of up to 170,000 DWT on the southern side and one of up to 200,000 DWT on the northern side. Pier II can accommodate one vessel of up to 360,000 DWT at a time, limited at 20 meters draft plus tide. In Pier I there are two shiploaders, which can load up to a combined total of 14,000 tons per hour. In Pier II there are two shiploaders that work alternately and can each load up to 16,000 tons per hour. In 2003, 72 million tons of iron ore and pellets were shipped through the terminal (of which 69 million tons were shipped for us and 3 million tons were shipped for third-parties). Praia Mole Terminal, also located in the Tubarão Maritime Terminal Complex, is principally a coal terminal and shipped 11.9 million tons in 2003. In 2004, we have budgeted US\$ 4.8 million for the expansion of the Praia Mole Terminal. We operate a grain terminal in the Tubarão area, which shipped 4.5 million tons of grains and fertilizers in 2003. We also operate a bulk liquid terminal that shipped 0.5 million tons in 2003. CVRD also operates the Paul Terminal, which specializes in pig iron and is located near the Port of Vitória, in the State of Espírito Santo. This Terminal has one pier that can accommodate one vessel of up to 75,000 DWT, which can load up to 900 tons per hour. The Paul Terminal shipped 1.9 million tons of pig iron in 2003.

*Ponta da Madeira Maritime Terminal Complex.* The Ponta da Madeira Maritime Terminal Complex is located near the Port of São Luís in the state of Maranhão. The Ponta da Madeira port facilities can accommodate three vessels. Pier I can accommodate vessels displacing up to 420,000 DWT. Pier II can accommodate vessels of up to 155,000 DWT. The two berths have a maximum loading rate of 16,000 tons per hour at Pier I and 8,000 tons per hour at Pier II. In February 2004, the government of the state of Maranhão authorized the operation of Pier III, which is able to accommodate vessels of up to 220,000 DWT and has a maximum loading rate of 8,000 tons per hour.

Cargo shipped through our Ponta da Madeira Maritime Terminal Complex consists principally of iron ore for us. Other cargo includes manganese ore for us and pig iron and soybeans for third parties. In 2003, 55.4 million tons were shipped through the terminal for us and 2.9 million tons were shipped through the terminal for third parties.

*Other investments.* Since November 1994, CVRD has operated a maritime terminal located in the state of Sergipe, Inácio Barbosa Maritime Terminal. This terminal was built by Petrobras and transferred to Sergiportos, a state owned company. In December 2002, Petrobras took over control of Inácio Barbosa Maritime Terminal in exchange for the cancellation of a liability of the state of Sergipe. CVRD and Petrobras are negotiating an agreement that will allow CVRD to run this terminal for the next 10 years.

In May 1998, we entered into a 25-year lease for the Capuaba maritime terminal in Vitória, in the state of Espírito Santo. To run this terminal CVRD established Terminal de Vila Velha S.A. (TVV). TVV is a port for loading and unloading of containers, in addition to being an alternative for general cargo (import and export operations) and automobile operations in Southeast and Midwest Brazil. It is connected to the Vitória a Minas railroad and with easy access to the BR101 and BR262 highways. The terminal is formed by berths 203 and 204 at the Capuaba Quay, has a 450-meter berth area and retro-area measuring nearly 100 thousand square meters. It has a covered storage area measuring 13,300 square meters and a yard with capacity for 3,300 containers. TVV is equipped with two quays cranes, two portainers and four transtainers. In 2003, TVV shipped over 114.3 thousand containers and approximately 713.5 thousand tons of general cargo.

Cia. Portuária Baía de Sepetiba (CPBS) is a company created to operate the iron ore export terminal in the Port of Sepetiba. The iron ore export terminal has a pier that allows the boarding of ships of up to 18.1 meters and up to 230,000 DWT. In 2003, the terminal uploaded approximately 13.3 million tons of iron ore, of which only 1,200 tons were uploaded for companies unrelated to CVRD.

### *Shipping*

We operate in three distinct shipping areas: seaborne dry-bulk services, coastal shipping containers and tug boat services.

In seaborne dry-bulk service, we carried 9.3 million tons of dry bulk, generating a revenue of US\$ 70 million in 2003. The table below sets forth information on the volume of cargo that our seaborne dry bulk shipping service carried for the periods indicated.

|                  | For the Year Ended December 31, |              |              |
|------------------|---------------------------------|--------------|--------------|
|                  | 2001                            | 2002         | 2003         |
|                  | (thousands of tons)             |              |              |
| Iron ore:        |                                 |              |              |
| CVRD.....        | 7,179                           | 4,287        | 4,386        |
| Third party..... | 7,748                           | 1,888        | 1,860        |
| Coal.....        | 3,824                           | 437          | 256          |
| Other.....       | 7,036                           | 1,294        | 2,819        |
| Total .....      | <u>25,787</u>                   | <u>7,906</u> | <u>9,321</u> |

We continued in 2003 the divestiture of our seaborne dry-bulk shipping business, which we began in 2001, by selling our fleet of vessels. Since 2001, we have sold 14 ships. In the first half of 2003, we owned a fleet of five vessels. The fleet, however, was reduced to three capesize vessels after the sale of two panamax vessels for US\$ 36 million. We intend to sell these three remaining ships in the near future. In addition to the remaining fleet, we also charter six vessels on a monthly basis.

The container business is operated by five vessels, chartered on a bare boat basis from Frota Oceânica S/A, and generated revenues of US\$ 42 million with 65,860 twenty equivalent units (teus) transported in 2003. The container business services ports of Brazil and Argentina, from the city of Fortaleza to Buenos Aires.

We also operate a fleet of eight tug boats in the ports of Vitória in the state of Espírito Santo, Trombetas in the state of Pará, São Luís in the state of Maranhão and Aracaju in the state of Sergipe. In addition to this fleet, we also have four chartered tug boats, two operating in Trombetas, one in Aracaju and the other one in Vitória. The services in Vitória and Trombetas generated a revenue of US\$ 20 million performing 4,892 operations (maneuvers) in 2003.

In São Luiz and Aracaju we operate through a tug boat consortium with 50% participation in each operation (maneuver).

*Competition in the logistics industry.* Our railroads compete with road transport, including trucks, with the main factors being cost and shipping time. We also have many international competitors in the coastal shipping industry.

## Aluminum-Related Operations

The table below sets forth information regarding our consolidated bauxite, alumina and aluminum revenues and sales by geographic market for the periods indicated. These figures do not include the revenues of our unconsolidated joint ventures.

|  | For the Year Ended December 31, |          |          |
|--|---------------------------------|----------|----------|
|  | (in millions of US\$)           |          |          |
|  | 2001                            | 2002     | 2003     |
| <b>Revenues classified by geographic destination</b> |                                 |          |          |
| Export sales:  |                                 |          |          |
| America, except United States .....                  | US\$ 9                          | US\$ 27  | US\$ 156 |
| Europe .....   | 173                             | 318      | 378      |
| Japan .....  | 12                              | 11       | 96       |
| United States .....                                  | 73                              | 10       | 32       |
| Asia, other than Japan .....                         | 16                              | 21       | 96       |
| Subtotal .....                                       | 283                             | 387      | 758      |
| Domestic sales .....                                 | 1                               | 75       | 165      |
| Subtotal .....                                       | 284                             | 462      | 923      |
| Eliminations(1) .....                                | —                               | —        | (71)     |
| Total .....  | US\$ 284                        | US\$ 462 | US\$ 852 |
| <b>Revenues classified by category</b>               |                                 |          |          |
| Bauxite .....  | 21                              | 23       | 37       |
| Alumina .....  | 32                              | 159      | 495      |
| Aluminum .....                                       | 231                             | 280      | 320      |
| Total .....  | US\$ 284                        | US\$ 462 | US\$ 852 |

(1) Eliminations of transactions between consolidated entities.

We operate our aluminum-related businesses through the following subsidiaries and joint ventures, as of April 30, 2004:

|  | Business | Our Direct or Indirect<br>Share of Capital<br>(Voting, Total) |        | Partners  |
|--|----------|---|--------|---|
|  |          | Voting<br>(%)   | Total  |   |
| Albras-Aluminio Brasileiro S.A. (Albras) .....               | Aluminum | 51.00%  | 51.00% | Nippon Amazon   |
| Alunorte-Alumina do Norte do Brasil S.A.<br>(Alunorte) ..... | Alumina  | 61.29   | 57.03  | Companhia Brasileira de<br>Alumínio – CBA<br>JAIC<br>Mitsui<br>Mitsubishi<br>Nippon Amazon<br>Norsk Hydro   |
| Mineração Rio do Norte S.A. (MRN) .....                      | Bauxite  | 40.00   | 40.00  | Abalco<br>Alcoa<br>Alcan<br>BHP Billiton Metais<br>Companhia Brasileira de<br>Alumínio — CBA<br>Norsk Hydro |
| Valesul Alumínio S.A. (Valesul) .....                        | Aluminum | 54.50   | 54.50  | BHP Billiton Metais   |

These subsidiaries and joint ventures engage in:

- mining bauxite,
- refining bauxite into alumina, and
- using alumina to produce primary aluminum and aluminum alloys.

In 2003, net revenues from aluminum-related products totaled US\$ 843 million.

### ***Bauxite***

**MRN.** MRN, the largest bauxite producer in Latin America and one of the largest in the world, produces bauxite for sale to us and our joint venture partners. Excess production may be sold to third parties. MRN operates three open-pit bauxite mines, which produce high quality bauxite. In addition, MRN controls substantial additional high quality bauxite resources that it believes can be produced economically in the future. MRN had net revenues of US\$ 254 million and net income of US\$ 81 million in 2003. MRN's mines are located in the northern region of the state of Pará.

The table below sets forth information regarding MRN's bauxite reserves as of December 31, 2003. The estimates of mineral reserves have been audited and verified by Golder. We are in the process of confirming the amount of proven and probable reserves at the Paragominas mine.

|                             | Projected<br>Exhaustion Date | Proven and Probable Reserves(1) |                    |                                     |
|-----------------------------|------------------------------|---------------------------------|--------------------|-------------------------------------|
|                             |                              | Type                            | Ore Tonnage        | Grade(2)                            |
|                             |                              |                                 | (millions of tons) | (% Al <sub>2</sub> O <sub>3</sub> ) |
| Mineração Rio do Norte S.A. |                              |                                 |                    |                                     |
| Almeidas .....              | 2009                         | Open pit                        | 26.6               | 51.2                                |
| Aviso .....                 | 2015                         | Open pit                        | 71.0               | 50.8                                |
| Saraca V .....              | 2018                         | Open pit                        | 14.5               | 48.2                                |

(1) Reported as recoverable product. CVRD's ownership of MRN's bauxite reserves is 40%.

(2) Expressed as Al<sub>2</sub>O<sub>3</sub>.

Operations at MRN's mines commenced in 1979. For 2001, 2002 and 2003, production equaled 10.7, 9.9 and 14.4 million tons, respectively.

MRN operates ore beneficiation facilities at its mines, which are connected by rail to a loading terminal and port facilities on the Trombetas River. The Trombetas River is a tributary of the Amazon River and MRN's port facilities can handle vessels of up to 50,000 DWT. MRN owns and operates the rail and the port facilities serving its mines. The MRN bauxite mines are accessible by road from the port area and obtain electricity from their own thermoelectric power station. MRN completed the expansion of its capacity from 11.0 million tons to 16.3 million tons in 2003.

Our MRN bauxite joint venture produces bauxite for sale on a take-or-pay basis to us and our joint venture partners at a price that is determined by a formula linked to the prevailing world prices of aluminum. Our Alunorte alumina subsidiary, which we began consolidating in July 2002, purchases all of its bauxite requirements from MRN. Our annual purchase commitment for 2003 was approximately US\$ 53 million.

**Paragominas project.** In July 2002, we acquired 64% of the total capital of MVC, which gave us 100% of MVC's total capital. MVC was subsequently merged into CVRD. Through the acquisition of MVC's assets, we hold active mining rights in the Paragominas region in the state of Pará. A new wholly-owned bauxite mine located in Paragominas, is expected to begin operations in 2006 to supply Alunorte's new expansion with 4.5 million tons per year of wet 12% moisture bauxite. However, because of delay in the issuance of required environmental licenses by the state government, we are not certain that the bauxite mine will be able to commence operations before the end of 2006. The bauxite quality will be similar to MRN's, and the project will use the strip mining method of extraction, and have a beneficiation plant including milling and a 230-kilometer long slurry pipeline. We expect that total capital expenditures on this project will be approximately US\$ 280 million.

## *Alumina*

Alunorte began operations in July 1995 and produces alumina by refining bauxite that MRN supplies. The Alunorte plant recently concluded an expansion of capacity and now has a production capacity of 2.4 million tons of alumina per year. In 2003, Alunorte produced 2.323 million tons. Alunorte sells the major portion of its production to Albras, Valesul and third-party aluminum companies for the production of aluminum. The Alunorte plant is located near Belém, in the state of Pará, next to Albras's aluminum production facilities. This allows Alunorte and its principal customer, Albras, to share infrastructure and other resources. Alunorte had net revenues of US\$ 405 million and net income of US\$ 127 million in 2003.

Each Alunorte joint venture partner must purchase on a take-or-pay basis all alumina produced by Alunorte in proportion to its respective interest. The joint ventures each pay the same price, which is determined by a formula based on prevailing world market prices of aluminum.

*Alunorte capacity expansions.* In April 2003, Alunorte inaugurated its third production line, which has a capacity of 825,000 tons per year. With this third line, Alunorte increased its production capacity to 2.4 million tons of alumina per year.

In July 2003, Alunorte began work on a new capacity expansion for its alumina refinery. This brownfield project, estimated to start up by 2006, involves the construction of stages 4 and 5 of the plant, and is expected to increase its annual capacity from 2.4 million to 4.2 million tons of alumina per year. Alunorte's total investment in this project is expected to be approximately US\$ 583 million.

*ABC Refinery Project.* In May 2004, we signed a framework agreement with Chalco that sets forth a general outline of some of the principal terms for a joint investment in an alumina refinery in Brazil (ABC refinery). Under the agreement, we and Chalco have agreed to develop a joint study for the construction of a greenfield refinery in the state of Pará, Brazil near the existing facilities of Alunorte. The alumina refinery is expected to have an initial capacity of 1.8 million tpy, and to reach a final capacity of 7.2 million tpy by gradual expansions. The refinery project would form part of a series of related transactions involving mining, transportation, shipping and port development in Brazil. The framework agreement contemplates that bauxite for the project would be supplied from our Paragominas bauxite mines. The initial phase of the refinery project is preliminarily estimated to have a capital expenditure cost of approximately US\$ 1 billion. The first stage of the refinery is expected to be completed and operational in 2007. The project remains subject to further discussion and to the negotiation of final documentation and a number of other conditions, including receipt of board and governmental approvals.

## *Aluminum*

Albras and Valesul each produce aluminum using alumina which Alunorte supplies. Alunorte has supplied all of Albras's alumina requirements and 54.5% of Valesul's alumina requirements since October 1995. Albras produces aluminum ingots and Valesul produces aluminum ingots, slabs, bars, billets and alloys. Aluminum is produced from alumina by means of a continuous electro-chemical process which requires substantial amounts of electricity.

*Albras.* The Albras plant is one of the largest aluminum plants in Latin America, with a capacity of approximately 430,000 tons per year. Albras started its operations in 1985 at a plant located near Belém in the state of Pará. Albras had net revenues of US\$ 592 million and net income of US\$ 198 million in 2003.

The Albras joint venture partners must purchase on a take-or-pay basis all aluminum produced by Albras in proportion to their ownership interests which represents an annual commitment from us of US\$ 302 million. See Note 18(d) to our consolidated financial statements. We generally market our share of Albras's output in international export markets to third-party aluminum processing companies.

The table below sets forth information regarding Albras's recent aluminum production and our recent purchases from Albras.

|                                 | For the Year Ended December 31, |                             |       |
|---------------------------------|---------------------------------|-----------------------------|-------|
|                                 | 2001                            | 2002<br>(thousands of tons) | 2003  |
| Albras production .....         | 333.0                           | 407.7                       | 432.1 |
| Our purchases from Albras ..... | 167.0                           | 208.8                       | 204.9 |

The production of aluminum requires a continuous flow of substantial amounts of electricity. Albras purchases electrical power from Eletronorte, a state-owned electric power utility. Eletronorte generates electricity at the Tucuruí Hydroelectric Power Plant located on the Tocantins River. This plant is the sole source of electrical power in the region in the quantities required for Albras's operations. Albras consumes approximately one-quarter of the non-peak period output of the Eletronorte plant.

In May 2004, Albras successfully executed an auction to purchase electricity for a 20-year period. This agreement will become effective beginning June 2004. The basic purchase price is R\$ 53.00 per megawatt hour (MWh), indexed to the general market price index, IGP-M, as calculated by *Fundação Getúlio Vargas*. In addition to the basic price, there will be a price increase once the price of primary aluminum exceeds US\$ 1,450.00 per ton, as registered at the London Metal Exchange (LME). According to the terms established in the auction, Albras will pre-purchase electricity in the amount of R\$ 1,200 million. See *Item 4. Information on the Company—Regulatory Matters—Energy*.

*Valesul.* Valesul started its operations in 1982 and operates a plant located in the state of Rio de Janeiro. Valesul produces primary aluminum and aluminum alloys in the form of ingots, slabs, bars and billets. Valesul's aluminum is sold primarily in the domestic Brazilian market on a spot basis. Valesul had net revenues of US\$ 157 million and net income of US\$ 18 million in 2003. Valesul sells directly to its own clients.

The table below sets forth information regarding Valesul's recent primary aluminum production and third-party scrap recycled by Valesul.

|                                  | For the Year Ended December 31, |                             |      |
|----------------------------------|---------------------------------|-----------------------------|------|
|                                  | 2001                            | 2002<br>(thousands of tons) | 2003 |
| Valesul production .....         | 80.1                            | 92.9                        | 94.0 |
| Third-party scrap recycled ..... | 20.1                            | 19.6                        | 16.7 |

Valesul currently obtains a portion of its electrical energy requirements from four wholly-owned small hydroelectric power plants located in the state of Minas Gerais, a portion from the Machadinho hydroelectric power plant in which Valesul has a share of 7%, and the remainder from a third-party power company at market rates. Valesul is able to supply 38% of its own energy requirements.

### ***Competition in Bauxite, Alumina and Aluminum***

The global aluminum market is highly competitive. The largest producers are Alcoa, Rusal, Alcan, Norsk Hydro, BHP Billiton and Chalco. The alumina and bauxite markets are also competitive, but are much smaller, because many of the major aluminum-producing companies have integrated bauxite, alumina and aluminum operations.

*Bauxite.* Most of global bauxite production is not traded, as it is dedicated to integrated alumina refineries. Competition in the bauxite export market is based primarily on two key factors: quality of bauxite and reliability of supply. We believe that MRN remains competitive in this market because of the high quality of Brazilian bauxite, and our aluminum production system, which ensures internal use of our bauxite production. We use substantially all of our portion of MRN's bauxite production to supply Alunorte with alumina.



*Alumina.* Competition in the alumina market is based primarily on quality, price and reliability of supply. We believe that Alunorte is competitive in the alumina market because of the high quality of its alumina, its advantages in scale and technology, its efficient port facilities, and the ongoing commitment of its owners to purchase a substantial portion of its annual production. We use a substantial portion of our share of Alunorte's alumina production to supply Albras and Valesul, and sell the remainder on the world market. In 2003, the main markets for the portion of our alumina not sold to Albras and Valesul were Norway and Canada.

*Aluminum.* As aluminum is a commodity, competition in the aluminum market is based primarily on the economics of transportation and the costs of production. We believe that Albras is competitive in the aluminum market because of its relatively efficient and accessible port facilities, and its generally prevailing lower costs of production. We generally market our share of Albras' production to third-party aluminum processing companies in Asia and Europe.

## Steel Investments

We have investments in the following joint ventures in the steel business, as of April 30, 2004:

|                            | Our Direct or Indirect<br>Share of Capital<br>(Voting—Total) |         | Partners   | 2003 Net<br>Revenues<br>(in millions of US\$) | Principal<br>Products   |
|----------------------------|--|---------|--|---|---|
|                            | Voting<br>(%)  | Total   |  |   |   |
| CSI (California, USA)..... | 50.0%  | 50.0%   | JFE Steel  | US\$ 764                                      | Hot-rolled steel;<br>cold-rolled steel;<br>galvanized steel;<br>steel tubes                   |
| CST (Brazil) .....         | 24.9   | 28.0(2) | Acesita<br>Arcelor<br>JFE Steel<br>Others                                    | 1,284(1)                                      | Steel slabs;<br>hot-rolled steel  |
| Siderar (Argentina).....   | 5.0  | 4.9     | Techint Group<br>Employees<br>Usiminas<br>Others                             | 904(1)  | Steel slabs;<br>hot-rolled steel;<br>cold-rolled steel;<br>galvanized steel;<br>tin plates    |
| Usiminas (Brazil) .....    | 23.0   | 11.5    | Nippon Usiminas<br>Previ<br>Caixa dos<br>Empregados<br>da Usiminas<br>Others | 2,819(1)                                      | Hot-rolled steel;<br>cold-rolled steel;<br>heavy steel<br>plates; electro<br>galvanized steel |

(1) Represents amounts translated from local financial statements and converted into U.S. dollars (where applicable) at prevailing.

(2) We are party to a shareholders' agreement which permits us to participate in a control group.

The market value of our investments in CST, Usiminas and Siderar, all of which have publicly traded equity, was US\$ 476 million, US\$ 219 million and US\$ 89 million, respectively, at December 31, 2003. The aggregate net book value of these investments was US\$ 206 million at December 31, 2003. The aggregate net book value of our total investments in steel producing companies (including CSI, a privately held company) was US\$ 309 million at December 31, 2003. We earned US\$ 60 million in dividends from these investments in 2003.

In line with our strategy to consolidate and focus on mining and logistics, in March 2001 we unwound our cross-holding relationships with CSN. As part of the unwinding transaction, CSN granted us the following rights of first refusal relating to CSN's Casa de Pedra iron ore mine, each of which lasts for a period of 30 years:

- the right to purchase at market prices any iron ore produced by the mine beyond CSN's internal requirements,
- the right to purchase or lease the mine should CSN decide to sell or lease it, and

- the right to become a joint venture partner should CSN decide to form a pelletizing joint venture with a third-party with iron ore produced by the mine.

In return, we have granted CSN a right of first refusal to participate with us in the construction of any new steel producing facilities undertaken prior to March 2006 relating to slabs, coils and rolled products over which projects we will have direct or indirect control.

This unwinding transaction, as a whole, is subject to post-notification review by the Brazilian antitrust authorities (CADE).

CVRD and Nucor Corporation signed an agreement to construct and operate an environmentally friendly pig iron project in Northern Brazil in April 2003. The project will utilize two conventional mini-blast furnaces to produce about 380,000 metric tons of pig iron per year in its initial phase, using CVRD iron ore from our Carajás mines in Northern Brazil. The charcoal source will be exclusively from eucalyptus trees grown in a cultivated forest of 82,000 acres with the total project encompassing approximately 200,000 acres. CVRD and Nucor Corporation will form a joint venture company to operate the facility. It is anticipated that Nucor Corporation will purchase all of the production of the plant.

Approximately 78% and 22% of the voting shares will be held by CVRD and Nucor (or one of its affiliates), respectively, see *Item 4. Information on the Company—Acquisitions, Asset Sales and Significant Changes in 2003 and 2004—Steel*. Cultivated forest assets, previously owned by Celmar and now directly owned by CVRD, will be used as an energy source for Ferro Gusa's pig iron production.

## **Energy Investments**

In 2003, we consumed 15.8 TWh of electricity. Energy management and efficient supply have become priorities for us, driven by the uncertainties associated with the sector's privatization and changes in the regulatory framework, which increased the risk of rising electricity prices and energy shortages, such as the one Brazil experienced in the second half of 2001. We perceived favorable investment opportunities in the Brazilian electricity sector and took advantage of them by investing in nine hydroelectric power generation projects set forth in the table below. We plan to use the electricity produced by these projects for our internal needs. We could experience construction delays in certain generation projects due to environmental and regulatory issues, which could consequently, lead to higher costs. Analysis of each project's feasibility and investments will depend on the new laws and regulations applicable to the electricity sector, which are currently under review by the federal government, and their impact on electricity prices and supply. As a large consumer of electricity, we expect that investing in power projects will help to reduce costs and protect us against price and energy supply volatility.

The following table sets forth information regarding our power generation projects as of April 30, 2004:

|                       | Location  | Our<br>Ownership<br>Interest | Partners   | Begins<br>Operations | Projected<br>Capacity | Our Investment   |                    |  |
|-----------------------|---|------------------------------|--|----------------------|-----------------------|--|--------------------|--|
|                       |   | (%)                          |  |                      | (in MW)               | As of<br>December<br>31, 2003<br>(in millions of US\$) | Projected<br>Total |  |
| Aimorés.....          | Rio Doce basin,<br>in the state of<br>Minas Gerais.   | 51.00%                       | Cemig  | July 2005(1)         | 330MW                 | US\$ 91  | US\$ 127.1         |  |
| Candonga .....        | Rio Doce basin,<br>in the state of<br>Minas Gerais.   | 50.00                        | Alcan  | August<br>2004(1)(2) | 140                   | 44   | 45.3               |  |
| Capim Branco I.....   | Araguari river, in<br>the state of<br>Minas Gerais.   | 48.42                        | Cemig-Capim<br>Branco<br>Paineiras<br>CMM                                    | February<br>2006(1)  | 240                   | 12   | 82.4               |  |
| Capim Branco II ..... | Araguari river, in<br>the state of<br>Minas Gerais.   | 48.42                        | Cemig-Capim<br>Branco<br>Paineiras<br>CMM<br>Camargo Corrêa<br>Cimentos S.A. | December<br>2006(1)  | 210                   | 4  | 79.8               |  |
| Estreito .....        | Tocantins river,<br>on the border of<br>the states of<br>Maranhão and<br>Tocantins.             | 30.00                        | Tractebel<br>Alcoa<br>BHP Billiton<br>Camargo<br>Energia S.A.                | October<br>2008(1)   | 1,087                 | 1  | 197.9              |  |
| Foz do Chapecó .....  | Uruguai river, on<br>the border of the<br>states of Santa<br>Catarina and Rio<br>Grande do Sul. | 40.00                        | CPFL-G<br>CEEE   | July 2008(1)         | 855                   | 2  | 202.4              |  |
| Funil.....            | Rio Grande, on<br>the border of the<br>states of São<br>Paulo and Minas<br>Gerais.              | 51.00                        | Cemig  | December<br>2002     | 180                   | 57   | —                  |  |
| Igarapava .....       | Rio Grande, on<br>the border of the<br>states of São<br>Paulo and Minas<br>Gerais.              | 38.15                        | CMM<br>CSN<br>Cemig<br>MMV   | January<br>1999      | 210                   | 52   | —                  |  |
| Porto Estrela .....   | Santo Antonio<br>river, in the state<br>of Minas Gerais.  | 33.33                        | Cemig<br>Coteminas   | September<br>2001    |                       |  |                    |  |
|                       |   |                              |  |                      | 112                   | 19   | —                  |  |
| Total (3) .....       |   |                              |  |                      | 3,364MW               | US\$ 282.1   | US\$734.9          |  |

(1) Projected date for commencement of the first unit of the project.

(2) Commencement date listed assumes the lifting of a judicial injunction prohibiting the filling of the reservoir and is subject to potential delay depending on the outcome of pending litigation.

(3) We also hold 43.85% of a consortium that has the concession right to build the Santa Isabel hydroelectric power plant at the Araguaia river, which would have a projected capacity of 1,087 MW. In view of difficulties in obtaining the necessary environmental license to begin its construction, we are currently negotiating with ANEEL to return this concession.

Our partners in our energy investments include:

- Companhia Energética de Minas Gerais, known as Cemig, a state-government controlled company.
- Cemig Capim Branco Energia S.A., known as Cemig-Capim Branco, an affiliate of Cemig.
- Comercial e Agrícola Paineiras Ltda., known as Paineiras, which is an affiliate of Suzano Participações S.A.
- BHP Billiton Metais S.A., a wholly-owned subsidiary of BHP Billiton.
- Companhia Mineira de Metais, known as CMM, which is an affiliate of Votorantim Participações S.A.
- Alcoa Alumínio S.A., known as Alcoa, which is an affiliate of Alcoa Inc.
- Mineração Morro Velho Ltda., known as MMV, which is an affiliate of Anglo American Brasil Ltda., which in turn is affiliated with Anglo American Plc.
- Companhia de Tecidos do Norte de Minas, known as Coteminas, which is an affiliate of Coteminas International Ltd.
- Tractebel Egi South America Ltda., known as Tractebel, which is a subsidiary of Tractebel S.A., a SUEZ group energy division.
- Alcan, Inc.
- CPFL Geração de Energia S.A., known as CPFLs-G, a subsidiary of CPFL Energia, a controlled company of VBC Participações.
- Companhia Estadual de Energia Elétrica, known as CEEE, is a state-owned power company.

Our total projected investment in these hydroelectric projects is estimated at US\$ 735 million. We cannot assure you that the aggregate cost will not escalate or that the projects will be completed on schedule.

In addition to the above, some of our affiliates generate part of their own energy.

## **REGULATORY MATTERS**

### **Mining**

Under the Brazilian Constitution, all mineral resources in Brazil belong to the Brazilian government. The Brazilian Constitution requires that mining companies incorporate in accordance with Brazilian law.

The Brazilian Constitution and Mining Code impose on mining companies various regulatory restrictions relating to, among other things:

- the manner in which mineral deposits are exploited,
- the health and safety of workers,
- the protection and restoration of the environment,
- the prevention of pollution, and
- the promotion of local communities where mines are located.

Mining companies in Brazil can only prospect and mine for mineral resources pursuant to prospecting authorizations or mining concessions granted by the National Mineral Production Department, *Departamento Nacional de Produção Mineral*, or DNPM, an agency of the Ministry of Mines and Energy of the Brazilian

government. DNPM grants prospecting authorizations to a requesting party for an initial period of three years. These authorizations are renewable at DNPM's discretion for another period of one to three years, provided that the requesting party is able to show that the renewal is necessary for proper conclusion of prospecting activities. On-site prospecting activities must start within 60 days of official publication of the issuance of a prospecting authorization. Upon completion of prospecting activities and geological exploration at the site, the grantee must submit a final report to DNPM. If the geological exploration reveals the existence of a mineral deposit that is economically exploitable, the grantee will have one year (which DNPM may extend) from approval of the report by DNPM to apply for a mining concession or to transfer its right to apply for a mining concession to a third-party. When a mining concession is granted, the holder of the concession must begin on-site mining activities within six months. DNPM grants mining concessions for an indeterminate period of time lasting until the exhaustion of the mineral deposit. Extracted minerals that are specified in the concession belong to the holder of the concession. With the prior approval of DNPM, the holder of a mining concession can transfer it to a third-party that is qualified to own concessions. In some cases, mining concessions are challenged by third parties.

Pursuant to Article 20 of the Brazilian Constitution of 1988, as implemented by Law No. 8001/1990, the Brazilian government charges us a royalty, known as *Financial Compensation for Exploiting Mineral Resources* (CFEM), on the revenues from the sale of minerals we extract, net of taxes, insurance costs and costs of transportation. The annual rates paid on our products are:

- iron ore and potash fertilizer, 2%;
- bauxite and manganese ore, 3%;
- kaolin, 2%;
- copper, 2%; and
- gold, 1%.

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

## **Railroads**

The Brazilian government, acting through the Ministry of Transportation and the ANTT, regulates and supervises the policies for the railroad transportation sector. The Federal Government may grant private companies concessions for the construction, operation or commercial exploration of railroads. Railroad concession contracts granted by the Federal Government impose certain shareholder ownership limitations. For FCA and MRS Logística the concession contracts provide that each shareholder can only own up to 20% of the voting capital of the concessionaire, unless otherwise permitted by ANTT. We are in compliance with the requirements imposed by the concession contracts for our railroad operations. We received an authorization for our ownership of FCA, see *Item 4. Information on the Company—Business Overview—Acquisitions, Asset Sales and Significant Changes in 2003 and 2004—Logistics*. As part of our acquisition of Caemi in September 2003, we acquired MBR's stake in MRS Logística, which increased our share in MRS Logística to 34.1% of the voting capital and 38.8% of the total capital. We are currently discussing the shareholding structure with ANTT and our partners in MRS Logística in order to comply with the applicable requirements, see *Item 4. Information on the Company—Lines of Business—Logistics*. The ownership limitation does not apply in the cases of EFVM and Estrada de Ferro Carajás (EFC).

The ANTT also sets different tariff limits for railroad services for each of the concessionaires and each of the different products transported. So long as these limits are respected, the actual prices charged can be negotiated directly with the users of such services.

## **Energy**

The power industry in Brazil is regulated by the Brazilian government, acting through the Ministry of Mines and Energy and ANEEL. The role of ANEEL is to implement and enforce policies and regulations designated by the Ministry of Mines and Energy and aimed at organizing and regulating the electricity sector and power

companies. ANEEL should ensure consumers an efficient and economical energy supply through regulation enforcement and the monitoring of prices and the operational efficiency of power companies.

Under the law governing the electricity sector, concessions grant exclusive rights to generate and transmit or to distribute electricity in a particular area for a period of time that should be sufficient for the concessionaire to recover its investment. The concessions for power generation are granted for 35 years and may be renewed at the federal government's discretion for an additional 20 years. Concessionaires are required to supply electricity for public services, on a continuing basis, in sufficient quantity and within approved standards of quality.

Given the hydrologic and integrated nature of the Brazilian electricity generation matrix, ANEEL has implemented regulations that created the Energy Reallocation Mechanism, known as MRE, a mechanism for sharing hydrological risk, and consequently reducing generation volatility among all generators. In order to implement the MRE, ANEEL designates a level of energy production, known as Assured Energy, for each generator, every five years. Assured Energy is calculated in accordance with a statistical model based on average rainfalls in the relevant region, water flows of rivers and water levels in each plant's reservoir over a multi-year time frame. Each generator is allowed to enter into contracts to sell up to 100% of its Assured Energy. To the extent a generator has signed contracts for the sale of its Assured Energy, and as long as MRE members as a whole are able to meet MRE Assured Energy levels, it receives payments based on these contractual terms, regardless of its level of actual generation. If all MRE members meet their contracted energy and there is a surplus of energy remaining, the net regional surplus generation is allocated among generators in different regions and this energy surplus may be sold in the wholesale market.

All contracts for wholesale energy purchases and sales are currently recorded in the wholesale energy market, or MAE. The MAE is a non-profit private entity subject to the authorization, regulation and supervision of ANEEL, and is responsible for operating the wholesale energy market and for ensuring that energy transactions in the short-term market are settled and cleared in an efficient manner. The MAE is primarily designed to effect the settlement of differences between the amount of energy contracted under bilateral contracts of the several market agents (generators, distributors, traders and large consumers), and the amount of energy actually consumed and produced. The settlement is done in accordance with the MAE spot prices, which are expressed in R\$/MWh and are calculated for each settlement period for each sub-market. Approximately 22% of the settlement balance the MAE has indicated is due to CVRD is under judicial dispute by other market agents.

In March 2004, the Brazilian government approved a new law, Law No. 10848/2004, for the electricity sector. Although the full regulations under the law have not yet been enacted, we believe that this new law will create an even tighter regulated sector, especially in the generation segment. The new law transfers jurisdiction of some regulatory areas from ANEEL to the Ministry of Mines and Energy. Under this new law, all consumers of electricity, including large consumers, such as CVRD, must contract the totality of their energy needs through contracts and penalties may apply for errors above 5% of consumed energy. This new law creates two parallel markets for energy: a regulated market, in which a *consumidor cativo*, or regulated consumer, will enter into contracts subject to regulated prices, and an unregulated market, in which a *consumidor livre*, or free consumer, will enter contracts with independent power producers at prevailing market prices. Consumers may migrate from one market to another. However, consumers must wait until the termination of their long-term contracts and, under pending regulations, may have to notify the Ministry of Mines and Energy that they intend to switch markets one, two, three or even five years in advance, depending on the circumstances.

The new law also creates an energy trading commission - CCEE (Câmara de Comercialização de Energia Elétrica), also called *pool*, which will be responsible for settling all energy transactions between distributors and generators. The CCEE will eventually replace the MAE as the wholesale energy market, but we do not expect significant changes in the settlement procedures regarding short-term transactions. Self-generators of energy, such as CVRD, may be required to provide a certain percentage of their generated energy from new concessions acquired after 2004 to the *pool*. The exact percentage, in addition to any tax on the amount of energy used by self-generators, has not yet been determined. Other factors which have not yet been determined and are the subject of pending regulation include the price that ANEEL will charge self-generators for the use of transmission lines, and the way in which energy projects will be auctioned.

Because the pending regulation for the sector is still under review by the Ministry of Mines and Energy, we cannot be certain of all the material impacts that this new law could have on our energy business. Changes in the regulatory environment could negatively affect our energy investments.

## Environmental Matters

Federal, state and municipal legislation contain provisions for the control and protection of the environment in Brazil. These laws govern the use of natural resources, the reclamation and restoration of mined areas, the control of atmospheric emissions, the treatment of industrial effluents, as well as the use, handling and final disposal of hazardous materials, and the control of water resources under the National Hydrological Resources Policy, which establishes hydrologic use rights and the fees applicable to that use. It is possible that environmental regulations will become stricter in the future. Any strengthening of these laws may lead to greater costs for environmental compliance.

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

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

*Issuance of Environmental Licenses.* We must obtain environmental licenses in order to build, develop, expand and operate facilities that use natural resources or may pollute the environment. We seek to obtain the legally required licenses for each of our facilities and activities. In some cases, this process requires a significant amount of time for the preparation of comprehensive environmental reports and their evaluation, as well as for the establishment of appropriate programs for environmental education of communities residing in areas affected by the proposed projects. We have entered into agreements with the appropriate environmental authorities with respect to facilities where environmental non-compliance has been detected in order to make these facilities compliant.

*Environmental Compensation.* Environmental Law No. 9985/2000 requires us to pay “environmental compensation” to state and federal authorities, in order to create and maintain protected sites, in the amount of at least 0.5% of the total investment of each venture with a material environmental impact. There are a number of uncertainties regarding the scope and application of this law, including what rate will be applied by the federal or state governments’ environmental agencies, how such a rate will be applied and under what basis an investment will be valued.

*Legal Reserve.* Under the Brazilian Forest Code, as amended, the exploration of economic activities in the Amazon basin can only reach 20% of a project’s land. We have a number of projects in the Amazon basin, such as Carajás and Cadam. We are currently below the exploitation threshold in all of these projects. However, some of our mines may approach this threshold as we expand our operations. There are a number of uncertainties regarding the scope and application of the Brazilian Forest Code, as amended, in particular where a company has pre-existing operations, as is the case with our current mining operations.

*Prevention and Environmental Control Measures.* Our environmental policies also aim to prevent, control and reduce the environmental impact caused by our business operations. To that end, we have made significant environment-related investments in our facilities and in employee training programs (approximately US\$ 29.2 million in 2003). We are also investing to develop environmental projects directed at the communities located near our facilities (approximately US\$ 6.5 million in 2003).

*Water Use.* We are intensive water users in eleven states with hydrological resources that vary from very high water availability in the Amazon to the scarcity in the northeast of Brazil. The Hydrological Resources Management System that is being implemented throughout CVRD includes evaluation of the availability of water in the areas where we operate and rationalization and control of water use. We continually monitor new water legislation and regulations and take particular interest in requirements adopted under the National Policy of Hydrological Resources, established by Law No. 9433/97, which defines the conditions for obtaining water use grants and for effluents disposal. Water use taxation has been discussed since 2002. However, no decision has yet been taken in any region where CVRD operates.

*ISO Certifications.* Our environmental management system is based on International Organization for Standardization (ISO) standard 14001. We have obtained 16 certificates covering iron ore and manganese ore and ferroalloys production, pelletizing plants, alumina refinery, port operations and our research center.

*Environmental Control Systems.* As a mining company, air emissions control is one of our main objectives, including in our pelletizing plants. Control equipment and systems at our facilities are complemented by monitoring systems and control software.

With respect to improvements in water quality, we strive to treat and control the pollutants disposed into the sea and local rivers or other water sources and also use extensive water recycling in our operations.

Through a comprehensive waste management system under implementation, we aim to achieve greater control of the generation and disposal of our waste, to develop opportunities to reuse and recycle, and to reduce waste.

In 2003, our mine decommissioning manual was developed, which described a complete set of directives, including technical practices and procedures to be followed during mine closures. The manual outlines procedures for the rehabilitation and monitoring of degraded areas, the main steps and sequence to be followed during closure, and any liabilities that may result after mine closure. The manual also provides standardized basic criteria and procedures, based on the directives of the CVM and the SEC (FAS 143), for cost evaluation, the establishment of current budgets, future decommissioning and reclamation (see Note 4 to our consolidated financial statements).

Our environmental program also includes reforestation projects which are intended to protect the soil against erosion processes, or to create buffers between our activities and communities in the surrounding areas.

In 2003, we spent US\$ 3.5 million on these activities. We also participate in the maintenance and preservation of Brazilian forests, including the National Carajás Forest in the Amazon, and we own and preserve the Vale do Rio Doce Natural Reserve, one of the remaining areas of the Atlantic Forest in the state of Espírito Santo. In the last twenty years we have provided support to the indigenous communities in the areas of education, health, infrastructure development and technical assistance with the aim of enhancing life quality and self-sustainability of these communities. Expenditures on these programs amounted to US\$ 5.8 million in 2003.

## **PATENTS AND TRADEMARKS**

We hold, or have applied for, a significant number of patents with legal intellectual property agencies in 25 countries and in Brazil's *Instituto Nacional de Propriedade Industrial* (INPI), the governmental agency responsible for granting patents and registering trademarks. Most of our patents relate to proprietary rights over iron ore dressing. One of our most successful patents relates to lower grade iron ore concentration, generally known as itabirite, which is widely used by other iron ore mining companies the world over. We are currently conducting technological research to investigate commercial exploration of our hard itabirites. We also hold registration certificates of our marks, including both trademark (logotype) and brand names, filed with INPI and 32 other countries. These registrations are systematically renewed every ten years in Brazil and abroad in accordance with each country's current legislation.

## **INSURANCE**

We carry insurance covering various types of risks, such as property, plant, equipment, liability, vehicles, liability of maritime terminals and transportation, as well as a group life insurance policy for our employees. We believe that our policies are in such amounts and cover such risks as are usually carried by companies in our industry. In 2002, we established SRV Insurance Company Limited, a "captive reinsurance" subsidiary incorporated in the Cayman Islands to enable us to obtain insurance and reinsurance at more competitive rates by assuming a portion of the risk under our property and business interruption insurance policy.



## CAPITAL EXPENDITURES

During the year 2003, CVRD made capital expenditures and other investments of US\$ 1,991 million.

Growth capital expenditures consisted of US\$ 913 million on projects and US\$ 82 million dedicated to research and development, including mineral exploration of US\$ 69 million.

The main investment projects were as follows:

- US\$ 61.0 million spent on increasing annual production capacity at the Carajás iron ore mine by 14 million tons. The capacity expansion at Carajás to 70 million tons per year was completed almost 12 months ahead of the original schedule.
- US\$ 27.7 million was spent on development of the Fábrica Nova and Brucutu mines, located in the Southern System, whose first phases will enter into operation in 2005 and 2006, respectively, adding a total of 22 million tons a year of iron ore to our production capacity.
- US\$ 9.9 million was spent on the construction of Pier III at Ponta da Madeira, which entered into operation at the end of 2003. The pier is being used for the shipment of iron ore and pellets, supporting the expansion to production capacity at Carajás.
- US\$ 95 million on the expansion of Alunorte, with US\$ 66 million on module 3, which was completed in April 2003 and US\$ 29 million to build modules 4 and 5, scheduled to start up in 2006.
- US\$ 329 million on the Sossego copper mine project, with commercial production at full capacity scheduled for June 2004.
- US\$ 28.4 million was spent on the capacity expansion project at the Taquari-Vassouras potash mine, which will increase capacity from the current 600,000 tons a year, to 850,000 tons. This is scheduled for completion by 2005.
- US\$ 156 million was spent on the purchase of 1,860 wagons and 44 locomotives for the transport of iron ore, and 57 locomotives and 1,126 wagons for the transport of general cargo: 101 locomotives and 2,986 wagons in all. Of this total, 77 locomotives and 2,022 wagons have already been delivered by the manufacturers and incorporated into our railroad fleet.
- US\$ 17.5 million was spent on the construction of the Candonga hydroelectric power plant, which is nearing the completion stage and scheduled to begin operations in 2004.
- US\$ 19.6 million was spent on the construction of the Aimorés hydroelectric power plant, scheduled to enter into service in 2005.

In addition to these projects, US\$ 82 million was invested in research and development, including mineral exploration of US\$ 69 million, of which our share was US\$ 50 million, and US\$ 19 million was invested by BNDES, in accordance with the Mineral Risk Contract, signed in 1997. Of this total:

- 63% was spent on prospecting in the Carajás mineral province, where we are principally searching for copper, nickel, gold, platinum metals group and manganese ore;
- 19% of this total was invested in other areas of Brazil, particularly in prospecting for kaolin and bauxite in the east of state of Pará; prospecting for copper in the states of Ceará and Paraíba; and prospecting for nickel in the states of Piauí, Goiás and São Paulo; and
- 18% was spent on prospecting for mineral deposits outside Brazil, the Company having established mineral prospecting offices in Peru and Chile, where the search is for copper and gold, and in Gabon, where the search is for manganese ore.

Our 2003 acquisitions consisted of:

- purchasing full control of Elkem Rana, now RDMN, a producer of ferromanganese alloys, for US\$ 17.6 million;
- purchasing shares of CST for US\$ 57.8 million, which increased our stake in this steel company from 22.85% to 28.02%; and
- purchasing 50% of the common shares and 40% of the preferred shares of Caemi, for US\$ 426.4 million.

The table below sets forth our historical capital expenditures by business area for the periods indicated. Our capital expenditures have historically been more intensive in the second half of the year. See *Item 5. Overview—Key Factors Affecting Revenues and Results of Operations—Divestitures and Asset Sales*, for a description of our divestitures.

|  | For the Year Ended December 31, |       |                       |     |      |       |
|--|---------------------------------|-------|-----------------------|-----|------|-------|
|  | 2001                            |       | 2002                  |     | 2003 |       |
|  |                                 |       | (in millions of US\$) |     |      |       |
| Ferrous Minerals.....                    | US\$                            | 454   | US\$                  | 435 | US\$ | 698   |
| Non-ferrous Minerals .....               |                                 | 40    |                       | 132 |      | 332   |
| Logistics.....                           |                                 | 25    |                       | 33  |      | 274   |
| Energy.....                              |                                 | 52    |                       | 72  |      | 40    |
| Aluminum.....                            |                                 | —     |                       | 63  |      | 79    |
| Corporate center .....                   |                                 | 24    |                       | 31  |      | 120   |
| Total capital expenditures .....         |                                 | 595   |                       | 766 |      | 1,543 |
| Acquisitions and other investments ..... |                                 | 854   |                       | 46  |      | 448   |
| Total .....                              | US\$                            | 1,449 | US\$                  | 812 | US\$ | 1,991 |

We have budgeted US\$ 1,815 million for capital expenditures in 2004. Of this total, 66.2%, or US\$ 1,202 million, will be capital expenditures on items for promoting growth (“growth capital expenditures”) and the remaining US\$ 613.3 million will be capital expenditures on items for maintaining existing operations (“stay-in-business capital expenditures”).

