

NATIONAL STEEL CO  
Form 20-F/A  
May 20, 2016

As filed with the Securities and Exchange Commission on May 20, 2016.

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM 20-F/A**

(Amendment No. 1)

.. REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
OR  
R ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2015  
OR  
.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
OR  
.. SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934

Commission File Number 1-14732

**COMPANHIA SIDERÚRGICA NACIONAL**  
(Exact Name of Registrant as Specified in its Charter)

**NATIONAL STEEL COMPANY**  
(Translation of Registrant's name into English)

**THE FEDERATIVE REPUBLIC OF BRAZIL**  
(Jurisdiction of incorporation or organization)

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(Address of principal executive offices)

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

| <u><b>Title of each class</b></u>   | <u><b>Name of each exchange on which registered</b></u> |
|---|---|
| Common Shares without par value   | New York Stock Exchange*                                |
| American Depositary Shares, (as evidenced by American Depositary Receipts), each representing one share of Common Stock | New York Stock Exchange                                 |

\* Not for trading purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

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**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

**Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the period covered by the annual report:**

Common Shares, without par value. 1,387,524,047 common shares. For further information, see "Item 7A. Major Shareholders", "Item 9A. Offer and Listing Details" and "Item 10B. Memorandum and Articles of Association."

**Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.**

R Yes No

**If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**

Yes RNo

**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.**

RYes No

**Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).**

Yes No

**Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):**

Large Accelerated Filer R Accelerated Filer Non-accelerated Filer

**Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:**

U.S. GAAP

Other

**International Financial Reporting  
Standards as issued by the  
International Accounting Standards  
Board R**

**If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:**

**Item 17   Item 18**

**If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).**

**Yes   R   No**

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**EXPLANATORY NOTE**

We are amending our annual report on Form 20-F for the year ended December 31, 2015, or the Annual Report, as originally filed with the U.S. Securities and Exchange Commission on May 13, 2016, to (i) include the tables to the financial statements and independent auditor’s report of Nacional Minérios S.A. that were excluded from its financial statements due to a clerical error and (ii) fix rounding errors in certain numbers in section Item 4D. Property, Plant and Equipment – Planned Investments.

Other than as set forth above, this Form 20-F/A does not, and does not purport to, amend, update or restate the information in any other item of the Annual Report as originally filed with the SEC. As a result, the Annual Report, as amended by this amendment, continues to speak as of the date of its original filing and we have not updated the disclosure as of a later date

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**PART II**

**PART III**

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## **Introduction**

Unless otherwise specified, all references in this annual report to:

“we,” “us,” “our” or “CSN” are to Companhia Siderúrgica Nacional and its consolidated subsidiaries;

“Brazilian government” are to the federal government of the Federative Republic of Brazil;

“*real*,” “*reais*” or “R\$” are to Brazilian *reais*, the official currency of Brazil;

“U.S. dollars,” “\$,” “U.S.\$” or “USD” are to United States dollars;

“billions” are to thousands of millions, “km” are to kilometers, “m” are to meters, “mt” or “tons” are to metric tons, “mtpy” are to metric tons per year and “MW” are to megawatts;

“TEUs” are to twenty-foot equivalent units;

“consolidated financial statements” are to the consolidated financial statements of Companhia Siderúrgica Nacional and its consolidated subsidiaries reported in International Financial Reporting Standards as issued by the IASB – IFRS as of December 31, 2013, 2014 and 2015 and for the years ended December 31, 2013 and 2014 and 2015 together with the corresponding Reports of Independent Registered Public Accounting Firm;

“ADSs” are to CSN’s American Depositary Shares and “ADRs” are to CSN’s American Depositary Receipts; and

“Brazil” is to the Federative Republic of Brazil.

## **Forward-Looking Statements**

This annual report includes forward-looking statements, within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, principally under the captions “Item 3. Key Information,” “Item 4. Information on the Company,” “Item 5. Operating and Financial Review and Prospects” and “Item 11. Quantitative and Qualitative Disclosures About Market Risk.” We have based these forward-looking statements largely on our current expectations and projections about future events, industry and financial trends affecting our business.

Many important factors, in addition to those discussed elsewhere in this annual report, could cause our actual results to differ substantially from those anticipated in our forward-looking statements, including, among other things:

- general economic, political and business conditions in Brazil and abroad, especially in China, which is the largest world steel producer and main consumer of our iron ore;
- demand for and prices of steel and mining products;
- the effects of the global financial markets and economic slowdowns;

- changes in competitive conditions and in the general level of demand and supply for our products;
- our liquidity position and leverage;
- management's expectations and estimates concerning our future financial performance and financing plans;
- our level of debt and our ability to obtain financing on satisfactory terms;
- availability and price of raw materials;
- changes in international trade or international trade regulations;
- protectionist measures imposed by Brazil and other countries;
- our capital expenditure plans;

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- inflation, interest rate levels and fluctuations in foreign exchange rates;
- our ability to develop and deliver our products on a timely basis;
- lack of infrastructure in Brazil;
- electricity and natural gas shortages and government responses to them;
- existing and future governmental regulation; and
- other risk factors as set forth under “Item 3D. Risk Factors.”

The words “believe,” “may,” “will,” “aim,” “estimate,” “forecast,” “plan,” “continue,” “anticipate,” “intend,” “expect” and similar words are intended to identify forward-looking statements. Forward-looking statements speak only as of the date they were made, and we undertake no obligation to publicly update or to revise any forward-looking statements after we distribute this annual report because of new information, future events or other factors. In light of the risks and uncertainties described above, the forward-looking events and circumstances discussed in this annual report might not occur and are not an indication of future performance. As a result of various factors, such as those risks described in “Item 3D. Risk Factors,” undue reliance should not be placed on these forward-looking statements.

### **Presentation of Financial and Other Information**

Our consolidated financial statements as of December 31, 2015 and 2014 and for the years ended December 31, 2015, 2014 and 2013 contained in “Item 18. Financial Statements” have been presented in thousands of *reais* (R\$) and prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). See Note 2(a) to our consolidated financial statements.

Certain figures included in this annual report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures, which precede them.

## **PART I**

### **Item 1. Identity of Directors, Senior Management and Advisors**

Not applicable.

### **Item 2. Offer Statistics and Expected Timetable**

Not applicable.

### **Item 3. Key Information**

### 3A. Selected Financial Data

We present in this section the summary financial and operating data derived from our audited consolidated financial statements as of and for the year ended December 31, 2015, 2014, 2013, 2012 and 2011.

The consolidated financial statements included in this annual report have been prepared in accordance with IFRS, as issued by the IASB, presented in Brazilian *real*. However, we have translated some of the Brazilian *real* amounts contained in this annual report into U.S. dollars for the convenience of readers outside of Brazil. The rate used to translate such amounts in respect of the year ended December 31, 2015 was R\$3.905 to U.S.\$1.00, which was the commercial rate for the purchase of U.S. dollars in effect as of December 31, 2015, as reported by the Central Bank of Brazil, or the Central Bank. The U.S. dollar equivalent information presented in this annual report is provided solely for the convenience of investors and should not be construed as implying that the Brazilian *real* amounts represent, or could have been or could be converted into, U.S. dollars at such rates or at any other rate. See “Exchange Rates” for more detailed information regarding the translation of *reais* into U.S. dollars.

Table of contents*Summary Financial and Operating Data*

The following tables present summary historical consolidated financial and operating data for us for each of the periods indicated. Solely for the convenience of the reader, Brazilian real amounts as of and for the year ended December 31, 2015 have been translated into U.S. dollars at the commercial market rate in effect as of December 31, 2015 as reported by the Central Bank of R\$3.905 to U.S.\$1.00. The selected financial data below should be read in conjunction with “Item 5. Operating and Financial Review and Prospects.”

We have applied, beginning January 1, 2013, IFRS 10 - Consolidated Financial Statements, which establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more entities, and IFRS 11 - Joint Arrangements, which requires a new valuation of joint arrangements, focusing on the rights and obligations of the arrangement, instead of its legal form. The reffered new standard provides additional transition relief, limiting the requirement to provide adjusted comparative information to only the preceding comparative period. We applied this transition relief as described above with respect to the adoption of IFRS 10 and IFRS 11.

The financial statements as of and for the year ended December 31, 2012 have been restated for the effects of the retrospective adoption of these new standards. Our financial statements as of and for the year ended December 31, 2011 remain unchanged and as disclosed previously. The selected financial data for the year ended December 31, 2011 have not been retrospectively adjusted and, as a result, are not comparable with the information as of and for the years ended December 31, 2015, 2014, 2013 and 2012.

| <b>Income Statement Data:</b>                    | <b>Year Ended December 31,</b>                     |   |                |                |                |               |
|--|--|---|----------------|----------------|----------------|---------------|
|  | <b>2015</b>  | <b>2015</b>                                       | <b>2014</b>    | <b>2013</b>    | <b>2012</b>    | <b>2011</b>   |
|  | <i>(in million of US\$, except per share data)</i> | <i>(in million of R\$, except per share data)</i> |                |                |                |               |
| <b>Net operating revenues</b>                    | <b>3,926</b>                                       | <b>15,332</b>                                     | <b>16,126</b>  | <b>17,312</b>  | <b>15,229</b>  | <b>16,520</b> |
| <b>Cost of products sold</b>                     | (3,022)  | 11,800  | (11,592)       | (12,423)       | (11,259)       | (9,801)       |
| <b>Gross profit</b>                              | <b>904</b>   | <b>3,532</b>                                      | <b>4,534</b>   | <b>4,889</b>   | <b>3,970</b>   | <b>6,719</b>  |
| <b>Operating expenses</b>                        |  |   |                |                |                |               |
| <b>Selling</b>                                   | (368)  | (1,436)   | (1,042)        | (875)          | (774)          | (604)         |
| <b>General and Administrative</b>                | (121)  | (471)   | (438)          | (486)          | (468)          | (576)         |
| <b>Equity in results of affiliated companies</b> | 297  | 1,160   | 331            | 158            | 642            | 0             |
| <b>Other expenses</b>                            | (342)  | (1,334)   | (657)          | (1,134)        | (2,763)        | (501)         |
| <b>Other income <sup>4</sup></b>                 | 954  | 3,727   | 90             | 567            | 111            | 791           |
| <b>Total <sup>4</sup></b>                        | <b>422</b>   | <b>1,646</b>                                      | <b>(1,716)</b> | <b>(1,770)</b> | <b>(3,252)</b> | <b>(962)</b>  |
| <b>Operating income</b>                          | <b>1,326</b>                                       | <b>5,178</b>                                      | <b>2,818</b>   | <b>3,120</b>   | <b>719</b>     | <b>5,757</b>  |
| <b>Non-operating income (expenses), net</b>      |  |   |                |                |                |               |
| <b>Financial income</b>                          | 125  | 489   | 172            | 171            | 391            | 717           |
| <b>Financial expenses</b>                        | (989)  | (3,862)   | (3,253)        | (2,683)        | (2,543)        | (2,723)       |

|  |            |              |              |            |                |              |
|--|------------|--------------|--------------|------------|----------------|--------------|
| <b>Income before taxes</b>                                       | <b>462</b> | <b>1,805</b> | <b>(263)</b> | <b>608</b> | <b>(1,433)</b> | <b>3,751</b> |
| <b>Income tax</b>  |            |              |              |            |                |              |
| <b>Current</b>   | (98)       | (381)        | (528)        | (1,291)    | (322)          | (136)        |
| <b>Deferred</b>  | 49         | 192          | 679          | 1,217      | 1,275          | 52           |
| <b>Net (Loss) income</b>   | <b>414</b> | <b>1,616</b> | <b>(112)</b> | <b>534</b> | <b>(481)</b>   | <b>3,667</b> |
| <b>Net loss attributable to non controlling interest</b>         | <b>92</b>  | <b>358</b>   | <b>(7)</b>   | <b>25</b>  | <b>(61)</b>    | <b>(39)</b>  |
| <b>Net income attributable to Companhia Siderúrgica Nacional</b> | <b>322</b> | <b>1,258</b> | <b>(105)</b> | <b>509</b> | <b>(421)</b>   | <b>3,706</b> |
| <b>Basic earnings common share</b>                               | 0.23737    | 0.92690      | -0.07440     | 0.34913    | -0.28815       | 2.54191      |
| <b>Diluted earnings per common share</b>                         | 0.23737    | 0.92690      | -0.07440     | 0.34913    | -0.28815       | 2.54191      |

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| Income Statement Data:   | Year Ended December 31,             |               |               |                            |               |                   |
|--|-------------------------------------|---------------|---------------|----------------------------|---------------|-------------------|
|  | 2015<br><i>(in million of US\$)</i> | 2015          | 2014          | 2013 <sup>3</sup>          | 2012          | 2011 <sup>2</sup> |
|  |                                     |               |               | <i>(in million of R\$)</i> |               |                   |
| <b>Current assets</b>  | <b>4,208</b>                        | <b>16,431</b> | <b>15,936</b> | <b>16,403</b>              | <b>19,099</b> | <b>21,945</b>     |
| <b>Investments</b>   | 1,024                               | 3,998         | 13,665        | 13,487                     | 10,840        | 2,088             |
| <b>Property, plant and equipment <sup>4</sup></b>  | <b>4,577</b>                        | <b>17,872</b> | <b>15,624</b> | <b>14,911</b>              | <b>18,520</b> | <b>17,377</b>     |
| <b>Other assets</b>  | 2,650                               | 10,349        | 4,542         | 5,602                      | 4,825         | 5,460             |
| <b>Total assets</b>  | <b>12,459</b>                       | <b>48,650</b> | <b>49,767</b> | <b>50,403</b>              | <b>53,284</b> | <b>46,870</b>     |
| <b>Current liabilities</b>   | 1,256                               | 4,903         | 6,363         | 5,564                      | 6,551         | 6,497             |
| <b>Non-current liabilities</b>   | <b>8,966</b>                        | <b>35,011</b> | <b>37,669</b> | <b>36,770</b>              | <b>37,725</b> | <b>31,956</b>     |
| <b>Stockholders' equity <sup>4</sup></b>   | 2,237                               | 8,736         | 5,735         | 8,069                      | 9,008         | 8,417             |
| <b>Total liabilities and stockholders' equity</b>  | <b>12,459</b>                       | <b>48,650</b> | <b>49,767</b> | <b>50,403</b>              | <b>53,284</b> | <b>46,870</b>     |
| <b>Paid-in capital <i>(in million of reais)</i></b>  | <b>1,163</b>                        | <b>4,540</b>  | <b>4,540</b>  | <b>4,540</b>               | <b>4,540</b>  | <b>1,681</b>      |
| <b>Common shares <i>(in million of shares)</i></b>   | 1,388                               | 1,388         | 1,388         | 1,457                      | 1,457         | 1,457             |
| <b>Dividends declared and interest on stockholders' equity <i>(in million of reais)</i><sup>1</sup></b>                  | <b>70</b>                           | <b>275</b>    | <b>700</b>    | <b>800</b>                 | <b>300</b>    | <b>1200</b>       |
| <b>Dividends declared and interest on stockholders' equity per common share <i>(in million of reais)</i><sup>1</sup></b> | 0.05                                | 0.2           | 0.5           | 0.55                       | 0.21          | 0.82              |

(1) Amounts consist of dividends declared and accrued interest on shareholders' equity during the year. For a discussion of our dividend policy and dividend and interest payments, see "Item 8A. Consolidated Statements and Other Financial Information-Dividend Policy."

(2) The selected financial data as of and for the year ended December 31, 2011 have not been retrospectively adjusted for the effects of the adoption of IFRS 10 and 11 as permitted by the transition guidance related to these standards.

(3) In 2013, the financial information was substantially impacted by the deconsolidation of Transordestina Logística S.A. which began to be recognized under the equity accounting method, due to the partial spin-off and the entry into effect of the new shareholders' agreement. For further information, see Other operating income (expenses) included in Item 5A. Operating Results.

(4) The 2015 financial information was impacted by the business combination of Congonhjas Minérios as described in "Item 5A. Operating Results"

The Brazilian foreign exchange system allows the purchase and sale of foreign currency and the international transfer of *reais* by any person or legal entity, regardless of the amount, subject to certain regulatory procedures.

The Brazilian *real* has experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies during the recent decades. The Central Bank has intervened occasionally to mitigate volatility in foreign exchange rates.

We cannot predict whether the Central Bank or the Brazilian government will continue to allow the Brazilian *real* to float freely or will intervene in the exchange rate market through a currency band system or otherwise. The Brazilian *real* may depreciate or appreciate against the U.S. dollar substantially.

The following tables present the purchase rate, expressed in *reais* per U.S. dollar (R\$/U.S.\$), for the periods indicated:

| <b>Year ended</b>        | <b>Low</b> | <b>High</b> | <b>Average <sup>(1)</sup></b> | <b>Period-end</b> |
|--------------------------|------------|-------------|-------------------------------|-------------------|
| <b>December 31, 2011</b> | 1.535      | 1.902       | 1.675                         | 1.876             |
| <b>December 31, 2012</b> | 1.702      | 2.112       | 1.955                         | 2.044             |
| <b>December 31, 2013</b> | 1.953      | 2.446       | 2.161                         | 2.343             |
| <b>December 31, 2014</b> | 2.560      | 2.740       | 2.639                         | 2.656             |
| <b>December 31, 2015</b> | 2.575      | 4.195       | 3.334                         | 3.905             |

| <b>Month ended</b>   | <b>Low</b> | <b>High</b> | <b>Average</b> | <b>Period-end</b> |
|----------------------|------------|-------------|----------------|-------------------|
| <b>October 2015</b>  | 3.738      | 4.001       | 3.880          | 3.859             |
| <b>November 2015</b> | 3.701      | 3.851       | 3.776          | 3.851             |
| <b>December 2015</b> | 3.748      | 3.983       | 3.871          | 3.905             |
| <b>January 2016</b>  | 3.986      | 4.156       | 4.052          | 4.043             |
| <b>February 2016</b> | 3.865      | 4.049       | 3.973          | 3.979             |
| <b>March 2016</b>    | 3.558      | 3.991       | 3.703          | 3.558             |
| <b>April 2016</b>    | 3.450      | 3.692       | 3.565          | 3.450             |

**Source: Central Bank.**

**(1)** Represents the daily average of the close exchange rates during the period



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We will pay any cash dividends and make any other cash distributions with respect to our common shares in Brazilian currency. Accordingly, exchange rate fluctuations may affect the U.S. dollar amounts received by ADS holders on conversion into U.S. dollars of such distributions for payment by the depositary. Fluctuations in the exchange rate between the Brazilian *real* and the U.S. dollar may also affect the U.S. dollar equivalent of the *real* price of our common shares on BM&FBOVESPA.

**3B. Capitalization and Indebtedness**

Not required.

**3C. Reasons for the Offer and Use of Proceeds**

Not required.

**3D. Risk Factors**

*An investment in our ADSs or common shares involves a high degree of risk. You should carefully consider the risks described below before making an investment decision. Our business, financial condition and results of operations could be materially and adversely affected by any of these risks. The trading price of our ADSs could decline due to any of these risks or other factors, and you may lose all or part of your investment. The risks described below are those that we currently believe may materially affect us.*

**Risks Relating to Brazil**

*The Brazilian government exercises significant influence over the Brazilian economy. This influence, as well as Brazilian political and economic conditions, could materially and adversely affect us.*

The Brazilian government frequently intervenes in the Brazilian economy and occasionally makes significant changes in policy and regulation. See “—Government efforts to combat inflation may hinder the growth of the Brazilian economy and could harm us” and “Item 5A. Operating Results—Brazilian Macro-Economic Scenario, Effects of Exchange Rate Fluctuations.” The Brazilian government’s actions, policies and regulations have involved, among other measures, increases in interest rates, changes in tax policies, price controls, currency devaluations, capital controls and limits on imports. Our business, financial condition and results of operations may be adversely affected by political, social, and economic developments in or affecting Brazil, and by changes in policy or regulations at the federal, state or municipal levels involving or affecting factors such as:

- interest rates;
- exchange controls;
- currency fluctuations;
- inflation;
- price volatility of raw materials and our final products;
- lack of infrastructure in Brazil;

- energy and water supply shortages and rationing programs;
- liquidity of the domestic capital and lending markets;
- regulatory policy for the mining, steel, cement, logistic and energy industries;
- environmental policies and regulations;

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- tax policies and regulations, including frequent changes in tax regulations that may result in uncertainties as to future taxation; and
- other political, social and economic developments in or affecting Brazil.

Recent economic and political instability, which have become more acute at the end of 2015, may lead to legislative or regulatory changes that could negatively affect us. In addition, such changes may also lead to further economic uncertainty and to heightened volatility and negative perception of the Brazilian securities markets which may adversely affect us and the trading price of our common shares.

Political crises, corruption scandals and deadlock in Brazil have in the past affected and are currently affecting the development of the Brazilian economy and the trust of foreign investors, as well as the public in general. Recent popular unrest has led to large demonstrations in the past three years, with the Brazilian populace expressing growing dissatisfaction with the country's deteriorating political climate, corruption, mounting inflation, slow GDP growth and high interest rates.

In addition and as a consequence to the above mentioned, since 2011, Brazil has experienced an economic slowdown. The Gross Domestic Product, or GDP, growth rates were a negative 3.8% in 2015, 0.1% in 2014, 2.7% in 2013, 1.8% in 2012 and 3.9% in 2011, compared to a GDP growth of 7.5% in 2010. In 2016, analysts project that the Brazilian GDP will contract 3.9%, according to a Focus Report published by the Brazilian Central Bank on April 29, 2016. Our results of operations and financial condition have been, and will continue to be, affected by the growth rate of the Brazilian GDP. We cannot assure you that the GDP will increase or remain stable. Developments in the Brazilian economy may affect Brazil's growth rates and, consequently, the use of our products and services.

***Exchange rate instability may adversely affect us and the market price of our common shares and ADSs.***

The Brazilian currency has long experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies. For example, the real appreciated 11.8%, 8.7% and 17.2% against the U.S. dollar in 2005, 2006 and 2007, respectively. In 2008, as a result of the worsening global economic crisis, the real depreciated 32% against the U.S. dollar, closing at R\$2.337 to U.S.\$1.00 on December 31, 2008. For the years of 2009 and 2010, amid robust GDP growth and a strong local economy the real appreciated 25.5% and 4.2%, respectively, against the U.S. dollar, closing at R\$1.741 and R\$1.666 to U.S.\$1.00 on December 31, 2009 and 2010, respectively. Since 2013, the real depreciated against the U.S. dollar by 14.6% in 2013, 13.4% in 2014 and 47.0% in 2015, mainly due to external and internal factors, closing at R\$2.343, R\$2.656 and R\$ 3.905 to U.S.\$1.00 on December 31, 2013, 2014 and 2015, respectively. On April 29, 2016 the exchange rate was R\$3.45 per U.S.\$1.00.

Depreciation of the *real* against major foreign currencies could create inflationary pressures in Brazil and contribute to Central Bank increases in interest rates, which could negatively affect us and the growth of the Brazilian economy, may curtail access to foreign financial markets and may prompt government intervention, which could include recessionary measures. Depreciation of the *real* can also, as in the context of an economic slowdown, lead to decreased consumer spending and reduced growth of the economy as a whole.

On the other hand, appreciation of the *real* relative to major foreign currencies could lead to a deterioration of Brazilian foreign exchange current accounts, as well as affect export-driven growth. Depending on the circumstances, either depreciation or appreciation of the *real* could materially and adversely affect the growth of the Brazilian economy and us, as well as impact the U.S. dollar value of distributions and dividends on, and the U.S. dollar

equivalent of the market price of, our common shares and our ADSs.

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In the event the *real* depreciates in relation to the U.S. dollar, the cost in *reais* of our foreign currency-denominated borrowings and imports of raw materials, particularly coal and coke, will increase. On the other hand, if the *real* appreciates in relation to the U.S. dollar, it will cause *real*-denominated production costs to increase as a percentage of total production costs and cause our exports to be less competitive. We had total U.S. dollar-denominated or -linked indebtedness of R\$18,384 million or 53% of our total indebtedness, as of December 31, 2015. Because of the *real* depreciation, the U.S. dollar-denominated debt increased by R\$4,227 million compared to December 31, 2014.

***Government efforts to combat inflation may hinder the growth of the Brazilian economy and could harm us.***

Brazil has in the past experienced extremely high rates of inflation, which has led the government to pursue monetary policies that have contributed to one of the highest real interest rates in the world. Since the implementation of the *Real Plan* in 1994, the annual rate of inflation in Brazil has decreased significantly, as measured by the National Broad Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*, or IPCA). Since 2014, and especially during the year of 2015, Brazil has again experienced high rates of inflation, and the tendency is a continuing high level of inflation for 2016. Inflation measured by the IPCA index was 5.9%, 6.4% and 10.7% in 2013, 2014 and 2015, respectively. Inflation and the Brazilian government's inflation containment measures, mainly through monetary policies, have had and may have significant effects on the Brazilian economy and our business. Tight monetary policies with high interest rates may restrict Brazil's growth and the availability of credit. Conversely, more lenient policies and interest rate decreases may trigger increases in inflation, with the consequent reaction of sudden and significant interest rate increases, which could negatively affect Brazilian economic growth and us. In addition, we may not be able to adjust the price of our products in the foreign markets to offset the effects of inflation in Brazil on our cost structure, given that most of our costs are incurred in *reais*. The Brazilian government has introduced policies aimed at reducing inflationary pressures, which could have the effect of reducing the overall performance of the Brazilian economy.

***Developments and perception of risk in other countries, especially other emerging market countries, may adversely affect the trading price of Brazilian securities, including our common shares and ADSs.***

The market value of securities of Brazilian companies is affected to varying degrees by economic and market conditions in other countries, especially other emerging market countries. Although economic conditions in these countries may differ significantly from economic conditions in Brazil, investors' reactions to developments in these other countries may have an adverse effect on the market value of securities of Brazilian issuers. Crisis in, or economic policies of, other countries may diminish investors' interest in securities of Brazilian issuers, including ours. This could adversely affect the trading price of our common shares and/or ADSs, and could also make it more difficult or impossible for us to access the capital markets and finance our operations on acceptable terms.

**Risks Relating to Us and the Industries in Which We Operate**

***We are exposed to substantial changes in the demand for steel and iron ore, which has a substantial impact in the prices of our products and may adversely affect our results of operations.***

The steel and mining industries are highly cyclical, both in Brazil and abroad. The demand for steel and mining products and, thus, the financial condition and results of operations of companies in the steel and mining industries, including us, are generally affected by macroeconomic fluctuations in the world economy and the economies of steel-producing countries, including trends in the automotive, construction, home appliances and packaging industries, as well as other industries which rely on steel distributors. A worldwide recession, an extended period of below-trend growth in developed countries or a slowdown in the emerging markets that are large consumers of our products (such

as the domestic Brazilian market for our steel products and the Chinese market for iron ore) could sharply reduce demand for our products. In addition, flat steel competes with other materials that may be used as substitutes, such as aluminum (particularly in the automotive and packaging industry), cement, composites, glass, plastic and wood. Government regulatory initiatives mandating the use of such materials in lieu of steel, whether for environmental or other reasons, as well as the development of other new substitutes for steel products, could also significantly reduce market prices and demand for steel products and thereby reduce our cash flow and profitability. Any material decrease in demand or increase in supply for steel and iron ore in the domestic or export markets served by us could have a material adverse effect on us.

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***Prices charged for iron ore are subject to volatility. International iron ore prices have been decreasing significantly and may have a negative impact on our revenues, cash flow, profitability, as well as result in a need to change the way we operate or in the suspension of certain of our projects and operations.***

Our iron ore prices are based on a variety of pricing terms, which generally use market price indices as a basis for determining the customer price. Our prices and revenues for iron ore are consequently volatile, which may adversely affect our results of operations and cash flow. In 2015, average iron ore prices decreased 28.5% to US\$ 55.5/dmt, from US\$96.7/dmt in 2014. In 2014, average iron ore prices decreased 42.6% to US\$96.7/dmt from US\$135.2/dmt in 2013, according to the average Platts IODEX (62% Fe CFR China). On April 29th 2016, the index stood at US\$65.85/dmt. As a result, revenues from our mining business decreased from 31% in 2013 to 23% in 2014 and 19% in 2015 of our total net revenues . A continuous decrease in the market prices for iron ore may result in a need to change the way we operate or, depending on the level of price decreases, even in the suspension of certain of our projects and operations and impairment of assets, which could adversely affect our financial position and results of operations.

***Adverse economic conditions in China and an increase in global iron ore production capacity could have a negative impact on our revenues, cash flow and profitability.***

China has been the main driver of global demand for minerals and metals over the last past years, effectively driving global prices for iron ore and steel. In 2015, China accounted for 70% of the global seaborne iron ore trade. The percentage of our iron ore sales volume consumed in China was 60% in 2015. China is also the largest world steel producer, accounting for approximately 50% of the global steel production.

A contraction of China's economic growth could result in lower global demand for iron ore and steel and increase the global steel industry over-capacity, leading to lower revenues, cash flow and profitability. Poor performance in the Chinese real estate sector and low investments in infrastructure, two of the largest markets for carbon steel in China, could also negatively impact our results. The China GDP increased 6.9% in 2015 compared to 7.3% in 2014, 7.7% in 2013 and 7.7% in 2012.

In addition, the recent strategy of the major iron ore suppliers to maintain their production targets and planned capacity increases could have a material adverse effect on us and adversely affect our results of operations.

***We may not be able to adjust our mining production volume in a timely or cost-efficient manner in response to changes in demand.***

Revenues from our mining business represented 31%, 25% and 19% of our total net revenues in 2013, 2014 and 2015, respectively. Operating at significant idle capacity during periods of weak demand may expose us to higher unit production costs since a significant portion of our cost structure is fixed in the short-term due to the high capital intensity of mining operations. In addition, efforts to reduce costs during periods of weak demand could be limited by labor regulations or existing labor or government agreements.

Conversely, our ability to rapidly increase production capacity is limited, which could render us unable to fully satisfy demand for our iron ore. When demand exceeds our production capacity, we may meet excess customer demand by purchasing iron ore from unrelated parties and reselling it, which would increase our costs and narrow our operating margins. If we are unable to satisfy excess customer demand in this way, we may lose customers. In addition, operating close to full capacity may expose us to higher costs, including demurrage fees due to capacity restraints in

our logistics systems.

***The availability and the price of raw materials that we need to produce steel, particularly coal and coke, may adversely affect our results of operations.***

In 2015, raw material costs accounted for 51.3% of our total steel production costs. Our main raw materials include iron ore, coal, coke, limestone, dolomite, manganese, zinc, tin and aluminum. We depend on third parties for some of our raw material requirements, including importing all of the coal required to produce coke and approximately 58.4% of our coke requirements. In addition, we require significant amounts of energy, in the form of natural gas and electricity, to power our plants and equipment.



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Any prolonged interruption in the supply of raw materials, natural gas, or electricity, or substantial increases in their prices, could materially and adversely affect us. These interruptions and price increases may be a result of changes in laws or trade regulations, the availability and cost of transportation, suppliers' allocations to other purchasers, interruptions in production by suppliers and/or accidents or similar events on suppliers' premises or along the supply chain. Our inability to pass those cost increases on to our customers or to meet our customers' demands because of non-availability of key raw materials could also have a material and adverse effect on us.

***Our steel products face significant competition, including price competition, from other domestic or foreign producers, which may adversely affect our profitability and market share.***

The global steel industry is highly competitive with respect to price, product quality and customer service, as well as technological advances that enable steel companies to reduce their production costs. Brazil's export of steel products is influenced by several factors, including the protectionist policies of other countries, especially those of the United States, disputes regarding these policies before the WTO (World Trade Organization), the Brazilian government's exchange rate policy and the growth rate of the world economy. Further, continuous advances in materials sciences and resulting technologies have given rise to improvements in products such as plastics, aluminum, ceramics and glass that permit them to substitute steel. Due to high start-up costs, the economics of operating a steelworks facility on a continuous basis may encourage mill operators to maintain high levels of output, even in times of low demand, which increases the pressure on industry profit margins. In addition, downward pressure on steel prices by our competitors may affect our profitability.

The steel industry has historically suffered from structural over-capacity which has worsened due to a substantial increase in production capacity in the developing world and particularly in China and India, as well as other emerging markets. China is now, by far, the largest global steel producer and, in addition, Chinese and certain steel exporting countries have favorable conditions (excess steel capacity, undervalued currency or higher market prices for steel in markets outside of such countries), which can have a significant impact on steel prices in other markets. If we are not able to remain competitive in relation to China or other steel-producing countries, our results may be adversely affected.

Since 2010, steel companies in Brazil have faced strong competition from imported products, mainly as a result of the global excess in steel production, reduction in demand for steel products in mature markets, exchange rate appreciation and tax incentives in some of the main exporting countries. Despite Brazilian import duties to protect domestic producers, a substantial volume of steel products is still being imported. If the Brazilian Government does not act against subsidized steel imports and there is an increase in imports, our results of operations may be materially and adversely affected. Apart from direct steel imports, the Brazilian industry has also been facing competition from imported finished goods, which affects the whole steel chain.

***Protectionist and other measures adopted by foreign governments could adversely affect our export sales.***

In response to the increased production and export of steel by many countries, anti-dumping and countervailing duty and safeguard measures were imposed in the late 1990s and early 2000s by foreign governments representing the main markets for our exports. In 2015, the U.S. authorities initiated anti-dumping and countervailing duty investigations on hot-rolled and cold-rolled steel sheets and coils imported from Brazil and other countries. Restrictions imposed by Canada on imports of hot-rolled products from Brazil remain in effect. In addition, technical or safety measures, such

as those imposed by the European Union on imports of certain chemical substances contained in products used to protect and/or pack steel products, may be adopted and as a result create barriers to steel exports. The imposition of these and other protectionist measures by foreign countries may materially and adversely affect our export sales.

*Our activities depend on authorizations, concessions, permits and licenses. Changes of laws and regulations and government measures could adversely affect us.*

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Our activities are subject to governmental authorizations, concessions, licenses or permits, which include environmental licenses for our infrastructure projects and concessions, including for the port terminals we operate and the railways in which we have an equity interest. Although we believe that such authorizations, concessions, licenses and permits will be granted and/or renewed as and when requested, we cannot guarantee that we will be able to maintain, renew or obtain any required authorization, concession, license or permit, as well as that no additional requirement will be imposed in connection with such request. Authorizations, concessions, licenses or permits required for the development of our activities may require that we meet certain performance thresholds or completion milestones. In case we are unable to meet these thresholds or milestones, we may lose or not be able to obtain or renew such authorizations, concessions, licenses or permits. We also cannot guarantee that we or our controlled entities that hold concessions will timely comply with our/their obligations under any relevant Concession Agreement or in Terms of Undertaking (*Termos de Ajustamento de Conduta*), or TACs, entered into with governmental agencies. Any of these events may result in the loss or early termination of concessions, authorizations, permits and/or licenses, the restriction of access to public financing for the concession or the amortization of the public financing before a project begins to operate, as well as the imposition of penalties, such as fines or the closure of facilities.

In addition, if laws and regulations applicable to these authorizations, concessions, permits or licenses change, modifications to our technologies and operations could be required, and we may need to make unexpected capital expenditures. Especially concerning our mining activities, new, more stringent environmental licensing requirements for our projects and operations could be imposed as a reaction by government to a major accident occurred in Brazil in 2015 involving the Fundão tailing dam of Samarco Mineração S.A. As a result, the amount and timing of future environmental and related expenditures may vary substantially from those currently anticipated and we may encounter delays in obtaining environmental or other operating licenses, or not be able to obtain and/or renew an authorization, permit and/or license. These events and additional costs may have a negative impact on the profitability of our projects or even make certain projects economically or otherwise unfeasible. See “—Current, new or more stringent environmental, safety and health regulations imposed on us may result in increased liabilities and increased capital expenditures.”

Our activities are also subject to governmental regulation in the form of taxes, charges and royalties, which can have an important financial impact on our operations. In the countries where we are present, governments may impose new taxes, raise existing taxes and royalty rates, reduce tax exemptions and benefits or change the basis on which taxes are calculated in a manner that is unfavorable to us. The Brazilian Congress is currently reviewing a bill that proposes significant changes to the Mineral Code, including a potential increase of the royalties (CFEM) charged for our mining activities. See “Item 4B. Business Overview—Government Regulation and Other Legal Matters—Brazil – Mining Regulation –Mineral Rights and Ownership.”

The loss or inability to obtain and/or renew any authorization, concession, permit or license, or changes in the regulatory framework that we operate in, may materially and adversely affect us.

***We have a level of indebtedness which could make it more difficult or expensive to refinance our maturing debt and /or incur new debt.***

As of December 31, 2015, our total debt outstanding amounted to R\$34,283 million, consisting of R\$1,875 million of short-term debt and R\$32,408 million of long-term debt. See “Item 5B. Liquidity and Capital Resources” and “Item 18.

Financial Statements.” We had R\$7,861 million of cash and cash equivalents as of December 31, 2015. Our planned investments in all of our business segments will require a significant amount of cash over the course of 2016 and following years. See “Item 4D. Property, Plant and Equipment – Capital Expenditures – Planned Investments.”

The level of our indebtedness could affect our credit rating and ability to obtain any necessary financing in the future and increase our cost of borrowing. In addition, our level of indebtedness could make it more difficult to refinance our existing indebtedness and could make us more vulnerable in the event of a continued downturn in our business. In these and other circumstances, servicing our indebtedness may use a substantial portion of our cash flow from operations, which could adversely affect our financial condition and results of operations and make it more difficult for us to make payments of dividends and other distributions to our shareholders, including the holders of our ADSs, as well as to fund our operations, working capital and capital expenditures necessary for the maintenance and expansion of our business activities.

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***We cannot assure you that our credit ratings will not be lowered, suspended or withdrawn by the rating agencies.***

Our credit ratings are limited in scope, and do not address all material risks relating to an investment in the notes, but rather reflect only the views of the rating agencies at the time the ratings are issued. These ratings may affect the cost and other terms upon which we are able to obtain funding and are subject to change either due to factors specific to us, trends in the industries we operate, or in credit and capital markets more generally. Our high level of indebtedness and other factors have recently resulted in decreases in our credit ratings. In 2016, Fitch Ratings, Moody's and S&P have decreased our credit ratings from B+, B1 and BB-, respectively, to B-, Caa1 and B, respectively, as of the date of this annual report. Credit rating agencies regularly evaluate us and their ratings of our long-term debt are based on a number of factors, including our financial strength. We cannot assure that credit rating agencies will not downgrade our credit ratings any further, or that such credit ratings will remain in effect for any given period of time or not be withdrawn entirely by the rating agencies, if, in the judgment of such rating agencies, circumstances so warrant. Any lowering, suspension or withdrawal of such ratings may have an adverse effect on us, our financial condition, results of operations and profitability, including our ability to refinance our existing indebtedness.

***Accidents or malfunctioning equipment on our premises, railways or ports may decrease or interrupt production, internal logistics or distribution of our products and negatively impact our business.***

The steel and iron ore production processes depend on certain critical equipment, such as blast furnaces, steel converters, continuous casting machines, rolling mills, drillers, reclaimers, conveyor belts, crushing and screening equipment and shiploaders, as well as on internal logistics and distribution channels, such as railways and seaports. This equipment and infrastructure may be affected in the case of malfunction or damage. In 2006, there was an accident involving the gas cleaning system adjacent to Blast Furnace No. 3 at the Presidente Vargas Steelworks, which prevented us from operating this blast furnace for approximately six months. At the end of 2015, the Company interrupted operation of the Blast Furnace No. 02 as from 2016, decreasing our annual production capacity of steel at the Presidente Vargas Steelworks by 26%. Similar or any other significant interruptions in our production process, internal logistics or distribution channels (including our ports and railways) could materially and adversely affect us.

In addition, our operations involve the use, handling, storage, discharge and disposal of hazardous substances into the environment. Our mining, steel and cement businesses are generally subject to significant risks and hazards, including fire, explosions, toxic gas leaks, spilling of polluting substances or other hazardous materials, rockfall incidents in mining operations and incidents involving mobile equipment or machinery. Such events could occur by accident or by breach of operating and maintenance standards, and could result in a significant environmental impact, damage to or destruction of our mineral properties and/or production facilities, personal injury or death, delays or suspensions in production, monetary losses and possible legal liability. We have health, safety and environmental standards and risk management programs and procedures in place to mitigate such risks, including in relation to our tailing dams. Notwithstanding our internal standards, policies and controls, our operations remain subject to incidents or accidents that could negatively and adversely affect our business reputation, results of operations and financial results.

***Our insurance policies may not be sufficient to cover all our losses***

We maintain several types of insurance policies, in line with the risk management of our businesses, which attempt to follow industry market practices for similar activities. Coverage in such policies encompasses domestic and international (import and export) cargo transportation (road, rail, sea or air), life insurance, personal accidents, health, auto insurance, D&O, general liability, erection risks, boiler and machinery coverage, trade credit insurance, surety, named perils, ports and terminal liabilities. We also have an operational risks policy for the Presidente Vargas Steelworks, Congonhas Minérios, Sepetiba Tecon and CSN Mining for a total insured value of U.S.\$ 600 million out of a total risk amount of U.S.\$ 11.1 billion. Under the terms of this policy we remain responsible for the first U.S.\$ 375 million in losses (material damages and loss of profits). The coverage obtained in these insurance policies may not be sufficient to cover all risks we are exposed to. Additionally, we may not be able to successfully contract or renew our insurance policies in terms satisfactory to us. The occurrence of one or more of these events may adversely affect our financial position.

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***Our projects are subject to risks that may result in increased costs and/or delays or that could prevent their successful implementation.***

We are investing to further increase our steel, mining and cement production capacity, as well as our logistics capabilities. See “Item 4D. Property, Plant and Equipment—Capital Expenditures—Planned Investments”. These projects are subject to a number of risks that may adversely affect our growth prospects and profitability, including the following:

- we may encounter delays, availability problems or higher than expected costs in obtaining the necessary equipment, services and materials to build and operate a project;
- our efforts to develop projects according to schedule may be hampered by a lack of infrastructure, including availability of overburden and waste disposal areas as well as reliable power and water supplies;
- we may fail to obtain, lose, or experience delays or higher than expected costs in obtaining or renewing the required permits, authorizations, licenses, concessions and/or regulatory approvals to build or continue a project; and
- changes in market conditions, laws or regulations may make a project less profitable than expected or economically or otherwise unfeasible.

Any one or a combination of the factors described above may materially and adversely affect us.