The budgeted investment projects for 2004 are as follows:

- US\$ 76.4 million has been budgeted for continued projects in connection with the capacity expansion of the Carajás iron ore mines to 70 million tons per year in 2004. An additional US\$ 28.8 million will be spent on a further expansion of the iron ore output at Carajás to 85 million tons per year. This includes mine, mill and port expansion. Startup is expected in 2006.
- US\$ 37.3 million has been budgeted for completion of phase I of the Brucutu iron ore mine. The first phase is scheduled for startup in 2006, when the mine will have a capacity of 12 million tons per year. Phase II, already planned, will add a further 12 million ton per year capacity beginning in 2008.
- US\$ 31.1 million has been budgeted for the Fábrica Nova iron ore mine, which is expected to reach nominal production capacity of 10 million tons per year in 2005 and 15 million tons per year in 2007.
- US\$ 3.0 million has been budgeted for a 14 million tons per year expansion of the Fazendão iron ore mine. Startup is expected in 2006.
- US\$ 13.2 million has been budgeted for an expansion of Itabira iron ore mine’s production from 43 to 46 million tons per year. Startup is planned for 2006.
- US\$ 25.9 million has been budgeted for the increase of Tubarão Maritime Terminal’s port capacity via the acquisition of new equipment and construction of silos and stockyards. Completion of the project is scheduled for 2005.
- US\$ 44.8 million has been budgeted for the 118 copper project. The project, with its expected production of 45,000 tons per year of copper cathode, is scheduled to come on stream in December 2005.

- US\$ 21.2 million has been budgeted for the expansion of the Taquari-Vassouras potash mine to a capacity of 850,000 tons per year.
- US\$ 83.2 million has been budgeted for the Paragominas I project.
- US\$ 183.3 million has been budgeted for stages 4 and 5 of Alunorte to expand the plant's capacity by 1.8 million tons per year. Construction began in third quarter 2003 and completion is expected in 2006.
- US\$ 182.0 million has been budgeted for the purchase 18 locomotives and 2,011 wagons to be used for the transport of iron ore and general cargo in the Vitória a Minas and Carajás railroads.
- US\$ 130.6 million has been budgeted for the purchase of 70 locomotives (mostly secondhand for refurbishment) and 1,167 wagons, to be used for the transportation of general cargo by FCA.
- US\$ 19.0 million has been budgeted for the Aimorés hydroelectric plant.
- US\$ 3.5 million has been budgeted for the Candonga hydroelectric project.
- US\$ 33.6 million has been budgeted for the Capim Branco Hydroelectric plants.

In addition to these projects, CVRD has budgeted US\$ 78 million for mineral exploration, of which our share is US\$ 64 million and US\$ 14 million is to be invested by BNDES, in accordance with the Mineral Risk Contract. The US\$ 14 million BNDES contribution is not included in the US\$ 1,815 million capital expenditures budget. Of the total budgeted capital expenditures for mineral exploration, 41.6% is expected to be spent in the Carajás mineral province and 35.5% in other areas of Brazil. The remaining 22.9% is budgeted for exploration in Peru, Chile, Gabon, Mozambique, Mongolia and China and other countries where CVRD is evaluating exploration opportunities.

## **Item 5. Operating and Financial Review and Prospects**

### **Overview**

Our 2003 net income of US\$ 1,548 million was the highest in our history, and represented a 127.6% increase over the US\$ 680 million we recorded in 2002. This performance was driven by higher operating income, foreign exchange and monetary gains and the improved performance of our affiliates and joint ventures. Our operating income rose by 15.0%, driven by a 29.8% increase in net revenues, partially offset by a 37.6% increase in our operating costs and expenses. Highlights from 2003 include:

- A 29.8% increase in net operating revenues compared to 2002, driven primarily by:
  - A 24.1% increase in revenues from iron ore and pellets, reflecting high demand levels that continued to exceed our production capacity, as well as higher prices. The increase in our iron ore and pellets revenues also reflects four months of the results of Caemi following our acquisition of control in September 2003;
  - An 84.4% increase in aluminum-related revenues, driven primarily by higher alumina revenues, which were fueled by a capacity expansion at Alunorte, higher alumina prices, and the impact of consolidating a full year of Alunorte's results in 2003, compared to only 6 months in 2002; and
  - A 31.9% increase in logistics services revenues, due to a 10.7% increase in volumes transported by our Vitória a Minas and Carajás railroads and to our September 2003 consolidation of FCA.
- A 37.6 % increase in operating costs and expenses, driven mainly by a 38.2% increase in cost of goods sold. The higher cost of goods sold resulted from higher volumes, an increase in fuel and oil expenses, and the impact of consolidating Caemi and FCA, both of which have higher costs than the rest of our iron ore and logistics operations.
- Foreign exchange and monetary gains of US\$ 242 million in 2003, compared to foreign exchange and monetary losses of US\$ 580 million in 2002.
- A turnaround in the performance of our joint ventures and affiliates, which contributed US\$ 306 million to net income in 2003, after reducing our net income by US\$ 87 million in 2002.

### ***Key Factors Affecting Revenue and Results of Operations***

#### ***Demand***

##### ***Demand for iron ore and pellets***

In recent years, we have experienced a significant increase in demand from China, and in 2003 we began to see a recovery in demand in Europe and Japan. Demand for our iron ore products is a function of worldwide demand for steel, which is, in turn, heavily influenced by worldwide economic activity. Worldwide demand for steel has been growing since the first quarter of 2002. A slowdown in global economic activity will generally affect demand for our iron ore products, although we expect there will typically be a lag effect, such as we have been observing in recent years.

Demand for iron ore and pellets exceeded our production capacity throughout 2003, and we expect that demand will continue to exceed our production capacity in 2004. We plan to invest US\$ 215.7 million in 2004 to increase the production capacity of our mines and to expand the capacity of our ports in order to better meet rising customer demand. To the extent demand exceeds our production capacity, we expect to purchase and resell iron ore and pellets from third parties to attempt to meet any shortfall. In 2003, we purchased 9.2 million tons of iron ore and pellets from third parties. We expect our purchases from third parties to increase in 2004.

### *Demand for aluminum-related products*

Demand for aluminum-related products is driven primarily by world economic conditions. In recent years, China has been the primary driver of demand in the aluminum sector. World demand for bauxite, alumina and aluminum currently exceeds supply, and we expect this trend to continue throughout 2004.

### *Demand for third-party transportation services*

Demand for our third party transportation services in Brazil is primarily driven by repressed demand for efficient logistics services since most of the cargo is transported using trucks. The market is currently much more supply driven than demand driven and we believe our ability to increase our revenues is mainly dependent on our ability to increase our wagon and locomotive fleets.

### **Production Capacity**

Capacity expansions are a key factor influencing our revenues. In 2003, we completed capacity expansions at Alunorte and MRN. The principal capacity expansions we expect to complete in 2004 include:

- Expansion of Carajás' annual production capacity to 70 million tons per year from the current 56 million tons per year. This capacity expansion will help partially offset the closure of our Capanema mine, which produced 6.4 million tons of iron ore in 2003 prior to ceasing operations in December 2003.
- Launch of copper concentrate production at our Sossego mine, scheduled for mid-2004.
- Purchase of 88 locomotives and 3,178 wagons in 2004 to expand the general cargo and iron ore transportation capacity of our railroads.

See *Item 4. Information on the Company—Capital Expenditures* for more details concerning our 2004 capital expenditures budget.

### **Prices**

#### *Ores and metals*

*Iron ore.* Our iron ore export sales are made pursuant to long-term supply contracts, which provide for annual price adjustments. Cyclical changes in the world demand for steel products affect sales prices and volumes in the world iron ore market. Different factors, such as the iron content of specific ore deposits, the various beneficiation and purifying processes required to produce the desired final product, particle size, moisture content, and the type and concentration of contaminants (such as phosphorus, alumina and manganese ore) in the ore, influence prices for iron ore. Fines, lump ore and pellets typically command different prices. We generally conduct annual price negotiations beginning in November of each year and ending early in the following year. Separate prices are established for the Asian and European iron ore markets. In the Asian market, the renegotiated prices are effective from April of the current year until March of the following year. In the European market, the renegotiated prices are generally effective for the calendar year. Because of the wide variety of iron ore and pellet quality and physical characteristics, iron ore and pellets are not considered commodities. This factor combined with the structure of the market has prevented the development of an iron ore futures market. We do not hedge our exposure to iron ore price volatility.

| Reference Prices for Europe in US\$ cents/metric ton Fe unit |               |                      |                       |
|--|---------------|----------------------|-----------------------|
| Year   | Carajás fines | Standard sinter feed | Blast furnace pellets |
| 2001   | 30.03         | 28.92                | 50.10                 |
| 2002   | 29.31         | 28.62                | 47.36                 |
| 2003   | 31.95         | 31.04                | 52.00                 |
| 2004   | 37.00         | 36.45                | 61.88                 |

Our reference prices per Fe unit for Carajás iron ore fines increased across-the-board in 2003 by 9% from 2002 levels, after declining by 2.4% in 2002 from 2001 levels. We experienced similar trends in the market for pellets, where reference prices increased by 9.8% in 2003, after declining by 5.5% in 2002. We have reached agreements with major steelmakers under which our iron ore prices for 2004 will increase by an average of 18% and our pellet prices will increase by an average of 19%.

*Aluminum-related operations.* We operate our aluminum operations through a combination of subsidiaries and unconsolidated joint ventures. We consolidate the revenues of (i) Alunorte, which refines and sells alumina,

and (ii) our wholly-owned trading subsidiary Itabira Rio Doce Company Ltd., which we refer to as Itaco, which resells bauxite, alumina and aluminum. Our remaining bauxite, alumina and aluminum operations are reflected in the line item “Equity in results of affiliates and joint ventures and change in provision for losses on equity investments” in our consolidated income statement.

Through Itaco, we sell our aluminum in an active world market where prices are determined by reference to prices prevailing on terminal markets, such as the London Metals Exchange and the Commodity Exchange, Inc., or COMEX, at the time of delivery. The following table sets forth the three-month average market prices for aluminum on the London Metals Exchange for the periods indicated.

|            | <b>Aluminum</b>     |
|------------|---------------------|
|            | <b>(\$ per ton)</b> |
| 1Q01 ..... | 1,561.47            |
| 2Q01 ..... | 1,511.59            |
| 3Q01 ..... | 1,405.96            |
| 4Q01 ..... | 1,334.66            |
| 1Q02 ..... | 1,394.48            |
| 2Q02 ..... | 1,377.17            |
| 3Q02 ..... | 1,330.35            |
| 4Q02 ..... | 1,356.92            |
| 1Q03 ..... | 1,392.04            |
| 2Q03 ..... | 1,379.55            |
| 3Q03 ..... | 1,419.94            |
| 4Q03 ..... | 1,519.80            |
| 1Q04 ..... | 1,667.37            |

Source: Bloomberg.

Albras and Alunorte seek to manage the risks associated with changes in aluminum prices by hedging. For more information about aluminum-related hedging, see *Item 11. Quantitative and Qualitative Disclosures About Market Risk*. During the first quarter of 2004, average market prices for aluminum on the London Metals Exchange rose by 9.7% compared to the previous quarter. Alumina prices remained at high levels during the first quarter of 2004, and we believe that the current structural imbalance between supply and demand in the alumina market will continue to have a positive impact on alumina prices in the near term.

Our unconsolidated joint venture MRN sells a substantial proportion of its bauxite to our consolidated subsidiary Alunorte, which in turn sells a substantial portion of its alumina production to our unconsolidated joint ventures Albras and Valesul. The basic arrangements under which these sales are made are as follows:

- Our MRN bauxite joint venture produces bauxite for sale on a take-or-pay basis to us and our joint venture partners at a price that is determined by a formula based on prevailing world prices of aluminum. Our Alunorte alumina subsidiary, which we began consolidating on June 30, 2002, purchases all of its bauxite requirements from MRN. Our annual purchase commitment for 2003 was approximately US\$ 53 million.
- Each Alunorte partner must purchase on a take-or-pay basis all alumina produced by Alunorte in proportion to its respective interest. Each partner pays the same price, which is determined by a formula linked to the prevailing world prices of aluminum. On June 30, 2002, we increased our stake in and acquired control of Alunorte and began consolidating it in our financial statements. As a result, since that date, payments we make to Alunorte under our take-or-pay commitment are eliminated in preparing our consolidated financial statements. In 2003, we sold 35.5% of our share of Alunorte’s production to Albras, 2.2% to Valesul, and the remainder to the market.
- Each Albras aluminum joint venture partner must purchase on a take-or-pay basis all aluminum produced by Albras in proportion to its ownership interest. In our case, our take-or-pay commitment is 51% (representing our proportional ownership interest) of the joint venture’s annual aluminum production. Although our annual purchase commitment to Albras can be substantial, approximately US\$ 302 million in 2003, prevailing world market prices for aluminum (subject to discount in accordance with the terms of our joint venture agreements) determine the aluminum prices at which we purchase from Albras. We resell the primary aluminum we receive from Albras through our trading subsidiary Itaco and earn a margin on the sale. We do not have a take-or-pay commitment to Valesul, which sells aluminum products directly to its customers.

*Manganese ore and ferroalloys.* Manganese ore and ferroalloy prices are strongly influenced by trends in the steel market. Manganese ore prices are generally negotiated on an annual basis using a benchmark established in

the Japanese market based on the reference price for the related ferroalloys. Ferroalloy prices are negotiated in open bids, quarterly contracts (particularly in Europe) or on a spot basis. They are influenced by a number of factors and are more volatile than prices for manganese ore. Among the principal factors are the price of manganese ore, the inventories held by producers or traders, occasional interruptions in production and anti-dumping tariffs in the principal markets (U.S., Europe, Japan and South Korea). Average manganese ore prices remained relatively stable, rising from US\$ 54 per ton in 2002 to US\$ 55 per ton in 2003. Average ferroalloy prices increased from US\$ 464 per ton in 2002 to US\$ 548 per ton in 2003, reflecting the general increase in the price of raw materials for steel. Ferroalloys are not a standardized product since we sell several kinds of alloys with various prices.

*Potash and kaolin.* Potash prices were higher in 2003 than in 2002, primarily reflecting a greater demand for fertilizers. Kaolin prices increased from US\$ 136 per ton in 2002 to US\$ 147 per ton in 2003 primarily reflecting high levels of demand.

### *Logistics*

We earn our logistics revenues primarily from fees charged to customers for the transportation of cargo via our railroads, ports and ships. Most of these revenues are earned by our railways, and nearly all of our logistics revenues are denominated in *reais*. Prices in the Brazilian railroad market are subject to maximum levels set by the Brazilian regulatory authorities but in practice have historically fallen well below the maximum levels permitted by law, primarily reflecting railroads' need to remain competitive with the trucking industry.

### *Currency Fluctuations*

Most of our sales are dollar-denominated, while most of our costs (other than debt expenses) are denominated in Brazilian currency. As a result, when the *real* is relatively strong against the dollar, this tends to have a negative effect on our reported financial results from operations, and vice versa. On the other hand, because most of our debt (and debt at the joint venture and affiliate level) is dollar-denominated, a decline in the value of the *real* causes us to record foreign-exchange losses.

Exchange rate effects had a significant positive effect on our net income in 2003. The average R\$/US\$ exchange rate was R\$ 2.9286 in 2002 and R\$ 3.0722 in 2003, representing a 4.9% nominal depreciation of the *real* relative to the U.S. dollar. This decline in the average value of the *real* relative to the U.S. dollar had a positive effect on our revenues, most of which are denominated in U.S. dollars, and helped reduce our costs, most of which are denominated in *reais*.

At the same time, although the average value of the *real* relative to the U.S. dollar was lower in 2003 than in 2002, the *real* appreciated by 22.3% relative to the U.S. dollar in 2003, from R\$ 3.5333 to US\$ 1.00 at December 31, 2002 to R\$ 2.8892 to US\$ 1.00 at December 31, 2003. As a result of this appreciation relative to the U.S. dollar, we recorded substantial foreign exchange gains on our U.S. dollar-denominated debt in 2003. In contrast, in 2002, the *real* depreciated against the dollar, causing us to record substantial foreign exchange losses.

### *Acquisitions*

We completed several significant acquisitions in 2002 and 2003.

- In June 2002, we increased our stake in and acquired control of Alunorte and began consolidating it in our financial statements. We previously had accounted for Alunorte under the equity method.
- In February 2003, we acquired for US\$ 17.6 million 100% of Elkem Rana AS, a Norwegian ferrochrome producer, which we subsequently renamed RDMN. We invested US\$ 16.7 million to convert RDMN's plant to allow production of ferro manganese alloys. The plant started operations with one furnace in June 2003 and brought its second furnace online in November 2003.
- In April 2003, we completed our acquisition from Acesita of shares of CST that are not subject to the CST controlling shareholders' agreement. We acquired 4.42% of the common shares and 5.64% of the preferred shares of CST, representing 5.17% of CST's total capital, for US\$ 59.7 million. Following this transaction, we now own 24.93% of CST's common shares and 29.96% of CST's preferred shares, totaling 28.02% of CST's capital.
- In September 2003, we completed the acquisition of Mitsui's interest in Caemi, and now own 100% of Caemi's common shares and 40% of its preferred shares, totaling 60.2% of Caemi's share capital. We

began consolidating Caemi as from that date. Caemi's subsidiary MBR contributed US\$ 233 million to our net revenues from iron ore for 2003 and US\$ 179 million to our total operating expenses for iron ore. Our acquisition of Caemi also gives us a controlling interest in Cadam, a kaolin producer. Cadam contributed US\$ 29 million to our net revenues from kaolin for 2003 and US\$ 32 million to our total operating expenses for kaolin.

Our acquisition of Caemi has increased our iron ore revenues, but had a negative impact on our operating margins. The lower margins at Caemi result primarily from the fact that unlike our Northern and Southern systems, which include their own railroads, MBR uses the services of a third-party railway operator—MRS Logística—to transport iron ore from its mines to its ports.

- In September 2003, we began consolidating FCA. FCA contributed US\$ 53 million to our net revenues from logistics services in 2003 and US\$ 86 million to our total operating expenses. FCA has lower operating margins than our other railways, principally due to higher concession costs and older infrastructure.

### ***Divestitures and Asset Sales***

We completed the following principal divestitures and asset sales in 2002 and 2003.

- In 2002, we sold the forestry assets of Florestas Rio Doce in connection with our exit from the pulp and paper business, and sold ships in connection with a change of strategy in our dry-bulk shipping business.
- In August 2003, we sold our last remaining gold mine, Fazenda Brasileiro, to Yamana Resources Inc., for US\$ 21 million.
- In November 2003, we sold our interest in Sepetiba Tecon S.A. to CSN and our interest in Companhia CFN to CSN and Taquari Participações S.A. These sales were made in connection with the purchase of FCA described above.
- In October 2003, we sold our interest in Fosfertil to Bunge Fertilizantes S.A. for US\$ 84 million.

### ***Effects of Certain Equity Method Affiliates and Investments Carried at Cost***

The financial condition and results of operations of our joint ventures, affiliated companies and investments can have a significant effect on our results of operations and financial condition. See Note 13 to our consolidated financial statements for information on these effects.

### ***Rising Unit Extraction Costs***

Several of our mines have operated for long periods and may experience rising extraction costs per unit as more expensive processes become necessary to extract remaining ore in these mines. Increases in extraction costs at each of these mines have not materially affected our results of operations as such increases were offset by productivity gains and by the favorable foreign exchange effects on these costs.

### ***Electricity Costs***

The average price per megawatt hour (MWh) paid by Albras for the years ended December 31, 2003, 2002 and 2001 was US\$ 15.07, US\$ 12.86 and US\$ 11.27. In May 2004, Albras successfully executed an auction to purchase electricity for a 20-year period. This contract will become effective beginning June 2004. The basic purchase price is R\$ 53.00 MWh, indexed to the general market price index, IGP-M, as calculated by *Fundação Getúlio Vargas*. In addition to the basic price, the electricity seller will have the right to participate in earnings from our sale of primary aluminum when the price exceeds US\$ 1,450.00 per ton, as registered at the London Metal Exchange (LME).

### ***Domestic Inflation Rates in Brazil***

As measured by the IGP-M Index, the Brazilian inflation rate was approximately 10.4% in 2001, 25.3% in 2002 and 8.7% in 2003. Most of our costs are incurred in Brazil in *reais*, while most of our revenues are earned



outside of Brazil in U.S. dollars. Inflation generally has a negative impact on our operating margins only in periods where it exceeds the rate of devaluation of the *real* against the U.S. dollar.

### ***Operating expenses***

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

- *Cost of goods sold.* Our cost of goods sold consists principally of costs for raw materials, bauxite and aluminum purchased under take-or-pay arrangements from MRN and Albras, iron ore and pellets purchased from third parties, logistics services purchased from third parties, labor costs, fuel costs, energy costs, and depreciation and exhaustion. Our cost of goods sold increased as a percentage of net operating revenues in 2003, driven principally by higher fuel costs and an increase in logistics costs due to our acquisition of Caemi.
- *Selling, general and administrative expenses.* Our selling, general and administrative expenses consist principally of the expenses of marketing our products and costs of our corporate headquarters.

### ***Brazilian Taxes***

We are subject to a number of Brazilian taxes. The principal taxes we pay are:

- *Value-Added Tax and Revenue Taxes.* Our gross revenues consist of total revenues from sales, net of discounts, returns and allowances, together with amounts we collect in respect of value-added tax. Net operating revenues represent revenues less value-added tax, which we collect on behalf of, and must remit to, state taxing authorities. We also collect other revenue taxes for social programs that are recorded under the line items value-added tax and other financial expenses in our financial statements. Export sales are currently exempt from both the value-added tax and the social taxes.
- *Income Tax and Social Contribution on Profits.* We pay income taxes, which include a tax called the social contribution on profits. The social contribution on profits tax rate is currently 9% and income tax rate is 25% representing a statutory composite rate of 34%.

Brazilian tax legislation changes, which are frequent, can have a significant impact on our results of operations. For example, in 2001, changes in Brazilian tax legislation were introduced, including a requirement that earnings from foreign subsidiaries be included in the determination of income taxes payable in Brazil. Based on the advice of legal counsel, we believe that the possibility that we will have to pay certain taxes potentially covered by this legislation is remote and accordingly have not recorded provisions for such taxes in our financial statements.

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

We believe that the following are our critical accounting policies. We consider an accounting policy to be critical if it is important to our financial condition and results of operations and requires significant judgments and estimates on the part of our management. For a summary of all of our significant accounting policies, see Note 3 to our consolidated financial statements.

### ***Translation Adjustments***

Our reporting currency is the U.S. dollar, but our functional currency for the majority of our operations is the *real*. In accordance with Statement of Financial Accounting Standards (SFAS) 52 – “Foreign Currency Translation,” we translate statement of income items to reflect the approximate results that would have occurred if each transaction had been translated using the exchange rate in effect on the date that the transaction was recognized. Because the separate translation of every transaction is impractical, an appropriate weighted-average exchange rate for the period is used. In most cases, we translate our statement of income accounts and those of subsidiaries that use the *real* as their functional currency into U.S. dollars at weighted-average monthly rates for the relevant reporting period. In the case of material exceptional items, we translate the amounts into U.S. dollars using the exchange rate on the date of the transaction. Additionally, during periods of high exchange rate volatility, we use estimated daily rates to translate our foreign exchange and monetary losses or gains, financial income and financial expenses. The determination of the appropriate weighted-average exchange rate requires significant management judgment and estimates. From January 1 to December 31, 2003, the *real* appreciated by approximately 22.3% against the U.S. dollar and generated a credit for the year recorded directly in the cumulative translation adjustment account of US\$ 736 million.

### ***Mineral Reserves and Life of Mines***

We regularly evaluate and update our estimates of proven and probable mineral reserves. Our proven and probable mineral reserves are determined using generally accepted estimation techniques and are audited by Golder Associates, an expert in geology, mining and iron ore reserves. Calculating our reserves requires us to make assumptions about future conditions that are highly uncertain, including future ore prices, foreign currency exchange rates, inflation rates, mining technology, availability of permits and production costs. Changes in some or all of these assumptions could have a significant impact on our recorded proven and probable reserves.

One of the ways we use our ore reserve estimates is to determine the mine closure dates used in recording the fair value liability for our asset retirement obligations and the periods over which we amortize our mining assets. Any change in our estimates of total expected future mine or asset lives could have a significant impact on the depreciation, depletion and amortization charges recorded in our consolidated financial statements under cost of goods sold. Changes in the estimated lives of our mines could also significantly impact our estimates of environmental and site reclamation costs, which are described in greater detail below.

### ***Environmental and Site Reclamation Costs***

Expenditures relating to ongoing compliance with environmental regulations are charged against earnings or capitalized as appropriate. These ongoing programs are designed to minimize the environmental impact of our activities.

Until December 31, 2002, we provided only for environmental liabilities relating to site restoration at mines already closed or which were expected to close in the next two years. The estimation of environmental costs was based on projections limited to the next two years and was not discounted to present value.

Effective January 1, 2003, we adopted SFAS 143 - "Accounting for Asset Retirement Obligations." SFAS 143 requires that we recognize a liability for the fair value of our estimated asset retirement obligations in the period in which they are incurred, if a reasonable estimate can be made. We consider the accounting estimates related to reclamation and closure costs to be critical accounting estimates because:

- we will not incur most of these costs for a number of years, requiring us to make estimates over a long period;
- reclamation and closure laws and regulations could change in the future or circumstances affecting our operations could change, either of which could result in significant changes to our current plans;
- calculating the fair value of our asset retirement obligations in accordance with SFAS 143 requires us to assign probabilities to projected cash flows, to make long-term assumptions about inflation rates, to determine our credit-adjusted risk-free interest rates and to determine market risk premiums that are appropriate for our operations; and
- given the significance of these factors in the determination of our estimated environmental and site reclamation costs, changes in any or all of these estimates could have a material impact on net income. In particular, given the long periods over which many of these charges are discounted to present value, changes in our assumptions about credit-adjusted risk-free interest rates could have a significant impact on the size of our provision. At January 1, 2003, we estimated the fair value of our aggregate total asset retirement obligations to be approximately US\$ 41 million, representing an increase of US\$ 26 million over the amount recorded under the prior accounting policy.

### ***Impairment of Long-Lived Assets and Goodwill***

We evaluate our investments and long-lived assets, which primarily include identifiable property, plant and equipment, for impairment whenever events or changes in circumstances indicate that the balance sheet carrying value of the asset may not be recoverable. If the asset is determined to be impaired, we record an impairment loss, and write down the asset, based upon the amount by which the carrying amount of the asset exceeds the higher of net realizable value and value in use. We generally determine value in use by discounting expected future cash flows using a risk-adjusted pre-tax discount rate that we believe is appropriate to the risks inherent in the asset. In order to estimate future cash flows, we must make various assumptions about matters that are highly uncertain, including future production and sales, product prices (which we estimate based on current and historical prices, price trends and related factors), recoverable reserves, operating costs, environmental and site reclamation costs and planned capital costs. Arriving at assumptions and estimates concerning these matters is a complex and often subjective process. These assumptions and estimates can be affected by a variety of matters, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, different assumptions and estimates could materially impact our reported financial results. More conservative assumptions of the anticipated future benefits from these businesses would result in greater impairment charges, which would decrease net income and result in lower asset values on our balance sheet. Conversely, less conservative assumptions would result in smaller impairment charges, higher net income and higher asset values.

In assessing potential impairment of our equity investments, we evaluate the carrying value of our listed equity investments relative to publicly available quoted market prices. If the quoted market price is below carrying value, and we consider the decline to be other than temporary, we write down our equity investments to quoted market value. For investments for which quoted market prices are not readily available, we evaluate the investments for impairment whenever the performance of the underlying entity indicates that impairment may exist. In such cases, the fair value of the investments is estimated principally based on discounted estimated cash flows using assumptions similar to those described above.

In relation to goodwill, each year on September 30, we use a two-step process to test for the recoverability of goodwill for each of our reporting units. Step one requires a comparison of the fair value of the reporting unit to the book value of its net assets. The fair value of the net assets is based on discounted cash flows using assumptions similar to those used in the process described above. Step two requires an estimate of the fair value of the individual assets and liabilities within the reporting unit. In the year ended December 31, 2003, after conducting impairment tests, we concluded that no write-down was necessary.

### ***Derivatives and Hedging Activity***

As of January 1, 2001, we adopted SFAS 133 – “Accounting for Derivative Financial Instruments and Hedging Activities,” as amended by SFAS 137, SFAS 138 and SFAS 149. Those standards require that we recognize all derivative financial instruments as either assets or liabilities on our balance sheet and measure such instruments at fair value. Changes in the fair value of derivatives are recorded in each period in current earnings or in other comprehensive income (outside net income), in the latter case depending on whether a transaction is designated as an effective hedge. In 2003, we did not designate any derivative financial instruments as hedges and the fair value adjustments to our derivatives were thus recorded in current net income. Had we designated our hedging instruments as permitted under SFAS 133, there would have been corresponding fair value adjustments, for certain of our hedging instruments, to the related hedged items in the case of fair value hedges or directly to stockholders’ equity in the case of cash flow hedges. During the year ended December 31, 2003, we recorded a charge of US\$ 43 million in relation to fair value adjustments on derivative instruments.

### ***Income Taxes***

In accordance with SFAS 109 - “Accounting for Income Taxes,” we recognize deferred tax effects of tax loss carryforwards and temporary differences in our consolidated financial statements. We record a valuation allowance when we believe that it is more likely than not that tax assets will not be fully recoverable in the future.

When we prepare our consolidated financial statements, we estimate our income taxes based on regulations in the various jurisdictions where we conduct business. This requires us to estimate our actual current tax exposure and to assess temporary differences that result from differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which we show on our consolidated balance sheet. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income.

To the extent we believe that recovery is not likely, we establish a valuation allowance. When we establish a valuation allowance or increase this allowance in an accounting period, we record a tax expense in our statement of income. When we reduce the valuation allowance, as occurred in 2003, we record a tax benefit in our statement of income.

Determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance to be recorded against our net deferred tax assets requires significant management judgment and estimates and assumptions about matters that are highly uncertain. For each income tax asset, we evaluate the likelihood of whether some portion or all of the asset will not be realized. The valuation allowance made in relation to accumulated income tax losses depends on our assessment of the probability of generation of future taxable profits within the legal entity in which the related deferred tax asset is recorded based on our production and sales plans, selling prices, operating costs, environmental costs, group restructuring plans for subsidiaries and site reclamation costs and planned capital costs.

### ***Contingencies***

We disclose material contingent liabilities unless the possibility of any loss arising is considered remote, and material contingent assets where the inflow of economic benefits is probable. We discuss our material contingencies in Note 18 to our financial statements.

We account for contingencies in accordance with SFAS 5 – “Accounting for Contingencies,” which requires that we record an estimated loss from a loss contingency when information available prior to issuance of our financial statements indicates that it is probable that a future event will confirm that an asset has been impaired or a liability has been incurred at the date of the financial statements, and the amount of the loss can be reasonably estimated. In particular, given the uncertain nature of Brazilian tax legislation, the assessment of potential tax liabilities requires significant management judgment. By their nature contingencies will only be resolved when one or more future events occur or fail to occur – and typically those events will occur a number of years in the future. Assessing such liabilities, particularly in the uncertain Brazilian legal environment, inherently involves the exercise of significant management judgment and estimates of the outcome of future events.

The provision for contingencies at December 31, 2003, totaling US\$ 635 million, consists of provisions of US\$ 177 million, US\$ 167 million, US\$ 285 million and US\$ 6 million for labor, civil, tax and other claims, respectively.

### ***Employee Post-retirement Benefits***

We sponsor a defined-benefit pension plan covering substantially all of our employees. We account for these benefits in accordance with SFAS No. 87 “Employers’ Accounting for Pensions.”

The determination of the amount of our obligations for pension benefits depends on certain actuarial assumptions. These assumptions are described in Note 17 to our consolidated financial statements and include, among others, the expected long-term rate of return on plan assets and increases in salaries. In accordance with U.S. GAAP, actual results that differ from our assumptions are accumulated and amortized over future periods and generally affect our recognized expenses and recorded obligations in such future periods.

## RESULTS OF OPERATIONS

### 2003 Compared to 2002

#### *Revenues*

Our gross operating revenues increased from US\$ 4,282 million in 2002 to US\$ 5,545 million in 2003. Our net operating revenues increased 29.8% from US\$ 4,123 million in 2002 to US\$ 5,350 million in 2003. The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated:

|                                       | Year ended December 31, |            |  | % Change |
|---------------------------------------|-------------------------|------------|--|----------|
|                                       | 2003                    | 2002       |  |          |
|                                       | (in millions of US\$)   |            |  |          |
| Iron ore and pellets                  |                         |            |  |          |
| Iron ore .....                        | US\$ 2,662              | US\$ 2,147 |  | 24.0%    |
| Pellets.....                          | 838                     | 673        |  | 24.5     |
| Subtotal .....                        | 3,500                   | 2,820      |  | 24.1     |
| Gold.....                             | 21                      | 103        |  | (79.6)   |
| Manganese ore and ferroalloys.....    | 349                     | 283        |  | 23.3     |
| Potash.....                           | 94                      | 91         |  | 3.3      |
| Kaolin.....                           | 96                      | 45         |  | 113.3    |
| Revenues from logistic services ..... | 604                     | 458        |  | 31.9     |
| Aluminum-related products.....        | 852                     | 462        |  | 84.4     |
| Other products and services.....      | 29                      | 20         |  | 45.0     |
| Gross revenues .....                  | 5,545                   | 4,282      |  | 29.5     |
| Value added tax.....                  | (195)                   | (159)      |  | 22.6     |
| Net operating revenues .....          | US\$ 5,350              | US\$ 4,123 |  | 29.8     |

#### *Iron ore and pellets*

The global seaborne iron ore market is currently experiencing the highest demand pressure it has faced in the past two decades. Reflecting these global market conditions, in 2003, customer demand for iron ore and pellets exceeded CVRD's production capacity, continuing the trend experienced in the second half of 2002. Our gross revenues for 2003 were also positively affected by price increases. We reached agreements with major steelmakers in May and June 2003 (retroactive to January 2003 for sales to Europe and April 2003 for sales to Asia), respectively, under which our reference prices for iron ore and pellets increased by an average of 9% and 9.8% respectively. Reflecting these positive volume and pricing trends, our gross revenues from iron ore and pellets increased 24.1%, from US\$ 2,820 million in 2002 to US\$ 3,500 million in 2003.

*Iron ore.* Gross revenues from iron ore increased by 24.0% from US\$ 2,147 million in 2002 to US\$ 2,662 million in 2003, driven primarily by a 13.3% increase in shipments of iron ore from 143.6 million tons in 2002 to 162.7 million tons in 2003. The volume growth includes by continued growth in shipments to China, which increased by 7.7 million tons compared to 2002. Shipments for 2003 also include four month's worth of shipments, accounting for 13.9 million tons of iron ore, by Caemi, which we began consolidating in September 2003. Actual average selling prices for iron ore were 9.4% higher in 2003 than in 2002, primarily reflecting price increases agreed with major steelmakers in May 2003.

*Pellets.* Gross revenues from pellets increased by 24.5%, from US\$ 673 million in 2002 to US\$ 838 million in 2003. The increase was primarily driven by a 14.6% increase in volume shipped, from 20.6 million tons in 2002 to 23.6 million tons in 2003. The average selling price for pellets increased by 8.4% in 2003 compared to the same period in 2002, reflecting the impact of the price increases agreed with major steelmakers in June 2003.

#### *Gold*

Gross revenues from sales of gold decreased 79.6%, from US\$ 103 million in 2002 to US\$ 21 million in 2003, reflecting the closure of our Igarapé Bahia mine in 2002 and lower yields from our Fazenda Brasileiro mine prior to its sale in August 2003. These developments led to an 81.4% decrease in volume sold. The volume declines were partially offset by a 14.6% increase in average selling prices in 2003, reflecting higher world gold prices due primarily to the devaluation of the U.S. dollar relative to other currencies and the war in Iraq.

On August 15, 2003, we sold Fazenda Brasileiro to Yamana Resources for US\$ 21 million. Since completion of the sale, our gold operations have been discontinued.

### *Manganese ore and ferroalloys*

Gross revenues from sales of manganese ore and ferroalloys increased by 23.3%, from US\$ 283 million in 2002 to US\$ 349 million in 2003. This increase resulted from:

- A 36.1% increase in sales of manganese ore, from US\$ 36 million in 2002 to US\$ 49 million in 2003. The sales increase was driven primarily by higher sales volume, which rose by 33.1%, mainly reflecting higher shipments of manganese ore sinter feed from our Carajás mine to China. Revenues were also positively affected by higher average selling prices, which increased by 2.3% compared to the same period in 2002.
- A 21.5% increase in gross revenues from ferroalloys, from US\$ 247 million in 2002 to US\$ 300 million in 2003. The increase was driven by strong demand for our principal ferroalloy products from the steel industry, which experienced an 18.0% increase in average selling prices and a 5.5% increase in volume. This increase was also impacted by the acquisition of RDMN. The plant started operations with one furnace in June 2003 and brought its second furnace online in November 2003.

### *Potash*

Gross revenues from sales of potash increased by 3.3%, from US\$ 91 million in 2002 to US\$ 94 million in 2003. The increase was driven by a 12.0% increase in average selling prices, reflecting strong demand. The higher average selling prices were partially offset by lower sales volume, which decreased 7.8% in 2003 due to inventory drawdowns. Shipments were higher in 2002 because we sold inventories on hand in addition to volumes produced in that period. Demand for potash in 2003 exceeded production capacity, and we expect this trend to continue in 2004.

### *Kaolin*

Gross revenues from sales of kaolin increased by 113.3%, from US\$ 45 million in 2002 to US\$ 96 million in 2003. Of the total US\$ 51 million increase in kaolin revenues, US\$ 31 million resulted from the consolidation of Cadam, the kaolin subsidiary of Caemi, beginning September 2003. Total volume shipped increased by 98.2%, reflecting the Cadam acquisition as well as increased marketing efforts by our PPSA subsidiary, and average selling prices rose by 7.7%.

### *Logistic services*

Gross revenues from logistic services increased by 31.9% from US\$ 458 million in 2002 to US\$ 604 million in 2003. The improved performance in logistics revenues reflects in large part our efforts to exploit opportunities provided by agricultural production, especially grains, and by increased shipments due to higher Brazilian steel production in 2003. Our gross revenues were also positively affected by the consolidation of FCA beginning September 2003. In particular, the increase in gross revenues from logistic services reflects:

- A 30.4% increase in revenues from railroad transportation, from US\$ 286 million in 2002 to US\$ 373 million in 2003. Of the US\$ 87 million increase, US\$ 61 million resulted from our consolidation of FCA beginning September 2003. The increase in revenues reflects an 11.2% increase in volume transported and 17.3% increase in average selling prices.
- A 34.6% increase in gross revenues from port operations, from US\$ 107 million in 2002 to US\$ 144 million in 2003. The increase in port operations gross revenues was driven by a 29.8% increase in average selling prices and a 1.8% increase in volume.
- A 33.8% increase in gross revenues from shipping, from US\$ 65 million in 2002 to US\$ 87 million in 2003.

### *Aluminum-related products*

Gross revenues from aluminum products increased 84.4%, from US\$ 462 million in 2002 to US\$ 852 million in 2003. This increase resulted from:

- A US\$ 336 million increase in gross revenues from sales of alumina, from US\$ 159 million in 2002 to US\$ 495 million in 2003. The increased alumina gross revenues primarily reflect the completion of a capacity expansion at Alunorte that went on-line in April 2003, increasing Alunorte's capacity from 1.6 million tons per year to 2.4 million tons per year. Average selling prices for alumina were 16.1% higher in 2003, reflecting the increase in worldwide demand for alumina. The inclusion of a full year

of Alunorte's results in 2003, compared with only 6 months in 2002, also positively affected gross revenues in 2003.

- A 14.3% increase in gross revenues from sales of aluminum, from US\$ 280 million in 2002 to US\$ 320 million in 2003. The increase in gross revenues from aluminum resulted from increased worldwide demand for aluminum, which led to a 7.1% increase in volume sold, and a 3.1% increase in average selling prices.
- A 60.9% increase in gross revenues from sales of bauxite, from US\$ 23 million in 2002 to US\$ 37 million in 2003. The increase in gross revenues from bauxite resulted from a 30.8% increase in volume sold and a 22.9% increase in average selling prices. The expansion of MRN's capacity from 11 million tons per year to 16 million tons per year completed in 2003 was the primary driver behind the volume increase. The price increase reflected a general rise in worldwide bauxite prices.

#### *Other products and services*

Gross revenues from other products and services increased 45.0%, from US\$ 20 million in 2002 to US\$ 29 million in 2003, primarily reflecting the sale by RDMN of excess energy to third parties in the Norwegian market during the conversion of its plant, which more than offset the decline in revenues due to the sale of our forestry assets, which was completed in 2002.

#### *Operating costs and expenses*

The following table summarizes our operating costs and expenses for the periods indicated.

|  | Year ended December 31, |            | % change |
|--|-------------------------|------------|----------|
|  | 2003                    | 2002       |          |
|  | (in millions of US\$)   |            |          |
| Cost of ores and metals .....                      | US\$ 2,066              | US\$ 1,579 | 30.8%    |
| Cost of logistic services.....                     | 370                     | 252        | 46.8     |
| Cost of aluminum-related products .....            | 678                     | 412        | 64.6     |
| Others.....  | 14                      | 20         | (30.0)   |
| Cost of goods sold .....                           | 3,128                   | 2,263      | 38.2     |
| Selling, general and administrative expenses ..... | 265                     | 224        | 18.3     |
| Research and development.....                      | 82                      | 50         | 64.0     |
| Employee profit sharing plan .....                 | 32                      | 38         | (15.8)   |
| Other costs and expense .....                      | 199                     | 119        | 67.2     |
| Total operating costs and expenses .....           | US\$ 3,706              | US\$ 2,694 | 37.6     |

#### *Cost of goods sold*

*General.* Total cost of goods sold increased 38.2%, from US\$ 2,263 million in 2002 to US\$ 3,128 million in 2003. CVRD's costs, as expressed in U.S. dollars, were positively affected by the depreciation of the *real* against the U.S. dollar because the majority of CVRD's costs and expenses are denominated in *reais*. The average R\$/US\$ exchange was R\$ 2.9286 during 2002 and R\$ 3.0722 during 2003, representing a nominal depreciation of 4.9%. At the same time, inflation as measured by the IGP-M, reached 8.7% in 2003, contributing to increases in our costs.

The major factors behind the increase in cost of goods sold during 2003 were:

- Material costs increased by US\$ 283 million in 2003 due to the significant increase in our total production, combined with a 43% increase in the price of fuel. Fuel and gas expenses accounted for 46.1% of our total materials cost in 2003, compared with 40.5% in 2002.
- Cost of outsourced services increased by US\$ 248 million in 2003. The principal component of this line was an increase in costs for outsourced logistics services resulting from our consolidation of Caemi beginning in September 2003. Unlike our Northern and Southern systems, where we use our own railroads, Caemi uses a third-party logistics provider—MRS Logística—to transport its iron ore to the port. Caemi accounted for US\$ 94 million in outsourced logistics costs in 2003. In 2003, our western mines in the Southern System also transported a portion of their output via MRS Logística, for a total freight cost of US\$ 39 million in 2003 compared with US\$ 28 million in 2002.
- Expenditures on purchases of products other than iron ore and pellets increased from US\$ 422 million

in 2002 to US\$ 604 million in 2003. The 40.3% increase in alumina production meant proportional growth in purchases of bauxite from MRN, accounting for US\$ 115 million in expenses. Similarly an increase in sales volume and prices of primary aluminum translated into an increase of about US\$ 39 million in our take-or-pay commitment to Albras.

- We incurred US\$ 46 million in demurrage expenses in 2003 due to congestion in our ports resulting from excess demand for iron ore and the resulting pressure on our logistics system.

*Cost of ores and metals.* Cost of ores and metals sold increased by 30.8% to US\$ 2,066 million in 2003 from US\$ 1,579 million in 2002, primarily due to increased production volumes required by the 13.5% increase in sales of iron ore and pellets. A portion of the increase in the cost of ores and metals sold also reflects the higher costs associated with purchases of iron ore from third parties to meet excess demand. The cost of ores and metals during 2003 also includes US\$ 147 million in costs generated by Caemi after its consolidation beginning in September 2003.

*Cost of logistic services.* Cost of logistic services increased by 46.8%, from US\$ 252 million in 2002 to US\$ 370 million in 2003. Of the US\$ 118 million increase, US\$ 71 million relates to costs generated by FCA after its consolidation beginning in September 2003. The remaining increase in costs resulted primarily from an increase in the number of ships chartered by Docenave.

*Cost of aluminum-related products.* Cost of aluminum-related products increased by 64.6%, from US\$ 412 million in 2002 to US\$ 678 million in 2003. The increase is primarily due to the increase in Alunorte's production capacity and the consolidation of Alunorte beginning in June 2002, which increased our consolidated costs by US\$ 205 million during 2003 compared with 2002.

*Cost of other products and services.* Cost of other products and services declined 30.0%, from US\$ 20 million in 2002 to US\$ 14 million in 2003, primarily due to the end of pulp purchases following our exit from the pulp and paper business.

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

Selling, general and administrative expenses increased 18.3%, from US\$ 224 million in 2002 to US\$ 265 million in 2003. We experienced higher *real*-denominated expenses in 2003 related to increased sales volumes. As expressed in U.S. dollars, these expenses were partially offset by the depreciation of the *real* against the U.S. dollar.

#### *Other costs and expenses*

Other costs and expenses increased from US\$ 119 million in 2002 to US\$ 199 million in 2003. The US\$ 80 million increase was primarily attributable to a US\$ 31 million increase in provisions for ICMS taxes, a US\$ 12 million write-off of assets at the São Luis pelletizing plant and US\$ 8 million of contingencies. In 2002, we recorded US\$ 49 million of income due to the sale of certain forestry assets of our subsidiary Florestas Rio Doce S.A.



### Operating Income by Segment

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

|                             | Year ended December 31,                             |                                |   |                                |
|-----------------------------|---|--------------------------------|---|--------------------------------|
|                             | 2003  |                                | 2002  |                                |
|                             | Operating income<br>(loss)<br>(in millions of US\$) | % of net operating<br>revenues | Operating income<br>(loss)<br>(in millions of US\$) | % of net operating<br>revenues |
| <b>Ferrous minerals</b>     |   |                                |   |                                |
| Iron ore .....              | US\$ 1,164  | 45%                            | US\$ 1,082  | 52%                            |
| Pellets .....               | 169   | 22                             | 101   | 15                             |
| Manganese ore .....         | 7   | n.a.                           | 5   | 16                             |
| Ferroalloys .....           | 34  | 28                             | 59  | 25                             |
| <b>Non-ferrous minerals</b> |   |                                |   |                                |
| Gold .....                  | 17  | 81                             | (33)  | n.a.                           |
| Potash .....                | 35  | 43                             | 32  | 41                             |
| Kaolin .....                | 4   | 4                              | 15  | 34                             |
| <b>Aluminum-related</b>     |   |                                |   |                                |
| Alumina .....               | 109   | 24                             | 32  | 21                             |
| Aluminum .....              | 25  | 8                              | 26  | 9                              |
| Bauxite .....               | 3   | 8                              | 1   | 4                              |
| <b>Logistics</b>            |   |                                |   |                                |
| Railroads .....             | 111   | 33                             | 128   | 49                             |
| Ports .....                 | 46  | 35                             | 22  | 23                             |
| Ships .....                 | (38)  | n.a.                           | (20)  | n.a.                           |
| <b>Others</b> .....         | (42)  | n.a.                           | (21)  | n.a.                           |
| <b>Total</b> .....          | US\$ 1,644  | 30.7                           | US\$ 1,429  | 34.7                           |

Our operating income as a percentage of net operating revenues declined from 34.7% in 2002 to 30.7% in 2003. The decline was driven primarily by:

- a decline in the operating profitability of our iron ore business due mainly to the consolidation of Caemi in September 2003. As described above, Caemi uses a third-party railroad to transport its iron ore from the mine to the port, resulting in higher costs for outsourced services; and
- a decline in the operating profitability of our railroad business due principally to the consolidation of FCA in September 2003. FCA is less profitable than our other railroads, primarily as a result of a more expensive concession contract.