***Current, new or more stringent environmental, safety and health regulations imposed on us may result in increased liabilities and increased capital expenditures.***

Our steel making, mining, cement, energy and logistics facilities are subject to a broad range of laws, regulations and permit requirements in Brazil relating mainly to the protection of health, safety and the environment.

Brazilian pollution standards are expected to continue to change, including the introduction of new effluent and air emission standards, water management and solid waste-handling regulations, wildlife maintenance regulations, restrictions on business expansions, native forest preservation requirements and the obligation to create privately owned conservation areas (Reserva Particular do Patrimônio Natural), or RPPNs, as an environmental compensation for industrial and mining expansion projects. The Brazilian government has adopted a decree under the national policy for climate change (*Política Nacional de Mudanças Climáticas*) that contemplates a 5% reduction in carbon emissions projected for 2020 for the industrial sector (including steel making and cement sectors) and an action plan for the sector is being developed by a technical committee composed of representatives from the government, industry associations and academia. The target reduction for the mining sector is yet to be established. In addition, the state of Rio de Janeiro, through its State Environmental Agency (*Instituto Estadual do Ambiente*), or INEA, issued a law that requires steel making and cement facilities to present action plans to reduce greenhouse gas emissions when renewing or applying for operational licenses. In regard to air emission standards, the Environmental National Council, or CONAMA, issued a resolution that obliges steel companies to comply with certain restrictions until 2018. The federal government has also established a national policy for solid waste (*Política Nacional de Resíduos Sólidos*), which provides for more strict guidelines for solid waste management and industry targets for reverse logistics as part of the environmental licensing process. Finally, a new regulatory framework for mining operations is currently being developed by the Department of Geology, Mining and Mineral Processing from the Ministry of Mines and Energy, which may impose stricter regulations on our mining operations, including requests for environmental recovery of areas and investments for the granting of mining concessions.

New or more stringent environmental, safety and health standards imposed on us could require us to make increased capital expenditures, create additional legal preservation areas in our properties, or make modifications in operating practices or projects. Especially with regard to our mining activities, new more stringent environmental, health and safety standards, including with respect to the licensing process of our projects and operations, could be imposed due to a major accident occurred in Brazil in 2015 involving the Fundão tailing dam of Samarco Mineração S.A. As a result, the amount and timing of future environmental and related expenditures may vary substantially from those currently anticipated. These additional costs may also have a negative impact on the profitability of the projects we intend to implement or may make such projects economically unfeasible. We could also be exposed to civil penalties, criminal sanctions and closure orders for non-compliance with these regulations, as well as encounter delays in the receipt of environmental or other operating licenses. Waste disposal and emission practices may result in the need for us to clean up or retrofit our facilities at substantial costs and/or could result in substantial liabilities. Environmental legislation restrictions imposed by foreign markets to which we export our products may also materially and adversely affect our export sales and us.



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In addition, we may be requested to enter into Terms of Undertaking (*Termos de Ajustamento de Conduta*), or TACs with Brazilian regulators and agencies that require us to minimize or eliminate the risk of environmental impacts in the areas where we operate. If we are unable to comply with a TAC in a timely manner, we may be exposed to penalties, such as fines, revocation of permits, or closure of facilities. See “Item 4B. Government Regulation and Other Legal Matters – Environmental Expenditures and Claims and Item 8A – Financial Information – Consolidated Statements and Other Financial Information – Legal Proceedings”.

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

We operate in a global environment, and our activities straddle multiple jurisdictions and complex regulatory frameworks with increased enforcement activities worldwide. Our governance and compliance procedures may not prevent breaches of law, accounting and/or governance standards. We may be subject to breaches of our Code of Ethics, business conduct protocols and instances of fraudulent behavior and dishonesty by our employees, contractors or other agents. Our employees or our employees’, contractors’ or other agents’ failure to comply with applicable laws and other standards could subject us to fines, loss of operating licenses and reputational harm, as well as other penalties, which may materially and adversely affect us.

***We may fail to maintain an effective system of internal controls, which could prevent us from timely and accurately reporting our financial results***

The Company's internal controls over financial reporting may not prevent or detect misstatements on a timely manner due to inherent limitations, including human error, circumvention or overriding of controls, or fraud. Even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If the Company fails to maintain the adequacy of its internal controls, including any failure to implement new or improved required controls, the Company's business and financial results could be harmed and the Company could fail to meet its financial reporting obligations. In this regard, and in connection with management’s evaluation of the effectiveness of the Company’s internal controls over financial reporting as of December 31, 2015, management determined that the Company did not maintain effective controls over the Significant Unusual Transactions (SUT) and that the ineffective control over SUT constitutes a material weakness.

While the Company is in the process of improving its internal controls, the material weakness will continue to exist until the remediation actions are fully implemented and tested. If the new controls being implemented to address the material weakness and to strengthen the overall internal control over accounting for SUT do not operate effectively, or if the Company is unsuccessful in implementing or maintaining these new controls or is otherwise unable to remediate this material weakness, the Company’s financial reporting may be disclosed untimely or with inaccuracies, which could negatively impact the Company’s business and financial results.

***Some of our operations depend on joint ventures, jointly controlled entities, consortia and other forms of cooperation, and our business could be adversely affected if our partners fail to observe their commitments.***

We currently operate parts of our business through joint ventures, strategic alliances and consortia with other companies. We have, among others, established a strategic alliance with an Asian consortium at our controlled

investee Congonhas Minérios S.A., or Congonhas, to mine iron ore, a joint venture with other Brazilian steel and mining companies at MRS Logística S.A., or MRS, to explore railway transportation in the Southeastern region of Brazil, a joint venture with certain Brazilian governmental entities at Transnordestina Logística S.A., or TLSA, to explore railway transportation in the Northeastern region of Brazil, a joint venture with Tractebel Energia S.A. and Cia. de Cimento Itambé at Itá Energética S.A., or ITASA, to produce electricity, and a consortium with Vale S.A., Votorantim Metais Zinco S.A., CEMIG Geração e Transmissão S.A. and Anglo Gold Ashant Córrego do Sítio Mineração S.A. at Igarapava Hydroelectric Power Plant to produce electricity.

Our forecasts and plans for theseis strategic alliances, joint ventures and consortia assume that our partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide managerial personnel or financing. In addition, many of the projects contemplated by our joint ventures or consortia rely on financing commitments, which contain certain preconditions for each disbursement. If any of our partners fails to observe their commitments or we fail to comply with all preconditions required under our financing commitments or other partnership arrangements, the affected joint venture, consortium or other project may not be able to operate in accordance with its business plans, or we may have to increase the level of our investment to implement these plans. In addition, certain of our joint venture agreements provide for customary dispute and deadlock resolution mechanisms, as well as put and call options exercisable under certain circumstances, which may require us to incur disbursements. Any of these events may have an adverse effect on us.

***Drilling and production risks could adversely affect the mining process.***

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

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

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

***Our mineral reserve estimates may materially differ from the mineral quantities that we may be able to actually recover; our estimates of mine life may prove inaccurate; market price fluctuations and changes in operating and capital costs may render certain ore reserves uneconomical to mine; and we may face rising extraction costs or investment requirements over time as our reserves deplete.***

Our reported ore reserves are estimated quantities of ore and minerals that we have determined can be economically mined and processed under present and anticipated conditions to extract their mineral content. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including many factors beyond our control. Reserve engineering involves estimating deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data and engineering and geological interpretation and judgment. As a result, no assurance can be given that the indicated amount of ore will be recovered or that it will be recovered at the rates we anticipate. Estimates of different engineers may vary, and results of our mining production subsequent to the date of an estimate may lead to revision of estimates. Reserve estimates and estimates of mine life may require revision based on actual production experience and other factors. For example, fluctuations in the market prices of minerals and metals, reduced recovery rates or increased operating and capital costs due to inflation, exchange rates or other factors may render proven and probable reserves uneconomic to exploit and may ultimately result in a restatement of reserves.

In addition, reserves are gradually depleted in the ordinary course of our exploration activities. As mining progresses, distances to the primary crusher and to waste deposits becomes longer and pits become steeper. Also, for some types of reserves, mineralization grade decreases and hardness increases at increased depths. As a result, over time we may experience rising unit extraction costs with respect to each mine, or we may need to make additional investments, including adaptation or construction of processing plants and expansion or construction of tailing dams. Our exploration programs may also fail to result in the expansion or replacement of reserves depleted by current production. If we do not enhance existing reserves or develop new operations, we may not be able to sustain our

current level of production beyond the remaining lives of our existing mines. See “Item 4B—Business Overview—Our Mining Segment—Mineral Reserves”.

*Natural and other disasters could disrupt our operations.*

Our business and operating results could be negatively impacted by social, technical and/or physical risks such as flooding, fire, power loss, loss or reduction of water supply, leakages, accidents, as well as telecommunications and information technology system failures. For example, flooding in Australia at the

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end of 2010 affected global coal supply and consequently increased our raw material costs. In addition, heavy rainfall in the Southeast Region of Brazil, as well as power and water supply shortages and rationing programs could affect our operations and consequently our revenues. Such events could affect our ability to conduct our business operations and, as a result, reduce our operating results and materially and adversely affect us.

***We may not be able to consummate proposed acquisitions successfully or integrate acquired businesses successfully.***

From time to time, we may evaluate acquisition opportunities that would strategically fit our business objectives. If we are unable to complete acquisitions, or integrate successfully and develop these businesses to realize revenue growth and cost savings, our financial results could be adversely affected. Acquisitions also pose the risk that we may be exposed to successor liability involving an acquired company. Due diligence conducted in connection with an acquisition, and any contractual guarantees or indemnities that we receive, may not be sufficient to protect us from, or compensate us for, actual liabilities. A material liability associated with an acquisition, such as labor or environmental liability, could adversely affect our reputation and financial performance and reduce the benefits of the acquisition.

In addition, we may incur asset impairment charges related to acquisitions, which may reduce our profitability. Our acquisition activities may also present financial, managerial and operational risks, including diversion of management attention from existing core businesses, difficulties integrating or separating personnel, financial and other systems, failure to achieve the operational benefits that were anticipated at the time of the transaction, adverse effects on existing business relationships with suppliers and customers, inaccurate estimates of fair value made in the accounting for acquisitions and/or amortization of acquired intangible assets which would reduce future reported earnings, potential loss of customers or key employees of acquired businesses, and indemnities and potential disputes with the buyers or sellers. Finally, proposed acquisitions may also be subject to review from the competition authorities of the countries involved in the transaction, which may approve such transaction, approve such transaction with restrictions, including the divestment of assets, or reject it. Any of these activities or adverse regulatory decisions could negatively affect our reputation, product sales, financial condition and/or results of operations.

***We may not be able to maintain adequate liquidity and our cash flows from operations and available capital may not be sufficient to meet our obligations***

While our cash flows from operations and available capital have been sufficient to meet our current operating expenses, contractual obligations and debt service requirements to date, our liquidity, cash flows from operations and available capital may be negatively impacted by the pricing environment for our steel and iron ore products, the exchange rate environment and the effects of continued negative economic conditions in Brazil. These factors have materially and adversely impacted our liquidity and we expect this trend to continue. Recent cost cutting measures implemented by us may not be sufficient to offset these effects or improve our liquidity.

We have recently announced certain measures to improve our liquidity and debt profile, including the potential sale of certain assets and the extension of our debt with Caixa Economica Federal and Banco do Brasil (for further information, see Item “5B. Liquidity and Capital Resources”). If we are unable to successfully sell certain assets and/or reduce our leverage, we may not be able to maintain adequate liquidity and our cash flows from operations and available capital may not be sufficient to meet our obligations.

***We have experienced labor disputes in the past that have disrupted our operations, and such disputes may recur.***

A substantial number of our employees and some of the employees of our subcontractors are represented by labor unions and are covered by collective bargaining or other labor agreements, which are subject to periodic renegotiation. Strikes and other labor disruptions at any of our facilities or labor disruptions involving third parties who may provide us with goods or services, have in the past and may in the future materially and adversely affect the operation of our facilities, and/or the timing of completion and the cost of our projects.

*We are exposed to the risk of litigation*

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We are currently and may in the future be a party to legal proceedings and claims. For some of these legal proceedings and claims, we have not established a provision on our balance sheet or have only established provisions for part of the amounts in question, based on our external or internal counsel's judgment as to the likelihood of an outcome favorable to us.

Although we are contesting such proceedings and claims, the outcome of each specific proceeding and claim is uncertain and may result in obligations that could materially and adversely affect our business and the value of our shares and ADSs. See "Item 8A. Consolidated Statements and Other Financial Information—Legal Proceedings" for additional information.

**Risks Relating to our Common Shares and ADSs**

***Our controlling shareholder has the ability to direct our business and affairs and its interests could conflict with yours.***

Our controlling shareholder has the power to, among other things, elect a majority of our directors and determine the outcome of any action requiring shareholder approval, including transactions with related parties, corporate reorganizations, acquisitions, dispositions, the destination and diversification of our investments, and the timing and payment of any future dividends, subject to minimum dividend payment requirements imposed under Brazilian Corporate Law. Our controlling shareholder may have an interest in pursuing acquisitions, dispositions, financings or similar transactions that could conflict with your interests as a holder of our common shares and ADSs. For a description of our ownership structure, see "Item 7A. Major Shareholders".

***If you surrender your ADSs and withdraw common shares, you risk losing the ability to remit foreign currency abroad and certain Brazilian tax advantages.***

As an ADS holder, you benefit from the electronic certificate of foreign capital registration obtained by the custodian for our common shares underlying the ADSs in Brazil, which allows the custodian to convert dividends and other distributions with respect to the common shares into non-Brazilian currency and remit the proceeds abroad. If you surrender your ADSs and withdraw common shares, you will be entitled to continue to rely on the custodian's electronic certificate of foreign capital registration for only five business days from the date of withdrawal. Thereafter, upon the disposition of, or distributions relating to, the common shares, you will not be able to remit abroad non-Brazilian currency unless you obtain your own electronic certificate of foreign capital registration or you qualify under Brazilian foreign investment regulations that entitle some foreign investors to buy and sell shares on Brazilian stock exchanges without obtaining separate electronic certificates of foreign capital registration. If you do not qualify under the foreign investment regulations you will generally be subject to less favorable tax treatment of dividends and distributions on, and the proceeds from any sale of, our common shares. For more information regarding exchange controls, see "Item 10.D. Exchange Controls". If you seek to obtain your own electronic certificate of foreign capital registration, you may incur expenses or suffer delays in the application process, which could delay your ability to receive dividends or distributions relating to our common shares or the return of your capital in a timely manner. The depository's electronic certificate of foreign capital registration may also be adversely affected by future legislative changes.

***Holders of ADSs may not be able to exercise their voting rights.***

Holders of ADSs may only exercise their voting rights with respect to the underlying common shares in accordance with the provisions of the deposit agreement. Under the deposit agreement, ADS holders must vote by giving voting

instructions to the depositary. Upon receipt of the voting instructions of the ADS holder, the depositary will vote the underlying common shares in accordance with these instructions. If we ask for voting instructions, the depositary will notify ADS holders of the upcoming vote and will arrange to deliver the proxy card. We cannot assure that ADS holders will receive the proxy card in time to ensure that they can instruct the depositary to vote. In addition, the depositary and its agents are not liable for failing to carry out voting instructions or for the manner of carrying out voting instructions. Alternatively, ADS holders can exercise their right to vote by surrendering their ADSs for cancellation in exchange for our common shares. Pursuant to our bylaws, the first call for a shareholders' meeting must be published at least 15 days in advance of the meeting, and the second call must be published at least 08 days in advance of the meeting. When a shareholders' meeting is convened, holders of ADSs may not receive sufficient advance notice to surrender their ADSs in exchange for the underlying common shares to allow them to vote with respect to any specific matter. As a result, holders of ADSs may not be able to exercise their voting rights.



***The relative volatility and illiquidity of the Brazilian securities markets may substantially limit your ability to sell the common shares underlying the ADSs at the price and time you desire.***

Investing in securities that trade in emerging markets, such as Brazil, often involves greater risk than investing in securities of issuers in the United States, and such investments are generally considered to be more speculative in nature. The Brazilian securities market is substantially smaller, less liquid, more concentrated and can be more volatile than major securities markets in the United States. The ten largest companies in terms of market capitalization represented 40% of the total market capitalization of the BM&FBOVESPA as of December 31, 2015. The top ten stocks in terms of trading volume accounted for 46%, 47.2% and 36.9% of all shares traded on the BM&FBOVESPA in 2015, 2014 and 2013, respectively. Accordingly, although you are entitled to withdraw the common shares underlying the ADSs from the depositary at any time, your ability to sell the common shares underlying the ADSs at a price and time at which you wish to do so may be substantially limited.

***Holders of ADSs may be unable to exercise preemptive rights with respect to our common shares.***

We may not be able to offer our common shares to U.S. holders of ADSs pursuant to preemptive rights granted to holders of our common shares in connection with any future issuance of our common shares unless a registration statement under the Securities Act is effective with respect to such common shares and preemptive 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 our common shares or to undertake steps that may be needed to find exemptions from registration available, and we cannot assure you that we will file any such registration statement or take any such steps. If such a registration statement is not filed and an exemption from registration does not exist. The JP Morgan Chase Bank, N.A., as depositary, may attempt to sell the preemptive rights, and you will be entitled to receive the proceeds of such sale. However, these preemptive rights will expire if the depositary does not sell them, and U.S. holders of ADSs will not realize any value from the granting of such preemptive rights. For a more complete description of preemptive rights with respect to the underlying shares, see “Item 10B. Memorandum and Articles of Association—Preemptive Rights”.

***A decrease in our market capitalization may increase volatility.***

In recent years our market capitalization has decreased and as a result the volatility in the trading price of our common shares and ADSs has increased. Any further decreases in our market capitalization may further increase volatility. In 2015, the trading price of our ADSs dropped for a certain period below the levels required by the listing standards of the New York Stock Exchange (“NYSE”). If the trading price of our ADSs again drops below those levels, we may be required to do a reverse stock split or a ratio change of the number of common shares per ADS in order to regain compliance with NYSE’s listing standards.

**Item 4. Information on the Company**

**4A. History and Development of the Company**

Companhia Siderúrgica Nacional is a Brazilian corporation (*sociedade por ações*) incorporated in 1941 pursuant to a decree of the Brazilian president at the time, Getúlio Vargas. The Presidente Vargas Steelworks, located in the city of Volta Redonda, in the state of Rio de Janeiro, started the production of coke, pig iron and steel products in 1946. Also in 1946, we incorporated both the Casa de Pedra Mine, located in the city of Congonhas, State of Minas Gerais, and the Arcos Mine, located in the city of Arcos, State of Minas Gerais. The Casa de Pedra Mine assures us

self-sufficiency in iron ore, whereas the Arcos Mine meets all our needs for flux, limestone and dolomite.

The Company was privatized through a series of auctions held in 1993 and early 1994, through which the Brazilian government sold its 91% ownership interest.

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Between 1993 and 2002, we implemented a capital improvement program aimed at increasing our annual production of crude steel, improving the quality of our products and enhancing our environmental protection and cleanup programs. As part of the investments, since February 1996, all our production has been based on the continuous casting process, rather than ingot casting, which involved an alternative method that resulted in higher energy use and metal loss. From 1996 until 2002, we spent the equivalent of U.S.\$2.4 billion on the capital improvement program and on maintaining our operational capacity, culminating with the renovation of Blast Furnace No. 3 and Hot Strip Mill No. 2 in 2001. These measures resulted in the increase of our annual production capacity to 5.6 million tons of crude steel and 5.1 million tons of rolled products.

In 2007, CSN started to sell iron ore in the seaborne market. Today, CSN, through its controlled company Congonhas Minérios, is an important exporter of iron ore, drawing from the high quality iron ore reserves in the Casa de Pedra and Engenho mines, located in the state of Minas Gerais. Congonhas Minérios currently holds the concession to operate the Terminal de Carvão, or TECAR, a solid bulks terminal located in Itaguaí Port in the state of Rio de Janeiro, through which Congonhas Minérios exports iron ore and imports coal and coke.

In 2009, we entered the cement market with our first grinding mill, next to the Presidente Vargas Steel Mill in Volta Redonda, Rio de Janeiro, taking advantage of the synergies with our steel business.

In order to diversify our product portfolio, we entered in the long steel market in 2012, with the acquisition of Stahlwerk Thüringen GmbH, or SWT, a long steel manufacturer located in Unterwellenborn, Germany.

In addition, a new plant for production of long steel products has been installed at Volta Redonda and started operations in December 2013. The plant consists on an electric arc steelmaking furnace, continuous casting for billets and a hot rolling mill for round section long products. This plant, which is in a ramp up process, is scheduled to reach its full production rate of 500,000 t/year at the end of 2016, providing the domestic market with rebar for civil construction and wire rod for industrial and civil construction applications.

## **General**

We operate throughout the entire steel production chain, from the mining of iron ore to the production and sale of a diversified range of high value-added steel products. We divide our business into five segments: steel, mining, cement, logistics and energy businesses.

### *Steel*

In our flat steel segment, we are an almost fully integrated steelmaker. Presidente Vargas Steelworks produce a broad line of steel products, including slabs, hot and cold-rolled, galvanized and tin mill products for the distribution, packaging, automotive, home appliance and construction industries.

Our current annual crude steel capacity and rolled product capacity at the Presidente Vargas Steelworks is 5.6 million and 5.1 million tons, respectively. In 2015, production of crude steel remained stable when compared with 2014, while the production of rolled steel products decreased 7% when compared to 2014.

Our production process is based on the integrated steelworks concept. Below is a brief summary of the steel making process at our Presidente Vargas Steelworks:

- Iron ore produced from our own company mines is processed in continuous sintering machines to produce sinter;
- Sinter and lump ore direct charges are smelted with lump coke and injected powdered coal in blast furnaces to produce pig iron;
- Pig iron is then refined into steel via basic oxygen converters;
- Steel is continuously cast in slabs; and
- Slabs are then hot rolled, producing hot bands that are coiled and sent to finishing facilities.

We currently obtain all of our iron ore except for the pellets, limestone and dolomite requirements, and a portion of our tin requirements from our own mines. Using imported coal, we produce approximately 58.4% of our coke requirements at current production levels in our own coke batteries at Volta Redonda. Imported coal is also pulverized and used directly in the pig iron production process. Zinc, manganese ore, aluminum and a portion of our tin requirements are purchased in local markets. Our steel production and distribution processes also require water, industrial gases, electricity, rail and road transportation, and port facilities.

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In addition to the production of flat steel, we entered into the long steel segment, with the acquisition of Stahlwerk Thüringen GmbH (SWT) in 2012 for €483.4 million. SWT is a long steel producer in Germany with annual production capacity of approximately 1.1 million tons of steel sections.

We also completed a new plant for production of long steel products in Volta Redonda, in December 2013. The plant consists of an electric arc steelmaking furnace, continuous casting for billets and a hot rolling mill for round section long products – wire rod and rebar. We expect this plant to reach 500,000 t/year output when fully operational, providing the domestic market with products for civil construction.

***Mining Activities***

We own a number of high quality iron ore mines, all located within Brazil's Iron Ore Quadrangle (*Quadrilátero Ferrífero*), in the state of Minas Gerais, including the Casa de Pedra and Engenho mines, located in the city of Congonhas, pertaining to our controlled investee, Congonhas Minérios, and Fernandinho mines, located in the city of Itabirito and the Cayman and Pedras Pretas mining rights, located in the city of Rio Acima and Congonhas, respectively, pertaining to our wholly owned subsidiary Minérios Nacional S.A. ("Minérios Nacional", former Mineração Nacional S.A.). Our mining assets also include the cargo terminal Itaguaí Port, or TECAR, pertaining to Congonhas Minérios, the Bocaina mines, located in the city of Arcos, in the state of Minas Gerais, which produces dolomite and limestone, and Estanho de Rondônia S.A., or ERSÁ, located in the city of Ariquemes, in the state of Rondônia, which mines and casts tin. We sold 21.5 million tons, 25.2 million tons and 25.7 million tons of iron ore in 2013, 2014 and 2015, respectively.

***Logistics***

Our verticalization strategy and intense synergies among our business units are strongly dependent on the logistics needed to guarantee the transportation of the inputs at a low operating cost. A number of railways and port terminals make up the logistics system integrating our mining, steelmaking and cement units.

We operate a port terminal for containers, Sepetiba Tecon, at Itaguaí Port, in the state of Rio de Janeiro, and Congonhas Minérios operates the solid bulks terminal, or TECAR, also located at Itaguaí Port, in the state of Rio de Janeiro.

We also have interests in three railways: (i) we share control in MRS Logística S.A., which operates the former Southeast System of the Federal Railway System, along the Rio de Janeiro-São Paulo-Belo Horizonte axis; (ii) we have an interest in jointly controlled investee Transnordestina Logística S.A., or TLSA; and (iii) we control Ferrovia Transnordestina Logística S.A, or FTL, which operates the former Northeastern Railway System or RFFSA.

***Cement***

We entered the cement market in May 2009, driven by the high synergy with our steelmaking business. This segment takes advantage of the slag generated by our blast furnaces, our limestone, used to produce clinker, reserves, located in the city of Arcos, in the state of Minas Gerais. Limestone is used to produce clinker. Clinker and slag are the main inputs in cement production.

We plan to increase our market share in the cement segment in Brazil in order to diversify our product mix and markets, reducing risks and adding value for our shareholders.

***Energy***

Steelmaking requires significant amounts of electricity to power rolling mills, production lines, hot metal processing, coking plants and auxiliary units. In 2015, our Presidente Vargas Steelworks consumed approximately 3.012 million MWh of electric energy.

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Our main source of electricity is our thermoelectric co-generation power plant at the Presidente Vargas Steelworks, which is fueled by the gases from the steel production process, with 235.2 MW installed capacity. In addition, we have a 29.5% interest in the Itá Hydroelectric Power Plant in Santa Catarina, through a 48.75% equity interest in ITASA, and a 17.9% interest in the Igarapava Hydroelectric Power Plant in Minas Gerais, from which we have ensured energy an average of 167 MW and an overage of 23 MW, respectively. These three plants give CSN an average generation capacity of 425 MW, supplying the group's total need for power. In 2014, we installed a new turbine generator at the Presidente Vargas Steelworks, which adds 21 MW to our existing installed capacity. This turbine is located near our Blast Furnace No. 3, using the outlet gases from the iron making process to generate energy.

### **Other Information**

CSN's legal and commercial name is Companhia Siderúrgica Nacional. CSN is organized for an unlimited period of time under the laws of the Federative Republic of Brazil. Our head offices are located at Av. Brigadeiro Faria Lima, 3400, 19<sup>th</sup> and 20<sup>th</sup> floors and 15<sup>th</sup> floor - part, Itaim Bibi, São Paulo, Brazil, CEP 04538-132, and our telephone number is +55-11-3049-7100. CSN's agent for service of process in the United States is CT Corporation, with offices at 111 Eighth Avenue, New York, New York 10011.

### **4B. Business Overview**

#### *Competitive Strengths*

We believe that we have the following competitive strengths:

***Integrated business model.*** We are a highly integrated steelmaker. This is due to our captive sources of raw materials, principally iron ore, and infrastructure, such as railways and deep-sea water port facilities. We own a number of high quality iron ore mines, all located within Brazil's Iron Ore Quadrangle (*Quadrilátero Ferrífero*), in the State of Minas Gerais, distinguishing us from our main competitors in Brazil which have to purchase all or a portion of their iron ore from mining companies.

***Profitable mining business.*** We have in recent years invested significantly in our mining business, placing CSN in a prominent position among the world's leading iron ore players. Further expansions will enable expanding product portfolio and total output, increasing our presence in seaborne markets.

The Company has high-quality iron ore reserves in Casa de Pedra, Engenho, Fernandinho and other mines, all located in Minas Gerais. Our mining activities provide relevant EBITDA generation. We sold 23.8 million tons in 2011, 20.2 million tons in 2012, 21.5 million tons in 2013, 25.2 million tons in 2014 (taking into account our proportional interest in Namisa throughout this period) and 25.7 million tons in 2015 (including 100% of NAMISA due to full consolidation of Congonhas Minerios as of December, 2015). The company's mining business also includes TECAR, a solid bulks terminal at Itaguaí Port (RJ), with a capacity to handle 45 mtpy, Mineração Bocaina, located in Arcos (MG), which produces dolomite and limestone and ERSA, which mines and casts tin.

During 2015, we implemented cost reduction actions, which along with the *Real* depreciation, reduced our production costs at the Casa de Pedra mine from US.\$ 24.66/ton in 2014 to US.\$ 15.56/ton in 2015.

***Thoroughly developed transport infrastructure.*** We have a thoroughly developed transport infrastructure, connecting our iron ore mine to our steel mill and to the port terminals we operate. The Presidente Vargas Steelworks facility is located next to railway and port systems, facilitating the supply of raw materials, the shipment of our production and easy access to our main clients. Our steelworks are close to the main steel consumer centers in Brazil, with easy access to port facilities and railway. The concession for the main railway we use and operate is owned by MRS, a company in which we hold a 34.94% direct and indirect ownership interest. The railway connects our Casa de Pedra mine to the Presidente Vargas Steelworks and to our terminals at Itaguaí Port, which handles our iron ore exports and most of our steel exports, as well as our imports of coal and metallurgical coke. Since the constitution of MRS railway, in 1996, it has significantly improved its productivity and developed its business, with increased cash generation.



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***Self-sufficiency in energy generation.*** We are self-sufficient in energy through our interests in the hydroelectric plants of Itá and Igarapava, as well as our own thermoelectric plant located inside the Presidente Vargas Steelworks. We also sell the excess energy we generate in the energy market on a spot basis. Our 256 MW thermoelectric cogeneration plant provides the Presidente Vargas Steelworks with approximately 60% of its energy needs for its steel mills, using as its primary fuel the waste gases generated by our coke ovens, blast furnaces and steel processing facilities. We hold a 29.5% stake in the Itá Hydroelectric Power Plant, in Santa Catarina. This ownership grants us an assured energy of 167 MW, proportional to our interests in the project, pursuant to a 30-year power purchase agreements at a fixed price per megawatt hour, adjusted annually for inflation. In addition, we own 17.9% of the Igarapava hydroelectric plant, with 210 MW fully installed capacity and a direct take of 23 MW of assured energy to us.

***Low cost structure.*** As a result of our fully integrated business model, our thoroughly developed transportation infrastructure and our self-sufficiency in energy generation, we have been consistently generating high margins compared to peer companies of both steel and mining segments. Other factors that lead to our low cost structure include the strategic location of our steelworks facility along with our well qualified work force with a lean cost.

***Diverse product portfolio and product mix.*** We have a diversified flat steel product mix that includes hot-rolled, cold-rolled, galvanized and steel tin mill products, in order to meet a wide range of customer needs across all steel consuming industries. We focus on selling high-margin products, such as tin-coated, pre-painted, galvalume and galvanized products. Our galvanized products provide material for exposed auto parts, using hot-dip galvanized steel and laser-welded blanks. Our CSN Paraná branch provides us with additional capacity to produce high-quality galvanized, galvalume and pre-painted steel products for the construction and home appliance industries. In addition, our distribution subsidiary, Prada, provides a strong sales channel in the domestic market, enabling us to meet demand from smaller customers, thus creating an important presence in this market.

***Strong presence in domestic market and strategic international exposure for steel products.*** We have a strong presence in the domestic market for steel products, with a market share above 30% of the domestic flat steel market, according to the Brazilian Steel Institute (IABR). In addition, we use our subsidiaries CSN LLC and Lusosider as sales channels for our flat steel products in the United States and in Europe, which accounted for approximately 22% of our total sales in 2015. Direct exports accounted for 4% of our total sales in 2015. In 2012 we acquired SWT, a long steel producer in Germany with annual production capacity of approximately 1.1 million tons of steel profiles, strengthening our steel products mix and geographical diversification. In 2015, SWT accounted for 15% of our total sales.

## **Strategies**

Our goal is to increase value for our shareholders by further benefiting from our competitive cost advantages and quality of product portfolio, maintaining our position as one of the world's lowest-cost steel producers, increasing our relevance as an important iron ore global player, increasing market share and size of our cement business and optimizing our infrastructure assets (including ports, railways and power generating plants) to enable high integration, quality product and low costs. To achieve these goals, we developed specific strategies for each of our business segments, as described below.

### ***Steel***

The strategy for our steel business involves:

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- A focus on the domestic market, by increasing market share in the flat steel segment and long steel market;
- An emphasis on high margin coated steel products, such as galvanized, galvalume, pre-painted and tin plate;
- Geographical diversification through our flat and long steel facilities abroad. We also intend to maintain and diversify our exports, focused on high quality products such as coated steels;
- The constant pursuit of operational excellence, by developing and implementing cost reduction projects (e.g. energy efficiency) and process review programs (e.g. internal logistic optimization, project development and implementation discipline);
- Exploring marketing and commercial synergies by using our flat steel distribution network and product portfolio to accelerate entrance into the domestic long steel market; and

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- Increasing customized services and distribution abilities through our expanding distribution network.

For information on planned investments relating to our steel activities, see “Item 4D. Property, Plant and Equipment – Capital Expenditures – Planned Investments.”

***Mining***

In order to strengthen our position in the iron ore market, we plan to invest in our mining assets, such as Congonhas Minérios, to enable low operational costs and long term growth opportunities.

In the coming years, we expect to reach an annual shipment level of over 60 mtpy of iron ore products, including third party products, by increasing mine capacity at Casa de Pedra and other mines, along with developing export services for third party producers. Considering the current pricing and global iron ore competitive scenario, we will focus on exporting quality iron ore with low cost, guaranteeing participation in the seaborne market.

To sustain this growth, we plan to increase capacity in TECAR, our solid bulks terminal at Itaguaí Port, to 70 mtpy.

In order to maximize the profitability of our product portfolio, we also plan to focus on increasing our output of high quality pellet-feed, by using Itabirito’s deposits and investing with strategic partners and clients in providing pellet feed to pellet producers.

For information on planned investments relating to our mining activities, see “Item 4D. Property, Plant and Equipment – Capital Expenditures – Planned Investments”.

***Logistics***

We expect to expand our current logistics capabilities, including our integrated infrastructure operations of railways and ports.

We intend to continue to improve the delivery of our products in the domestic market (mainly steel and cement) by implementing low cost measures and improving our efficiency through integration and increase in the use of rail transportation, and by providing more distribution centers to reach end clients.

In addition to investments in TECAR, we expanded the TECON terminal at Itaguaí Port in 2014. The project enables us to operate large vessels simultaneously, increasing TECON’s capacity to 440,000 containers.

In terms of railways, the Transnordestina Logística project is being developed to explore a logistic potential, focusing on iron ore, agricultural commodities, gypsum and fuel. We also plan to invest in increasing our efficiency and capacity in the south of Brazil through our interest in MRS.

On September 20, 2013 we entered into an investment agreement with our partners in TLSA, Valec Engenharia, Construções e Ferrovias S.A. and Fundo de Desenvolvimento do Nordeste – FDNE, two Brazilian federal government entities focused on infrastructure and the development of the northeastern region, to implement the partial spin-off of TLSA. The operation was part of a business reorganization and resulted in the segregation of the assets of the Northeastern railway system into two systems: (i) Railway System I, operated by FTL, comprising the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá –

Jorge Lins and (ii) the Railway System II, operated by TLSA, comprising the stretches between Missão Velha – Salgueiro, Salgueiro – Trindade, Trindade – Eliseu Martins, Salgueiro – Porto de Suape and Missão Velha – Porto de Pecém.

As a result of the partial spin-off and the subsequent entry into effect of the new shareholders' agreement, control of TLSA is now shared with other shareholders, who have veto rights over certain important corporate decisions. As a result, we ceased to consolidate TLSA and began recognizing it in accordance with the equity accounting method. See “Item 4B. Business—Our Logistics Segment—Railways—Northeastern Railway System.”

### ***Cement***

Our cement business strategy involves the utilization of the limestone reserves in our Arcos mine and the slag generated by our blast furnaces at Volta Redonda. The first cement grinding mill was inaugurated in 2009, with capacity to produce 2.3 million tons per year. In 2011, we began producing clinker in the Arcos plant enabling lower production costs. We intend to expand our cement production capacity to 5.3 million tons per year over the next few years. We plan to achieve this goal by adding 3.0 million tons per year of capacity through the construction of three new grinding mills and the construction of a new clinker kiln in Arcos. During 2015, we inaugurated two new grinding mills, reaching 4.3 million tons of capacity. For information on planned investments relating to our cement activities, see “Item 4D. Property, Plant and Equipment – Capital Expenditures – Planned Investments.”

### ***Additional Investments***

In addition to the currently planned investments and capital expenditures, we continue to consider possible acquisitions or divestments, joint controlled entities and brownfield or greenfield projects to improve our steel, cement and mining cost competitiveness and production, along with our logistics capabilities, logistics infrastructure and energy generation.

### ***Our Steel Segment***

We produce carbon steel, which is the world’s most widely produced type of steel, representing the vast bulk of global consumption. From carbon steel, we sell a variety of products, both domestically and abroad, to manufacturers in several industries.

### ***Flat Steel***

The following chart reflects our flat steel production cycle in general terms.

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Our Presidente Vargas Steelworks produces flat steel products — slabs, hot-rolled, cold-rolled, galvanized and tin mill products. For further information on our production process, see “—Production Process.”

### ***Slabs***

Slabs are semi-finished products used for processing hot-rolled, cold-rolled or coated coils and sheet products. We are able to produce continuously cast slabs with a standard thickness of 250 millimeters, widths ranging from 830 to 1,600 millimeters and lengths ranging from 5,250 to 10,500 millimeters. We produce high, medium and low carbon slabs, as well as micro-alloyed, ultra-low-carbon and interstitial free slabs. The slabs are then slitted and finished, generating blooms which are delivered to the long products plant.

### ***Hot-Rolled Products***

Hot-rolled products include heavy and light-gauge hot-rolled coils and sheets. A heavy gauge hot-rolled product, as defined by Brazilian standards, is a flat-rolled steel coil or sheet with a minimum thickness of 5.01 millimeters. We are able to provide coils of heavy gauge hot-rolled sheet having a maximum thickness of 12.70 millimeters used to manufacture automobile parts, pipes, structural beams and other construction products. We produce light gauge hot-rolled coils and sheets with a minimum thickness of 1.20 millimeters, which are used for welded pipe and tubing, automobile parts, gas containers, compressor bodies and light cold-formed shapes, channels and profiles for the construction industry.

***Cold-Rolled Products***

Cold-rolled products include cold-rolled coils and sheets. A cold-rolled product, as defined by Brazilian standards, is a flat cold-rolled steel coil or sheet with thickness ranging from 0.30 millimeters to 3.00 millimeters. Cold-rolled products have more uniform thickness and better surface quality when compared to hot-rolled products and their main applications are automotive parts, home appliances and construction. We supply cold-rolled coils in thicknesses of between 0.30 millimeters and 2.99 millimeters.

### ***Galvanized Products***

Galvanized products are comprised of flat-rolled steel coated on one or both sides with zinc or a zinc-based alloy applied by either a hot-dip or an electrolytic process. We use the hot-dip process, which is approximately 20% less expensive than the electrolytic process. Galvanizing is one of the most effective and low-cost processes used to protect steel against corrosion caused by exposure to water and the atmosphere. Galvanized products are highly versatile and can be used to manufacture a broad range of products, such as:

- automobiles, trucks and bus bodies;
- manufactured products for the construction industry, such as panels for roofing and siding, dry wall and roofing support frames, doors, windows, fences and light structural components;
- air ducts and parts for hot air, ventilation and cooling systems;
- culverts, garbage containers and other receptacles;
- storage tanks, grain bins and agricultural equipment;
- panels and sign panels; and
- pre-painted parts.

Galvanized sheets, both painted and bare, are also frequently used for gutters and downspouts, outdoor and indoor cabinets, all kinds of home appliances and similar applications. We produce galvanized sheets and coils in continuous hot-dip processing lines, with thickness ranging from 0.30 millimeters to 3.00 millimeters. The continuous process results in products with highly adherent and uniform zinc coatings capable of being processed in nearly all kinds of bending and forming machinery.

We produce *Galvanew*® in addition to the standard galvanized products. This product is produced by an additional annealing cycle just after the zinc hot-dip coating process. This annealing process causes iron to diffuse from the base steel into the zinc coating. The resulting iron-zinc alloy coating allows better welding and paint performance. The combination of these qualities makes our *Galvanew*® product particularly well suited for manufacturing automobile and home appliance parts including high gloss exposed parts.



At CSN Paraná, one of our branches, we produce *Galvalume*®, a continuous Al-Zn coated material. Although the production process is similar to the hot-dip galvanized coating, *Galvalume*® has at least twice the corrosion resistance of standard galvanized steel. *Galvalume*® is primarily used in outdoor construction applications that may be exposed to severe acid corrosion, like marine uses.

The value added from the galvanizing process permits us to price our galvanized products with a higher profit margin. Our management believes that our expertise in value-added galvanized products presents one of our best opportunities for profitable growth because of the increase in Brazilian demand for such high margin products.

Through our branch CSN Paraná, we also produce pre-painted flat steel, which is manufactured in a continuous painting line. In this production line, a layer of resin-based paint in a choice of colors is deposited over either cold-rolled or galvanized base materials. Pre-painted material is a higher value-added product used primarily in the construction and home appliance markets.

### ***Tin Mill Products***

Tin mill products consist of flat-rolled low-carbon steel coils or sheets with, as defined by Brazilian standards, a maximum thickness of 0.45 millimeters, coated or uncoated. Coatings of tin or chromium are applied by electrolytic process. Coating costs place tin mill products among the highest priced products that we sell. The added value from the coating process permits us to price our tin mill products with a higher profit margin. There are four types of tin mill products, all produced by us in coil and sheet forms:

- Tin plate - coated on one or both sides with a thin metallic tin layer plus a chromium oxide layer, covered with a protective oil film;

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- Tin free steel - coated on both sides with a very thin metallic chromium layer plus a chromium oxide layer, covered with a protective oil film;
- Low tin coated steel - coated on both sides with a thin metallic tin layer plus a thicker chromium oxide layer, covered with a protective oil film; and
- Black plate - uncoated product used as the starting material for the coated tin mill products.

Tin mill products are primarily used to make cans and other containers. With six electrolytic coating lines, we are one of the biggest producers of tin mill products in the world and the sole producer of coated tin mill products in Brazil.

***Production Process***

The main raw materials used in flat production in an integrated steelworks are iron ores, coals, coke, and fluxes such as limestone and dolomite. The iron ore consumed at the Presidente Vargas Steelworks is extracted, crushed, classified, screened (treatment process) and transported by railway from our Casa de Pedra mine, located in the city of Congonhas, in the State of Minas Gerais, 328 km away from the Presidente Vargas Steelworks. The high quality ores mined and sized at Casa de Pedra, with an iron content of approximately 60%, and its low extraction costs are major contributors to our low steel production costs.

We import all the hard coking coals required for coke production and PCI coals for the blast furnace process, due to the lack of hard coking and PCI coals with the appropriate quality in Brazil. The hard coking coals are then charged in coke batteries to produce coke through a distillation process. See “—Raw Materials and Suppliers—Raw Materials and Energy Requirements.” This coal distillation process also produces coke oven gas as a byproduct, which we use as a main source of fuel for our thermoelectric co-generation power plant. After being screened, coke is transported to blast furnaces, where it is used as a combustion source and also as a component to transform iron ore to hot metal. In 2015, we produced approximately 41.6% of our coke needs, the remaining coke was imported.

At sintering plants, fine-sized iron ore and coke breeze or other fine-sized solid fuels are mixed with fluxes (limestone and dolomite) to produce sinter. The sinter, lump iron ore, iron ore pellets (which are 100% acquired in the domestic market), fluxing materials and coke are then loaded into our two operational blast furnaces for smelting. We operate a pulverized coal injection facility, or PCI, which allows to inject low-cost pulverized coals directly into the blast furnaces, replacing approximately one-third of the total coke demand.

The iron ore and iron ore pellets are reduced to pig iron through successive chemical reactions with carbon monoxide (from the coke and PCI coal) at the blast furnaces, which operate 24 hours a day. The iron and iron ore pellets are gradually reduced, then melts and flows downward. Impurities are separated from the hot metal to form a liquid slag with the loaded fluxes (limestone and dolomite). From time to time, hot metal (white-hot liquid iron) and slag are drained from the bottom of the furnace. Slag (containing melted impurities) is granulated and used to produce cement.

The hot metal is transported to the steelmaking shop by 350-ton capacity torpedo cars and charged in basic oxygen furnaces together with scrap and fluxes. At the basic oxygen furnaces, oxygen is blown onto the liquid burden to oxidize its remaining impurities and to lower its carbon content, thus producing liquid steel. The molten steel is conveyed from the basic oxygen furnaces to the secondary refining equipment (degasser, ladle furnace and Argon stirring station). After adjusting the chemical composition, the molten steel is transferred to the continuous casting machines from which crude steel (i.e., rectangular shaped slabs) is produced. A portion of the slab products can be sold directly in the export market.

In the hot rolling process, reheated slabs from the continuous casting machines are fed into hot strip mills to reduce the thickness of the slabs from 250 millimeters to a range of between 1.2 and 12.7 millimeters. At the end of the hot strip mill, the long, thin steel strip from each slab is coiled and conveyed to a cooling yard. Some hot-rolled coils are dispatched directly to customers in the as-rolled condition. Others are further processed at the pickling lines, in a hydrochloric bath, to remove surface oxides and improve surface quality. After pickling, the hot-rolled coils selected to produce thinner materials are sent to be rolled at cold strip mills. CSN has three cold strip mills, one of which was revamped in September 2011, adding 150,000 tons per year to CSN's cold rolling capacity. The better surface characteristics of cold-rolled products enhance their value to customers when compared to hot-rolled products. Additional processing related to cold-rolling may further improve surface quality. Following cold-rolling, coils may be annealed, coated (by hot dip galvanizing or electrolytic tinning process) and painted, to enhance medium-and long-term anti-corrosion performance and also to add characteristics that will broaden the range of steel utilization. Coated steel products have higher profit margins than bare steel products. Of our coated steel products, tin mill and galvanized products are our highest margin products.

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Steel plant equipment regularly undergo scheduled maintenance shutdowns. Typically the rolling mills and coating lines are maintained on a weekly or monthly basis whereas the blast furnaces and other special equipment are scheduled for routine maintenance on a semi-annual or annual basis.

Our business encompasses operational and commercial activities. Our operations are undertaken by our production sector, which is composed of the following two units:

- The operational unit - responsible for steel production operations, repair shops, in-plant railway, and process development at our Presidente Vargas Steelworks; and
- The support unit - responsible for production planning, management of product stockyards, energy and utility facilities and work force safety assistance at the Presidente Vargas Steelworks.

The production sector is also responsible for environment and quality consultancy, new product development, capital investment implementation for steel production and processing, and the supervision of CSN Porto Real's and CSN Paraná's operations.

***Quality Management System***

We maintain a Quality Management System that is certified to comply with the International Standardization Organization ISO 9001 standard and the automotive industry's Technical Specification ISO/TS 16949 in June 2015. ISO 9001 is for the design and manufacture of slabs, blooms, billets, hot rolled flat, pickled and oiled, cold rolled and galvanized steel, tin mill products and long steel products and ISO/TS 16949:2009, third edition, for the manufacture of hot-rolled flat , pickled and oiled steel products, cold-rolled and galvanized steel products.

We also maintain a certification attesting that products furnished by our Araucária plant in the state of Paraná, Brazil, to the electrical and electronic equipment industries are in conformity with Directive 2011/65/EU of the European Parliament on the restriction of the use of certain hazardous substances in electrical and electronic equipment – RoHS.

***Production Output***

The following table sets forth, for the periods indicated, the annual production of crude steel within Brazil and by us and the percentage of Brazilian production attributable to us:

| <b>Crude Steel Production</b> | <b>Brazil</b> | <b>CSN</b><br><i>(In millions of tons)</i> | <b>CSN % of Brazil</b> |
|-------------------------------|---------------|--|------------------------|
|-------------------------------|---------------|--|------------------------|

|             |      |     |       |
|-------------|------|-----|-------|
| <b>2015</b> | 33.2 | 4.2 | 12.7% |
| <b>2014</b> | 33.9 | 4.5 | 13.3% |
| <b>2013</b> | 34.2 | 4.5 | 13.2% |
| <b>2012</b> | 34.7 | 4.8 | 13.8% |
| <b>2011</b> | 35.2 | 4.9 | 13.9% |

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**Source: Brazilian Steel Institute (*Instituto Aço Brasil*), or IABr.**

The following table contains some of our operating statistics for the periods indicated:

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|   | <b>2015</b> | <b>2014</b><br><i>(In millions of tons)</i> | <b>2013</b> |
|---|-------------|---|-------------|
| <b>Production of:</b>                         |             |   |             |
| <b>Molten Steel</b>                           | 4.4         | 4.6   | 4.6         |
| <b>Crude Steel</b>                            | 4.2         | 4.5   | 4.5         |
| <b>Hot-Rolled Coils and Sheets</b>            | 4.3         | 4.8   | 5           |
| <b>Cold-Rolled Coils and Sheets</b>           | 2.5         | 2.5   | 2.7         |
| <b>Galvanized Products</b>                    | 1.4         | 1.6   | 1.5         |
| <b>Tin Mill Products</b>                      | 0.6         | 0.6   | 0.7         |
| <b>Consumption of Coal for Coke Batteries</b> | 1.3         | 1.6   | 1.5         |
| <b>Consumption of Coal for PCI</b>            | 0.5         | 0.6   | 0.6         |

***Raw Materials and Suppliers***

The main raw materials we use in our integrated steel mill include iron ore, coke, coal (from which we make coke), limestone, dolomite, aluminum, tin and zinc. In addition, our production operations consume water, gases, electricity and ancillary materials.

***Raw Materials and Energy Requirements***

In the first half of 2011, prices of the main raw materials used by CSN continuously increased due to unbalanced global supply and demand. In the second half of 2011, prices decreased, mainly due to the worsening of the European crisis.

In the first nine months of 2012, prices of the main raw materials used by CSN continued to fall due to the global crisis in the steel market caused mainly by the decline in China's growth rates and the European crisis. In the fourth quarter of 2012, prices increased, mainly due to the restocking of Chinese mills in preparation for the winter and Chinese holidays.

In 2013, 2014 and 2015, coal and coke prices continued decreasing. These commodity segments are concentrated in the hands of a few global players and there can be no assurance that price increases will not be imposed on steel producers in the future.

*Iron Ore*

We are able to obtain the majority of our iron ore requirements from our Casa de Pedra and Engenho mines located in the State of Minas Gerais. The only iron ore product which we buy from third parties is pellet. For a description of our iron ore segment see “– Our Mining Segment.”

*Coal*

In 2015, our metallurgical coal consumption totaled 1.75 million tons. Metallurgical coal includes coking coal and PCI coal, which is a lower grade coal injected into the blast furnaces, in a pulverized form, to reduce coke consumption. The PCI system reduces CSN’s need for imported coke, and since it is a lower cost compared to imported coke, thus reducing production costs. The total PCI coal consumption in 2015 totaled 0.46 million tons, all imported. The sources of the hard coking coal consumed in our plants in 2015 were as follows: USA (60.0%), Australia (35.0%) and Canada (5.0%) and for PCI: Russia (55.0%), Australia (45.0%).

During 2015, CSN’s coking coal and PCI coal costs in US dollar decreased significantly when compared to 2014 and 2013. The quarterly benchmark price for metallurgical coal began its drop and ended the year at its lowest price (US\$89.00) since 2010, a decrease of US\$26.00 compared with the first quarter of 2015. The deals for the first quarter of 2015 were US\$2.00/mt lower than for the fourth quarter of 2014. The previous lowest settlement amount had been for the fiscal year 2009, when it was priced at US\$129.00/mt.

### *Coke*

In 2015, in addition to the approximately 0.94 million tons of coke we produced, we also consumed 1.32 million tons of coke bought from third parties in China and Colombia, a decrease of 21.66% as compared to our consumption in 2014. The decrease in coke production throughout 2015 derives from an ongoing revamp project in our coke plants, which will last through the next few years.

### *Limestone and Dolomite*

Our Bocaina mine is located in Arcos, in the State of Minas Gerais, and has been supplying, since the early 1970s, limestone (calcium carbonate) and dolomite (dolomitic limestone) to our Presidente Vargas Steelworks in Volta Redonda. These products are used in the process of sintering and calcination. Arcos has one of the largest and highest quality reserves of limestone in the world, which is used in the production of various products, including clinker and cement.

The annual production of limestone and dolomite for our steelworks is approximately 2.5 million tons.

The main products obtained from limestone and dolomite that are transferred to our steelworks in Volta Redonda are:

- Limestone and dolomite calcination: with a granulometry between 32 and 76 mm, they are used in the lime plant in Volta Redonda to produce calcitic and dolomitic lime, for further use in the steelmaking process and sintering. At the steelworks, lime is used for chemical controlling of liquid slag, in order to preserve the refractory of the converters and assist in the stabilization of the chemical reactions that occur during the steel manufacturing process. During sintering, the purpose of lime is to increase the performance of this process and the final quality of the sinter that is produced.
- Limestone and dolomite fines for sintering: used in the production of “sinter”, in our steelworks. The sintering process mixes and heats together with fine ores, solid fuel and flux, producing a highly reactive granulated burden. The sinter is used in blast furnaces as the main source of iron for the production of pig iron.

Beginning in 2011, with the start-up of clinker plant to produce cement in Volta Redonda, the mine in Arcos also became responsible for supplying limestone for cement manufacturing in Volta Redonda.

### *Aluminum, Zinc and Tin*



Aluminum is mostly used for steelmaking. Zinc and tin are important raw materials used in the production of certain higher-value steel products, such as galvanized and tin plate, respectively. We typically purchase aluminum, zinc and tin from third-party domestic suppliers under one year contracts. Specifically in relation to tin, we purchase part of our demand from CSN's subsidiary ERSA. We maintain approximately 15, 16 and 36 days inventory of tin, aluminum and zinc, respectively, at the Presidente Vargas Steelworks.

*Other Raw Materials*

In our production of steel, we consume, on an annual basis, significant amounts of spare parts, refractory bricks and lubricants, which are generally purchased from domestic suppliers.

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We also consume significant amounts of oxygen, nitrogen, hydrogen, argon and other gases at the Presidente Vargas Steelworks. These gases are supplied by a third-party under a long-term contract from its gas production facilities located on the Presidente Vargas Steelworks site. In 2015, we used 698,700 tons of oxygen to produce 4.2 million tons of crude steel.

*Water*

Large amounts of water are also required in the production of steel. Water serves as a solvent, a catalyst and a cleaning agent. It is also used to cool, to carry away waste, to help produce and distribute heat and power, and to dilute liquids. Our source of water is the Paraíba do Sul River, which runs through the city of Volta Redonda. Over 92% of the water used in the steelmaking process is recirculated and the balance, after careful processing, is returned to the Paraíba do Sul River. Since March 2003, the Brazilian government has imposed a monthly tax for our use of water from the Paraíba do Sul River, based on an annual fee of approximately R\$0.705 million.

*Electricity*

Steelmaking requires significant amounts of electricity to power rolling mills, production lines, hot metal processing, coking plants and auxiliary units. In 2015, our Presidente Vargas Steelworks consumed approximately 3.01 million MWh of electric energy.

Our main source of electricity is our thermoelectric co-generation power plant at the Presidente Vargas Steelworks, which is fueled by the gases from the steel production process, with 235.2 MW of installed capacity. In addition, we have a 29.5% interest in the Itá Hydroelectric Power Plant in Santa Catarina, through a 48.75% equity interest in ITASA, and a 17.9% interest in the Igarapava Hydroelectric Power Plant in Minas Gerais, from which we have ensured energy take of 167 MW on average and 23 MW average, respectively. Those three assets give CSN an average generation capacity of 425 MW, supplying the group's total demand for power. In 2014, we installed a new turbine generator at the Presidente Vargas Steelworks, which added 21 MW to our existing installed capacity. This turbine is located near our Blast Furnace No. 3, using the outlet gases from the iron making process to generate energy.

*Natural Gas*

In addition to electricity, we consume natural gas, mainly in our hot strip mill. Companhia Estadual de Gás do Rio de Janeiro S.A., or CEG Rio, which was privatized in 1997, is currently our major source of natural gas. Variations in the supply of gas can affect the level of steel production. We have not experienced any significant stoppages of production due to a shortage of natural gas. We also purchase fuel oil from Petrobras and Raízen. In 2015, the Presidente Vargas Steelworks consumed 489 million m<sup>3</sup> of natural gas.

The market for natural gas is strongly correlated with the electricity market. Brazilian electricity generation is based principally on hydroelectric power, itself dependent on the level of Brazil's reservoirs. As a contingency against low levels of rainfall, there are several thermoelectric power plants which use natural gas. Due to low levels of rainfall in 2013 and 2014, reservoirs reached their lowest level in the past ten years; consequently the Brazilian Electricity System Operator (Operador Nacional do Sistema Elétrico), or ONS, increased the utilization of thermoelectric generation.

*Diesel Oil*

In mid-October 2006 and July 2008, we entered into agreements with Companhia Brasileira de Petróleo Ipiranga, or Ipiranga, to receive diesel oil in order to supply our equipment in our mining plants in the state of Minas Gerais, which provide the iron ore, dolomite and limestone used in our steel plant in Volta Redonda. In 2015, our consumption totaled 59,526 kiloliters of diesel oil, used to produce 25.713 million tons of iron ore, for which we paid US\$ 33.5 million or R\$111.6 million, until November. In December, 2015 we consumed 3.9 kiloliters, used to produce 2.1 million tons of iron ore, for which we paid US\$2.0 million or R\$7.5 million.

*Suppliers*

We acquire the inputs necessary for the production of our products in Brazil and abroad, with aluminum, zinc, tin, spare parts, refractory bricks, lubricants, oxygen, nitrogen, hydrogen and argon being the main inputs acquired in Brazil. Coal and coke are the only inputs acquired abroad. In 2015 we consumed 262,000 tons of third party slabs.

Our main raw materials suppliers are set forth below:

| <b>Main Suppliers</b>   | <b>Raw Material</b> |
|---|---------------------|
| <b>Açominas and CSA</b>   | Slabs               |
| <b>Walters Energy, Rio Tinto Coal, Alpha Resources, Carbo One Limited and Teck Coal</b> | Coal                |
| <b>CI Milpa, ThyssenKrupp, Sinochen and Coeclerici</b>                                  | Coke                |
| <b>Ibrame, Latasa, Chancellor and Alumbras</b>  | Aluminum            |
| <b>Votorantim Metais (1)</b>  | Zinc                |
| <b>White Solder, ERSA, Melt Metais and Mineração Taboca</b>                             | Tin                 |
| <b>Sotreq, VeyanceMetso, Maxbelt and Mason</b>  | Spare parts         |
| <b>Magnesita, RHI and Saint Gobain</b>  | Refractory bricks   |
| <b>Ipiranga and BR Distribuidora</b>  | Lubricants          |

**(1) We depend on Votorantim Metais as it is the only supplier of zinc in Brazil**

*Flat Steel Mill*

The Presidente Vargas Steelworks, located in the city of Volta Redonda, in the State of Rio de Janeiro, began operating in 1946. It is an integrated facility covering approximately 4.0 square km and containing five coke batteries (three of which are currently in operation), three sinter plants, two blast furnaces, a basic oxygen furnace steel shop, or BOF shop, with three converters, three continuous casting units, one hot strip mill, three cold strip mills, two continuous pickling lines, one continuous annealing line, 28 batch annealing furnaces, three continuous galvanizing lines, four continuous annealing lines exclusively for tin mill products and six electrolytic tinning lines.

At the end of 2015, the Company decided to idle Blast Furnace No. 2 operation as from 2016, decreasing our annual production capacity of steel at the Presidente Vargas Steelworks by 28% from 5.4 million tons to 3.9 million tons.

Our major operational units and corresponding effective capacities as of December 31, 2015, including CSN LLC and Lusosider, are set forth in the following chart:

**Effective Capacity**

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|                                  | <b>Tons per year</b> | <b>Equipment in operation</b> |
|----------------------------------|----------------------|-------------------------------|
| <b>Process:</b>                  |                      |                               |
| <b>Coking plant</b>              | 1,525,000            | 3 batteries                   |
| <b>Sintering plant</b>           | 6,360,000            | 3 machines                    |
| <b>Blast furnace</b>             | 5,380,000            | 2 furnaces                    |
| <b>BOF shop</b>                  | 5,750,000            | 3 converters                  |
| <b>Continuous casting</b>        | 5,600,000            | 3 casters                     |
| <b>Finished Products:</b>        |                      |                               |
| <b>Hot strip mill</b>            | 5,100,000            | 1 mill                        |
| <b>Cold strip mill</b>           | 4,700,000            | 6 mills                       |
| <b>Galvanizing line</b>          | 2,095,000            | 7 lines                       |
| <b>Electrolytic tinning line</b> | 930,000              | 5 lines                       |

*Downstream Facilities**CSN Paraná*

Our CSN Paraná branch produces and supplies plain regular galvanized products, Galvalume® products and pre-painted steel products for the automotive, construction and home appliance industries. The plant has an annual capacity of 330,000 tons of galvanized products and Galvalume® products, 130,000 tons of pre-painted products, which can use cold-rolled or galvanized steel as substrate, service capacity of 150,000 tons of sheets and narrow strips, and 220,000 tons of pickled hot-rolled coils in excess of the coils required for the coating process.

*CSN Porto Real*

Our CSN Porto Real branch produces and supplies plain regular galvanized, Galvanew® products and tailored blanks mainly for the automotive industry. The plant has an annual capacity of 350,000 tons of galvanized products, including Galvanew® products, and 150,000 tons of tailored blanks, sheets and narrow strips, which can use cold-rolled or galvanized steel as a substrate.

*Metalic*

We have a 99.99% ownership interest in Cia. Metalic Nordeste, or Metalic. Metalic is one of the few two-piece steel can producers in all the Americas. It has approximately 12% of the packaging market for carbonated drinks in the Northeastern region of Brazil. Currently, we are Metalic's only supplier of the steel used to make two-piece cans. The development of drawn-and-wall-ironed steel for the production of two-piece cans is an important achievement in the production process at the Presidente Vargas Steelworks.

*Prada*

We have a 99.99% ownership interest in Cia. Metalúrgica Prada, or Prada. Established in 1936, Prada is the largest Brazilian steel can manufacturer and has an annual production capacity of over one billion cans in its three industrial facilities: two located in the state of São Paulo and one in the state of Minas Gerais. Currently, we are the only Brazilian producer of tin plate, Prada's main raw material, which makes Prada one of our major customers of tin plate products. Prada has important clients in the food and chemical industries, including packages of vegetables, fish, dairy products, meat, aerosols, paints and varnishes, and other business activities. On December 30, 2008, we merged one of our subsidiaries, Indústria Nacional de Aços Laminados S.A., or INAL, into Prada. INAL was a distributor of laminated steel founded in 1957 and, after the merger, it became a branch of Prada responsible for distribution of CSN and Prada's products, or Prada Distribuição.

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Prada Distribuição is one of the leaders in the Brazilian distribution market for steel products with 460,000 tons per year of installed processing capacity. Prada Distribuição has one steel service center and six distribution centers strategically located in the Southeast region Brazil. The service center is located in the city of Mogi das Cruzes between the cities of São Paulo and Rio de Janeiro. Its product mix also includes sheets, slit coils, sections, tubes, and roofing in standard or customized format, according to clients' specifications. Prada Distribuição processes the entire range of products produced by us and services 4,000 customers annually from the civil construction, automotive and home appliances sectors, among others.

*Companhia Siderurgica Nacional, LLC*

CSN LLC holds the assets of former Heartland Steel, a flat steel processing facility in Terre Haute, Indiana. This facility has an annual cold rolling production capacity of 800,000 tons of full hard cold rolled coils. Delivery capacity of cold-rolled and galvanized products are 280,000 and 315,000 tons/year, respectively. Currently, CSN LLC is obtaining raw materials by buying hot rolled coils directly from mills in the United States or importing from mills abroad. See "Item 4B. Government Regulation and Other Legal Matters—Anti-Dumping Proceedings—United States" for a discussion about anti-dumping issues on Brazilian hot coils exports to the United States.

*Lusosider, Aços Planos, S.A.*

We own 99.94% of Lusosider, a flat steel processing facility located in Seixal, near Lisbon, Portugal. Lusosider has the capacity to produce and sell approximately 50,000 tons of hot-rolled pickled coils, 50,000 tons of cold-rolled and 240,000 tons of galvanized products per year. Its main customers include service centers and tube making industries.

*CSN Distribuição*

We have two service centers, one located in the city of Camaçari, in the State of Bahia and one in the city of Jaboatão dos Guararapes, in the state of Pernambuco, to support sales in the Northeastern and North regions. There is also a Distribution Center in the city of Canoas, in the state of Rio Grande do Sul, to support sales in the South region of Brazil.



*Long Steel - Mills*

*SWT*

In February 2012, we acquired Stahlwerke Thuringen, or SWT, located in Unterwellenborn, Germany, which marked our entrance into the long steel market. SWT specializes in the production of profiles, including IPE (European I Beams) and HE (European Wide Flange Beams) sections, channels and UPE (Channels with Parallel Flanges) sections and steel sleepers. In total, more than 200 types of sections are produced according to different German and international standards.

The following chart reflects SWT's production cycle in general terms.

## **Production Process**

Scrap arrives at the mill by rail or road. Two gantry cranes are used to transfer the scrap to a stockyard. Two remote-controlled diesel-hydraulically driven transfer wagons carry the recycled steel in containers, which also function as charging vessels to the melting shop.

The electric arc of the DC-furnace is generated between a graphite electrode and the bottom of the furnace, which functions as the anode. This energy, supplemented by natural gas/oxygen burners, is used to convert this material into molten steel.

After the smelting process, the molten metal is tapped into the ladle in a wagon, which is then positioned under the ladle furnace. The purpose of this process is to achieve the desired composition, by the addition of alloys, and the necessary final temperature of the steel. The ladle is then transported to the casting shop with the transport wagon and is elevated onto the turret that rotates it into the casting position. The tundish distributes the steel to four strands of water-cooled copper moulds that provide the desired beam blank shape. As soon as the strands pass through the moulds they undergo an intensive cooling process. After solidification is complete, the strands pass through guides which transport and straighten the strands out of the casting arc into the horizontal plane, where they are then cut into pieces of the required length with automatic flame-cutting torches. A transfer manipulator passes the beam blanks to the roller table of the rolling mill.

The rolling mill provides facilities for both duo and universal rolling processes. In contrast to the continuous operation where the sections are rolled in strands arranged one after the other, in this reversing mill the section bar is run forwards and backwards in several passes through rolls that either have “grooves” or function according to the universal rolling principle.

The three stand assemblies in the rolling mill include, a break down stand coupled with a cropping saw, a tandem group and a finishing group. After having passed the finishing strand, the dimensional accuracy of the rolled section is measured using laser technology.

The next stage is the finishing department, where the sections, which can be up to 100m long, cool down on a walking beam cooling bed, before being straightened. The sections are then cut on a cold saw plant to lengths between 6m and 28m, as requested by customers.



[Table of contents](#)**Production Output - SWT**

|                                       | <b>2015</b> | <b>2014</b>                   | <b>2013</b> |
|---------------------------------------|-------------|-------------------------------|-------------|
|                                       |             | <i>(In thousands of tons)</i> |             |
| <b>Production of:</b>                 |             |                               |             |
| <b>Beam Blank (Crude Steel)</b>       | 794         | 844                           | 813         |
| <b>Long Steel (Finished Products)</b> | 743         | 758                           | 765         |

***Raw Materials and Suppliers****Raw Materials and Energy Requirements*

The main raw material we use in our long steel operation is scrap. In addition, our production operations consume electricity, natural and technical gases and ancillary materials like ferroalloys, lime, dolomite and foaming coal.

*Scrap*

During 2011, prices for scrap continuously increased due to unbalanced supply and demand in Europe and increasing globalization of scrap trading worldwide. Prices in the European market were particularly affected. In 2013, the scrap average price decreased significantly until the middle of the year followed by a slight prices increase. In 2014 and 2015 the scrap prices decreased significantly. Our scrap consumption totaled approximately 0.9 million tons and accounted for nearly 60% of our production costs. We are able to obtain 70% of our scrap needs from within a 250 km vicinity.

*Ferroalloys, lime and foaming coal*

Because we do not own any sources of alloys, lime and foaming coal we have to buy these materials from traders. Our traders are located mostly in Europe and the materials come from different producers around the world.

*Rolls*

We consume different types of rolls in our rolling mill, usually cast rolls which come from Germany, Italy, Slovenia and China.

*Graphite electrodes*

In the smelting shop (electric arc furnace), we use graphite electrodes with a diameter of 750mm and in the ladle furnace, we use electrodes with a diameter of 400mm. The electrodes come from Europe, Japan and China.

*Other raw materials*

In our production of steel we consume, on an annual basis, amounts of electrodes, rolls, refractory materials and materials for packaging and spare parts, which are mostly purchased from domestic suppliers.

*Water*

Large amounts of water are required in the production process. Our source of water is the Saale river, located 5 km from the plant. We use our own water station to pump water via pipelines to the plant.

*Electricity and Natural Gas*

Steelmaking also requires significant amounts of electricity and natural gas, for which we have supply contracts. Under normal conditions, we consume approximately 450 GWh of electric energy and an equal amount of natural gas.

Table of contents*Suppliers*

We acquire the inputs necessary for the production of our products in Germany and other countries.

Our main raw materials suppliers are set forth below:

| <b>Main Suppliers</b>               | <b>Raw Material</b> |
|-------------------------------------|---------------------|
| <b>Scholz, TSR</b>                  | Scrap               |
| <b>Verbund</b>                      | Electric Energy     |
| <b>E.on Ruhrgas</b>                 | Natural gas         |
| <b>RHI</b>                          | Refractory          |
| <b>SGL, Graftec, NCK</b>            | Electrodes          |
| <b>Siemens, Schneider, Voith</b>    | Spare parts         |
| <b>Irlle, Walzengießerei Coswig</b> | Rolls               |

*Facilities - SWT*

SWT possesses a 28 km internal railway system, and the logistics infrastructure to ensure supply of scrap and delivery of finished products. Main markets served by SWT include: non-residential construction, equipment industries, engineering and transport, in Germany and neighboring countries, including Poland and the Czech Republic.

**Effective Capacity - SWT**

|                                   | <b>Tons per year</b> | <b>Equipment in operation</b> |
|-----------------------------------|----------------------|-------------------------------|
| <b>Process:</b>                   |                      |                               |
| <b>EAF – Electric Arc Furnace</b> | 1,100,000            | 1 furnace                     |
| <b>Ladle Furnace</b>              | 1,100,000            | 1 furnace                     |
| <b>Finished Products:</b>         |                      |                               |
| <b>Section mill</b>               | 1,000,000            | 1 mill                        |

**Volta Redonda EAF Mill**

***Plant Characteristics***

We completed a new plant mill for production of long steel products in Volta Redonda and started assisted operations in December 2013 and 2014 we started ramping up the production process. The plant consists of a 50t electric arc steelmaking furnace, 50t ladle metallurgy, continuous casting machine for billets and a hot rolling mill for wire rod and reinforcing bar.. We expect this plant to reach up to 500,000 t/year output when fully operational, providing the domestic market with products for civil construction and high quality drawing and cold heading applications.

***Steelmaking Shop***

Designed for an output of 400,000 t/year, this unit mainly consists of one 50t UHP, AC electric arc furnace, one 50t ladle furnace, one continuous casting machine for billets with three strands, mobile equipment and cranes, power supply, distribution facilities and and auxiliary equipment.

***Rolling Mill***

Designed for an output of 500,000 t/year, this unit has one walking-beam reheating furnace, or RHF, a 4-stand blooming mill, a 250t hot shear, a 6-stand roughing mill, a 6-stand intermediate mill, a 6-stand pre-finishing mill, internal water cooling, a double length flying shear, a stepping cooling bed, a 500t cold shear, transfer inspection stand, bundling machine, a water-cooling section before wire finishing mill, a 10-stand high-speed wire finishing mill, a water-cooling section after wire finishing mill, a laying head, a loose coil cooling line, reforming device, bundling machine, stripper and coil handling devices.

## ***Production Process - Rebar and Wire-rod***

### *Steelmaking*

The process of steelmaking begins with the arrival of smelt scrap and pig iron at our facilities by wagons and trucks. After being conditioned, scrap and pig iron are delivered for scrap bucket preparation in the scrap yard. The scrap buckets are prepared based on the type of steel that will be manufactured in the steelmaking shop.

The scrap bucket mixed with pig iron is, with the help of a crane, brought to the electric arc furnace. After loading, the furnace begins the melting process, which involves the creation of steel through use of electrodes, burners and oxygen injectors. In the furnace, the scrap metal becomes liquid steel after reaching the appropriate temperature and is tapped into a previously prepared ladle.

During tapping, alloys are added to the liquid steel and the mixture is placed in a ladle furnace. In the ladle furnace, chemical composition corrections are made to the mixture. The ladle, containing the liquid steel is then brought to the continuous casting machine.

The liquid steel is then poured into a tundish where it is cast into the molds, beginning the process of solidification and transformation of steel in billets. After being solidified, the billets are cut into particular sizes according to the intended application.

### *Rolling Mill*

The rolling mill is comprised of a blooming mill, a roughing mill, an intermediate mill, a pre-finishing mill and a wire finishing mill in order to reduce the steel thickness and make the thickness uniform. When using 250x250mm blooms cut from BOF slabs, the blooms will be moved by a chain shifting device, which has heat insulation, that brings the blooms to the delivery table in the blooming mill before they are rolled into transfer bar of 150x150mm and then cropped and divided by a 250t hot shear. Afterwards the transfer bars are sent by the heat retaining table and chain shifting device to the roughing mill. Then, in line with product requirements, for straight pieces the transfer bar will be fed into roughing mill, intermediate rolling mill and pre-finishing mills to be rolled continuously into straight thread rebar or round bar. In order to produce wires, the rolling piece leaving the pre-finishing mill will be fed into high-speed wire finishing mill where it is rolled into the desired wire coils.



The production flow chart is showed below:

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[Table of contents](#)**Production Output****Certain Operating Statistics***(In thousands of tons)***Production of:****Billets (Crude Steel)****2015****2014**

151

105

**Long Steel (Finished Products)**

131

93

*Raw Materials and Energy Suppliers*

The main raw material we use in our long steel operation in Volta Redonda is scrap, in addition to pig iron. We also use blooms, which we produce at our BOF shop. In addition, our production operations consume electricity, natural and technical gases and ancillary materials like ferroalloys, lime, dolomite and foaming coal. The supply sources for these materials are the same used for our flat steel operations. See “Item 4B—Raw Materials and Suppliers.”

**Our Mining Segment**

Our mining activities are one of the largest in Brazil and are mainly driven by the exploration of one of iron ore reserves, Casa de Pedra, in the State of Minas Gerais. We sell our iron ore products mainly in Asia, Europe and Brazil with sales and marketing taking place through our principal hubs in Minas Gerais, in Brazil and Austria.

***Our Mines***

*Location, Access and Operation*

***Casa de Pedra***

Casa de Pedra mine is an open pit mine located in the city of Congonhas in the State of Minas Gerais, Brazil, approximately 80 km south of the city of Belo Horizonte and 360 km north of the city of

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Rio de Janeiro. The site is approximately 1,000 meters above sea level and accessible from the cities of Belo Horizonte or Congonhas through mostly paved roads.

Casa de Pedra mine is a hematite-rich iron deposit of an early proterozoic banded iron formation in Brazil's Iron Ore Quadrangle (*Quadrilátero Ferrífero*), which is located in the central part of the State of Minas Gerais in the Southeastern region of Brazil and has been one of the most important iron producing regions in Brazil for the last 50 years. It has been incorporated to CSN in 1941, but has been in operation since 1913.

Our iron ore at Casa de Pedra is currently excavated by a fleet composed of Komatsu PC5500 and Caterpillar 6060 hydraulic shovels, wheel loaders (Caterpillar 994H, Komatsu WA1200 and LeTourneau 1850) and then hauled by a fleet of Caterpillar 793D (240 tons), Caterpillar 793F (240 tons) and Terex Unit Rig MT4400AC (240 tons). This fleet has an installed annual ROM capacity of approximately 130 million tons.

Then the ore is processed in our treatment facilities, which have an installed capacity of 28 million tons of products per year. We use in Casa de Pedra electrical power provided by hydroelectric plants.

Casa de Pedra mine supplies all of our iron ore needs except pellets, producing lump ore, sinter feed and pellet feed fines with high iron content. The maps below illustrate the location of our Casa de Pedra mine:



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### ***Engenho***

The Engenho mine is also an open pit mine located at the Southwestern region of the Iron Ore Quadrangle, 60 km south of the city of Belo Horizonte and is accessible from the cities of Belo Horizonte or Congonhas through mostly paved roads. The map below illustrates the location of our Engenho mine:

The Engenho mine started operation in 1950. The ore in this mine is excavated by a fleet of wheel loaders (Komatsu WA470) and excavators (Komatsu PC600) and then hauled by a fleet of Mercedes-Benz Actros 4844 trucks. There is also equipment that operates in the dam and in the yard. These fleet consist of wheel loaders (Komatsu WA470 and Komatsu WA500), excavators (Komatsu PC600 and Komatsu PC350) and trucks (Mercedes-Benz Actros 4844 and Mercedes-Benz Axor 4144).

Then the ore is processed in the Pires treatment facilities, which have an installed capacity of 7 million tons of products per year. We use electrical power provided by hydroelectric plants in Engenho mine and Pires Complex.

### ***Fernandinho***

The Fernandinho mine is located in the city of Itabirito, in the State of Minas Gerais. This city is located in the Middle-East region of the State of Minas Gerais and approximately 40 km from the city of Belo Horizonte. Fernandinho is an open pit mine and is accessible from the cities of Belo Horizonte or Itabirito through mostly paved roads. The map below illustrates the location of our Fernandinho mine:



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The Fernandinho mine also started operation in 1950. The ore in this mine is excavated by a fleet of wheel loaders (Komatsu WA470) and excavators (Komatsu PC350LC-8) and then hauled by Mercedes Bens AXOR 4144K trucks.

Then the ore is processed in the Fernandinho treatment facilities, which have an installed capacity of 600 thousand tons of products per year. We use electrical power provided by hydroelectric plants in Fernandinho mine as well.

The map below shows the location of Casa de Pedra, Engenho and Fernandinho Mines:



Casa de Pedra and Engenho mines are now part of a company named Congonhas Minérios, which resulted from the combination of the iron ore and related logistic assets of CSN and Namisa. See “Item 5A Specific Events Affecting our Results of Operations” for more information on the transaction.

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### ***Limestone and Dolomite Mine***

Our extraction and preparation of limestone and dolomite is done at our Bocaina mining facility located in the city of Arcos, in the State of Minas Gerais. The Bocaina mine is an open pit mine and it can be accessed from the cities of Belo Horizonte, located at approximately 230 km, and Volta Redonda (where the Presidente Vargas Steelworks is situated), located at approximately 462 km, through mostly paved roads.

The ore in this mine is excavated by a fleet wheel loaders (Caterpillar 990, Caterpillar 980 and excavators (Komatsu PC350LC-8, Hitachi ZX470LC-5) and then hauled by a fleet of Iveco Trakker 8 x 4, Caterpillar 775, Mercedes Axor 2831 6 x 4 and Volkswagen Constellation 21330 trucks.

This mining facility has an installed annual production capacity of approximately 4.0 million tons. This mining facility has sufficient limestone and dolomite reserves to adequately supply our steel production, at current levels, for 40 years.

The Bocaina mine is wholly-owned by us. The maps below illustrate the location of this mine:

***Tin***

We own a tin operation in Itapuã do Oeste, in the State of Rondônia, through our subsidiary Estanho de Rondônia S.A. (ERSA). This facility has an installed annual production capacity of approximately 3,600 tons of tin, which we use substantially as a raw material to produce tin plate, a coated steel product. A small part of our tin production that is not used as raw material is sold to third parties; however, the results from these sales are insignificant to our consolidated results.

***Mineral Rights and Ownership***

The Mining Code and the Brazilian Federal Constitution impose requirements on mining companies 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 the health and safety of local communities where the mines are located. The Mining Code also imposes certain notifications and reporting requirements.

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We hold concessions to mine iron ore, limestone and dolomite. We purchase manganese in the local market. We own 87.52% of Congonhas Minérios mines and 100% of Bocaina and Santa Bárbara mines. In addition, each mine is an “open pit” mine. Iron ore extraction, crushing, screening and concentration are done in three different sites: Casa de Pedra mine and Pires beneficiation plant (all Congonhas Minério’s property) and Fernandinho mine, a Minerérios Nacional’s property

***Casa de Pedra***

Our mining rights for Casa de Pedra mine include the mine, a beneficiation plant, roads, a loading yard and a railway branch and are duly registered with the Brazilian Department of Mineral Production (*Departamento Nacional de Produção Mineral*), or DNPM. DNPM has also granted us easements in 19 mine areas located in the surrounding region, which are not currently part of Casa de Pedra mine.

We believe we have obtained and are in compliance with all licenses and authorizations for our operations and projects at Casa de Pedra mine.

Exploration undertaken at the Casa de Pedra mine is subject to mining lease restrictions, which were reflected in our iron ore reserve calculations. Quality requirements (chemical and physical) are the key “modifying factors” in the definition of ore reserves at Casa de Pedra and were properly accounted for by us.

***Mineral Reserves***

The following table sets forth the type of each of our mines, period of operation, projected exhaustion dates and percentage of our interest:

| <b>Mine</b>                                      | <b>Type</b> | <b>Operating Since</b>              | <b>Projected exhaustion date</b> | <b>CSN % interest</b> |
|--|-------------|-------------------------------------|----------------------------------|-----------------------|
| <b>Iron:</b>                                     |             |                                     |                                  |                       |
| <b>Casa de Pedra (Congonhas, Minas Gerais)</b>   | Open pit    | 1913                                | 2040                             | 87.52                 |
| <b>Engenho (Congonhas, Minas Gerais)</b>         | Open pit    | 2007 (Start of operation by Namisa) | 2040                             | 87.52                 |
| <b>Fernandinho (Itabirito, Minas Gerais)</b>     | Open pit    | 2007 (Start of operation by Namisa) | 2039                             | 87.52                 |
| <b>Limestone and Dolomite:</b>                   |             |                                     |                                  |                       |
| <b>Bocaina (Arcos, Minas Gerais)</b>             | Open pit    | 1946                                | 2055                             | 100                   |
| <b>Tin</b>                                       |             |                                     |                                  |                       |
| <b>Santa Barbara (Itapuã do Oeste, Rondonia)</b> | Open pit    | 1950                                | 2054                             | 100                   |

The following table sets forth our estimates of proven and probable reserves and other mineral deposits at our mines reflecting the results of reserve studies. They have been calculated in accordance with the technical definitions contained in the SEC's Industry Guide 7, and estimates of mine life described herein are derived from such reserve estimates. The mineralized material disclosed are for the entire mines, and not just for our proportional interest in the mines.

In the most recent reserve audit conducted in 2014, the losses for mine dilution and mining recovery considered were 5% each for both Casa de Pedra and Engenho mines.

In 2014 we audited resources and reserves for Casa de Pedra and Engenho mines. As for Fernandinho mine we audited only resources. We do not have audited resources/reserves studies for our Bocaina mine, thus the resources/reserves presented at the table below were not audited by any third parties for that mine. As for our Santa Barbara mine we do not have reserve estimates and do not currently plan to begin campaigns to complete a study in connection with these property in light of its low materiality to our business.