Our margins in our kaolin business dropped sharply in 2003, driven both by a significant increase in operating costs at PPSA in 2003 and by the recording of impairment charges in 2003 relating to value-added taxes at both Cadam and PPSA.

### ***Non-operating income (Expenses)***

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

|  | <b>Year ended December 31,</b> |                   |
|--|--------------------------------|-------------------|
|  | <b>2003</b>                    | <b>2002</b>       |
|  | <b>(millions of US\$)</b>      |                   |
| Financial income .....                                 | US\$ 102                       | US\$ 127          |
| Financial expenses.....                                | (351)                          | (375)             |
| Foreign exchange and monetary gains (losses) net ..... | 242                            | (580)             |
| Gain on sale of investments .....                      | 17                             | —                 |
| Non-operating income (expenses) .....                  | <u>US\$ 10</u>                 | <u>US\$ (828)</u> |

Net non-operating income in 2003 amounted to US\$ 10 million, compared to net non-operating expenses of US\$ 828 million in 2002. This change primarily reflects:

- The effect of exchange rate movements on our net U.S.-dollar denominated liabilities (mainly short and long-term debt, less cash and cash equivalents), which generated a net foreign exchange gain of US\$ 222 million in 2003, compared to a loss of US\$ 515 million in 2002.
- A decrease in financial income from US\$ 127 million in 2002 to US\$ 102 million in 2003 due to lower cash balances and reductions in interest rates.
- A decrease in financial expenses from US\$ 375 million in 2002 to US\$ 351 million in 2003, principally due to the recognition, in 2002, of US\$ 60 million relative to losses on interest rate derivatives against only US\$ 3 million in 2003 and lower interest rates.
- A net gain of US\$ 17 million, reflecting a gain of US\$ 61 million on the sale of Fosfertil in October 2003, less a loss of US\$ 44 million on the sale of CFN in November 2003.

### ***Income Taxes***

In 2003, we recorded a net tax expense of US\$ 297 million, compared to a net tax benefit of US\$ 149 million in 2002. The difference resulted primarily from:

- An increase in tax expense at nominal statutory rates from US\$ 204 million in 2002 to US\$ 562 million in 2003 due to higher pre-tax income.
- Accrual of a US\$ 59 million expense in respect of exempt foreign income in 2003, compared to a tax benefit of US\$ 196 million in 2002. This change resulted primarily from the effects of the foreign exchange variations on the foreign assets that are exempt for tax purposes.
- Accrual of a US\$ 56 million expense related to the difference on tax basis of equity investees in 2003, compared to a tax benefit of US\$ 20 million in 2002. This resulted mainly from effect of the deductible amortization of goodwill for local tax purposes.
- An increase in tax incentives from US\$ 4 million in 2002 to US\$ 60 million in 2003 due to the iron ore and alumina incentives on the higher income tax basis in 2003.

The above factors were partially offset by the tax benefit of tax-deductible dividends that we pay in the form of interest on shareholders' equity, which amounted to US\$ 271 million in 2003, as compared to US\$ 99 million in 2002.

## Affiliates and Joint Ventures

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments resulted in a gain of US\$ 306 million in 2003, compared to a loss of US\$ 87 million in 2002. The following table summarizes the composition of our equity in results of affiliates and joint ventures and provisions for losses on equity investments for the periods indicated.

|  | Year ended December 31, |           |
|--|-------------------------|-----------|
|  | 2003                    | 2002      |
|  | (in millions of US\$)   |           |
| <b>Equity in results of affiliates and joint ventures and provision for losses on equity investments</b> |                         |           |
| Ferrous .....  | US\$ 133                | US\$ (66) |
| Logistics .....  | (52)                    | (88)      |
| Aluminum and Bauxite .....   | 147                     | 39        |
| Steel .....  | 81                      | 23        |
| Others .....   | (3)                     | 5         |
| Total equity in results of affiliates and joint ventures and provisions for losses .....                 | US\$ 306                | US\$ (87) |

*Iron ore and pellets.* Our equity in the results of iron ore and pellet affiliates and joint ventures and provisions for losses on equity investments amounted to a gain of US\$ 133 million in 2003, compared to a loss of US\$ 66 million in 2002. The higher gain in 2003 resulted primarily from improved results at Samarco and Kbrasco and improved results at Caemi prior to its consolidation in September 2003. The loss in 2002 also reflected a write-down in the value of our investment in Caemi to its fair value, which resulted in recognition of a loss of US\$ 86 million. The improvements at each of these affiliates were due to strong demand in the market for iron ore and pellets.

*Logistics.* In 2003, our equity in the results of logistics affiliates and joint ventures and provisions for losses on equity investments amounted to a net loss of US\$ 52 million, compared with a net loss of US\$ 88 million in 2002. The lower net loss in 2003 was driven primarily by improved results at MRS Logística, which partially offset the recording of higher provisions for losses related to FCA in 2003 than in 2002. We recorded higher provisions for losses related to FCA in 2003 due to asset impairment provisions.

*Aluminum-related.* Our equity in the results of our aluminum-related affiliates and joint ventures and provisions for losses on equity investments improved from a net gain of US\$ 39 million in 2002, compared to a net gain of US\$ 147 million in 2003. The improvement was driven by improved results at Albras, which more than offset a decline in the net gains we recorded on our investments in Valesul and MRN compared to 2002. The result in 2002 included a net loss of US\$ 23 million related to Alunorte prior to its consolidation beginning in June 2002.

In 2003, our aluminum-related affiliates recorded exchange gains due to the effects of the appreciation of the *real* at December 31, 2003, compared to December 31, 2002, on their foreign currency denominated debt. In addition to exchange rate effects, the operating results of Albras, Valesul and MRN in 2003 were influenced by the following factors:

- *Albras.* In 2003, Albras generated net income of US\$ 198 million on net sales of US\$ 592 million, compared to a net loss of US\$ 22 million in 2002 on net sales of US\$ 529 million. Our portion of net income of Albras was US\$ 104 million in 2003, compared with a reversal of a provision for losses of US\$ 10 million in 2002. The 11.9% increase in net sales at Albras resulted primarily from a 6.9% increase in sales volume due to increased worldwide demand for aluminum and process improvements that helped expand production capacity. This increase in sales volume was reinforced by a 4.4% increase in the average sales price of aluminum from US\$ 1,306.38 per ton in 2002 to US\$ 1,363.68 per ton in 2003. The impact of the appreciation of the *real* on Albras' foreign currency denominated debt was the main driver for the increase in earnings during the period.
- *Valesul.* In 2003, Valesul generated net income of US\$ 18 million on net sales of US\$ 157 million, compared to net income of US\$ 25 million in 2002 on net sales of US\$ 139 million. CVRD's portion of the net income of Valesul was US\$ 10 million in 2003, compared to US\$ 14 million in 2002. The decline in net income at Valesul was driven primarily by an increase in electricity costs, which more than offset the improvement in net sales.

- *MRN.* In 2003, MRN generated net income of US\$ 81 million on net sales of US\$ 254 million, compared to net income of US\$ 94 million in 2002 on net sales of US\$ 173 million. Our portion of the net income of MRN was US\$ 33 million in 2003 and US\$ 38 million in 2002. The revenue increase was driven by a 42.2% increase in sales volume, due principally to a capacity expansion completed in March 2003, and a 1.5% increase in average selling prices for bauxite. Net income was lower in 2003 due to higher financial expenses related to the financing of the capacity expansion, and the inclusion in MRN's 2002 results of a gain on the sale by MRN of its shares of Alunorte.

*Steel.* In 2003, we recorded a net gain of US\$ 81 million in respect of our equity in the results of steel affiliates and joint ventures, compared to a net gain of US\$ 23 million in 2002. The increase reflects improved performance at Usiminas and CST, which more than offset lower returns at CSI. The improved performance at CST primarily reflects a 23.4% increase in average selling prices, reflecting higher slab prices and the start up of sales of hot rolled coils (HRC), a higher value product. The improved performance at Usiminas primarily reflects the positive impact of exchange rate variations on Usiminas' U.S. dollar-denominated debt. CSI's net income declined in 2003 primarily due to a sharp increase in the cost of steel slabs, an important raw material for its operations, which reduced CSI's gross margins.

## 2002 Compared to 2001

### Revenues

The following table summarizes our gross revenues by product and our net operating revenues for the periods indicated:

|                                       | For the Year Ended December 31, |            | % change |
|---------------------------------------|---------------------------------|------------|----------|
|                                       | 2002                            | 2001       |          |
|                                       | (in millions of US\$)           |            |          |
| Iron ore and pellets                  |                                 |            |          |
| Iron ore .....                        | US\$ 2,147                      | US\$ 2,003 | 7.2%     |
| Pellets .....                         | 673                             | 597        | 12.7     |
| Subtotal .....                        | 2,820                           | 2,600      | 8.5      |
| Gold .....                            | 103                             | 139        | (25.9)   |
| Manganese ore and Ferroalloys .....   | 283                             | 259        | 9.3      |
| Potash .....                          | 91                              | 71         | 28.2     |
| Others .....                          | 45                              | 41         | 9.8      |
| Revenues from logistic services ..... | 458                             | 608        | (24.7)   |
| Aluminum-related products .....       | 462                             | 284        | 62.7     |
| Other products and services .....     | 20                              | 75         | (73.3)   |
| Gross Revenues .....                  | 4,282                           | 4,077      | 5.0      |
| Value Added Tax .....                 | (159)                           | (142)      | 12.0     |
| Net Operating Revenues .....          | US\$ 4,123                      | US\$ 3,935 | 4.8      |

Net operating revenues increased 4.8% to US\$ 4,123 million in 2002 from US\$ 3,935 million in 2001. This increase reflected higher gross revenues from our iron ore and pellets, aluminum-related products and other mining products, which were partially offset by decreases in gross revenues from logistics, gold and other products and services.

### *Iron ore and pellets*

Gross revenues from iron ore and pellets increased 8.5% to US\$ 2,820 million in 2002 from US\$ 2,600 million in 2001, reflecting a 10.4% increase in volume sold, partially offset by lower average selling prices.

Sales of iron ore attained record levels in 2002, amounting to 143.6 million tons in 2002, compared to 130.8 million tons in 2001, an increase of 9.8%. The expansion seen in sales of pellets was greater in percentage terms than sales growth for iron ore, reflecting the strong demand for steel and the use of pellets to increase the productivity of blast furnaces in making steel, particularly in China. Pellet sales rose from 17.9 million tons in 2001 to 20.6 million tons in 2002, a 14.8% increase. The increase in volume of iron ore and pellets in 2002 was driven primarily by strong demand from China, where increased demand for consumer durables, coupled with substantial investment in infrastructure and housing, resulted in sharply higher steel consumption, leading Chinese steelmakers to dramatically increase their purchases of iron ore and pellets. Demand in our other principal markets was stable.

Actual average selling prices for iron and pellets declined by 1.7%, reflecting an across-the-board reduction in reference prices following the 2002 price negotiations with steel manufacturers, and a decrease of 0.2% due to an increase in the proportion of pellets in the product mix, which accentuated the effect of reductions in pellet prices.

### *Gold*

Revenues from gold sales decreased 25.9% to US\$ 103 million in 2002 from US\$ 139 million in 2001, reflecting a 34.8% decrease in volume sold, which was partially offset by an 8.9% increase in average selling prices. The 34.8% decrease in volume from 508,472 troy ounces in 2001 to 331,479 troy ounces in 2002 was primarily due to the closure of our Igarapé Bahia gold mine in 2002 and reduced production at Fazenda Brasileiro, which is nearing the end of its productive life and has encountered lower gold yields. We have since agreed to sell Fazenda Brasileiro as described above. The 8.9% increase in average selling prices reflects the increase in world gold prices during 2002 as a result of increased political uncertainty, lower equity prices, weakness in the U.S. dollar and other factors which made gold an attractive alternative investment.

### *Manganese ore and ferroalloys*

Gross revenues from sales of manganese ore and ferroalloys increased by 9.3%, from US\$ 259 million in 2001 to US\$ 283 million in 2002, driven by higher sales of ferroalloys, which more than offset a decline in sales of manganese ore. Gross revenues from ferroalloys increased by US\$ 45 million, or 22%, driven by a 107% increase in volume resulting from strong demand for steel and from the end of the energy rationing in Brazil, which was partially offset by a decline in prices due to the shift in product mix. Gross revenues from sales of manganese ore declined by US\$ 21 million, or 37%, primarily as a result of a 27% decline in volume. The decline in manganese ore volumes resulted primarily from the delay of a major shipment in December 2002. Average selling prices for manganese ore fell by 15% in 2002, driven by lower overall demand for manganese ore from the steel industry at the time the annual prices were established.

### *Potash*

Gross revenues from sales of potash increased by 28.2%, from US\$ 71 million in 2001 to US\$ 91 million in 2002, primarily due to a 45% increase in volume, which more than offset a 16.7% decline in average selling prices. The significant increase in volume resulted from strong demand from the domestic fertilizer sector. The decline in average selling prices primarily reflects a reduction in prices to match our international competitors.

### *Others*

Gross revenues from sales of kaolin increased by 9.8%, from US\$ 41 million in 2001 to US\$ 45 million in 2002, mainly due to an increase in sales volume as well as higher average selling prices.

### *Logistic services*

Gross revenues from logistic services decreased by 24.7% to US\$ 458 million in 2002 from US\$ 608 million in 2001. This reduction is principally due to a decrease of US\$ 140 million in our world-wide logistics revenues due principally to our divestitures in the dry-bulk shipping business in the second half of 2001. It also reflects the impact of a decrease relating to revenues from services provided to Ferteco and Samitri in 2001 prior to our acquisition of these companies. In addition, gross logistics revenues were adversely affected by the devaluation of the *real*, which largely offset increases in volumes in the domestic market. General cargo shipped by our railroads increased by 14.0%, from 12,900 million net ton kilometers in 2001 to 14,700 million net ton kilometers in 2002. The increase in volume reflects strong increases in the transport of grains and soybeans, increases in steel shipments, and increases in the inter-modal transport of containers, which exploits the connections between highway transportation, rail, ports and coastal shipping. Our ports handled 26.3 million tons of general cargo in 2002, compared with 21.7 million tons in the previous year.

### *Aluminum-related products*

Revenues from aluminum products (bauxite, alumina, aluminum) increased 62.7% to US\$ 462 million in 2002 from US\$ 284 million in 2001. Of the total increase of US\$ 178 million, US\$ 124 million was due to the consolidation of Alunorte beginning June 30, 2002, when we acquired control of this previously affiliated company. The remaining US\$ 54 million resulted from:

- resales by us of increased aluminum purchased from our affiliate Albras, under take-or-pay arrangements, reflecting Albras' increase in production capacity beginning at the start of 2002 and the end of energy rationing; and
- US\$ 21 million in resales of alumina purchased from third parties to meet excess customer demand at Alunorte.

### *Other products and services*

Revenues from other products and services decreased 73.3% to US\$ 20 million in 2002 from US\$ 75 million in 2001, reflecting our exit from the pulp and paper business, which began in 2001 with the sale of Bahia Sul and Cenibra, and was completed in 2002 upon the sale of approximately 47,700 hectares of Eucalyptus forest owned by our subsidiary Florestas Rio Doce S.A.

### *Operating costs and expenses*

The following table summarizes our operating costs and expenses for the periods indicated.

|   | <b>For the Year Ended December 31,</b> |             |
|---|--|-------------|
|   | <b>2002</b>                            | <b>2001</b> |
|   | <b>(in millions of US\$)</b>           |             |
| Cost of ores and metals sold.....   | US\$ 1,579                             | US\$ 1,550  |
| Cost of logistic services.....  | 252                                    | 378         |
| Cost of aluminum-related products.....  | 412                                    | 269         |
| Others.....   | 20                                     | 75          |
| Cost of goods sold.....   | 2,263                                  | 2,272       |
| Selling, general and administrative expenses .....                                  | 224                                    | 241         |
| Research and development, employee profit sharing and other costs and expenses..... | 207                                    | 460         |
| Total operating costs and expenses .....  | US\$ 2,694                             | US\$ 2,973  |

### *Cost of goods sold*

Total cost of goods sold decreased 0.4% to US\$ 2,263 million in 2002 from US\$ 2,272 million in 2001. Our costs, as expressed in U.S. dollars, were favorably affected by the significant devaluation of the *real* against the U.S. dollar during the period (from R\$ 2.3204 to US\$ 1.00 at December 31, 2001 to R\$ 3.5333 to US\$ 1.00 at December 31, 2002, or a devaluation of 34.3%), because the majority of these costs and expenses are denominated in *reais*. The average rate of exchange was R\$ 2.9286 to US\$ 1.00 during 2002 and R\$ 2.2464 to US\$ 1.00 during 2001, representing a devaluation of 23.3%. The average rate of devaluation is lower than year-on-year devaluation because the exchange rate movements were concentrated in the second half of 2002.

Cost of ores and metal sold increased 1.8% to US\$ 1,579 million in 2002 from US\$ 1,550 million in 2001, primarily due to increased production volumes required by the 10.3% increase in sales of iron ore and pellets, offset by a near-equivalent decrease attributed to the effects of devaluation of the *real* on our domestic costs (approximately 52% of our total costs is denominated in *reais*) net of wage and price increases linked to local inflation. The amount in 2002 also includes US\$ 22 million in gold derivatives losses. A portion of the increase in cost of ores and metal sold also reflects higher costs associated with purchases of iron ore from third parties to meet excess demand.

Cost of logistic services decreased 33.3% to US\$ 252 million in 2002 from US\$ 378 million in 2001, whereas our corresponding revenue decreased only 24.7%. The decrease in costs at a rate greater than the decrease in revenue is due to the effects of the devaluation of the *real* on our domestic costs as described above.

Cost of aluminum-related products increased 53.2% to US\$ 412 million in 2002 from US\$ 269 million in 2001. The increase is partly due to the consolidation of Alunorte beginning on June 30, 2002, which contributed

US\$ 91 million to consolidated costs. The remaining US\$ 52 million cost increase relates to the take-or-pay arrangements and third party sales described above. The effects of exchange rate movements on the cost of aluminum-related products were insignificant, since the related costs are primarily determined by international market prices.

Cost of other products and services decreased 73.3% to US\$ 20 million in 2002 from US\$ 75 million in 2001, reflecting principally the decreases in volumes of pulp purchases as a result of our divestitures in this line of business.

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

Selling, general and administrative expenses decreased 7.1% to US\$ 224 million in 2002 from US\$ 241 million in 2001, due principally to the favorable effects of exchange rate movements, partly offset by the effects of increased selling expenses due to increased volumes. As a percentage of net operating revenues, selling, general and administrative expenses declined from 6.1% in 2001 to 5.4% in 2002.

#### *Research and development, employee profit sharing and other operating costs and expenses*

Research and development, employee profit sharing and other costs and expenses decreased 55.0% to US\$ 207 million in 2002 from US\$ 460 million in 2001. This decrease resulted primarily from a US\$ 260 million reduction in other operating costs and expenses, which more than offset a US\$ 7 million increase in research and development expenses.

The US\$ 260 million reduction in other operating costs and expenses primarily reflects three asset impairment provisions that occurred in 2001:

- plant and equipment impairment provisions of US\$ 67 million and US\$ 34 million due to impairment of certain shipping assets;
- amortization of goodwill of US\$ 34 million; and
- a write-off of value added taxes of US\$ 54 million on products purchased based on our agreement with a state government.

The reduction also reflects:

- a US\$ 26 million reduction in contingency provisions, to US\$ 53 million in 2002 from US\$ 79 million in 2001; and
- a gain in 2002 of US\$ 49 million on the sale of certain forestry assets of our subsidiary Florestas Rio Doce S.A.

Together, these two factors more than offset a US\$ 40 million provision in 2002 related to the acceleration of the expected closing date for our Fazenda Brasileiro gold mine, from 2009 to 2005.

#### ***Non-Operating Income (Expenses)***

|  | <b>For the Year Ended December 31,</b> |                 |
|--|--|-----------------|
|  | <b>2002</b>                            | <b>2001</b>     |
|  | <b>(in millions of US\$)</b>           |                 |
| Financial income .....                         | US\$ 127                               | US\$ 135        |
| Financial expenses.....                        | (375)                                  | (335)           |
| Foreign exchange and monetary losses, net..... | (580)                                  | (426)           |
| Gain on sale of investments .....              | —                                      | 784             |
| Non-operating income (expenses) .....          | <u>US\$ (828)</u>                      | <u>US\$ 158</u> |

Net non-operating expenses in 2002 were US\$ 828 million, compared to net non-operating income of US\$ 158 million in 2001. The principal reasons for this change were:

- the negative effect of exchange rate movements on our net U.S.-dollar denominated liabilities (mainly short and long-term debt less cash and cash equivalents). Our net foreign exchange losses amounted to US\$ 515 million in 2002, compared to US\$ 410 million in 2001; and
- gains of US\$ 784 million in 2001 upon divestitures of our interests in Bahia Sul, CSN and Cenibra.

In addition, our financial income decreased to US\$ 127 million in 2002 from US\$ 135 million in 2001, due primarily to lower international interest rates following the terrorist attacks in the United States in September 2001. Our financial expenses increased to US\$ 375 million in 2002 from US\$ 335 million in 2001 mainly due to our consolidation of Alunorte, which increased our financial expenses by US\$ 14 million in the second half of 2002, and to US\$ 60 million in losses we incurred on interest rate derivatives.

In 2002, we included the cost of contractual increases in supplementary benefits related to early retirement programs (US\$ 35 million in 2002) in financial expenses. Until 2001, this cost had been recorded under other operating expenses. In 2001, this cost was US\$ 33 million.

### ***Income Taxes***

In 2002, we recorded a tax benefit of US\$ 149 million, as compared to a tax benefit of US\$ 218 million in 2001. Our tax expense at statutory rates would have been US\$ 204 million in 2002 and US\$ 381 million in 2001. The difference is principally due to the tax benefit of tax-deductible dividends that we pay in the form of interest on shareholders' equity, which amounted to US\$ 99 million in 2002, as compared to US\$ 260 million in 2001, and US\$ 196 million due to tax-exempt foreign income in 2002, as compared to US\$ 226 million in 2001.

### ***Affiliates and Joint Ventures***

Our equity in the results of affiliates and joint ventures and provisions for losses on equity investments in aggregate totaled a loss of US\$ 87 million in 2002, compared to a loss of US\$ 53 million in 2001.

*Iron ore and pellets.* Our equity in the results of iron ore and pellet affiliates and joint ventures amounted to a loss of US\$ 55 million in 2002, compared to a loss of US\$ 7 million in 2001. The loss in 2002 included a charge of US\$ 86 million for a goodwill write-down relating to our investment in Caemi, which more than offset improved results at several of our other pellet joint ventures, including Samarco, where earnings were helped by volumes that increased by 29% and the elimination of goodwill amortization expenses in 2002. The writedown of our investment at Caemi reflects the decline in the listed market price of Caemi's preferred shares. We also recorded a provision for losses at Kobrasco in the amount of US\$ 14 million.

*Aluminum and bauxite.* Our equity in the results of aluminum and bauxite affiliates and joint ventures declined from US\$ 37 million in 2001 to US\$ 29 million in 2002, and we recorded a US\$ 10 million release of a provision related to our investment in Albras. Our portion of Alunorte's losses up until the time we acquired control in June 2002 was US\$ 23 million, compared to losses of US\$ 6 million for the whole of 2001. The increased losses at Alunorte primarily reflect the effects of the devaluation of the *real* on Alunorte's U.S.-dollar denominated debt.

Like Alunorte, in 2002, our affiliates in the aluminum sector recorded increased losses due to the effects of the depreciation of the *real* on their foreign currency denominated debt. In addition to exchange rate effects, the operating results of Albras and MRN in 2002 compared to 2001 were influenced by the following factors:

- *Albras.* In 2002, Albras generated net income of US\$ 20 million on net sales of US\$ 529 million. This compares to net income of US\$ 8 million in 2001 on net sales of US\$ 472 million. Our portion of net income of Albras was US\$ 10 million in 2002, compared with US\$ 4 million in 2001. The increase in sales at Albras primarily reflects a 22.3% increase in sales volume resulting from a capacity expansion completed at the beginning of 2002. This increase in volume was partially offset by an 8.6% decline in the average sales price of aluminum from US\$ 1,428 per ton in 2001 to US\$ 1,306 per ton in 2002.
- *MRN.* In 2002, MRN generated net income of US\$ 94 million on net sales of US\$ 173 million. This compares to net income of US\$ 81 million in 2001 on net sales of US\$ 211 million. Our portion of the net income of MRN was US\$ 38 million in 2002, compared with US\$ 32 million in 2001. MRN's revenues declined in 2002 due to an 8.1% reduction in the average sales price of bauxite to US\$ 18.95 per ton in 2002 from US\$ 20.63 per ton in 2001, and a 9.3% decline in sales volume to 9.9 million tons in 2002 from 10.9 million tons in 2001 due to lower demand in the first half of the year and interference from the expansion work in the second half of the year. However, since most of MRN's costs are incurred in *reais*, the reduction in costs as expressed in U.S. dollars more than offset the reduction in revenue, resulting in an increase in net income.



*Steel.* Our equity in the results of steel affiliates and joint ventures increased from US\$ 5 million in 2001 to US\$ 23 million in 2002, reflecting higher net income at CST and CSI, which more than offset a loss at Usiminas. The improved performance at CSI primarily reflects lower energy costs in 2002 in California. The improved performance in CST primarily reflects higher average sales prices partially offset by a decline in volumes of slabs sold. The loss at Usiminas primarily reflects the effects of the devaluation of the *real* on Usiminas' U.S. dollar-denominated debt.

*Paper and pulp.* Reflecting our sale of Cenibra and Bahia Sul in 2001, we recorded no equity in results of paper and pulp affiliates and joint ventures in 2002. These companies had contributed in aggregate US\$ 20 million to our equity results up to the date of sale.

*Other affiliates and joint ventures.* Our equity in the results of other affiliates and joint ventures amounted to a loss of US\$ 25 million in 2002, compared to a loss of US\$ 95 million in 2001. We recorded a provision for losses related to FCA of US\$ 42 million in 2002, after recording a loss of US\$ 95 million in 2001 (which had included a US\$ 74 million write-off of goodwill). In addition, our affiliate MRS Logística generated significant losses in 2002, of which our portion was US\$ 20 million; in addition to this amount, we recorded a provision for losses of US\$ 7 million related to MRS Logística. We and the other shareholders of these companies continue to explore various alternatives to restructure their businesses.

Upon adoption of SFAS 142 – “Goodwill and other intangible assets,” beginning January 1, 2002, we ceased amortizing goodwill. In 2001, we recorded goodwill amortization of US\$ 45 million relating to us and our consolidated subsidiaries and US\$ 47 million related to equity investees.

## Liquidity and Capital Resources

### *Overview*

Our principal uses of funds are for capital expenditures, dividend payments and repayment of debt. We have historically met these requirements by using cash generated from operating activities and through short-term and long-term debt. We believe these sources of funds, together with our cash and cash equivalents on hand, will continue to be adequate to meet our currently anticipated capital requirements.

In addition, from time to time, we review acquisition and investment opportunities and will, if a suitable opportunity arises, make selected acquisitions and investments to implement our business strategy. We generally make investments either directly or through subsidiaries, joint ventures or affiliated companies, and fund these investments through internally generated funds, the issuance of debt or a combination of these methods.

In 2004, our major cash needs include announced expected capital expenditures of US\$ 1,815 million, an announced minimum cash dividend of US\$ 550 million, and repayment or refinancing of US\$ 1,257 million in long-term debt that matures in 2004. We expect to meet our cash needs for 2004 primarily through a combination of operating cash flow, cash and cash equivalents on hand and new long-term debt.

### *Sources of Funds*

Our principal sources of liquidity are cash and cash equivalents on hand and cash flows from operating activities. At December 31, 2003, we had cash and cash equivalents of US\$ 585 million. Our operating activities generated positive net cash flows of US\$ 1,757 million in 2003.

In addition to the above sources of liquidity, we believe we are well-positioned to raise additional capital in the debt markets. We are among the most highly rated Brazilian corporate borrowers, which we believe enhances our ability to access the debt markets. Our most recent bond offering, in January 2004, was rated Ba2 by Moody's, three notches above the Brazilian sovereign debt rating.

CVRD uses committed credit line instruments with the aim of improving the efficiency of its cash management and alleviating debt refinancing risks during moments of instability in financial markets. To this end, US\$ 500 million in global committed credit line facilities have been established with the main commercial banks, US\$ 400 million of which can be used over a period of up to one year after the date of disbursement, with a repayment period of up to one year, and US\$ 100 million, which can be used for a period of up to 24 months, with a repayment period of 36 months after the contract is signed. These credit lines will be made available to CVRD although we do not intend to use them unless liquidity becomes excessively tight.

We have completed two major financings since the end of 2003.

- In December 2003, we filed a US\$ 2,000 million shelf registration statement with the U.S. Securities and Exchange Commission. We completed our first offering under the shelf registration statement in January 2004, issuing US\$ 500 million in 30-year guaranteed notes through Vale Overseas Limited, leaving us with remaining capacity under our shelf registration statement of US\$ 1,500 million. The January 2004 bond offering raised net proceeds of US\$ 490.4 million.
- In March 2004, we entered into a syndicated loan, which will be disbursed in installments by a bank syndicate, in the amount of US\$ 300 million. The term of the loan is seven years, with an average life of 4.25 years. The cost is the 6-month LIBOR plus 0.7% per annum. This transaction has 97.5% of political risk insurance and 95% of commercial risk insurance provided by the Japanese agency Nippon Export and Investment Insurance (NEXI). The facility is unsecured and there is no link to imports or export receivables. In April we drew US\$ 200 million under this facility and the remaining US\$ 100 million may be disbursed at any time prior to March 2005.

### *Uses of Funds*

#### *Capital expenditures*

In 2003, we used US\$ 1,991 million in investing activities, of which US\$ 1,543 million constituted capital expenditures. We have budgeted a total of US\$ 1,815 million for capital expenditures in 2004. This amount

includes expenditures on projects as well as expenditures for maintenance and exploration. See *Item 4. Information on the Company—Capital Expenditures*.

#### *Dividends*

We paid aggregate dividends of US\$ 675 million in 2003. For 2004, CVRD has announced a minimum dividend of US\$ 550 million.

#### ***Debt***

At December 31, 2003, our aggregate outstanding debt was US\$ 4,028 million, consisting of short-term debt of US\$ 1,257 million (including US\$ 1,009 million in current portion of long-term debt and US\$ 119 million in loans from related parties), and long-term debt of US\$ 2,771 million (including US\$ 4 million in loans from related parties). We describe the average interest rates and security interests granted on our long-term debt in Note 15 to our audited financial statements.

Our short-term debt consists primarily of U.S. dollar-denominated trade financing, mainly in the form of export prepayments and export sales advances with foreign and Brazilian financial institutions.

Our major categories of long-term indebtedness (including the current portion of long-term debt) are as follows:

- *U.S. dollar-denominated foreign loans and financing (US\$ 1,621 million at December 31, 2003).* These loans primarily include export financing lines, import finance from export credit agencies, loans from commercial banks and multilateral organizations. The loans generally bear floating rate interest at spreads over LIBOR. In April 2004, we drew US\$ 200 million under a syndicated loan facility.
- *U.S. dollar-denominated fixed rate notes (US\$ 900 million at December 31, 2003).* We have issued several series of fixed rate bonds both at the CVRD parent company level and through our finance subsidiary Vale Overseas Limited with a CVRD guarantee. The US\$ 900 million outstanding at December 31, 2003 includes US\$ 300 million of 9.0% guaranteed notes due 2013 issued by Vale Overseas in August 2003, US\$ 300 million of 8.625% enhanced guaranteed notes due 2007 issued by Vale Overseas in March 2002 and US\$ 300 million of 10.0% notes due April 2004 issued by CVRD in April 1996. In January 2004, Vale Overseas Limited issued US\$ 500 million in 8.25% Guaranteed Notes due 2034.
- *U.S. dollar-denominated export securitizations (US\$ 525 million outstanding at December 31, 2003).* We have a US\$ 550 million securitization program based on existing and future receivables generated by our subsidiary CVRD Overseas Ltd that relates to exports of iron ore and pellets to six of our customers in Europe, Asia and the United States. The securitization transaction is divided into three fixed rate tranches and one floating rate tranche.
- *Perpetual notes (US\$ 65 million at December 31, 2003).* We have issued perpetual notes that are exchangeable for 48,000 million preferred shares of MRN. Interest is payable on the notes in an amount equal to dividends paid on the underlying preferred shares relating to periods beginning with the 2000 fiscal year.
- *Local debt (US\$ 551 million at December 31, 2003).* We have a series of Brazilian loans, principally from BNDES, most of which are indexed to U.S. dollars, and the remainder of which are linked to baskets of currencies or floating rates in Brazil.

Some of our long-term debt instruments contain financial covenants. Our principal covenants require us to maintain certain ratios, such as debt to equity, net debt to EBITDA and interest coverage. We were in full compliance with our financial covenants as of December 31, 2003, and we believe that our existing covenants will not significantly restrict our ability to borrow additional funds as needed to meet our capital requirements. We believe we will be able to operate within the terms of our financial covenants for the foreseeable future. None of these covenants directly restricts our ability to pay dividends on equity securities at the parent company level.

For additional information about our debt, please see Notes 14 and 15 to our audited financial statements.

### Shareholder debentures

At the time of the first stage of our privatization in 1997, we issued debentures to our shareholders. The terms of the debentures were established to ensure that our pre-privatization shareholders, including the Brazilian government, would participate alongside us in potential future financial benefits that we derive from exploiting certain mineral resources that were not taken into account in determining the minimum purchase price of our shares in the privatization. In accordance with the debentures deed, holders have the right to receive semi-annual payments equal to an agreed percentage of our net revenues (revenues less value added tax, transport fee and insurance expenses related to the trading of the products) from certain identified mineral resources that we owned at the time of the privatization, to the extent that we exceed defined thresholds of sales volume relating to certain mineral resources, and from the sale of mineral rights that we owned at that time. Our obligation to make payments to the holders will cease when the relevant mineral resources are exhausted. We made no payments under the shareholder debentures in 2003. The first payment, of R\$ 0.012 per debenture, was made on March 31, 2004. See Note 18(f) to our consolidated financial statements for a description of the terms of the debentures.

### Contractual Obligations

The following table summarizes our long-term debt, short-term debt, operating lease obligations, purchase obligations and Alunorte take or pay obligations at December 31, 2003. This table excludes other obligations that we may have, including pension obligations (discussed in Note 17 to our consolidated financial statements).

|  | Payments Due by Period |                  |                       |            |               |  |
|--|------------------------|------------------|-----------------------|------------|---------------|--|
|  | Total                  | Less than 1 year | 2005-2006             | 2007-2008  | Thereafter    |  |
|  |                        |                  | (in millions of US\$) |            |               |  |
| Long-term debt (a)(b).....             | US\$ 3,776             | US\$ 1,009       | US\$ 1,044            | US\$ 752   | US\$ 971      |  |
| Short-term debt (c).....               |                        | 248              | —                     |            | —             |  |
| Operating lease obligations.....       | 841                    | 37               | 74                    | 74         | 656           |  |
| Purchase obligations.....              | 1,217                  | 619              | 262                   | 316        | 20            |  |
| Take-or-pay obligation (MRN)(d).....   | 855                    | 53               | 107                   | 107        | 588           |  |
| Take-or-pay obligation (Albras)(e) ... | 1,510(f)               | 302              | 604                   | 604        | (e)(f)        |  |
| Total.....                             | US\$ 8,447(f)          | US\$ 2,268       | US\$ 2,091            | US\$ 1,853 | US\$ 2,235(f) |  |

- (a) We are parties to a US\$ 100 million Export Prepayment Agreement that has a final maturity of July 2006 under which the lender has the right to demand payment of the entire amount outstanding in July 2004, subject to certain notice provisions
- (b) Includes US\$ 4 million of long-term debt to related parties.
- (c) Includes US\$ 119 million of short-term debt to related parties.
- (d) We are committed under a take-or-pay agreement to purchase bauxite from MRN at a price that is determined by a formula based on prevailing world prices of aluminum.
- (e) We are committed under a take-or-pay agreement to take annual delivery of approximately 207,060 metric tons per year of aluminum from Albras at market prices. This estimate is based on 51% of ALBRAS expected production and, at a market price of \$1,458.16 per metric ton, at December 31, 2003, represents an annual commitment of \$302. Because our take-or-pay agreement does not have a specified duration; we are unable to determine the amounts due after 2008.
- (f) Total does not include take-or-pay commitments to Albras for periods after 2008.

### Off-balance sheet arrangements

At December 31, 2003, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of US\$ 283 million, of which US\$ 10 million are secured by mineral rights and US\$ 273 million consist solely of unsecured guarantees. Our guarantees primarily consist of guarantees in connection with Albras' capacity expansion (US\$ 271 million). We do not charge commissions for extending these guarantees, except in the case of Albras and Samarco. See Note 18 to our consolidated financial statements for more information concerning these guarantees.

### Recent Accounting Pronouncements

In December 2003, the FASB issued FIN 46R – "Consolidation of Variable Interest Entities, (revised December 2003)." The primary objectives of FIN 46R are to provide guidance on the identification of entities for which control is achieved through means other than through voting rights (variable interest entities or VIEs) and how to determine when and which business enterprise should consolidate the VIE (the primary beneficiary). This new model for consolidation applies to an entity in which either (1) the equity investors (if any) do not have a controlling financial interest or (2) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. In addition, FIN 46R requires that both the primary beneficiary and all other enterprises with a significant variable interest in a VIE make additional

disclosures regarding the nature, purpose, size and activities of the VIE and the enterprise's maximum exposure to loss as a result of its involvement with the VIE.

The implementation date of FIN 46R is the first period ending after December 15, 2003 for Special Purpose Entities (SPEs) and as from January 1, 2004 for previously existing variable interest entities that are not SPEs. FIN 46R may be applied prospectively with a cumulative adjustment as of the date on which it is first applied or by restating previously issued financing statements for one or more years with a cumulative-effect adjustment as of the beginning of the first year restated. It is possible that we will consolidate or disclose information in relation to certain joint ventures and equity investments.

With respect to SPEs, the adoption of FIN 46R did not result in consolidation of any additional entities at December 31, 2003.

We are evaluating the impact of implementing FIN 46R as from January 1, 2004 with respect to consolidating variable interest entities that are not SPEs. It is reasonably possible that Albras, an aluminum producer with total assets of US\$ 649 at December 31, 2003 will be consolidated in 2004.

In May 2003, FASB issued SFAS No. 150 – “Accounting For Certain Financial Instruments with Characteristics of both Liabilities and Equity.” This statement establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances). The FASB decided to make this statement effective shortly after issuance for contracts created or modified after it is issued and for existing contracts at the beginning of the first interim period beginning after June 15, 2003. We do not expect SFAS 150 to have a material impact on our financial statements.

## Item 6. Directors, Senior Management and Employees

### BOARD OF DIRECTORS

#### Overview

Our *Conselho de Administração*, or board of directors, sets general guidelines and policies for our business and monitors the implementation of those guidelines and policies by our executive officers. The board of directors holds regularly scheduled meetings on a monthly basis and holds additional meetings when called by its chairman, vice-chairman or any two directors. Decisions of the board of directors require a quorum of a majority of the directors and are taken by majority vote.

Under the Brazilian Corporate Law, the board of directors must have at least three members. Each director and his or her respective alternate are elected at a general shareholders' meeting and are subject to removal at any time. Our bylaws state that the board of directors must consist of eleven members and eleven alternates. Our current employees have the right to appoint one director and an alternate. Under the Brazilian Corporate Law, members of the board of directors must be shareholders of CVRD. Members of the board of directors are elected for two-year terms and can be re-elected. Each alternate director serves on behalf of a specific board member. In the absence of the director for whom an alternate director is acting, that alternate director may attend and vote at meetings of the board of directors.

Nine of our current directors and nine of our current alternate directors were appointed to their positions directly by Valepar, our principal shareholder, pursuant to Valepar's shareholders' agreement and the provisions of the Brazilian Corporate Law. For a description of the procedures under which our directors are appointed, see *Item 10. Additional Information—Memorandum and Articles of Incorporation—Common Shares and Preferred Shares—General*. For a description of Valepar's shareholders' agreement, see *Item 7. Major Shareholders and Related Party Transactions—Major Shareholders—Principal Shareholder*.

#### Directors of CVRD

The table below lists the current members of the board of directors. All of our directors were elected or re-elected, as the case may be, in 2003, and their terms will expire in 2005.

|  | Year<br>First<br>Elected | Position      | Age |
|--|--------------------------|---------------|-----|
| Sérgio Ricardo Silva Rosa (1) .....            | 2003                     | Chairman      | 45  |
| Erik Persson (1) .....                         | 2001                     | Director      | 50  |
| Ricardo Carvalho Giambroni (1) .....           | 2001                     | Director      | 47  |
| Arlindo Magno de Oliveira (1) .....            | 2003                     | Director      | 52  |
| Jaques Wagner (4) .....                        | 2003                     | Director      | 53  |
| Renato da Cruz Gomes (1) .....                 | 2001                     | Director      | 51  |
| Mário da Silveira Teixeira Júnior (1) .....    | 2003                     | Vice-Chairman | 58  |
| Katsuto Momii (4) .....                        | 2003                     | Director      | 61  |
| Oscar Augusto de Camargo Filho(4) .....        | 2003                     | Director      | 66  |
| Claudio Bernardo Guimarães de Moraes (3) ..... | 2003                     | Director      | 42  |
| Francisco Valadares Póvoa (2) .....            | 1997                     | Director      | 55  |

(1) Appointed by Valepar and approved at the annual shareholders' meeting.

(2) Appointed by our employees and approved at the annual shareholders' meeting.

(3) Informally nominated by BNDESPAR and approved at the annual shareholders' meeting.

(4) Appointed by Valepar and approved at the general shareholder's meeting held on December 30, 2003.

The table below lists the alternate members of the board of directors.

|  | <b>Year<br/>First<br/>Elected</b> | <b>Position</b> | <b>Age</b> |
|--|-----------------------------------|-----------------|------------|
| Ivan Luiz Modesto Schara (1) .....         | 2003                              | Director        | 37         |
| Gerardo Xavier Santiago (1) .....          | 2003                              | Director        | 44         |
| Octávio Mauro Muniz Freire Alves (1) ..... | 2001                              | Director        | 43         |
| Jorge Luiz Pacheco (1) .....               | 2003                              | Director        | 49         |
| Antonio Carlos Dias Pastori (1).....       | 2003                              | Director        | 52         |
| Rômulo de Mello Dias (1) .....             | 2003                              | Director        | 42         |
| João Moisés de Oliveira (4) .....          | 2003                              | Director        | 59         |
| Isao Yasozumi (4) .....                    | 2003                              | Director        | 51         |
| Wanderlei Viçoso Fagundes (4) .....        | 2003                              | Director        | 57         |
| Ana Marta Horta Veloso (3) .....           | 2003                              | Director        | 35         |
| Otto de Souza Marques Júnior (2) .....     | 1997                              | Director        | 57         |

- (1) Appointed by Valepar and approved at the annual shareholders' meeting.  
(2) Appointed by our employees and approved at the annual shareholders' meeting.  
(3) Informally nominated by BNDESPAR and approved at the annual shareholders' meeting.  
(4) Appointed by Valepar and approved at the general shareholder's meeting held on December 30, 2003.

We have summarized below the business experience, areas of expertise, and principal outside business interests of our current directors:

*Sérgio Ricardo Silva Rosa.* Mr. Rosa joined our board of directors in April 2003 and was designated as Chairman in May 2003. Mr. Rosa is currently the chief executive officer of PREVI - Caixa de Previdência dos Funcionários do Banco do Brasil, or Previ, where he has been an executive officer since 2000. He is also a director of Valepar S.A., or Valepar, and an executive officer of Litel Participações S.A., or Litel. Mr. Rosa has been a director of Brasil Telecom Participações since December 2000, and of Sauípe S.A. since May 2001. Prior to joining Previ, Mr. Rosa served as President of the Confederação Nacional dos Bancários from June 1994 to May 2000. From January 1995 to December 1996, Mr. Rosa was an alderman of the municipality of São Paulo.

*Erik Persson.* Mr. Persson joined our board of directors in April 2001. Mr. Persson has been a planning officer at Previ since June 2000, and has worked at Previ since 1977. Mr. Persson has also served as a director of Valepar and Litel since April 2001, and has held a position as director of SEEB and FEEB, both in Rio Grande do Sul, since 1990.

*Ricardo Carvalho Giambroni.* Mr. Giambroni joined our board of directors in April 2001. From December 2001 to May 2003, he was member of our Finance Committee, and since May 2003 he has been a member of the Governance and Ethics Committee. In March 2003, he was nominated CEO of Litela Participações S.A., or Litela; in April 2001 he was nominated director and, in April 2003, executive officer of Valepar. Mr. Giambroni is a manager of the equity division at Previ. From June 1999 to December 2002, he has been an executive officer of Litel. From June 1997 to April 2001, he was a director of Paranapanema Group and, from April 2001 to December 2002, of Valepar.

*Arlindo Magno de Oliveira.* Mr. Magno joined our board of directors in April 2003. Since 1996, he has served in a variety of positions at Previ, including among others: member of the fiscal council, customer service manager, officer for deliberations and executive officer for planning. From April to October 2002, Mr. Magno was the executive officer in charge of finance and management at CEDAE – Companhia Estadual de Água e Esgoto. He has also acted as a director of several companies, including Companhia de Eletricidade do Estado da Bahia - COELBA, Companhia Energética do Rio Grande do Norte - COSERN, CPFL Energia S.A., CPFL Geração de Energia S.A. and ENERCAN – Campos Novos Energia S.A.

*Jaques Wagner.* Mr. Wagner joined our board of directors in December 2003. As of January 23, 2004, Mr. Wagner serves as Minister of the Council on Economic Development's Special Administrative Office. From 1999 to 2002, he was a member of the Parliament and served as the Minister of Labor from 2003 to 2004.

*Renato da Cruz Gomes.* Mr. Gomes joined our board of directors in April 2001. Mr. Gomes has been an executive officer of Bradespar S.A. since 2000. He is also a director of Bradesplan S.A. and Eletron S.A. From 1976 through 2000, Mr. Gomes held a variety of positions within BNDES and participated on the boards of directors of many companies, namely Elebra Eletrônica, Globo Cabo,

Aracruz, Iochpe, Bahia Sul and Latasa. He was also a member of the advisory board of Factor Sinergia – Fundo de Investimento de Valores Mobiliários em Ações and the investment committee of Bradesco Templeton Value and Liquidity Fund. Mr. Gomes has been an executive officer of Valepar since April 2001.