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| Mine Name<br>and Location                              | Audited Reserves<br>(in millions of tons) |                               | Ore Tonnage <sup>3</sup><br>(in millions of tons) |                               | Grade <sup>4</sup> | Rock<br>Type                           | Recoverable<br>Product <sup>5</sup><br>(in millions of<br>tons) |
|--|---|-------------------------------|---|-------------------------------|--------------------|--|---|
|  | Proven <sup>6</sup>                       | Probable <sup>7</sup>         | Proven <sup>6</sup>                               | Probable <sup>7</sup>         |                    |  |   |
| <b>Iron:</b>   |   |                               |   |                               |                    |  |   |
|  |   |                               |   |                               |                    | Hematite<br>(7%)                       |   |
| <b>Casa de<br/>Pedra (Congonhas, Minas<br/>Gerais)</b> | 1,043                                     | 1,662                         | 1,002   | 1,662                         | 41.36% Fe          | Itabirite<br>(93%)                     | 1.47  |
| <b>Engenho (Congonhas,<br/>Minas Gerais)</b>           | 108                                       | 209                           | 108   | 209                           | 39.48%             | Hematite<br>(3%)<br>Itabirite<br>(97%) | 163   |
| <b>Fernandinho (Itabirito,<br/>Minas Gerais)</b>       |   |                               |   |                               | 40.21%             | Itabirite<br>(100%)                    |   |
| <b>Total Iron:</b>                                     |   |                               |   |                               |                    |  |   |
| <b>Limestone and Dolomite:</b>                         |   |                               |   |                               |                    |  |   |
|  | <b>Proven<sup>6</sup></b>                 | <b>Probable<sup>(7)</sup></b> | <b>Proven<sup>(6)</sup></b>                       | <b>Probable<sup>(7)</sup></b> |                    |  |   |
|  |   |                               |   |                               | 43.84%CaO          | Limestone<br>(89.3%)                   |   |
| <b>Bocaina (Arcos, Minas<br/>Gerais)</b>               | 311                                       | 38                            | 308   | 38                            | 3.71%MgO           | Dolomite<br>(10.7%)                    | 261   |

(1) Reserves means the part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. We do not have reserve audits for the Fernandinho mine. The reserves for the Casa de Pedra and Fernandinho mines were audited in December, 2014 and we have reduced the amount of proven reserves by our annual production since then.

(2) Mineralization that has been sufficiently sampled at close enough intervals to reasonably assume continuity between samples within the area of influence. This material does not yet qualify as a reserve.

(3) Represents ROM material.

(4) Grade is the proportion of metal or mineral present in ore or any other host material.

(5) Represents total product tonnage after mining and processing losses.

(6) Means reserves for which: (i) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and (ii) 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.

(7) Means reserves for which quantity and grade and /or quality are computed from information similar to that used for proven (measure) 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 (measure) reserves, is high enough to assume continuity between points of observation.

The metallurgical recovery factor is the proportion of iron in the ore delivered to the processing plant that is recovered by the metallurgical process. In 2015, the metallurgical recovery factor obtained by Casa de Pedra concentration plant was 82.0% and by the Pires plant was 65.8%.

The cutoff grade is the minimum ore percentage that determines which material will be fed in the processing plant. The cutoff grade value for Casa de Pedra and Engenho mines considered in the most recent audit is 23.37%.

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The prices used in the 2014 audit for the estimation of Casa de Pedra reserves, are shown in the following table. As shown, the product price we assumed to estimate our reserves, is based on expectations of an average long term price of US\$90 per ton, considering that as a reasonable price for a sustainable development of the iron ore market.

|   | Price for the three years prior to the audit<br>(US\$/t) |      |      | Long term average<br>(US\$/t)<br>Assumption |
|---|--|------|------|---|
|   | 2011   | 2012 | 2013 |   |
| <b>Platts 62Fe CFR<br/>N.China (\$/dmt)</b> | 169  | 130  | 135  | 90  |

***Casa de Pedra***

In 2012, we started a multi-year study of our iron ore resources and reserves at Casa de Pedra. The study consists of two stages the first stage of which was completed at the end of December of 2014, and the second stage of which involves more drillings and research of the deposit. The first stage includes all drillholes until October of 2013, and the second one includes all drillholes after October of 2013 by the end of the drilling campaign in December of 2014. Both stages of this new study of resources and reserves of Casa de Pedra mine are in accordance with best practices in the iron ore market.

We conducted extensive work throughout 2014 to document and classify all information related to both the current and future operations of the Casa de Pedra mine. In 2014, we hired Snowden Group, to undertake an independent analysis of the Casa de Pedra iron ore resources and reserves. Snowden carried out a full analysis of all available information and has independently validated our reported resources and reserves.

Snowden accepts as appropriate the estimates regarding proven and probable reserves made by us, totaling 2,704 million tons of iron ore (as of December 31, 2014) at a grade of 41.36% Fe and 36.46% SiO<sub>2</sub>. This new estimate of our iron ore reserves at Casa de Pedra is significantly larger than our estimate of 1,631 million tons, contained in an appraisal report prepared in 2006 by Golder Associates.

Over the course of the Casa de Pedra Mine's life we have executed different drilling campaigns and, in total, we have drilled 106,791 meters by the end of October of 2013, the first stage of the iron ore resources and reserves report. The last completed campaign started in October of 2012 and ended in November of 2014. In the course of that campaign, we drilled 15,752.25 meters that we used in this first stage of resources and reserves and we are currently extending our drilling campaign 17,539.40 meters which we will use in the second stage to increase and improve our knowledge of the iron ore deposits at Casa de Pedra.

***Engenho and Fernandinho***

In 2012 we started the same process used at Casa de Pedra to identify iron ore resources and reserves at the Engenho and iron ore resources at the Fernandinho mine in two stages.

We conducted extensive work throughout 2014 to document and classify all information related to both the current and future operations of the Engenho and Fernandinho mines. In 2014, we hired Snowden Group, to conduct an independent analysis of the Engenho iron ore resources and reserves and Fernandinho resources. Snowden carried out



a full analysis of all available information and has independently validated our reported resources and reserves.

Snowden accepts as appropriate the estimates regarding proven and probable reserves made by us, totaling for Engenho 317 million tons of iron ore (as of December 31, 2014) at a grade of 39.48% Fe and 40.01% SiO<sub>2</sub>.

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In November 2012 we started a new drilling campaign with an additional 11,899 meters in the Engenho mine. In this first stage we use drillings performed up until the end of October 2013. For Engenho we used 4,085 meters of this last campaign totaling 9,264 meters to report the first stage estimates. In the second stage (the drilling performed up until December, 2014) we will use 7,814 meters in the Engenho mine.

**Production***Casa de Pedra*

The Casa de Pedra facilities are located in the city of Congonhas, in the State of Minas Gerais. The Casa de Pedra mine is located 350 km from the Presidente Vargas Steelworks and supplies iron ore products to our steel mill, as well as for export through the Itaguaí Port. Casa de Pedra's equipment fleet and treatment facilities have an installed annual ROM capacity of approximately 130 million tons and 28 million tons, respectively.

*Pires and Fernandinho Beneficiation Plants*

Pires plant is the beneficiation plant of Congonhas Minérios. The plant receives material from Engenho mine (located at the northern border of the Casa de Pedra mine) and processes crude ore acquired from other companies, which along with its own ROM, generates final products such as: lump ore, small lump ore (hematitinha), sinter feed and concentrates.

Fernandinho plant receives material from Fernandinho mine (located in the city of Itabirito) generates sinter feed and fines as final products.

The table below sets forth production of iron ore of our mines for the last three years:

|                                       | <b>Production<sup>1</sup></b> |             |             |
|---------------------------------------|-------------------------------|-------------|-------------|
|                                       | <b>2013</b>                   | <b>2014</b> | <b>2015</b> |
| <b>Casa de Pedra<sup>2</sup> (Mt)</b> | 15.4                          | 21.65       | 26.24       |
| <b>Grade (%)</b>                      | 63.80%                        | 63.80%      | 63.80%      |
| <b>Pires<sup>2</sup> (Mt)</b>         | 3.4                           | 3.8         | 1.6         |
| <b>Grade (%)</b>                      | 61.60%                        | 62.10%      | 63.90%      |
| <b>Fernandinho<sup>2</sup> (Mt)</b>   | 0.6                           | 0.6         | 0           |
| <b>Grade (%)</b>                      | 59.40%                        | 59.50%      | -           |

(1) In addition to its own production, Namisa also purchased iron ore from third parties. Third party purchase volumes totaled 11.9 million tons, 8.3 million tons and 3.1 million tons in 2013, 2014 and 2015, respectively.

(2) Production information considers 100% of the mines.

|  | <b>CSN Consolidated Sales<sup>1</sup></b> |             |                         |
|--|---|-------------|-------------------------|
|  | <b>2013</b>                               | <b>2014</b> | <b>2015<sup>2</sup></b> |

|   |              |              |              |
|---|--------------|--------------|--------------|
| <b>Consolidated Sales (Mt)</b>                    | <b>25.67</b> | <b>28.88</b> | <b>25.67</b> |
| <b>Consolidated Net Revenue Per Unit (US\$/t)</b> | <b>98</b>    | <b>64</b>    | <b>26.91</b> |

- (1) Consolidated sales consider 100% of Namisa's Sales Volume until November 2015.
- (2) Since December 2015, we have been considering 100% stake of Congonhas Minérios.

### *Distribution*

Transportation costs are a significant component of our steel and iron ore production costs and are a factor in our price-competitiveness in the export market. Railway is the main means of transport by which we convey raw materials from our mines to the Presidente Vargas Steelworks and steel and iron ore products to ports for shipment overseas. Iron ore, limestone and dolomite from our two mines located in the State of Minas Gerais are transported by railroad to the Presidente Vargas Steelworks for processing into steel. The distances from our mines to the Presidente Vargas Steelworks are 328 km and 455 km. The distances from our mines to the ports are 440 km and 160 km. Imported coal and coke bought from foreign suppliers are unloaded at the port of Itaguaí, 90 km west of the city of Rio de Janeiro, and shipped 109 km by train to the Presidente Vargas Steelworks. Our finished steel products are transported by train, truck and ships to our customers throughout Brazil and abroad. Our most important local markets are the cities of São Paulo (335 km from the Presidente Vargas Steelworks), Rio de Janeiro (120 km) and Belo Horizonte (429 km).

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Until recently, Brazil's railway system (including railcars and tracks) was principally government-owned and in need of repair, but it has now been largely privatized. In an attempt to increase the reliability of our rail transportation, we hold interests in companies that hold concessions for the main railway systems we use. For further information on our railway concessions, see "—Facilities—Railways."

We export iron ore and import coal and coke through the Itaguaí Port, in the State of Rio de Janeiro. The coal and container terminals have been operated by us since August 1997 and 1998, respectively.

## **Our Logistics Segment**

Our logistics segment is comprised of railway and port facilities.

### ***Railways***

#### *Southeastern Railway System*

MRS has a 30-year concession to operate, through the year 2026 and renewable for an equal period of 30 years, Brazil's Southeastern railway system. As of December 31, 2015, we held 34.94% of MRS's total capital. For more information see "Item 5E. Off-Balance Sheet Arrangements". The Brazilian Southeastern railway system, with 1,643 km of track, serves the São Paulo - Rio de Janeiro - Belo Horizonte industrial triangle in Southeast Brazil, and links our mines located in the State of Minas Gerais to the ports located in the states of São Paulo and Rio de Janeiro and to the steel mills of CSN, Companhia Siderúrgica Paulista or Cosipa, and Gerdau Açominas. In addition to serving other customers, the railway transports iron ore from our mines at Casa de Pedra in the State of Minas Gerais and coke and coal from Itaguaí Port in the State of Rio de Janeiro to the Presidente Vargas Steelworks and transports our exports to the ports of Itaguaí and Rio de Janeiro. The railway system connects the Presidente Vargas Steelworks to the container terminal at Itaguaí Port, which handles most of our steel exports. Our transport volumes represent approximately 19% of the Brazilian Southeastern railway system's total volume. We are jointly and severally liable, along with the other main MRS's shareholders, for the full payment of the outstanding amount of its indebtedness (See "Item 5E. Off-Balance Sheet Arrangements"). However we expect that MRS will make the lease payments through internally generated funds and proceeds from financing.

#### *Northeastern Railway System*

We hold interest in companies that have concessions to operate the Northeastern railway system, which operates in the states of Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Alagoas and Rio Grande do Norte and connects with the region's leading ports, offering an important competitive advantage through opportunities for intermodal transportation solutions and made-to-measure logistics projects. Resolution No. 4,042/2013 issued by the transportation regulatory agency (Agência Nacional de Transportes Terrestres), or ANTT, authorized the partial spin-off of TLSA and, as a result, the Northeastern railway system is currently divided into the Railway System I, operated by FTL, and the Railway System II, operated by TLSA.

As of December 31, 2015, we held 89.79% of the capital stock of FTL, which has a concession to operate the Railway System I (which encompasses the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá – Jorge Lins) of Brazil's Northeastern railway system until 2027,

renewable for an additional 30 years. The Railway System I consists of 4,238 km of railways. As of December 31, 2015, R\$98.7 million in concession payments were outstanding over the remaining 12 years of the concession.

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As of December 31, 2015, we held 56.92% of the capital stock of TLSA, which has a concession to construct and operate the Railway System II (which encompasses the stretches between Missão Velha – Salgueiro, Salgueiro – Trindade, Trindade – Eliseu Martins, Salgueiro – Porto de Suape and Missão Velha – Porto de Pecém) of Brazil’s Northeastern railway system. Once concluded, the Railway System II will have an extension of 1,753 km of tracks that will connect the interior of Northeast Brazil to Pecém and Suape Ports. This concession was granted in 1997 and recently had its original term extended until the earlier of 2057 or the date when TLSA reaches a rate of annual return of 6.75% of its total investment with monetary adjustments. For more information, see “Item 5E. Off-Balance Sheet Arrangements.”

***Port Facilities***

*Solid Bulks Terminal*

We operate an integrated and modern logistics structure. Part of this structure includes the operation of TECAR through a concession renewed in 2015 and expiring in 2047.

TECAR is connected to road and rail systems across Southeastern Brazil and is one of the four port terminals that make up the Port of Itaguaí facilities. With a strategic location and a total area of 740,761 m<sup>2</sup>, the terminal consists of a concrete molded berthing pier superposed on jacketed stilts connected to the mainland by an access bridge perpendicular to the berthing pier. Its backyard includes conveyor belts, an internal road system, bulk storage yards, a railway looping, as well as industrial and administrative facilities.

Our imports of coal and coke and exports of iron ore occur through this terminal. Under the terms of the concession, we have the obligation to ship at least 3.0 million tons of bulk cargo annually and, as of 2020, we undertook to ship 38.4 million tons of iron ore annually. Among the approved investments, that we had previously announced was the development and expansion of the solid bulks terminal at Itaguaí, which phase 1 expansion to handle up to 45 million tons of iron ore per year was completed in 2013. For further information, see “—D. Property, Plant and Equipment—Planned Investments—Mining.”

*Container Terminal*

We own 99.99% of Sepetiba Tecon S.A., or TECON, which has a concession to operate the container terminal at Itaguaí Port for a 25-year term expiring in 2026, that is renewable for another 25 years. As of December 31, 2015, approximately U.S.\$69 million of the cost of the concession remained payable over the next 11 years of the contract. For more information, see “Item 5E. Off-Balance Sheet Arrangements.”

The Itaguaí Port is located in Brazil’s Southeast Region, with all major exporting and importing areas of the states of São Paulo, Minas Gerais and Rio de Janeiro within 500 km from the port. This area represented more than 55% of the Brazilian gross domestic product, or GDP, in 2014 according to the Brazilian Geography and Statistics Institute (Instituto Brasileiro de Geografia e Estatística).

The Brazilian Federal Port Agency has made investments in port infrastructure projects such as expanding the maritime access channel to the Itaguaí Port and increasing its depth. In addition, significant investments were made by the Brazilian federal government in adding two extra lanes to the Rio-Santos road, and in constructing the Rio de Janeiro Metropolitan Bypass, a beltway that crosses the Rio de Janeiro metropolitan area. These factors, combined with favorable natural conditions, like natural deep waters and a low urbanization rate around the port area, allow the operation of large vessels as well as highly competitive prices for all services rendered, resulting in the terminal being a major hub port in Brazil.

We have invested in infrastructure and equipment at Sepetiba TECON, such as the Berth 301 Equalization, the acquisition of two new Super Post Panamax Ship-to-Shore Cranes and four new RTG cranes for yard operations, that were delivered in the first quarter of 2014. These investments, along with the previous ones, like the dredging of Sepetiba Tecon's Berths 302/303 and access channel to 15.5m depth, increased TECON's capacity from 320,000 containers (or 480,000 TEUs) to 440,000 containers (or 660,000 TEUs) per year.

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In 2015, there was a decrease in the volume of containers operated by the terminal, which handled 151,823 units, a decrease of almost 12% compared to 2014, when we handled 172,736 units. The impact, however, was mitigated because, despite the Brazilian economic crisis, the terminal was able to attract two new container service calls (Asia and Gulf of Mexico/USA).

On the other hand, we exported 926,155 tons of steel products in 2015, an increase of 154% compared to 364,053 tons in 2014, breaking a 5-year record especially as a result of a combination of low domestic demand and favorable exchange rates. We also increased the operations of other cargoes, reaching a volume of 205,834 tons, compared to 110,348 tons in 2014.

### **Our Cement Segment**

Our cement segment is comprised of a cement plant in Volta Redonda, in the state of Rio de Janeiro, and in Arcos, in the state of Minas Gerais.

In 2015, two new crushing facilities were delivered in Arcos, increasing its annual capacity by 2.2 million tons of cement. With the implementation of the new clinker kiln in Arcos (MG), scheduled for 2016, CSN will achieve self-sufficiency in the production of this raw material.

#### ***Production***

The cement production is held at Volta Redonda and Arcos and begins with the influx of raw materials: clinker, limestone, gypsum and slag. We consume clinker produced in our clinker plant in Arcos and eventually we import clinker to supply demand. Limestone comes from Arcos by rail. Slag is a by-product of iron and steel, produced in the blast furnace, and is also stored in the warehouse, arriving at the plant by road. CSN uses natural gypsum, from Ouricuri, in the state of Pernambuco, which arrives at the plant by truck and is stored in the warehouse.

All transportation of raw materials within the plant is carried out by conveyor belts, placing inputs in scales according to a predefined formula and delivering them to the mills. There are two grinding lines and each mill has a nominal capacity of 170 tons/h. Annual plant capacity is 2.4 million tons of cement. The mill has a hydraulic roller system, which uses pressure to grind the layer of material on the turntable. Hot gas, derived from the combustion of natural gas or petroleum coke, is used in the mills to dry materials.

The types of cement we produce are: CP III-40 RS, CP II-E-32 and CP II-E-40 in bagged and bulk forms. The plant has four silos, two of them with 10,000 tons of capacity and two with 5,000 tons of capacity. Cement can be shipped in bagged and bulk forms. We have two baggers with 12 filling nozzles (nominal capacity of 3,600 bags/hour) and two palletizers for bagging cement.

### **Our Energy Segment**

Our energy segment is comprised of generation plants and is aimed at enabling us to maintain our self-sufficiency in energy, reducing our production cost and our exposure to fluctuations or availability of certain energy sources.

Our energy related assets include:

*Thermoelectric Co-Generation Power Plant*



We completed the construction of a 235.2 MW thermoelectric co-generation power plant at the Presidente Vargas Steelworks in December 1999. Since October 2000, the plant has provided the steelworks with approximately 60% of the electric energy needed in its steel mills. Aside from operational improvements, the power plant supplies our strip mills with electric energy, processed steam and forced air from the blast furnaces, benefiting the surrounding environment through the elimination of flares that burn steel-processing gases into the atmosphere. In addition, we installed a new turbine generator in 2014, which added 21 MW to our existing installed capacity. This turbine is located near our Blast Furnace No. 3, and uses the outlet gases from the iron making process to generate energy.

*Itá Hydroelectric Facility*

Tractebel and CSN each own 48.75% of ITASA, a special-purpose company formed for the purpose of owning and operating, under a 30-year concession granted in 2000, 60.5% of the Itá hydroelectric facility on the Uruguay river in Southern Brazil. Companhia de Cimento Itambé, or Itambé, owns the remaining 2.5% of ITASA. Tractebel directly owns the remaining 39.5% of the Itá hydroelectric facility.

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The power facility was built using a project finance structure with an investment of approximately U.S.\$860 million. The long-term financing for the project was closed in March 2001 and consisted of U.S.\$78 million in debentures issued by ITASA, a U.S.\$144 million loan from private banks and U.S.\$116 million of direct financing from BNDES, all of which were paid in February 2013. The sponsors of the project have invested approximately U.S.\$306 million in this project.

Itá has an installed capacity of 1,450 MW, with a firm guaranteed output of 668 MW, and became fully operational in March 2001.

We and the other shareholders of ITASA have the right to take our pro rata share (proportional to our ownership interest in the project) of Itá's output pursuant to 30-year power purchase agreements at a fixed price per megawatt hour, adjusted annually for inflation. Since October 2002, we have been using our entire Itá take internally.

*Igarapava Hydroelectric Facility*

We own 17.9% of a consortium that built and has the right to operate for 30 years the Igarapava hydroelectric facility. Other consortium members are Aliança, Votorantim Metais Zinco and AngloGold Ashanti Mineração Ltda. The plant has an installed capacity of 210 MW, corresponding to 136 MW of firm guaranteed output. We have been using our 23 MW take from Igarapava to supply energy to the Arcos mines and our other units.

**Marketing Organization and Strategy**

*Flat Steel*

Our steel products are sold both domestically and abroad as a main raw material for several different manufacturing industries, including the automotive, home appliance, packaging, construction and steel processing industries.

Our sales approach is to establish brand loyalty and achieve a reputation for quality products by developing relationships with our clients and focusing on their specific needs, providing tailor-made solutions for each of our clients.

Our commercial area is responsible for sales of all of our products. This area is divided into two major teams, one focused on international sales and the other on domestic sales. The domestic market oriented sales team is divided into seven market segments: Packaging, Distribution Network, Automotive Industry (Automakers and Auto Parts), Home Appliances, Original Equipment Manufacturer, or OEM, Construction and Pipes. The commercial area also has a team called "Special Sales" which is responsible for selling all the process residues, such as blast furnace slag, pitch and ammonia, which are widely used as inputs in chemical and cement industries.

The Distribution Network division is responsible for supplying large steel processors and distributors. Besides the independent distributors, CSN also has its own distributor, called Prada Distribuição. The Pipes division supplies oil

and gas pipe manufacturers as well as some industries that produce small diameter pipe and light profiles. The Packaging unit acts in an integrated way with suppliers, representatives of the canning industry and distributors to respond to customer needs for finished-products. The Automotive unit is supplied by a specialized mill, CSN Porto Real, and also by a portion of the galvanized material produced at Presidente Vargas Steelworks, benefitting from a combined sales strategy.

Historically, our export sales were made primarily through international brokers. However, as part of our strategy to establish direct, longer-term relationships with end-users, we have decreased our reliance on such brokers. We have focused our international sales on more profitable markets in order to maximize revenues and shareholder returns.

All of our sales are on an order-by-order basis and have an average delivery time of 45 days. As a result, our production levels closely reflect our order log book status. We forecast sales trends in both the domestic and export markets based on the historical data available and the general economic outlook for the near future. We have our own data systems to remain informed of worldwide and Brazilian market developments. Further, our management believes that one of the keys to our success is maintaining a presence in the export market. Such presence gives us the flexibility to shift between domestic and export markets, thereby allowing us to maximize our profitability.

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Unlike with other commodity products, there is no exchange trading of steel, or uniform pricing, as wide differences exist in terms of size, quality and specifications. In general, exports are priced based on international spot prices of steel at the time of sale in U.S. dollars or Euros, depending on the destination. Sales are normally paid up front, or within 14 or 28 days, and, in the case of exports, usually backed by a letter of credit and an insurance policy. Sales are made primarily on cost and freight terms.

*Sales by Geographic Region*

In 2015, we sold steel products to customers in Brazil as well as to customers in 32 other countries. The fluctuations in the portion of total sales assigned to domestic and international markets, which can be seen in the table below, reflect our ability to adjust sales in light of variations in the domestic and international economies, as well as steel demand and prices, both domestically and abroad.

The two main export markets for our products are North America and Europe, representing approximately 70% and 18%, respectively, of our export sales volume in 2015.

In North America, we utilize our subsidiary CSN LLC, which acts as a commercial channel for our products. CSN has historically shipped hot-rolled to CSN LLC which is then processed and transformed into more value-added products at CSN LLC's plant, such as cold-rolled coil and galvanized. Moreover, we are able to export cold-rolled coils which can be directly sold or processed by CSN LLC in order to manufacture galvanized products.

**CSN – Sales of All Steel Products by Destination***(In thousands of metric tons and millions of R\$)*

|                          | <b>2015</b>  |                   |   |                   | <b>2014</b>  |                   |   |                   |              |                   |
|--------------------------|--------------|-------------------|---|-------------------|--------------|-------------------|---|-------------------|--------------|-------------------|
|                          | <b>Tons</b>  | <b>% of Total</b> | <b>Net Operating Revenues<sup>(2)</sup></b> | <b>% of Total</b> | <b>Tons</b>  | <b>% of Total</b> | <b>Net Operating Revenues<sup>(2)</sup></b> | <b>% of Total</b> | <b>Tons</b>  | <b>% of Total</b> |
| <b>Brazil</b>            | 2,968        | 59.50%            | 6,612                                       | 60.40%            | 3,718        | 72.00%            | 8,493                                       | 75.40%            | 4,650        | 76.00%            |
| <b>Export</b>            | 2,022        | 40.50%            | 4,332                                       | 39.60%            | 1,460        | 28.00%            | 2,764                                       | 24.60%            | 1,467        | 24.00%            |
| <b>Total</b>             | <b>4,990</b> | <b>100%</b>       | <b>10,944</b>                               | <b>100%</b>       | <b>5,117</b> | <b>100%</b>       | <b>11,257</b>                               | <b>100%</b>       | <b>6,117</b> | <b>100%</b>       |
| <b>Exports by Region</b> |              |                   |   |                   |              |                   |   |                   |              |                   |
| <b>Asia</b>              | 9            | 0%                | 17  | 0%                | 48           | 3.20%             | 78  | 2.80%             | 30           | 2.10%             |
|                          | 802          | 39.70%            | 1,834                                       | 42.30%            | 289          | 19.70%            | 669   | 24.20%            | 298          | 20.30%            |

**North  
America<sup>(1)</sup>**

|                          |       |        |       |        |       |        |       |        |       |        |
|--------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| <b>Latin<br/>America</b> | 115   | 5.70%  | 376   | 8.70%  | 59    | 4.00%  | 161   | 5.80%  | 59    | 4.00%  |
| <b>Europe</b>            | 1,090 | 53.90% | 2,087 | 48.20% | 1,057 | 72.10% | 1,840 | 66.60% | 1,071 | 73.00% |
| <b>All Others</b>        | 7     | 0%     | 18    | 0%     | 7     | 0.50%  | 16    | 0.60%  | 9     | 0.60%  |

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(1) Sales to Mexico are included in North America.(2) Net operating revenues presented above differ from amounts in our IFRS consolidated financial statements because they do not include revenues from non-steel products (non-steel products include mainly by-products, iron ore, logistics services and cement).

*Sales by Product*

The following table sets forth our market shares for steel sales in Brazil of hot-rolled, cold-rolled, galvanized and tin mill products for 2015, 2014 and 2013.

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|                                  | <b>2015</b> | <b>2014</b> | <b>2013</b> |
|----------------------------------|-------------|-------------|-------------|
| <b>CSN Domestic Market Share</b> |             |             |             |
| <b>Hot-Rolled Products</b>       | 36%         | 41%         | 45%         |
| <b>Cold-Rolled Products</b>      | 19%         | 18%         | 17%         |
| <b>Galvanized Products</b>       | 28%         | 28%         | 27%         |
| <b>Tin Mill Products</b>         | 12%         | 11%         | 11%         |
| <b>Long Steel</b>                | 5%          | 1%          | -           |

*Sales by Industry*

We sell our steel products to manufacturers in several industries. The table below shows our domestic shipments breakdown by volume for the last three years among our market segments:

|                             | <b>2015</b>  | <b>2014</b> | <b>2013</b> |
|-----------------------------|--|-------------|-------------|
|                             | <i>(In percentages of total domestic volume shipped)</i> |             |             |
| <b>Distribution Network</b> | 45%  | 37%         | 44%         |
| <b>Packaging</b>            | 13%  | 11%         | 8%          |
| <b>Automotive</b>           | 11%  | 18%         | 17%         |
| <b>Home Appliances</b>      | 9%   | 9%          | 7%          |
| <b>OEM</b>                  | 4%   | 4%          | 5%          |
| <b>Construction</b>         | 18%  | 21%         | 20%         |

We believe we have a particularly strong domestic and export position in the sale of tin mill products used for packaging in Latin America. Our customers for these products include some of the world's most important food processing companies, as well as many small and medium-sized entities. We also maintain a strong position in the sale of galvanized products for use in the automobile manufacturing, construction and home appliance industries in Brazil and abroad, supplied by CSN Porto Real and CSN Paraná. No single customer accounts for more than 10% of our net operating revenues.

For further information on steel sales, see "Item 5A. Operating Results—Steel Markets and Product Mix— Sales Volume and Net Operating Revenues by Steel Products and Markets" and "Item 5A. Operating Results— Results of Operations—Year 2015 Compared to Year 2014—Net Operating Revenues."

*Seasonality*

Steel demand is stronger in the second quarter of the year and weaker in the last quarter. Nevertheless, our production is continuous throughout the year.

***Long Steel – SWT***

Our long steel products are sold both in Germany (about 30%) and other countries, mainly in Europe (60%), for industrial, infrastructure, civil construction and engineering industries.

Our sales approach is to establish brand loyalty and to maintain our reputation of high quality products and excellent delivery performance by developing long term relationships with our clients. SWT focuses on meeting specific customer needs, developing solutions for both low temperature and high temperature resistant applications, as well as optimized section shapes for special applications.

Our commercial area is responsible for sales of all of our products worldwide. This area is divided into the direct sales team which is organized in 13 agencies located in Germany and our core markets in Europe, the commercial back office department (order management from entry via tracking to the final delivery and invoicing), logistics contracting (truck, rail, vessel, maritime, inventory worldwide) and a rail logistics department.

SWT does not possess its own distribution network, instead cooperating with the big steel distributors and traders in Europe and other countries. All of our sales are on an order-by-order basis. The delivery time is related to the logistics chain and varies between 2 to 6 weeks depending on Incoterm and section type. As a result, our production levels closely reflect our order log book status. We forecast sales trends in both the European and export markets based on the historical data available from the last two years and the general economic outlook for the near future. We believe that our presence in the export market outside of Europe gives us more flexibility to optimize production and maximize our profitability.

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Sections are not sold based on uniform pricing in Europe, as wide differences exist in terms of size, quality and specifications. In general, exports are priced based on international spot prices of steel at the time of sale in U.S. dollars or Euros, depending on the destination. Sales are normally paid within 30 days, and, in the case of exports, usually backed by a letter of credit and an insurance policy. All SWT businesses are 100% covered by EulerHermes risk insurance, a bank guarantee or a letter of credit. Sales are made primarily on cost and freight terms.

***Long Steel – Volta Redonda***

In 2013, CSN started the production of long steel in Volta Redonda. This plant has production capacity of 500kt/y when fully operational, providing the domestic market with products for civil and industrial construction.

Divided in wire rod, rebar CSN 50 and rebar CSN 25, the products were developed using high technology and in accordance with the highest quality and sustainability standards, with all tradition and reliability of our products.

The commercial team is comprised of its own sales force ready to meet all the needs of the market, not only the needs of small clients, but also the needs of large wholesales. Following the model already successfully deployed by us, in which we seek a diversified and pulverized service to our customers, we will be able to count on a real partner to boost our business.

In order to optimize the process, the product's outflow will be made in operational synergy with the flat steel units, using the same distribution centers, strategically located so as to deliver to all national territory.

This is another addition for the products from our portfolio, which is already comprised of cement, structural section products derived by flat steel, such as tile, tube, among others, so as to offer a portfolio that thoroughly covers the civil construction segment.

**Iron Ore**

Iron ore products are commercialized by our commercial team located in Brazil and overseas. In Europe and Asia, our offices also include technical assistance management. These three marketing units allow us to maintain close relations with our customers worldwide, understand the environment where they operate, monitor their requirements and provide all necessary assistance in a short period of time. Market intelligence analysis, planning and administration of sales are handled from Brazil by the staff in our São Paulo office, while our domestic sales team is located at Casa de Pedra mine, in the State of Minas Gerais.



We supply our iron ore to the steel industry and our main targets are the Brazilian, European, Middle Eastern and Asian markets. Prevailing and expected levels of demand for steel products directly affect demand for iron ore. Demand for steel products is correlated to many factors, such as GDP, global manufacturing production, urbanization, construction and infrastructure spending.

We believe our competitiveness has been improved by our customer service and market intelligence. It is paramount for us to have a clear understanding of our customers' businesses in order to address their needs, surpass their expectations and build long-term relationships. We have a customer-oriented marketing policy and specialized local personnel in direct contact with our clients in order to help determine the mix that best suits each particular client.

**CSN – Sales of Iron Ore Products by Destination**  
(In thousands of metric tons and millions of R\$)

|                      | 2015              |             |                        |             | 2014              |             |                        |             | 2013              |             |                        |             |
|----------------------|-------------------|-------------|------------------------|-------------|-------------------|-------------|------------------------|-------------|-------------------|-------------|------------------------|-------------|
|                      | Tons              | % of total  | Net Operating Revenues | % of total  | Tons              | % of total  | Net Operating Revenues | % of total  | Tons              | % of total  | Net Operating Revenues | % of total  |
| <b>Brazil</b>        | 538,592           | 2.30%       | 175,223                | 5.50%       | 138,436           | 0.50%       | 306,837                | 7.50%       | 157,041           | 0.70%       | 679,974                | 13%         |
| <b>Export</b>        | 23,322,408        | 97.70%      | 3,012,027              | 94.50%      | 25,106,988        | 99.50%      | 3,802,566              | 92.50%      | 21,377,106        | 99.30%      | 4,616,754              | 87%         |
| <b>Total</b>         | <b>23,861,003</b> | <b>100%</b> | <b>3,187,250</b>       | <b>100%</b> | <b>25,245,424</b> | <b>100%</b> | <b>4,109,403</b>       | <b>100%</b> | <b>21,534,147</b> | <b>100%</b> | <b>5,296,728</b>       | <b>100%</b> |
| <b>Exports to</b>    |                   |             |                        |             |                   |             |                        |             |                   |             |                        |             |
| <b>Asia</b>          | 21,963,324        | 95%         | 2,836,505              | 95%         | 24,334,337        | 97%         | 3,674,778              | 97%         | 16,956,231        | 79.30%      | 3,610,625              | 78%         |
| <b>North America</b> | -                 | -           | -                      | -           | -                 | -           | -                      | -           | -                 | -           | -                      | -           |
| <b>Europe</b>        | 1,028,221         | 4%          | 132,792                | 4%          | 772,651           | 3%          | 127,788                | 3%          | 4,420,875         | 20.70%      | 1,006,129              | 22%         |
| <b>Latin America</b> | 330,861           | 1%          | 42,730                 | 1%          |                   |             |                        |             |                   |             |                        |             |

(\*) Iron ore sales volumes presented in this table take into consideration sales by CSN and by our subsidiaries and jointly controlled entities proportionally to our interest (Namisa 60% until November 2015 and 100% stake in Congonhas Minérios as of December 2015).

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The first step to our entry into the international iron ore market was taken in February 2007, with the completion of the first phase of the expansion of our coal seaport terminal in Itaguaí, in the State of Rio de Janeiro, which enabled us to also handle and export iron ore and to load from our own facilities the first shipment of our iron ore products.

In 2015, our iron ore sales reached 25.7 million tons, a decrease of 11% compared to 2014. According to our consolidated financial statements, total mining net revenue decreased 22% over the past year, mainly due to lower iron ore prices. The share of mining segment revenue in CSN's total net revenue decreased from 25% in 2014 to 19% in 2015.

In 2015, 95% of our iron ore export sales went to the Asian market, mainly China and 4% were sold in the European market. Of our total sales, 72% were sinter feed, 13% pellet feed, 7% lump ore and 8% concentrated.

As global iron ore markets are highly competitive, we focus on our flexibility, reliability and efficient manner of supplying iron ore to the world market.

Through our marketing offices, we have long-term relationships with most players in the steel industry in China, Japan, Taiwan, South Korea, Europe and Brazil.

## **Cement**

We sell cement type CP III-40, CP II-E-32 and CP II-E-40 in bagged and bulk forms. We operate in the markets of Rio de Janeiro, Minas Gerais and Sao Paulo. With the purpose of expanding and increasing competitiveness, we own eleven distribution centers located in strategic points: three in São Paulo, four in Rio de Janeiro and four in Minas Gerais. Supply to these distribution centers is made through railways and road transport, using mainly the MRS railway.

We have a diverse client base of approximately 18,000 clients, including construction material stores, home centers, concrete producers, construction companies, mortar industries and cement artifact producers.

The focus of our sales strategy is on retail. In this segment, we have a strong presence in sales points, where we reinforce the quality of the product to final customers. The retail segment operates with a low level of inventory, and a significant percentage of repurchase in the month, which highlights the competitive advantage of CSN's distribution centers.

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In 2015, amid the ongoing Brazilian economics crisis, we marginally increased our sales, reaching 2,182 thousands tons, marking a growth of 3% when compared to 2014. All our cement production is sold in the domestic market.

**CSN – Cement Sales Figures** *(In thousands of metric tons and millions of R\$)*

|               | <b>2015</b> |                               | <b>2014</b> |                               | <b>2013</b> |                               |
|---------------|-------------|-------------------------------|-------------|-------------------------------|-------------|-------------------------------|
|               | <b>Tons</b> | <b>Net Operating Revenues</b> | <b>Tons</b> | <b>Net Operating Revenues</b> | <b>Tons</b> | <b>Net Operating Revenues</b> |
| <b>Brazil</b> | 2,182       | 432                           | 2,185       | 440                           | 2,045       | 415                           |

**Insurance**

We and our subsidiaries maintain several types of insurance policies. These insurances are contracted in line with the risk management of our business and attempt to follow the market practices for similar activities. Coverage in such policies encompasses domestic and international (import and export) cargo transportation (by road, rail, sea or air), life insurance, personal accidents, health, auto insurance, D&O, general liability, erection risks, boiler and machinery coverage, trade credit insurance, surety, named perils, ports and terminal liabilities. These policies may not be sufficient to cover all risks we are exposed to.

We also have an insurance policy covering the operational risks, material damages and loss of profits of our following branches and subsidiaries: Presidente Vargas Steelworks, Congonhas Minério, Container Terminal Sepetiba TECON, CSN Mining. This policy was negotiated with domestic and foreign insurers and reinsurers and is valid until September 30, 2016 for a total insured value of U.S.\$600 million (out of a total risk amount of U.S.\$11.1 billion). Under the terms of the policy, we remain responsible for the first tranche of U.S.\$375 million in losses (material damages and loss of profits).

**Intellectual Property**

We maintain a special unit for managing the intellectual property rights which include: trademarks, patents and industrial designs, ensuring adequate protection for the company and the possibility of commercialization, through technology transfer agreements the results of our innovation developments. We also maintain cooperation agreements with universities and research institutes for the exchange of technical cooperation and developments related to new processes and / or products.

[Table of contents](#)**Competition in the Steel Industry**

Both the worldwide and the Brazilian steel markets are intensely competitive. The primary competitive factors in these markets include quality, price, payment terms and customer service. Further, continuous advances in materials, sciences and resulting technologies have given rise to improvements in products such as plastics, aluminum, ceramics, glass and concrete, permitting them to serve as substitutes for steel for certain purposes.

**Competition in the Brazilian Steel Industry**

The primary competitive factors in the domestic market include quality, price, payment terms and customer service.

The following table sets forth the production of crude steel by Brazilian companies for the years indicated<sup>(1)</sup>:

|                                      | 2014    |                                    | 2013    |                                    | 2012    |                                    |
|--------------------------------------|---------|------------------------------------|---------|------------------------------------|---------|------------------------------------|
|                                      | Ranking | Production<br>(In<br>million tons) | Ranking | Production<br>(In<br>million tons) | Ranking | Production<br>(In<br>million tons) |
| <b>Gerdau<sup>(2)</sup></b>          | 1       | 7.5                                | 1       | 8.1                                | 1       | 8.2                                |
| <b>Usiminas</b>                      | 2       | 6.1                                | 2       | 6.9                                | 2       | 7.2                                |
| <b>ArcelorMittal<br/>Tubarão</b>     | 3       | 5.4                                | 4       | 4.4                                | 4       | 4.4                                |
| <b>CSN</b>                           | 4       | 4.5                                | 3       | 4.5                                | 3       | 4.8                                |
| <b>ArcelorMittal<br/>Aços Longos</b> | 5       | 3.3                                | 5       | 3.5                                | 5       | 3.4                                |
| <b>Others</b>                        |         | 7.1                                |         | 6.8                                |         | 6.5                                |
| <b>Total</b>                         |         | <b>33.9</b>                        |         | <b>34.2</b>                        |         | <b>34.5</b>                        |

Source: IABr

1. Information for 2015 was not yet available as of the date of this annual report.
2. Data from Aços Villares have been merged into data from Gerdau.

**Competitive Position — Global**

During 2015, Brazil maintained its place as the largest producer of crude steel in Latin America, with a production output of 33.2 million tons and a 2.1% share of total world production, according to data from the World Steel Association, or WSA. In 2015, Brazil also maintained its position as the ninth largest steel producer globally, accounting for around half of total production in Latin America, approximately twice the size of Mexico's or 42% of the U.S.' steel production, according to data from the WSA. According to IABr, Brazilian exports in 2015 amounted to 13.7 million tons of finished and semi-finished steel products, increased by 40% compared to 2014.

We compete on a global basis with the world's leading steel manufacturers. We have positioned ourselves in the world market with a product mix characterized by high margin and strong demand, such as tin plate and galvanized products. We have relatively low-cost and sufficient availability of labor and energy, and own high-grade iron ore

reserves. These global market advantages are partially offset by costs of transporting steel throughout the world, usually by ship. Shipping costs, while helping to protect our domestic market, put pressure on our export price. To maintain our position in the world steel market in light of the highly competitive international environment with respect to price, our product quality and customer service must be maintained at a high level. See “Item 4B. Business Overview—Government Regulation and Other Legal Matters—Proceedings Related to Protectionist Measures” for a description of protectionist measures being taken by steel-importing countries that could negatively impact our competitive position.

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### ***Competitive Advantages of the Brazilian Steel Industry***

Brazil's principal competitive advantages are its abundant supply of low-cost, high-grade iron ore and energy resources. Brazil also benefits from a vast internal market with a large growth potential, a privatized industry making investments in plant and equipment, and deep water ports allowing the operation of large ships, which facilitates access to export markets.