*Mário da Silveira Teixeira Júnior.* Mr. Teixeira has been a board member of CVRD since May 2003. On July 1, 1971, Mr. Teixeira joined Bradesco S.A. Corretora de Títulos e Valores Mobiliários, where he served as an executive officer from March 1983 to January 1984, when he was elected chief department officer at Banco Bradesco S.A. In 1992 he became chief managing officer, in 1998 vice-president and from March 1999 until July 2001 he was a member of the board of directors. From July 2001 to March 2002, Mr. Teixeira was CEO of Bradespar and, in March 2002, he returned to the board of directors of Banco Bradesco S.A. Mr. Teixeira has been vice-president of the board of directors of Companhia Paulista de Força e Luz – CPFL since August 2, 2001, a position that he also held from November 1997 to April 2000. Since August 30, 2001, he has also been vice-president of the board of directors of CPFL Energia S.A., a position that he also held in from March to April 2000. He was a member of the board of directors of Globo Cabo S.A. from 1998 to 2000; Latasa from 1992 to 2000; São Paulo Alpargatas S.A. from 1996 to 1999; and Serra da Mesa Energia S.A. and VBC Energia S.A. from 1997 to 2000.

*Katsuto Momii.* Mr. Momii joined our board of directors in September 2003. Mr. Momii was an executive director and senior executive managing officer until March 31, 2004, and is currently executive vice president of Mitsui & Co., Ltd. since April 1, 2004, having joined such company in April 1965.

*Oscar Augusto de Camargo Filho.* Mr. Camargo Filho joined our board of directors in September 2003. He is currently a partner of CWA Consultoria Empresarial. From 1999 to 2003, Mr. Camargo Filho served as Chairman of the board of directors of MRS Logística, and as a member of the board of directors of such company from 2002 to 2004. From 1973 to 2003, he held various positions with Caemi, including CEO and member of its board of directors.

*Claudio Bernardo Guimarães de Moraes.* Mr. Moraes joined our board of directors in April 2003. From 1984 until the present, he has served in a variety of positions at BNDES, being currently the superintendent of the area responsible for the analysis of operations. From April 2002 to April 2003, Mr. Moraes was a member of our fiscal council.

*Francisco Valadares Póvoa.* Mr. Póvoa joined our board of directors in May 1997. He is also a director of Valepar and CSI and a member of Valia's board of trustees. He is also the CEO of Investvale. Until March 2001, he was also a director of CSN and was previously an alternate director of CSN. Mr. Póvoa joined us as a mining engineer in 1972 and has held a variety of positions at CVRD.

## Directors of Vale Overseas

Vale Overseas' directors are as follows:

|                                 | Position | Age |
|---------------------------------|----------|-----|
| Fabio de Oliveira Barbosa.....  | Director | 43  |
| Fernando Ramos Nóbrega.....     | Director | 45  |
| Bernardeth Vieira de Souza..... | Director | 52  |

Mr. Barbosa also serves as Vale Overseas' principal executive officer and Mr. Nóbrega also serves as Vale Overseas' principal financial and accounting officer. Mr. Barbosa's experience is summarized below under —Executive Officers.

*Fernando Ramos Nóbrega.* Mr. Nóbrega serves as the General Manager – Finance of CVRD. He has been a board member at Itabasco, Nibrasco, Hispanobras and Kobrasco since 1998. During the year 2000, Mr. Nóbrega was the Financial and Administrative Director of FCA. Prior to that he held a variety of positions at CVRD and Rio Doce America, Inc., New York. Mr. Nóbrega obtained an engineering degree from Universidade Federal do Rio de Janeiro (UFRJ) and an Executive MBA in Management from New York University in 1997.

*Bernardeth Vieira de Souza.* Mrs. Vieira de Souza is the General Manager – Treasury for CVRD. Mrs. Vieira de Souza obtained an Accounting and Business Administration degree from Universidade do Estado do Rio de



Janeiro (UERJ) and a Master's in Management and Administration of Cash Flow from *Fundação Getúlio Vargas* (FGV-RJ).

The business address of the Vale Overseas directors is Avenida Graça Aranha, 26, 17th floor, 20030-900 Rio de Janeiro, RJ, Brazil.

## EXECUTIVE OFFICERS

### Overview

The executive officers are our legal representatives and are responsible for day-to-day operations and the implementation of the general policies and guidelines set forth by the board of directors. Our bylaws provide for a minimum of six and a maximum of nine executive officers. The board of directors appoints executive officers for two-year terms and may remove them at any time. According to the Brazilian Corporate Law, executive officers must be Brazilian residents. The executive officers hold regularly scheduled meetings on a bi-weekly basis and hold additional meetings when called by any executive officer.

### Executive Officers

The table below lists our current executive officers. The term of each of our executive officers expires in 2005.

|                                       | <b>Year of<br/>Appointment</b> | <b>Position</b>  | <b>Age</b> |
|---------------------------------------|--------------------------------|--|------------|
| Roger Agnelli .....                   | 2002                           | Chief Executive Officer                                    | 45         |
| Armando de Oliveira Santos Neto ..... | 2002                           | Executive Officer (Ferrous Minerals)                       | 54         |
| José Carlos Martins .....             | 2004                           | Executive Officer (Holdings and Business Development)      | 54         |
| Antonio Miguel Marques .....          | 2002                           | Executive Officer (Non-Ferrous Minerals)                   | 47         |
| Guilherme Rodolfo Laager .....        | 2002                           | Executive Officer (Logistics)                              | 47         |
| Fabio de Oliveira Barbosa .....       | 2002                           | Executive Officer (Finance and Investor Relations)         | 43         |
| Gabriel Stoliar .....                 | 2002                           | Executive Officer (Planning and Control)                   | 50         |
| Carla Grasso .....                    | 2002                           | Executive Officer (Human Resources and Corporate Services) | 42         |

We have summarized below the experience, areas of expertise, and principal outside business interests of our current executive officers.

*Roger Agnelli.* Mr. Agnelli was elected President and CEO of Companhia Vale do Rio Doce in July 2001. He developed his professional career at the Bradesco financial group from 1981 to 2001, where he reached the position of executive director of Banco Bradesco in 1998, remaining in that office until the year 2000; he also was President and CEO of Bradespar S.A., from March, 2000 to July, 2001. Due to his activities in the areas of investments, mergers and acquisitions, and asset management, he has also been a member of the board of directors of several major companies in Brazil, such as Companhia Paulista de Força e Luz, Companhia Siderúrgica Nacional, Latas de Alumínio S.A. – LATASA, VBC Energia S.A., Brasmotor S.A., Mahle Metal Leve S.A., Rio Grande Energia S.A. and Serra da Mesa Energia S.A. Mr. Agnelli has also been a director of UGB Participações S.A. and Vice-President of ANBID – Brazil's National Association of Investment Banks. Mr. Agnelli was the Chairman of the board of directors of Companhia Vale do Rio Doce, from May 2000 until July 2001 and is presently a member of the board of directors of Asea Brown Boveri. Mr. Agnelli is a full member of the Economic and Social Development Council (CDES), an advisory council to the President of Brazil. He is also President of the Chinese-Brazilian Business Council, and has recently accepted the invitation to become a member of the International Investments Council, to advise the President of the South African Republic, Dr. Thabo Mbeki. Mr. Agnelli has a degree in economics from the Fundação Armando Álvares Penteado, in São Paulo.

*Armando de Oliveira Santos Neto.* Mr. Santos was appointed as an executive officer of our ferrous minerals division in October 2001. Currently, Mr. Santos is also a director of Caemi, Samarco and RDM. Mr. Santos has held many different positions in CVRD since 1970 when he began as a trainee at the railway division. His experience in iron ore sales and marketing includes positions at Rio Doce America, Inc. in New York, Rio Doce Asia in Tokyo, and Rio Doce International S.A. in Brussels. From 1997 to 2000, Mr. Santos was the commercial executive officer for the iron ore division. Before becoming executive officer of the ferrous minerals division, he was president of Rio Doce America, Inc. Mr. Santos has a degree in civil engineering from the Universidade Federal do Espírito Santo (UFES).

*José Carlos Martins.* Mr. Martins was appointed as an executive officer of our holdings and business development areas in April 2004. He has over 30 years of experience in the metals industry. He was an officer and president of Aços Villares from 1986 to 1996 and chief managing officer of the steel area at CSN, from 1997 to 1999. In 1999, Mr. Martins became President of Latasa, one of the largest aluminum can producers in Latin America. Upon the purchase of Latasa by Rexam, a United Kingdom company, in 2003, he became president and CEO of Rexam's South American beverage can division, Rexam Beverage Can South America. Mr. Martins has a degree in Economics from Pontifícia Universidade Católica de São Paulo.

*Antonio Miguel Marques.* Mr. Marques was appointed as an executive officer of our non-ferrous minerals division in April 2004. Currently, Mr. Marques is director of Caemi, CST, MRN, Alunorte, Albras, Valesul and Usiminas, and CEO of Vale do Rio Doce Energia S.A. Prior to that, Mr. Marques has held various positions at Caraíba Metais S.A. Indústria e Comércio, DuPont do Brasil S.A., Billiton Metais S.A., Parapanema Group and Votarantim Group. Mr. Marques has a degree in mining engineering from the Universidade Federal de Ouro Preto. He received his post-graduate degree in Mineral Treatment at the Universidade Federal de Minas Gerais (UFMG) and obtained an MBA from COPPEAD, at the Universidade Federal do Rio de Janeiro (UFRJ).

*Guilherme Rodolfo Laager.* Mr. Laager was appointed as an executive officer of our logistics division in September 2001. Mr. Laager served as logistics, procurement and technology information director for Companhia de Bebidas das Américas – AMBEV from 1989 until August 2000. From 1982 until 1988, Mr. Laager worked for Andersen Consulting and, from 1979 until 1981, for IESA, International de Engenharia S.A. Mr. Laager has a degree in civil engineering from the Universidade Federal do Rio de Janeiro (UFRJ) and obtained an MBA in business administration from COPPEAD, also at UFRJ.

*Fabio de Oliveira Barbosa.* Mr. Barbosa was appointed as our chief financial officer in May 2002. He is also an officer of Docepar S.A. and Chairman of the board of directors of Caemi. Prior to that, Mr. Barbosa served as a member of our board of directors from April 2000 to March 2002. Previously, he served as chairman of the board of directors of BANESPA – Banco do Estado de São Paulo S.A., and also served as a board member of the following companies: Banco do Brasil S.A., Caixa Econômica Federal, CST and TELESP—Telecomunicações de São Paulo. Prior to joining us, Mr. Barbosa has served as secretary of the National Treasury at the Ministry of Finance since July 1999, after serving as assistant secretary in the previous four years. From 1992 to 1995, he served as adviser to the Executive Board of the World Bank, in Washington D.C. From 1990 to 1992, he was Deputy and Head of the Fiscal Policy Unit at the Ministry of Economy and Finance. From 1988 to 1990, he was economic advisor and head of the Economic Analysis Unit, both at the Ministry of Planning. Prior to that time, Mr. Barbosa held a variety of positions at the Ministry of Industry and Commerce, the Paraná State Development Institute, the Ministry of Labor and the Institute for Applied Economic Research.

*Gabriel Stoliar.* Since October 2001, Mr. Stoliar has served as the chief planning and control officer of CVRD. In September 1997, he was originally appointed as an executive officer of the Corporate Center. He is also director of Usiminas, Caemi, CST and PPSA. In 1994, he was appointed director of BNDESPAR. In 1991, Mr. Stoliar assumed the position of superintendent of the operational division responsible for the areas of mining, metallurgy, chemicals, petrochemicals, pulp and paper of BNDESPAR. He was appointed by BNDESPAR in 1988 as manager of operations in the area of capital, electronic and consumer goods. In 1982, he was promoted to manager of BNDES for the project area of FINSOCIAL. In 1978, he was hired by BNDES as an analyst in the area of pulp, paper and petrochemicals. Mr. Stoliar began his career as a business organization consultant at the Institute of Economic and Management Development of the Federation of Industries of Rio de Janeiro. Mr. Stoliar obtained an engineering degree from Universidade Federal do Rio de Janeiro (UFRJ), a post graduate degree in production engineering and an MBA from PDG/EXE-SDE in Rio de Janeiro.

*Carla Grasso.* Ms. Grasso was appointed as an executive officer of the human resources and corporate services area in October 2001. From December 1997 to October 2001, Ms. Grasso served as the personnel, management and IT officer to CVRD's Corporate Centre. Before joining CVRD, she acted as secretary of the Brazilian supplementary social security office, from January 1994 to November 1997; as advisor to the Ministry of Social Security, from December 1992 to December 1993; as deputy coordinator of fiscal policy at the Ministry of Finance, from October to December 1992; as finance advisor and coordinator of the Macroeconomics and Social areas of the Brazilian Presidency office, from March 1990 to October 1992; as advisor to the Ministry of Planning, from November 1988 to March 1990; and as advisor to the Presidency of Cebrae – Centro Brasileiro de Apoio à Pequena e Média Empresa, from

January to November 1988. In 1997, she was appointed as an executive officer of Fundação Vale do Rio Doce de Habitação e Desenvolvimento Social. Ms. Grasso has both a degree in Economics and a master in Economics from Universidade de Brasília (UnB).

## FISCAL COUNCIL

Under the Brazilian Corporate Law, we may appoint a *conselho fiscal*, a fiscal council, as a corporate body independent of our management and external auditors. The primary responsibility of the fiscal council is to review management's activities and the financial statements, and report its findings to the shareholders. We have established a permanent fiscal council, which may have from three to five members. On April 28, 2004, the shareholders appointed or re-appointed the current members and their respective alternates. Holders of preferred class A shares, including the golden share, may elect one member of the fiscal council and the respective alternate. Non-controlling holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the fiscal council and the respective alternate. The terms of the members of the fiscal council expire at the next annual shareholders' meeting following their election.

The table below lists the current members of the fiscal council.

|  | <b>First Year of<br/>Appointment</b> |
|--|--------------------------------------|
| Wilson Risolia Rodrigues (1) .....     | 2003                                 |
| Marcelo Amaral Moraes (2) .....        | 2004                                 |
| Oswaldo Mário Pêgo de Amorim (2) ..... | 2004                                 |
| Pedro Carlos de Mello (2) .....        | 2002                                 |

(1) Appointed by the preferred shareholders.

(2) Appointed by Valepar.

The table below lists the alternate members of the fiscal council.

|                                      | <b>First Year of<br/>Appointment</b> |
|--------------------------------------|--------------------------------------|
| Marcelo Bragagnolo Bonini (1) .....  | 2003                                 |
| Milton Lourenço Cabral (2) .....     | 2004                                 |
| Inácio Clemente da Silva (2) .....   | 2004                                 |
| Luís Henrique Rosati Rocha (2) ..... | 2004                                 |

(1) Appointed by the preferred shareholders.

(2) Appointed by Valepar.

## ADVISORY COMMITTEES

Our bylaws establish five technical and advisory committees to the board of directors, as follows: Executive Development, Strategic, Finance, Audit, and Governance and Ethics. Some committee members are not members of the board of directors.

- *The Executive Development Committee* is responsible for reporting on general human resources policies; recommending compensation levels for our executive officers; and establishing guidelines for evaluating the performance of our executive officers. The members of the executive development committee are: Francisco Valadares Póvoa, João Moisés de Oliveira, Arlindo Magno de Oliveira, Olga Loffredi and Oscar Augusto de Camargo Filho.
- *The Strategic Committee* is responsible for reviewing and making recommendations to the board of directors concerning the strategic guidelines and strategic plan submitted annually to the board by our executive officers; the company's annual and multi-annual investment budgets; investment and/or divestiture opportunities submitted by executive officers; and mergers and acquisitions. The members of the strategic committee are: Roger Agnelli, Gabriel Stoliar, Samir Zraick, José Roberto Mendonça de Barros and Cezar Manoel de Medeiros.
- *The Finance Committee* is responsible for reviewing and making recommendations to the board of directors concerning: the financial policies and the internal financial control systems of the company; compatibility between the level of distributions to shareholders and the parameters established in the annual budget; and consistency with the general policy on dividends and the capital structure of the company. The members of the finance committee are: Roger Agnelli, Fabio de Oliveira Barbosa, Rômulo de Mello Dias, Luiz Carlos Siqueira Aguiar and Wanderlei Viçoso Fagundes.
- *The Audit Committee* is responsible for recommending the appointment of the independent auditors and the employee responsible for internal auditing of the company to the board of directors; reporting on the policies and the company's annual auditing plan submitted by the employee responsible for internal auditing, and on its execution; tracking the results of the company's internal auditing, and identifying, prioritizing, and submitting actions to be accompanied by the executive officers; and analyzing the annual report, as well as the financial statements of the company and making recommendations to the board of directors. The members of the audit committee are: Marcos Fábio Coutinho, Antonio José de Figueiredo Ferreira, Ricardo Wiering de Barros and Paulo Roberto Ferreira de Medeiros. None of the members of our audit committee is a member of the board of directors. Accordingly, the entire board of directors is serving as the audit committee for purposes of our obligations under the Sarbanes-Oxley Act of 2002.
- *The Governance and Ethics Committee* is responsible for evaluating our corporate governance practices and the workings of the board of directors, and recommending improvements to the code of ethics and our system of management in order to avoid conflicts of interests between the company and its shareholders or administrators; issuing reports on policies relating to corporate responsibility, such as the environment, health, safety and social responsibility of the company submitted by the executive officers; and issuing reports on potential conflicts of interest between the company and its shareholders or administrators. The members of the governance and ethics committee are: Renato da Cruz Gomes, Ricardo Carvalho Giambroni and Ricardo Simonsen.

## **COMPENSATION OF DIRECTORS, EXECUTIVE OFFICERS, FISCAL COUNCIL MEMBERS AND ADVISORY COMMITTEES**

### **General**

Under our bylaws, our shareholders are responsible for establishing the aggregate compensation we pay to the members of our board of directors and our executive officers. Our shareholders determine this annual aggregate compensation at the general shareholders' meeting each year. In order to establish aggregate director and officer compensation, our shareholders usually take into account various factors which range from age, experience and skills of our directors and officers to the recent performance of our operations. Once aggregate compensation is established, the members of our board of directors are then responsible for distributing such aggregate compensation individually in compliance with our bylaws. The executive development committee of our board of directors makes recommendations to the board concerning the annual aggregate compensation.

For the year ended December 31, 2003, we paid approximately R\$ 20 million in aggregate (including fixed and variable remuneration and benefits in kind granted) to the members of our board of directors and to the executive officers for services in all capacities. For the year ended December 31, 2003, none of our board members and executive officers had any financial or other interests in transactions involving us which was not in the ordinary course of business.

The total number of common shares owned by our directors and executive officers as of April 30, 2004, was 10,650. The total number of preferred class A shares owned by our directors and executive officers as of April 30, 2004, was 15,208. None of our directors or executive officers beneficially owns one percent or more of any class of our shares.

### **Incentive Compensation**

In addition to fixed compensation, our executive officers are also eligible for bonuses and long-term incentive payments of preferred stock. Each executive officer may receive a bonus based on his or her individual performance and our performance during the fiscal year. The board of directors determines and the shareholders' meeting approves the total annual amount of compensation. Long-term incentive payments of preferred stock are then based on a portion of the bonus received. The long-term incentive vests over a three-year period and is paid only after the end of three years of service. After the stock is paid in respect of a long term incentive payment, it remains subject to a further holding period during which it may not be sold, but the executive officer will be entitled to dividends paid during the holding period.

### **Fiscal Council**

During 2003, the monthly amount we paid to the members of the fiscal council was R\$ 4,700 to each member, excluding benefits. We paid an aggregate of US\$ 66,000 to members of the fiscal council in 2003. In addition, the members of the fiscal council are reimbursed for travel expenses related to the performance of their functions.

### **Advisory Committees**

We paid an aggregate of R\$ 518,000 to members of CVRD's advisory committees in 2003. In addition, the members of CVRD's advisory committees are reimbursed for travel expenses related to the performance of their functions.

## EMPLOYEES

### General

The table below sets forth the number of our employees by category as of the dates indicated.

|   | At December 31, |        |        |
|---|-----------------|--------|--------|
|   | 2001            | 2002   | 2003   |
| Ferrous Minerals.....                         | 9,638           | 10,622 | 13,107 |
| Logistics.....                                | 8,528           | 7,613  | 8,820  |
| Non-Ferrous Minerals .....                    | 1,342           | 1,104  | 1,332  |
| Aluminum, Steel and Business Development..... | 697             | 733    | 810    |
| Administrative .....                          | 5,929           | 7,503  | 5,563  |
| Total .....                                   | 26,134          | 27,575 | 29,632 |

### Wages and Benefits

Wages and benefits for CVRD and its subsidiaries are generally established on a company-by-company basis. CVRD establishes its annual wage and benefits programs in July of each year following negotiations with its unions. In July 2003, CVRD reached an agreement with the unions for a 17% salary increase and maintenance of current benefits. The provisions of CVRD's collective bargaining agreements with its unions also apply to CVRD's non-union employees. CVRD has never suffered any material economic loss as a result of labor strikes or stoppages.

### Pension Plans

Employees of CVRD and most of its subsidiaries are eligible to participate in pension plans managed by Valia. Sponsored by CVRD, Valia is a closed, nonprofit, complementary social security plan with financial and administrative autonomy. Substantially all of the participants in plans sponsored by Valia are participants in a new plan Valia implemented in May 2000. The new plan is primarily a defined contribution plan with a defined benefit feature relating to service prior to May 2000. Valia also sponsors the "old plan" which is a defined benefit plan, with benefits based on years of service, salary and social security benefits. This plan covers retired participants and their beneficiaries, as well as a relatively small number of employees that declined to transfer from the old plan to the new plan when it was established in May 2000.

Employees of Caemi and its subsidiaries and employees of Alunorte participate in different pension plans. Caemi and MBR contribute to an open supplementary pension plan that is principally a defined-contribution, maintained by Bradesco Vida e Previdência S.A. This plan had its origin in the social security and pension plan maintained by Fundação Caemi de Previdência Social and sponsored by Caemi and MBR. The benefits granted by Caemi and MBR include pensions for old age, retirement, disability and death as well as annual bonuses. Benefits related to health care and group life insurance provided by Caemi and its subsidiaries to the employees come to an end when the beneficiary leaves the company, whether retired or not. On December 1, 2001, Cadam joined a defined contribution supplementary pension plan managed by Bradesco Vida e Previdência S.A. Alunorte's employees are covered by a pension plan managed by Bradesco Previdência Privada.

### Other Benefits

All CVRD employees and their dependants are entitled to supplementary medical assistance, which offers coverage for outpatient and in-hospital treatment, dental care and prescription drug costs. Beneficiaries have free choice of care providers, with part of expenses being reimbursed. Other important fringe benefits offered to employees are an annual amount for school materials, group life insurance, funeral assistance and reimbursement of nursery school costs for employees' children up to the age of three years.

**Equity Ownership**

CVRD's employees previously had an equity stake in our business through Investvale, an association of our current and retired employees. During 2002, Investvale contributed all of its shares in CVRD in exchange for an interest in Valepar S.A., our principal shareholder. On November 14, 2003, Investvale sold its stake in Valepar to BNDESPAR and now has no remaining direct or indirect stake in CVRD.

CVRD's bylaws authorize us to establish stock option plans, but to date we have not done so.

## Item 7. Major Shareholders and Related Party Transactions

### MAJOR SHAREHOLDERS

#### Overview

The table below sets forth certain information regarding beneficial ownership of our common and preferred class A shares as of April 30, 2004, by each person we know to be the beneficial owner of more than 5% of any class of our outstanding capital stock, and by all directors and executive officers as a group.

|   | Shares Owned | Percent of Class |
|---|--------------|------------------|
| <b>Common Shares</b>                              |              |                  |
| Valepar S.A.(1).....                              | 130,715,711  | 52.3%            |
| Litel Participações S.A.(2) .....                 | 130,715,711  | 52.3             |
| Previ (3).....                                    | 130,715,711  | 52.3             |
| BNDESPAR(4).....                                  | 17,667,640   | 7.2              |
| Directors and executive officers as a group ..... | 10,547       | *                |
| <b>Preferred Class A Shares(5)</b>                |              |                  |
| Directors and executive officers as a group ..... | 402          | *                |
| <b>Golden Share</b>                               |              |                  |
| Brazilian government .....                        | 1            | 100.0            |

- (1) See the table below for more information on Valepar's shareholders.
- (2) Represents shares owned by Valepar, which may be viewed as beneficially owned by Litel Participações S.A. under the rules of the Securities and Exchange Commission. In general, a person who has or shares voting power or investment power with respect to securities is treated as a beneficial owner of those securities. It does not necessarily imply that the named person has the economic or other benefits of ownership.
- (3) Represents shares owned by Valepar, which may be viewed as beneficially owned by Previ through its equity interest in Litel Participações S.A. and Litela Participações S.A.
- (4) Excludes common shares owned directly by Valepar, in which BNDESPAR has an ownership interest.
- (5) The Brazilian government (National Treasury) owns 5,075,341 preferred class A shares representing 3.7% of the outstanding preferred class A shares, and BNDESPAR owns 1,401,978 preferred class A shares representing 1% of the outstanding preferred class A shares.
- (\*) Represents less than 1% of the outstanding shares of the class.

The tables below set forth information as of April 30, 2004 regarding share ownership of the common shares of Valepar S.A. and Litel Participações S.A.

|  | Common Shares Owned | Percent of Common Shares Owned |
|--|---------------------|--------------------------------|
| <b>Valepar S.A.</b>                    |                     |                                |
| Litel Participações S.A.(1) .....      | 52,663,766          | 49.0%                          |
| Eletron S.A. ....                      | 31,453              | 0.03                           |
| Babié Participações S.A.(2) .....      | 21,843,547          | 20.3                           |
| Bradespar S.A. (3).....                | 666,642             | 0.6                            |
| Bradesplan Participações S.A.(2) ..... | 289,308             | 0.3                            |
| Mitsui & Co. Ltda.(2).....             | 19,607,357          | 18.2                           |
| BNDESPAR .....                         | 12,375,000          | 11.5                           |
| Total.....                             | 107,477,073         | 100.00                         |

- (1) Litel owns 16,594,824 preferred Class B shares of Valepar, which represents 71.41% of the preferred shares. Litela, an affiliate of Litel owns 6,643,814 preferred Class B shares of Valepar, which represents 28.59% of the preferred shares.
- (2) Babié and Bradesplan are affiliated companies of Bradespar S.A.
- (3) Bradespar is controlled by a control group consisting of Cidade de Deus – Cia Comercial Participações, Fundação Bradesco, NCF Participações S.A. and Nova Cidade de Deus Participações S.A.



**Litel Participações S.A.**

|   |                    |                |
|---|--------------------|----------------|
| BB Carteira Ativa 0(1) .....                      | 202,753,508        | 73.59%         |
| BB Carteira Ativa II(1) .....                     | 53,388,022         | 19.38%         |
| BB Renda Fixa IV(1) .....                         | 19,371,990         | 7.03%          |
| Others .....                                      | 822                |                |
| Directors and Executive Officers as a group ..... | 7                  |                |
| Total.....  | <u>275,514,349</u> | <u>100.00%</u> |

- (1) Each of BB Carteira Ativa 0, BB Carteira Ativa II and BB Renda Fixa IV is a Brazilian investment fund. BB Carteira Ativa 0 is 100% owned by Previ. BB Carteira Ativa II is 59.36% owned by Funcef, 35.8% owned by Petros and 4.84% owned by Fundação Cesp. BB Renda Fixa IV is 100% owned by Previ. Each of Previ, Petros, Funcef and Fundação Cesp is a Brazilian pension fund.

In September 2003, Bradespar sold 15% of the outstanding common shares of Valepar to Mitsui. In November 2003, Investvale sold shares amounting to 18.2% of the outstanding common shares of Valepar to BNDESPAR.

In 1997, we were privatized by the Brazilian government, which transferred voting control to Valepar. As part of the privatization process, the National Treasury and BNDES, the government-owned development bank, together retained 32% of our common shares and 4% of our preferred class A shares. On March 20, 2002, as the final step of the privatization process, the Brazilian government and BNDES each sold 39,393,919 shares, in the form of common shares or American depositary shares, which together represented 32.1% of our outstanding common shares. Currently, BNDESPAR, a wholly-owned subsidiary of BNDES, owns common shares representing approximately 7.2% of our outstanding common shares and 1.0% of our outstanding preferred class A shares. The Brazilian government now owns approximately 3.7% of our outstanding preferred class A shares (not counting shares held by BNDESPAR), and a golden share in us, which gives it veto powers over certain actions that we could propose to take. For a detailed description of the veto powers granted to the Brazilian government by virtue of its ownership of the golden share, see *Item 10. Additional Information—Common and Preferred Shares—General*.

**Principal Shareholder**

Our principal shareholder is Valepar. The shareholders of Valepar have entered into a shareholders' agreement, ending in 2017. This agreement:

- grants rights of first refusal on any transfer of Valepar shares and preemptive rights on any new issue of Valepar shares;
- prohibits the direct acquisition of CVRD shares by Valepar's shareholders unless authorized by the other shareholders;
- prohibits encumbrances on Valepar shares (other than in connection with financing our acquisition);
- requires each party generally to retain control of its special purpose company holding its interest in shares of Valepar, unless the rights of first refusal mentioned above are observed;
- allocates Valepar's and our board seats;
- provides for the maintenance by CVRD of a dividend policy requiring CVRD to distribute a specific percentage of CVRD's net profit for each fiscal year;
- provides for the maintenance by CVRD of a capital structure that does not exceed specified debt to equity thresholds;
- requires the Valepar shareholders to vote their indirectly held CVRD shares and to cause their representatives on CVRD's board of directors to vote only in accordance with decisions made at Valepar pre-meetings held prior to meetings of CVRD's board of directors or shareholders; and
- establishes super-majority voting requirements for certain significant actions relating to Valepar or to us.

Pursuant to the shareholders' agreement, holders of at least 75% of the Valepar shares must agree to any of the following matters:

- any amendment of CVRD's bylaws;
- any increase of CVRD's capital stock by share subscription, creation of a new class of shares, change in the characteristics of the existing shares or any capital reduction of CVRD;
- any issuance of any debentures of CVRD, whether convertible into shares of CVRD, participation certificates upon compensation, call options or any other security of CVRD;
- any determination of issuance price for any new shares of capital stock or other security of CVRD;
- any amalgamation, spin-off or merger to which CVRD is a party, as well as any change to CVRD's corporate form;
- any dissolution, receivership, bankruptcy or any other voluntary act for financial reorganization or any suspension thereof;
- the election and replacement of CVRD's board of directors, including the chairman of the board, and any officer of CVRD;
- the disposal or acquisition of equity participation in any other company by CVRD, as well as the acquisition of any shares of capital stock of CVRD by Valepar, or of Valepar by CVRD, to be held in the acquirer's treasury;
- the participation by CVRD in a group of companies or in a consortium of any kind;
- the execution of distribution, investment, sales exportation, technology transfer, trademark license, patent exploration, license to use and lease agreements, to which CVRD will be a party;
- the approval and amendment of CVRD's business plan;
- the determination of the compensation of the directors of CVRD, as well as the duties of the board;
- any profit sharing among the administrators of CVRD;
- the determination of the compensation of CVRD's officers;
- any change in the corporate purpose of CVRD;
- the distribution or non-distribution of any dividends on any shares of capital stock of CVRD other than as provided in CVRD's bylaws and any payment of interest on the net equity of CVRD;
- the appointment and replacement of CVRD's independent auditor;
- the creation of any "in rem" guarantee, granting of guarantees including rendering of sureties by CVRD with respect to obligations of any third party, including any related companies or subsidiaries;
- the passing of any resolution on any matter which, pursuant to applicable law, entitle a shareholder to cease being a shareholder upon return of its shares to CVRD;
- the appointment and replacement by the board of directors of any representative of CVRD in subsidiaries, companies related to CVRD or other companies in which CVRD is entitled to appoint administrators; and
- any change in the debt to equity threshold, as defined in the shareholders' agreement.

In addition, the shareholders' agreement provides that any issuance of participation certificates by CVRD or any disposition of CVRD's shares held by Valepar requires the unanimous consent of all of Valepar's shareholders.

### **American Depositary Shares**

As of April 30, 2004, American depositary shares represented 26.8% of our outstanding common shares and 47.4% of our outstanding preferred class A shares.

### **RELATED PARTY TRANSACTIONS**

At December 31, 2003, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of US\$ 283 million, of which US\$ 242 million is denominated in U.S. dollars and the remaining US\$ 41 million in Brazilian currency. See Note 18(a) to our consolidated financial statements.

We have commercial relationships in the ordinary course of our business with a number of companies that are affiliated with Previ and Bradespar S.A., which may be deemed to beneficially own the shares owned by Valepar, our principal shareholder. The most significant of these is our relationship with CST, in which both we and Previ hold an interest. In 2003, CST accounted for approximately 2.5% of our total sales, 3.3% of our iron ore and pellet sales and 5.2% of our manganese ore and ferroalloys sales. All of our sales to CST are made on arms' length terms.

We also have commercial relationships in the ordinary course of our business with Mitsui.

For information regarding investments in affiliated companies and joint ventures and for information regarding transactions with major related parties, see Notes 13 and 20 to our consolidated financial statements.

### **Item 8. Financial Information**

#### **LEGAL PROCEEDINGS**

We and our subsidiaries are defendants in numerous legal actions in the normal course of business, including civil, administrative, tax, social security and labor proceedings. We have set aside or deposited in court amounts to cover estimated contingency losses due to adverse legal judgments. Based on the advice of legal counsel, we believe that the provision made against contingent losses is sufficient to cover probable losses in connection with such actions.

We are currently involved in 14 proceedings before CADE, which is the primary Brazilian antitrust regulator. Most of these proceedings involve post-transaction review of acquisition or joint venture transactions, which is required for nearly all of our acquisitions and joint ventures. The remaining are administrative proceedings alleging that we have engaged in illegal anticompetitive conduct in connection with our logistics and aluminum-related businesses. We intend to defend these claims vigorously. If CADE were to determine that undue concentration exists in any of our industries, it could impose measures to safeguard competition, which could include requirements that we divest operations or respect price restrictions. If CADE were to find that we have engaged in anticompetitive conduct, it could order us to cease the conduct and / or to pay fines. The Caemi acquisition was approved by the European Commission subject to certain conditions, including the sale of the Quebec Cartier Mining Company (QCM). We are still in the process of disposing of the stake in QCM.

Numerous lawsuits challenging the legality of our privatization are pending, including a number of class action lawsuits. The lower courts issued favorable decisions in these lawsuits that are being appealed by the plaintiff. We do not believe that, individually or in the aggregate, these actions will adversely affect the course of the privatization process or otherwise have a material adverse effect on us.

We are a defendant in a public civil action seeking to annul the concession agreement through which we and certain other defendants operate the Praia Mole port terminal. The case, which was first filed in 1998, is still in its pre-trial stages and we believe that the claim is without merit.

We are currently a defendant in two separate actions brought by the municipality of Itabira, in the state of Minas Gerais. It alleges that our Itabira iron ore mining operations have caused environmental and social damages. In one of the actions, filed in August 1996, the municipality of Itabira alleges that our Itabira iron ore mining operations have caused environmental and social damages and claims damages with respect to the degradation of the site of one of our mines, as well as the immediate restoration of the affected ecological complex and the performance of

compensatory environmental programs in the region. The damages sought, as adjusted from the date of the claim, amount to approximately US\$ 775 million. We believe that this amount is significantly higher than the amount we would actually be responsible for in the event that we were found liable. We have requested the annulment of this action as it represents no actual controversy. In fact, on June 5, 2000, the local environmental authorities granted an operating license to our Itabira iron ore mining operations. This license sets forth conditions regarding the environmental restoration of the degraded site and the performance of compensatory environmental programs. We intend to continue to comply with these conditions. In the other action, the municipality of Itabira is claiming the right to be reimbursed for expenses it has incurred in connection with public services rendered as a consequence of our mining activities. The damages sought, as adjusted from the date of the claim, amount to approximately US\$ 765 million. We believe that this action is without merit. We are vigorously defending both pending actions.

We are engaged in litigation with respect to certain aspects of recent tax regulation that requires earnings from foreign subsidiaries to be included in the determination of income taxes payable in Brazil. We obtained an injunction in February 2003, suspending our obligation to pay amounts in dispute. Based on the advice of legal counsel, we believe that the likelihood that we will have to pay certain such taxes is remote and, accordingly, we have not recorded provisions for these taxes in our financial statements.

In accordance with ANEEL Resolution No. 591, dated as of November 2003, Light began charging several additional fees to Valesul that are included in the tariff for the use of the distribution system. Valesul paid the transmission fees to Light in connection with the months of November and December 2003. The payment for the transmission of energy related to January 2004 was made through a judicial deposit. In February 2004, Valesul obtained an injunction order relieving it from paying such fees and making the judicial deposits. This injunction was lifted in May 2004. Final resolution of the matter is still pending.

#### **DIVIDENDS AND INTEREST ON SHAREHOLDERS' EQUITY**

Under the Brazilian Corporate Law, shareholders are generally entitled to receive an annual mandatory dividend set forth in the company's bylaws, which may not be lower than 25% of adjusted net income for the relevant year, calculated in accordance with the Brazilian Corporate Law. For a discussion on dividend distribution provisions in our bylaws, see *Item 10. Additional Information*.

Under our dividend policy, our management proposes to our board of directors, no later than January 31 of each year, a minimum value per share, expressed in U.S. dollars, that will be distributed in that year to our shareholders. Dividends and/or interest on shareholders equity are determined in U.S. dollars, considering our expected cash generation and needs in the year of distribution. The proposal establishes two equal semi-annual installments to be paid in the months of April and October of each year. It is submitted to the board of directors in the meetings scheduled for the months of April and October. Once approved, dividends and/or interest on shareholders equity are paid in Brazilian *reais*, and converted at prevailing exchange rates on the last business day before the board meetings in April and October of each year. Management can also propose to the board of directors, depending on our performance, a further payment to shareholders of an additional amount per share over and above the minimum payout value initially established. The payment of any additional dividend occurs on the same dates fixed for the payment of the second installment of the minimum dividend, in October. For 2004, our management proposed to the Board of Directors a minimum dividend of US\$ 550 million. Our normal practice is to pay the same dividend or interest on shareholders equity on both common and preferred class A shares.

In addition, since our privatization in 1997, and following a recommendation from Valepar, our principal shareholder, we have distributed a minimum dividend equal to at least 50% of the amount of net income for distribution with respect to each fiscal year.

We may make distributions either in the form of dividends or in the form of interest on shareholders' equity. Dividends with respect to the American depositary shares, and to non-resident holders of common shares of preferred class A shares, will not be subject to Brazilian withholding tax, except for dividends declared based on profits generated prior to December 31, 1995. These dividends will be subject to Brazilian withholding tax at varying rates. Distributions of interest on shareholders' equity to shareholders, including holders of American depositary receipts, are currently subject to Brazilian withholding tax of 15%.

By law, we are required to hold an annual shareholders' meeting by April 30 of each year at which an annual dividend may be declared. Additionally, our board of directors may declare interim dividends. Under the Brazilian Corporate Law, dividends are generally required to be paid to the holder of record on a dividend declaration date within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date.

of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or payments of interest on shareholders' equity) in respect of its shares, after which we will have no liability for such payments. Since 1997, all cash distributions we have made have been in the form of interest on shareholders' equity. See *Item 10. Additional Information—Common Shares and Preferred Shares—Payments on Shareholders' Equity*.

We make cash distributions on the common shares and preferred class A shares underlying the American depositary shares in Brazilian currency to the custodian on behalf of the depositary. The custodian then converts such proceeds into U.S. dollars and causes such U.S. dollars to be delivered to the depositary for distribution to holders of American depositary receipts. For more information on Brazilian tax policies regarding dividend distributions, see *Item 10. Additional Information—Taxation—Brazilian Tax Considerations*.

The table below sets forth the cash distributions we paid to holders of common shares and preferred class A shares for the periods indicated. We have calculated U.S. dollar conversions using the commercial market rate in effect on the date of payment. We stated amounts gross of any applicable withholding tax.

| <b>Year</b> | <b>Payment<br/>Date</b> | <b>Reais per Share at<br/>Payment Date</b> | <b>U.S. Dollars per Share at<br/>Payment Date</b> |
|-------------|-------------------------|--|---|
| 1999        | January 15 .....        | 0.65                                       | 0.44  |
|             | March 31 .....          | 0.50                                       | 0.29  |
|             | August 20 .....         | 1.11                                       | 0.57  |
| 2000        | March 1 .....           | 1.17                                       | 0.66  |
| 2001        | February 20 .....       | 3.33                                       | 1.66  |
|             | December 10 .....       | 2.305                                      | 0.98  |
| 2002        | April 30 .....          | 2.305                                      | 0.98  |
|             | December 10 .....       | 2.68                                       | 0.71  |
| 2003        | April 30 .....          | 1.62                                       | 0.56  |
|             | October 31 .....        | 3.42                                       | 1.20  |
| 2004        | April 30 .....          | 2.06                                       | 0.70  |

## Item 9. The Offer and Listing

### SHARE PRICE HISTORY

The table below sets forth trading information for our preferred and common American depositary shares, as reported by the New York Stock Exchange (and for periods prior to June 2000, reported by the National Quotations Bureau, Inc.), and our preferred class A shares and our common shares, as reported by the BOVESPA, for the periods indicated.

|                     | <i>Reais per Common Share</i> |          | <i>Reais per Preferred Class A Share</i> |           | <i>U.S. Dollars per Preferred Class A American Depositary Share</i> |            | <i>U.S. Dollars per Common American Depositary Share</i> |        |
|---------------------|-------------------------------|----------|--|-----------|---|------------|--|--------|
|                     | High                          | Low      | High                                     | Low       | High  | Low        | High   | Low    |
| 1999 .....          | R\$ 42.00                     | R\$ 9.80 | R\$ 50.00                                | R\$ 13.80 | US\$ 26.50  | US\$ 10.87 | US\$ —   | US\$ — |
| 2000 .....          | 52.40                         | 33.00    | 59.00                                    | 38.82     | 33.13   | 19.75      | —  | —      |
| 2001 .....          | 55.00                         | 42.70    | 58.70                                    | 44.00     | 26.98   | 18.65      | —  | —      |
| 2002 .....          | 109.00                        | 50.00    | 102.20                                   | 50.90     | 29.51   | 20.51      | 30.00  | 21.75  |
| 2003 .....          | 170.80                        | 80.90    | 148.00                                   | 77.45     | 51.90   | 24.30      | 59.59  | 25.71  |
| 1Q02 .....          | 65.70                         | 50.00    | 64.20                                    | 50.90     | 27.49   | 21.52      | 27.39  | 26.15  |
| 2Q02 .....          | 78.10                         | 61.50    | 75.90                                    | 59.80     | 29.51   | 23.50      | 30.00  | 25.68  |
| 3Q02 .....          | 89.50                         | 71.50    | 84.20                                    | 65.50     | 25.35   | 20.51      | 27.55  | 22.75  |
| 4Q02 .....          | 109.00                        | 84.30    | 102.20                                   | 79.98     | 27.79   | 21.04      | 28.91  | 21.75  |
| 1Q03 .....          | 104.00                        | 91.00    | 100.00                                   | 87.50     | 27.87   | 24.30      | 29.50  | 25.71  |
| 2Q03 .....          | 91.99                         | 80.90    | 88.78                                    | 77.45     | 28.70   | 25.66      | 30.80  | 26.85  |
| 3Q03 .....          | 119.00                        | 85.00    | 108.60                                   | 79.10     | 37.49   | 28.02      | 41.60  | 29.92  |
| 4Q03 .....          | 170.80                        | 121.50   | 148.00                                   | 108.79    | 51.90   | 37.35      | 59.59  | 42.00  |
| 1Q04 .....          | 180.00                        | 145.10   | 159.00                                   | 124.40    | 55.50   | 42.45      | 62.87  | 49.96  |
| December 2003 ..... | 170.80                        | 134.01   | 148.00                                   | 118.49    | 51.90   | 40.70      | 59.59  | 46.00  |
| January 2004 .....  | 180.00                        | 156.00   | 159.00                                   | 138.69    | 55.50   | 47.10      | 62.87  | 53.67  |
| February 2004 ..... | 177.50                        | 158.30   | 152.80                                   | 138.68    | 52.40   | 47.10      | 61.00  | 54.46  |
| March 2004 .....    | 174.90                        | 145.10   | 151.25                                   | 124.40    | 52.35   | 42.45      | 60.43  | 49.96  |
| April 2004 .....    | 163.93                        | 130.31   | 142.75                                   | 114.00    | 49.77   | 39.09      | 57.09  | 45.30  |
| May 2004 .....      | 161.00                        | 130.00   | 136.90                                   | 113.00    | 43.89   | 36.30      | 51.51  | 42.25  |
| June 2004(1) .....  | 160.51                        | 150.24   | 136.80                                   | 129.50    | 44.30   | 40.95      | 51.81  | 47.65  |

(1)through June 8, 2004

### TRADING MARKETS

Our publicly traded share capital consists of common shares and preferred class A shares, each without par value. Our common shares and our preferred class A shares are publicly traded in Brazil on BOVESPA, under the ticker symbols VALE3 and VALE5, respectively. Our common shares and preferred class A shares also trade on the LATIBEX, under the ticker symbols XVALO and XVALP, respectively. The LATIBEX is an electronic market created in 1999 by the Madrid stock exchange in order to enable trading of Latin American equity securities in euro denomination.

On December 12, 2003, we agreed to comply with heightened corporate governance and disclosure requirements established by the BOVESPA in order to qualify as a company admitted to BOVESPA's "Level 1 of Corporate Governance Requirements."

To become a Level 1 company, an issuer must agree to:

- ensure that shares of the issuer representing 25% of its total capital are effectively available for trading;
- adopt offering procedures that favor widespread ownership of shares whenever making a public offering;
- comply with minimum quarterly disclosure standards;
- follow stricter disclosure policies with respect to transactions made by controlling shareholders, directors and officers involving securities issued by the issuer;
- disclose any existing shareholders' agreements and stock option plans; and
- make a schedule of corporate events available to the shareholders.

Our common American depositary shares, each representing one common share, have been traded on the New York Stock Exchange since March 2002, under the ticker symbol RIO. Our preferred American depositary shares, each representing one preferred class A share, have been traded on the New York Stock Exchange since June 2000, under the ticker symbol RIOPR. Since 1994, the preferred class A American depositary shares traded in the over-the-counter market. JPMorgan Chase Bank serves as the depositary for both the common and the preferred American depositary shares. At April 30, 2004, there were 131,379,259 American depositary shares outstanding, representing 47.4% of our preferred class A shares, 26.8% of our common shares or 34.2% of our total share capital.

## **Item 10. Additional Information**

### **MEMORANDUM AND ARTICLES OF ASSOCIATION**

#### **Company Objects and Purposes**

Our corporate purpose is defined by our bylaws to include:

- the exploitation of mineral deposits in Brazil and abroad by means of extraction, processing, industrialization, transportation, shipment and commerce of mineral assets;
- the building and operation of railways and the exploitation of own or third party rail traffic;
- the building and operation of own or third party maritime terminals, and the exploitation of nautical activities for the provision of support within the harbor;
- the provision of logistics services integrated with cargo transport, comprising generation, storage, transshipment, distribution and delivery within the context of a multimodal transport system;
- the production, processing, transport, industrialization and commerce of all and any source and form of energy, also involving activities of production, generation, transmission, distribution and commerce of its products, derivatives and subproducts;
- the carrying-on, in Brazil or abroad, of other activities that may be of direct or indirect consequence for the achievement of its corporate purpose, including research, industrialization, purchase and sale, importation and exportation, the exploitation, industrialization and commerce of forest resources and the provision of services of any kind whatsoever; and
- constituting or participating in any fashion in other companies, consortia or associations directly or indirectly related to its business purpose.

#### **Directors' Powers**

Under the Brazilian Corporate Law, if a director or an executive officer has a conflict of interest with the company in connection with any proposed transaction, the director or executive officer may not vote in any decision of the board of directors or of the board of executive officers regarding such transaction and must disclose the nature and extent of the conflicting interest for transcription in the minutes of the meeting. In any case, a director or an executive officer may not transact any business with the company, including any borrowings, except on reasonable or fair terms and conditions that are identical to the terms and conditions prevailing in the market or offered by third parties. Under our bylaws, shareholders set the aggregate compensation payable to directors and executive officers. The board of directors allocates the compensation among its members and the executive officers. See *Item 6. Directors, Management and Employees—Compensation*. Our bylaws do not establish any mandatory retirement age limits.

### **COMMON SHARES AND PREFERRED SHARES**

Set forth below is certain information concerning our authorized and issued share capital and a brief summary of certain significant provisions of our bylaws and the Brazilian Corporate Law. This description does not purport to be complete and is qualified by reference to our bylaws (an English translation of which has been filed with the SEC) and to the Brazilian Corporate Law.

#### **General**

Our bylaws authorize the issuance of up to 300 million common shares and up to 600 million preferred class A shares, in each case based solely on the approval of the board of directors without any additional shareholder approval.

Each common share entitles the holder thereof to one vote at meetings of our shareholders. Holders of common shares are not entitled to any preference relating to our dividends or other distributions.



Holders of preferred class A shares and the golden share are generally entitled to the same voting rights as holders of common shares, except with respect to the election of members of the board of directors, and are entitled to a minimum annual non-cumulative preferential dividend of (i) at least 3% of the book value per share, calculated in accordance with the financial statements, which serve as reference for the payment of dividends, or (ii) 6% of their pro rata share of our paid-in capital, whichever is higher. Non-controlling shareholders holding common shares representing at least 15% of our voting capital, and preferred class A shares representing at least 10% of our total share capital, have the right to appoint each one member and an alternate to our board of directors. If no group of common or preferred class A shareholders meets the thresholds described above, shareholders holding preferred or common shares representing at least 10% of our total share capital are entitled to combine their holdings to appoint one member and an alternate to our board of directors. Holders of preferred class A shares and the golden share may elect one member of the permanent fiscal council and the respective alternate. Non-controlling holders of common shares comprising at least 10% of the common shares outstanding may also elect one member of the fiscal council and an alternate.

The Brazilian government holds one golden share in us. The golden share is a preferred share that entitles its holder to the same rights (including with respect to voting and dividend preference) as holders of preferred class A shares. In addition, the holder of the golden share is entitled to veto any proposed action relating to the following matters:

- (1) a change in our name;
- (2) a change in the location of our head office;
- (3) a change in our corporate purpose as regards the mining activities;
- (4) any liquidation of our company;
- (5) any disposal or winding up of activities of any one or more of the following stages of our iron ore mining integrated systems:
  - (a) mineral deposits, ore deposits, mines;
  - (b) railways; or
  - (c) ports and maritime terminals;
- (6) any change in the bylaws relating to the rights accorded to the classes of capital stock issued by us; and
- (7) any change in the bylaws relating to the rights accorded the golden share.

#### ***Calculation of Distributable Amount***

At each annual shareholders' meeting, the board of directors is required to recommend, based on the executive officers' proposal, how to allocate our earnings for the preceding fiscal year. For purposes of the Brazilian Corporate Law, a company's net income after income taxes and social contribution taxes for such fiscal year, net of any accumulated losses from prior fiscal years and amounts allocated to employees' and management's participation in earnings represents its "net profits" for such fiscal year. In accordance with the Brazilian Corporate Law, an amount equal to our "net profits," as further reduced by amounts allocated to the legal reserve, to the contingency reserve or to the unrealized income reserve established by us in compliance with applicable law (discussed below) and increased by reversals of reserves constituted in prior years, will be available for distribution to shareholders in any particular year. Such amount, the adjusted net profits, is herein referred to as the distributable amount. We may also establish discretionary reserves, reserves for investment projects and fiscal investment reserves, as discussed below.

**Legal reserve.** Under the Brazilian Corporate Law, we are required to maintain a legal reserve to which we must allocate 5% of our "net profits" for each fiscal year until the amount of the reserve equals 20% of our paid-in capital. Net losses, if any, may be charged against the legal reserve.

**Discretionary reserves.** Under the Brazilian Corporate Law, a company may also provide for discretionary allocations of "net profits" to the extent set forth in its bylaws. Our bylaws provide for one discretionary depletion reserve which may be taken into account in allocating net profits for any fiscal year. We currently maintain a tax incentive depletion reserve established in respect of certain mining operations. Appropriations to the tax incentive

depletion reserve are deductible for tax purposes. The discretionary depletion reserve has not been used since 1996, when the related tax incentive expired. For more details, see Note 13 to our consolidated financial statements. There are no limits on the size or amount of proceeds that may be retained in the discretionary depletion reserve. However, the sum of the legal reserve, the depletion reserve and the reserve for investment projects may not exceed the amount of our paid-in capital.

*Contingency reserve.* Under the Brazilian Corporate Law, a portion of our “net profits” may also be discretionally allocated to a “contingency reserve” for an anticipated loss that is deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the loss was anticipated if such loss does not in fact occur or charged off in the event that the anticipated loss occurs. We have never allocated an amount to the contingency reserve.

*Reserve for investment projects.* Under the Brazilian Corporate Law, we may allocate a portion of our “net profits” for discretionary appropriations for plant expansion and other capital investment projects, the amount of which is based on a capital budget previously presented by management and approved by shareholders. Under Law No. 10,313, capital budgets with a duration longer than one year must be reviewed at each annual shareholders’ meeting. After completion of the relevant capital projects, we may retain the appropriation until shareholders vote to transfer all or a portion of the reserve to capital or retained earnings.

*Unrealized income reserve.* As of March 1, 2002, under Law No. 10,313, which amended the Brazilian Corporate Law, the amount by which the mandatory dividend exceeds the “realized” portion of net profits for any particular year may be allocated to the unrealized income reserve. The “realized” portion of net profits is the amount by which “net profits” exceed the sum of (i) our net positive results, if any, from the equity method of accounting for earnings and losses of our subsidiaries and certain affiliates, and (ii) the profits, gains or return obtained on transactions completed after the end of the following fiscal year.

*Tax incentive investment reserve.* Under the Brazilian tax laws, a portion of “net profits” may also be allocated to a general “tax incentive investment reserve” in amounts corresponding to reductions in our income tax generated by credits for particular government-approved investments.

The Brazilian Corporate Law provides that all discretionary allocations of “net profits,” including discretionary reserves, the contingency reserve, the unrealized income reserve and the reserve for investment projects, are subject to approval by the shareholders voting at the annual meeting and can be transferred to capital or used for the payment of dividends in subsequent years. The fiscal incentive investment reserve and legal reserve are also subject to approval by the shareholders voting at the annual meeting and may be transferred to capital but are not available for the payment of dividends in subsequent years.

Our calculation of “net profits” and allocations to reserves for any fiscal year are determined on the basis of financial statements prepared in accordance with the Brazilian Corporate Law. Our consolidated financial statements have been prepared in accordance with U.S. GAAP and, although our allocations to reserves and dividends will be reflected in these financial statements, investors will not be able to calculate such allocations or required dividend amounts from our consolidated financial statements.

### ***Mandatory Dividend***

Our bylaws prescribe that we must distribute to our shareholders in the form of dividends or interest on shareholders’ equity an annual amount equal to not less than 25% of the distributable amount, referred to as the mandatory dividend, unless the board of directors advises our shareholders at our general shareholders’ meeting that payment of the mandatory dividend for the preceding year is inadvisable in light of our financial condition. The fiscal council must review any such determination and report it to the shareholders. In addition to the mandatory dividend, our board of directors may recommend to the shareholders payment of dividends from other funds legally available therefore. Any payment of interim dividends will be netted against the amount of the mandatory dividend for that fiscal year. The shareholders must also approve the recommendation of the board of directors with respect to any required distribution. The amount of the mandatory dividend is subject to the size of the legal reserve, the contingency reserve, and the unrealized income reserve. The amount of the mandatory dividend is not subject to the size of the discretionary depletion reserve. See *Item 10. Additional Information—Common Shares and Preferred Shares—Calculation of Distributable Amount*. To date, our board of directors has never determined that payment of the mandatory dividend was inadvisable.

Since our privatization in 1997, and following a recommendation from Valepar, our principal shareholder, we have distributed a dividend equal to at least 50% of the amount of net income for distribution with respect to each fiscal year.

In November 2002, our board of directors approved a new dividend policy. See *Item 8. Financial Information—Dividends and Interest on Shareholders' Equity*.

#### ***Dividend Preference of Preferred Shares***

Pursuant to our bylaws, holders of preferred class A shares and the golden share are entitled to a minimum annual non-cumulative preferential dividend equal to (i) at least 3% of the book value per share, calculated in accordance with the financial statements which serve as reference for the payment of dividends, or (ii) 6% of their pro rata share of our paid-in capital, whichever is higher. To the extent that we declare dividends in any particular year in amounts which exceed the preferential dividends on preferred class A shares, and after holders of common shares have received distributions equivalent, on a per share basis, to the preferential dividends on preferred class A shares, holders of common shares and preferred class A shares shall receive the same additional dividend amount per share. Since the first step of our privatization in 1997, we have had sufficient distributable amounts to be able to distribute equal amounts to both common and preferred shareholders.

#### ***Other Matters Relating to Preferred Class A Shares***

Our bylaws do not provide for the conversion of preferred class A shares into common shares. In addition, the preferred class A shares do not have any preference upon our liquidation and there are no redemption provisions associated with the preferred class A shares.

#### ***Payments on Shareholders' Equity***

Pursuant to a change in Brazilian tax law effective January 1, 1996, Brazilian companies are permitted to pay limited amounts to shareholders and treat such payments as an expense for Brazilian income tax purposes. In accordance with Law No. 9,249 dated December 26, 1995, our bylaws provide for the distribution of interest on shareholders' equity as an alternative form of payment to shareholders. The interest rate applied is limited to the Brazilian long-term interest rate, or TJLP, for the applicable period. The deduction of the amount of interest paid cannot exceed the greater of (1) 50% of net income (after the deduction of the provision of social contribution on net profits and before the deduction of the provision of the corporate income tax) before taking into account any such distribution for the period in respect of which the payment is made or (2) 50% of the sum of retained earnings and profit reserves. Any payment of interest on shareholders' equity to shareholders is subject to Brazilian withholding income tax at the rate of 15%, except for a beneficiary located in a tax haven jurisdiction (*i.e.* a country that does not impose income tax or that imposes it at a maximum rate lower than 20%), in which case the rate is 25%. Under our bylaws, the amount paid to shareholders as interest on shareholders' equity (net of any withholding tax) may be included as part of any mandatory and minimum dividend. Under the Brazilian Corporate Law, we are obligated to distribute to shareholders an amount sufficient to ensure that the net amount received, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on shareholders' equity, is at least equal to the mandatory dividend.

#### ***Voting Rights***

Each common share entitles the holder thereof to one vote at meetings of our shareholders. Holders of preferred class A shares are entitled to the same voting rights as holders of common shares except that they may not vote on the election of members of the board of directors, except in the event of dividend arrearages, as described below. One of the members of the permanent fiscal council and his or her alternate are elected by majority vote of the holders of preferred class A shares. Holders of preferred class A shares and common shares may, in certain circumstances, combine their respective holdings to elect members of our board of directors.

The golden share entitles the holder thereof to the same voting rights as holders of preferred class A shares. The golden share also confers certain other significant voting rights in respect of particular actions, as described under *Item 10. Additional Information—Common Shares and Preferred Shares—General*.

The Brazilian Corporate Law provides that non-voting or restricted-voting shares, such as the preferred class A shares, acquire unrestricted voting rights beginning when a company has failed for three consecutive fiscal years (or for any shorter period set forth in a company's constituent documents) to pay any fixed or minimum dividend to

which such shares are entitled and continuing until payment thereof is made. Our bylaws do not set forth any such shorter period.

Any change in the preferences or advantages of our preferred class A shares, or the creation of a class of shares having priority over the preferred class A shares, would require the approval of holders of a majority of the outstanding preferred class A shares, voting as a class at a special meeting.

### ***Shareholders' Meetings***

A general shareholders' meeting convenes each year to decide all matters relating to our corporate purposes and to pass such resolutions as they deem necessary for our protection and well-being.

Pursuant to the Brazilian Corporate Law, shareholders voting at a general shareholders' meeting have the power, among other powers, to:

- amend the bylaws;
- elect or dismiss members of the board of directors and members of the fiscal council at any time;
- receive annual reports by management and accept or reject management's financial statements and recommendations including the allocation of net profits and the distributable amount for payment of the mandatory dividend and allocation to the various reserve accounts;
- authorize the issuance of debentures;
- suspend the rights of a shareholder in default of obligations established by law or by the bylaws;
- accept or reject the valuation of assets contributed by a shareholder in consideration for issuance of capital stock;
- pass resolutions to reorganize our legal form, to merge, consolidate or split us, to dissolve and liquidate us, to elect and dismiss our liquidators and to examine their accounts; and
- authorize management to file for bankruptcy or to request a *concordata*, a procedure involving protection from creditors similar in nature to reorganization under the U.S. Bankruptcy Code.

All shareholders meetings, including the annual shareholders' meeting, are convened by publishing, no fewer than fifteen days prior to the scheduled meeting date and no fewer than three times, a notice in the *Diário Oficial do Estado do Rio de Janeiro* and in a newspaper with general circulation in the city where we have our registered office, which is Rio de Janeiro. Our shareholders have previously designated *Jornal do Commercio* for this purpose. Also, as our shares are traded on BOVESPA, we must publish a notice in a São Paulo based newspaper. Such notice must contain the agenda for the meeting and, in the case of an amendment to our bylaws, an indication of the subject matter. In addition, under our bylaws, the holder of the golden share is entitled to a minimum of 15 days prior formal notice to its legal representative of any general shareholders' meeting to consider any proposed action subject to the veto rights accorded to the golden share. See *Item 10. Additional Information—Common Shares and Preferred Shares—General*.

A shareholders' meeting may be held if shareholders representing at least one-quarter of the voting capital are present. If no such quorum is present, notice must again be given in the same manner as described above except for the eight-days prior notice, and a meeting may then be convened without any specific quorum requirement, subject to the minimum quorum and voting requirements for certain matters, as discussed below. A shareholder without a right to vote may attend a general shareholders' meeting and take part in the discussion of matters submitted for consideration.

Except as otherwise provided by law, resolutions of a shareholders' meeting are passed by a simple majority vote, abstentions not being taken into account. Under the Brazilian Corporate Law, the approval of shareholders representing at least one-half of the issued and outstanding voting shares is required for the types of action described below, as well as, in the case of clause (a) and clause (b), a majority of issued and outstanding shares of the affected class:

(a) creating a new class of preferred shares or disproportionately increasing an existing class of preferred shares relative to the other classes of shares, other than to the extent permitted by the bylaws;

(b) changing a priority, preference, right, privilege or condition of redemption or amortization of any class of preferred shares or creating any class of non-voting preferred shares that has a priority, preference, right, condition or redemption or amortization superior to an existing class of shares, such as the preferred shares;

(c) reducing the mandatory dividend;

(d) changing the corporate purposes;

(e) merging us with another company or consolidating or splitting us;

(f) dissolving or liquidating us;

(g) participating in a centralized group of companies as defined under the Brazilian Corporate Law; and

(h) canceling any ongoing liquidation of us.

Whenever the shares of any class of capital stock are entitled to vote, each share is entitled to one vote. Annual shareholders' meetings must be held by April 30 of each year. Shareholders' meetings are called, convened and presided over by the Chairman or by the Vice-Chairman of our board of directors. A shareholder may be represented at a general shareholders' meeting by an attorney-in-fact appointed not more than one year before the meeting, who must be a shareholder, a company officer or a lawyer. For a public company, such as us, the attorney-in-fact may also be a financial institution.

### **Redemption Rights**

Our common shares and preferred class A shares are not redeemable, except that a dissenting shareholder is entitled under the Brazilian Corporate Law to obtain redemption upon a decision made at a shareholders' meeting by shareholders representing at least 50% of the voting shares:

- (1) to create a new class of preferred shares or to disproportionately increase an existing class of preferred shares relative to the other classes of shares (unless such actions are provided for or authorized by the bylaws);
- (2) to modify a preference, privilege or condition of redemption or amortization conferred on one or more classes of preferred shares, or to create a new class with greater privileges than the existing classes of preferred shares;
- (3) to reduce the mandatory distribution of dividends;
- (4) to change our corporate purposes;
- (5) to merge us with another company or consolidate us;
- (6) to transfer all of our shares to another company in order to make us a wholly-owned subsidiary of such company, an *incorporação de ações*;
- (7) to approve the acquisition of control of another company at a price which exceeds certain limits set forth in the Brazilian Corporate Law;
- (8) to approve our participation in a centralized group of companies as defined under the Brazilian Corporate Law; or
- (9) in the event that the entity resulting from (a) a merger, (b) an *incorporação de ações* as described in clause (6) above or (c) a spin-off that we conduct fails to become a listed company within 120 days of the general shareholders' meeting at which such decision was taken.

Only holders of shares adversely affected by the changes mentioned in items (1) and (2) above may require us to redeem their shares. The right of redemption mentioned in items (5), (6) and (8) above may only be exercised if our shares do not satisfy certain tests of liquidity at the time of the shareholder resolution. The right of redemption lapses 30 days after publication of the minutes of the relevant general shareholders' meeting, unless, in the case of items (1) and (2) above, the resolution is subject to confirmation by the preferred shareholders (which must be made

at a special meeting to be held within one year), in which case the 30-day term is counted from the publication of the minutes of the special meeting.

We would be entitled to reconsider any action giving rise to redemption rights within 10 days following the expiration of such rights if the redemption of shares of dissenting shareholders would jeopardize our financial stability. Law No. 9,457 dated May 5, 1997, which amended the Brazilian Corporate Law, contains provisions which, among other provisions, restrict redemption rights in certain cases and allow companies to redeem their shares at their economic value, subject to certain requirements. Our bylaws currently do not provide that our capital stock will be redeemable at its economic value and, consequently, any redemption pursuant to the Brazilian Corporate Law would be made at no less than the book value per share, determined on the basis of the last balance sheet approved by the shareholders; *provided* that if the general shareholders' meeting giving rise to redemption rights occurred more than 60 days after the date of the last approved balance sheet, a shareholder would be entitled to demand that his or her shares be valued on the basis of a new balance sheet dated within 60 days of such general shareholders' meeting.

### **Preemptive Rights**

Each of our shareholders has a general preemptive right to subscribe for shares in any capital increase, in proportion to his or her shareholding. A minimum period of 30 days following the publication of notice of a capital increase is allowed for the exercise of the right and the right is negotiable. Under our bylaws, our board of directors may decide not to extend preemptive rights to our shareholders or, under Law No. 10,303, to reduce the 30-day period for the exercise of preemptive rights, in each case with respect to any issuance of shares, debentures convertible into shares and warrants in the context of a public offering, subject to the limit on the number of shares that may be issued with the approval of the board without any additional shareholder approval. In the event of a capital increase that would maintain or increase the proportion of capital represented by preferred class A shares, holders of preferred American depositary receipts will have preemptive rights to subscribe only to newly issued preferred class A shares. In the event of a capital increase that would reduce the proportion of capital represented by preferred class A shares, shareholders will have preemptive rights to subscribe for preferred class A shares, in proportion to their shareholdings, and for common shares only to the extent necessary to prevent dilution of their overall interest in us. In the event of a capital increase that would maintain or increase the proportion of capital represented by common shares, shareholders will have preemptive rights to subscribe only to newly issued common shares. In the event of a capital increase that would reduce the proportion of capital represented by common shares, holders of common shares will have preemptive rights to subscribe for preferred class A shares only to the extent necessary to prevent dilution of their overall interest in us.

### **Tag-along rights**

According to the Brazilian Corporate Law, in the event of a sale of control of the Company, the acquirer is obliged to offer to holders of voting shares the right to sell their shares for a price equal to at least 80% of the price paid for the voting shares representing control.

### **Form and Transfer**

Our preferred class A shares and common shares are in book-entry form registered in the name of each shareholder or its nominee. The transfer of such shares is made under the Brazilian Corporate Law which provides that a transfer of shares is effected by our transfer agent, Banco Bradesco S.A., upon presentation of valid share transfer instructions to us by a transferor or its representative. When preferred shares or common shares are acquired or sold on a Brazilian stock exchange, the transfer is effected on the records of our transfer agent by a representative of a brokerage firm or the stock exchange's clearing system. Transfers of shares by a foreign investor are made in the same way and are executed by the investor's local agent, who is also responsible for updating the information relating to the foreign investment furnished to the Central Bank of Brazil.

BOVESPA operates a central clearing system through *Companhia Brasileira de Liquidação e Custódia*, or CBLC. A holder of our shares may participate in this system and all shares elected to be put into the system will be deposited in custody with CBLC (through a Brazilian institution that is duly authorized to operate by the Central Bank of Brazil and maintains a clearing account with CBLC). The fact that such shares are subject to custody with the relevant stock exchange will be reflected in our registry of shareholders. Each participating shareholder will, in turn, be registered in the register of our beneficial shareholders that is maintained by CBLC and will be treated in the same way as registered shareholders.

## MATERIAL CONTRACTS

For information concerning our material contracts, see *Item 4. Information on the Company* and *Item 5. Operating and Financial Review and Prospects*.

### EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS

There are no restrictions on ownership of our capital stock by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of preferred class A shares or common shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, that the relevant investment be registered with the Central Bank of Brazil. These restrictions on the remittance of foreign capital abroad could hinder or prevent the custodian for the preferred class A shares or common shares represented by American depositary shares, or holders who have exchanged American depositary shares for preferred class A shares or common shares, from converting dividends, distributions or the proceeds from any sale of preferred class A shares or common shares, as the case may be, into U.S. dollars and remitting such U.S. dollars abroad. Delays in, or refusal to grant any required government approval for conversions of Brazilian currency payments and remittances abroad of amounts owed to holders of American depositary shares could adversely affect holders of American depositary receipts.

Under Resolution No. 2,689, foreign investors may invest in almost all financial assets and engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with Resolution No. 2,689, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Under Resolution No. 2,689, a foreign investor must:

- appoint at least one representative in Brazil, with powers to perform actions relating to its investment,
- complete the appropriate foreign investor registration form,
- register as a foreign investor with the CVM, and
- register its foreign investment with the Central Bank of Brazil.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 2,689 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank of Brazil or the CVM. In addition, securities trading is restricted to transactions carried out on stock exchanges or through organized over-the-counter markets licensed by the CVM, except for subscription, bonification, conversion of debentures into shares, securities indexes, purchase and sale of investment funds quotas and, if permitted by the CVM, going private transactions, canceling or suspension of trading. Moreover, the offshore transfer or assignment of the securities or other financial assets held by foreign investors pursuant to Resolution No. 2,689 are prohibited, except for transfers resulting from a corporate reorganization, or occurring upon the death of an investor by operation of law or will.

Resolution No. 1,927 of the National Monetary Council, which is the restated and amended Annex V to Resolution No. 1,289, which we call the Annex V Regulations, provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. It provides that the proceeds from the sale of American depositary shares by holders of American depositary receipts outside Brazil are free of Brazilian foreign investment controls and holders of American depositary shares who are not resident in a tax haven jurisdiction (*i.e.* a country or location that does not impose taxes on income or where the maximum income tax rate is lower than 20%, or where the legislation imposes restrictions on disclosure of the shareholding composition or the ownership of the investment) will be entitled to favorable tax treatment.

An electronic registration has been issued by the custodian in the name of JPMorgan Chase Bank, the depositary, with respect to the American depositary shares. Pursuant to this electronic registration, the custodian and the depositary are able to convert dividends and other distributions with respect to the preferred class A shares or common shares represented by American depositary shares into foreign currency and to remit the proceeds outside Brazil. If a holder exchanges American depositary shares for preferred class A shares or common shares,

the holder may continue to rely on the custodian's electronic registration for only five business days after the exchange. After that, the holder must seek to obtain its own electronic registration with the Central Bank of Brazil under Law No. 4,131 or Resolution No. 2,689. Thereafter, unless the holder has registered its investment with the Central Bank of Brazil, such holder may not convert into foreign currency and remit outside Brazil the proceeds from the disposition of, or distributions with respect to, such preferred class A shares or common shares. A holder that obtains an electronic registration generally will be subject to less favorable Brazilian tax treatment than a holder of American depositary shares. See *Item 10. Additional Information—Taxation—Brazilian Tax Considerations*.

There are two principal foreign exchange markets in Brazil (which have operated under identical operational limits and had identical rates since February 1999):

- the commercial rate exchange market, and
- the floating rate exchange market.

Most trade and financial foreign-exchange transactions, including transactions relating to the purchase or sale of shares or the payment of dividends or interest with respect to shares, are carried out on the commercial market. Only a Brazilian bank authorized to buy and sell currency in the commercial market may effect purchases of foreign currencies in that market. In both markets, rates are freely negotiated, but may be strongly influenced by Central Bank of Brazil intervention. See *Item 3. Key Information—Exchange Rates*.

Under Brazilian law, whenever there is a serious imbalance in Brazil's balance of payments or reasons to foresee a serious imbalance, the Brazilian government may impose temporary restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil, and on the conversion of Brazilian currency into foreign currencies. Such restrictions may hinder or prevent the custodian or holders who have exchanged American depositary shares for underlying preferred class A shares or common shares from converting distributions or the proceeds from any sale of such shares, as the case may be, into U.S. dollars and remitting such U.S. dollars abroad.

## TAXATION

The following summary contains a description of the principal Brazilian and U.S. federal income tax consequences of the ownership and disposition of preferred class A shares, common shares or American depositary shares. You should know that it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a holder of preferred class A shares, common shares or American depositary shares.

Holders of preferred class A shares, common shares, or American depositary shares should consult their own tax advisors to discuss the tax consequences of the purchase, ownership and disposition of preferred class A shares, common shares or American depositary shares, including, in particular, the effect of any state, local or other national tax laws.

Although there is at present no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may result in such a treaty. We cannot predict whether or when such a treaty will enter into force or how it will affect the U.S. holders, as defined below, of preferred class A shares, common shares, or American depositary shares.

### **Brazilian Tax Considerations**

The following discussion summarizes the principal Brazilian tax consequences of the acquisition, ownership and disposition of American depositary shares by a holder not deemed to be domiciled in Brazil for purposes of Brazilian taxation and, by a holder of preferred class A shares or common shares, who has registered his/her investment in preferred class A shares or common shares with the Central Bank of Brazil as a U.S. dollar investment (in each case, a non-Brazilian holder). It is based on the tax laws of Brazil and regulations thereunder in effect on the date hereof, which are subject to change (possibly with retroactive effect). This discussion does not specifically address all of the Brazilian tax considerations applicable to any particular non-Brazilian holder. Therefore, each non-Brazilian holder should consult his or her own tax advisor concerning the Brazilian tax consequences of an investment in preferred class A shares, common shares, or American depositary shares.

*Taxation of dividends.* Dividends, including dividends paid in kind, paid by us from profits of periods beginning on or after January 1, 1996 (1) to the depositary in respect of the preferred class A shares or common shares underlying the American depositary shares or (2) to a non-Brazilian holder in respect of preferred class A



shares or common shares will generally not be subject to Brazilian withholding income tax. Dividends paid from profits generated before January 1, 1996 may be subject to Brazilian withholding income tax at varying rates depending on the year the profits were generated, except in the case of stock dividends, which are not subject to withholding income tax in Brazil unless we redeem the stock within five years from such distribution or the non-Brazilian holder sells the stock in Brazil within this five-year period.

*Distributions of interest on shareholders' equity.* Since January 1, 1996, Brazilian corporations may attribute interest on shareholders' equity as an alternative form of making dividend distributions, which they may pay in cash. They base the calculation on shareholders' equity as stated in the statutory accounting records. The interest rate applied may not exceed the TJLP as determined by the Central Bank of Brazil from time to time (9.75% per annum for the three-month period starting April 2004). Also, the amount paid may not be higher, for tax purposes, than the greater of (1) 50% of net income (after the deduction of the provision of social contribution on net profits but before taking into account such payment of interest and the provision of corporate income tax) for the relevant period or (2) 50% of the sum of retained earnings and profit reserves as of the beginning of the year in respect of which the payment is made.

The amount of interest attributed to shareholders is deductible for corporate income tax and social contribution on net profit purposes. Therefore, the benefit to us, as opposed to making a dividend payment, is a reduction in our corporate taxes charge equivalent to 34% of such amount. Subject to certain limitations, income tax is withheld from the shareholders on interest payments at the rate of 15%, except if the beneficiary is exempt from tax in Brazil, which payments are free of Brazilian tax, and except if the beneficiary is located in a tax haven jurisdiction, in which case the applicable rate is 25%.

*Taxation of gains.* For purposes of Brazilian taxation, two types of non-Brazilian holders should be considered: (1) non-Brazilian holders that are not resident or domiciled in tax haven jurisdictions, which are registered before the Central Bank of Brazil and the CVM to invest in Brazil in accordance with Resolution No. 2,689 or are holders of American depositary shares; and (2) other non-Brazilian holders, which include any and all non-residents in Brazil who invest in the country through any other means and all type of investors that are located in a tax haven jurisdiction. The investors identified in item (1) are subject to a favorable tax treatment, as described below.

According to the Law No. 10,833, dated December 29, 2003, gains earned abroad derived from the disposition of assets located in Brazil by non-residents to other non-residents may become subject to taxation in Brazil. Although we believe that the ADSs do not fall within the definition of assets located in Brazil for the purposes of this rule, considering the general and unclear scope of the rule and the lack of judicial court rulings in respect thereto, we are unable to predict whether such understanding will ultimately prevail in the courts of Brazil.

The deposit of preferred class A shares or common shares in exchange for American depositary shares is not subject to Brazilian income tax if the preferred class A shares or common shares are registered under Resolution No. 2,689 and the respective holder is not located in a tax haven jurisdiction. If the preferred class A shares or common shares are not registered, or if they are registered but the respective holder is located in a tax haven jurisdiction, the deposit of preferred class A shares or common shares in exchange for American depositary shares may be subject to Brazilian capital gains tax at the rate of 15%, or 25% in the case of a resident of a tax haven jurisdiction. The withdrawal of preferred class A shares or common shares in exchange for American depositary shares is not subject to Brazilian income tax. On receipt of the underlying preferred class A shares or common shares, a non-Brazilian holder, registered under Resolution No. 2,689 may register the U.S. dollar value of such shares with the Central Bank of Brazil as described below under —*Registered Capital*. If such non-Brazilian holder does not qualify under Resolution No. 2,689, it will be subject to the less favorable tax treatment described above in respect of exchanges of preferred class A shares or common shares.

Non-Brazilian holders are subject to income tax imposed at a rate of 15%, or 25% in the case of a resident of a tax haven jurisdiction, on gains realized on sales or dispositions of preferred class A shares or common shares other than on the Brazilian stock, future and commodities exchange, in which case the income tax is imposed at a rate of 20%. With reference to proceeds of a redemption or of a liquidating distribution with respect to the preferred class A shares or common shares, the difference between the amount received and the amount of foreign currency registered with the Central Bank of Brazil, translated into *reais* at the commercial market rate on the date of the redemption or liquidation distribution, will be also subject to income tax at a rate of 15%, once such transactions are treated as a sale or disposition carried out outside of the Brazilian stock, future and commodities exchange.

Gains realized arising from transactions on a Brazilian stock, future and commodities exchange, by an investor under Resolution No. 2,689 and not located in a tax haven jurisdiction are exempt from income tax. The preferential

treatment under Resolution No. 2,689 is no longer applicable if the non-Brazilian holder of class A shares or common shares is resident in a tax haven jurisdiction. As a consequence, gains realized on transactions performed by such holder on the Brazilian stock, futures and commodities exchange are subject to income tax at a rate of 20%.

Non-Brazilian holders are subject to income tax imposed at a rate of 20% on gains realized on sales or dispositions of preferred class A shares or common shares that occur on a Brazilian stock, future and commodities exchange unless such sale or disposition is made by a non-Brazilian holder who is not resident in a tax haven jurisdiction and (1) such sale is made within five business days of the withdrawal of such common shares in exchange for American depositary shares and the proceeds thereof are remitted abroad within such five-day period, or (2) such sale is made under Resolution No. 2,689 by a registered non-Brazilian holder who obtains registration with the Brazilian securities commission, in which cases the non-Brazilian holder is exempt from income tax.

The gain realized as a result of a transaction on a Brazilian stock, future and commodities exchange is the difference between the amount in Brazilian currency realized on the sale or disposition and the acquisition cost, without any correction for inflation, of the shares sold. The gain realized as a result of a transaction that does not occur on a Brazilian stock, future and commodities exchange will be calculated based on the foreign currency amount registered with the Central Bank of Brazil. It is possible that the current preferential treatment for holders of American depositary receipts and non-Brazilian holders of preferred class A shares and common shares under Resolution No. 2,689 will not continue in the future.

Any exercise of preemptive rights relating to the preferred class A shares or common shares will not be subject to Brazilian taxation. Any gain on the transaction will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of preferred class A shares or common shares.

*Other Brazilian taxes.* There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of preferred class A shares or common shares or American depositary shares by a non-Brazilian holder, except for gift and inheritance taxes which are levied by some states of Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil or in the relevant State to individuals or entities resident or domiciled within such state in Brazil. There are no Brazilian stamp, issue, registration, or similar taxes or duties payable by holders of preferred class A shares or common shares or American depositary shares.

A financial transaction tax (the "IOF tax") may be imposed on a variety of foreign transactions, including the conversion of Brazilian currency into foreign currency (*e.g.*, for purposes of paying dividends and interest) or vice-versa (the "IOF/Câmbio"). The IOF/Câmbio is currently 0% with some specific exceptions, but the Minister of Finance has the legal power to increase the rate to a maximum of 25%. Any such increase will be applicable only prospectively.

IOF tax may also be levied on transactions involving bonds or securities (the "IOF/Títulos") even if the transactions are effected on the Brazilian stock, futures or commodities exchange. The rate of the IOF/Títulos with respect to preferred class A shares or common shares or American depositary shares is currently 0%. The Minister of Finance, however, has the legal power to increase the rate to a maximum of 1.5% per day. Any such increase will be applicable only prospectively.

In addition to the IOF tax, the temporary contribution on financial transactions (the "CPMF tax") will be imposed through December 2007 on all fund transfers in connection with financial transactions in Brazil.

*Registered capital.* The amount of an investment in preferred class A shares or common shares held by a non-Brazilian resident holder who obtains registration under Resolution 2,689, or by the depositary representing such holder, is eligible for registration with the Central Bank of Brazil; such registration (the amount so registered is referred to as Registered Capital) allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized with respect to disposition of, such preferred class A shares or common shares.

The registered capital for each preferred class A share or common share purchased in the form of an American depositary share, or purchased in Brazil, and deposited with the depositary in exchange for an American depositary share, will be equal to its purchase price (in U.S. dollars) to the purchaser.

The registered capital for a preferred class A share or common share that is withdrawn upon surrender of an American depositary share will be the U.S. dollar equivalent of:

- (1) the average price of a preferred class A share or common share on the Brazilian stock, future and commodities exchange on which the greatest number of such shares was sold on the day of withdrawal, or
- (2) if no preferred class A shares or common shares were sold on that day, the average price on the Brazilian stock, future and commodities exchange on which the greatest number of preferred class A shares or common shares were sold in the fifteen trading sessions immediately preceding such withdrawal.

The U.S. dollar value of the preferred class A shares or common shares is determined on the basis of the average commercial market rates quoted by the Central Bank of Brazil on such date (or, if the average price of preferred class A shares or common shares is determined under clause (2) of the preceding sentence, the average of such average quoted rates on the same fifteen dates used to determine the average price of the preferred class A shares or common shares).

A non-Brazilian resident holder of preferred class A shares or common shares may experience delays in completing such registration which may delay remittances abroad. Such a delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder.

### **U.S. Federal Income Tax Considerations**

This discussion only applies to U.S. holders, as defined below, who hold their preferred class A shares or common shares or American depositary shares as capital assets. This discussion does not describe all of the tax consequences that may be relevant in light of a holder's particular circumstances or to holders subject to special rules, such as:

- certain financial institutions,
- insurance companies,
- dealers or traders in securities or foreign currencies,
- persons holding preferred class A shares, common shares or American depositary shares as part of hedge, straddle, conversion or other integrated transaction,
- holders whose functional currency is not the U.S. dollar,
- partnerships or other entities classified as partnerships for U.S. federal income tax purposes,
- persons subject to the alternative minimum tax, or
- persons owning, actually or constructively, 10% or more of our voting shares.

This discussion is based on the Internal Revenue Code of 1986, as amended to the date hereof, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury Regulations, changes to any of which may affect the tax consequences described herein. Holders should consult their tax advisors with regard to the application of the United States federal income tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

This discussion is also based, in part, on representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms.

As used herein, the term "United States holder" means a beneficial owner of preferred class A shares, common shares, or American depositary shares that is for U.S. federal income tax purposes:

- a citizen or resident alien individual of the United States,
- a corporation created or organized in or under the laws of the United States or of any political subdivision thereof, or

- an estate or trust the income of which is subject to United States federal income taxation regardless of its source.

The term United States holder also includes certain former citizens of the United States.

In general, for U.S. federal income tax purposes, holders of American depositary receipts evidencing American depositary shares will be treated as the beneficial owners of the preferred class A shares or common shares represented by those American depositary shares. Deposits and withdrawals of preferred class A shares or common shares by holders in exchange for American depositary shares will not result in the realization of gain or loss for U.S. federal income tax purposes.

*Taxation of dividends.* Distributions paid on American depositary shares, preferred class A shares or common shares, including distributions paid in the form of payments of interest on capital for Brazilian tax purposes, out of our current or accumulated earnings and profits, as determined for U.S. federal tax purposes, before reduction for any Brazilian income tax withheld by us, will be taxable to you as foreign source dividend income and will not be eligible for the dividends-received deduction allowed to corporations.

You will be required to include dividends paid in *reais* in income in an amount equal to their U.S. dollar value calculated by reference to an exchange rate in effect on the date such items are received. If you hold American depositary shares, you will be considered to receive a dividend when the dividend is received by the depositary.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual prior to January 1, 2009 with respect to the American depositary shares will be subject to taxation at a maximum rate of 15% if the dividends are “qualified dividends.” Dividends paid on the American depositary shares will be treated as qualified dividends if (i) the American depositary shares are readily tradable on an established securities market in the United States and (ii) the Company was not, in the year prior to the year in which the dividend was paid, and is not, in the year in which the dividend is paid, a passive foreign investment company (“PFIC”), foreign personal holding company (“FPHC”) or foreign investment company (“FIC”). The American depositary shares are listed on the New York Stock Exchange and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on CVRD’s audited financial statements and relevant market and shareholder data, CVRD believes that it was not treated as a PFIC, FPHC or FIC for U.S. federal income tax purposes with respect to its 2003 taxable year. In addition, based on CVRD’s audited financial statements and its current expectations regarding the value and nature of its assets, the sources and nature of its income, and relevant market and shareholder data, we do not anticipate becoming a PFIC, FPHC or FIC for its 2004 taxable year.

Based on existing guidance, it is not entirely clear whether dividends received with respect to the preferred class A shares and common shares will be treated as qualified dividends, because the preferred class A shares and common shares are not themselves listed on a U.S. exchange. In addition, the U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of American depositary shares, preferred class A shares or common stock and intermediaries through whom such securities are held will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them. Holders of American depositary shares, preferred class A shares and common shares should consult their own tax advisers regarding the availability of the reduced dividend tax rate in the light of their own particular circumstances.

Subject to generally applicable limitations and restrictions, you will be entitled to a credit against your United States federal income tax liability, or a deduction in computing your U.S. federal taxable income, for Brazilian income taxes withheld by us. You must satisfy minimum holding period requirements to be eligible to claim a foreign tax credit for Brazilian taxes withheld on dividends. The limitation on foreign taxes eligible for credit is calculated separately for specific classes of income. For this purpose dividends paid by us on our shares will generally constitute “passive income” (or, for some holders, “financial services income”).

*Taxation of capital gains.* Upon a sale or exchange of preferred class A shares, common shares or American depositary shares, you will recognize a capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the amount realized on the sale or exchange and your adjusted tax basis in the preferred class A shares, common shares or American depositary shares. Long-term capital gains recognized by an individual United States holder are subject to taxation at a reduced rate. This gain or loss will be long-term capital gain or loss if your holding period in the American depositary shares exceeds one year. Any gain or loss will be U.S. source gain or loss for U.S. foreign tax credit purposes. Consequently, if a Brazilian withholding tax is imposed on the sale

or disposition of American depositary shares, preferred class A shares or common shares, and you do not receive significant foreign source income from other sources you may not be able to derive effective U.S. foreign tax credit benefits in respect of such Brazilian withholding tax. You should consult your own tax advisor regarding the application of the foreign tax credit rules to your investment in, and disposition of, American depositary shares, preferred class A shares or common shares.

If a Brazilian tax is withheld on the sale or disposition of shares, the amount realized by a U.S. holder will include the gross amount of the proceeds of such sale or disposition before deduction of the Brazilian tax. See *Item 10. Additional Information—Taxation—Brazilian Tax Considerations*.

#### *Information reporting and backup withholding*

Information returns may be filed with the Internal Revenue Service in connection with distributions on the preferred class A shares, common shares or American depositary shares and the proceeds from their sale or other disposition. You may be subject to United States backup withholding tax on these payments if you fail to provide your taxpayer identification number or comply with certain certification procedures or otherwise establish an exemption from backup withholding.

The amount of any backup withholding from a payment to you will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that the required information is furnished to the Internal Revenue Service.

### **DOCUMENTS ON DISPLAY**

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, and accordingly file reports and other information with the SEC. Reports and other information filed by us with the SEC may be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain copies of these materials by mail from the Public Reference Section of the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You may also inspect CVRD's reports and other information at the offices of the New York Stock Exchange, 11 Wall Street, New York, New York 10005, on which CVRD's American depositary shares are listed. Our SEC filings are also available to the public from the SEC's website at <http://www.sec.gov>. For further information on obtaining copies of CVRD's public filings at the New York Stock Exchange, you should call (212) 656-5060.

We also file financial statements and other periodic reports with the CVM.

### **Item 11. Quantitative and Qualitative Disclosures About Market Risk**

The principal market risks we face are interest rate risk, exchange rate risk and commodity price risk. We manage some of these risks through the use of derivative instruments. Our policy has been to settle all commodity derivatives contracts in cash without physical delivery of product.

Our risk management activities follow policies and guidelines reviewed and approved by our board of directors. These policies and guidelines generally prohibit speculative trading and short selling and require diversification of transactions and counter-parties. We monitor and evaluate our overall position daily in order to evaluate financial results and impact on our cash flow. We also periodically review the credit limits and creditworthiness of our hedging counter-parties. We report the results of our hedging activities to senior management on a monthly basis.

As of January 1, 2001, we have adopted SFAS 133 – “Accounting for Derivative Financial Instruments and Hedging Activities,” as amended by SFAS 137 and SFAS 138, and we recognize all derivatives on our balance sheet at fair value. Accordingly we recognized an initial transition adjustment of US\$ 12 million as a charge in our statement of income relative to net unrealized losses on contracts open as of December 31, 2000. Since January 1, 2001, all derivatives have been adjusted to fair market value at each balance sheet date and the gain or loss included in current earnings.

The asset (liability) balances at December 31, 2003 and 2002 and the movement in fair value of derivative financial instruments is as follows:

|   | <b>Gold</b>      | <b>Interest<br/>rates<br/>(LIBOR)</b> | <b>Currencies</b> | <b>Alumina</b>   | <b>Total</b>     |
|---|------------------|---------------------------------------|-------------------|------------------|------------------|
| Initial unrealized gains and (losses) at January 1, 2002 .....  | US\$ 7           | US\$ (36)                             | US\$ (4)          | US\$ —           | US\$ (33)        |
| Gains recognized upon consolidation of Alunorte .....           | —                | —                                     | —                 | 2                | 2                |
| Financial settlement .....                                      | (2)              | 21                                    | 3                 | 1                | 23               |
| Unrealized gains (losses) in the period .....                   | (22)             | (60)                                  | (1)               | —                | (83)             |
| Effect of exchange rate changes .....                           | 2                | 15                                    | 1                 | —                | 18               |
| <b>Unrealized gains and (losses) at December 31, 2002 .....</b> | <b>US\$ (15)</b> | <b>US\$ (60)</b>                      | <b>US\$ (1)</b>   | <b>US\$ 3</b>    | <b>US\$ (73)</b> |
| Financial settlement .....                                      | 8                | 30                                    | —                 | —                | 38               |
| Unrealized gains (losses) in the period .....                   | (24)             | (3)                                   | 6                 | (22)             | (43)             |
| Effect of exchange rate changes .....                           | (1)              | (13)                                  | —                 | 1                | (13)             |
| <b>Unrealized gains and (losses) at December 31, 2003 .....</b> | <b>US\$ (32)</b> | <b>US\$ (46)</b>                      | <b>US\$ 5</b>     | <b>US\$ (18)</b> | <b>US\$ (91)</b> |

## INTEREST RATE AND EXCHANGE RATE RISK

The table below sets forth our floating and fixed rate long-term debt, categorized by local and foreign currency, and as a percentage of our total long-term debt portfolio at the dates indicated, including loans from both related and unrelated parties, as reflected in our consolidated financial statements.

|                                    | At December 31,                           |       |       |      |       |       |
|------------------------------------|---|-------|-------|------|-------|-------|
|                                    | 2002                                      |       |       | 2003 |       |       |
|                                    | (in millions of US\$, except percentages) |       |       |      |       |       |
| Floating rate debt:                |   |       |       |      |       |       |
| <i>Real</i> -denominated .....     | US\$                                      | 126   | 5.3%  | US\$ | 208   | 7.5%  |
| Foreign currency denominated ..... |   | 1,293 | 54.8  |      | 1,427 | 51.6  |
| Fixed rate debt:                   |   |       |       |      |       |       |
| Foreign currency denominated ..... |   | 940   | 39.9  |      | 1,132 | 40.9  |
| Total                              | US\$                                      | 2,359 | 100.0 | US\$ | 2,7   | 100.0 |

The table below provides information about our debt obligations as of December 31, 2003, which are sensitive to changes in interest rates and exchange rates. The table presents the principal cash flows and related weighted-average interest rates of these obligations by expected maturity date. Weighted-average variable interest rates are based on the applicable reference rate (LIBOR or TJLP) at December 31, 2003. The debt obligations' actual cash flows are denominated in U.S. dollars or Brazilian *reais*, as indicated.

|                           | 2005                  | 2006     | 2007     | 2008     | to 2014  | Total     | Fair Value Cash Flow at December 31, 2003 | Fair Value Accounting at December 31, 2003 |
|---------------------------|-----------------------|----------|----------|----------|----------|-----------|---|--|
|                           | (in millions of US\$) |          |          |          |          |           |   |  |
| U.S. dollar-denominated:  |                       |          |          |          |          |           |   |  |
| Fixed rate                |                       |          |          |          |          |           |   |  |
| Bonds up to 7% .....      | US\$ —                | US\$ —   | US\$ —   | US\$ —   | US\$ —   | US\$ —    | US\$ 334                                  | US\$ 337                                   |
| Bonds over 7% .....       | —                     | —        | 300      | —        | 300      | 600       | 325                                       | 335  |
| Loans up to 7% .....      | 13                    | 39       | 34       | 33       | 153      | 272       | 272                                       | 272  |
| Loans over 7% .....       | 64                    | 42       | 43       | 38       | 73       | 260       | 260                                       | 260  |
|                           | 77                    | 81       | 377      | 71       | 526      | 1,132     | 1,191                                     | 1,204                                      |
| Floating rate             |                       |          |          |          |          |           |   |  |
| Loans up to 7% .....      | 364                   | 449      | 156      | 110      | 310      | 1,389     | 1,328                                     | 1,389                                      |
| Loans over 7% .....       | 10                    | 10       | 7        | 6        | 5        | 38        | 39  | 38   |
|                           | 374                   | 459      | 163      | 116      | 315      | 1,427     | 1,367                                     | 1,427                                      |
| Subtotal .....            | 451                   | 540      | 540      | 187      | 841      | 2,559     | 2,558                                     | 2,631                                      |
| <i>Real</i> -denominated: |                       |          |          |          |          |           |   |  |
| Floating rate             |                       |          |          |          |          |           |   |  |
| Loans up to 7% .....      | 3                     | 1        | —        | —        | 90       | 94        | 95  | 94   |
| Loans over 7% .....       | 26                    | 23       | 14       | 11       | 40       | 114       | 108                                       | 114  |
| Subtotal .....            | 29                    | 24       | 14       | 11       | 130      | 208       | 203                                       | 208  |
| Total .....               | US\$ 480              | US\$ 564 | US\$ 554 | US\$ 198 | US\$ 971 | US\$2,767 | US\$ 2,761                                | US\$ 2,839                                 |

### Interest Rate Risk

We are exposed to interest rate risk in our floating-rate debt. Our floating-rate debt consists principally of U.S. dollar borrowings related to trade finance and loans from commercial banks and multilateral organizations. In general, our foreign currency floating rate debt is principally subject to changes in the London Interbank Offered Rate, or LIBOR. Our floating rate debt denominated in *reais* is principally subject to changes in the TJLP, as fixed by the Central Bank of Brazil.