Brazilian domestic steel prices have historically been higher than its export prices. However, in 2010 and 2011, lower demand in mature markets, the appreciation of the real against the U.S. dollar, certain tax incentives, and imported steel products forced Brazilian producers to adjust prices closer to export price levels in order to maintain competitiveness. In 2012, with the depreciation of the real against the U.S. dollar and protective government measures which raised taxes on steel imports, export prices fell and domestic prices increase again.

Despite the increase in the overall steel sheet demand in 2013, prices in the USA, Germany and China decreased by 5.2% compared to 2012 while, in 2014, the global average sheet prices decreased by 4.3% compared to 2013.

In 2015, due to the depreciation of the real against the U.S. dollar and lower domestic demand, sales in the external market became more attractive and the Brazilian exports of flat products has increased 64%, while imports decreased 21% compared with the same period in 2014.

The global steel overcapacity and the exchange rate volatility approximate the domestic to the international steel prices, which is expected to continue in the short term.

### **Government Regulation and Other Legal Matters**

#### ***Environmental Regulation***

We are subject to Brazilian federal, state and municipal environmental laws and regulations governing air emissions, waste water discharges, solid and hazardous waste handling and disposal, wildlife management, forest maintenance, dangerous products transportation, and preservation of traditional communities. We are committed to controlling the substantial environmental impact caused by our steelmaking, mining, cement and logistics operations, in accordance with international standards and in compliance with environmental laws and regulations in Brazil. We believe currently we are largely in compliance with applicable environmental requirements. While the Brazilian government has authority to promulgate environmental regulations setting forth minimum standards of environmental protection, state and local governments have the power to enact more stringent environmental regulations.

We are subject to regulation and supervision by the Brazilian Ministry of Environment, the Environmental National Council, or CONAMA, which is the federal body responsible for enacting technical regulations and environmental protection standards, and by the Brazilian Institute of Environment and Renewable Natural Resources, or IBAMA, which is responsible for enforcing environmental laws at the federal level. The environmental regulations of the State

of Rio de Janeiro, in which the Presidente Vargas Steelworks (UPV) is located, are enforced by the INEA. In the state of Minas Gerais, where our main mining operations are located, we are subject to regulations and supervision by the Environmental Policy Council, or COPAM, by the Regional Superintendent of Environment and Sustainable Development, or SUPRAM-CM, the Water Management Institute of Minas Gerais, or IGAM, the State Forestry Institute, or IEF, and the State Environmental Foundation, or FEAM, which are the competent bodies of the Secretary of State for the Environment and Sustainable Development of Minas Gerais, or SEMAD. Specific goals and standards are established in operating permits or environmental accords issued to each company or plant. These specific operational conditions complement the standards and regulations of general applicability and are required to be observed throughout the duration of the permit or accord. The terms of such operating permits are subject to change and are likely to become stricter. All of our facilities currently have or are in the process of obtaining/renewing their operating permits.

### ***Environmental Expenditures and Claims***

Promoting responsible environmental and social management is part of our business. We prioritize processes and equipment that offer modern and reliable technologies on environmental risks monitoring and control. We operate a corporate environmental department managed by a corporate environmental department under an Environmental Management System, or EMS, compliant with ISO 14001:2004 requirements. In addition, we have established (i) an internal committee for environmental management composed of professionals from different departments of CSN's units, whose goal is to regularly discuss any problems that may arise and to identify risks and aspects of the operations in which the group can act pro-actively in order to prevent possible environmental harm and (ii) a sustainability committee composed of external advisors, which provides guidelines for our strategic decisions. The environmental controls implemented since 2006 also contribute to mitigate environmental risks of CSN's operations.

To further understand our potential social and environmental risks, we use mapping criteria in accordance with the Global Reporting Initiative (G4), or GRI, for all of our operations. Resulting data and indicators in environmental, social and economic categories allow us to track our performance, structure and monitor action plans, in an effort to improve and enhance our results.

Since 2010, we have been conducting a survey of greenhouse gas emissions at our main sites following the guidelines of the GHG Protocol. Additionally, in response to a law enacted by the State of Rio de Janeiro in 2012 and in effect since 2013, which requires steel making and cement industries to present action plans to reduce greenhouse gas emissions when renewing or applying for operational licenses, we are conducting such survey under the supervision of INEA. CSN intends to use this information in the development of a corporate carbon management program and related strategies to reduce emissions, as well as to identify current risks and opportunities for improvement.

Other strategies are being adopted by us in order to improve our environmental commitment. Since 2012, we participate in the *Climate Forum* organized by the Ethos Institute for Social Responsibility and in 2015 we joined the *Open Letter to Brazil on Climate Change* initiative, with the aim that the Brazilian government assume a leadership position during the 21st United Nations Framework Convention on Climate Change (UNFCCC) Conference, or COP-21. In 2015, we confirmed our commitment to sustainable development by signing the Sustainable Development Charter of Industry promoted by the World Steel Association, which is comprised of 75 leading steel companies committed to the seven principles of sustainability in the industry, and we also received the Gold Standard of the GHG Protocol, which confirms that we are in compliance with the standards imposed by the GHG Protocol. We report the guidelines followed by our management with respect to climate change, supply chain and water resources to the Carbon Disclosure Project – CDP, and actively participates in the network NICOLE Brazil, a Brazilian leading organization that develops and promotes solutions for the management of contaminated areas. We also develop environmental education projects and promote understanding of the historical and natural patrimony, especially in the Arcos, Casa de Pedra and TLISA plants. To reaffirm our commitment to the transformation of values and attitudes through new habits and knowledge, we started the Environmental Education Program (PEA), an initiative managed by the CSN Foundation that uses art as a dialogue between students, teachers and employees.

In relation to our expenditures for environmental programs, and given the potential risk of water shortages, especially in the Southeast of the Brazil, we have continued with various actions aimed at increasing the efficiency of water usage in our production processes, with an emphasis on accomplishing a water reuse rate of, at least, 92% in the Usina Presidente Vargas plant. In 2014, we hired a consultancy to prepare a water inventory, which provided us knowledge of how and to what extent our operations affect water resources, allowing us to develop plans and take actions to improve our efficiency and reduce potential pollution in local watersheds.



Since our privatization, we have invested heavily in environmental protection and remediation programs. We had environmental expenditures (capitalized and expensed) of R\$405 million in 2015, of which R\$90 million relate to capital expenditures (CAPEX) and R\$315 million relate to operational expenditures (OPEX). Our total environmental expenditures were R\$361 million in 2014 and R\$382 million in 2013. Our investments in environmental projects during 2015 were mainly related to: (i) operation, maintenance and retrofitting of environmental control equipment; (ii) development of environmental studies for permit applications; (iii) studies, monitoring, and remediation of environmental liabilities due to prior operations, especially before our privatization; and (iv) human resources (environmental team), Environmental Management System, sustainability projects and compliance programs.

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Our environmental guidelines also comprehend monitoring of our tailing dams, which are used to contain the waste of the beneficiation process of iron ore and to contain sediments from the waste dumps and mining activities. On an annual basis, all our tailing dams are audited by independent audit companies. The most recent audit report confirmed and attested that all tailing dams are stable, in accordance with technical standards and relevant legislation. In addition to that, CSN's tailing dams are built using the "downstream" method, which is considered the safest method of tailing dams' construction.

*TACs*

In 2010, we signed with the Rio de Janeiro State Government a Term of Undertaking (*Termo de Ajustamento de Conduta*), or TAC ("TAC 2010"), that required new investments and studies to retrofit our environmental control equipment at the UPV plant. The TAC 2010 initially estimated the total amount to be disbursed in connection with the implementation of the required projects to be R\$216 million. This initial estimate was updated to R\$260 million as we obtained more accurate cost estimates for the completion of the projects. In 2013, we signed an amendment to the TAC 2010 regarding certain items pending conclusion and also included new obligations, as determined by the Rio de Janeiro State Environmental Agency (INEA), resulting in an additional investment of R\$165 million, which has already been made by us. Given the deadline of the TAC 2010 in 2015, CSN, the Rio de Janeiro State and INEA came into a new agreement for complementary actions and signed a new TAC – TAC INEA No. 03/2016, in April 13, 2016 ("TAC 2016"). The TAC 2016 determines an additional investment of R\$178 million for environmental controls at the UPV plant and the payment, by CSN, to the Rio de Janeiro state authorities of environmental fines in the amount of R\$22 million, which will be allocated to environmental programs in the Volta Redonda region. As a consequence, the TAC 2016 concludes legal proceedings related to the TAC 2010. In April 2016, INEA executed one of the letters of guarantee in the amount of R\$13 million and such amount has already been paid by CSN.

*Other Environmental Proceedings and Liabilities*

In July 2012, the Environmental Public Prosecutor of the State of Rio de Janeiro (*Ministério Público Estadual do Rio de Janeiro*) filed a judicial proceeding against us claiming that we must (i) remove all waste disposed in two areas used as an industrial waste disposal site in the city of Volta Redonda and (ii) relocate 750 residences located in the adjacent neighborhood Volta Grande IV Residential, also in the city of Volta Redonda. Later in 2012, we received notices for lawsuits brought by certain home owners at Volta Grande IV Residential claiming indemnification for alleged moral and material damages. Trial Courts in Rio de Janeiro have been adopting a split position as to whether the individual claims shall or not remain suspended until production of technical evidence on the Public Civil Action. Some cases remain suspended and others advanced to nomination of the judicial experts that will conduct the evidence production phase. For more information, please see "Item 8A. Consolidated Statements and Other Financial Information—Legal Proceedings—Other Legal Proceedings."

In 2015, the Federal Public Prosecutor of Rio de Janeiro (*Ministério Público Federal do Rio de Janeiro*) filed a public civil action against CSN to request an adjustment to emissions thresholds of the UPV plant. According to Resolução Conama 436, CSN is required to reduce emissions by December 2018. Currently, CSN is complying with state regulations.

In respect to other allegedly contaminated areas located in the city of Volta Redonda, State of Rio de Janeiro, the Federal and State Prosecutors have initiated lawsuits seeking remediation and indemnification in relation to the areas known as Marcia I, Marcia II, III and IV, Wandir I and II and Reciclam. These legal proceedings are in an initial phase and, currently, CSN is conducting environmental studies which will determine the extension of the impacts

arising from the contamination and is also implementing measures in order to comply with the applicable laws. Once concluded, these environmental studies will be presented and attached to each respective legal proceeding. Therefore, at this moment, no amount has been determined in relation to any significant disbursement and/or investment to made by us.

Our main environmental claims as of December 31, 2015 were associated with recovery services at former coal mines decommissioned in 1989 in the state of Santa Catarina, and recovery services due to previous operations in our UPV plant.

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We record a provision for remediation costs and environmental lawsuits when a loss is probable and the amount can be reasonably estimated. This provision is included in our statements of income in “Other Operating (Expenses) Income”. We do not include in our reserves environmental liabilities related to ERSA, as these are contractually supported by its former owner. As of December 31, 2015, we had provisions for environmental liabilities in the total amount of R\$262.3 million, which we believe are sufficient to cover all probable losses. Such amount compares to R\$211.5 million as of December 31, 2014, and R\$346.5 million as of December 31, 2013. The increase in our provisions for environmental liabilities in 2015 as compared to 2014 is mainly due to the critical review of the remediation strategy and environmental management for external landfill areas, especially the areas of Mina IV (environmental recovery of former coal mine in Santa Catarina State) and Estação Ecológica de Corumbá (management of a nature conservation area in the State of Minas Gerais), resulting in a new technical approach based on geotechnical confinement.

The changes in the provision for environmental liabilities on our financial statements are as follows:

|   | <b>Amounts</b><br><i>(in millions of R\$)</i> |
|---|---|
| <b>December 31, 2013</b>                          | <b>346.5</b>                                  |
| <b>Term of Undertaking (TAC)(1)</b>               | 5.7   |
| <b>Decommissioned Coal Mines (Santa Catarina)</b> | -11.6   |
| <b>Landfills and other(2)</b>                     | -129.0  |
| <b>December 31, 2014</b>                          | <b>211.5</b>                                  |
| <b>Term of Undertaking (TAC)(1)</b>               | 72.8  |
| <b>Decommissioned Coal Mines (Santa Catarina)</b> | -12.9   |
| <b>Landfills and other(2)</b>                     | -9.1  |
| <b>December 31, 2015</b>                          | <b>262.3</b>                                  |

(1) Refers to environmental compensation agreed in the TAC but not related to investments in equipment.

(2) Refers to an estimate calculation of recovery costs related to landfills remediation obligations.

***Brazil – mining regulation***

Under the Brazilian Constitution, all mineral resources in Brazil belong to the federal government. The Brazilian Constitution and Mineral Code impose various regulatory restrictions on mining companies relating to, among other things:

- the manner in which mineral deposits must be exploited;
- the health and safety of workers and the safety of residential areas located near mining operations;
- the protection and restoration of the environment;
- the prevention of pollution; and
- the support of local communities where mines are located.

Mining companies in Brazil can only prospect and mine pursuant to prospecting authorizations or mining concessions granted by the National Department of Mineral Production (*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 one to 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 holder of the prospecting authorization must submit a final report to DNPM. If the geological exploration reveals the existence of a mineral deposit that is economically exploitable, the grantee has one year (which DNPM may extend) from approval of the report by DNPM to apply for a mining concession by submitting an economic exploitation plan or to transfer its right to apply for a mining concession to an unrelated party. When a mining concession is granted, the holder of such mining 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 an unrelated party that is qualified to own concessions. Under certain circumstances, mining concessions may be challenged by unrelated parties.

Table of contents*Mining Concessions*

Our iron ore mining activities at Casa de Pedra mine are performed based on *Manifesto de Mina*, which gives us full ownership over the mineral deposits existing within our property limits. Our iron ore mining activities at Engenho and Fernandinho mines are based on a concession by the Ministry of Mines and Energy, which grants us the right to exploit mineral resources from the mine for an indeterminate period of time lasting until the exhaustion of the mineral deposit. Our limestone and dolomite mining activities at the Bocaína mine and our tin mining activities at Ariquemes (ERSA mine) are based on concessions under similar conditions. See “Item 4D. Property, Plant and Equipment” for further information.

On October 30, 2015 and upon prior approval of DNPM, the Manifesto de Mina for Casa de Pedra was transferred by CSN to Congonhas Minérios, which also became the titleholder of the Engenho mining concession by the end of the year of 2015. In the same occasion, Fernandinho mining concession and the mining rights of Cayman and Pedras Pretas were transferred by Nacional Minérios (“Namisa”) to Minérios Nacional. For further information, see “Item 4D. Property, Plant and Equipment”.

*Mineral Rights and Ownership*

Our mineral rights for Casa de Pedra mine include the mining concession, a beneficiation plant, roads, a loading yard and a railway branch, and are duly registered with the DNPM. We have also been granted by DNPM easements in 19 mine areas located in the surrounding region, which are not currently part of Casa de Pedra mine, with the purpose to expand our operations, and hold title to all of our proved and probable reserves.

In addition, we have obtained and are in compliance with all licenses and authorizations for our operations and projects at Casa de Pedra mine.

The exploitation in Casa de Pedra mine is subject to mining lease restrictions, which were duly addressed in our iron ore reserve calculations. Quality requirements (chemical and physical) are the key “modifying factors” in the definition of ore reserves at Casa de Pedra and were properly accounted for by our mine planning department.

The Brazilian government charges us a royalty known as the Financial Compensation for Exploiting Mineral Resources (*Compensação Financeira pela Exploração de Recursos Minerais*), or CFEM, on the revenues from the sale of minerals we extract, net of taxes, insurance costs and costs of transportation. DNPM is responsible for enacting regulations on CFEM and auditing the mining companies to ensure the proper payment of CFEM. The current annual rates are:

- 3% on bauxite, potash and manganese ore;
- 2% on iron ore, kaolin, copper, nickel, fertilizers and other minerals; and
- 1% on gold.

The Mineral Code and ancillary mining laws and regulations also impose 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 (in a rate of 50% of the CFEM). Mining companies must also enter into agreements with the Brazilian

government to use public lands and eventually compensate the government for damages caused to such 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.

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The Brazilian Congress is currently reviewing a bill that proposes significant changes in the Mineral Code, including a potential increase of the CFEM rates, which may have a material impact on our mining operations.

**Antitrust Regulation**

We are subject to various laws in Brazil which seek to maintain a competitive commercial environment. The competition law and practice in Brazil are governed by Law No. 12,529, dated November 30, 2011, which came into force on May 30, 2012 and provided for significant changes in the Brazilian Antitrust System's structure, including the creation of the new Conselho Administrativo de Defesa Econômica (CADE). Referred law introduced a mandatory pre-merger notification system, as opposed to the post-merger review system previously in force. The new CADE is now formed by an Administrative Tribunal of Economic Defense (*Tribunal Administrativo de Defesa Econômica*), a General-Superintendence (*Superintendência-Geral*) and a Department of Economic Studies (*Departamento de Estudos Econômicos*).

CADE is responsible for the control of anti-competitive practices in Brazil. If CADE determines that certain companies have acted collusively to raise prices, it has the authority to impose fines on the offending companies, prohibit them from receiving loans from Brazilian government sources and bar them from bidding on public projects. In addition, CADE has the authority to prevent or impose certain conditions to mergers and acquisitions and/or to impose certain restrictions or conditions on M&A transactions (for instance, require a company to divest assets or take other anti-dumping measures) should it determine that the industry in which it operates is insufficiently competitive or that the transaction creates a market concentration which can affect competition.

For further antitrust-related information, see "Item 8A. Consolidated Statements and Other Financial Information-Legal Proceedings."

**Regulation of Other Activities**

In addition to mining, environmental and antitrust regulation, we are subject to comprehensive regulatory regimes for certain of our other activities, including railway transportation, electricity generation and ports.

Our railway business is subject to regulation and supervision by the Brazilian Ministry of Transportation and the National Agency for Ground Transportation (*Agência Nacional de Transportes Terrestres*), or ANTT, and operates pursuant to concession contracts granted by the federal government, which impose certain limitations and obligations. As of December 31, 2015, we owned the following railway related assets: (i) a 34.94% direct and indirect participation in MRS Logística S.A., which holds a concession to operate Brazil's Southeastern railway system until 2026, renewable for an additional 30 years, (ii) a 56.92% participation in TLSA, which holds a concession to operate the Northeastern Railway System II (which encompasses the stretches between Missão Velha – Salgueiro, Salgueiro – Trindade, Trindade – Eliseu Martins, Salgueiro – Porto de Suape and Missão Velha – Porto de Pecém) of Brazil's Northeastern railway system until the earlier of 2057, or the date when TLSA reaches a rate of annual return of 6.75% of its total investment and (iii) a 89.79% participation in FTL, which holds a concession to operate the Northeastern Railway System I (which encompasses the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá – Jorge Lins) of Brazil's Northeastern railway system until 2027, renewable for an additional 30 years.

Our port business is subject to regulation and supervision by the Brazilian Secretariat of Ports (*Secretaria dos Portos*, or SEP), the Ministry of Transportation, and the National Water Transportation Agency (*Agência Nacional de*



*Transportes Aquaviários*, or ANTAQ). As of December 31, 2015, we owned a 99.99% participation in TECON, which has a concession to operate the container terminal at Itaguaí Port for a 25-year term until 2026, renewable for an additional 25 years. The concession to operate TECAR, a solid bulks terminal at Itaguaí Port, expires in 2047 and is explored since December 31, 2015, by our controlled company Congonhas Minérios due to the transaction entered into with the Asian Consortium. For more information regarding the transaction with the Asian Consortium, please see item “5A Operating Results.

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Our electricity generation business is subject to regulation and supervision by the Brazilian Ministry of Mines and Energy, the National Agency for Electric Energy (*Agência Nacional de Energia Elétrica*), or ANEEL, and the National Electric System Operator (*Operador Nacional do Sistema Elétrico*, or ONS). As of December 31, 2015, we owned the following energy related assets: (i) a 235.2 MW thermoelectric co-generation power plant at our Presidente Vargas Steelworks, (ii) a 48.75% participation in ITASA, which owns and operates 60.5% of the Itá hydroelectric facility on the Uruguay river in Southern Brazil under a renewable 30-year concession until 2030, and (iii) a 17.9% participation in the consortium that built and has the right to operate the Igarapava hydroelectric facility in Southeast Brazil under a renewable 30-year concession until 2028.

For further information on our logistics and energy segments, see “Item 4B. Business Overview.”

***Proceedings Related to Protectionist Measures***

Over the past several years, exports of steel products from various countries and companies, including Brazil and us, have been the subject of anti-dumping, countervailing duty and other trade related investigations from importing countries. These investigations resulted in duties that limit our access to certain markets.

In Brazil, we are subject to regulation and supervision by the Ministry of Development, Industry and Foreign Trade, the Secretary of Foreign Trade (*Secretaria de Comércio Exterior*), or SECEX, and the Commercial Defense Department (*Departamento de Defesa Comercial*), or DECOM. Worldwide, our exports are subject to the protectionist measures summarized below.

*United States*

*Anti-dumping (AD) and Countervailing Duties (CVD)*. In the U.S., we are subject to regulation and supervision by the U.S. Department of Commerce, or DOC, the International Trade Commission, or ITC, the International Trade Administration, or ITA, and the Import Administration, or IA.

On July 28, 2015, AK Steel Corporation, ArcelorMittal USA LLC, Nucor Corporation, Steel Dynamics, Inc. and United States Steel Corporation filed antidumping and countervailing duty (“AD/CVD”) petitions with respect to certain cold-rolled flat steel products from Brazil, China, India, Japan, Korea, Russia, and the United Kingdom at the ITC and the DOC. On August 24, 2015, the DOC initiated both AD/CVD investigations with respect to cold-rolled steel from Brazil. On September 10, 2015, the ITC announced affirmative preliminary injury determinations with respect to cold-rolled imports from Brazil.

On August 11, 2015, AK Steel Corporation, ArcelorMittal USA LLC, Nucor Corporation, SSAB Enterprises, LLC, Steel Dynamics, Inc., and United States Steel Corporation filed AD/CVD petitions with respect to certain hot-rolled steel products from Australia, Brazil, Japan, the Republic of Korea, the Netherlands, Turkey, and the United Kingdom. On September 9, 2015, the DOC initiated both AD/CVD investigations with respect to hot-rolled steel from Brazil. On September 24, 2015, the ITC announced affirmative preliminary injury determinations with respect to hot-rolled steel imports from Brazil.

In December 2015 and January 2016, the DOC reached preliminary determinations on the CVD investigation, these determinations imposed a rate of 7.42% for the exports of both hot-rolled and cold products. In February 2016, the DOC issued its preliminary determination on the anti-dumping investigation of cold-rolled products, which was reviewed on April 2016, in which the rate imposed on exports to the US was 20.84% as of March 7, 2016. In March 2016, the DOC issued the preliminary determination on the anti-dumping investigation of hot-rolled products, in which the rate imposed was 33.91%. The final determination for anti-dumping and countervailing duty investigations is expected to be issued in July 2016 for cold-rolled products and August 2016 for hot-rolled products.

## *Canada*

*Anti-dumping.* In Canada, we are subject to regulation and supervision by the Canadian International Trade Tribunal, or CITT, the Canada Border Services Agency, or CBSA and the Anti-dumping and Countervailing Directorate.

In January 2001, the Canadian government initiated an anti-dumping investigation process involving hot-rolled sheets and coils exported from Brazil. The investigation was concluded in August 2001, with the imposition by Canada of an anti-dumping order. Despite the limitations imposed by Canada, we are not currently affected by this anti-dumping order since we do not export hot rolled coil to Canada.

## **Overview of Steel Industry**

### ***World Steel Industry***

The worldwide steel industry comprises hundreds of steelmaking facilities divided into two major categories, integrated steelworks and non-integrated steelworks, depending on the method used for producing steel. Integrated plants, which accounted for approximately 2/3 of worldwide crude steel production in 2013, typically produce steel by smelting in blast furnaces the iron oxide found in ore and refining the iron into steel, mainly through the use of basic oxygen furnaces or, more rarely, in electric arc furnaces. Non-integrated plants (sometimes referred to as mini-mills), which accounted for approximately 1/3 of worldwide crude steel production in 2013, produce steel by melting scrap metal, occasionally complemented with other metallic materials, such as direct reduction iron or hot-briquette iron, in electric arc furnaces. Industry experts expect that a lack of a reliable and continuous supply of quality scrap metal, as well as the high cost of electricity, may restrict the growth of mini- mills.

Steel continues to be the material of choice in the automotive, construction, machinery and other industries. Notwithstanding potential threats from substitute materials such as plastics, aluminum, glass and ceramics, especially for the automotive industry, steel continues to demonstrate its economic advantage. From 2004 through 2014, total global crude steel production averaged approximately 1.4 billion tons per year. According to the WSA, in 2015, production reached 1.62 billion tons, which represents a decreased of 2.8% as compared to 2014.

China's crude steel production in 2015 reached 804 million tons, a reduction of 2.3% as compared to 2014. Production volume in China has more than tripled in the last ten years, from 222 million tons in 2002. China's share of world steel production increased from 49.3% in 2014 to 50.2% in 2015. In 2015, Asian countries reduced their production by 2.2%, reaching 1.09 billion tons, according to WSA.

World crude steel production reached 1,622.8 million tonnes (Mt) for the year 2015, down by -2.8% compared to 2014, and crude steel production decreased in all regions except Oceania in 2015. China's crude steel production reached 803.8 Mt, down by -2.3% on 2014. China's share of world crude steel production increased from 49.3% in 2014 to 49.5% in 2015.

All major producing countries, except for India, decreased their production levels in 2015. According to the World Steel Association, in 2015 the global crude steel production decreased, slightly and, considering that 2014 was a record production year, the production levels remained in line with 2013 figures.



### *Brazilian Steel Industry*

Since the 1940s, steel has been of vital importance to the Brazilian economy. During the 1970s, strong government investments were made to provide Brazil with a steel industry able to support the country's industrialization boom. After a decade of little to no investment in the sector in the 1980s, the government selected the steel sector as the first for privatization commencing in 1991, resulting in a more efficient group of companies operating today.

### *A Privatized Industry*

During almost 50 years of state control, the Brazilian flat steel sector was coordinated on a national basis under the auspices of Siderbrás, the national steel monopoly. The state had far less involvement in the non-flat steel sector, which has traditionally been made up of smaller private sector companies. The larger integrated flat steel producers operated as semi-autonomous companies under the control of Siderbrás and were each individually privatized between 1991 and 1993. We believe that the privatization of the steel sector in Brazil has resulted in improved financial performance, as a result of increased efficiencies, higher levels of productivity, lower operating costs, a decline in the labor force and an increase in investment.

### *Domestic Demand*

Historically, the Brazilian steel industry has been affected by substantial fluctuations in domestic demand for steel. Although national per capita consumption varies with GDP, fluctuations in steel consumption tend to be more pronounced than changes in economic activity. Crude steel consumption per capita in Brazil has increased from 104 kilograms in 1999 to 147 kilograms in 2010. It is still considered low when compared to the levels of some developed countries, such as the United States and Germany.

From 2005 to 2015, Brazilian GDP grew on average 2.1%. In 2008 and 2009, overall global economic activity slowed significantly and domestic apparent steel consumption amounted to 24.0 million tons and 19.1 million tons, respectively. In 2010, with the recovery of the global economy, domestic demand rose by 38.8% to 26.6 million tons. On the other hand, in 2011, domestic steel demand decreased 1.2% to 26.2 million tons, mainly due to high levels of inventory held by distributors and increased indirect imports. In 2012, the slowdown of the Brazilian economy led to another decrease in steel consumption of 17.6% to 21.6 million tons.

The Brazilian flat steel sector is shifting production to the higher value-added consumer durable sector. This sector is highly dependent on domestic consumer confidence, which, in turn, is affected by economic policies and certain expectations of the current government administration. Over the past years, automobile manufacturers made significant investments in Brazil. In 2009 and 2010, vehicle production recovered from the 2008 financial crisis in response to government incentives such as tax cuts. In 2012, the Brazilian market reached a record 3.8 million vehicles sold, reflecting a specific government measure, which reduced the industrialized products tax. On the other hand, exports decreased by 20.1%. In 2013, with the postponement of the reduction in industrialized products tax, the Brazilian market maintained the level of vehicles sales, but had an increase of 13.5% in exports, according to the Auto Manufacturers' Association, or ANFAVEA, data. In 2014, the decrease in the family consumption and the employment level, allied with the end of government incentives resulted in a reduction of 7.1% in vehicles sales, respectively, according to the ANFAVEA data. In 2015, vehicles sales decreased 26.6% due to the economic recession a large number of vehicles in stock and by the return of the industrialized products tax.

### *Market Participants*

According to IABr (Instituto Aço Brasil), the Brazilian steel industry is composed of 29 mills managed by 11 corporate groups, with an installed annual capacity of approximately 48.4 million tons, producing a full range of flat, long, carbon, stainless and specialty steel.

*Capacity Utilization*

There were no significant changes in Brazilian nominal steel production capacity in 2014 compared to 2013. This capacity was estimated at 48.9 million tons. The local steel industry operated at approximately 70% utilization in 2014, similar to the level recorded in 2013.

Table of contents*Exports/Imports*

Brazil has been playing an important role in the export market, primarily as an exporter of semi-finished products. The Brazilian steel industry has taken several steps towards expanding its capacity to produce value-added products. Brazil's exports of slabs and billets reached 5.3 million tons in 2010, which represented 58% of total steel exports. In 2011, the exports of semi-finished products reached 7.2 million tons, representing 66% of total exports. In 2012, exports of semi-finished products were 6.6 million tons, a 7.4% decrease in relation to the previous year, representing 68% of total exports. In 2013, the exports of semi-finished products reached 5.3 million tons, representing 65% of total exports. In 2014, Brazilian steel exports totaled 9.8 million tons, an increase of 21% compared to 2013 and steel imports increased by 7%, compared to 2013, according to IABr.

In 2015, Brazilian steel exports totaled 13.7 million tons and accounted for US\$6.6 billion in export earnings for Brazil. Over the last 20 years, the Brazilian steel industry has been characterized by a structural need to export, which is demonstrated by the industry's supply demand curve. The Brazilian steel industry has experienced periods of overcapacity, cyclicity and intense competition during the past several years. Demand for finished steel products, as measured by domestic apparent consumption, has consistently fallen short of total supply (defined as total production plus imports). In 2015, steel imports were 3.2 million tons, or 15% of apparent domestic consumption, in line with the figures from 2014. In 2015, steel imports decreased by 19% as compared to 2014, according to IABr.

For information on the production by the largest Brazilian steel companies, see "Item 4B. Business Overview—Competition—Competition in the Brazilian Steel Industry."

**4C. Organizational Structure**

We conduct our business directly and through subsidiaries. For more information on our organizational structure, see Note 2(b) to our consolidated financial statements included in "Item 18. Financial Statements."

**4D. Property, Plant and Equipment**

Our principal executive offices are located in the city of São Paulo, the State of São Paulo at Avenida Brigadeiro Faria Lima, 3,400, 20<sup>th</sup>, 19<sup>th</sup> and 15<sup>th</sup> - part floors (telephone number 55-11-3049-7100), and our main production operations are located in the city of Volta Redonda, in the State of Rio de Janeiro, located approximately 120 km from the city of Rio de Janeiro. Presidente Vargas Steelworks, our steel mill, is an integrated facility covering approximately 4.0 square km and located in the city of Volta Redonda in the State of Rio de Janeiro. Our iron ore, limestone and dolomite mines are located in the State of Minas Gerais, which borders the State of Rio de Janeiro to the north. Each of these mines lies within 500 km of, and is connected by rail and paved road to, the city of Volta Redonda.

The table below sets forth certain material information regarding our property as of December 31, 2015. For more information, see Note 10 to our consolidated financial statements included in "Item 18. Financial Statements."

| Facility                         | Location                               | Size          | Use        | Productive Capacity       | Title | En  |
|----------------------------------|--|---------------|------------|---------------------------|-------|-----|
| Presidente Vargas Steelworks (1) | Volta Redonda, State of Rio de Janeiro | 4.0 square km | steel mill | 5.6 million tons per year | owned | non |



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|  |   |  |  |   |            |     |
|--|---|--|--|---|------------|-----|
| CSN Cimentos (2)                         | Volta Redonda, State of Rio de Janeiro                              | 0.08 square km                               | cement plant                                     | 2.4 million tons per year   | owned      | non |
| <b>CSN Porto Real</b>                    | Porto Real, State of Rio de Janeiro                                 | 0.27 square km                               | galvanized steel producer                        | 350,000 tons per year   | owned      | non |
| CSN Paraná                               | Araucária, State of Paraná  | 0.98 square km                               | galvanized and pre-painted products              | 100,000 tons of pre-painted product and 220,000 tons of pickled hot-rolled coils      | owned      | non |
| <b>Metalic</b>                           | Maracanaú, State of Ceará   | 0.10 square km                               | steel can manufacturer                           | 900 million cans per year   | owned      | non |
| Prada                                    | São Paulo, State of São Paulo and Uberlândia, State of Minas Gerais | SP – 0.14 square km;<br>MG – 0.02 square km; | steel can manufacturer                           | 1 billion cans per year   | owned      | non |
| CSN, LLC                                 | Terre Haute, Indiana, USA   | 0.78 square km                               | cold-rolled and galvanized products              | 800,000 tons of cold-rolled products and 315,000 tons per year of galvanized products | owned      | non |
| <b>Lusosider</b>                         | Seixal, Portugal  | 0.39 square km                               | hot-dip galvanized, cold-rolled and tin products | 240,000 tons of galvanized products and 50,000 tons of cold-rolled products per year  | owned      | non |
| Prada                                    | Mogi das Cruzes, State of São Paulo                                 | 0.20 square km                               | distributor                                      | 730,000 tons per year   | owned      | non |
| <b>Casa de Pedra mine</b>                | Congonhas, State of Minas Gerais                                    | 49.00 square km                              | iron ore mine                                    | 26.0 mtpy(6)  | owned(7)   | non |
| Engenho mine(8)                          | Congonhas, State of Minas Gerais                                    | 2.85 square km                               | iron ore mine                                    | 5.6 mtpy(9)   | concession | non |
| <b>Fernandinho mine(8)</b>               | Itabirito, State of Minas Gerais                                    | 1.47 square km                               | iron ore mine                                    | 0.75 mtpy(6)  | concession | non |
| Bocaina mine                             | Arcos, State of Minas Gerais  | 4.11 square km                               | limestone and dolomite mines                     | 4.0 mtpy  | concession | non |
| <b>ERSA mine</b>                         | Ariquemes, State of Rondônia  | 0.015 square km                              | tin mine   | 3,600 tons  | concession | non |
| Thermoelectric co-generation power plant | Volta Redonda, State of Rio de Janeiro                              | 0.04 square km                               | power plant                                      | 235.2 MW  | owned      | non |
| <b>Itá(10)</b>                           | Uruguay River - Southern Brazil                                     | 9.87 square km                               | power plant                                      | 1,450 MW  | concession | non |
| Igarapava(10)                            | State of Minas Gerais   | 5.19 square km                               | power plant                                      | 210 MW  | concession | non |
| <b>Southeastern (MRS)</b>                | Southern and Southeastern regions of Brazil                         | 1,674 km of tracks                           | railway  | --  | concession | non |
| FTL                                      | Northern and northeastern regions                                   | 4,238 km tracks of                           | railway  | --  | concession | non |

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|   |   |                                   |                        |                         |                          |
|---|---|-----------------------------------|------------------------|-------------------------|--------------------------|
| <b>TLSA</b>   | of Brazil<br>Northern<br>and northeastern regions | railway 1<br>383 km<br>tracks     | railway                | --                      | concession non           |
| <b>TECAR at Itaguaí Port</b>                              | of Brazil<br>Itaguaí, State of Rio<br>de Janeiro  | of railway 2<br>0.69 square<br>km | Iron ore shipment      | 45 mtpy                 | concession non           |
| <b>Container terminal<br/>- TECON at<br/>Itaguaí port</b> | Itaguaí, State of Rio de<br>Janeiro               | 0.44 square<br>km                 | containers             | 480 K TEUpy             | concession non           |
| <b>Namisa</b>   | State of Minas Gerais                             | 11.56<br>square km                | mine                   | -                       | Concession/<br>owned non |
| <b>Land</b>   | State of Rio de Janeiro                           | 31.02<br>square km                | undeveloped            | --                      | owned plec<br>mor        |
| <b>Land</b>   | State of Santa Catarina                           | 6.22 square<br>km                 | undeveloped            | --                      | owned plec               |
| <b>Land</b>   | State of Minas Gerais                             | 32.73<br>square km                | undeveloped            | --                      | owned non                |
| <b>Land</b>   | State of Piaui                                    | 856.61<br>square km               | undeveloped            |                         | owned non                |
| <b>Steel plant with rolling<br/>mill (SWT)</b>            | Europa / Germany /<br>Unterwellenborn             | 0.898<br>square km                | production of sections | 1 million tons per year | owned non                |

- (2) Our CSN Cimentos cement plant is included in the same area as our Presidente Vargas Steelworks.
- (3) Pursuant to a loan agreement entered into by the State of Rio de Janeiro and Galvasud as of May 4, 2000.
- (4) Pursuant to a loan agreement entered into by Kreditanstatt Für Wiederaufbau, Galvasud and Unibanco as of August 23, 1999.
- (5) Pursuant to a loan agreement entered into by Metalic and Banco do Nordeste do Brasil S.A as of 2007.
- (6) Information on installed capacity of products. For information on mineral reserves at our Casa de Pedra mine, see “—Reserves at Casa de Pedra Mine” and table under “—Casa de Pedra Mine” below.

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- (7) Based on the Manifesto de Mina. See, “Item 4. Information on the Company — B. Business Overview — Government Regulation and Other Legal Matters — Mining Concessions.”
- (8) Property owned by our 60% consolidated investee Namisa.
- (9) Information on equipment fleet installed annual ROM capacity.
- (10) Property 29.5% owned by us.
- (11) Property 17.9% owned by us.
- (12) Pledged pursuant to various legal proceedings, mainly related to tax claims.

For information on environmental issues with respect to some of the facilities described above, see “Item 4B. Business Overview—Government Regulation and Other Legal Matters—Environmental Expenditures and Claims.” In addition, for information on our plans to construct, expand and improve our facilities, see “Item 4. Information on the Company—D. Property, Plant and Equipment—Planned Investments” and Note 10 to our financial statements included elsewhere in this Form 20-F.

The map above shows the locations of the Presidente Vargas Steelworks, CSN Paraná, Prada, CSN Porto Real (formerly known as GalvaSud), Metalic, Lusosider, ERSA, CSN LLC and SWT facilities, our iron ore, limestone and dolomite mines, the power generating facilities in which we have an ownership interest, and the main port used by us to export steel products and import coal and coke, as well as the main railway connections.

## **Acquisitions and Dispositions**

### *Usiminas*

On December 31, 2015 we owned, directly and indirectly, 20.69% of the preferred shares and 14.13% of the common shares of Usinas Siderúrgicas de Minas Gerais S.A. (“Usiminas”), resulting from various acquisitions in the market since mid-2010. For more information on the value of these assets, please see “Item 5A. Operating Results —Critical Accounting Estimates—Impairment of Long-Lived Assets, Intangible Assets, Goodwill and Financial Assets”. We are assessing strategic alternatives in relation to our investment in Usiminas. For more information on the antitrust matters regarding our investment in Usiminas see “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information Selected Financial Data—Legal Proceedings—Antitrust.”

As of March 2016, the Usiminas’ Board of Directors approved a capital increase amounting to R\$64,882, through the issuance of 50,689,310 preferred shares. Consequently on April 19, 2016 CSN exercised its right of subscription, paying R\$11,603 for 9,064,856 preferred shares.

The Usiminas’ Shareholders’ Meeting approved in April 2016 an increase in its share capital amounting to R\$1,000,000, through the issuance of 200,000,000 new common shares, with a deadline for exercising the preferential right to acquire the said shares up to 23 May 2016. The company continues to evaluate alternatives related to the investment in Usiminas.

On April 28, 2016, CSN elected, for two years' term of office, two fixed and two alternate members in the Usiminas' Board of Directors and, for one year's term, one fixed and one alternate member in the Usiminas' Fiscal Committee. The election was made possible through the flexibility and exceptional decision from CADE (Administrative Council for Economic Defense) in relation to the TCD (Performance Commitment Agreement) signed by CSN and CADE in 2014. The mentioned decision had permitted that CSN elected pre-approved members to the Board of Directors and Fiscal Committee of USIMINAS, and was rendered by the majority of CADE's members at its session of 27 April 2016. The election of Usiminas’ Board and Fiscal Committee members by CSN, as well as all meetings of the Board of Directors of Usiminas, are currently suspended as a result of judicial decisions issued by the State Court of Minas Gerais and the Federal Court of the Federal District, respectively. CSN has appealed the decision issued by the State Court of Minas Gerais on May 13, 2016.

*Namisa / Congonhas Minérios*

By the end of 2015, we restructured our iron ore business by means of the combination into Congonhas Minérios, a CSN subsidiary, of the iron ore businesses and related logistics assets of CSN and Namisa, resulting in a fully integrated operation. As part of the restructuring, Namisa was merged into Congonhas Minérios.

Previously, in 2008, a consortium of Asian companies composed of Itochu Corporation, JFE Steel Corporation, Kobe Steel, Ltd, Nisshin Steel Co. Ltd., Posco and China Steel Corporation, or the Asian Consortium, made an investment in our subsidiary Namisa. The joint control of Namisa was governed by a shareholders' agreement entered into with the Asian Consortium. In addition, we entered into certain other agreements, including a share purchase agreement and long-term operational agreements between Namisa and us, which provided for certain obligations that, in case breached and not cured within the relevant cure period, could give rise, in certain situations, to the right of the non-breaching party to exercise a call or a put option, as the case may be, with respect to the Asian Consortium's ownership interest in Namisa.

In 2013, we and the Asian Consortium initiated negotiations to resolve certain matters that (i) were subject to qualified quorum under the shareholders' agreement, and (ii) related to the fulfillment of certain obligations under the agreements mentioned above. In parallel, we engaged in discussions with the Asian Consortium aiming at the combination of the iron ore business and related logistics assets of CSN and Namisa.