We enter into interest rate derivative transactions primarily to hedge against interest rate fluctuations on our LIBOR-based debt. We generally do not hedge our TJLP-based debt. Our interest rate derivatives portfolio generally consists of option trades which aim to cap our exposure to interest rate fluctuations. A cap is the maximum rate we will be required to pay on the notional amount of the debt. Conversely, a floor is the minimum rate we will be required to pay on the notional amount of the debt. Certain caps are subject to knock-out provisions which, if triggered, eliminate the protection provided by the cap.

The table below sets forth certain information with respect to our interest rate derivatives portfolio at December 31, 2002 and 2003:

|             | At December 31, 2002 |            |  | At December 31, 2003 |            |                   | Final maturity |
|-------------|----------------------|------------|--|----------------------|------------|-------------------|----------------|
|             | Notional Value       | Rate Range | Unrealized (loss)<br>(in millions of US\$, except rate ranges) | Notional Value       | Rate Range | Unrealized (loss) |                |
| Floor ..... | 500                  | 5.7-6.3%   | (13)   | 500                  | 5.7-6.0%   | (16)              | Nov/06         |
| Swap .....  | 475                  | 5.8-6.7%   | (47)   | 454                  | 5.8-6.7%   | (30)              | Oct/07         |
| Total ..... |                      |            | US\$ (60)  |                      |            | US\$ (46)         |                |

The unrealized loss in the amount of US\$ 60 million and US\$ 46 million represents the amount payable if all transactions had been settled on December 31, 2002 and 2003, respectively.

### Exchange Rate Risk

We are exposed to exchange rate risk associated with our foreign currency denominated debt. On the other hand, a substantial proportion of our revenues are denominated in, or automatically indexed to, the U.S. dollar, while the majority of our costs are expressed in *reais*. This provides a natural hedge against any devaluation of the Brazilian *real* against the U.S. dollar. When devaluation occurs, the immediate negative impact on foreign currency denominated debt is offset over time by the positive effect of devaluation on future cash flows. In light of this framework, we generally do not use derivative instruments to manage the currency exposure on our long-term dollar denominated debt. However, we do monitor market fluctuations and occasionally use derivatives to minimize the effects of the volatility of the exchange rates in the cash flow.

From time to time we enter into foreign exchange derivative swap transactions seeking to change the characteristics of our *real*-denominated cash investments to US dollar-indexed instruments. The extent of such transactions depends on our perception of market and currency risk, but is never speculative in nature. All such deals are marked-to-market at each balance sheet date and the effect included in financial income or expense. During the years ended December 31, 2003 and 2002 our use of such instruments was not significant.

As mentioned above, the main exposure to exchange rate risk we have is related to U.S. dollars. We have other exposures related to our indebtedness that are denominated in euros and in Japanese yen, and we use derivative instruments to protect ourselves against the risks associated with exchange rate movements in these foreign currencies against the U.S. dollars.

The table below sets forth certain information with respect to our exchange rate derivatives portfolio at December 31, 2002 and 2003. These derivatives are structured forwards that we have purchased, which will require us to purchase foreign currencies as specified below:



|                                   | At December 31, 2002 |       |                            |          | At December 31, 2003 |       |                            |        | Final<br>Maturity |
|-----------------------------------|----------------------|-------|----------------------------|----------|----------------------|-------|----------------------------|--------|-------------------|
|                                   | Notional<br>Value    |       | Unrealized<br>Loss         |          | Notional<br>Value    |       | Unrealized<br>Gain         |        |                   |
|                                   | Price Range          |       |                            |          | Price Range          |       |                            |        |                   |
| (in millions, except yen amounts) |                      |       |                            |          |                      |       |                            |        |                   |
| Yen purchased.....                | ¥                    | 3,543 | ¥ 83- 91<br>Per US\$       | US\$ —   | ¥                    | 3,385 | ¥ 79-83<br>Per US\$        | US\$ 3 | Apr/05            |
| Euro purchased.....               | €                    | 5     | US\$ 1.18-1.23<br>Per US\$ | (1)      | €                    | 23    | US\$ 1.22-1.23<br>Per US\$ | 2      | Dec/11            |
| Total .....                       |                      |       |                            | US\$ (1) |                      |       |                            | US\$ 5 |                   |

The unrealized losses in the amounts of US\$ 1 million and unrealized gains of US\$ 5 million represent the amounts payable if all transactions had been settled on December 31, 2002 and December 31, 2003, respectively.

### COMMODITY PRICE RISK

We are also exposed to various market risks relating to the volatility of world market prices for:

- iron ore and pellets, which represented 63.1% of our 2003 consolidated revenues;
- manganese ore and ferroalloys, which represented 6.3% of our 2003 consolidated revenues;
- aluminum-related products, which represented 15.4% of our 2003 consolidated revenues;
- gold, which represented 0.4% of our 2003 consolidated revenues, and which we expect to begin producing again in 2004 upon the commencement of commercial operations of our Sossego copper mine; and
- copper, which we expect to begin producing in 2004.

We do not enter into derivatives transactions to hedge our iron ore, manganese ore or ferroalloys exposure. See *Item 5. Operating and Financial Review and Prospects*.

To manage the risk associated with fluctuations in aluminum prices, our affiliates Albras and Alunorte engage in hedging transactions involving put and call options, as well as forward contracts. These derivative instruments allow Albras and Alunorte to establish minimum average profits for their future aluminum production in excess of their expected production costs and therefore ensure stable cash generation. However, they also have the effect of reducing potential gains from price increases in the spot market for aluminum.

The table below sets forth certain information with respect to Albras's derivatives portfolio at December 31, 2002 and 2003. We have a 51% voting capital interest and a 51% total capital interest in Albras.

|                        | At December 31, 2002                 |                               |   | At December 31, 2003                 |                               |   | Final maturity |
|------------------------|--------------------------------------|-------------------------------|---|--------------------------------------|-------------------------------|---|----------------|
|                        | Notional Value<br>(tons of aluminum) | Price Range<br>(US\$ per ton) | Unrealized gain (loss)<br>(in millions of US\$) | Notional Value<br>(tons of aluminum) | Price Range<br>(US\$ per ton) | Unrealized Gain (loss)<br>(in millions of US\$) |                |
| Puts purchased.....    | 46,500                               | US\$ 1,390-1,500              | US\$ 5.4  | 148,500                              | US\$ 1,390-1,450              | US\$ 1.9  | Jun/05         |
| Forwards sold.....     | 39,250                               | 1,400-1,600                   | 5.9   | 27,000                               | 1,400-1,600                   | (5.4)   | Dec/06         |
| Calls sold.....        | 59,500                               | 1,580-1,700                   | —   | 160,500                              | 1,570-1,630                   | (9.8)   | Jun/05         |
| Other instruments..... | 106,000                              |                               | (0.8)   | 246,000                              | 1,390-1,680                   | (6.9)   | Dec/08         |
| Total .....            |                                      |                               | US\$ 10.5                                       |                                      |                               | US\$ (20.2)                                     |                |

The table below sets forth certain information with respect to Alunorte's derivatives portfolio at December 31, 2002 and 2003. We have a 61.29% voting capital interest and a 57.0% total capital interest in Alunorte. We consolidate Alunorte's operations in our financial statements.

|                        | At December 31, 2002                 |                               |   | At December 31, 2003                 |                               |   |                |
|------------------------|--------------------------------------|-------------------------------|---|--------------------------------------|-------------------------------|---|----------------|
|                        | Notional Value<br>(tons of aluminum) | Price Range<br>(US\$ per ton) | Unrealized gain (loss)<br>(in millions of US\$) | Notional Value<br>(tons of aluminum) | Price Range<br>(US\$ per ton) | Unrealized Gain (loss)<br>(in millions of US\$) | Final Maturity |
| Puts purchased.....    | 27,500                               | US\$ 1,400-1,530              | US\$ 2.3  | 101,000                              | US\$ 1,390-1,450              | US\$ 0.7  | Jun/05         |
| Forwards sold.....     | 12,000                               | 1,400-1,578                   | 1.7   | —                                    | 1,540-1,580                   | —   | —              |
| Calls sold.....        | 27,250                               | 1,710-1,732                   | (0.3)   | 113,000                              | 1,380-1,690                   | (6.1)   | Jun/05         |
| Other instruments..... | 69,500                               |                               | (0.6)   | 240,000                              |                               | (12.6)  | Dec/08         |
| Total .....            |                                      |                               | US\$ 3.1  |                                      |                               | US\$ (18.0)                                     |                |

To manage the risk associated with fluctuations in gold prices, we enter into derivative instruments which allow us to establish a minimum profit level for future gold production or the content of gold associated with the production of copper. However, they may also have the effect of eliminating potential gains on certain price increases in the spot market for gold.

The table below sets forth certain information with respect to our gold derivatives portfolio at December 31, 2002 and 2003.

|                        | At December 31, 2002 |                               |   | At December 31, 2003 |                               |   |                |
|------------------------|----------------------|-------------------------------|---|----------------------|-------------------------------|---|----------------|
|                        | Quantity<br>(oz.)    | Price Range<br>(US\$ per oz.) | Unrealized gain (loss)<br>(in millions of US\$) | Quantity<br>(oz.)    | Price Range<br>(US\$ per oz.) | Unrealized gain (loss)<br>(in millions of US\$) | Final Maturity |
| Puts purchased .....   | 428,000              | US\$ 270-355                  | US\$ 3.1  | 393,000              | US\$ 270-385                  | US\$ 1.1  | Dec/08         |
| Calls sold.....        | 595,000              | 316-407                       | (17.8)  | 423,000              | 317-440                       | (31.5)  | Dec/08         |
| Other instruments..... | 20,000               | —                             | —   | 20,000               | —                             | (1.4)   | Nov/06         |
| Total .....            |                      |                               | US\$ (14.7)                                     |                      |                               | US\$ (31.8)                                     |                |

The unrealized loss in the amount of US\$ 15 million and US\$ 32 million represents the amount payable if all transactions had been settled on December 31, 2002 and 2003, respectively.

## CREDIT RISK

### Financial Institutions Risk & Exposure

CVRD has a strict policy regarding the financial risk we can assume with Financial Institutions.

On a 6-month basis, our portfolio is evaluated according to very specific criteria, including its financial strength, rated by international rating agencies. In addition, we also consider the range of financial products the institution is able to provide. The process is submitted to the management, which is responsible for approving and defining the final conditions.

With this procedure, we take a position of mitigating our financial risk and ensuring the quality of our credit exposure.

CVRD invests its cash holdings and engages into transactions with derivatives only with financial institutions that have at least an A credit rating.

### Commercial Credit Exposure

CVRD began implementing its commercial credit policy in 2003. The policy establishes a set of rules under which the Executive Board approves an Annual Commercial Exposure Limit, representing the maximum commercial credit exposure CVRD will risk. This exposure limit is applied to each business segment of CVRD. The policy outlines a procedure for measuring, granting and controlling commercial credit within CVRD which requires that each customer seeking commercial credit undergo an evaluation of its financial statements, company size, past payment performance and country risk.

In 2004, we expect to extend the commercial credit policy to all of CVRD's consolidated companies.

**Item 12. Description of Securities Other than Equity Securities**

Not applicable.

**PART II****Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

**Item 15. Controls and Procedures**

CVRD has carried out an evaluation under the supervision and with the participation of CVRD's management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of CVRD's disclosure controls and procedures as of the end of the period covered by this annual report. Vale Overseas carried out a similar evaluation that relied primarily on CVRD's evaluation of its controls. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon the evaluation described above, the Chief Executive Officer and Chief Financial Officer of CVRD and the Director and Principal Executive Officer and Director and Principal Financial Officer of Vale Overseas concluded that, as of the end of the period covered by this annual report, the disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed in the reports CVRD or Vale Overseas, as applicable, files and submits under the Exchange Act is recorded, processed, summarized and reported as and when required.

There has been no change in CVRD's or Vale Overseas' internal control over financial reporting during CVRD's and Vale Overseas fiscal year ended December 31, 2003 that has materially affected or is reasonably likely to materially affect CVRD's or Vale Overseas' internal control over financial reporting.

**Item 16A. Audit Committee Financial Expert**

CVRD's board of directors has determined that CVRD board members Arlindo Magno de Oliveira, Ricardo Carvalho Giambroni, Mário da Silveira Teixeira Júnior e Renato da Cruz Gomes are audit committee financial experts.

**Item 16B. Code of Ethics**

CVRD has adopted a code of ethics that applies to all board members, executive officers and employees, including the Chief Executive Officer and the Chief Financial Officer and Principal Accounting Officer of CVRD. CVRD's code of ethics is also applicable to Vale Overseas and applies to its directors. We have posted copies of these codes of ethics on our Internet website at the following address: <http://www.cvr.com.br>. Copies of our codes of ethics may be obtained without charge by writing to us at the address set forth on the front cover of this Form 20-F. Neither CVRD nor Vale Overseas has granted any implicit or explicit waivers from any provision of its code of ethics to the officers described above since adoption of the code.

**Item 16C. Principal Accountant Fees and Services****Principal Accountant Fees**

PricewaterhouseCoopers Auditores Independentes billed the following fees to us for professional services in 2002 and 2003.

|                          | Year ended December 31, |     |      |     |
|--------------------------|-------------------------|-----|------|-----|
|                          | 2002                    |     | 2003 |     |
|                          | (thousands of US\$)     |     |      |     |
| Audit Fees .....         | US\$                    | 316 | US\$ | 673 |
| Audit-Related Fees ..... |                         | 5   |      | --  |
| Tax Fees .....           |                         | --  |      | --  |
| All Other Fees .....     |                         | --  |      | --  |
| Total Fees .....         | US\$                    | 321 | US\$ | 673 |

“Audit Fees” are the aggregate fees billed by PricewaterhouseCoopers for the audit of our consolidated and annual financial statements, reviews of interim financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements. “Audit-Related Fees” are fees charged by PricewaterhouseCoopers for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under “Audit Fees.” In 2002, this category included fees for consultations regarding the Brazilian GAAP accounting treatment of certain investments in electrical energy consortia.

### **Audit Committee Pre-Approval Policies and Procedures**

Our board of directors currently serves as our audit committee for purposes of the Sarbanes-Oxley Act of 2002. Our board of directors requires management to obtain the board’s approval before engaging independent auditors to provide any audit or permitted non-audit services to us or our subsidiaries. Pursuant to this policy, our board of directors pre-approves all audit and non-audit services provided to CVRD and its subsidiaries by their respective independent auditors.

The board’s pre-approval process works as follows. Each year, each of the independent auditors of CVRD and its subsidiaries prepares a detailed list of services that it proposes to perform during the coming year. These proposed services are presented first to our advisory audit committee and then to the board of directors, which considers and approves the services. Management is not permitted to engage our auditors for any audit or non-audit service that is not on the list of services approved by the board of directors without first returning the board of directors for approval of such additional services.

## **PART III**

### **Item 17. Financial Statements**

The Registrant has responded to *Item 18* in lieu of responding to this Item.

### **Item 18. Financial Statements**

Reference is made to pages F-1 through F-47 and B-1 through B-21.

**Item 19. Exhibits**

| <u>Exhibit<br/>Number</u> |   |
|---------------------------|---|
| 1.1                       | Bylaws of Companhia Vale do Rio Doce (English translation)  |
| 1.2 (*)                   | Memorandum & Articles of Association of Vale Overseas Limited   |
| 1.3                       | Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated March 6, 2002.   |
| 1.4                       | Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated July 23, 2003.   |
| 1.5                       | Amendment to the Memorandum & Articles of Association of Vale Overseas Limited dated January 7, 2004  |
| 8                         | List of Subsidiaries  |
| 12.1                      | Certification of Chief Executive Officer of CVRD pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.                           |
| 12.2                      | Certification of Chief Financial Officer of CVRD pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934.                           |
| 12.3                      | Certification of Director and Principal Executive Officer of Vale Overseas pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934. |
| 12.4                      | Certification of Director and Principal Financial Officer of Vale Overseas pursuant to Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934. |
| 13.1                      | Certification of Chief Executive Officer and Chief Financial Officer of CVRD, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.                  |
| 13.2                      | Certification of Principal Executive Officer and Principal Financial Officer of Vale Overseas, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 14.1                      | Consent of PricewaterhouseCoopers (CVRD and Vale Overseas).   |
| 14.2                      | Consent of Trevisan (Albras).   |
| 14.3                      | Consent of Deloitte Touche Tohmatsu (Albras).   |
| 14.4                      | Consent of Trevisan (Alunorte).   |
| 14.5                      | Consent of Deloitte Touche Tohmatsu (Alunorte).   |
| 14.6                      | Consent of KPMG LLP (CSI).  |
| 14.7                      | Consent of Deloitte Touche Tohmatsu (Cenibra).  |
| 14.8                      | Consent of Deloitte Touche Tohmatsu (Docenave).   |
| 14.9                      | Consent of Deloitte Touche Tohmatsu (Hispanobras).  |
| 14.10                     | Consent of Deloitte Touche Tohmatsu (Itabasco).   |
| 14.11                     | Consent of Deloitte Touche Tohmatsu (Kobrasco).   |

- 14.12 Consent of Deloitte Touche Tohmatsu (MRN).
- 14.13 Consent of Deloitte Touche Tohmatsu (Nibrasco).
- 14.14 Consent of Deloitte Touche Tohmatsu (Valesul).
- 14.15 Consent of KPMG Auditores Independentes (Valesul).
- 14.16 Consent of Deloitte Touche Tohmatsu (RDM).
- 14.17 Consent of Deloitte Touche Tohmatsu (Urucum).
- 14.18 Consent of Golder Associates S.A.

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(\*) Incorporated by reference to the annual report on Form 20-F of CVRD and Vale Overseas Limited for the year ended December 31, 2002.

## SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

### COMPANHIA VALE DO RIO DOCE

By: /s/ Roger Agnelli  
Name: Roger Agnelli  
Title: Chief Executive Officer

By: /s/ Fabio de Oliveira Barbosa  
Name: Fabio de Oliveira Barbosa  
Title: Chief Financial Officer

### VALE OVERSEAS LIMITED

By: /s/ Fabio de Oliveira Barbosa  
Name: Fabio de Oliveira Barbosa  
Title: Director and Principal Executive Officer

By: /s/ Fernando Ramos Nóbrega  
Name: Fernando Ramos Nóbrega  
Title: Director and Principal Financial Officer

Date: June 10, 2004

**COMPANHIA VALE DO RIO DOCE**  
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## **REPORT OF INDEPENDENT ACCOUNTANTS**

### **To the Board of Directors and Stockholders of Companhia Vale do Rio Doce**

In our opinion, based upon our audits and the reports of other auditors, the accompanying consolidated balance sheets and the related consolidated statements of income, of cash flows and of changes in stockholders' equity, present fairly, in all material respects, the financial position of Companhia Vale do Rio Doce and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of certain affiliates, the investments in which total US\$ 376 million and US\$343 million at December 31, 2003 and 2002, respectively, and equity in earnings of US\$157 million, US\$60 million and US\$53 million for 2003, 2002 and 2001, respectively. Also, we did not audit the financial statements of certain majority-owned subsidiaries as at and for the years ended December 31, 2003, 2002 and 2001, which statements reflect total assets of US\$1,352 million and US\$969 million at December 31, 2003 and 2002, respectively, and total revenues of US\$839 million, US\$426 million and US\$407 million for 2003, 2002 and 2001, respectively. The financial statements of these affiliates and subsidiaries were audited by other auditors whose reports thereon have been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts for these affiliates and subsidiaries, is based solely on the reports of the other auditors. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits and the reports of other auditors provide a reasonable basis for the opinion expressed above.

As discussed in Note 4 to the financial statements, the Company changed its method of accounting for asset retirement obligations, as from January 1, 2003.

PricewaterhouseCoopers  
Auditores Independentes

Rio de Janeiro, Brazil  
February 20, 2004

**Consolidated Balance Sheets**  
**Expressed in millions of United States dollars**

|   | As of December 31, |              |
|---|--------------------|--------------|
|   | 2003               | 2002         |
| Assets  |                    |              |
| Current assets  |                    |              |
| Cash and cash equivalents.....  | 585                | 1,091        |
| Accounts receivable   |                    |              |
| Related parties.....  | 115                | 121          |
| Unrelated parties.....  | 703                | 539          |
| Loans and advances to related parties.....  | 56                 | 49           |
| Inventories.....  | 505                | 292          |
| Deferred income tax .....   | 91                 | 211          |
| Others.....   | 419                | 286          |
|   | <b>2,474</b>       | <b>2,589</b> |
| Property, plant and equipment, net.....   | <b>6,484</b>       | <b>3,297</b> |
| Investments in affiliated companies and joint ventures and other<br>investments, net of provision for losses on equity investments..... | <b>1,034</b>       | <b>732</b>   |
| Other assets  |                    |              |
| Goodwill on acquisition of subsidiaries.....  | 451                | 412          |
| Loans and advances  |                    |              |
| Related parties.....  | 40                 | 89           |
| Unrelated parties.....  | 68                 | 73           |
| Prepaid pension cost.....   | 82                 | 79           |
| Deferred income tax.....  | 234                | 358          |
| Judicial deposits.....  | 407                | 239          |
| Unrealized gain on derivative instruments.....  | 5                  | 3            |
| Others.....   | 155                | 84           |
|   | <b>1,442</b>       | <b>1,337</b> |
| <b>TOTAL.....</b>   | <b>11,434</b>      | <b>7,955</b> |

**Consolidated Balance Sheets**  
Expressed in millions of United States dollars  
(Except number of shares)

(Continued)

|   | As of December 31, |              |
|---|--------------------|--------------|
|   | 2003               | 2002         |
| Liabilities and stockholders' equity  |                    |              |
| Current liabilities   |                    |              |
| Suppliers.....  | 482                | 365          |
| Payroll and related charges.....  | 78                 | 76           |
| Interest attributed to stockholders.....  | 118                | 3            |
| Current portion of long-term debt - unrelated parties.....  | 1,009              | 717          |
| Short-term debt.....  | 129                | 184          |
| Loans from related parties.....   | 119                | 64           |
| Others.....   | 318                | 99           |
|   | <b>2,253</b>       | <b>1,508</b> |
| Long-term liabilities   |                    |              |
| Employees post-retirement benefits.....   | 198                | 141          |
| Long-term debt - unrelated parties.....   | 2,767              | 2,359        |
| Loans from related parties.....   | 4                  | 7            |
| Provisions for contingencies (Note 18).....   | 635                | 428          |
| Unrealized loss on derivative instruments.....  | 96                 | 76           |
| Others.....   | 268                | 122          |
|   | <b>3,968</b>       | <b>3,133</b> |
| Minority interests.....   | <b>329</b>         | <b>27</b>    |
| Stockholders' equity  |                    |              |
| Preferred class A stock - 600,000,000<br>no-par-value shares authorized and 138,575,913 issued..... | 1,055              | 904          |
| Common stock - 300,000,000 no-par-value<br>shares authorized and 249,983,143 issued.....            | 1,902              | 1,630        |
| Treasury stock - 4,183 (2002 - 4,481) preferred and 4,715,170 common shares.....                    | (88)               | (88)         |
| Additional paid-in capital.....   | 498                | 498          |
| Other cumulative comprehensive income.....  | (4,375)            | (5,175)      |
| Appropriated retained earnings.....   | 3,035              | 2,230        |
| Unappropriated retained earnings.....   | 2,857              | 3,288        |
|   | <b>4,884</b>       | <b>3,287</b> |
| <b>TOTAL.....</b>   | <b>11,434</b>      | <b>7,955</b> |

*See notes to consolidated financial statements.*

**Consolidated Statements of Income**  
**Expressed in millions of United States dollars**  
**(except number of shares and per-share amounts)**

|   | Year ended December 31, |                |                |
|---|-------------------------|----------------|----------------|
|   | 2003                    | 2002           | 2001           |
| Operating revenues, net of discounts, returns and allowances  |                         |                |                |
| Sales of ores and metals  |                         |                |                |
| Iron ore and pellets.....   | 3,500                   | 2,820          | 2,600          |
| Gold.....   | 21                      | 103            | 139            |
| Manganese and ferroalloys.....  | 349                     | 283            | 259            |
| Potash.....   | 94                      | 91             | 71             |
| Others.....   | 96                      | 45             | 41             |
|   | <b>4,060</b>            | <b>3,342</b>   | <b>3,110</b>   |
| Revenues from logistic services.....  | 604                     | 458            | 608            |
| Aluminum products.....  | 852                     | 462            | 284            |
| Other products and services.....  | 29                      | 20             | 75             |
|   | <b>5,545</b>            | <b>4,282</b>   | <b>4,077</b>   |
| Value-added tax.....  | (195)                   | (159)          | (142)          |
| Net operating revenues.....   | <b>5,350</b>            | <b>4,123</b>   | <b>3,935</b>   |
| Operating costs and expenses  |                         |                |                |
| Cost of ores and metals sold.....   | (2,066)                 | (1,579)        | (1,550)        |
| Cost of logistic services.....  | (370)                   | (252)          | (378)          |
| Cost of aluminum products.....  | (678)                   | (412)          | (269)          |
| Others.....   | (14)                    | (20)           | (75)           |
|   | <b>(3,128)</b>          | <b>(2,263)</b> | <b>(2,272)</b> |
| Selling, general and administrative expenses.....   | (265)                   | (224)          | (241)          |
| Research and development.....   | (82)                    | (50)           | (43)           |
| Employee profit sharing plan.....   | (32)                    | (38)           | (38)           |
| Others.....   | (199)                   | (119)          | (379)          |
|   | <b>(3,706)</b>          | <b>(2,694)</b> | <b>(2,973)</b> |
| Operating income.....   | <b>1,644</b>            | <b>1,429</b>   | <b>962</b>     |
| Non-operating income (expenses)   |                         |                |                |
| Financial income.....   | 102                     | 127            | 135            |
| Financial expenses.....   | (351)                   | (375)          | (335)          |
| Foreign exchange and monetary gains (losses), net.....  | 242                     | (580)          | (426)          |
| Gain on sale of investments.....  | 17                      | -              | 784            |
|   | <b>10</b>               | <b>(828)</b>   | <b>158</b>     |
| Income before income taxes, equity results and minority interests.....  | <b>1,654</b>            | <b>601</b>     | <b>1,120</b>   |
| Income taxes  |                         |                |                |
| Current.....  | (90)                    | (12)           | 46             |
| Deferred.....   | (207)                   | 161            | 172            |
|   | <b>(297)</b>            | <b>149</b>     | <b>218</b>     |
| Equity in results of affiliates and joint ventures and change in provision<br>for losses on equity investments..... | 306                     | (87)           | (53)           |
| Minority interests.....   | (105)                   | 17             | 2              |
| Income from continuing operations.....  | <b>1,558</b>            | <b>680</b>     | <b>1,287</b>   |
| Change in accounting practice for asset retirement obligations (Note 4).....  | (10)                    | -              | -              |
| Net income .....  | <b>1,548</b>            | <b>680</b>     | <b>1,287</b>   |
| Basic earnings per Preferred Class A Share.....   | <b>4.03</b>             | <b>1.77</b>    | <b>3.34</b>    |
| Basic earnings per Common Share.....  | <b>4.03</b>             | <b>1.77</b>    | <b>3.34</b>    |
| Weighted average number of shares outstanding (thousands of shares)   |                         |                |                |
| Common shares.....  | 245,268                 | 249,864        | 249,864        |
| Preferred Class A shares.....   | 138,571                 | 135,042        | 135,042        |

See notes to consolidated financial statements.

## Consolidated Statements of Cash Flows

Expressed in millions of United States dollars

|   | Year ended December 31, |              |              |
|---|-------------------------|--------------|--------------|
|   | 2003                    | 2002         | 2001         |
| Cash flows from operating activities:   |                         |              |              |
| Net income  | 1,548                   | 680          | 1,287        |
| Adjustments to reconcile net income to cash provided by operating activities:                               |                         |              |              |
| Depreciation, depletion and amortization  | 238                     | 214          | 212          |
| Dividends received  | 197                     | 91           | 132          |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments | (306)                   | 87           | 53           |
| Deferred income taxes   | 207                     | (161)        | (172)        |
| Current income taxes contingency  | -                       | -            | -            |
| Provisions for other contingencies  | 9                       | 53           | 79           |
| Impairment of property, plant and equipment   | 51                      | 62           | 79           |
| Gain on sale of investments   | (17)                    | -            | (784)        |
| Change in accounting practice for asset retirement obligations (Note 4)                                     | 10                      | -            | -            |
| Pension plan  | 12                      | 11           | 32           |
| Foreign exchange and monetary losses (gains)  | (382)                   | 1,031        | 460          |
| Net unrealized derivative losses (gains)  | 43                      | 83           | 38           |
| Minority interests  | 105                     | (17)         | (2)          |
| Others  | (15)                    | 46           | 131          |
| Decrease (increase) in assets:  |                         |              |              |
| Accounts receivable   | 37                      | (123)        | (49)         |
| Inventories   | (22)                    | (69)         | (40)         |
| Others  | (9)                     | (105)        | 17           |
| Increase (decrease) in liabilities:   |                         |              |              |
| Suppliers   | (18)                    | 102          | 21           |
| Payroll and related charges   | (25)                    | 23           | 42           |
| Others  | 94                      | 94           | (18)         |
| Net cash provided by operating activities   | <b>1,757</b>            | <b>2,102</b> | <b>1,518</b> |
| Cash flows from investing activities:   |                         |              |              |
| Loans and advances receivable   |                         |              |              |
| Related parties   |                         |              |              |
| Additions   | (157)                   | (101)        | (75)         |
| Repayments  | 71                      | 75           | 79           |
| Others  | 35                      | 20           | 7            |
| Guarantees and deposits   | (99)                    | (78)         | (85)         |
| Additions to investments  | (68)                    | (1)          | (338)        |
| Additions to property, plant and equipment  | (1,543)                 | (766)        | (595)        |
| Proceeds from disposal of investments   | 83                      | -            | 989          |
| Proceeds from disposals of property, plant and equipment  | 58                      | 7            | 3            |
| Cash used to acquire subsidiaries, net of cash acquired   | (380)                   | (45)         | (516)        |
| Net cash used in investing activities   | <b>(2,000)</b>          | <b>(889)</b> | <b>(531)</b> |
| Cash flows from financing activities:   |                         |              |              |
| Short-term debt, net issuances (repayments)   | (38)                    | (345)        | (28)         |
| Loans   |                         |              |              |
| Related parties   |                         |              |              |
| Additions   | 72                      | 54           | 145          |
| Repayments  | (26)                    | (75)         | (44)         |
| Issuances of long-term debt   |                         |              |              |
| Related parties   | 14                      | 17           | 66           |
| Others  | 1,025                   | 698          | 317          |
| Repayments of long-term debt  |                         |              |              |
| Related parties   | (4)                     | (15)         | (40)         |
| Others  | (766)                   | (330)        | (310)        |
| Interest attributed to stockholders   | (675)                   | (602)        | (1,066)      |
| Treasury stock  | -                       | -            | (27)         |
| Net cash used in financing activities   | <b>(398)</b>            | <b>(598)</b> | <b>(987)</b> |
| Increase (decrease) in cash and cash equivalents  | (641)                   | 615          | -            |
| Effect of exchange rate changes on cash and cash equivalents  | 135                     | (641)        | (94)         |
| Cash and cash equivalents, beginning of period  | 1,091                   | 1,117        | 1,211        |
| Cash and cash equivalents, end of period  | <b>585</b>              | <b>1,091</b> | <b>1,117</b> |
| Cash paid during the period for:  |                         |              |              |
| Interest on short-term debt   | (7)                     | (46)         | (45)         |
| Interest on long-term debt  | (178)                   | (157)        | (164)        |
| Income tax  | (55)                    | (12)         | (46)         |
| Non-cash transactions   |                         |              |              |
| Special pension plan contribution in shares of CSN  | -                       | -            | (249)        |
| Conversion of loans receivable to investments   | (187)                   | (55)         | (35)         |
| Income tax paid with credits  | (81)                    | -            | -            |

See notes to consolidated financial statements.

**Consolidated Statements of Changes in Stockholders' Equity**  
**Expressed in millions of United States dollars**  
**(except number of shares and per-share amounts)**

|  | Year ended December 31, |             |             |
|--|-------------------------|-------------|-------------|
|  | 2003                    | 2002        | 2001        |
| Preferred class A stock (including one special share)        |                         |             |             |
| Beginning of the period.....                                 | 904                     | 820         | 709         |
| Transfer from appropriated retained earnings.....            | 151                     | 84          | 111         |
| End of the period.....                                       | 1,055                   | 904         | 820         |
| Common stock   |                         |             |             |
| Beginning of the period.....                                 | 1,630                   | 1,479       | 1,279       |
| Transfer from appropriated retained earnings.....            | 272                     | 151         | 200         |
| End of the period.....                                       | 1,902                   | 1,630       | 1,479       |
| Treasury stock   |                         |             |             |
| Beginning of the period.....                                 | (88)                    | (88)        | (61)        |
| Acquisitions in 2001.....                                    | -                       | -           | (27)        |
| End of the period.....                                       | (88)                    | (88)        | (88)        |
| Additional paid-in capital                                   |                         |             |             |
| End of the period.....                                       | 498                     | 498         | 498         |
| Other cumulative comprehensive income                        |                         |             |             |
| Amounts not recognized as net periodic pension cost          |                         |             |             |
| Beginning of the period.....                                 | -                       | -           | (100)       |
| Excess of additional minimum liability.....                  | -                       | -           | 151         |
| Tax effect on above.....                                     | -                       | -           | (51)        |
| End of the period.....                                       | -                       | -           | -           |
| Cumulative translation adjustments                           |                         |             |             |
| Beginning of the period.....                                 | (5,185)                 | (3,475)     | (2,972)     |
| Change in the period.....                                    | 736                     | (1,710)     | (503)       |
| End of the period.....                                       | (4,449)                 | (5,185)     | (3,475)     |
| Unrealized gain on available-for-sale securities             |                         |             |             |
| Beginning of the period.....                                 | -                       | -           | 24          |
| Change in the period.....                                    | 74                      | -           | (24)        |
| End of the period.....                                       | 74                      | -           | -           |
| Adjustments relating to investments in affiliates            |                         |             |             |
| Beginning of the period.....                                 | 10                      | 10          | 8           |
| Change in the period.....                                    | -                       | -           | 2           |
| Transfer to retained earnings.....                           | (10)                    | -           | -           |
| End of the period.....                                       | -                       | 10          | 10          |
| Total other cumulative comprehensive income.....             | (4,375)                 | (5,175)     | (3,465)     |
| Appropriated retained earnings                               |                         |             |             |
| Beginning of the period.....                                 | 2,230                   | 3,212       | 3,537       |
| Transfer (to) from retained earnings.....                    | 1,228                   | (747)       | (14)        |
| Transfer to capital stock.....                               | (423)                   | (235)       | (311)       |
| End of the period.....                                       | 3,035                   | 2,230       | 3,212       |
| Retained earnings  |                         |             |             |
| Beginning of the period.....                                 | 3,288                   | 2,184       | 1,647       |
| Net income.....  | 1,548                   | 680         | 1,287       |
| Interest attributed to stockholders                          |                         |             |             |
| Preferred class A stock.....                                 | (275)                   | (117)       | (276)       |
| Common stock.....  | (486)                   | (206)       | (488)       |
| Appropriation (to) from reserves.....                        | (1,218)                 | 747         | 14          |
| End of the period.....                                       | 2,857                   | 3,288       | 2,184       |
| Total stockholders' equity.....                              | 4,884                   | 3,287       | 4,640       |
| Comprehensive income (loss) is comprised as follows:         |                         |             |             |
| Net income.....  | 1,548                   | 680         | 1,287       |
| Amounts not recognized as net periodic pension cost.....     | -                       | -           | 100         |
| Cumulative translation adjustments.....                      | 736                     | (1,710)     | (503)       |
| Unrealized gain (loss) on available-for-sale securities..... | 74                      | -           | (24)        |
| Adjustments relating to investments in affiliates.....       | -                       | -           | 2           |
| Total comprehensive income (loss).....                       | 2,358                   | (1,030)     | 862         |
| <b>Shares</b>  |                         |             |             |
| Preferred class A stock (including one special share).....   | 138,575,913             | 138,575,913 | 138,575,913 |
| Common stock.....  | 249,983,143             | 249,983,143 | 249,983,143 |
| Treasury stock (1)   |                         |             |             |
| Beginning of the period.....                                 | (4,719,651)             | (4,715,261) | (3,659,311) |
| Acquisitions.....  | -                       | (4,390)     | (1,055,950) |
| Sales.....   | 298                     | -           | -           |
| End of the period.....                                       | (4,719,353)             | (4,719,651) | (4,715,261) |
|  | 383,839,703             | 383,839,405 | 383,843,795 |
| <b>Interest attributed to stockholders (per share)</b>       |                         |             |             |
| Preferred class A stock (including one special share).....   | 1,98                    | 0,84        | 1,99        |
| Common stock.....  | 1,98                    | 0,84        | 1,99        |

(1) As of December 31, 2003, 4,715,170 common shares and 4,183 preferred shares were held in treasury in the amount of US\$ 88. The 4,715,170 common shares guarantee a loan of to our subsidiary Alunorte.

See notes to consolidated financial statements.

**Notes to the Consolidated Financial Statements**  
**Expressed in millions of United States dollars, unless otherwise stated**

**1 The Company and its operations**

Companhia Vale do Rio Doce (CVRD) is a limited liability company, duly organized and existing under the laws of the Federative Republic of Brazil. Our operations are carried out through CVRD and its subsidiary companies, joint ventures and affiliates, and mainly consist of mining, non-ferrous metal production and logistics, as well as energy, aluminum and steel activities. Further details of our operations and those of our joint ventures and affiliates are described in Note 13.

The main operating subsidiaries we consolidate are as follows:

| <b>Subsidiary</b>                                  | <b>% ownership</b> | <b>Head office location</b> | <b>Principal activity</b>           |
|--|--------------------|-----------------------------|-------------------------------------|
| Alumina do Norte do Brasil S.A. - Alunorte         | 57                 | Brazil                      | Aluminum                            |
| CADAM S.A. (2) (4)                                 | 37                 | Brazil                      | Kaolin                              |
| CELMAR S.A. - Indústria de Celulose e Papel (3)    | 100                | Brazil                      | Forestry                            |
| CVRD Overseas Ltd.                                 | 100                | Cayman Island               | Trading                             |
| Ferrovia Centro-Atlântica S.A. (4)                 | 100                | Brazil                      | Logistics                           |
| Ferteco Mineração S.A. - FERTECO (3)               | 100                | Brazil                      | Iron ore and Pellets                |
| Itabira Rio Doce Company Ltd. - ITACO              | 100                | Cayman Island               | Trading                             |
| Mineração Serra do Sossego S.A. (1) (5)            | 100                | Brazil                      | Copper                              |
| Minerações Brasileiras Reunidas S.A. - MBR (4) (7) | 56                 | Brazil                      | Iron ore                            |
| Navegação Vale do Rio Doce S.A. - DOCENAVE         | 100                | Brazil                      | Shipping                            |
| Pará Pigmentos S.A.                                | 82                 | Brazil                      | Kaolin                              |
| Rio Doce International Finance Ltd. - RDIF         | 100                | Bahamas                     | International finance               |
| Rio Doce Manganês Europe - RDME                    | 100                | France                      | Ferroalloys                         |
| Rio Doce Manganese Norway - RDMN                   | 100                | Norway                      | Ferroalloys                         |
| Salobo Metais S.A. (1)                             | 100                | Brazil                      | Copper                              |
| Rio Doce Manganês S.A. (6)                         | 100                | Brazil                      | Manganese and Ferroalloys           |
| Urucum Mineração S.A.                              | 100                | Brazil                      | Iron ore, Ferroalloys and Manganese |
| Vale do Rio Doce Alumínio S.A. - ALUVALE (5)       | 100                | Brazil                      | Aluminum                            |

(1) Development stage companies

(2) Through Caemi Mineração e Metalurgia S.A.

(3) Merged with CVRD on August 29, 2003

(4) Consolidated as from September 2003

(5) Merged with CVRD on December 30, 2003

(6) Formerly Sibra-Eletrosiderúrgica Brasileira S.A.

(7) Through Caemi Mineração e Metalurgia S.A. and Belém Administrações e Participações Ltda.

**2 Basis of consolidation**

All majority-owned subsidiaries where we have both share and management control are consolidated, with elimination of all significant intercompany accounts and transactions. Investments in unconsolidated affiliates and joint ventures are reported at cost plus our equity in undistributed earnings or losses. Included in this category are certain joint ventures in which we have majority ownership but, by force of shareholders' agreements, do not have effective management control. We provide for losses on equity investments with negative stockholders' equity where applicable (see Note 13).

We evaluate the carrying value of our listed investments relative to publicly available quoted market prices. If the quoted market price is below book value, and such decline is considered other than temporary, we write-down our equity investments to quoted market value.

We define joint ventures as businesses in which we and a small group of other partners each participate actively in the overall entity management, based on a shareholders agreement. We define affiliates as businesses in which we participate as a minority

stockholder but with significant influence over the operating and financial policies of the investee.

### **3 Summary of significant accounting policies**

In preparing the consolidated financial statements, we are required to use estimates to account for certain assets, liabilities, revenues and expenses. Our consolidated financial statements therefore include various estimates concerning the selection of useful lives of property, plant and equipment, provisions necessary for contingent liabilities, fair values assigned to assets and liabilities acquired in business combinations, income tax valuation allowances, employee post-retirement benefits and other similar evaluations; actual results may vary from our estimates.

#### **(a) Basis of presentation**

We have prepared the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("US GAAP"), which differ in certain respects from the accounting practices adopted in Brazil that we use in preparing our statutory financial statements.

The U.S. dollar amounts for the years presented have been remeasured (translated) from the Brazilian currency amounts in accordance with the criteria set forth in Statement of Financial Accounting Standards 52 – "Foreign Currency Translation" (SFAS 52).

Prior to July 1, 1997, Brazil was considered under SFAS 52 to have a highly inflationary economy and accordingly, up to June 30, 1997, we adopted the U.S. dollar as both our functional currency and reporting currency.

As from July 1, 1997, we concluded that the Brazilian economy had ceased to be highly inflationary and changed our functional currency from the reporting currency (U.S. dollars) to the local currency (Brazilian reais), for Brazilian operations and extensions thereof. Accordingly, we translated the U.S. dollar amounts of non-monetary assets and liabilities into reais at the current exchange rate, and those amounts became the new accounting bases for such assets and liabilities.

We have remeasured all assets and liabilities into U.S. dollars at the current exchange rate at each balance sheet date (R\$2.8892 and R\$3.5333 to US\$1.00 at December 31, 2003 and 2002, respectively), and all accounts in the statements of income (including amounts relative to local currency indexation and exchange variances on assets and liabilities denominated in foreign currency) at the average rates prevailing during the period. The translation gain or loss resulting from this remeasurement process is included in the cumulative translation adjustments account in stockholders' equity.

The net exchange transaction gain (loss) included in our statement of income was \$222, (\$515) and (\$410) in 2003, 2002 and 2001, respectively, included within the line "Foreign exchange and monetary losses, net".

#### **(b) Business combinations**

We adopt the procedures determined by SFAS 141 – "Business Combinations" to recognize acquisitions of interests in other companies. The method of accounting used in our business combination transactions is the "purchase method", which requires that acquirers reasonably determine the fair value of the identifiable assets and liabilities of acquired companies, individually, in order to determine the goodwill paid in the purchase to be recognized as an intangible asset. On the acquisition of assets, which include the rights to mine reserves of natural resources, the establishment of values for these assets includes the placing of fair values on purchased reserves, which are classified in the balance sheet as property, plant and equipment.

Goodwill was amortized in a systematic manner over the periods estimated to be benefited through December 31, 2001. As required by SFAS 142 - "Goodwill and Other Intangible Assets" from January 1, 2002 goodwill resulting from the acquisitions is not amortized, but is tested for impairment at least annually and reduced to fair value to the extent any such



impairment is identified.

**(c) Inventories**

Inventories are stated at the average cost of purchase or production, lower than replacement or realizable values. We record allowances for slow moving or obsolete inventories when considered appropriate, reflecting our periodic assessment of recoverability. A write-down of inventory utilizing the allowance establishes a new cost basis for the related inventory.

Finished goods inventories include all related materials, labor and direct production expenditures, and exclude general and administrative expenses.

**(d) Property, plant and equipment**

Property, plant and equipment are recorded at cost, including interest cost incurred during the construction of major new facilities. We compute depreciation on the straight-line basis at annual rates which take into consideration the useful lives of the items, such as: from 2% to 20% for the railroads, 5% for ships, 3% for buildings, from 2% to 5% for installations and from 5% to 20% for mining and other equipment. Expenditures for maintenance and repairs are charged to operating costs and expenses as incurred.

We capitalize the costs of developing major new ore bodies or expanding the capacity of operating mines and amortize these to operations on the unit-of-production method based on the total probable and proven quantity of ore to be recovered. Exploration costs are expensed until economic viability of mining activities is established; subsequently such costs are capitalized together with further exploration costs. We capitalize mine development costs as from the time we actually begin such development.

**(e) Available-for-sale equity securities**

Equity securities classified as “available-for-sale” are recorded in accordance with SFAS 115 “Accounting for Certain Investments in Debt and Equity Securities”. Accordingly, we exclude unrealized holding gains and losses, net of taxes, if applicable, from income and recognize them as a separate component of stockholders’ equity until realized.