In November 30, 2015, the aforementioned discussions resolved upon the closing of an agreement between we and the Asian Consortium providing for the combination of CSN's and Namisa's iron ore business and related logistics assets. The transaction consisted in a joint venture whereby the Asian Consortium contributed its 40% ownership interest in Namisa to Congonhas Minérios and CSN contributed the Casa de Pedra iron ore mine, its 60% ownership interest in Namisa, an 8.63% ownership interest in MRS and the rights to manage and operate the port concession in the Itaguaí Port (TECAR). In addition, long-term "offtake" agreements were executed for the supply by Congonhas Minérios of iron ore products to the Asian Consortium members and to us, as well as a long term port services agreement was executed between Congonhas Minérios and CSN to guarantee the use of TECAR by CSN to import raw materials necessary for our other activities.

Considering CSN's and the Asian Consortium's contributions in the transaction, adjustments arising from the negotiations between the parties, as well as debt, cash and working capital adjustments, immediately after the closing, CSN and the Asian Consortium became shareholders of Congonhas Minérios with ownership interests of, respectively, 87.52% and 12.48%. The transaction also included an earn-out mechanism which, in the event of a qualified liquidity event under certain valuation parameters occurring within an agreed period of the closing of the transaction, could dilute the Asian Consortium's ownership interest in Congonhas Minérios from 12.48% up to 8.71%.

Congonhas Minérios is currently a fully integrated operation (mine, rail and port), which includes an 18.63% ownership interest in MRS (comprised of Namisa's former 10% ownership interest in MRS and the 8.63% ownership interest contributed by CSN), access to rail transportation in the form of long term agreements and the TECAR port concession.

As a result of this transaction, CSN and the Asian Consortium put an end to the discussions initiated in 2013 and Congonhas Minérios captured synergies among the businesses involved, including process optimization, efficiencies in the operation and reduction of operational costs and capital expansion, and increased shareholder value, creating a world class company.

**Capital Expenditures**

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In 2015 the investments made by the Company totaled approximately R\$ 2.2 billion, highlighting:

- Cement: R\$438 million for completion of two new grinding mills and implementation of the new clinker plant;
- Steel: R\$345 million, mainly for sustaining investments in coke plants at UPV (usina Presidente Vargas), environmental projects at UPV, energy efficiency projects (TG20), technological modernization projects at the UPV, expansion of Steel Service Plant at Mogi das Cruzes and maintenance projects in other units;
- Mining: R\$ 898 million, mainly for the acquisition of new mining equipment, running projects in iron ore beneficiation, balance of payments (sado de contratos, verificar melhor tradução) regrading Tecar expansion and sustaining current investment projects;
- Other investments: R\$ 117 million for running investments in other operations (such as FTL and Tecon) and corporate projects (such as IT);
- Spare Parts: R\$ 360 million.

**Planned Investments**

In 2016 the Company's investment budget prioritize the implementation of running capital projects and sustaining investments in order to maintain the operational capability, environment and safety issue. New investments will be evaluated considering the market conditions, financial results and projection of additional cash flow generated by each project.

Considering these guidelines, investments designed for 2016 are in the order of R\$1.4 billion, highlighted below:

- Cement: R\$529 million, specially for completion of the new clinker unit in Arcos;

- Steel: R\$500 million, mainly for sustaining investments in coke plants UPV, environmental projects, technological modernization projects at the UPV, completion of the expansion of the Steel Service Center of Mogi das Cruzes service and project maintenance in other units;
- Mining (projects at Congonhas Mineração and Tecar): R\$ 111 million, mainly for final payments of equipment that were acquired in 2015, running projects in iron ore beneficiation, expansions studies for Phase 60 Mtpa in Tecar (engineering and environmental studies) and sustaining investment projects in the units;
- Other investments: R\$72 million for sustaining investments in other operations (such as FTL and Tecon) and corporate projects (such as IT);
- SpareParts: R\$180 million.

Our planned investments in iron ore, steel, logistics and cement are described below.

### ***Steel***

The investment plan in the coming years prioritizes sustaining investment with efficiency gains, as the revamp of coke ovens, steel mill, pickling, casting, and execution of environmental projects, technological modernization projects at the UPV, completion of the expansion of the Steel Service Center of Mogi das Cruzes and maintenance projects in other units.

### ***Mining***

Considering the market conditions, financial results and projection of additional cash flow generated by each project, in the first phase we analyze the expansion of production capacity in Casa de Pedra to 40 million tons per year and the expansion of port capacity in Itaguai / RJ (Tecar) from 45 million tonnes to 60 million tons.



## ***Cement***

The cement plant in Volta Redonda has a production capacity of 2.4 million tons per year, taking advantage of the slag generated by our blast furnaces and the clinker produced in the mine of Arcos. We are implementing an integrated plant with two new cement grinding mills and a new clinker unit in Arcos, adding 2 million tons of cement per year during 2015. At a later stage the company evaluates the implementation of an advanced grinding unit, adding another 1 million tons.

## ***Additional Investments***

In addition to the currently planned investments and capital expenditures, we continue to evaluate possible acquisitions or divestitures, joint controlled entities and brownfield or greenfield projects to increase or complement our steel, cement and mining production and logistics capabilities, logistics infrastructure, energy generation and return on capital.

## **4E. Unresolved Staff Comments**

On April 15, 2016, CSN received a letter from the Staff of the SEC's Division of Corporation Finance as part of its review of the Company's Form 20-F for the fiscal year ended December 31, 2014 and the Company's Form 6-K for the last quarter of 2015.

The Staff requested additional information and provided comments related to certain accounting disclosures, including our accounting policies regarding our concessions and disclosure relating to the acquisition of control of Nacional Minérios S.A. on November 30, 2015. The Company responded to that letter on May 06, 2016 and believes that it has addressed the Staff's comments.

As of the date of this annual report, the Company has not received confirmation from the Staff that its review process is complete. The Company intends to continue working with the Staff and respond to any remaining comments.

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

The following discussion should be read in conjunction with our consolidated financial statements as of December 31, 2015 and 2014 and for each of the years ended December 31, 2015, 2014 and 2013 included in "Item 18. Financial Statements". Our consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and are presented in thousands of reais (R\$), as explained in Note 2(a) to our consolidated financial statements included in "Item 18. Financial Statements."

We have applied, beginning January 1, 2013, IFRS 10 - Consolidated Financial Statements, which establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or

more entities, and IFRS 11 - Joint Arrangements, which requires a new valuation of joint arrangements, focusing on the rights and obligations of the arrangement, instead of its legal form. In accordance with the new standards, the proportionate consolidation method for jointly controlled entities is no longer permitted. As a result of the adoption of these new standards, the Company no longer consolidates its jointly controlled entities MRS Logística S.A. and CBSI - Companhia Brasileira de Serviços de Infraestrutura, and Nacional Minérios S.A. until November 30, 2015 and began accounting for these investments under the equity method. As from December 1<sup>st</sup>, 2015, Nacional Minérios S.A. was consolidated as a result of the mining activities restructuring and then merged on December 31, 2015 into Congonhas Minérios S.A.

The amendments provide additional transition relief, limiting the requirement to provide adjusted comparative information to only the preceding comparative period. We applied this transition relief as described above with respect to the adoption of IFRS 10 and IFRS 11. As a result, the financial statements as of and for the year ended December 31, 2012 and the opening balance sheet as of January 1, 2012 have been restated for the effects of the retrospective adoption of these new standards. Our financial statements as of and for the year ended December 31, 2011 remain unchanged and as disclosed previously and, as a result, are not comparable with the information as of and for the years ended December 31, 2013 and 2012.

In addition, due to the partial spin-off of TLSA on December 27, 2013 and the consequent entry into effect of the new shareholders' agreement, we ceased to consolidate TLSA and began recognizing it in accordance with the equity accounting method.

## **5A. Operating Results**

### **Overview**

#### ***Brazilian Macro-Economic Scenario***

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As a company with the vast majority of its operations and a large portion of its sales in Brazil, we are affected by the general economic conditions of Brazil. The rate of growth in Brazil is important in determining our growth capacity and the results of our operations.

The following table shows some Brazilian economic indicators for the periods indicated:

|  | Year ended December 31, |          |          |
|--|-------------------------|----------|----------|
|  | 2015                    | 2014     | 2013     |
| GDP growth   | -3.8%                   | 0.1%     | 2.3%     |
| Inflation (IPCA) <sup>1</sup>  | 10.7%                   | 6.4%     | 5.9%     |
| Inflation (IGP-M) <sup>2</sup>   | 10.5%                   | 3.7%     | 5.5%     |
| CDI <sup>3</sup>   | 13.2%                   | 10.8%    | 8.1%     |
| Appreciation (depreciation) of the <i>real</i> against the U.S. dollar | -45.0%                  | -13.4%   | -14.6%   |
| Exchange rate at the end of period (U.S.\$1.00)                        | R\$3.904                | R\$2.656 | R\$2.343 |
| Average exchange rate (U.S.\$1.00)                                     | R\$3.338                | R\$2.357 | R\$2.160 |
| Unemployment rate <sup>4</sup>   | 8.5%                    | 6.8%     | 7.1%     |

**Sources: IBGE, Fundação Getúlio Vargas, Central Bank and CETIP.**

(1) The IPCA is a consumer price index measured by the IBGE.

(2) The IGP-M is the general market price index measured by the Fundação Getúlio Vargas.

(3) The Interbank Deposit Rate, or CDI, represents the average interbank deposit rate performed during a given day in Brazil (accrued as of the last month of the period, annualized).

(4) The unemployment rate (PNAD) is measured by IBGE.

## ***Steel***

For the years ended December 31, 2013, 2014 and 2015 our steel segment represented 63%, 65% and 68% of our net revenues, respectively, and 44%, 61% and 59% of our gross profit, respectively. In 2015, 60% of our steel revenues were in Brazil, and 40% were abroad, as compared to 75% and 25%, respectively, in 2014, and 78% and 22%, respectively, in 2013.

According to the World Steel Association (WSA), global crude steel production totaled 1.6 billion tons in 2015, 2.9% less when compared with 2014, with China responsible for 804 million tons, or 50% of the global output, recording a decrease of 2.3%. Japan's crude steel production decreased 5.4%, totaling 105 million tons in 2015. In the European Union, production reached 166 million tons in 2015, corresponding to a 1.7% fall compared to 2014. In the U.S., crude steel production totaled 78 million tons in 2015, an 11.4% decrease as compared to 2014. Existing global capacity usage decreased by 7.4% over the year before to 69.7%.

According to the Brazilian Steel Institute (IABr), domestic crude steel production was 33.3 million tons in 2015, 1.9% less than in 2014, while rolled steel output totaled 22.6 million tons, down by 8.3% in the same period.

Apparent domestic steel product consumption in Brazil amounted to 21.3 million tons in 2015, 13% less than in 2014, while domestic sales decreased 12% to 18.2 million tons. Annual imports to Brazil were 3.2 million tons, 19% less than the year before, while exports increased 35% to 13.2 million tons.

***Mining***

For the years ended December 31, 2013, 2014 and 2015 our mining segment represented, 27%, 23% and 19% of our net revenues, respectively, and 44%, 24% and 24% of our gross profit, respectively. In 2015, 95% of our mining revenues came from exports and 5% from the domestic market, as compared to 93% and 7%, respectively, in 2014, and 87% and 13%, respectively, in 2013.

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In 2015, the seaborne iron ore market remained under pressure due to the increased supply capacity in Australia and Brazil. The adoption of cost reduction programs allowed junior producers to remain in the market. On the demand side, the infrastructure and construction, major steel consumers in China, showed a significant slowdown. Therefore, the steel volume produced by this country dropped 2% in 2015, the first reduction in more than three decades. In this scenario, iron ore prices fell by 28% in 2013, 43% over 2014, averaging US\$55.50/dmt (Platts, 62% Fe, N. China). On April 29, 2016, the index stood at US\$65.85/dmt.

Nevertheless, according to CRU, the iron ore seaborne market recorded growth of 2%, reaching 1.42 billion tons. China imported 914 million tons, a 1% increase when compared to 2014 and equivalent to almost 65% of total sales volume. Brazil shipped 364 million tons in 2015, 6% more than the year before.

China registered its most modest GDP growth in 25 years, reaching 6.9% during 2015. Industrial production, a strong indicator of the country's growth, grew by 6.1%, as compared to 8.3% in 2014, reinforcing prospects of a slowdown in the short term.

***Logistics, Port Logistics, Cement and Energy***

The performance of our logistics, cement and energy segments are directly related to the performance of our steel and mining segments. For the years ended on December 31, 2013, 2014 and 2015, these segments represented an aggregate of 10%, 12% and 12% of our net revenues, respectively, and an aggregated of 12%, 15% and 17% of our gross profit, respectively. A material portion of the revenues in these segments is derived from our steel and mining operations, which utilize our logistics network and energy output.

***Specific Events Affecting our Results of Operations***

***TLSA***

On September 20, 2013 we entered into an investment agreement with our partners in TLSA, Valec Engenharia, Construções e Ferrovias S.A. and Fundo de Desenvolvimento do Nordeste – FDNE, two Brazilian federal government entities focused on infrastructure and the development of the northeastern region, to implement the partial spin-off of TLSA. The operation was part of a business reorganization and resulted in the segregation of the assets of the Northeastern railway system into two systems: (i) Railway System I, operated by FTL, comprising the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá – Jorge Lins and (ii) the Railway System II, operated by TLSA, comprising the stretches between Missão Velha – Salgueiro, Salgueiro – Trindade, Trindade – Eliseu Martins, Salgueiro – Porto de Suape and Missão Velha – Porto de Pecém.

As a result of the partial spin-off and the subsequent entry into effect of the new shareholders' agreement, control of TLSA is now shared with other shareholders, who have veto rights over certain important corporate decisions. As a result, since December 27, 2013, we ceased to consolidate TLSA and began recognizing it in accordance with the equity accounting method. See "Note 7 to our consolidated financial statements included elsewhere in this Annual Report.

***Congonhas Minérios***

On November 30, 2015, we concluded the establishment of a strategic alliance with an asian consortium composed of ITOCHU Corporation, JFE Steel Corporation, POSCO, Ltd., Kobe Steel, Ltd., Nisshin Steel Co, Ltd. and China Steel Corp. (“Asian Consortium”).

The transaction consisted of a business combination of the iron ore and related logistic assets of CSN and Namisa. The Asian Consortium contributed its equity interest of Namisa (40%) into Congonhas Minérios S.A. (“Congonhas Minérios”), a mining subsidiary of CSN, and CSN contributed the Casa de Pedra iron ore mine, its 60% ownership interest in Namisa, an 8.63% ownership interest in MRS and the rights to manage and operate the port concession in the Itaguaí Port (TECAR).

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Considering the position of Congonhas Minérios' assets, the contributions made by the Asian Consortium in the transaction, as well as adjustments resulting from the negotiations between the parties and adjustments of debt, cash, working capital, CSN and the Asian Consortium held, respectively, equity stakes at 87.52% and 12.48% in the capital stock of Congonhas Minérios upon conclusion of the transaction.

Part of the iron ore produced by Congonhas Minérios will be sold to members of the Asian Consortium and to CSN. Such rights are reflected in long-term supply agreements entered into on November 30, 2015, which terms were negotiated on usual market conditions. CSN also ensured the use of TECAR for import of raw materials through a long-term agreement.

The transaction was concluded by the signing of a shareholders agreement by the shareholders of Congonhas Minérios, on November 30, 2015.

The following steps were carried out in order to conclude the transaction:

- Payment of dividends by Namisa before closing of the transaction, amounting US\$1.4 billion (equivalent to R\$5.4 billion);
- Restructuring of Congonhas Minérios through the contribution, by CSN, of assets and liabilities related to Casa de Pedra, the rights to operate TECAR, 60% of Namisa's shares, 8.63% of MRS' shares, and US\$850 million in debt (equivalent to R\$3,370 million, as presented in note 9.b of our Consolidated Financial Statements);
- Acquisition, by Congonhas Minérios, of 40% of the Namisa shares held by the Asian Consortium, resulting in the incorporation of Namisa by Congonhas Minérios;
- Signing of a shareholders agreement ("Shareholders' Agreement") by the shareholders of Congonhas Minérios;
- Payment by CSN of US\$680 million relating to the acquisition of 4% of the shares held by the Asian Consortium in Congonhas Minérios and an additional US\$ 27 million relating to the acquisition of 0.16% of the shares held by the Asian Consortium in Congonhas, amounting to US\$ 707 million (equivalent to R\$2.7 billion);

- Settlement of the pre-existing agreements with Namisa for supply of high-silicon and low-silicon content ROM (Run of Mine), port services and ore beneficiation.

We applied IFRS 3 to record the November 2015 transaction, as there was a change of control of Namisa on November 30, 2015. We applied the acquisition method along with the step acquisition method. The acquirer for purposes of IFRS 3 was our subsidiary Congonhas Minérios which was also the surviving entity.

As a result of the step acquisition, we recognized a gain of R\$2,792 million in the value of our 60% interest in Namisa. In addition, as a result of the application of items B51 and B52 of IFRS 3, we recognized a gain of R\$621 million as a result of the termination of the then existing agreements between Namisa and Congonhas. We also recorded R\$528 million in taxes on the gains from the transaction.

Additionally, there was a change in our interest in Congonhas without representing a loss of control in Congonhas. Our participation decreased from 100% to 87.52%. According to IFRS 10, this change should be classified as an equity transaction and the resulting gain or loss on the new value of the participation must be recorded directly in equity. Because of this percentage change, we recorded a gain of R\$1,945 million.

The sum of the net gains recorded in our results and the gains recorded in our shareholders' equity was a total increase in our shareholders' equity from the November 2015 transaction of R\$4,830 million.

For further details, see Note 3 of our Consolidated Financial Statements included in this Annual Report.

## **Steel Markets and Product Mix**

### ***Supply and Demand for Steel***

Prices of steel are sensitive to changes in worldwide and local demand, which in turn are affected by worldwide and country-specific economic cycles, and to available production capacity. While the export price of steel (which is denominated in U.S. dollars or Euros, depending on the export destination) is the spot price, there is no exchange trading of steel or uniform pricing. Unlike other commodity products, steel is not completely fungible due to wide differences in terms of size, chemical composition, quality and specifications, all of which impact prices. Many companies (including us) discount their list prices for regular customers, making their actual transaction prices difficult for us to determine.

Historically, export prices and margins have been lower than domestic prices and margins because of the logistics costs, taxes and tariffs. The portion of production that is exported is affected by domestic demand, exchange rate fluctuations and the prices that can be charged in the international markets.

The following table shows Brazilian steel production and apparent consumption (domestic sales plus imports) and global production and demand for the periods indicated:



|  | 2015 <sup>(1)</sup> | 2014   | 2013   |
|--|---------------------|--------|--------|
| <b>Brazilian Market (in thousands of tons)<sup>(2)</sup></b> |                     |        |        |
| <i>Total Flat and Long Steel</i>                             |                     |        |        |
| <b>Production</b>  | 22,629              | 24,917 | 26,264 |
| <b>Apparent Consumption</b>                                  | 21,328              | 25,606 | 25,253 |
| <i>Hot-Rolled Coils and Sheets</i>                           |                     |        |        |
| <b>Production</b>  |                     | 4,541  | 4,262  |
| <b>Apparent Consumption</b>                                  |                     | 3,602  | 3,627  |
| <i>Cold-Rolled Coils and Sheets</i>                          |                     |        |        |
| <b>Production</b>  |                     | 2,516  | 2,753  |
| <b>Apparent Consumption</b>                                  |                     | 2,843  | 2,764  |
| <i>Galvanized Sheets</i>                                     |                     |        |        |
| <b>Production</b>  |                     | 2,887  | 3,020  |
| <b>Apparent Consumption</b>                                  |                     | 3,588  | 3,175  |
| <i>Tin Plates</i>  |                     |        |        |
| <b>Production</b>  |                     | 553    | 934    |
| <b>Apparent Consumption</b>                                  |                     | 534    | 560    |
| <b>Global Market (in millions of tons)</b>                   |                     |        |        |
| <b>Crude Steel Production</b>                                | 1,622               | 1,670  | 1,649  |

**Source: IABr and WSA.**

- (1) Some information for 2015 was not yet available as of the date of this annual report.  
(2) Information about production excludes intra steel companies' sales.

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Sales trends in both the domestic and foreign markets are forecasted monthly based on historical data of the preceding months. CSN uses its own information system to remain current on market developments so that it can respond swiftly to fluctuations in demand.

CSN considers its flexibility in shifting between markets, and its ability to monitor and optimize inventory levels in light of changing demand, as key to its success.

We have a strategy of increasing the portion of our sales attributable to higher value-added coated products, particularly galvanized flat steel and tin plate products. Galvanized products are directed at the automotive, construction and home appliance industries. Tin plate products are used by the steel packaging market.

|                              | Sales Volume <sup>(1)</sup> |              |              |             |             |             |                   |             |             |
|------------------------------|-----------------------------|--------------|--------------|-------------|-------------|-------------|-------------------|-------------|-------------|
|                              | Tons                        |              |              | In Market*  |             |             | % of Sales Volume |             |             |
|                              | 2015                        | 2014         | 2013         | 2015        | 2014        | 2013        | 2015              | 2014        | 2013        |
| <b><u>Domestic Sales</u></b> |                             |              |              |             |             |             |                   |             |             |
| <b>Slabs</b>                 | 6                           | 11           | 11           | 0%          | 0%          | 0%          | 0%                | 0%          | 0%          |
| <b>Hot-Rolled</b>            | 1,070                       | 1,521        | 2,107        | 36%         | 41%         | 45%         | 21%               | 29%         | 34%         |
| <b>Cold-Rolled</b>           | 558                         | 682          | 798          | 19%         | 18%         | 17%         | 11%               | 13%         | 13%         |
| <b>Galvanized</b>            | 820                         | 1,028        | 1,248        | 27%         | 28%         | 27%         | 16%               | 20%         | 20%         |
| <b>Tin Mill</b>              | 374                         | 423          | 486          | 13%         | 11%         | 11%         | 7%                | 8%          | 9%          |
| <b>Long Steel</b>            | 161                         | 52           |              | 5%          | 1%          |             | 3%                | 1%          |             |
| <b>Subtotal</b>              | <b>2,988</b>                | <b>3,718</b> | <b>4,650</b> | <b>100%</b> | <b>100%</b> | <b>100%</b> | <b>60%</b>        | <b>72%</b>  | <b>76%</b>  |
| <b><u>Sales abroad</u></b>   |                             |              |              |             |             |             |                   |             |             |
| <b>Slabs</b>                 |                             | -            | -            | 0%          | 0%          | 0%          | 0%                | 0%          | 0%          |
| <b>Hot-Rolled</b>            | 235                         | 53           | 20           | 12%         | 4%          | 1%          | 5%                | 1%          | 0%          |
| <b>Cold-Rolled</b>           | 204                         | 65           | 66           | 10%         | 4%          | 4%          | 4%                | 1%          | 1%          |
| <b>Galvanized</b>            | 717                         | 481          | 468          | 35%         | 33%         | 31%         | 14%               | 9%          | 8%          |
| <b>Tin Mill</b>              | 141                         | 115          | 159          | 7%          | 8%          | 10%         | 3%                | 2%          | 3%          |
| <b>Long Steel</b>            | 724                         | 746          | 754          | 36%         | 51%         | 54%         | 14%               | 14%         | 12%         |
| <b>Subtotal</b>              | <b>2,022</b>                | <b>1,460</b> | <b>1,467</b> | <b>100%</b> | <b>100%</b> | <b>100%</b> | <b>40%</b>        | <b>28%</b>  | <b>24%</b>  |
| <b>Total</b>                 | <b>5,010</b>                | <b>5,177</b> | <b>6,117</b> |             |             |             | <b>100%</b>       | <b>100%</b> | <b>100%</b> |
| <b><u>Total Sales</u></b>    |                             |              |              |             |             |             |                   |             |             |
| <b>Slabs</b>                 | 6                           | 11           | 11           |             |             |             | 0%                | 0%          | 0%          |
| <b>Hot-Rolled</b>            | 1,305                       | 1,574        | 2,127        |             |             |             | 26%               | 30%         | 35%         |
| <b>Cold-Rolled</b>           | 762                         | 747          | 864          |             |             |             | 15%               | 14%         | 14%         |
| <b>Galvanized</b>            | 1,537                       | 1,509        | 1,716        |             |             |             | 31%               | 29%         | 28%         |
| <b>Tin Mill</b>              | 515                         | 538          | 645          |             |             |             | 10%               | 10%         | 11%         |
| <b>Long Steel</b>            | 885                         | 798          | 754          |             |             |             | 18%               | 15%         | 12%         |
| <b>Total</b>                 | <b>5,010</b>                | <b>5,177</b> | <b>6,117</b> |             |             |             | <b>100%</b>       | <b>100%</b> | <b>100%</b> |

<sup>1</sup>% of Sales Volume in Market means the participation of each line of product into the group of domestic sales and sales abroad.

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|                              | Net Operating Revenues <sup>(1)</sup> |               |               |                             |             |             |             |             |             |      |
|------------------------------|---------------------------------------|---------------|---------------|-----------------------------|-------------|-------------|-------------|-------------|-------------|------|
|                              | In millions of R\$                    |               |               | % of Net Operating Revenues |             |             | Total       |             |             |      |
|                              | 2015                                  | 2014          | 2013          | In Market*                  | 2015        | 2014        | 2013        | 2015        | 2014        | 2013 |
| <b><u>Domestic Sales</u></b> |                                       |               |               |                             |             |             |             |             |             |      |
| Slabs                        | 6                                     | 11            | 10            | 0%                          | 0%          | 0%          | 0%          | 0%          | 0%          | 0%   |
| Hot-Rolled                   | 1,789                                 | 2,769         | 3,471         | 27%                         | 33%         | 37%         | 16%         | 25%         | 29%         |      |
| Cold-Rolled                  | 1,060                                 | 1,411         | 1,509         | 16%                         | 17%         | 16%         | 9%          | 13%         | 12%         |      |
| Galvanized                   | 1,991                                 | 2,609         | 2,888         | 30%                         | 31%         | 30%         | 18%         | 23%         | 24%         |      |
| Tin Plate                    | 1,475                                 | 1,589         | 1,651         | 22%                         | 19%         | 17%         | 13%         | 14%         | 14%         |      |
| Long steel                   | 291                                   | 105           |               | 4%                          | 1%          |             | 3%          | 1%          |             |      |
| <b>Subtotal</b>              | <b>6,612</b>                          | <b>8,493</b>  | <b>9,529</b>  | <b>100%</b>                 | <b>100%</b> | <b>100%</b> | <b>59%</b>  | <b>75%</b>  | <b>79%</b>  |      |
| <b><u>Sales abroad</u></b>   |                                       |               |               |                             |             |             |             |             |             |      |
| Slabs                        | -                                     | -             | -             | 0%                          | 0%          | 0%          | 0%          | 0%          | 0%          | 0%   |
| Hot-Rolled                   | 386                                   | 81            | 30            | 9%                          | 3%          | 0%          | 3%          | 1%          | 0%          |      |
| Cold-Rolled                  | 403                                   | 124           | 112           | 9%                          | 5%          | 4%          | 4%          | 1%          | 1%          |      |
| Galvanized                   | 1,734                                 | 1,009         | 893           | 40%                         | 37%         | 33%         | 16%         | 9%          | 7%          |      |
| Tin Plate                    | 421                                   | 280           | 345           | 10%                         | 10%         | 13%         | 4%          | 2%          | 3%          |      |
| Long steel                   | 1,388                                 | 1,269         | 1,223         | 32%                         | 46%         | 50%         | 12%         | 11%         | 10%         |      |
| <b>Subtotal</b>              | <b>4,332</b>                          | <b>2,764</b>  | <b>2,603</b>  | <b>100%</b>                 | <b>100%</b> | <b>100%</b> | <b>39%</b>  | <b>25%</b>  | <b>21%</b>  |      |
| <b>Total</b>                 | <b>10944</b>                          | <b>11,257</b> | <b>12,132</b> |                             |             |             | <b>100%</b> | <b>100%</b> | <b>100%</b> |      |
| <b><u>Total Sales</u></b>    |                                       |               |               |                             |             |             |             |             |             |      |
| Slabs                        | 6                                     | 11            | 10            |                             |             |             |             |             |             |      |
| Hot-Rolled                   | 2,175                                 | 2,849         | 3,501         |                             |             |             |             |             |             |      |
| Cold-Rolled                  | 1,463                                 | 1,535         | 1,621         |                             |             |             |             |             |             |      |
| Galvanized                   | 3,725                                 | 3,618         | 3,781         |                             |             |             |             |             |             |      |
| Tin Plate                    | 1,896                                 | 1,869         | 1,996         |                             |             |             |             |             |             |      |
| Long steel                   | 1,679                                 | 1,375         | 1,223         |                             |             |             |             |             |             |      |
| <b>Subtotal</b>              | <b>10,944</b>                         | <b>11,257</b> | <b>12,132</b> |                             |             |             | <b>0%</b>   | <b>0%</b>   | <b>0%</b>   |      |
| <b>By-Product</b>            | <b>215</b>                            | <b>89</b>     | <b>261</b>    |                             |             |             | <b>2%</b>   | <b>1%</b>   | <b>2%</b>   |      |
| <b>Total</b>                 | <b>11,159</b>                         | <b>11,346</b> | <b>12,393</b> |                             |             |             | <b>100%</b> | <b>100%</b> | <b>100%</b> |      |

<sup>1</sup>% of Sales Volume in Market means the participation of each line of product into the group of domestic sales and sales abroad.

### **Effects of Exchange Rate Fluctuations**

Our export revenues are substantially denominated in U.S. dollars and our domestic revenues are denominated in Brazilian *reais*.

A significant portion of our cost of products sold is commoditized raw materials, the prices of which are denominated in U.S. dollars. The balance of our cost of products sold and our cash operating expenses (i.e., operating expenses apart from depreciation and amortization) are denominated in *reais*.

The depreciation of the *Brazilian real* against the U.S dollar has the following effects on the results of our operations:

- Domestic revenues tend to be lower (in comparison with prior years) and this effect partially offset to the extent to which we sell more products than usual in the foreign market;
- The impact of *real* denominated costs of products sold and operating costs tend to be lower; and
- Financial expenses are increased to the extent to which our exposure to U.S. dollar-denominated debt is not protected. However, to the extent our future export transactions are hedged by our U.S. dollar denominated debt, our foreign exchange variation generated from the debt used as a hedge instrument is recognized directly in net equity as Other Comprehensive Income and will be charged against income at the time the future export transactions occur.

The depreciation of the *Brazilian real* against the U.S dollar has the following effects on the results of our operations:

- Foreign revenues tend to be lower (in comparison with prior years) and this effect is partially offset to the extent to which we sell more products than usual in the domestic market;
- The impact of *real* denominated costs of products sold and operating costs tends to be higher; and
- Financial expense is reduced to the extent to which our exposure to U.S. dollar-denominated debt is not protected. However, to the extent our future export transactions are hedged by our U.S. dollar denominated debt, our foreign exchange variation generated from the debt used as a hedge instrument is recognized directly in net equity as Other Comprehensive Income and will be charged against income at the time the future export transactions occur.

The impact of fluctuations in the exchange rate of the *real* against other currencies on the results of our operations can be seen in the “foreign exchange and monetary gain (loss), net” line in our income statement, although that amount is partially offset by the net financial income (or expense) attributable to the profit (or loss) on the derivative transaction of our foreign currency-denominated debt. In order to minimize the effects of the exchange rate fluctuations, we may use derivative transactions, including currency swap and foreign currency option agreements. For a discussion of the possible impact of fluctuations in the foreign currency exchange and interest rates on our principal financial instruments and positions, see “Item 11. Quantitative and Qualitative Disclosures About Market Risk.”



Table of contents**Effects of Inflation and Interest Rates**

Inflation rates in Brazil have been significantly volatile in the past. Inflation rates remained relatively stable from 2003 to 2004, decreased in 2005 and 2006 and increased in 2007 and 2008. In 2009, for the first time since its creation in 1989, the IGP-M inflation index recorded a deflation in a calendar year, equivalent to 1.71%.

In 2012, the index increased 7.8% and in 2013, 2014 and 2015, the IGP-M index increased 5.9%, 3.7% and 10.5%, respectively, driven by domestic factors (including the increase in regulated prices, such as gasoline and energy) as well external factors such as the strength of the U.S. dollar.

Inflation also affects our financial performance by increasing our costs and expenses denominated in *reais* that are not linked to the U.S. dollar. Our cash costs and operating expenses are substantially denominated in *reais* and have tended to follow the Brazilian inflation ratio, because our suppliers and service providers generally increase or decrease prices to reflect Brazilian inflation. In addition, some of our *real*-denominated debt is indexed to take into account the effects of inflation. Under this debt, the principal amount is generally adjusted with reference to inflation indexes. In addition, a significant portion of our *real*-denominated debt bears interest based on the Interbank Deposit Certificate (*Certificado de Depósito Interbancário*), or CDI, rate which is partially adjusted for inflation.

The table below shows the Brazilian general price index and the CDI rates for the periods shown:

|                                      | <b>Year Ended December 31,</b> |             |             |
|--------------------------------------|--------------------------------|-------------|-------------|
|                                      | <b>2015</b>                    | <b>2014</b> | <b>2013</b> |
| <b>Inflation (IGP-M)<sup>1</sup></b> | 10.50%                         | 3.70%       | 5.90%       |
| <b>CDI<sup>2</sup></b>               | 13.20%                         | 10.80%      | 8.10%       |

**Source: Fundação Getúlio Vargas, or FGV, and CETIP.**

(1) The IGP-M inflation is the general market price index measured by the FGV.

(2) The Interbank Deposit Rate, or CDI, represents the average interbank deposit rate performed during a given day in Brazil (accrued as of the last month of the period, annualized).

**Accounting for mining production utilized by our steel production**

We are currently self-sufficient regarding the iron ore used in our steel production except for pellets. The iron ore required is extracted from our Casa de Pedra mine, which in 2015 amounted to approximately 5.0 million tons of its total iron ore production of approximately 26.2 million tons. The remainder of the iron ore production is sold to third parties in Brazil and throughout the world.

The cost of iron ore regarding our steel production is recorded on our income statement in the cost of goods sold line item as its extraction cost plus transport from the mine. In 2015, 2014 and 2013, these costs were R\$366 million, R\$422 million and R\$372 million, respectively.





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After the closing of the transaction between CSN and the Asian Consortium, as announced on December 12, 2014 and November 30, 2015 the cost of iron ore regarding our steel production will be recorded as from December, 2015 at adjusted market prices and conditions, instead of its extraction cost plus transport from the mine, as our mining operations will be concentrated in our controlled company, Congonhas Minérios S.A, which will sell iron ore to CSN to produce steel. Details of the transaction between CSN and the Asian Consortium and related conditions precedent for closing are described on Item “4D. Property, Plant and Equipment”, Acquisitions and Dispositions.

### **Critical Accounting Estimates**

We prepared our consolidated financial statements as of and for the year ended December 31, 2015 in accordance with IFRS, as issued by the IASB.

In preparing our consolidated financial statements, we make estimates concerning a variety of matters. Some of these matters are highly uncertain, and our estimates involve judgments we make based on the information available to us. In the discussion below, we have identified several of these matters for which our financial presentation would be materially affected if either (1) we used different estimates that we could reasonably have used or (2) in the future we change our estimates in response to changes that are reasonably likely to occur.

This discussion addresses only those estimates that we consider most important based on the degree of uncertainty and the likelihood of a material impact if we used a different estimate. There are many other areas in which we use estimates about uncertain matters, but the reasonably likely effect of changed or different estimates is not material to our financial presentation.

### **Impairment of long-lived assets, intangible assets, goodwill and financial assets**

In accordance with IAS 36 “Impairment of assets”, long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset.

If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

A determination of the fair value of an asset requires management to make certain assumptions and estimates with respect to projected cash inflows and outflows related to future revenues and expenditures. These assumptions and estimates can be influenced by different external and internal factors, such as economic and industry trends, interest rates and changes in the marketplace. A change in the assumptions and estimates that we use could change our estimate of the expected future net cash flows and lead to the recognition of an impairment charge in results of operations relating to our property, plant and equipment.

Assets that have an indefinite useful life, such as goodwill, are not subject to amortization and are tested annually for impairment in accordance with IAS 36 “Impairment of assets”. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Goodwill is allocated to Cash-Generating Units (CGUs) for impairment testing purposes. The allocation is made to

Cash-Generating Units or groups of Cash-Generating Units that are expected to benefit from the business combination from which the goodwill arose, and the unit is not greater than the operating segment.

Financial assets are reviewed for impairment at the end of each reporting period and we assess whether there is objective evidence that a financial asset or a group of financial assets is impaired.

In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost is also objective evidence of impairment. Determining what is considered a “significant” or “prolonged” decline requires judgment.

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For this judgment we assess, among other factors, the historical changes in the equity prices, the duration and proportion in which the fair value of the investment is lower than its cost, and the financial health and short-term prospects of the business for the investee, including factors such as: industry and segment performance, changes in technology, and operating and financial cash flows. If there is any of this evidence of impairment of available-for-sale financial assets, the cumulative loss measured as the difference between the acquisition cost and the current fair value, less any impairment loss on the financial asset previously recorded in profit or loss is reclassified from shareholders' equity and recognized in the income statement. Impairment losses recognized in the income statement as available-for-sale instruments are not reversed through the income statement.

On December 31, 2015, we owned, directly and indirectly, 20.69% of the preferred shares (USIM5) and 14.13% of the common shares (USIM3) of Usinas Siderúrgicas de Minas Gerais S.A. ("Usiminas"), resulting from various acquisitions on the stock exchange since mid-2010. The instruments are classified as financial instruments available for sale and measured at their fair value based on their quoted market price in the Brazilian stock exchange (BOVESPA) on December 31, 2015.

### **Depreciation and amortization**

The basis for calculation of depreciation is the cost of the asset less the estimated residual value upon sale. While no specific depreciation method is recommended, the method chosen should be applied consistently for all significant components of assets and allocation of the depreciation should be on a systematic basis for each one of the accounting periods that best represents the realization of the economic benefits during the usable lives of assets.

The useful lives are reviewed every fiscal year for all the Company's units. See further details in Note 10 to our consolidated financial statements.

### **Fair value of business combinations**

The acquisition method is used to account for each business combination that we conduct. The payment obligation transferred by acquiring an entity is measured by the fair value of the assets transferred, liabilities incurred and equity instruments issued. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement, where applicable. Acquisition-related costs are recognized in profit or loss for the year, as incurred. Identifiable assets acquired and liabilities assumed in a business combination are initially measured at their fair values at the acquisition date. We recognize non-controlling interests in the acquiree according to the proportional non-controlling interest held in the fair value of the acquiree's net assets.

### **Derivatives**

IAS 39, "Financial Instruments: Recognition and Measurement", requires 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 the statement of income or in other comprehensive income, in the latter case depending on whether a transaction is designated as an effective hedge. Our derivative instruments do not qualify for hedge accounting. Changes in the fair value of any of these derivative instruments are immediately recorded in the statements of income under "Financial income" and "Financial expenses". We use derivatives for hedging purposes. We apply hedge accounting on our cash flow hedge in order to protect ourselves against exposure to changes in cash flows due to foreign currency risk associated with our recognized debt and with highly probable forecast transactions that may affect our net results. Our hedging instrument are non-derivative monetary items.

Therefore, the effective portion of the foreign exchange gains and losses are accounted for in other comprehensive income. The ineffective portion of the gain or loss on the hedging instrument, if any, is accounted for in income (loss). With respect to the fair value measurement, we must make assumptions such as to future foreign currency exchange and interest rates. For a discussion of the possible impact of fluctuations in the foreign currency exchange and interest rates on our principal financial instruments and positions, see “Item 11. Quantitative and Qualitative Disclosures About Market Risk.”

**Pension plans**

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We sponsor defined benefit pension plans covering some of our retirees. We account for these benefits in accordance with IAS 19, "Employee Benefits". The determination of the amount of our obligations for pension benefits depends on certain actuarial assumptions. These assumptions are described in Note 27 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 IFRS, when the benefits of a plan are increased, the portion of the increased benefit related to past services of employees is recognized in profit or loss until the benefits become vested. The Company recognize all the actuarial gains and losses resulting from defined benefit plans immediately in other comprehensive income and then transferred within equity. If the plan is extinguished, actuarial gains and losses are recognized in profit or loss.

Some of the Company's entities offered a postretirement healthcare benefit to their employees. The expected costs of these benefits were accumulated during the employment period, and are calculated using the same accounting method used for the defined benefit pension plans.

**Deferred taxes**

We compute and pay income taxes based on results of operations determined under Brazilian Corporate Law. A deferred income tax liability is recognized for all temporary tax differences, while a deferred income tax asset is recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary difference can be utilized. Deferred tax assets and liabilities are classified as long-term. Tax assets and liabilities are offset if the entity has a legally enforceable right to offset them and they are related to taxes levied by the same taxing authority. If the criterion for offset of current tax assets and liabilities is met, deferred tax assets and liabilities will also be offset. The income tax related to items recognized directly in equity in the current period or in a prior period is recognized directly in the same account. We regularly review the deferred income tax assets for recoverability and will only recognize these if we believe that it is probable that the deferred income tax assets will be realized, based on historical taxable income, projected future taxable income, and the expected timing of the reversals of existing temporary differences. If we operate at a loss or are unable to generate sufficient future taxable income, or if there is a material change in the actual effective tax rates or discount rates, the time period over which the underlying temporary differences become taxable or deductible, or any change in its future projections, we reduce the carrying amount of deferred income tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred income tax asset to be realized.

**Contingencies and disputed taxes**

We record provisions for contingencies relating to legal proceedings with respect to which we deem the likelihood of an unfavorable outcome to be probable and the loss can be reasonably estimated. This determination is made based on the opinion of our internal and external legal counsel. We believe these contingencies are properly recognized in our financial statements in accordance with IAS 37 "Provision, Contingent Liabilities and Contingent Assets". We are also involved in judicial and administrative proceedings that are aimed at obtaining or defending our legal rights with respect to taxes that we believe to be unconstitutional or otherwise not required to be paid by us. We believe that these proceedings will ultimately result in the realization of contingent tax credits or benefits that can be used to settle direct and indirect tax obligations owed to the Brazilian Federal or State Governments or to settle municipal tax obligations owed to the corresponding Municipality as per our laws. We do not recognize these contingent tax credits or benefits in our financial statements until realization of such gain contingencies has been resolved. This occurs when a final irrevocable decision is rendered by the courts in Brazil. The accrual for the legal obligation related to the current direct or indirect tax obligations offset is not reversed until such time as the utilization of the contingent tax credits or benefits is ultimately realized. The accounting for the contingent tax credits is in accordance with accounting for

contingent assets under IAS 37. Our accruals include interest on the tax obligations that we may offset with contingent tax credits or benefits at the interest rate defined in the relevant tax law. The recorded accruals for these disputed taxes and other contingencies may change in the future due to new developments in each matter, such as changes in legislation, irrevocable, final judicial decisions specific to us, or changes in approach, such as a change in settlement strategy in dealing with these matters. For further information on the judicial and administrative proceedings in which we are involved, see “Item 8A. Consolidated Statements and Other Financial Information—Legal Proceedings”.

### **Allowance for doubtful accounts**

We consider a provision for bad debts in our trade accounts receivable in order to reflect our expectation as to the net realizable value thereof. This provision is estimated based on an analysis of our receivables and is periodically reviewed to maintain real expectation of collectability of our accounts receivable.

### **Mineral Reserves and Useful life of mine**

The estimates of probable and proven reserves are periodically evaluated and updated. These reserves are determined using generally accepted geological valuation techniques. The method of calculation requires the use of different assumptions by internal specialists and changes in some of these assumptions may have significant impact on probable and proven iron ore reserves recorded and on the useful life of mines.

The tangible assets that are mine-specific, are depreciated over the shorter of the normal useful lives of such assets or the useful life of the mine.

Exploration expenditures are recognized as expenses until the viability of mining activities is established, after this period the subsequent development costs are capitalized. Exploration and valuation expenditures include:

- Research and analysis of historical data related to area exploration;
- Topographic, geological, geochemical and geophysical studies;
- Determine the mineral asset's volume and quality/grade;
- Examine and test the extraction processes and methods;
- Topographic surveys of transportation and infrastructure needs;
- Market and financial studies;

The development costs of new mineral deposits or capacity expansion in mine operations are capitalized and amortized using the produced (extracted) units method based on the probable and proven ore quantities.

The development stage includes:

- Drillings to define the ore body;
- Access and draining plans;
- Advance removal of overburden (top soil and waste material removed prior to initial mining of the ore body) and waste material (non-economic material that is intermingled with the ore body).

Stripping costs (the costs associated with the removal of overburden and other waste materials) incurred during the development of a mine, before production commences, are capitalized as part of the depreciable cost of developing the property. Such costs are subsequently amortized over the useful life of the mine based on proven and probable reserves.

Stripping costs in the production phase are included in the cost of the inventory produced, except when a specific extraction campaign is made to access deeper deposits than of the ore body. In these cases, costs are capitalized and taken to noncurrent assets when the mineral ore deposit is extracted and are amortized over the useful life of the ore body.

### **Property, Plant and Equipment**

In accordance with our accounting policy, the cost of maintenance in operating assets is capitalized when it does not occur annually and results in an increase in the useful life of the asset. Depreciation is recognized on an accrual basis until the next maintenance event of the relevant asset. Expenditures for maintenance and repairs in operating assets, that are necessary to maintain assets under normal conditions of use, are charged to operating costs and expenses, as incurred.



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As of December 31, 2015, 2014 and 2013, the Company capitalized borrowing costs amounting to R\$166.4 million, R\$165.8 million and R\$490.7 million, respectively. These costs are basically estimated for the cement, mining and long steel projects, mainly relating to: new integrated cement plant, (ii) Casa de Pedra expansion (iii); long steel mill in the city of Volta Redonda (RJ).

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### Recently Issued Accounting Pronouncements Adopted and Not Adopted by Us

The standards, amendments to standards and interpretations that became effective as from January, 2015 were not applicable to the Group.

Additionally, the standards, amendments to standards and IFRS interpretations issued by the IASB that are not yet effective and were not early adopted by the Group for the year ended December 31, 2015 is described in Note 2 to our consolidated financial statements contained in “Item 18. Financial Statements.”

### Results of Operations

The following table presents certain financial information with respect to our operating results for each of the years ended December 31, 2015, 2014 and 2013:

| Income Statement Data:                    | 2015   | Year Ended December 31,                     |         |         |
|---|--|---|---------|---------|
|   | (in millions of US\$, except per share data) | 2015  | 2014    | 2013    |
|   |  | (in millions of R\$, except per share data) |         |         |
| Net operating revenues                    | 3,927  | 15,332                                      | 16,126  | 17,312  |
| Cost of sales and/or services             | -3,022                                       | -11,800                                     | -11,592 | -12,423 |
| Gross Profit                              | 905  | 3,532                                       | 4,534   | 4,889   |
| Operating expenses                        |  |   |         |         |
| Selling                                   | -368   | -1,436                                      | -1,042  | -875    |
| General and administrative                | -121   | -471  | -438    | -486    |
| Equity in results of affiliated companies | 297  | 1,160                                       | 331     | 158     |
| Other operating expenses                  | -342   | -1,334                                      | -657    | -1,134  |

|   |        |        |         |         |
|---|--------|--------|---------|---------|
| <b>Other operating income</b>   | 955    | 3,727  | 90      | 567     |
| <b>Total</b>  | 422    | 1,646  | -1,716  | -1,770  |
| <b>Operating income</b>   | 1,326  | 5,178  | 2,818   | 3,120   |
| <b>Financial Results</b>  |        |        |         |         |
| <b>Financial income</b>   | 125    | 492    | 172     | 171     |
| <b>Financial expenses</b>   | -989   | -3,865 | -3,253  | -2,683  |
| <b>Income before taxes</b>  | -462   | -1,805 | -263    | 608     |
| <b>Income taxes</b>   |        |        |         |         |
| <b>Current</b>  | -98    | -381   | -528    | -1,291  |
| <b>Deferred</b>   | 49     | 192    | 679     | 1,217   |
| <b>Total</b>  | -48    | -189   | 151     | -74     |
| <b>Net income (loss) for the year</b>                                   | 414    | 1,616  | -112    | 534     |
| <b>Net Income (loss) income attributable to noncontrolling interest</b> | 92     | 358    | -7      | 25      |
| <b>Net (loss) income attributable to Companhia Siderúrgica Nacional</b> | 322    | 1,258  | -105    | 509     |
| <b>Basic (loss) earnings per common share</b>                           | 0.2374 | 0.9269 | -0.0744 | 0,34913 |
| <b>Diluted (loss) earnings per common share</b>                         | 0.2374 | 0.9269 | -0.0744 | 0,34913 |

Table of contents**Year 2015 Compared to Year 2014**

We maintain integrated operations in five business segments: steel, mining, logistics, cement and energy. We manage and control the performance of our various business segments, considering the proportional interest in our jointly controlled entities, MRS Logística S.A., and CBSI - Companhia Brasileira de Serviços de Infraestrutura, reflected on figures described below, which may differ from those accounted according to IFRS.

In 2013, the financial statement was substantially impacted by the deconsolidation of Transordestina Logística S.A., which began to be recognized under the equity accounting method, due to the partial spin-off and the entry into effect of the new shareholders' agreement.

Since December 1, 2015, we have been consolidating Namisa, which was recorded under the equity method until November 30, 2015. On December 31, 2015 Namisa was merged into Congonhas Minérios.

Our consolidated results for the years ended December 31, 2015 and 2014 by business segment are presented below:

| <b>Consolidated Results</b>   | <b>Year Ended December 31, 2015</b> |               |                       |                          |               |               |                     | <b>Consolidated</b> |
|-------------------------------|-------------------------------------|---------------|-----------------------|--------------------------|---------------|---------------|---------------------|---------------------|
|                               | <b>Steel</b>                        | <b>Mining</b> | <b>Port Logistics</b> | <b>Railway Logistics</b> | <b>Cement</b> | <b>Energy</b> | <b>Eliminations</b> |                     |
| <b>Net operating revenues</b> | 11,203                              | 3,187         | 213                   | 1,157                    | 432           | 245           | -1,104              | 15,332              |
| <b>Domestic Market</b>        | 6,757                               | 175           | 213                   | 1,157                    | 432           | 245           | -1,227              | 7,752               |
| <b>Export Market</b>          | 4,446                               | 3,012         | -                     | -                        | -             | -             | 122                 | 7,580               |
| <b>Cost of goods sold</b>     | -9,127                              | -2,324        | -142                  | -788                     | -330          | -196          | 1,107               | -11,800             |
| <b>Gross profit</b>           | 2,076                               | 864           | 71                    | 369                      | 102           | 49            | 2                   | 3,532               |
| <b>Adjusted EBITDA*</b>       | 1,791                               | 1,171         | 63                    | 469                      | 75            | 43            | -361                | 3,251               |

| <b>Consolidated Results</b>   | <b>Year Ended December 31, 2014</b> |               |                       |                          |               |               |                     | <b>Consolidated</b> |
|-------------------------------|-------------------------------------|---------------|-----------------------|--------------------------|---------------|---------------|---------------------|---------------------|
|                               | <b>Steel</b>                        | <b>Mining</b> | <b>Port Logistics</b> | <b>Railway Logistics</b> | <b>Cement</b> | <b>Energy</b> | <b>Eliminations</b> |                     |
| <b>Net operating revenues</b> | 11,492                              | 4,109         | 202                   | 1,105                    | 440           | 324           | -1,547              | 16,126              |
| <b>Domestic Market</b>        | 8,650                               | 307           | 202                   | 1,105                    | 440           | 324           | -1,063              | 9,966               |
| <b>Export Market</b>          | 2,841                               | 3,803         | -                     | -                        | -             | -             | -484                | 6,160               |
| <b>Cost of goods sold</b>     | -8,672                              | -2,986        | -138                  | -753                     | -295          | -187          | 1,439               | -11,592             |
| <b>Gross profit</b>           | 2,820                               | 1,123         | 65                    | 352                      | 145           | 138           | -109                | 4,534               |
| <b>Adjusted EBITDA*</b>       | 2,935                               | 1,429         | 68                    | 407                      | 116           | 135           | -361                | 4,729               |

\*For more information on Adjusted EBITDA see "Results of Operations—Adjusted EBITDA."

## **Net Operating Revenues**

Net operating revenues decreased R\$794 million, or 5%, from R\$16,126 million recorded in 2014 to R\$15,332 million in 2015, due to the lower prices practiced in the mining segment.

Net domestic revenues decreased 22%, from R\$9,966 million in 2014 to R\$7,752 million in 2015, while net revenues of exports and sales abroad increased 23%, from R\$6,160 million in 2014 to R\$7,580 million in 2015, given the slowdown in the domestic economy and our strategy to redirect our sales to the foreign market.

### ***Steel***

Steel net operating revenues decreased R\$289 million, or 3%, from R\$11,492 million in 2014 to R\$11,203 million in 2015, due to a decrease in sales volume of 4% from 5,177 thousand tons in 2014 to 4,990 thousand tons in 2015.

Steel net domestic revenues decreased R\$1,894 million, or 22%, from R\$8,650 million in 2014 to R\$6,757 million in 2015, due to a decrease in sales volume of 20%, from 3,717 in 2014 to 2,969 million tons in 2015.

Steel net revenues from exports and sales abroad increased R\$1,605 million, or 56%, from R\$2,841 million in 2014 to R\$4,446 million in 2015, due to an increase of 39% in the sales volume to the foreign markets, based on the strategy to redirect sales as discussed above, from 1,460 in 2014 to 2,022 thousand tons in 2015.

## **Net Operating Revenues**

### ***Mining***

Total mining net operating revenues decreased R\$922 million, or 22%, from R\$4,109 million in 2014 to R\$3,187 million in 2015, mainly due to a decrease of 43% in average international iron ore prices, from US\$97/dmt in 2014 to US\$55/dmt in 2015, principally due to an increased supply capacity in Australia and Brazil, in addition to the significant slowdown in the infrastructure and construction sector, major steel consumers in China.

Mining net export revenues decreased R\$791 million, or 21%, from R\$3,803 million in 2014 to R\$3,012 million in 2015, mainly due to the decrease of 43% in average international iron ore prices partially offset by increased export sales volumes.

Mining net domestic revenues decreased R\$132 million, or 43%, from R\$307 million in 2014 to R\$175 million in 2015, mainly due to the decrease in iron ore prices and, to reduced sales volumes.

### ***Logistics***

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Logistics net operating revenues increased R\$62 million, or 5%, from R\$1,307 million in 2014 to R\$1,370 million in 2015. In 2015, net revenue from railway logistics totaled R\$1,157 million and net revenue from port logistics amounted to R\$213 million, while in 2014, net revenue from railway logistics totaled R\$1,105 million and net revenue from port logistics amounted to R\$202 million.

***Cement***

Cement net revenue decreased R\$9 million, or 2%, from R\$440 million in 2014 to R\$432 million in 2015, mainly due to a decrease of 1% in cement sales volume from 2,209 thousand tons in 2014 to 2,182 thousand tons in 2015.

***Energy***

Our net operating revenues from the energy segment decreased R\$80 million, or 25% of total net revenue from the energy segment, from R\$324 million in 2014 to R\$245 million in 2015, mainly due to the reduction of surplus energy available for selling and lower energy prices.

**Cost of Products Sold**

Consolidated cost of products sold increased R\$208 million, or 2% from R\$11,592 million in 2014 to R\$11,800 million in 2015, due to the impact from the foreign exchange variation on steel production cost partially compensated by a reduction of R\$662 million in the cost of products sold in the mining segment.

***Steel***

Consolidated steel costs of products sold were R\$9,127 million in 2015, representing a 5% increase as compared to the R\$8,672 million in 2014, mainly due to increased cost of imported raw materials, higher electricity consumption and maintenance.

The following table sets forth our flat steel production costs, the production costs per ton of steel and the portion of production costs attributable to the primary components of our costs of production. With the exception of coal and coke, which we import, and some metals (such as aluminum, zinc and tin) with domestic prices linked to international prices, our production costs are mostly denominated in *reais*.

| Steel Production Cost | 2015        |           | 2014        |           | Variation 2015 Vs. 2014 |           |
|-----------------------|-------------|-----------|-------------|-----------|-------------------------|-----------|
|                       | R\$ million | R\$ / ton | R\$ million | R\$ / ton | R\$ million             | R\$ / ton |
| Raw Materials         | 3,242       | 726       | 3,398       | 702       | -156                    | -34.6     |
| Iron Ore              | 377         | 84.33     | 422         | 87.3      | -45                     | 13.2      |
| Coal                  | 670         | 150       | 748         | 154.8     | -78                     | -4.3      |
| Coke                  | 874         | 195.7     | 694         | 143.6     | 180                     | -9.9      |
| Metals                | 443         | 99.1      | 335         | 69.4      | 108                     | 7.8       |
| Outsourced Slabs      | 278         | 62.29     | 467         | 96.7      | -189                    | -38.2     |
| Pellets               | 296         | 66.26     | 399         | 82.6      | -103                    | 3.1       |
| Scrap                 | 48          | 10.68     | 74          | 15.3      | -26                     | -7.3      |
| Other <sup>1</sup>    | 256         | 57.4      | 251         | 51.9      | 5                       | 1         |

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|                                 |       |       |       |       |      |       |
|---------------------------------|-------|-------|-------|-------|------|-------|
| <b>Labor</b>                    | 777   | 173.9 | 706   | 146.1 | 71   | 18.9  |
| <b>Other Production Costs</b>   | 2,471 | 553   | 2,359 | 488.2 | 112  | -33.3 |
| <b>Energy / Fuel</b>            | 718   | 160.9 | 495   | 102.4 | 223  | -21.5 |
| <b>Services and Maintenance</b> | 866   | 194   | 910   | 188.3 | -44  | 7.1   |
| <b>Tools and Supplies</b>       | 264   | 59.1  | 260   | 53.9  | 4    | -4.5  |
| <b>Depreciation</b>             | 408   | 91.4  | 575   | 119.1 | -167 | -10.7 |
| <b>Other</b>                    | 214   | 47.9  | 119   | 24.5  | 95   | -3.7  |
| <b>Total</b>                    | 6,489 | 1,453 | 6,455 | 1,336 | 34   | -49   |

(1) Includes limestone and dolomite

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We are self-sufficient in almost all raw materials used in the production of steel. The principal raw materials we use in our integrated steel mill include iron ore, coke, coal (from which we produce most of our coke necessities), limestone, dolomite, aluminum, tin and zinc. In addition, our production operations consume water, gases, electricity and ancillary materials.

We obtain our iron ore requirements except pellets from our Casa de Pedra mine located in the state of Minas Gerais, and the limestone and dolomite from our Bocaina mine in the city of Arcos, in the state of Minas Gerais. All coal and a portion of the coke we consume are acquired from different international producers “See Item 4B—Raw Materials and Suppliers.”

Our steel production costs increased R\$34 million, or 0,5%, from R\$6,455 million in 2014 to R\$6,489 million in 2015, mainly due to the increased cost of imported raw materials, higher electricity consumption and maintenance.

Our costs regarding purchase of outsourced slabs from third parties decreased R\$189 million, or 40%, from R\$467 million in 2014 to R\$278 million in 2015, due to lower consumption of slabs purchased from third parties.

Our coke costs increased R\$180 million, or 26%, from R\$694 million in 2014 to R\$874 million in 2015, corresponding to 13% of our steel production cost and an increase of 45% in energy consumption, partially offset by the depreciation of the real.

Our coal costs decreased R\$78 million, or 10%, from R\$748 million in 2014 to R\$670 million in 2015, corresponding to 10% of our steel production cost, mainly due to lower international coal prices, partially offset by the depreciation of the real.

Our scrap costs decreased R\$26 million, or 35%, from R\$74 million in 2014 to R\$48 million in 2015, mainly due to lower consumption.

Other production costs including energy/fuel, services and maintenance, tools and supplies and depreciation increased R\$112 million or 5%, from R\$2,359 million in 2014 to R\$2,471 million in 2015.

***Mining***

Our mining costs of products sold decreased R\$662 million, or 22%, from R\$2,986 million in 2014 to R\$2,324 million in 2015, mainly due to the decrease in volume sold and purchased from third parties.

***Logistics***

Cost of services attributable to our logistics segment increased R\$39 million, or 4%, from R\$891 million in 2014 to R\$930 million in 2015, due to the increases of R\$35 million and R\$4 million in the costs of railway logistics and port logistic services, respectively. For railway logistics the increase was mainly due to an increase in costs from MRS. For port logistics services, the increase was the higher volume of steel products transported during the period.

***Cement***

Cost of products sold attributable to our cement segment increased R\$35 million, or 12%, from R\$295 million reported in 2014 to R\$330 million in 2015, mainly due to purchase of Clinker to supply the Arcos plant.

***Energy***



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Cost of products sold attributable to our energy segment increased R\$9 million, or 5%, from R\$187 million in 2014 to R\$196 million in 2015.

**Gross Profit**

Gross profit decreased R\$1,002 million, or 22%, from R\$4,534 million in 2014 to R\$3,532 million in 2015, due to the decrease of R\$794 million in net revenues and to the increase of R\$208 million in cost of products sold, as discussed above..

*Steel*

Gross profit in the steel segment decreased R\$744 million, or 26%, from R\$2,820 million in 2014 to R\$2,076 million in 2015.

*Mining*

Our gross profit in the mining segment decreased R\$260 million, or 23% from R\$1,123 million in 2014 to R\$864 million in 2015.

**Logistics**

Gross profit in the logistics segment decreased R\$23 million, or 5%, from R\$416 million in 2014 to R\$440 million in 2015.

*Cement*

Gross profit in the cement segment decreased R\$44 million, or 30% from R\$145 million in 2014 to R\$102 million in 2015.

*Energy*

Gross profit in energy segment decreased R\$89 million, or 64%, from R\$138 million in 2014 to R\$49 million in 2015.

**Selling, general and administrative**

Selling, general and administrative expenses increased R\$426 million, or 29%, from R\$1,480 million in 2014 to R\$1,906 million in 2015. Selling expenses increased R\$394 million, or 38%, from R\$1,042 million in 2014 to R\$1,436 million in 2015, mainly due to an increase of iron ore CIF sales (sales including insurance and freight costs), while general and administrative expenses increased R\$32 million, or 7%, from R\$438 million in 2014 to R\$470 million in 2015.

**Other operating income (expenses)**

We had an increase of R\$2,958 million in “Other Operating Income and Expenses” to a net operating income of R\$2,392 million in 2015 as compared to R\$567 million of other net operating expenses in 2014 mainly due to the gain of R\$3,413 million, composed of a positive impact of R\$2,792 million of remeasurement at fair value of our previous

60% stake in Namisa and a gain in the settlement of preexisting relationship of R\$621 million as a result of the business combination, as explained in Item 5A “Specific Events Affecting our Results of Operations – Congonhas Minérios” section. Additionally, in 2015 we recorded tax credits of PIS and COFINS in the amount of R\$234 million which we can use to pay future tax obligations.

The gains above were partially offset by the increase in impairment of available-for-sale financial assets of R\$350 million and increase in provisions for tax, social security, labor, civil and environmental risks in the amount of R\$290 million. For more information, see Note 22 to the consolidated financial statements included in “Item 18. Financial Statements”.

#### **Equity Result in Results of Affiliated Companies**

Equity result increased R\$829 million, or 250%, from income of R\$331 million in 2014 to R\$1,160 million in 2015, mainly due to the increase on the result of the jointly-controlled investee Namisa from R\$673 million for the year ended December 31, 2014 to R\$1,157 million for the eleven-month period ended November 30, 2015, due to the exchange rate variation over Namisa’s cash position both proportional to our interest in this subsidiary.

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The investment in Namisa was accounted for under the equity method until November 30, 2015. In December CSN exchanged a stake in Congonhas Minérios for the 40% stake of the Consortium in Namisa and CSN became the majority shareholder of Namisa; accordingly, Namisa was consolidated as from December 1<sup>st</sup>, 2015. Details of the transaction between CSN and the Asian Consortium and related conditions precedent for closing are described on Item 4D. Property, Plant and Equipment, Acquisitions and Dispositions.

**Operating Income**

Operating income increased R\$2,360 million, or 84%, from R\$2,818 million in 2014 to R\$5,178 million in 2015 due to:

- The gain of R\$3,413 million arisen from the business combination of Namisa; and
- an increase of R\$829 million in equity result partially offset by;
- a decrease of R\$1,002 million in gross profit; and
- and an increase of R\$425 million in selling, general and administrative expenses.

**Financial expenses (income), net**

Our financial income and expenses generated a net financial expenses of R\$3,373 million in 2015 as compared to a net financial expenses of R\$3,081 million, an increase of R\$292 million in our financial expenses. This increase was mainly due to the depreciation of the *Real* which generated an increase in foreign exchange losses of R\$1,239 million in 2015 in comparison to 2014, partially offset by: (i) a higher gain in our derivatives transactions of R\$603 million in 2015 in comparison to 2014 and; (ii) R\$135 million greater financial income from short-term investments as a result of the strategy of repatriation of cash previously held in our offshore subsidiaries.

**Hedge Accounting**

CSN regularly exports a large portion of its iron ore production, as well as steel products. The revenue in reais from these exports is impacted by the fluctuation of the exchange rate. On the other hand, CSN raises funds in foreign currency through borrowings and financings, in addition to imports of metallurgical coal and coke which are used in its steelmaking process, among other production inputs. These dollar liabilities act as a natural hedge for oscillations in export revenue.

In order to better reflect the effect of exchange fluctuations on its financial statements, as of December 31, 2014 CSN began to designate part of its U.S. dollar-denominated liabilities as a hedge for future exports. As a result, the exchange variation arising from these liabilities were temporarily recorded directly in net equity as Other Comprehensive Income totaling to R\$1,520 as of December 31, 2015. The said amount is transferred to the income statement when the exports take place, thus allowing impacts from the exchange fluctuation on liabilities and exports to be recorded simultaneously. It is important to note that the adoption of hedge accounting does not involve the contracting of any type of financial instrument. For more information, see Note “11.d) Transactions with Derivative Financial Instruments” in our consolidated financial statements.

**Income Taxes**

Income tax expense in Brazil refers to federal income tax and social contribution. The statutory rates for these taxes applicable to the periods presented herein were 25% for federal income tax and 9% for the social contribution. Adjustments are made to the income in order to reach the effective tax expense or benefit in each fiscal year. As a result, our effective tax rate among exercises presents volatility.

At the statutory rates the balances owed totaled expenses of R\$614 million in 2015 and a benefit of R\$90 million in 2014 (34% of income before taxes and adjustments to the income). After adjustments to meet the effective rates, we recorded expenses for income tax and social contribution of R\$189 million in 2015, as compared to a benefit of R\$151 million in 2014. Expressed as a percentage of pre-tax income,

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income tax moved from 57% in 2014 to 10% in 2015. For the year ended December 31, 2015, these adjustments totaled a benefit of R\$425 million, comprised mainly of:

- a positive R\$394 million adjustment related to equity result;
- a benefit of R\$829 million related to results of subsidiaries taxed at different rates or not taxed;
- R\$632 million positive impact related to the remeasurement at fair value of the 60% stake in Namisa as a result of the business combination of the former joint-controlled entity;
- a negative R\$177 million adjustment related to tax loss and negative basis for which the tax credit was not recorded, and
- a negative impact of R\$1,143 million related to tax credits not recorded in the year.

For further information, see Note 15 to our consolidated financial statements.”

It is not possible to predict the future adjustments to the federal income tax and social contribution at statutory rates, as they depend on interest on stockholder’s equity, tax incentives, non-taxable factors including income from offshore operations, and tax losses from offshore operations, especially when expressed as a percentage of income.

### Net Income (Loss) for the year

In 2015, the Company recorded a net profit of R\$1,616 million, as compared to a net loss of R\$112 million in 2014.

### Year 2014 Compared to Year 2013

We maintain integrated operations in five business segments: steel, mining, logistics, cement and energy. We manage and control the performance of our various business segments, considering the proportional interest in our jointly controlled entities, Nacional Minérios S.A., MRS Logística S.A., and CBSI - Companhia Brasileira de Serviços de Infraestrutura, reflected on figures described below, which may differ from those accounted according to IFRS.

In 2013, the financial statement was substantially impacted by the deconsolidation of Transordestina Logística S.A. which began to be recognized under the equity accounting method, due to the partial spin-off and the entry into effect of the new shareholders’ agreement.

Our consolidated results for the years ended December 31, 2014 and 2013 by business segment are presented below:

| R\$ million                   | Logistics     |              |                   |                      |            |            |               | Year Ended                           |
|-------------------------------|---------------|--------------|-------------------|----------------------|------------|------------|---------------|--------------------------------------|
|                               | Steel         | Mining       | Port<br>Logistics | Railway<br>Logistics | Cement     | Energy     | Eliminations  | December<br>31, 2014<br>Consolidated |
| <b>Consolidated Results</b>   |               |              |                   |                      |            |            |               |                                      |
| <b>Net operating revenues</b> | <b>11,492</b> | <b>4,109</b> | <b>202</b>        | <b>1,105</b>         | <b>440</b> | <b>324</b> | <b>-1,547</b> | <b>16,126</b>                        |
| Domestic Market               | 8,650         | 307          | 202               | 1,105                | 440        | 324        | -1,063        | 9,966                                |

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|                           |               |               |             |             |             |             |              |                |
|---------------------------|---------------|---------------|-------------|-------------|-------------|-------------|--------------|----------------|
| Export Market             | 2,841         | 3,803         |             |             |             |             | -484         | 6,160          |
| <b>Cost of goods sold</b> | <b>-8,672</b> | <b>-2,986</b> | <b>-138</b> | <b>-753</b> | <b>-295</b> | <b>-187</b> | <b>1,439</b> | <b>-11,592</b> |
| <b>Gross profit</b>       | <b>2,820</b>  | <b>1,123</b>  | <b>65</b>   | <b>352</b>  | <b>145</b>  | <b>138</b>  | <b>-109</b>  | <b>4,534</b>   |
| <b>Adjusted EBITDA*</b>   | <b>2,935</b>  | <b>1,429</b>  | <b>68</b>   | <b>407</b>  | <b>116</b>  | <b>135</b>  | <b>-361</b>  | <b>4,729</b>   |

| R\$ million                   | Logistics     |               |                   |                      |             |             |               | Year Ended           |
|-------------------------------|---------------|---------------|-------------------|----------------------|-------------|-------------|---------------|----------------------|
|                               | Steel         | Mining        | Port<br>Logistics | Railway<br>Logistics | Cement      | Energy      | Eliminations  | December<br>31, 2013 |
| <b>Consolidated Results</b>   |               |               |                   |                      |             |             |               | <b>Consolidated</b>  |
| <b>Net operating revenues</b> | <b>12,393</b> | <b>5,297</b>  | <b>195</b>        | <b>1,074</b>         | <b>416</b>  | <b>212</b>  | <b>-2,274</b> | <b>17,312</b>        |
| Domestic Market               | 9,696         | 680           | 195               | 1,074                | 416         | 212         | -1,025        | 11,247               |
| Export Market                 | 2,697         | 4,617         |                   |                      |             |             | -1,249        | 6,065                |
| <b>Cost of goods sold</b>     | <b>-9,962</b> | <b>-2,829</b> | <b>-97</b>        | <b>-708</b>          | <b>-277</b> | <b>-161</b> | <b>1,612</b>  | <b>-12,423</b>       |
| <b>Gross profit</b>           | <b>2,431</b>  | <b>2,468</b>  | <b>97</b>         | <b>366</b>           | <b>139</b>  | <b>50</b>   | <b>-662</b>   | <b>4,890</b>         |
| <b>Adjusted EBITDA*</b>       | <b>2,454</b>  | <b>2,618</b>  | <b>82</b>         | <b>406</b>           | <b>101</b>  | <b>47</b>   | <b>-304</b>   | <b>5,404</b>         |

\*For more information on Adjusted EBITDA see "Results of Operations—Adjusted EBITDA."

## Net Operating Revenues

Net operating revenues decreased R\$1,186 million, or 7%, from R\$17,312 million recorded in 2013 to R\$16,126 million in 2014, due to a decrease in revenues from our steel and mining segments.

Net domestic revenues decreased 11%, from R\$11,247 million in 2013 to R\$9,966 million in 2014, while total of exports and sales abroad increased 2%, from R\$6,065 million in 2013 to R\$6,160 million in 2014.

### *Steel*

Steel net operating revenues decreased R\$902 million, or 7%, from R\$12,393 million in 2013 to R\$11,492 million in 2014, due to a decrease in sales volume of 15% from 6,117 thousand tons in 2013 to 5,177 thousand tons in 2014, partially offset by an increase of 10% in our average steel prices

Steel net domestic revenues decreased R\$1,045 million, or 11%, from R\$9,696 million in 2013 to R\$8,650 million in 2014, due to a decrease of 20% in sales volume from 4,650 thousand tons in 2013 to 3,718 thousand tons in 2014, mainly due to a reduction in domestic flat steel sales, impacted by the 3.2% downturn in industrial activity, as apparent steel consumption has a direct correlation with the GDP growth. This decrease in sales volume was partially offset by an increase of 11% in average domestic steel prices, driven principally by the real depreciation, which causes steel imports to become relatively more expensive.

Steel net revenues from exports and sales abroad increased R\$144 million, or 5%, from R\$2,697 million in 2013 to R\$2,841 million in 2014, due to an increase of 7% in the average steel prices to the foreign market given the real depreciation, which results in more favorable conditions to compete abroad, as our foreign prices are sensitive to international prices and the exchange rate. Our sales volume to the foreign markets remained stable in 2014 at 1,460 thousand tons when compared to 2013. *Logistics*

Logistics net operating revenues increased R\$38 million, or 3%, from R\$1,269 million reported in 2013 to R\$1,307 million in 2014. In 2014, net revenue from railway logistics totaled R\$1,105 million and net revenue from port logistics amounted to R\$202 million, while in 2013, net revenue from railway logistics totaled R\$1,074 million and net revenue from port logistics amounted to R\$195 million.

Our net revenue from logistic services to third parties was R\$ 1,015 million, or 78% of total net revenue from logistic services, in 2014 and R\$1,000 million, or 79%, in 2013.

### *Mining*

Total mining net operating revenues decreased R\$1,188 million, or 22%, from R\$5,297 million in 2013 to R\$4,109 million in 2014, mainly due to:

- A decrease of 28% in average international iron ore prices, from US\$135/dmt in 2013 to US\$97/dmt in 2014, principally due to a substantial upturn in exports by the main Australian mining companies coupled with a resilience of the high-cost Chinese producers, along with the downturn in investments in the China's real estate sector due to the gradual slowdown of the economy.
- The decrease in iron ore prices was partially offset by an increase of 17% in our iron ore sales, from 21.5 million tons in 2013 to 25.2 million tons in 2014. This volume increase came mainly from Casa de Pedra mine, which sales increased 29%, from 15.3 million tons in 2013 to 19.8 million tons in 2014, given the expansion of its iron ore production, which increased 40%, from 15.4 million tons in 2013 to 21.6 million tons in 2014, due to the ramp up of this mine.

Mining net export revenues decreased R\$814 million, or 17%, from R\$4,617 million in 2013 to R\$3,803 million in 2014, mainly due to the decrease of 28% in average international iron ore prices, partially offset by an increase of 17% in our iron ore exports, from 21.4 million tons in 2013 to 25.1 million tons in 2014, mainly from Casa de Pedra, as aforementioned.

Mining net domestic revenues decreased R\$373 million, or 59%, from R\$680 million in 2013 to R\$307 million in 2014, due to the decrease in iron ore prices and a reduction in domestic sales, from 157 thousand tons in 2013 to 138 thousand tons in 2014.



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Cement net revenue increased R\$25 million, or 6%, from R\$416 million in 2013 to R\$440 million in 2014, mainly due to an increase of 7% in cement sales volume from 2,046 thousand tons in 2013 to 2,185 thousand tons in 2014, with the ramp up of our cement grinding plant in Volta Redonda.

**Energy**

Our net operating revenues from the energy segment increased R\$113 million, or 53% of total net revenue from the energy segment, from R\$212 million in 2013 to R\$324 million in 2014, mainly due to the sale of surplus energy on the market.

Our net revenue from energy sales to third parties were R\$ 172 million, or 53%, in 2014 and R\$62 million, or 29%, in 2013.

**Cost of Products Sold**

Consolidated cost of products sold decreased R\$830 million, or 7% from \$12,423 million in 2013 to R\$11,592 million in 2014, mainly given a decrease in cost of products sold from our steel segment.

**Steel**

Consolidated steel costs of products sold were R\$8,672 million in 2014, representing a 13% decrease as compared to the R\$9,962 million recorded in 2013, mainly due to the decrease in steel sales volume.

Other than the periodic sale of excess inventories and the purchase by our subsidiaries of semi-finished products from third parties for further processing, our cost of products sold is comparable to our flat steel production cost.

The following table sets forth our flat steel production costs, the production costs per ton of steel and the portion of production costs attributable to the primary components of our costs of production. With the exception of coal and coke, which we import, and some metals (such as aluminum, zinc and tin) with domestic prices linked to international prices, our production costs are mostly denominated in *reais*.

| Steel Production Cost | 2014        |           | 2013        |           | Variation   |           |
|-----------------------|-------------|-----------|-------------|-----------|-------------|-----------|
|                       | R\$ million | R\$ / ton | R\$ million | R\$ / ton | R\$ million | R\$ / ton |
| Raw Materials         | 3,390       | 701.6     | 3,702       | 736.2     | -312        | -34.6     |
| Iron Ore              | 422         | 87.3      | 372         | 74.1      | 50          | 13.2      |
| Coal                  | 748         | 154.8     | 800         | 159.1     | -52         | -4.3      |
| Coke                  | 694         | 143.6     | 772         | 153.5     | -78         | -9.9      |
| Metals                | 335         | 69.4      | 310         | 61.6      | 25          | 7.8       |
| Outsourced Slabs      | 467         | 96.7      | 678         | 134.9     | -211        | -38.2     |
| Pellets               | 399         | 82.6      | 400         | 79.5      | -1          | 3.1       |
| Scrap                 | 74          | 15.3      | 114         | 22.6      | -40         | -7.3      |
| Other <sup>(1)</sup>  | 251         | 51.9      | 256         | 50.9      | -5          | 1         |

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|                                   |       |       |       |       |      |       |
|-----------------------------------|-------|-------|-------|-------|------|-------|
| <b>Labor</b>                      | 706   | 146.1 | 639   | 127.2 | 67   | 18.9  |
| <b>Other Production Costs</b>     | 2,359 | 488.2 | 2,621 | 521.5 | -262 | -33.3 |
| <b>Energy / Fuel</b>              | 495   | 102.4 | 623   | 123.9 | -128 | -21.5 |
| <b>Services and Maintenance</b>   | 910   | 188.3 | 911   | 181.2 | -1   | 7.1   |
| <b>Tools and Supplies</b>         | 260   | 53.9  | 294   | 58.4  | -34  | -4.5  |
| <b>Depreciation<sup>(2)</sup></b> | 575   | 119.1 | 652   | 129.8 | -77  | -10.7 |
| <b>Other</b>                      | 119   | 24.5  | 141   | 28.2  | -22  | -3.7  |
| <b>Total</b>                      | 6,455 | 1,336 | 6,962 | 1,385 | -507 | -49   |

(1) Includes limestone and dolomite

(2) The decrease of the depreciation in 2014 refers mainly to the revision of the useful lives of the assets performance.

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We are self-sufficient in almost all raw materials used in the production of steel. The principal raw materials we use in our integrated steel mill include iron ore, coke, coal (from which we produce most of our coke necessities), limestone, dolomite, aluminum, tin and zinc. In addition, our production operations consume water, gases, electricity and ancillary materials.

We obtain our iron ore requirements except pellets from our Casa de Pedra mine located in the state of Minas Gerais, and the limestone and dolomite from our Bocaina mine in the city of Arcos, in the state of Minas Gerais. The coal and coke we consume are acquired from different international producers “See Item 4B—Raw Materials and Suppliers.”

Our steel production costs decreased R\$507 million, or 7%, from R\$6,962 million in 2013 to R\$6,455 million in 2014, mainly due to the reduction in costs with raw materials, mainly due to lower costs with slabs purchased from third parties and lower costs with coke and coal.

Our costs regarding purchase of outsourced slabs from third parties decreased R\$211 million, or 31%, from R\$678 million in 2013 to R\$467 million in 2014, due to lower consumption of slabs purchased from third parties given the lower production of rolled products.

Our coke costs decreased R\$78 million, or 10%, from R\$772 million in 2013 to R\$694 million in 2014, corresponding to 11% of our steel production cost, mainly due to lower international coke prices and a decrease of 5% in consumption, partially offset by the depreciation of the real.

Our coal costs decreased R\$52 million, or 7%, from R\$800 million in 2013 to R\$748 million in 2014, corresponding to 12% of our steel production cost, mainly due to lower international coal prices, partially offset by an increase of 2% in consumption and by the depreciation of the real.

Our scrap costs decreased R\$40 million, or 35%, from R\$114 million in 2013 to R\$74 million in 2014, mainly due to lower consumption.

Other production costs regarding energy/fuel decreased R\$128 million or 21%, from R\$623 million in 2013 to R\$495 million in 2014.

***Mining***

Our mining costs of products sold increased R\$157 million, or 6%, from R\$2,829 million in 2013 to R\$2,986 million in 2014, mainly due to the increase in volume of iron ore sold. The unit cost per ton in 2014 decreased 10%, from R\$131 in 2013 to R\$118 in 2014 due to a dilution of fixed costs, given the higher production and sales volume.

***Logistics***

Cost of services attributable to our logistics segment increased R\$85 million, or 11%, from R\$806 million in 2013 to R\$891 million in 2014, due to the increases of R\$45 million and R\$40 million in the costs of railway logistics and port logistic services, respectively. For railway logistics the increase of R\$45 million was mainly due to an increase in costs from MRS. For port logistics services, the increase of R\$ 40 million was the higher volume of steel products transported during the period.

*Cement*

Cost of products sold attributable to our cement segment increased R\$19 million, or 7%, from R\$277 million reported in 2013 to R\$295 million in 2014, mainly due to the increase in sales volume. The unit cost per ton was R\$135, remained stable in 2013 and 2014.

### ***Energy***

Cost of products sold attributable to our energy segment increased R\$25 million, or 16%, from R\$161 million in 2013 to R\$187 million in 2014.

### **Gross Profit**

Gross profit decreased R\$355 million, or 7%, from R\$4,889 million in 2013 to R\$4,534 million in 2014, due to the decrease of R\$1,186 million in net revenues partially offset by the decrease of R\$830 million in cost of products sold, as discussed above.

### ***Steel***

Gross profit in the steel segment increased R\$389 million, or 16%, from R\$2,431 million in 2013 to R\$2,820 million in 2014.

### ***Mining***

Our gross profit in the mining segment decreased R\$1,344 million, or 55% from R\$2,467 million in 2013 to R\$1,123 million in 2014.

### ***Logistics***

Gross profit in the logistics segment decreased R\$47 million, or 10%, from R\$463 million in 2013 to R\$416 million in 2014.

### ***Cement***

Gross profit in the cement segment increased R\$6 million, or 4.6% from R\$139 million in 2013 to R\$145 million in 2014.

### ***Energy***

Gross profit in energy segment increased R\$88 million, or 173%, from R\$50 million in 2013 to R\$138 million in 2014.

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

Selling, general and administrative expenses increased R\$120 million, or 9%, from R\$1,360 million in 2013 to R\$1,480 million in 2014. Selling expenses increased R\$167 million, or 19%, from R\$875 million in 2013 to R\$1,042 million in 2014, mainly due to an increase of iron ore CIF sales (sales including insurance and freight costs), driven by our strategy of adding value to cargoes destined to Asian markets, while general and administrative expenses decreased R\$47 million, or 10%, from R\$485 million in 2013 to R\$438 million in 2014.

### **Other operating income (expenses)**

In 2014, we recorded a net expense of R\$567 million in the “Other Revenue and Expenses” item, mainly due to the negative impact of R\$205 million regarding the reclassification of accrued losses from investments in shares recorded as available for sale.

In 2013 net operating expenses of R\$568 million were mainly due to a negative impact of R\$254 million regarding provision for tax, social security, labor, civil and environmental risks, R\$233 million regarding REFIS program and R\$216 million regarding an impairment due to the spin-off of TLSA which were partially offset by a R\$474 million gain on share of control of TLSA. For more information see Note 22 to the consolidated financial statements included in “Item 18. Financial Statements”.

### **Equity Result in Results of Affiliated Companies**

Equity result increased R\$173 million, or 109%, from income of R\$158 million in 2013 to R\$331 million in 2014, mainly due to the increase on the result of the jointly-controlled investee Namisa of R\$133 million in 2013 and R\$291 million in 2014, both proportional to our interest in this subsidiary.