**(f) Revenues and expenses**

Revenues are recognized when title has transferred to the customer or services are rendered. Revenue from exported products is recognized when such products are loaded on board the ship. Revenue from products sold in the domestic market is recognized when delivery is made to the customer. Revenue from transportation services, other than shipping operations, is recognized when the service order has been fulfilled. Shipping operations are recorded on the completed voyage basis and net revenue, costs and expenses of voyages not completed at period-end are deferred. Anticipated losses on voyages are provided when probable and can be reasonably estimated. Expenses and costs are recognized on the accrual basis.

**(g) Environmental and site reclamation and restoration costs**

Expenditures relating to ongoing compliance with environmental regulations are charged against earnings or capitalized as appropriate. These ongoing programs are designed to minimize the environmental impact of our activities. With respect to our major iron ore mine at Carajás, which has extensive remaining reserves, liabilities for final site reclamation and restoration costs will be recorded when the respective reclamation and restoration strategies can be reasonably determined and the related costs can be reasonably estimated.

**(h) Compensated absences**

We fully accrue the employees compensation liability for vacations vested during the year.

**(i) Income taxes**

In accordance with SFAS 109 - "Accounting for Income Taxes", the deferred tax effects of tax loss carryforwards and temporary differences have been recognized in the consolidated financial statements. A valuation allowance is made when we believe that it is more likely than not that tax assets will not be fully recoverable in the future.

**(j) Statement of cash flows**

Cash flows relating to overnight financing and investment are reported net. Short-term investments that have a ready market and maturity to us, when purchased, of 90 days or less are considered cash equivalents.

**(k) Earnings per share**

Earnings per share are computed by dividing net income by the weighted average number of common and preferred shares outstanding during the period.

**(l) Interest attributed to stockholders**

As from January 1, 1996 Brazilian corporations are permitted to attribute interest on stockholders' equity. The calculation is based on the stockholders' equity amounts as stated in the statutory accounting records and the interest rate applied may not exceed the long-term interest rate (TJLP) determined by the Brazilian Central Bank. Also, such interest may not exceed 50% of net income for the year nor 50% of retained earnings plus revenue reserves.

The amount of interest attributed to stockholders is deductible for income tax purposes. Accordingly, the benefit to us, as opposed to making a dividend payment, is a reduction in our income tax charge equivalent to the statutory tax rate applied to such amount. Income tax is withheld from the stockholders relative to interest at the rate of 15%.

Under Brazilian law, interest attributable to stockholders is considered as part of the annual minimum dividend (See Note 16). Accordingly such distributions are treated as dividends for accounting purposes.

We have opted to pay such tax-deductible interest to our stockholders and have therefore accrued the amounts due as of December 31, 2003, 2002 and 2001, with a direct charge to stockholders' equity.

**(m) Derivatives and hedging activities**

As of January 1, 2001 we adopted SFAS 133 - "Accounting for Derivative Financial Instruments and Hedging Activities", as amended by SFAS 137, SFAS 138 and SFAS 149. Those standards require that we recognize all derivative financial instruments as either assets or liabilities on our balance sheet and measure such instruments at fair value. Changes in the fair value of derivatives are recorded in each period in current earnings or in other comprehensive income, in the latter case depending on whether a transaction is designated as an effective hedge.

The transition adjustment relating to the fair value of derivatives existing as of December 31, 2000 is recorded as a charge of \$8 in our statement of income for the year ended December 31, 2001. In view of the immateriality of this effect of a change in accounting principle the corresponding amount was included with other non-operating expenses. Certain of our affiliated companies and joint ventures also recorded similar charges, of which our portion of \$4 is included in the caption "Equity in results of affiliates and joint ventures" in the statement of income.

Further information about our derivatives and hedging activities is included in Note 22.

**(n) Comprehensive income**

We have disclosed comprehensive income as part of the Statement of Changes in Stockholders' Equity, in compliance with SFAS 130 – "Reporting Comprehensive Income".

**(o) Reclassification**

Certain minor reclassifications have been made to the financial statements for 2002 and 2001 to make them comparable with the 2003 presentation.

**4 Change in accounting practice**

In June 2001, the FASB issued SFAS 143 - "Accounting for Asset Retirement Obligations". We adopted SFAS 143 as from January 1, 2003, and as a consequence an additional \$26 for asset retirement obligations was recorded as "Others - long-term liabilities", a net increase of \$11 in mine development costs was registered within "Property, plant and equipment" and a resulting charge of \$10 was registered as "Change in Accounting Practice for Asset Retirement Obligations" on the Statement of Income, net of income tax (\$15 gross of deferred income tax). Over time the liabilities will be accreted for the change in their present value and initial capitalized costs will be amortized over the useful lives of the related assets.

**5 Recently-issued accounting pronouncements**

In December 2003, the FASB issued FIN 46R – "Consolidation of Variable Interest Entities, (revised December 2003)". The primary objectives of FIN 46R are to provide guidance on the identification of entities for which control is achieved through means other than through voting rights (variable interest entities or VIEs) and how to determine when and which business enterprise should consolidate the VIE (the primary beneficiary). This new model for consolidation applies to an entity in which either (1) the equity investors (if any) do not have a controlling financial interest or (2) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. In addition, FIN 46R requires that both the primary beneficiary and all other enterprises with a significant variable interest in a VIE make additional disclosures regarding the nature, purpose, size and activities of the VIE and the enterprise's maximum exposure to loss as a result of its involvement with the VIE.

The implementation date of FIN 46R is the first period ending after December 15, 2003 for Special Purpose Entities (SPEs) and as from January 1 2004 for previously existing variable interest entities which are not SPEs. FIN 46R may be applied prospectively with a cumulative adjustment as of the date on which it is first applied or by restating previously issued financing statements for one or more years with a cumulative-effect adjustment as of the beginning of the first year restated. It is possible that we will consolidate or disclose information in relation to certain joint ventures and equity investments.

With respect to SPEs the adoption of FIN 46R did not result in consolidation of any additional entities at December 31, 2003 and it is reasonably possible that Albras – Alumínio Brasileiro S.A., an aluminum producer with total assets of \$ 649 and revenues of \$ 594 for the year ended December 31, 2003, will be consolidated in 2004. CVRD's maximum exposure to loss as a result of its guarantees of Albras' debt in the amount of \$ 271, at December 31, 2003.

We are evaluating the impact of implementing FIN 46R as from January 1, 2004 with respect to consolidating variable interest entities which are not SPEs.

In May 2003 FASB issued SFAS No. 150 – "Accounting For Certain Financial Instruments with Characteristics of both Liabilities and Equity", which establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both

liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances). The FASB decided to make this statement effective shortly after issuance for contracts created or modified after it is issued and for existing contracts at the beginning of the first interim period beginning after June 15, 2003. We do not expect SFAS 150 to have a material impact on our financial statements.

Emerging Issue Task Force No. 01-08 (EITF 01-08), *Determining Whether an Arrangement is a Lease*, provides guidance in determining whether an arrangement should be considered a lease subject to the requirements of FASB Statement No. 13 (FAS 13), *Accounting for Leases*. The rule defines, among others, that an arrangement conveys the right to use the property, plant, and equipment (PP&E) if the purchaser (lessee) has (1) the ability to operate the PP&E, (2) control physical access to the PP&E, or (3) it is remote that one or more other parties will take more than a minor amount of the output and the pricing for the output is not fixed per unit or based on current market prices at the date of delivery.

The consensus is to be applied to arrangements agreed or committed to, modified, or acquired in business combinations initiated after the beginning of an entity's next reporting period beginning after May 28, 2003. We have not entered into significant arrangements since this date.

## **6 Our privatization**

In May 1997, we were privatized by the Brazilian Government, which transferred voting control to Valepar S.A. ("Valepar"). The Brazilian Government has retained certain rights with respect to our future decisions and those of Valepar and has also caused us to enter into agreements which may affect our activities and results of operations in the future. These rights and agreements are:

- . Preferred Special Share. The Brazilian Government holds a preferred special share of CVRD which confers upon it permanent veto rights over changes in our (i) name, (ii) headquarters location, (iii) corporate purpose with respect to mineral exploration, (iv) continued operation of our integrated iron ore mining systems and (v) certain other matters.
- . Preferred Class A Share of Valepar. The Brazilian Government held a preferred class A share of Vale par which confers upon it approval rights for a period of five years in respect of (i) concentration of ownership of Vale par by particular types of investors in excess of prescribed limitations and (ii) changes in the Valepar holding company structure relating to ownership of our common shares. This share was cancelled on April 28, 2003.
- . Shareholder revenue interests. On July 7, 1997, we issued to shareholders of record on April 18, 1997 (including the Brazilian Government) revenue interests providing holders thereof with the right to receive semi-annual payments based on a percentage of our net revenues above threshold production volumes from identified mining resources. These instruments are not secured by the corresponding mineral reserves and deposits.

In addition to the preferred special share mentioned above, the National Treasury and the Banco Nacional de Desenvolvimento Econômico e Social – BNDES, the Government – owned development bank, together held 32% of our common shares and 4% of our preferred shares, which in aggregate represented 22% of our total capital at December 31, 2001. These common shares were sold through a public offering in Brazil and abroad which was completed on March 27, 2002.

## **7 Major acquisitions and disposals during the years presented**

We made the following acquisitions during the periods presented. Pro forma information with respect to our acquisitions of the control of Alunorte in June 2002 and Caemi in September 2003 is shown in items (b) and (c) below:

- (a) On April 27, 2001 we acquired 100% of Ferteco Mineração S.A. - FERTECO, a non-public company whose main activity is production and commercialization of iron ore and pellets, for \$523 in cash.

The assets and liabilities acquired and corresponding goodwill were as follows:

|                                |            |
|--------------------------------|------------|
| Fair value of assets.....      | 401        |
| Fair value of liabilities..... | (251)      |
| Net assets at fair value.....  | 150        |
| Purchase price.....            | 523        |
| Goodwill.....                  | <u>373</u> |

For FERTECO inventories were valued at \$57, property, plant and equipment were valued at \$178, and the deferred tax liability was \$24.

- (b) In December 2001, acting through our wholly-owned foreign subsidiary Itabira Rio Doce Company Ltd. - ITACO, we acquired 659,375,000 common shares of Caemi Mineração e Metalurgia S.A. (Caemi), corresponding to 16.82% of its total capital and 50% of its voting capital from Cayman Iron Ore Investment Co., Ltd., a wholly-owned subsidiary of Mitsui & Co., Ltd. (MITSUI) for US\$ 279. Caemi is a Brazilian company headquartered in Rio de Janeiro, which operates in the iron ore, kaolin, refractory bauxite and railroad sectors and was accounted for as an equity investee up to September 2, 2003 (see below).

This acquisition was approved by the European Commission subject to the commitment for Caemi to sell its equity investment in Quebec Cartier Mining Company (QCM), a Canadian producer of iron ore and pellets. On December 31, 2003 Caemi sold its holding of QCM's common shares to the Quebec Provincial Government for the symbolic amount of 100 Canadian dollars and converted loans to QCM of 20 million Canadian dollars into preferred stock with no voting rights (other than on matters required by law). Caemi will continue to guarantee certain financings of QCM until 2007 and has undertaken to provide further financial support to QCM, if necessary, in the form of subordinated loans up to 2010, limited to 34.5 million Canadian dollars (equivalent to \$27 at December 31, 2003). The fair value of this commitment has been fully provided.

CVRD and Mitsui, each of which held 50% of Caemi's common shares, entered into a shareholder agreement requiring both shareholders to approve all major decisions affecting Caemi.

The estimated net assets and corresponding goodwill were as follows:

|  | <u>December 31, 2001</u> |
|--|--------------------------|
| Estimated fair value of assets.....              | 1,127                    |
| Estimated fair value of liabilities.....         | (734)                    |
| Net assets at fair value.....                    | <u>393</u>               |
| Interest in total capital acquired.....          | 16.82%                   |
| Estimated fair value of net assets acquired..... | 66                       |
| Purchase price.....                              | 279                      |
| Goodwill.....                                    | <u>213</u>               |

On September 2, 2003 we acquired a further 43.37% of the capital of Caemi for \$426, increasing our participation to 60.23%. Caemi has been consolidated as from this date.

The acquisition cost of the 43.37% of Caemi, net of cash acquired, was as follows:

|  | <b>September 2, 2003</b> |
|--|--------------------------|
| Estimated fair value of assets.....                  | 1,699                    |
| Estimated fair value of liabilities.....             | (716)                    |
| Net assets at fair value.....                        | <b>983</b>               |
| Interest in total capital acquired.....              | 43.37%                   |
| Estimated fair value of net assets acquired.....     | 426                      |
| Purchase price.....                                  | 426                      |
| Less cash acquired.....                              | (46)                     |
| Acquisition cost of Caemi, net of cash acquired..... | <b>380</b>               |

### Caemi Pro forma

The unaudited condensed pro forma income statement below shows the impact of the acquisition of Caemi on the consolidated statements of income as if the current 60.23% participation in Caemi had been acquired on January 1, 2002 (instead of the 16.86% equity investment previously held, being 16.82% initially acquired and 0.04% purchased subsequently).

|  | <b>2003</b>              |                                  |                  | <b>2002</b>              |                  |                  |
|--|--------------------------|----------------------------------|------------------|--------------------------|------------------|------------------|
|  | <b>CVRD Consolidated</b> | <b>Pre-acquisition CAEMI (1)</b> | <b>Pro Forma</b> | <b>CVRD Consolidated</b> | <b>CAEMI (2)</b> | <b>Pro Forma</b> |
|  |                          |                                  | (unaudited)      |                          |                  | (unaudited)      |
| Net operating revenues.....  | 5,350                    | 424                              | 5,774            | 4,123                    | 572              | 4,695            |
| Operating costs and expenses.....  | (3,706)                  | (343)                            | (4,049)          | (2,694)                  | (545)            | (3,239)          |
| Operating income (loss).....   | 1,644                    | 81                               | 1,725            | 1,429                    | 27               | 1,456            |
| Non-operating income (expenses).....   | 10                       | 16                               | 26               | (828)                    | (101)            | (929)            |
| Income before income taxes, equity results and minority interests.....   | 1,654                    | 97                               | 1,751            | 601                      | (74)             | 527              |
| Income taxes.....  | (297)                    | (41)                             | (338)            | 149                      | 12               | 161              |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments..... | 306                      | (20)                             | 286              | (87)                     | (2)(3)           | (89)             |
| Minority interests.....  | (105)                    | 18                               | (87)             | 17                       | 64               | 81               |
| Income from continuing operations.....   | 1,558                    | 54                               | 1,612            | 680                      | -                | 680              |
| Change in accounting practice for asset retirement obligations.....  | (10)                     | -                                | (10)             | -                        | -                | -                |
| <b>Net income.....</b>   | <b>1,548</b>             | <b>54</b>                        | <b>1,602</b>     | <b>680</b>               | <b>-</b>         | <b>680</b>       |

(1) Period from January to August, 2003 (Consolidated as from September 2003).

(2) Period from January to December, 2002, net of consolidation adjustments.

(3) Includes elimination of Caemi equity investment write-down based on quoted market price - \$86.

- (c) On June 27, 2002 we acquired a further 12.62% of the capital of ALUNORTE for \$42, increasing our participation to 57.03% (represented by 62.09% of total common stock and 19.05% of total preferred stock). ALUNORTE has been consolidated as from this date.

Unaudited pro forma information with respect to the effect on our consolidated statements of income, reflecting the consolidation of ALUNORTE as if control has been acquired as at January 1, 2001 is as follows:

|   | 2002                 |                                 |                          | 2001                 |            |                          |
|---|----------------------|---------------------------------|--------------------------|----------------------|------------|--------------------------|
|   | CVRD<br>Consolidated | Pre-<br>acquisition<br>ALUNORTE | Pro Forma<br>(unaudited) | CVRD<br>Consolidated | ALUNORTE   | Pro Forma<br>(unaudited) |
| Net operating revenues.....   | 4,123                | 138                             | 4,261                    | 3,935                | 294        | 4,229                    |
| Operating costs and expenses.....   | (2,694)              | (151)                           | (2,845)                  | (2,973)              | (219)      | (3,192)                  |
| Operating income.....   | 1,429                | (13)                            | 1,416                    | 962                  | 75         | 1,037                    |
| Non-operating income (expenses).....                                      | (828)                | (38)                            | (866)                    | 158                  | (83)       | 75                       |
| Income before income taxes, equity results<br>and minority interests..... | 601                  | (51)                            | 550                      | 1,120                | (8)        | 1,112                    |
| Income taxes.....   | 149                  | -                               | 149                      | 218                  | (5)        | 213                      |
| Equity in results of affiliates and joint ventures.....                   | (28)                 | 23                              | (5)                      | (49)                 | 7          | (42)                     |
| Change in provision for losses on equity investments.....                 | (59)                 | -                               | (59)                     | (4)                  | -          | (4)                      |
| Minority interests.....   | 17                   | 28                              | 45                       | 2                    | -          | 2                        |
| <b>Net income.....</b>  | <b>680</b>           | <b>-</b>                        | <b>680</b>               | <b>1,287</b>         | <b>(6)</b> | <b>1,281</b>             |

- (d) On March 9, 2001 we transferred our 10.33% interest in Companhia Siderúrgica Nacional - CSN to VALIA, as a special pension plan contribution, for \$249 (fair market value determined based on the weighted average price of the last thirty trading sessions at the São Paulo stock exchange in the period ended on March 9, 2001). This transfer resulted in a gain of \$107. We have provided VALIA with a guarantee that we will make additional contributions to the pension plan if the market value of the CSN shares falls below threshold levels prior to the sale thereof by VALIA. At December 31, 2003 we have provided \$1 in respect of this commitment.
- (e) On April 27, 2001 we concluded the sale of our 32.00% interest in Bahia Sul Celulose S.A. - BSC for \$318, received in cash on May 7, 2001. This operation resulted in a gain of \$170.
- (f) On June 6, 2001 we concluded the sale of our 51.48% interest in Celulose Nipo-Brasileira S.A. - CENIBRA for \$671, received in cash on September 14, 2001. This operation resulted in a gain of \$507.
- (g) On October 10, 2003, the subsidiary Companhia Paulista de Ferro Ligas (CPFL) finalized the sale of its shares in Fertilizantes Fosfatados S.A. (Fosfértil) to Bunge Fertilizantes S.A. for \$84. The profit on the operation was \$61.
- This transaction is in line with CVRD's focus on mining and logistics and its strategy to sell equity participations which had assumed the nature of portfolio investments.
- (h) On November 7, 2003 we sold our investment in Companhia Ferroviária do Nordeste (CFN) to CSN for a symbolic amount, recording a loss on this transaction of \$44.

## 8 Income taxes

Income taxes in Brazil comprise federal income tax and social contribution, which is an additional federal tax. The statutory composite enacted tax rate applicable in the periods presented is 34% represented by a 25% federal income tax rate plus a 9% social contribution rate.



The amount reported as income tax expense in our consolidated financial statements is reconciled to the statutory rates as follows:

|  | Year ended December 31, |       |       |
|--|-------------------------|-------|-------|
|  | 2003                    | 2002  | 2001  |
| Income before income taxes, equity results and minority interests.....                       | 1,654                   | 601   | 1,120 |
| Federal income tax and social contribution expense at statutory enacted rates.....           | (562)                   | (204) | (381) |
| Adjustments to derive effective tax rate:  |                         |       |       |
| Tax benefit on interest attributed to stockholders.....                                      | 271                     | 99    | 260   |
| Exempt foreign income (expenses).....  | (59)                    | 196   | 226   |
| Difference on tax basis of equity investees.....   | (56)                    | 20    | 58    |
| Tax effect related to provision for losses and write-downs .....                             | -                       | 29    | 59    |
| Tax incentives.....  | 60                      | 4     | 26    |
| Valuation allowance reversal (provision) .....   | 53                      | (12)  | (44)  |
| Other non-taxable gains (losses).....  | (4)                     | 17    | 14    |
| Federal income tax and social contribution expense in consolidated statements of income..... | (297)                   | 149   | 218   |

We have certain tax incentives relative to our iron ore and manganese operations in Carajás and relative to alumina in Barcarena. The incentives relative to iron ore and manganese comprise full income tax exemption on defined production levels up to 2005 and partial exemption up to 2013. Both incentives relative to alumina expire in 2010. An amount equal to the tax saving must be appropriated to a reserve account within stockholders' equity and may not be distributed in the form of cash dividends.

The major components of the deferred tax accounts in the balance sheet are as follows:

|  | As of December 31 |              |
|--|-------------------|--------------|
|  | 2003              | 2002         |
| <b>Net current deferred tax assets</b>   |                   |              |
| Accrued expenses deductible only when disbursed.....                                 | 91                | 211          |
|  | <b>91</b>         | <b>211</b>   |
| <b>Long-term deferred tax assets and liabilities</b>                                 |                   |              |
| <b>Assets</b>  |                   |              |
| Deferred tax relative to temporary differences.....                                  | 3                 | 5            |
| Tax deductible goodwill in business combinations.....                                | 79                | 66           |
| Related to provision for losses and write-downs of investments.....                  | 149               | 158          |
| Additional retirement benefits provision, net of unrecognized pension obligation.... | 73                | 47           |
| Tax loss carryforwards.....  | 132               | 187          |
| Other temporary differences.....   | 206               | 211          |
|  | <b>642</b>        | <b>674</b>   |
| <b>Liabilities</b>   |                   |              |
| Inflationary income.....   | (26)              | (21)         |
| Relative to investments acquired.....  | (202)             | -            |
| Prepaid retirement benefit.....  | (28)              | (27)         |
| Fair value adjustments in business combinations.....                                 | (40)              | (38)         |
|  | <b>(296)</b>      | <b>(86)</b>  |
| <b>Valuation allowance</b>   |                   |              |
| Beginning balance.....   | (230)             | (213)        |
| Translation adjustments.....   | (37)              | 73           |
| Business acquisition, sales and others.....  | 102               | (78)         |
| Net change in allowance.....   | 53                | (12)         |
| Ending balance.....  | <b>(112)</b>      | <b>(230)</b> |
| Net long-term deferred tax assets.....   | <b>234</b>        | <b>358</b>   |

## 9 Cash and cash equivalents

|  | As of December 31 |              |
|--|-------------------|--------------|
|  | 2003              | 2002         |
| Cash.....                              | 88                | 51           |
| Deposits in local currency.....        | 267               | 220          |
| Deposits in United States dollars..... | 230               | 820          |
|  | <b>585</b>        | <b>1,091</b> |

## 10 Accounts receivable

|  | As of December 31 |            |
|--|-------------------|------------|
|  | 2003              | 2002       |
| Customers  |                   |            |
| Domestic.....  | 195               | 189        |
| Export, all denominated in<br>United States dollars..... | 665               | 503        |
|  | <b>860</b>        | <b>692</b> |
| Allowance for doubtful accounts.....                     | (30)              | (26)       |
| Allowance for ore weight credits.....                    | (12)              | (6)        |
| Total.....   | <b>818</b>        | <b>660</b> |

Accounts receivable from customers in the steel industry amount to 27.5% and 18.4% of domestic receivables (export receivables – 88.1% and 95.1%) at December 31, 2003 and 2002, respectively. No single customer accounted for more than 10% of total revenues in any of the years presented.

## 11 Inventories

|   | As of December 31 |            |
|---|-------------------|------------|
|   | 2003              | 2002       |
| Finished products                         |                   |            |
| Iron ore and pellets.....                 | 146               | 86         |
| Manganese and ferroalloys .....           | 78                | 51         |
| Alumina.....                              | 20                | 15         |
| Kaolin.....                               | 16                | 6          |
| Others.....                               | 8                 | 6          |
| Spare parts and maintenance supplies..... | 237               | 128        |
|   | <b>505</b>        | <b>292</b> |

## 12 Property, plant and equipment

### a) Per business area:

|                               | As of December 31, 2003 |                          |              | As of December 31, 2002 |                          |              |
|-------------------------------|-------------------------|--------------------------|--------------|-------------------------|--------------------------|--------------|
|                               | Cost                    | Accumulated depreciation | Net          | Cost                    | Accumulated depreciation | Net          |
| <b>Ferrous</b>                |                         |                          |              |                         |                          |              |
| Ferrous - Southern System     |                         |                          |              |                         |                          |              |
| Mining.....                   | 2,196                   | 812                      | 1,384        | 728                     | 318                      | 410          |
| Railroads.....                | 866                     | 389                      | 477          | 646                     | 308                      | 338          |
| Marine terminals.....         | 183                     | 87                       | 96           | 99                      | 60                       | 39           |
|                               | <b>3,245</b>            | <b>1,288</b>             | <b>1,957</b> | <b>1,473</b>            | <b>686</b>               | <b>787</b>   |
| Ferrous - Northern System     |                         |                          |              |                         |                          |              |
| Mining.....                   | 676                     | 277                      | 399          | 483                     | 208                      | 275          |
| Railroads.....                | 924                     | 376                      | 548          | 727                     | 292                      | 435          |
| Marine terminals.....         | 196                     | 85                       | 111          | 139                     | 65                       | 74           |
|                               | <b>1,796</b>            | <b>738</b>               | <b>1,058</b> | <b>1,349</b>            | <b>565</b>               | <b>784</b>   |
| Pelletizing.....              | 382                     | 133                      | 249          | 283                     | 76                       | 207          |
| Ferroalloys.....              | 273                     | 153                      | 120          | 171                     | 96                       | 75           |
| Energy.....                   | 128                     | 11                       | 117          | 58                      | 6                        | 52           |
| Construction in progress..... | 914                     | -                        | 914          | 406                     | -                        | 406          |
|                               | <b>6,738</b>            | <b>2,323</b>             | <b>4,415</b> | <b>3,740</b>            | <b>1,429</b>             | <b>2,311</b> |
| <b>Non-Ferrous</b>            |                         |                          |              |                         |                          |              |
| Potash.....                   | 54                      | 22                       | 32           | 39                      | 15                       | 24           |
| Gold.....                     | 27                      | 25                       | 2            | 119                     | 100                      | 19           |
| Kaolin.....                   | 220                     | 75                       | 145          | 71                      | 17                       | 54           |
| Research and projects.....    | 86                      | 62                       | 24           | 63                      | 48                       | 15           |
| Construction in progress..... | 797                     | -                        | 797          | 288                     | -                        | 288          |
|                               | <b>1,184</b>            | <b>184</b>               | <b>1,000</b> | <b>580</b>              | <b>180</b>               | <b>400</b>   |
| <b>Logistics</b>              |                         |                          |              |                         |                          |              |
| General cargo.....            | 575                     | 188                      | 387          | 232                     | 109                      | 123          |
| Maritime transportation.....  | 8                       | 6                        | 2            | 10                      | 8                        | 2            |
| Construction in progress..... | 35                      | -                        | 35           | 19                      | -                        | 19           |
|                               | <b>618</b>              | <b>194</b>               | <b>424</b>   | <b>261</b>              | <b>117</b>               | <b>144</b>   |
| <b>Holdings</b>               |                         |                          |              |                         |                          |              |
| Aluminum                      | 545                     | 92                       | 453          | 248                     | 55                       | 193          |
| Others .....                  | 2                       | 1                        | 1            | 12                      | 2                        | 10           |
| Construction in progress..... | 111                     | -                        | 111          | 204                     | -                        | 204          |
|                               | <b>658</b>              | <b>93</b>                | <b>565</b>   | <b>464</b>              | <b>57</b>                | <b>407</b>   |
| <b>Corporate Center</b>       |                         |                          |              |                         |                          |              |
| Corporate.....                | 67                      | 28                       | 39           | 35                      | 13                       | 22           |
| Construction in progress..... | 41                      | -                        | 41           | 13                      | -                        | 13           |
|                               | <b>108</b>              | <b>28</b>                | <b>80</b>    | <b>48</b>               | <b>13</b>                | <b>35</b>    |
| <b>Total.....</b>             | <b>9,306</b>            | <b>2,822</b>             | <b>6,484</b> | <b>5,093</b>            | <b>1,796</b>             | <b>3,297</b> |

### b) Per type of assets:

|                                | As of December 31, 2003 |                          |              | As of December 31, 2002 |                          |              |
|--------------------------------|-------------------------|--------------------------|--------------|-------------------------|--------------------------|--------------|
|                                | Cost                    | Accumulated depreciation | Net          | Cost                    | Accumulated depreciation | Net          |
| Land and buildings.....        | 749                     | 303                      | 446          | 489                     | 188                      | 301          |
| Installations.....             | 2,466                   | 932                      | 1,534        | 1,448                   | 590                      | 858          |
| Equipment.....                 | 883                     | 405                      | 478          | 391                     | 196                      | 195          |
| Railroads.....                 | 1,741                   | 756                      | 985          | 1,258                   | 568                      | 690          |
| Mine development costs.....    | 353                     | 115                      | 238          | 193                     | 53                       | 140          |
| Purchased mining reserves..... | 578                     | 8                        | 570          | -                       | -                        | -            |
| Others.....                    | 638                     | 303                      | 335          | 384                     | 201                      | 183          |
|                                | <b>7,408</b>            | <b>2,822</b>             | <b>4,586</b> | <b>4,163</b>            | <b>1,796</b>             | <b>2,367</b> |
| Construction in progress.....  | 1,898                   | -                        | 1,898        | 930                     | -                        | 930          |
| <b>Total.....</b>              | <b>9,306</b>            | <b>2,822</b>             | <b>6,484</b> | <b>5,093</b>            | <b>1,796</b>             | <b>3,297</b> |

Losses on disposals and impairments of property, plant and equipment totaled \$51, \$62 and \$79 in 2003, 2002 and 2001, respectively. Disposals and impairments mainly relate to impairment of gold mines, sales of ships and trucks, locomotives and other equipment which were replaced in the normal course of business.

In 2002 we sold certain forestry assets of our subsidiary Florestas Rio Doce S.A. for \$59 and recorded a gain on this sale of \$49. In 2003 we sold our last significant gold mining operations for \$ 21 which was the book value.

**(c) Hydroelectric projects**

We participate in several jointly-owned hydroelectric plants, already in operation or under construction. We have an undivided interest in these plants and are responsible for our proportionate share of the costs of construction and operation and are entitled to our proportionate share of the energy produced.

The situation of these projects at December 31, 2003 is as follows:

| <b>Project</b>       | <b>Begins<br/>operations /<br/>expected begins<br/>operations</b> | <b>Our<br/>interest<br/>%</b> | <b>Plant in<br/>service</b> | <b>Our<br/>share of<br/>plant in<br/>service</b> | <b>Our share of<br/>accumulated<br/>depreciation</b> | <b>Plant under<br/>construction</b> | <b>Our share of<br/>plant under<br/>construction</b> |
|----------------------|---|-------------------------------|-----------------------------|--|--|-------------------------------------|--|
| Igarapava.....       | January, 1999   | 38.1                          | 136                         | 52   | (8)  | -                                   | -  |
| Porto Estrela.....   | September, 2001   | 33.3                          | 57                          | 19   | (1)  | -                                   | -  |
| Funil.....           | December, 2002  | 51.0                          | 112                         | 57   | (2)  | -                                   | -  |
| Candonga.....        | August, 2004  | 50.0                          | -                           | -  | -  | 87                                  | 44   |
| Aimorés.....         | July, 2005  | 51.0                          | -                           | -  | -  | 178                                 | 91   |
| Capim Branco I.....  | February, 2006  | 48.4                          | -                           | -  | -  | 25                                  | 12   |
| Capim Branco II..... | December, 2006  | 48.4                          | -                           | -  | -  | 8                                   | 4  |
| Foz do Chapecó.....  | July, 2008  | 40.0                          | -                           | -  | -  | 5                                   | 2  |
| Estreito.....        | October, 2008   | 30.0                          | -                           | -  | -  | 4                                   | 1  |

Income and expenses relating to operating plants are not material.

## 13 Investments in affiliated companies and joint ventures

| December 31, |  |  |  |  |             |      |                         |      |      |                         |      |      | Quoted<br>market  |
|--------------|--|--|--|--|-------------|------|-------------------------|------|------|-------------------------|------|------|-------------------|
| 2003         |  |  |  |  | Investments |      | Equity Adjustments      |      |      | Dividends received      |      |      | Decem-<br>ber 31, |
|              |  |  |  |  |             |      | Year ended December 31, |      |      | Year ended December 31, |      |      | 2003              |
|              |  |  |  |  | 2003        | 2002 | 2003                    | 2002 | 2001 | 2003                    | 2002 | 2001 | 2003              |
|              |  |  |  |  |             |      |                         |      |      |                         |      |      |                   |
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## 14 Short-term debt

Our short-term borrowings are from commercial banks and relate export financing denominated in United States dollars.

Average annual interest rates on short-term borrowings were 3.19%, 3.97% and 4.96% in 2003, 2002 and 2001, respectively.

## 15 Long-term debt

|  | As of December 31   |            |                       |              |
|--|---------------------|------------|-----------------------|--------------|
|  | Current liabilities |            | Long-Term liabilities |              |
|  | 2003                | 2002       | 2003                  | 2002         |
| Foreign debt   |                     |            |                       |              |
| Loans and financing contracted in the following currencies:  |                     |            |                       |              |
| United States dollars.....                                   | 470                 | 431        | 1,151                 | 1,034        |
| Japanese Yen.....  | 30                  | 1          | 2                     | 29           |
| Others.....  | 3                   | 1          | 25                    | 1            |
| Fixed Rate Notes - US\$ denominated.....                     | 300                 | 200        | 600                   | 600          |
| Securitization of export receivables - US\$ denominated..... | 44                  | 25         | 481                   | 275          |
| Perpetual notes .....  | -                   | -          | 65                    | 63           |
| Accrued charges.....   | 54                  | 20         | -                     | -            |
|  | <b>901</b>          | <b>678</b> | <b>2,324</b>          | <b>2,002</b> |
| Local debt   |                     |            |                       |              |
| Indexed by Long-Term Interest Rate - TJLP .....              | 10                  | 8          | 88                    | 22           |
| Indexed by General Price Index-Market (IGPM) .....           | 16                  | 14         | 19                    | 24           |
| Basket of currencies.....                                    | 30                  | 13         | 23                    | 32           |
| Non-convertible debentures.....                              | -                   | -          | 90                    | 64           |
| Indexed by U.S. dollars.....                                 | 33                  | 1          | 221                   | 215          |
| Accrued charges.....   | 19                  | 3          | 2                     | -            |
|  | <b>108</b>          | <b>39</b>  | <b>443</b>            | <b>357</b>   |
| Total.....   | <b>1,009</b>        | <b>717</b> | <b>2,767</b>          | <b>2,359</b> |

The long-term portion at December 31, 2003 becomes due in the following years:

|   |              |
|---|--------------|
| 2005.....   | 480          |
| 2006.....   | 564          |
| 2007 .....  | 554          |
| 2008.....   | 198          |
| Thereafter.....   | 816          |
| No due date (Perpetual notes and non-convertible debentures)..... | 155          |
|   | <b>2,767</b> |

At December 31, 2003 annual interest rates on long-term debt were as follows:

|                                 |              |
|---------------------------------|--------------|
| Up to 7%.....                   | 2,366        |
| 7.1% to 9%.....                 | 930          |
| 9.1% to 11%.....                | 316          |
| Over 11% .....                  | 99           |
| Variable (Perpetual notes)..... | 65           |
|                                 | <b>3,776</b> |

The indexes applied to debt and respective percentage variations in each year were as follows:

|  | 2003    | 2002  | 2001  |
|--|---------|-------|-------|
| TJLP - Long-Term Interest Rate (effective rate)..... | 11.50   | 9.87  | 9.50  |
| IGP-M - General Price Index - Market.....            | 8.71    | 25.31 | 10.37 |
| United States Dollar.....                            | (18.23) | 52.27 | 18.67 |

At December 31, 2003 the US\$ denominated Fixed Rate Notes of \$900 (2002 - \$800) and other debt of **\$1,606** (2002 - **\$1,430**) are unsecured. The export securitization of \$525 (2002 - \$300) is secured by existing and future accounts receivable of our subsidiary CVRD Overseas Ltd. Loans from international lenders of \$232 (2002- \$295) are guaranteed by the Federal Government, to which we have given counter-guarantees of **\$193** (2002 - **\$204**) secured by our own shares and accounts receivable **of us and** of a subsidiary. We have also loans from local and international institutions secured by property, plant and equipment in the amount of \$165 (2002 - \$129). The remaining long-term debt of \$387 (2002 - \$213) is secured mainly by assets of subsidiaries.

The Perpetual Notes are exchangeable for 48 billion preferred shares of the affiliate MRN (initially equivalent to 8% of the total number of shares of MRN owned by us). Interest is payable on the Notes in an amount equal to dividends paid on the underlying preferred shares, relative to periods starting as from the 2000 fiscal year. The Notes may be redeemed at our option or the Noteholders at any time by transfer of the underlying preferred shares to the Noteholders, providing the preemptive rights of the existing shareholders of MRN have been waived or have expired. Redemption by transfer of the underlying net assets of MRN is compulsory if certain events occur, including the liquidation or merger of MRN or the transfer of MRN's asset and liabilities to a consortium formed by its shareholders to take over the operations of MRN. In the event of early termination the Notes may be redeemed, at the option the Noteholders, in lieu of transfer of the shares, for a cash sum equal to \$48 plus the net present value of average annual earnings declared and paid by MRN for the three years immediately preceding such termination multiplied by 20 and discounted by 10% per year. This latter amount represents a fair value at December 31, 2003 of \$65.

## 16 Stockholders' equity

Each holder of common and preferred class A stock is entitled to one vote for each share on all matters that come before a stockholders' meeting, except for the election of the Board of Directors, which is restricted to the holders of common stock. As described in Note 6, the Brazilian Government holds a preferred special share which confers on it permanent veto rights over certain matters.

As of December 31, 2003, we had acquired 4,719,353 shares to be held in treasury for subsequent disposal or cancellation at an average weighted unit cost of R\$27.80 (minimum cost of R\$20.07 and maximum of R\$52.09).

Both common and preferred stockholders are entitled to receive a dividend of at least 25% of annual net income, upon approval at the annual stockholders' meeting. In the case of preferred stockholders, this dividend cannot be less than 6% of the preferred capital as stated in the statutory accounting records or, if greater, 3% of the book equity value per share. With respect to each of 2003, 2002 and 2001 we distributed dividends to preferred stockholders in excess of this limit. Interest attributed to stockholders as from January 1, 1996 is considered part of the minimum dividend.

Brazilian law permits the payment of cash dividends only from retained earnings as stated in the statutory accounting records and such payments are made in Reais. At December 31, 2003, we had no undistributed retained earnings. In addition, appropriated retained earnings at December 31, 2003 includes \$2,283, related to the unrealized income and expansion

reserves, which could be freely transferred to retained earnings and paid as dividends, if approved by the stockholders.

No withholding tax is payable on distribution of profits earned as from January 1, 1996, except for distributions in the form of interest attributed to stockholders as explained in Note 3 (I).

Brazilian laws and our By-laws require that certain appropriations be made from retained earnings to reserve accounts on an annual basis, all determined in accordance with amounts stated in the statutory accounting records, as detailed below:

|   | Year ended December 31 |              |              |
|---|------------------------|--------------|--------------|
|   | 2003                   | 2002         | 2001         |
| Appropriated retained earnings            |                        |              |              |
| Unrealized income reserve                 |                        |              |              |
| Balance January 1.....                    | 211                    | 548          | 874          |
| Transfer to retained earnings.....        | (18)                   | (337)        | (326)        |
| Balance December 31.....                  | <b>193</b>             | <b>211</b>   | <b>548</b>   |
| Expansion reserve                         |                        |              |              |
| Balance January 1.....                    | 1,494                  | 1,667        | 1,546        |
| Transfer to capital stock.....            | (423)                  | -            | (278)        |
| Transfer from (to) retained earnings..... | 1,019                  | (173)        | 399          |
| Balance December 31.....                  | <b>2,090</b>           | <b>1,494</b> | <b>1,667</b> |
| Legal reserve                             |                        |              |              |
| Balance January 1.....                    | 241                    | 325          | 307          |
| Transfer from (to) retained earnings..... | 133                    | (84)         | 18           |
| Balance December 31.....                  | <b>374</b>             | <b>241</b>   | <b>325</b>   |
| Fiscal incentive depletion reserve        |                        |              |              |
| Balance January 1.....                    | 284                    | 649          | 771          |
| Transfer to capital stock.....            | -                      | (212)        | -            |
| Transfer to retained earnings.....        | 63                     | (153)        | (122)        |
| Balance December 31.....                  | <b>347</b>             | <b>284</b>   | <b>649</b>   |
| Fiscal incentive investment reserve       |                        |              |              |
| Balance January 1.....                    | -                      | 23           | 39           |
| Transfer to capital stock.....            | -                      | (23)         | (33)         |
| Transfer from retained earnings.....      | 31                     | -            | 17           |
| Balance December 31.....                  | <b>31</b>              | <b>-</b>     | <b>23</b>    |
| Total appropriated retained earnings..... | <b>3,035</b>           | <b>2,230</b> | <b>3,212</b> |

The purpose and basis of appropriation to such reserves is described below:

- . Unrealized income reserve - this represents principally our share of the earnings of affiliates and joint ventures, not yet received in the form of cash dividends.
- . Expansion reserve - this is a general reserve for expansion of our activities.
- . Legal reserve - this reserve is a requirement for all Brazilian corporations and represents the appropriation of 5% of annual net income under Brazilian GAAP up to a limit of 20% of capital stock under Brazilian GAAP.
- . Fiscal incentive depletion reserve - this represents an additional amount relative to mineral reserve depletion equivalent to 20% of the sales price of mining production, which is deductible for tax purposes providing an equivalent amount is transferred from retained earnings to the reserve account. This fiscal incentive expired in 1996.
- . Fiscal incentive investment reserve - this reserve results from an option to designate a portion of income tax otherwise payable for investment in government approved projects and is recorded in the year following that in which the taxable income was earned. As from 2000, this reserve also contemplates the tax incentives described in Note 8.



## 17 Pension plans

Since 1973 we have sponsored a defined benefit pension plan (the “Old Plan”) covering substantially all employees, with benefits based on years of service, salary and social security benefits. This plan is administered by Fundação Vale do Rio Doce de Seguridade Social – VALIA and was funded by monthly contributions made by us and our employees, calculated based on periodic actuarial appraisals.

In May 2000, we implemented a new pension plan, which is primarily a defined contribution plan with a defined benefit feature relative to service prior to May 2000 (the “New Plan”), and offered our active employees the opportunity of transferring to the New Plan. Over 98% of our active employees opted to transfer to the New Plan. The Old Plan will continue in existence, covering almost exclusively retired participants and their beneficiaries.

The following information details the status of the defined benefit elements of our plans in accordance with SFAS 132 - “Employers’ Disclosure about Pensions and Other Post-retirement Benefits”, as amended.

### (a) Change in benefit obligation

|  | As of December 31 |              |
|--|-------------------|--------------|
|  | 2003              | 2002         |
| Benefit obligation at beginning of year..... | 1,308             | 1,388        |
| Service cost.....                            | 2                 | 2            |
| Interest cost.....                           | 136               | 120          |
| Benefits paid.....                           | (111)             | (94)         |
| Effect of exchange rate changes.....         | 20                | (288)        |
| Actuarial loss.....                          | 75                | 180          |
| Benefit obligation at end of year.....       | <b>1,430</b>      | <b>1,308</b> |

We use a measurement date of December 1, 2003 for our pension and postretirement benefit plans.

### (b) Change in plan assets

|   | As of December 31 |              |
|---|-------------------|--------------|
|   | 2003              | 2002         |
| Fair value of plan assets at beginning of year..... | 1,285             | 1,374        |
| Actual return on plan assets.....                   | 432               | 277          |
| Employer contributions.....                         | 14                | 12           |
| Benefits paid.....                                  | (111)             | (94)         |
| Effect of exchange rate changes.....                | 17                | (284)        |
| Fair value of plan assets at end of year.....       | <b>1,637</b>      | <b>1,285</b> |

Plan assets at December 31, 2003 include \$194 of portfolio investments in our own shares (\$102 at December 31, 2002) and \$20 of shares of related parties (\$ 8 at December 31, 2002), as well as \$323 of Federal Government Securities (\$387 at December 31, 2002).

Employer contributions expected for 2004 are \$ 14 (unaudited).

(c) **Accrued pension cost liability (prepaid pension cost)**

|   | As of December 31 |      |
|---|-------------------|------|
|   | 2003              | 2002 |
| Funded status, excess of benefit obligation over plan assets..... | (207)             | 23   |
| Unrecognized net transitory obligation.....                       | (56)              | (65) |
| Unrecognized net actuarial loss.....                              | 181               | (37) |
| Accrued pension cost liability (prepaid pension cost).....        | (82)              | (79) |

(d) **Assumptions used in each year (expressed in nominal terms)**

|   | 2003       | 2002       |
|---|------------|------------|
| Discount rate.....                                  | 11.30% p.a | 11.30% p.a |
| Expected return on plan assets .....                | 13.40% p.a | 11.30% p.a |
| Rate of compensation increase - up to 47 years..... | 6.91% p.a  | 6.91% p.a  |
| Inflation.....                                      | 5.00% p.a  | 5.00% p.a  |

All assumptions will be revised during 2004.

(e) **Investment targets and composition of plan assets**

The asset allocation for the Company's pension plans at the end of 2003 and 2002, and the target allocation for 2004, by asset category, follows. The fair value of plan assets for these plans is \$1,637 and \$1,285 at the end of 2003 and 2002, respectively.

| Asset category          | Target<br>allocation<br>for 2004 | Percentage of plan assets at<br>December 31, |             |
|-------------------------|----------------------------------|--|-------------|
|                         |                                  | 2003   | 2002        |
| Equity securities ..... | 30%                              | 27%  | 29%         |
| Real estate.....        | 7%                               | 6%   | 7%          |
| Loans.....              | 4%                               | 2%   | 3%          |
| Fixed Income.....       | 59%                              | 65%  | 61%         |
| <b>Total.....</b>       | <b>100%</b>                      | <b>100%</b>                                  | <b>100%</b> |

The fixed income allocation target of 59% was established in order to match the asset with the benefit payments. The proposal for 2004 is an increase of up to 33% in the investments in inflation-indexed funds. The remaining investments in fixed income would be responsible for the payment of short-term plan benefits.

The increase in the target allocation for equity securities is related to a 32% expected return in the IBOVESPA (Brazilian stock index). This high return is due to an expected increase of corporate profits, and a belief that Brazil's risk will decrease, economic activity will increase, and U.S. interest rates will remain low.

(f) **Pension costs**

|   | Year ended December 31 |           |           |
|---|------------------------|-----------|-----------|
|   | 2003                   | 2002      | 2001      |
| Service cost - benefits earned during the period..... | 2                      | 2         | 2         |
| Interest cost on projected benefit obligation.....    | 136                    | 120       | 180       |
| Actual return on assets.....                          | (432)                  | (277)     | (220)     |
| Amortization of initial transitory obligation.....    | 9                      | 9         | 12        |
| Net deferral.....                                     | 297                    | 157       | 58        |
| Net periodic pension cost.....                        | <u>12</u>              | <u>11</u> | <u>32</u> |

In addition to benefits provided under our pension plan, accruals have been made relative to supplementary benefits extended in previous periods as part of early-retirement programs. Such accruals included in long-term liabilities totaled \$198 and \$141, at December 31, 2003 and 2002, respectively, plus \$32 and \$23, respectively, in current liabilities.

The cost recognized in the years 2003, 2002 and 2001 relative to the defined contribution element of the New Plan was \$5, \$5 and \$3, respectively.

**18 Commitments and contingencies**

- (a) At December 31, 2003, we had extended guarantees for borrowings obtained by affiliates and joint ventures in the amount of \$283, of which \$242 is denominated in United States dollars and the remaining \$41 in local currency, as follows:

| Affiliate or Joint Venture | Amount of guarantee | Denominated currency | Purpose        | Final maturity | Counter guarantees   |
|----------------------------|---------------------|----------------------|----------------|----------------|----------------------|
| ALBRAS.....                | 231                 | US\$                 | Debt guarantee | 2007           | None                 |
|                            | 40                  | R\$                  | Debt guarantee | 2010           | None                 |
| SAMARCO.....               | 10                  | US\$                 | Debt guarantee | 2020           | None                 |
| VALESUL.....               | 1                   | R\$                  | Debt guarantee | 2006           | None                 |
| NIBRASCO.....              | <u>1</u>            | US\$                 | Debt guarantee | 2004           | Collateral<br>Pledge |
|                            | <u>283</u>          |                      |                |                |                      |

We expect no losses to arise as a result of the above guarantees. We charge commission for extending these guarantees in the case of Albras and Samarco.

We have not provided any significant guarantees since January 1, 2003 which would require fair value adjustments under FIN 45 – “Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others”.

- (b) CVRD and its subsidiaries are defendants in numerous legal actions in the normal course of business. Based on the advice of our legal counsel, management believes that the provision made against contingent losses is sufficient to cover probable losses in connection with such actions.

The provision for contingencies and the related judicial deposits are composed as follows:

|                             | December 31, 2003           |                   | December 31, 2002           |                   |
|-----------------------------|-----------------------------|-------------------|-----------------------------|-------------------|
|                             | Provision for contingencies | Judicial deposits | Provision for contingencies | Judicial deposits |
| Labor claims.....           | 177                         | 66                | 109                         | 52                |
| Civil claims.....           | 167                         | 54                | 95                          | 32                |
| Tax - related actions ..... | 285                         | 279               | 220                         | 153               |
| Others.....                 | 6                           | 8                 | 4                           | 2                 |
|                             | <b>635</b>                  | <b>407</b>        | <b>428</b>                  | <b>239</b>        |

Labor - related actions principally comprise employee claims for (i) payment of time spent travelling from their residences to the work-place, (ii) additional payments for alleged dangerous or unhealthy working conditions and (iii) various other matters, often in connection with disputes about the amount of indemnities paid upon dismissal.

Civil actions principally relate to claims made against us by contractors in connection with losses alleged to have been incurred by them as a result of various past government economic plans during which full indexation of contracts for inflation was not permitted.

Tax - related actions principally comprise our challenges of certain revenue taxes, VAT and of the tax on financial movements – CPMF.

We continue to vigorously pursue our interests in all the above actions but recognize that probably we will incur some losses in the final instance, for which we have made provisions.

Our judicial deposits are made as required by the courts for us to be able to enter or continue a legal action. When judgment is favorable to us, we receive the deposits back; when unfavorable, the deposits are delivered to the prevailing party. An increase of \$126 for tax deposits during 2003 refers mainly to an action in which we challenged the annual limitation on use to our tax loss carryforwards.

Contingencies settled in 2003, 2002 and 2001 aggregated \$182 \$178 and \$6, respectively, and additional provisions aggregated \$146, \$264 and \$79, respectively.

In addition to the contingencies for which we have made provisions we have possible losses in connection with tax contingencies totaling \$308 and \$220 at December 31, 2003 and 2002, respectively, for which no provision is maintained.

- (c) We are defendants in two actions seeking substantial compensatory damages brought by the Municipality of Itabira, State of Minas Gerais, which we believe are without merit. Due to the remote likelihood that any loss will arise therefrom no provision has been made in the financial statements with respect to these two actions.
- (d) We are committed under a take-or-pay agreement to take annual delivery of approximately 207,060 metric tons per year of aluminum from ALBRAS at market prices. This estimate is based on 51% of ALBRAS expected production and, at a market price of \$1,458.16 per metric ton, at December 31, 2003, represents an annual commitment of \$302. Actual take from Albras was \$296, \$257 and \$220 during 2003, 2002 and 2001, respectively.
- (e) We and BNDES entered into a contract, known as the Mineral Risk Contract, in March 1997, relating to prospecting authorizations for mining regions where drilling and exploration are still in their early stages. The Mineral Risk Contract provides for the joint development of certain unexplored mineral deposits in approximately two million identified hectares of land in the Carajás region, as well as proportional participation in any financial benefits earned from the development of such resources. Iron ore and manganese deposits already identified and subject to development are specifically excluded from the Mineral Risk Contract.



Pursuant to the Mineral Risk Contract, we and BNDES each agreed to provide US\$ 205 million, which represents half of the US\$ 410 million in expenditures estimated as necessary to complete geological exploration and mineral resource development projects in the region over a period of five years, which was extended for an additional period of two years. We will oversee these projects and BNDES will advance us half of our costs on a quarterly basis. Under the Mineral Risk Contract, as of December 31, 2003, the remaining contributions towards exploration and development activities totaled US\$ 87 million. In the event that either of us wishes to conduct further exploration and development after having spent such US\$ 205 million, the contract provides that each party may either choose to match the other party's contributions, or may choose to have its financial interest proportionally diluted. If a party's participation in the project is diluted to an amount lower than 40% of the amount invested in connection with exploration and development projects, then the Mineral Risk Contract provides that the diluted party will lose all the rights and benefits provided for in the Mineral Risk Contract and any amounts previously contributed to the project.

Under the Mineral Risk Contract, BNDES has agreed to compensate us through a finder's fee production royalty on their share of mineral resources that are discovered and placed into production. This finder's fee is equal to 3.5% of the revenues derived from the sale of gold, silver and platinum group metals and 1.5% of the revenues derived from the sale of other minerals, including copper, except for gold and other minerals discovered at Serra Leste, for which the finder's fee is equal to 6.5% of revenues.

- (f) At the time of our privatization in 1997, we issued shareholder revenue interests known in Brazil as "debentures" to our then-existing shareholders, including the Brazilian Government. The terms of the "debentures", were set to ensure that our pre-privatization shareholders, including the Brazilian Government, would participate alongside us in potential future financial benefits that we are able to derive from exploiting our mineral resources.

In preparation for the issuance of the debentures, we issued series B preferred shares on a one-for-one basis to all holders of our common shares and series A preferred shares. We then exchanged all of the series B shares for the debentures at par value. The debentures are not redeemable or convertible, and do not trade on a stapled basis or otherwise with our common or preferred shares. During 2002 we registered the debentures with the CVM in order to permit trading.

Under Brazilian Central Bank regulations, pre-privatization shareholders that held their shares through our preferred share American Depositary Receipt, or ADR, program and institutional investors that held their shares through rule 1,298/87 of Brazilian Central Bank were not permitted to receive the debentures or any financial benefits relating to the debentures. We sought approval from the Central Bank to distribute the debentures to these investors, but the Central Bank rejected our request. We renewed our request to the Central Bank, but we cannot be sure that we will succeed. Therefore, unless the Central Bank approves our request, the debentures will not have any value for ADR holders and foreign investors through annex V.

Under the terms of the debentures, holders will have the right to receive semi-annual payments equal to an agreed percentage of our net revenues (revenues less value added tax) from certain identified mineral resources that we owned as of May 1997, to the extent that we exceed defined threshold production volumes of these resources, and from the sale of mineral rights that we owned as of May 1997. Our obligation to make payments to the holders will cease when the relevant mineral resources are exhausted at which time we are required to repay the original par value plus accrued interest. Based on current production levels, and estimates for new projects, we expect to start payments referring to copper resources in 2004, to iron ore resources in approximately 2020 for the Northern System and 2030 for the Southern System, and payments related to other mineral resources at the end of the decade.

The table below summarizes the amounts we will be required to pay under the debentures based on the net revenues we earn from the identified mineral resources and the sale of mineral rights.

| Area  | Mineral                                     | Required Payments by CVRD  |
|---|---|--|
| Southern System                             | Iron ore                                    | 1.8% of net revenue, after total sales from May 1997 exceeds 1.7 billion tons.   |
| Northern System                             | Iron ore                                    | 1.8% of net revenue, after total sales from May 1997 exceeds 1.2 billion tons.   |
| Pojuca, Andorinhas, Liberdade and Sossego   | Gold and copper                             | 2.5% of net revenue from the beginning of commercialization corresponding to our ownership interest at April 15, 1997. |
| Igarapé Bahia and Alemão                    | Gold and copper                             | 2.5% of net revenue, after total sales from May 1997 exceeds 70 tons of gold.  |
| Fazenda Brasileiro (*)                      | Gold  | 2.5% of net revenue after total sales from May 1997 exceeds 26 tons.   |
| Other areas, excluding Carajás/ Serra Leste | Gold  | 2.5% of net revenue.   |
| Other areas owned as of May 1997            | Other minerals                              | 1% of net revenue, 4 years after the beginning of the commercialization.   |
| All areas                                   | Sale of mineral rights owned as of May 1997 | 1% of the sales price.   |

We sold Fazenda Brasileiro in August 2003 and will pay the corresponding amount of \$2 debenture holders by March 31, 2004.

- (g) We use various judgments and assumptions when measuring our environmental liabilities and asset retirement obligations. Changes in circumstances, law or technology may affect our estimates and we periodically review the amounts accrued and adjust them as necessary. Our accruals do not reflect unasserted claims because we are currently not aware of any such issues. Also the amounts provided are not reduced by any potential recoveries under cost sharing, insurance or indemnification arrangements because such recoveries are considered uncertain. The changes are demonstrated as follows:

|  |           |
|--|-----------|
| Balance as of December 31, 2002.....                       | 15        |
| Initial recognition of SFAS 143 as at January 1, 2003..... | 26        |
| Increase due to new subsidiaries acquired.....             | 11        |
| Accretion expense.....                                     | 6         |
| Revisions to estimated cash flows.....                     | 15        |
| Cumulative translation adjustment.....                     | 8         |
| <b>Balance as of December 31, 2003.....</b>                | <b>81</b> |

Had SFAS 143 been applied prior to January 1, 2003, the pro forma asset retirement obligation at December 31, 2002, 2001 and 2000 would have been \$41, \$44 and \$42, respectively.

Additionally, had SFAS 143 been applied previously, net income for the years ended December 31, 2002 and 2001 on a pro forma basis would have been lower by \$8 and \$6 (unaudited).

Had SFAS 143 been applied in prior years the impact on net income and earnings per share would be as follows:

|  | <u>2002</u> | <u>2001</u> |
|--|-------------|-------------|
| Net income   | 680         | 1,287       |
| Net income (pro forma - unaudited)                                 | 672         | 1,281       |
| Basic earnings per Preferred Class A Share                         | 1.77        | 3.34        |
| Basic earnings per Common Share                                    | 1.77        | 3.34        |
| Basic earnings per Preferred Class A Share (pro forma - unaudited) | 1.75        | 3.32        |
| Basic earnings per Common Share (pro forma - unaudited)            | 1.75        | 3.32        |

**(h) Description of Leasing Arrangements**

We conducts part of our railroad and port operation using equipments and facilities under 30 and 25 year operating leases, respectively. At the end of the lease term, we will return the leased assets.

The following is a schedule of future minimum operating lease payments required under long-term operating leases as of December 31, 2003:

Year ending December 31:

|  |                   |
|--|-------------------|
| 2004                                   | 37                |
| 2005                                   | 37                |
| 2006                                   | 37                |
| 2007                                   | 37                |
| 2008                                   | 37                |
| Later years                            | 656               |
| <b>Total minimum payments required</b> | <b><u>841</u></b> |

The total of expenses in 2003 and 2002 was \$ 37 and \$ 26, respectively.

**19 Segment and geographical information**

In 1999 we adopted SFAS 131 "Disclosures about Segments of an Enterprise and Related Information" with respect to the information we present about our operating segments. SFAS 131 introduced a "management approach" concept for reporting segment information, whereby such information is required to be reported on the basis that the chief decision-maker uses internally for evaluating segment performance and deciding how to allocate resources to segments. Our business segments are currently organized as follows:

Ferrous products - comprises iron ore mining and pellet production, as well as the Northern and Southern transportation systems, including railroads, ports and terminals, as they pertain to mining operations. Manganese mining and ferroalloys are also included in this segment.

Non-ferrous products – comprises the production of non-ferrous minerals.

Logistics – comprises our transportation systems as they pertain to the operation of our ships, ports and railroads for third-party cargos.

Holdings – divided into the following sub-groups:

- Aluminum - comprises aluminum trading activities, alumina refining and investments in joint ventures and affiliates engaged in bauxite mining and aluminum metal smelting.



- Steel - comprises our investments in joint ventures and affiliates operating in the steel industry.
- Others - comprises our investments in joint ventures and affiliates engaged in other businesses.

Information presented to top management with respect to the performance of each segment is generally derived directly from the accounting records maintained in accordance with accounting practices generally accepted in Brazil together with certain minor inter-segment allocations.

Consolidated net income and principal assets are reconciled as follows:

## Results by segment - before eliminations

| As of and for the year ended December 31,  |          |             |           |          |        |              |         |          |             |           |              |        |              |         |          |             |           |          |        |              |         |
|--|----------|-------------|-----------|----------|--------|--------------|---------|----------|-------------|-----------|--------------|--------|--------------|---------|----------|-------------|-----------|----------|--------|--------------|---------|
| 2003   |          |             |           |          |        |              |         | 2002     |             |           |              |        |              |         |          | 2001        |           |          |        |              |         |
|  | Holdings |             |           |          |        |              |         | Holdings |             |           |              |        |              |         | Holdings |             |           |          |        |              |         |
|  | Ferrous  | Non ferrous | Logistics | Aluminum | Others | Eliminations |         | Ferrous  | Non ferrous | Logistics | (1) Aluminum | Others | Eliminations |         | Ferrous  | Non ferrous | Logistics | Aluminum | Others | Eliminations |         |
| Gross revenues - Export.....   | 5,257    | 104         | 75        | 758      | -      | (2,354)      | 3,840   | 4,200    | 143         | 41        | 387          | -      | (1,843)      | 2,928   | 3,558    | 173         | 147       | 283      | 47     | (1,414)      | 2,794   |
| Gross revenues - Domestic.....   | 1,142    | 107         | 472       | 165      | -      | (181)        | 1,705   | 996      | 96          | 374       | 75           | 3      | (190)        | 1,354   | 1,083    | 78          | 344       | 1        | 8      | (231)        | 1,283   |
| Cost and expenses.....   | (4,871)  | (192)       | (366)     | (760)    | 3      | 2,535        | (3,651) | (3,773)  | (225)       | (244)     | (426)        | 7      | 2,033        | (2,628) | (3,632)  | (176)       | (412)     | (259)    | (37)   | 1,645        | (2,871) |
| Depreciation, depletion and amortization.....  | (191)    | (18)        | (14)      | (15)     | -      | -            | (238)   | (170)    | (25)        | (14)      | (4)          | (1)    | -            | (214)   | (167)    | (17)        | (26)      | -        | (2)    | -            | (212)   |
| Pension plan.....  | (11)     | -           | (1)       | -        | -      | -            | (12)    | (9)      | (1)         | (1)       | -            | -      | -            | (11)    | (27)     | (3)         | (2)       | -        | -      | -            | (32)    |
| Operating income.....  | 1,326    | 1           | 166       | 148      | 3      | -            | 1,644   | 1,244    | (12)        | 156       | 32           | 9      | -            | 1,429   | 815      | 55          | 51        | 25       | 16     | -            | 962     |
| Financial income.....  | 195      | 1           | 14        | 10       | 4      | (122)        | 102     | 193      | 1           | 11        | 11           | 4      | (93)         | 127     | 169      | 1           | 11        | 7        | 6      | (59)         | 135     |
| Financial expenses.....  | (406)    | (4)         | (9)       | (49)     | (5)    | 122          | (351)   | (433)    | (6)         | (5)       | (15)         | (9)    | 93           | (375)   | (368)    | (10)        | (11)      | (1)      | (4)    | 59           | (335)   |
| Foreign exchange and monetary gains (losses), net.....   | 150      | 16          | (14)      | 93       | (3)    | -            | 242     | (442)    | (36)        | (18)      | (85)         | 1      | -            | (580)   | (396)    | (21)        | (10)      | -        | 1      | -            | (426)   |
| Gain on sale of investments.....   | (27)     | -           | -         | -        | -      | -            | (27)    | -        | -           | -         | -            | -      | -            | -       | -        | -           | -         | -        | 784    | -            | 784     |
| Equity in results of affiliates and joint ventures and change in provision for losses on equity investments..... | 133      | 3           | (9)       | 147      | 76     | -            | 350     | (66)     | -           | (88)      | 39           | 28     | -            | (87)    | (7)      | -           | (108)     | 41       | 21     | -            | (53)    |
| Income taxes.....  | (226)    | (3)         | (2)       | (27)     | 1      | -            | (257)   | 145      | -           | (8)       | 22           | (10)   | -            | 149     | 220      | -           | (3)       | 1        | -      | -            | 218     |
| Minority interests.....  | (44)     | (3)         | -         | (58)     | -      | -            | (105)   | 2        | (6)         | -         | 21           | -      | -            | 17      | 2        | -           | -         | -        | -      | -            | 2       |
| Income from continuing operations.....   | 1,101    | 11          | 146       | 264      | 76     | -            | 1,598   | 643      | (59)        | 48        | 25           | 23     | -            | 680     | 435      | 25          | (70)      | 73       | 824    | -            | 1,287   |
| Change in accounting practice for asset retirement obligations (note 4).....                                     | (10)     | -           | -         | -        | -      | -            | (10)    | -        | -           | -         | -            | -      | -            | -       | -        | -           | -         | -        | -      | -            | -       |
| Net income.....  | 1,091    | 11          | 146       | 264      | 76     | -            | 1,588   | 643      | (59)        | 48        | 25           | 23     | -            | 680     | 435      | 25          | (70)      | 73       | 824    | -            | 1,287   |
| Sales classified by geographic destination:  |          |             |           |          |        |              |         |          |             |           |              |        |              |         |          |             |           |          |        |              |         |
| Export market  |          |             |           |          |        |              |         |          |             |           |              |        |              |         |          |             |           |          |        |              |         |
| America, except United States.....   | 526      | -           | 38        | 156      | -      | (329)        | 391     | 392      | -           | 25        | 27           | -      | (207)        | 237     | 238      | -           | 65        | 9        | -      | (118)        | 194     |
| United States.....   | 337      | 8           | -         | 32       | -      | (188)        | 189     | 340      | 35          | 3         | 10           | -      | (190)        | 198     | 247      | 139         | 21        | 73       | 47     | (112)        | 415     |
| Europe.....  | 2,214    | 75          | 30        | 378      | -      | (913)        | 1,784   | 1,799    | 100         | 9         | 318          | -      | (734)        | 1,492   | 1,469    | 33          | 44        | 173      | -      | (635)        | 1,084   |
| Middle East/Africa/Oceania.....  | 292      | -           | 4         | -        | -      | (70)         | 226     | 239      | -           | -         | -            | -      | (46)         | 193     | 216      | -           | 4         | -        | -      | (20)         | 200     |
| Japan.....   | 569      | 13          | -         | 96       | -      | (259)        | 419     | 488      | 3           | 1         | 11           | -      | (228)        | 275     | 525      | -           | 10        | 12       | -      | (155)        | 392     |
| China (2).....   | 897      | 7           | -         | 77       | -      | (401)        | 580     | 574      | 4           | 1         | 21           | -      | (270)        | 330     | -        | -           | -         | -        | -      | -            | -       |
| Asia, other than Japan and China.....  | 422      | 1           | 3         | 19       | -      | (194)        | 251     | 368      | 1           | 2         | -            | -      | (168)        | 203     | 863      | 1           | 3         | 16       | -      | (374)        | 509     |
|  | 5,257    | 104         | 75        | 758      | -      | (2,354)      | 3,840   | 4,200    | 143         | 41        | 387          | -      | (1,843)      | 2,928   | 3,558    | 173         | 147       | 283      | 47     | (1,414)      | 2,794   |
| Domestic market.....   | 1,142    | 107         | 472       | 165      | -      | (181)        | 1,705   | 996      | 96          | 374       | 75           | 3      | (190)        | 1,354   | 1,083    | 78          | 344       | 1        | 8      | (231)        | 1,283   |
|  | 6,399    | 211         | 547       | 923      | -      | (2,535)      | 5,545   | 5,196    | 239         | 415       | 462          | 3      | (2,033)      | 4,282   | 4,641    | 251         | 491       | 284      | 55     | (1,645)      | 4,077   |
| Assets:  |          |             |           |          |        |              |         |          |             |           |              |        |              |         |          |             |           |          |        |              |         |
| Property, plant and equipment, net.....  | 4,495    | 1,000       | 424       | 564      | 1      | -            | 6,484   | 2,346    | 400         | 144       | 383          | 24     | -            | 3,297   | 3,171    | 240         | 305       | -        | 97     | -            | 3,813   |
| Additions to Property, plant and equipment.....  | 822      | 440         | 186       | 95       | -      | -            | 1,543   | 524      | 132         | 33        | 63           | 14     | -            | 766     | 508      | 40          | 25        | -        | 22     | -            | 595     |
| Investments in affiliated companies and joint ventures and other investments, net of provision for losses.....   | 344      | -           | 44        | 329      | 317    | -            | 1,034   | 350      | -           | (10)      | 200          | 192    | -            | 732     | 673      | 29          | 34        | 287      | 195    | -            | 1,218   |
| Capital employed.....  | 4,137    | 266         | 429       | 498      | 20     | -            | 5,350   | 2,364    | 119         | 161       | 209          | 24     | -            | 2,877   | 2,976    | 249         | 313       | 18       | 70     | 4            | 3,630   |

(1) Control of Alunorte was acquired and consolidated from June 2002.

(2) In 2001 China was classified within Asia.

## Operating income by product – after eliminations

| Year ended December 31, |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
|-------------------------|----------|----------|-------|-----------------|--------------|-------------------|---|----------------------------------|--|------------------|--|----------|----------|-------|-----------------|--------------|-------------------|---|----------------------------------|--|------------------|--|----------|----------|-------|-----------------|--------------|-------------------|---|----------------------------------|--|--------------|------------------|
| 2003                    |          |          |       |                 |              |                   |   |                                  |  | 2002             |  |          |          |       |                 |              |                   |   |                                  | 2001                                     |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
|                         | Revenues |          |       | Value added tax | Net revenues | Cost and expenses | Impairment/ Gain on sale of property, plant and equipment |                                  | Depreciation, depletion and amortization | Operating income |  | Revenues |          |       | Value added tax | Net revenues | Cost and expenses | Impairment/ Gain on sale of property, plant and equipment |                                  | Depreciation, depletion and amortization | Operating income |  | Revenues |          |       | Value added tax | Net revenues | Cost and expenses | Impairment/ Gain on sale of property, plant and equipment |                                  | Depreciation, depletion and amortization | Pension plan | Operating income |
|                         | Export   | Domestic | Total |                 |              |                   | Net   | of property, plant and equipment |  |                  |  | Export   | Domestic | Total |                 |              |                   | Net   | of property, plant and equipment |  |                  |  | Export   | Domestic | Total |                 |              |                   | Net   | of property, plant and equipment |  |              |                  |
| Ferrous                 |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
| Iron ore.....           | 2,108    | 554      | 2,662 | (65)            | 2,597        | (1,318)           | 1,279   | (10)                             | (105)                                    | 1,164            |  | 1,642    | 505      | 2,147 | (63)            | 2,084        | (915)             | 1,169   | -                                | (87)                                     | 1,082            |  | 1,529    | 474      | 2,003 | (58)            | 1,945        | (869)             | 1,076   | (263)                            | (80)                                     | -            | 733              |
| Pellets.....            | 627      | 211      | 838   | (19)            | 819          | (627)             | 192   | (11)                             | (11)                                     | 169              |  | 530      | 143      | 673   | (19)            | 654          | (548)             | 106   | -                                | (5)                                      | 101              |  | 474      | 123      | 597   | (12)            | 585          | (497)             | 88  | (45)                             | (4)                                      | -            | 39               |
| Manganese....           | 38       | 11       | 49    | (5)             | 44           | (35)              | 9   | -                                | (2)                                      | 7                |  | 24       | 12       | 36    | (5)             | 31           | (20)              | 11  | -                                | (6)                                      | 5                |  | 50       | 7        | 57    | (5)             | 52           | (39)              | 13  | -                                | (2)                                      | (17)         | (6)              |
| Ferroalloys....         | 201      | 99       | 300   | (21)            | 279          | (218)             | 61  | (17)                             | (10)                                     | 34               |  | 176      | 71       | 247   | (14)            | 233          | (169)             | 64  | -                                | (5)                                      | 59               |  | 131      | 71       | 202   | (18)            | 184          | (114)             | 70  | -                                | (7)                                      | (10)         | 53               |
|                         | 2,974    | 875      | 3,849 | (110)           | 3,739        | (2,198)           | 1,541   | (39)                             | (128)                                    | 1,374            |  | 2,372    | 731      | 3,103 | (101)           | 3,002        | (1,652)           | 1,350   | -                                | (103)                                    | 1,247            |  | 2,184    | 675      | 2,859 | (93)            | 2,766        | (1,519)           | 1,247   | (308)                            | (93)                                     | (27)         | 819              |
| Non ferrous             |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
| Gold.....               | 21       | -        | 21    | -               | 21           | (2)               | 19  | -                                | (2)                                      | 17               |  | 103      | -        | 103   | -               | 103          | (86)              | 17  | (35)                             | (15)                                     | (33)             |  | 139      | -        | 139   | -               | 139          | (99)              | 40  | (47)                             | (15)                                     | (2)          | (24)             |
| Potash.....             | -        | 94       | 94    | (12)            | 82           | (40)              | 42  | -                                | (7)                                      | 35               |  | -        | 91       | 91    | (12)            | 79           | (43)              | 36  | -                                | (4)                                      | 32               |  | -        | 71       | 71    | (6)             | 65           | (37)              | 28  | (2)                              | (4)                                      | (1)          | 21               |
| Kaolin.....             | 83       | 13       | 96    | (3)             | 93           | (70)              | 23  | (12)                             | (7)                                      | 4                |  | 40       | 5        | 45    | (1)             | 44           | (27)              | 17  | -                                | (2)                                      | 15               |  | 34       | 7        | 41    | (2)             | 39           | 5                 | 44  | (29)                             | (1)                                      | -            | 14               |
|                         | 104      | 107      | 211   | (15)            | 196          | (112)             | 84  | (12)                             | (16)                                     | 56               |  | 143      | 96       | 239   | (13)            | 226          | (156)             | 70  | (35)                             | (21)                                     | 14               |  | 173      | 78       | 251   | (8)             | 243          | (131)             | 112   | (78)                             | (20)                                     | (3)          | 11               |
| Aluminum                |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
| Alumina.....            | 342      | 153      | 495   | (8)             | 487          | (363)             | 124   | -                                | (15)                                     | 109              |  | 85       | 74       | 159   | (4)             | 155          | (119)             | 36  | -                                | (4)                                      | 32               |  | 32       | -        | 32    | -               | 32           | (32)              | -   | -                                | -  | -            | -                |
| Aluminum.....           | 312      | 8        | 320   | -               | 320          | (295)             | 25  | -                                | -  | 25               |  | 279      | 1        | 280   | -               | 280          | (254)             | 26  | -                                | -  | 26               |  | 230      | 1        | 231   | -               | 231          | (209)             | 22  | -                                | -  | -            | 22               |
| Bauxite.....            | 34       | 3        | 37    | (1)             | 36           | (33)              | 3   | -                                | -  | 3                |  | 23       | -        | 23    | -               | 23           | (22)              | 1   | -                                | -  | 1                |  | 21       | -        | 21    | -               | 21           | (19)              | 2   | -                                | -  | -            | 2                |
|                         | 688      | 164      | 852   | (9)             | 843          | (691)             | 152   | -                                | (15)                                     | 137              |  | 387      | 75       | 462   | (4)             | 458          | (395)             | 63  | -                                | (4)                                      | 59               |  | 283      | 1        | 284   | -               | 284          | (260)             | 24  | -                                | -  | -            | 24               |
| Logistics               |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |                  |  |          |          |       |                 |              |                   |   |                                  |  |              |                  |
| Railroads.....          | -        | 373      | 373   | (39)            | 334          | (153)             | 181   | -                                | (70)                                     | 111              |  | -        | 286      | 286   | (27)            | 259          | (55)              | 204   | (4)                              | (72)                                     | 128              |  | -        | 299      | 299   | (26)            | 273          | (89)              | 184   | (10)                             | (74)                                     | (2)          | 98               |
| Ports.....              | 1        | 143      | 144   | (14)            | 130          | (75)              | 55  | -                                | (9)                                      | 46               |  | -        | 107      | 107   | (11)            | 96           | (67)              | 29  | -                                | (7)                                      | 22               |  | -        | 104      | 104   | (10)            | 94           | (45)              | 49  | (3)                              | (9)                                      | -            | 37               |
| Ships.....              | 54       | 33       | 87    | (3)             | 84           | (122)             | (38)  | -                                | -  | (38)             |  | 26       | 39       | 65    | (3)             | 62           | (69)              | (7)   | (7)                              | (6)                                      | (20)             |  | 105      | 100      | 205   | (4)             | 201          | (195)             | 6   | (34)                             | (13)                                     | -            | (41)             |
|                         | 55       | 549      | 604   | (56)            | 548          | (350)             | 198   | -                                | (79)                                     | 119              |  | 26       | 432      | 458   | (41)            | 417          | (191)             | 226   | (11)                             | (85)                                     | 130              |  | 105      | 503      | 608   | (40)            | 568          | (329)             | 239   | (47)                             | (96)                                     | (2)          | 94               |
| Others.....             | 19       | 10       | 29    | (5)             | 24           | (66)              | (42)  | -                                | -  | (42)             |  | -        | 20       | 20    | -               | 20           | (40)              | (20)  | -                                | (1)                                      | (21)             |  | 49       | 26       | 75    | (1)             | 74           | (56)              | 18  | (1)                              | (3)                                      | -            | 14               |
|                         | 3,840    | 1,705    | 5,545 | (195)           | 5,350        | (3,417)           | 1,933   | (51)                             | (238)                                    | 1,644            |  | 2,928    | 1,354    | 4,282 | (159)           | 4,123        | (2,434)           | 1,689   | (46)                             | (214)                                    | 1,429            |  | 2,794    | 1,283    | 4,077 | (142)           | 3,935        | (2,295)           | 1,640   | (434)                            | (212)                                    | (32)         | 962              |

## 20 Related party transactions

Transactions with major related parties resulted in the following balances:

|   | As of December 31 |             |            |             |
|---|-------------------|-------------|------------|-------------|
|   | 2003              |             | 2002       |             |
|   | Assets            | Liabilities | Assets     | Liabilities |
| AFFILIATED COMPANIES AND JOINT VENTURES |                   |             |            |             |
| FCA .....                               | -                 | -           | 70         | 1           |
| HISpanoBRAS.....                        | 18                | 29          | 18         | 25          |
| ITABRASCO.....                          | 16                | 17          | 19         | 25          |
| NIBRASCO.....                           | 36                | 25          | 26         | 17          |
| KOBRASCO.....                           | 51                | 14          | 40         | 8           |
| CST.....                                | 31                | -           | 23         | -           |
| USIMINAS.....                           | 7                 | -           | 5          | -           |
| ALBRAS.....                             | 14                | 95          | 10         | 58          |
| Others.....                             | 38                | 87          | 48         | 53          |
|   | <b>211</b>        | <b>267</b>  | <b>259</b> | <b>187</b>  |
| Current.....                            | 171               | 263         | 170        | 180         |
| Long-term.....                          | 40                | 4           | 89         | 7           |

These balances are included in the following balance sheet classifications:

|  | As of December 31 |             |            |             |
|--|-------------------|-------------|------------|-------------|
|  | 2003              |             | 2002       |             |
|  | Assets            | Liabilities | Assets     | Liabilities |
| Current assets                             |                   |             |            |             |
| Accounts receivable.....                   | 115               | -           | 121        | -           |
| Loans and advances to related parties..... | 56                | -           | 49         | -           |
| Other assets                               |                   |             |            |             |
| Loans and advances to related parties..... | 40                | -           | 89         | -           |
| Current liabilities                        |                   |             |            |             |
| Suppliers.....                             | -                 | 144         | -          | 116         |
| Loans from related parties.....            | -                 | 119         | -          | 64          |
| Long-term liabilities                      |                   |             |            |             |
| Long-term debt.....                        | -                 | 4           | -          | 7           |
|  | <b>211</b>        | <b>267</b>  | <b>259</b> | <b>187</b>  |

The principal amounts of business and financial operations carried out with major related parties are as follows:

|  | Year ended December 31 |            |            |            |            |            |
|--|------------------------|------------|------------|------------|------------|------------|
|  | 2003                   |            | 2002       |            | 2001       |            |
|  | Income                 | Expense    | Income     | Expense    | Income     | Expense    |
| <b>AFFILIATED COMPANIES AND JOINT VENTURES</b> |                        |            |            |            |            |            |
| CST.....                                       | 136                    | -          | 152        | -          | 146        | -          |
| NIBRASCO.....                                  | 116                    | 133        | 146        | 150        | 135        | 132        |
| ALUNORTE (to June 2002).....                   | -                      | -          | 6          | -          | 84         | 38         |
| SIDERAR.....                                   | 53                     | -          | 35         | -          | 30         | -          |
| ITABRASCO.....                                 | 61                     | 20         | 74         | 53         | 67         | 33         |
| HISpanoBRAS.....                               | 66                     | 69         | 77         | 77         | 74         | 74         |
| KOBRASCO.....                                  | 62                     | 57         | 84         | 46         | 75         | 63         |
| CENIBRA (to May 2001).....                     | -                      | -          | -          | -          | 30         | 46         |
| USIMINAS.....                                  | 79                     | -          | 76         | -          | 59         | -          |
| ALBRAS.....                                    | 149                    | 286        | 73         | 265        | 5          | 208        |
| VALESUL.....                                   | 10                     | -          | 7          | 1          | -          | -          |
| MRN.....                                       | -                      | -          | -          | 56         | -          | 17         |
| Others.....                                    | 55                     | 176        | 79         | 94         | 99         | 142        |
| <b>BRAZILIAN FEDERAL GOVERNMENT</b>            |                        |            |            |            |            |            |
| Banco do Brasil S.A.....                       | -                      | -          | 3          | -          | 27         | -          |
| Petróleo Brasileiro S.A. - PETROBRAS.....      | -                      | -          | -          | -          | 2          | 18         |
| Centrais Elétricas Brasileiras S.A.....        | -                      | -          | -          | -          | 1          | -          |
| BNDES.....                                     | -                      | -          | -          | 2          | 1          | 19         |
|  | <b>787</b>             | <b>741</b> | <b>812</b> | <b>744</b> | <b>835</b> | <b>790</b> |

These amounts are included in the following statement of income classifications:

|  | Year ended December 31 |            |            |            |            |            |
|--|------------------------|------------|------------|------------|------------|------------|
|  | 2003                   |            | 2002       |            | 2001       |            |
|  | Income                 | Expense    | Income     | Expense    | Income     | Expense    |
| Sales / Cost of iron ore and pellets.... | 608                    | 317        | 599        | 380        | 518        | 349        |
| Revenues from logistic services.....     | 13                     | -          | 66         | -          | 85         | -          |
| Sales / Cost of aluminum products....    | 153                    | 427        | 74         | 314        | -          | 254        |
| Financial income/expenses.....           | (17)                   | (4)        | 15         | 18         | 180        | 59         |
| Others.....                              | 30                     | 1          | 58         | 32         | 52         | 128        |
|  | <b>787</b>             | <b>741</b> | <b>812</b> | <b>744</b> | <b>835</b> | <b>790</b> |

## 21 Fair value of financial instruments

The carrying amount of our current financial instruments generally approximates fair market value because of the short-term maturity or frequent repricing of these instruments.

The market value of long-term investments, where available, is disclosed in Note 13 to these financial statements.

Based on borrowing rates currently available to us for bank loans with similar terms and average maturities, the fair market value of long-term debt at December 31, 2003 and 2002 is estimated as follows:

|                        | As of December 31 |       |
|------------------------|-------------------|-------|
|                        | 2003              | 2002  |
| Fair market value..... | 2,839             | 2,379 |
| Carrying value.....    | 2,767             | 2,359 |

Fair market value estimates are made at a specific point in time, based on relevant market information and information about the financial instruments. Changes in assumptions could significantly affect the estimates.

## 22 Derivative financial instruments

Volatility of interest rates, exchange rates and commodity prices are the main market risks to which we are exposed - all three are managed through derivative operations. These have the exclusive aim of reducing exposure to risk. We do not use derivatives for speculation purposes.

We monitor and evaluate our derivative positions on a regular basis and adjust our strategy in response to market conditions. We also periodically review the credit limits and credit worthiness of our counter-parties in these transactions. In view of the policies and practices established for operations with derivatives, management considers the occurrence of non-measurable risk situations as unlikely.

The asset (liability) balances and the movement in fair value of derivative financial instruments is as follows:

|  | Interest rates |             |            |             |             |
|--|----------------|-------------|------------|-------------|-------------|
|  | Gold           | (LIBOR)     | Currencies | Alumina     | Total       |
| Unrealized gains (losses) at January 1, 2001.....          | 9              | (8)         | (4)        | -           | (3)         |
| Unrealized gains and (losses) realized in the period.....  | 2              | (36)        | (4)        | -           | (38)        |
| Financial settlement.....                                  | (4)            | 8           | 4          | -           | 8           |
| <b>Unrealized gains (losses) at December 31, 2001.....</b> | <b>7</b>       | <b>(36)</b> | <b>(4)</b> | <b>-</b>    | <b>(33)</b> |
| Gain recognized upon consolidation of Alunorte.....        | -              | -           | -          | 2           | 2           |
| Financial settlement.....                                  | (2)            | 21          | 3          | 1           | 23          |
| Unrealized gains (losses) in the period.....               | (22)           | (60)        | (1)        | -           | (83)        |
| Effect of exchange rate changes.....                       | 2              | 15          | 1          | -           | 18          |
| <b>Unrealized gains (losses) at December 31, 2002.....</b> | <b>(15)</b>    | <b>(60)</b> | <b>(1)</b> | <b>3</b>    | <b>(73)</b> |
| Financial settlement.....                                  | 8              | 30          | -          | -           | 38          |
| Unrealized gains (losses) in the period.....               | (24)           | (3)         | 6          | (22)        | (43)        |
| Effect of exchange rate changes.....                       | (1)            | (13)        | -          | 1           | (13)        |
| <b>Unrealized gains (losses) at December 31, 2003.....</b> | <b>(32)</b>    | <b>(46)</b> | <b>5</b>   | <b>(18)</b> | <b>(91)</b> |

Unrealized gains (losses) in the period are included in our income statement under the following captions:

Gold – financial expenses;  
Interest rates – financial expenses;  
Currencies – financial expenses;  
Alumina – financial expenses.

Final maturity dates for the above instruments are as follows:

|                             |          |
|-----------------------------|----------|
| Gold.....                   | Dec 2007 |
| Interest rates (LIBOR)..... | Oct 2007 |
| Currencies.....             | Dec 2011 |
| Alumina.....                | Sep 2005 |

**(a) Interest Rate and Exchange Rate Risk**

Interest rate risks mainly relate to that part of the foreign debt borrowed at floating rates. The foreign currency debt is largely subject to fluctuations in the London Interbank Offered Rate - LIBOR. That portion of local currency denominated debt that is subject to floating rates is linked to the Long Term Interest Rate - TJLP, fixed quarterly by the Brazilian Central Bank. We have used derivative instruments to protect ourselves against fluctuations in the LIBOR rate.

There is an exchange rate risk associated with our foreign currency denominated debt. On the other hand, the majority of our revenues is denominated in, or automatically indexed to, the U.S. dollar, while the majority of our costs is denominated in reais. This provides a natural hedge against any devaluation of the Brazilian real against the U.S. dollar. When events of this nature occur, the immediate negative impact on foreign currency denominated debt is offset over time by the positive effect of devaluation on future cash flows.

With the floating exchange rate regime in Brazil, we adopt a strategy of monitoring market fluctuations, using derivatives to protect against specific risks from exchange rate variation.

From time to time we enter into foreign exchange derivative swap transactions seeking to change the characteristics of our real-denominated cash investments to US dollar-indexed instruments. The extent of such transactions depends on our perception of market and currency risk, but is never speculative in nature. All such operations are marked-to-market at each balance sheet date and the effect included in financial income or expense. During the periods presented our use of such instruments was not significant.

**(b) Commodity Price Risk**

We also use derivative instruments to manage exposure to changing gold prices and to ensure an average minimum profit level for future and alumina production. However, they may also have the effect of eliminating potential gains on certain price increases in the spot market. We manage our contract positions actively, and the results are reviewed at least monthly, allowing adjustments to targets and strategy to be made in response to changing market conditions.

In the case of gold and alumina derivatives, our policy has been to settle all contracts through cash payments or receipts, without physical delivery of product.

## Information about independent auditors

Our consolidated financial statements are audited by PricewaterhouseCoopers Auditores Independentes. The financial statements of certain of our subsidiaries and affiliates have been audited by independent auditors other than PricewaterhouseCoopers Auditores Independentes as described below, and, as mentioned in their report, PricewaterhouseCoopers Auditores Independentes has relied on such audits when expressing their opinion on our consolidated financial statements.

The following entities prepare financial statements in US GAAP which are audited in accordance with auditing standards generally accept in the United States of America:

|  | Auditors | Years Audited    | City             | State | Country |
|--|----------|------------------|------------------|-------|---------|
| <b>Steel</b>   |          |                  |                  |       |         |
| Alumínio Brasileiro S.A. - ALBRAS.....                         | Trevisan | 2003             | RJ               | RJ    | Brazil  |
| Alumina do Norte do Brasil S.A. - ALUNORTE .....               | Trevisan | 2003             | RJ               | RJ    | Brazil  |
| Alumina do Norte do Brasil S.A. - ALUNORTE .....               | DTT      | 2002, 2001       | RJ               | RJ    | Brazil  |
| California Steel Industries, Inc. ....                         | KPMG LLP | 2002, 2001       | Orange<br>County | CA    | USA     |
| Navegação Vale do Rio Doce S.A. - DOCENAVE.....                | DTT      | 2003, 2002, 2001 | RJ               | RJ    | Brazil  |
| Celulose Nipo-Brasileira S.A - CENIBRA                         | DTT      | 2001             | Salvador         | BA    | Brazil  |
| Companhia Hispano-Brasileira de Pelotização - HISPANOBRAS..... | AA       | 2001             | Vitória          | ES    | Brazil  |
| Companhia Hispano-Brasileira de Pelotização - HISPANOBRAS..... | DTT      | 2003, 2002       | Vitória          | ES    | Brazil  |
| Companhia Ítalo-Brasileira de Pelotização - ITABRASCO.....     | AA       | 2001             | Vitória          | ES    | Brazil  |
| Companhia Ítalo-Brasileira de Pelotização - ITABRASCO.....     | DTT      | 2003, 2002       | Vitória          | ES    | Brazil  |
| Companhia Coreano Brasileira de Pelotização - KOBRASCO.....    | DTT      | 2003, 2002, 2001 | Vitória          | ES    | Brazil  |
| Mineração Rio do Norte S.A. ....                               | AA       | 2001             | RJ               | RJ    | Brazil  |
| Mineração Rio do Norte S.A. ....                               | DTT      | 2003, 2002       | RJ               | RJ    | Brazil  |
| Companhia Nipo-Brasileira de Pelotização - NIBRASCO.....       | DTT      | 2003, 2002, 2001 | RJ               | RJ    | Brazil  |
| Valesul Alumínio S.A. ....                                     | KPMG     | 2002, 2001       | RJ               | RJ    | Brazil  |
| Valesul Alumínio S.A. ....                                     | DTT      | 2003             | RJ               | RJ    | Brazil  |
| Urucum Mineração S.A. ....                                     | DTT      | 2003             | Salvador         | BA    | Brazil  |
| Rio Doce Manganês S.A. ....                                    | DTT      | 2003, 2002, 2001 | Salvador         | BA    | Brazil  |

AA - Arthur Andersen S/C (ceased business in 2002)

DTT - Deloitte Touche Tohmatsu

RJ - Rio de Janeiro

ES - Espírito Santo

BA - Bahia

## Subsequent Event

On January 9, 2004 we launched a bond issue maturing in 2034. The bonds carry a coupon of 8.25% a year with semiannual payment and will be sold at 98.904% of face value, priced to have a yield to maturity of 8.35%, at a spread of 336 basis points over 30-year US Treasuries. The bonds mature on January 17, 2034 and received a risk rating of Ba2 from Moody's Investor Services. The 30-year term is the longest for a bond issued by a Brazilian company in the international capital market.

The bonds are unsecured and non-subordinated obligations of Vale Overseas Limited and have the full and unconditional guarantee of CVRD. The guarantee will be "pari passu" to all obligations of CVRD of a similar nature. The funds raised with this issue are earmarked to cover the general needs of the Company.

\* \* \*



## **Board of Directors, Fiscal Council and Executive Officers**

### **Board of Directors**

Sérgio Ricardo Silva Rosa  
Chairman

Mário da Silveira Teixeira Júnior

Arlindo Magno de Oliveira

Cláudio Bernardo Guimarães de Moraes

Erik Persson

Francisco Valadares Póvoa

Jaques Wagner

Katsuto Momii

Oscar Augusto de Camargo Filho

Renato da Cruz Gomes

Ricardo Carvalho Giambroni

### **Advisory Committees of the Board of Directors**

#### **Audit Committee**

Antonio José de Figueiredo Ferreira  
Marcos Fábio Coutinho  
Paulo Roberto Ferreira de Medeiros  
Ricardo Wiering de Barros

#### **Executive Development Committee**

Arlindo Magno de Oliveira  
Francisco Valadares Póvoa  
João Moisés de Oliveira  
Olga Loffredi  
Oscar Augusto de Camargo Filho

#### **Strategic Committee**

Roger Agnelli  
Gabriel Stoliar  
César Manoel de Medeiros  
José Roberto Mendonça de Barros  
Samir Zraick

#### **Finance Committee**

Roger Agnelli  
Fábio de Oliveira Barbosa  
Luiz Carlos Siqueira Aguiar  
Rômulo de Mello Dias  
Wanderlei Viçoso Fagundes

#### **Governance and Ethics Committee**

Renato da Cruz Gomes  
Ricardo Simonsen  
Ricardo Carvalho Giambroni

### **Fiscal Council**

Joaquim Vieira Ferreira Levy

Luiz Octávio Nunes West

Pedro Carlos de Mello

Vicente Barcelos

Wilson Risolia Rodrigues

### **Executive Officers**

Roger Agnelli  
**Chief Executive Officer**

Antonio Miguel Marques  
**Executive Officer for Equity Holdings and Business Development**

Armando de Oliveira Santos Neto  
**Executive Officer for Ferrous Minerals**

Carla Grasso  
**Executive Officer for Human Resources and Corporate Services**

Diego Cristobal Hernández Cabrera  
**Executive Officer for Non-Ferrous Minerals**

Fábio de Oliveira Barbosa  
**Chief Financial Officer**

Gabriel Stoliar  
**Executive Officer for Planning**

Guilherme Rodolfo Laager  
**Executive Officer for Logistics**

Otto de Souza Marques Junior  
Chief Officer of Control Department

Eduardo de Carvalho Duarte  
Chief Accountant  
CRC-RJ 57439