The investment in Namisa is currently accounted under the equity method. After the closing of the transaction between CSN and the Asian Consortium, as announced on December 12, 2014, the accounting impact will be revised based on the final terms of control of the agreement. Details of the transaction between CSN and the Asian Consortium and related conditions precedent for closing are described on Item 4D. Property, Plant and Equipment, Acquisitions and Dispositions.

### **Operating Income**

Operating income decreased R\$302 million, or 10%, from R\$3,120 million in 2013 to R\$2,818 million in 2014 due to:

- a decrease of R\$355 million in gross profit and an increase of R\$120 million in selling, general and administrative expenses, partially offset by;
- an increase of R\$173 million in equity result.

### **Financial expenses (income), net**

In 2014, our net financial expenses increased R\$570 million, or 23%, from R\$2,512 million in 2013 to R\$3,081 million in 2014, mainly due to:

- an increase in interest expenses of R\$364 million, or 13%, from R\$2,740 million in 2013 to R\$3,104 million in 2014, mainly due to the increase of R\$549 million in financial expenses regarding borrowings and financing, due to an increase in gross debt. This increase was partially offset by a reduction of R\$225 million from 2013 to 2014 due to a negative effect of R\$277 million in 2013 regarding interest related to our adherence to the REFIS program.
- a variation of R\$205 million regarding monetary and exchange variations, from a revenue of R\$56 million in 2013 to a loss of R\$149 million in 2014, mainly due to the effect of the 13% average depreciation of the Real against the U.S. dollar. .

### **Income Taxes**

Income tax expense in Brazil refers to federal income tax and social contribution tax. The statutory rates for these taxes applicable to the periods presented herein were 25% for federal income tax and 9% for the social contribution. Adjustments are made to the income in order to reach the effective tax expense or benefit in each fiscal year. As a result, our effective tax rate among exercises presents volatility.

The balances owed for these periods totaled a benefit of R\$90 million in 2014 and an expense of R\$207 million in 2013 (34% of income before taxes and adjustments to the income). After adjustments we recorded a benefit for

income tax and social contribution of R\$151 million in 2014, as compared to an expense of R\$ 74million in 2013. Expressed as a percentage of pre-tax income, income tax moved from 12% in 2013 to 57% in 2014. For the year ended December 31, 2014, these adjustments totaled a benefit of R\$61 million, comprised mainly of:

For the year ended December 31, 2014, adjustments totaled a benefit of R\$61 million, comprised mainly of:

- a positive R\$113 million adjustment related to equity result;
- a negative R\$29 million adjustment related to tax loss and negative basis without deferred tax.

For the year ended December 31, 2013, adjustments totaled an expense of R\$133 million, comprised mainly of:

- a positive R\$550 million adjustment related to tax credits from subsidiaries, which increased tax gains;



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- a positive R\$255 million adjustment related to interest on capital benefit, which increased tax gains;
- a positive R\$173 million adjustment related to income subject to special tax rates or untaxed, which increased tax gains;
- a negative R\$689 million adjustment related to the REFIS which increased tax expenses;
- a negative R\$167 million adjustment related to tax loss and negative basis without constituted deferred tax, which decreased tax gains; and

It is not possible to predict the future adjustments to the federal income tax and social contribution at statutory rates, as they depend on interest on stockholder's equity, tax incentives, non-taxable factors including income from offshore operations, and tax losses from offshore operations, especially when expressed as a percentage of income.

**Net Income (Loss) for the year**

In 2014, the Company recorded a net loss of R\$112 million, as compared to a net income of R\$534 million in 2013

**Adjusted EBITDA**

The Company uses adjusted EBITDA to measure the performance of its various segments and the capacity to generate recurring operating cash. It comprises net income before net financial result, income and social contribution taxes, depreciation and amortization, share of profit (losses) of investees, proportional EBITDA of jointly controlled companies and other operating income (expenses). However, although it is used to measure segment results, adjusted EBITDA is not a measure recognized by Brazilian accounting practices or International Financial Reporting Standards (IFRS), has no standard definition and therefore should not be compared to similar indicators adopted by other companies. As required by IFRS 8, the table below shows the reconciliation of the adjusted EBITDA with the net income (loss) for the year.

| R\$ Million  | 2015         | 2014         | 2013         |
|--|--------------|--------------|--------------|
| <b>Profit/(Loss) for the year</b>                                | 1,616        | -112         | 534          |
| Depreciation and amortization                                    | 1136         | 1245         | 1094         |
| <b>Income tax and social contribution</b>                        | 189          | -151         | 74           |
| Net financial result   | 3373         | 3081         | 2512         |
| <b>EBITDA</b>  | 6,313        | 4,063        | 4,214        |
| Other operating income (expenses)                                | -2392        | 567          | 568          |
| <b>Share of profit (losses) of investees</b>                     | -1,160       | -331         | -158         |
| Proportional EBITDA of Jointly Controlled Investees <sup>1</sup> | 490          | 430          | 781          |
| <b>Adjusted EBITDA</b>   | <b>3,251</b> | <b>4,729</b> | <b>5,404</b> |

<sup>1</sup> Adjusted EBITDA is calculated based on net income/loss, before depreciation and amortization, income taxes, the net financial result, results from investees, and other operating income (expenses) and includes the proportional share of the EBITDA of the jointly-owned investees MRS Logística and CBSI, as well as the Company's 60% stake in Namisa until November 2015 and 100% stake in Congonhas Minérios as of December 2015.

Adjusted EBITDA decreased R\$1,478 million, or 31%, from R\$4,729 million in 2014 to R\$3,251 million in 2015, due to the decrease in the steel and mining EBITDA.

Adjusted EBITDA decreased R\$675 million, or 12%, from R\$5,404 million in 2013 to R\$4,729 million in 2014, due to the decrease in revenue from mining operations.

## **5B. Liquidity and Capital Resources**

### **Overview**

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Our main uses of funds are for capital expenditures and repayment of debt. We have historically met these requirements by using cash generated from operating activities and through the issuance of short and long-term debt instruments. We expect to meet our cash needs for 2016 primarily through a combination of operating cash flow, cash and cash equivalents on hand, cash from asset sales and newly issued long-term debt instruments in order to repay the portion of our total debt maturing in 2016.

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

### **Sources of Funds and Working Capital**

#### ***Year 2015 Compared to Year 2014***

##### ***Cash Flows***

Cash and cash equivalents decreased by R\$825 million in 2015, compared to a decrease of R\$1,310 million in 2014.

##### **Operating Activities**

Cash provided by operations was R\$5,069 million and R\$824 million in 2015 and 2014, respectively. The R\$4,245 million increase was mainly due to the Namisa's dividend receipt, amounting R\$3,545 million, part of the conclusion process of the business combination between CSN mining assets and Namisa and other taxes variation amounting to R\$634 million, since 2014 had a significant payment of REFIS.

##### ***Investing Activities***

We used cash in our investing activities in the total amount of R\$2,865 million in 2015 and R\$1,658 million in 2014. The increase of R\$1,207 million in cash used in investing activities was mainly due to:

- the payment of R\$2,727 million (US\$707 million) related to the purchase of a stake of 4.16% of CongonhasMinérios as part of the business combination between CSN mining assets and Namisa;
- cash margin to cover our derivatives position in the amount of R\$725 million;
- the two main cash outflows mentioned above were partially offset by derivatives operations receipt of R\$827 million, cash of merged entities in the amount of R\$923 million and loans from related party received in the amount of R\$316 million.

##### ***Financing Activities***

Cash used in financing activities was R\$3,091 million in 2015 compared to R\$531 million in 2014. This R\$2,560 million increase was mainly due to a decrease of R\$1,525 million in borrowings, an increase of R\$1,139 million in amortizations and R\$586 million of forfeiting and drawee risk amortizations, partially offset by R\$900 million of the purchase of treasury shares occurred in 2014.

*Year 2014 Compared to Year 2013*

*Cash Flows*

Cash and cash equivalents decreased by R\$1,310 million in 2014, compared to a decrease of R\$1,896 million in 2013.

**Operating Activities**

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Cash provided by operations was R\$824 million and R\$2,723 million, in 2014 and 2013, respectively. The R\$1,899 million decrease was mainly due to:

- a decrease of the outstanding balance of the Tax Recovery Program (Refis) in the amount of R\$1,013 million, due to the adherence to the Early Settlement of Tax Debts – Federal Law 13,043;
- an increase of R\$1,176 million in inventories mainly due to an increase of 41 days in the average inventory turnover, mainly due to the decrease in steel sales;

These effects were partially offset by an increase of R\$522 million in trade payables mainly due to an increase of 27 days in the supplier payment period.

***Investing Activities***

We used cash in our investing activities in the total amount of R\$1,658 million in 2014 and R\$2,246 million in 2013. The decrease of R\$588 million in cash used in investing activities was mainly due to R\$642 million reduction of investments in fixed assets.

***Financing Activities***

Cash used in financing activities was R\$531 million in 2014 compared to R\$2,406 million in 2013. This R\$1,875 million decrease was mainly due to:

- a decrease in R\$1,236 million in dividends and interest on capital paid;
- a decrease of R\$946 million in amortizations of borrowings and financings, including forfeiting and drawee risk operations;
- a increase of R\$780 regarding new borrowings and financing.

These effects were partially offset by disbursements in 2014 through buybacks programs amounting to R\$914 million regarding the acquisition of our own shares and R\$172 million related to debt securities.

***Trade Accounts Receivable Turnover Ratio***

Our receivable turnover ratio (the ratio between trade accounts receivable and net operating revenues), expressed in days of sales decreased 1 day to 30 days on December 31, 2015 from 31 days on December 31, 2014.

***Turnover of Inventory***

Our inventory turnover (obtained by dividing inventories by annualized cost of products sold), expressed in days of cost of products sold increased 22 days to 127 days in 2015 from 105 days in 2014, mainly due to a decrease in steel sales volume.

***Trade Accounts Payable Turnover Ratio***

The accounts payable turnover ratio (obtained by dividing trade accounts payable by annualized cost of products sold), expressed in days of cost of products sold, was 52 days on December 31, 2015 and on December 31, 2014.

***Liquidity Management***

Given the capital intensive, cyclical nature of our industry and the generally volatile economic environment in certain emerging markets, we have retained a substantial amount of cash on hand to run our operations, to satisfy our financial obligations and to be prepared for potential investment opportunities. As of December 31, 2015, cash and cash equivalent totaled R\$7,861 million, compared to R\$8,686 million as of December 31, 2014.

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As of December 31, 2015, short-term and long-term indebtedness accounted for 6% and 94%, respectively, of our total debt, and the average life of our existing debt was equivalent to approximately eight years, considering a 40-year term for the perpetual bonds issued in September 2010.

In 2013, we took advantage of the strong liquidity conditions to extend the maturity profile of our debt. These activities were unrelated to the management of any interest rate, inflation and/or foreign exchange risk exposure. Given the lack of a liquid secondary market for our short-term debt instruments in 2013, we have accumulated cash instead of prepaying our debt prior to final maturity. As of December 31, 2013, short-term and long-term indebtedness accounted for 9.6% and 90.4%, respectively, of our total debt, and the average life of our existing debt was equivalent to approximately seven years, considering a 40 year term for the perpetual bonds issued in September 2010. As of December 31, 2014, short-term and long-term indebtedness accounted for 9% and 91%, respectively, of our total debt, and the average life of our existing debt was equivalent to approximately seven years, considering a 40 year term for the perpetual bonds issued in September 2010.

***Capital Expenditures and Investments***

CSN invested R\$2,170 million in 2015, taking advantage of opportunities to accelerate projects that enhance competitiveness, including:

- The acquisition of new mining equipment, anticipating some of the investments scheduled for 2016 due to current favorable financing conditions. These items of equipment were already helping to reduce mining costs in 2015.
- The accelerated development of the Arcos' clinker kiln project in Minas Gerais, anticipating higher operating margins in the Southeast System.
- Revamp of the Turbo Generator (TG20) in Presidente Vargas Plant, recovering the nominal energy capacity of 117MW in the TG20.

Of total investments, R\$376 million went to spare parts and R\$561 million to current investments.

In 2014, we invested a total of R\$ 2,405 million, R\$872 million of which was allocated as follows: jointly controlled investees TLISA: R\$512 million (100%); MRS Logística: R\$301 million (33.3%); and Namisa: R\$59 million (60%).

The remaining R\$1,533 million was expended on: construction of a brownfield long steel mill at the Volta Redonda site: R\$77 million; expansion of the steel service center at our CSN Mogi das Cruzes (Prada) facility: R\$ 39 million; expansion of the Itaguaí Port (TECAR and TECON): R\$172 million; expansion of the Casa de Pedra mine: R\$267 million; expansion of the cement plant: R\$481 million; and stay-in-business capex: R\$ 497 million.

In 2015, we continued to implement our strategy of developing downstream opportunities and projects based on synergies, new product lines and market niches by creating or expanding current capacity of services centers, as described in "Item 4B. Business Overview—Facilities."

We expect to meet our liquidity requirements from cash generated from operations, and, if needed, the issuance of debt securities. For details on our Planned Investments see "Item 4D. Property, Plant and Equipment—Capital

Expenditures—Planned Investments.”

***Debt and Derivative Instruments***

At December 31, 2015 and 2014, total debt (composed of current and non-current portions of borrowings and financings) was R\$34,283 million and R\$30,354 million (excluding transactions costs), respectively, equal to 392% and 529% of the Shareholders' equity at December 31, 2015 and 2014, respectively. At December 31, 2015, our short-term debt (composed of current borrowings and financings, which includes current portion of long-term debt) totaled R\$1,875 million and our long-term debt (composed of non-current borrowings and financings) totaled R\$32,408 million. The foregoing amounts do not include debt of others for which we are contingently liable. See “Item 5E. Off-Balance Sheet Arrangements.”



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At December 31, 2015, approximately 46% of our debt was denominated in reais and substantially all of the remaining balance was denominated in U.S. dollars.

Our current policy is to protect ourselves against foreign exchange losses and interest rate losses on our debt and currently our exposure is protected through foreign exchange derivative products, including futures and swaps and hedge accounting. For a description of our derivative instruments, see Note 13.IV to our consolidated financial statements contained in “Item 18. Financial Statements.”

The components of R\$1,875 million of our consolidated current portion of short-term debt outstanding at December 31, 2015 were:

| <b>Components</b>           | <b>Average<br/>Interest Rate</b>                                | <b>Total<br/>(in millions of R\$)</b> |
|-----------------------------|---|---------------------------------------|
| <b>Fixed rate notes</b>     | 6.5% - 6.9%   | 176                                   |
| <b>BNDES/Finame</b>         | 1.3% + TJLP and fixed rate of 2.5% to<br>6% + 1.5%              | 55                                    |
| <b>Prepayment financing</b> | 1.3% - 4.5% and 109.5% to 116.5% of<br>CDI and fixed rate of 8% | 1,017                                 |
| <b>Debentures</b>           | 110.8% to 113.7% of CDI   | 61                                    |
| <b>CCB</b>                  | 112.5% and 113% of CDI  | 93                                    |
| <b>Perpetual bonds</b>      | 7.00%   | 5                                     |
| <b>Forfaiting</b>           | 1.25% to 3.28%  | 289                                   |
| <b>Others</b>               | 1.2% - 8,00%  | 179                                   |
| <b>Total</b>                |   | <b>1,875</b>                          |

The components of R\$32,408 million of our consolidated long-term debt outstanding at December 31, 2015 were (amounts are reflected in long-term debt):

| <b>Components</b>           | <b>Average<br/>Interest Rate</b>                              | <b>Total<br/>(in millions of R\$)</b> |
|-----------------------------|---|---------------------------------------|
| <b>Debentures</b>           | 110.8% to 113.7% of CDI                                       | 1,750                                 |
| <b>Fixed rate notes</b>     | 6.5% – 6.9%   | 6,911                                 |
| <b>BNDES/Finame</b>         | 1.3% + TJLP and fixed rate of 2.5% to<br>6% + 1.5%            | 1,018                                 |
| <b>Perpetual bonds</b>      | 7.00%   | 3,905                                 |
| <b>Prepayment financing</b> | 1% - 7.5% and 109.5% to 116.5% of<br>CDI and fixed rate of 8% | 11,263                                |
| <b>CCB</b>                  | 112.5% and 113% of CDI  | 7,200                                 |
| <b>Others</b>               | 1.2% - 8,00%  | 361                                   |
| <b>Total</b>                |   | <b>32,408</b>                         |



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The information of our indebtedness below refers to the outstanding amount in December 31, 2015.

- debentures issued in July 2011, of R\$1,150 million bearing interest at a rate of 110.8% of the CDI rate per annum and maturity in 2019.
- debentures issued in March 2014, of R\$400 million bearing interest at a rate of 111.2% of the CDI rate per annum and maturity in 2021.
- debentures issued in January 2015, of R\$100 million bearing interest at a rate of 113.7% of the CDI rate per annum and maturity in 2022.
- debentures issued in July 2015, of R\$100 million bearing interest at a rate of 113.7% of the CDI rate per annum and maturity in 2022.

Eurodollar and Euronotes issued in accordance with Rule 144A and Regulation S under the Securities Act reflect senior unsecured debt instruments issued by us and our offshore subsidiaries, including:

- the U.S.\$750 million bonds, 6.875% per annum coupon, issued in September 2009 with maturity in 2019.
- in July 2010, we issued U.S.\$1 billion bonds, 6.50% per annum coupon and maturity date in July 2020, in January 2012, we priced, through our wholly-owned subsidiary CSN Resources S.A., an additional bond issuance in the amount of U.S.\$200 million. The offering price was 106.00% and yield was 5.6% p.a.
- in September 2010, we issued U.S. \$1 billion perpetual bonds, 7.0% per annum coupon.

We issued export credit notes, or NCEs:

- in September 2009, in the amount of R\$1.0 billion, in favor of Banco do Brasil S.A., due 2018. In September 2015, we amortized R\$ 613.3 million resulting in an outstanding balance of R\$ 386.7 million. This amortization is related to the rollover of of this debt mentioned below;
- in Septembe 2009, in the amount of R\$300 million, in favor of Banco do Brasil S.A., due 2018. In September, 2015, we amortized R\$180 million resulting in an outstanding balance of R\$120 million. This amortization also is related to the rollover of of this debt mentioned below;

- in May 2010 in the amount of R\$2.0 billion, in favor of Banco do Brasil S.A., through our subsidiary Congonhas Minérios S.A., due 2019. In September 2015, we amortized R\$715 million resulting in an outstanding balance of R\$1.3 billion. This amortization also is related to the rollover of this debt mentioned below;
- in April 2011, we issued another NCE, in the amount of R\$1.5 billion; in favor of Banco do Brasil S.A., due to 2019. In September 2015, we amortized R\$1.0 billion. This amortization also is related to the rollover of this debt mentioned below;
- in March 2013, in the amount of R\$ 200 million, in favor of Banco do Brasil S.A., due 2016. In February, 2016 the total amount was extended to 2017;
- in February 2013, in the amount of R\$ 45 million, in favor of HSBC Brasil., due 2016;

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- in February 2013, in the amount of R\$ 100 million, in favor of Bradesco, due 2016;
- in September 2015, R\$1.5 billion in favor of Banco do Brasil due 2020. This amortization also is related to the rollover of this debt mentioned below;
- in September 2015, R\$715 million, through our subsidiary Congonhas Minérios S.A., in favor of Banco do Brasil due 2020. This amortization also is related to the rollover of this debt mentioned below;

Export Pre-Payment issued by CSN:

- in October 2010, in the amount of U.S. \$ 66,7 million, in favor of Banco Santander S.A., due 2017;
- in April 2012, in the amount of U.S. \$ 30 million, in favor of Banco Safra S.A., due 2017;
- in April 2013, in the amount of U.S. \$ 378 million in favor of Banco do Brasil S.A., due 2021;
- in November 2013, in the amount of U.S. \$ 200 million, in favor of Banco Bradesco S.A., due 2018;
- in November 2013, in the amount of U.S. \$ 345 million, in favor of Banco Bradesco S.A., due 2022;
- in February 2014, in the amount of U.S. \$ 100 million, in favor of ING Bank, due 2019;
- in April 2014, in the amount of U.S. \$ 200 million, in favor of Banco Santander S.A., due 2019;

- in September 2014, in the amount of U.S. \$ 100 million, in favor of Banco Santander S.A., due 2019;
- in December 2014, in the amount of U.S. \$ 100 million, in favor of Bank of China, due 2020;
- In April 2015, in the amount of U.S. \$ 71 million, in favor of Caterpillar Financial Services Corporation., due 2020;
- In July 2015, in the amount of U.S. \$ 77 million, in favor of Caterpillar Financial Services Corporation., due 2020.

We contracted credit facilities from Caixa Econômica Federal (CEF), under its special credit for large companies, in the form of a bank credit bill, or CCB:

- on December, 2009, in the amount of R\$2.0 billion and to be amortized in 156 months. In August 2015, we amortized R\$1.3 billion resulting in an outstanding balance of R\$715 mm. This amortization is related to the rollover of R\$2.57 billion mentioned below.
- on December, 2010, in the amount of R\$1.0 billion and to be amortized in 156 months. In August 2015, we amortized R\$1.3 billion resulting in an outstanding balance of R\$715 million. This amortization also is related to the rollover of R\$2.57 billion mentioned below.

In 2011, we contracted two additional CCBs:

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- in February 2011, in the amount of R\$2.0 billion and to be amortized in 94 months. In August 2015, we amortized R\$1.0 billion resulting in an outstanding balance of R\$1.0 billion. This amortization also is related to the rollover of R\$2.57 billion mentioned below.

- in August 2011, in the amount of R\$2.2 billion and to be amortized in 108 months.

In September 2015, we concluded the extension of part of our debt with the Caixa Econômica Federal in the amount of R\$2.57 billion, and with Banco do Brasil, amounting to R\$2.21 billion, shifting maturities scheduled for 2016 and 2017 to the period between 2018 and 2022 in installments equally distributed.

In January 2012, we secured financing contracted through our subsidiary CSN Steel S.L., in the amount of €120 million, to partially fund the acquisition of all shares held by the Alfonso Gallardo Group, S.L.U. (“Grupo Gallardo”) in the following companies: SWT and Gallardo Sections S.L.U.

We contracted Pre-Export Payments from Caterpillar:

- In April 2015, in the amount of U.S \$ 71 million, in favor of Caterpillar Financial Services Corporation., due 2020.

- In July 2015, in the amount of U.S \$ 77 million, in favor of Caterpillar Financial Services Corporation., due 2020.

***Maturity Profile***

The following table sets forth the maturity profile of our long-term debt at December 31, 2015:

| Maturity in            | Principal Amount<br>(In thousands of R\$) |
|------------------------|---|
| <b>2017</b>            | 1,458,605                                 |
| <b>2018</b>            | 5,799,525                                 |
| <b>2019</b>            | 7,870,087                                 |
| <b>2020</b>            | 8,483,766                                 |
| <b>2021</b>            | 2,320,721                                 |
| <b>After 2021</b>      | 2,667,072                                 |
| <b>Perpetual bonds</b> | 3,904,800                                 |
| <b>Total</b>           | <b>32,484,576</b>                         |

### **5C. Research & Development and Innovation**

CSN has continuously invested in Research and Development to improve its products and processes, thus meeting market demands and assuring customers' requirements.

In 2015 was instituted in the Company a new unit called INOVA CSN, an organizational environment created in order to facilitate innovation projects in products, processes, energy efficiency and environmental to the business units of the entire Corporation, through financial funding from private and public institutions.

Inova CSN connects the company to technological and scientific development environment, local and worldwide, aimed at innovations that provide added value to us and our customers. The highlight of the Innovation Strategic Plan 2015 is the Product Innovation Project: *Development of Advanced High Strength Galvanized Steels in Industrial Scale Applied to the Automotive Industry, Aiming to Decrease the Fuel Consumption and Impacts to the Environment.*



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Total expenses in 2015 in research, development and innovation reached U.S. \$ 16 million compared to U.S. \$ 6.8 million in 2014 and U.S. \$ 6.5 million in 2013.

The current projects in development are:

- Advanced High Strength Galvanized Steel Dual Phase DP800 for the automotive industry to application in structural parts.
- Advanced Press Hardening Galvanized Steel - PHS 1500 for the automotive industry, structural parts.
- High Strength IF (Interstitial Free) Galvanized Steel – IF 260 and 300 HS, for the automotive industry, special applications to high strength and good formability.
- Structural High Strength Galvanized Steels – class 450, 500 and 550, for application in the civil construction market, mainly for storage silos.
- High-carbon Hot-Rolled steel for chainsaws (SAE 8660), designed to US market.
- Tin-plated steel in new applications in Brazilian market (aerosol cans, easy open ends).
- High Strength Low Alloy cold-rolled steel, HSLA 420 and 500, for the automotive industry.

## **5D. Trend Information**

### *Steel*

The WSA expects apparent steel consumption to grow by 0.7% worldwide in 2016 and decrease 2.0% in China. The IABr estimates domestic sales of 17.4 million tons in 2016, with apparent consumption of 19.4 million tons.

### *Mining*

In 2015, the seaborne iron ore market was adversely affected by a substantial 43% price decrease, as the Platts Fe62% CFR China index fell from US\$68/dmt at the beginning of the year to US\$39/dmt at end of December. This decrease was due to the increased supply capacity in Australia and Brazil along with the downturn in investments in China's real estate sector due to the gradual slowdown of the economy.

Nevertheless, Chinese annual iron ore imports increased by 2.2% when compared to 2014, reaching 953 million tons, while the global seaborne iron ore market grew by 2.1% to 1.42 billion tons.

## **5E. Off-Balance Sheet Arrangements**

In addition to the debt that is reflected on our balance sheet, we are contingently liable for the off-balance concession payments and also for "take-or-pay" contractual obligations. The following table summarizes all of the off-balance sheet obligations for which we are contingently liable and which are not reflected under liabilities in our consolidated financial statements:

### **Contingent Liability with Respect to Consolidated and Non-Consolidated Entities as of December 31, 2015**

|                            | <b>Aggregate<br/>Amount</b> | <b>Maturity</b>                    |
|----------------------------|-----------------------------|------------------------------------|
|                            |                             | <i>(In millions of R\$)</i>        |
| <b>Guarantees of Debt:</b> |                             |                                    |
| <b>Transnordestina</b>     | 2,591                       | Until 09/19/2056 and<br>indefinite |

**Contingent Liability for Concession Payments<sup>(1)</sup> :**

| <b>Concession</b>                        | <b>Type of service</b>  | <b>2016</b>    | <b>2017</b>    | <b>2018</b>    | <b>2019</b>    | <b>After 2019</b> | <b>Total</b>     |
|--|---|----------------|----------------|----------------|----------------|-------------------|------------------|
| FTL (Ferrovia Transnordestina Logística) | 30-year concession granted on December 31, 1997, renewable for another 30 years, to develop public service and operating the railway system in northeastern Brazil. The northeastern railway system covers 4238 kilometers of railway network and operates in Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Alagoas and Rio Grande do Norte. | 8,229          | 8,229          | 8,229          | 8,229          | 65,832            | <b>98,748</b>    |
| Teacar                                   | Concession to operate the TECAR, a solid bulk terminal, one of the four terminals that make up the Port of Itaguai, located in Rio de Janeiro. The concession agreement expires in 2022, renewable for another 25 years.  | 125,326        | 125,326        | 125,326        | 125,326        | 3,509,116         | <b>4,010,420</b> |
| Tecon                                    | 25-year concession started in July 2001, renewable for another 25 years to operate the container terminal at the Port of Itaguai.   | 27,927         | 27,927         | 27,927         | 27,927         | 181,523           | <b>293,231</b>   |
|  |   | <b>161,482</b> | <b>161,482</b> | <b>161,482</b> | <b>161,482</b> | <b>3,756,471</b>  | <b>4,402,399</b> |

(1) Other consortia members are also jointly and severally liable for these payments.



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## “Take-or-Pay” Contractual Obligations

| Type of service  | Payments in the period <i>(in millions of R\$)</i> |                  |                |                |                |                |                  | Total            |
|--|--|------------------|----------------|----------------|----------------|----------------|------------------|------------------|
|  | 2014   | 2015             | 2016           | 2017           | 2018           | 2019           | After 2019       |                  |
| <b>Transportation of iron ore, coal, coke, steel products, cement and mining products.</b> | 263,266  | 197,646          | 624,459        | 595,951        | 595,951        | 595,951        | 3,916,115        | 6,328,427        |
| <b>Unloading, storage, movement, loading and railroad transportation services.</b>         | 5,570  | -                | -              | -              | -              | -              | -                | -                |
| <b>Supply of power, natural gas, oxigen, nitrogen, argon and iron ore pellets.</b>         | 1,011,416  | 1,025,236        | 342,817        | 32,205         | 32,205         | 32,205         | 64,409           | 503,362          |
| <b>Processing of slag generated during pig iron and steel production</b>                   | 49,739   | 104,013          | 18,743         | 8,507          | 8,507          | 7,074          | 22,988           | 65,819           |
| <b>Manufacturing, repair, recovery and production of ingot casting machine units.</b>      | 40,250   | 127,776          | 2,885          | -              | --             | -              | -                | 2,885            |
|  | <b>1,370,241</b>                                   | <b>1,452,900</b> | <b>988,904</b> | <b>636,663</b> | <b>636,663</b> | <b>635,230</b> | <b>4,003,512</b> | <b>6,900,972</b> |

## **Guarantees of Debt**

We guarantee the loans that BNDES has granted to Transnordestina in May and December 2005, and in January 2006, all of which mature by September 19, 2056, adjusted based on the TJLP plus 1.5% per annum. The total outstanding amount of the debt as of December 31, 2015 was R\$2,590 million.

The approved construction investment is R\$7,542,000 and the balance of disburseable funds will be adjusted using the IPCA as from April 2012. Should additional funds be required, they will be provided by CSN and/or third parties under Permanent Track Use contracts.

The budget to conclude the project is under review, currently it is being analyzed by the competent agencies (shareholders), and it is expected that the reviewed budget will be as follows: Missão Velha-Salgueiro: R\$0.4 billion, Salgueiro-Trindade: R\$0.7 billion, Trindade-Eliseu Martins: R\$2.4 billion, Missão Velha-Porto de Pecém: R\$3 billion, Salgueiro-Porto de Suape: R\$4.7 billion, amounting R\$ 11.2 billion.

## **Contingent Liability for Concession Payments**

### ***FTL - Ferrovia Transnordestina Logística S.A. and Transnordestina Logística S.A.***

We hold interest in companies that have concessions to operate the Northeastern railway system, which operates in the states of Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Alagoas and Rio Grande do Norte and connects with the region's leading ports, offering an important competitive advantage through opportunities for intermodal transportation solutions and made-to-measure logistics projects. Resolution No. 4,042/2013 issued by the ANTT authorized the partial spin-off of TLSA and, as a result, the Northeastern railway system is currently divided into the Railway System I, operated by FTL, and the Railway System II, operated by TLSA..

On September 20, 2013 we entered into an investment agreement with our partners in TLSA, Valec Engenharia, Construções e Ferrovias S.A. and Fundo de Desenvolvimento do Nordeste – FDNE, two Brazilian federal government entities focused on infrastructure and the development of the northeastern region. Under this investment agreement we and our partners have agreed on a revised budget of R\$7,5 billion to complete the construction of the Railway System II. Such investment agreement also provides for indicative terms and conditions, including amounts, under which BNDES, Banco do Nordeste Brasileiro – BNB and certain Brazilian development agencies have agreed to provide long-term financing for the completion of Railway System II. Although we have received indicative terms, the financing is subject to several conditions, including the satisfactory completion of internal and credit approval processes by all lenders. If any of the conditions are not met, including final credit approval by all agencies involved in terms and costs reasonable to us, we may not be able to obtain the financing.

As of December 31, 2015, we held 89.79% of the capital stock of FTL, which has a concession to operate the Railway System I (which encompasses the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá – Jorge Lins) of Brazil's Northeastern railway system until 2027, renewable for an additional 30 years. The Railway System I consists of 4,238 km of railways. As of December 31, 2015, R\$98.7 million in concession payments was outstanding over the remaining 12 years of the concession.



***Tecar***

We hold the concession to operate TECAR, a solid bulks terminal, one of four terminals that form the Itaguaí Port, located in the State of Rio de Janeiro. In 2015, the company achieved the anticipated contract renewal for additional 25 years and, accordingly, the expiration date was postponed from 2022 to 2047. Itaguaí Port, in turn, is connected to the Presidente Vargas Steelworks, Casa de Pedra and Congonhas Minérios by the Southeastern railway system. Our imports of coal and coke are made through this terminal. Under the terms of the concession, we have the obligation to ship at least 3.0 million tons of bulk cargo annually and to make available room to ship 2.0 million tons of third parties' iron ore and pellets cargoes. As of December 31, 2015, R\$4,010 million was outstanding over the remaining 32 years of the concession.

***Sepetiba Tecon***

We own 99.99% of Sepetiba Tecon S.A., or TECON, which holds a concession to operate, for a 25-year term (renewable for additional 25 years), the container terminal at the Itaguaí Port, located in the State of Rio de Janeiro. As of December 31, 2015, R\$ 293 million of the cost of the concession was outstanding and payable over the remaining 11 years of the concession. For more information, see “Item 4D. Property, Plant and Equipment – Capital Expenditures – Planned Investments”.

***Transportation of iron ore, coal, coke, steel products, cement and mining products***

***MRS Logística S.A.***

***Transportation of Iron Ore, Coal and Coke to Volta Redonda***

The volume set for iron ore and pellets is 7,500,000 tons per year and for coal, coke and other smelter products is 3,500,000 tons per year. Variation of up to 10% is accepted, with a guarantee of payment of at least 80%, but the obligation is for each item individually.

***Transportation of Iron Ore for Export from Itaguaí***

The volume set was 40,000,000 tons per year for the first three years, with gradual increases for the following years, with a guarantee of payment of at least 80%. We may increase or decrease the volume set in the agreement every year by up to 10% and 15%, respectively, taking into consideration the volume informed in the previous year. This agreement expires on November 30, 2026.

The minimum amounts to be paid under the contract terms are calculated by a tariff model that assures competitive prices.

***Transportation of Steel Products***

The volume set is 2,750,000 tons per year, with an acceptable variation of up to 10%, with a guarantee of payment of at least 80%. The agreement covers the transportation of steel products from the Presidente Vargas Steelworks to third party terminals, and expires on May 31, 2016.

***Cement Transportation***

This agreement covers transportation of bagged cement from UPV to Rio de Janeiro, São José dos Campos and São Paulo. For 2014, the volume set was 376,251 tons; for 2015 was 520,000 and for 2016 we expect it to be 545,063 tons. The volume set is 633,600 from 2017 until 2026. Under the terms of the agreement, we are committed to provide at least 80% of the volume of cement to MRS. This agreement is valid until 2026.

***Ferrovias Centro Atlântica - FCA***

***Transportation of Reduction Products***



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This agreement covers transportation of reduction products from the city of Arcos to the city of Volta Redonda.

As of 2014, volume set for reduction products was 1,805,000 tons with an acceptable variation of up to 5%. For 2015 the volume set was 1,860,000 tons with a guarantee of payment of at least 90%.

***Transportation of Clinker***

This agreement covers transportation of clinker products from the city of Arcos to the city of Volta Redonda.

As of 2014, the volume set for clinker was 660,000 tons per year with an acceptable variation of up to 10%. This agreement will expire on April 19, 2020.

In 2014, the calculation of “take-or-pay” considered the total volume performed in both contracts - clinker and reduction products – regardless of the percentage transported of each one.

For 2015, the volume set was 660,000 tons with a guarantee of payment of at least 90%.

***Unloading, storage, movement, loading and railroad transportation services.***

In 2014, we signed a three-year “take-or-pay” agreement by which we are committed to guarantee at least 75% of cargo for transport in the first year and at least 69% of volume through the end of the agreement.

***Supply of power, natural gas, oxygen, nitrogen, argon and iron ore pellets.***

To secure gas supply (oxygen, nitrogen and argon), in 1994 we signed a 22-year “take-or-pay” agreement by which we are committed to acquire at least 90% of the gas volume guaranteed in the contract. Under the terms of the agreement, we are not required to advance funds raised against future processing charges if the supplier is unable to meet its financial obligations.

To secure natural gas supply, 2007 we signed a five-year “take-or-pay” agreement, by which we are committed to acquire at least 70% of the gas volume provided by the supplier. Under the terms of the agreement, we are not required to advance funds raised against future processing charges if the supplier is unable to meet its financial obligations. In addition, if we do not acquire the minimum volume agreed, the amount paid which relates to that difference may be compensated in future years, including one year after the contract’s expiration. This agreement is valid until June 30, 2016. However, it has an automatic renewal clause for more six months which can be extended for equal and successive periods.

To secure pellets supply, in 2009 we signed a 5-year “take-or-pay” agreement, by which we are committed to acquire at least 90% of the pellets volume provided by the supplier. Under the terms of the agreement, we are not required to advance funds raised against future processing charges if the supplier is unable to meet its financial obligations. In 2015 we signed a 1-year agreement without “take-or-pay” clause, but with a quarterly negotiation of pellet prices.

To secure energy supply, in 2001 we entered into a 20-year agreement. According to the “take or pay” clause, we are committed to acquire at least 80% of the annual energy volume contracted from the supplier.

***Processing of slag generated during pig iron and steel production***

CSN undertakes to acquire at least 2,400 metric tons of blast furnace mud for processing at CSN's mud concentration plant. This agreement is valid until March 31, 2023.

The supplier undertakes to perform the scrap recovery services resulting from the process of production of pig iron and steel from Presidente Vargas Steelworks, receiving by this process the equivalent in value of the result of multiplying the unit price (U.S.\$/t) by the total Liquid Steel CSN's Mill production, with a guarantee of a minimum production of liquid steel corresponding to 400,000 tons. This agreement is valid until March 31, 2016 and is under negotiation for renewal.

[Table of contents](#)***Manufacturing, repair, recovery and production of ingot casting machine units.***

The supplier provides continuous casting machines maintenance services in steel production at Presidente Vargas Steelworks, with a guarantee of a minimum production of 365,000 tons per month. This agreement expired in December 31, 2015. For 2016 we negotiated the minimum production to an average of 278,000 ton per month.

**5F. Tabular Disclosure of Contractual Obligations**

The following table represents our long-term contractual obligations as of December 31, 2015:

| <b>Contractual obligations</b>                         | <b>Payment due by period</b> |                             |                  |                  |                                  |
|--|------------------------------|-----------------------------|------------------|------------------|----------------------------------|
|  | <b>Total</b>                 | <b>Less than<br/>1 year</b> | <b>1-3 years</b> | <b>3-5 years</b> | <b>More<br/>than 5<br/>years</b> |
| <b>Long-term accrued finance charges<sup>(1)</sup></b> | 23,214                       | 3,276                       | 6,202            | 4,062            | 9,674                            |
| <b>Taxes payable in installments</b>                   | 112                          | 24                          | 22               | 15               | 51                               |
| <b>Long-term debt <sup>(2)</sup></b>                   | 32,408                       | 1,435                       | 13,617           | 10,793           | 6,563                            |
| <b>“Take-or-Pay” contracts</b>                         | 6,901                        | 989                         | 1,273            | 1,270            | 3,369                            |
| <b>Derivatives swap agreements<sup>(3)</sup></b>       | 72                           | 72                          | 0                | 0                | 0                                |
| <b>Concession agreements<sup>(4)</sup></b>             | 4,402                        | 161                         | 323              | 323              | 3,595                            |
| <b>Purchase obligations:</b>                           |                              |                             |                  |                  |                                  |
| <b>Raw materials<sup>(5)</sup></b>                     | 629                          | 447                         | 182              | 0                | 0                                |
| <b>Maintenance<sup>(6)</sup></b>                       | 1,218                        | 908                         | 309              | 0                | 0                                |
| <b>Utilities/Fuel<sup>(7)</sup></b>                    | 270                          | 235                         | 15               | 7                | 13                               |
| <b>Total</b>   | 2,116                        | 1,590                       | 506              | 7                | 13                               |

(1) These accrued finance charges refer to the cash outflow related to the contractual interest expense of our long-term debt and were calculated using the contractual interest rates taken forward to the maturity dates of each contract.

(2) These amounts were presented net of transaction costs and issue premiums.

(3) Derivative swap agreements were calculated based on market prices, on December 31, 2015, for futures with similar maturity to our derivative swap agreements.

(4) Refers to TECON, TECAR and FTL concessions agreements

(5) Refers mainly to purchases of coal, tin, aluminum and zinc, which comprise part of the raw materials for steel manufacturing and take-or-pay contracts.

(6) We have outstanding contracts with several contractors in order to maintain our plants in good operating conditions; due to the strong demand for specialized maintenance service, the term of some of these contracts is for more than one year.

(7) Refers mainly to natural gas, power supply and cryogenics, which are provided by limited suppliers; and with some of which we maintain long-term contracts.

**5G. Safe Harbor**

See “Forward-Looking Statements.”

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**Item 6. Directors, Senior Management and Employees****6A. Directors and Senior Management****General**

We are managed by our Board of Directors (*Conselho de Administração*), which consists of up to eleven members, and our Board of Executive Officers (*Diretoria Executiva*), which consists of two to nine Executive Officers with no specific designation (one of whom is the Chief Executive Officer). In accordance with our bylaws (*Estatuto Social*), each Director is elected for a term of one year by our shareholders at an annual shareholders' meeting. Our bylaws require our employees to be represented by one Director on the Board of Directors. The members of the Board of Executive Officers are appointed by the Board of Directors for a two-year term.

Our Board of Directors is responsible for setting general guidelines and policies for our business and our Board of Executive Officers is responsible for the implementation of such guidelines and policies and for our day-to-day operations. As of the date of this annual report, our Board of Directors was comprised of one Chairman and five members, and our Board of Executive Officers was comprised of our Chief Executive Officer and five Executive Officers.

Our Directors and Executive Officers as of the date of this annual report are:

| <b>Name</b>                             | <b>Position</b>         | <b>First Elected on</b> | <b>Last Elected on</b> |
|---|-------------------------|-------------------------|------------------------|
| <i>Board of Directors</i>               |                         |                         |                        |
| <b>Benjamin Steinbruch</b>              | Chairman                | April 23, 1993          | April 28, 2016         |
| <b>Fernando Perrone</b>                 | Member                  | September 26, 2002      | April 28, 2016         |
| <b>Fabiam Franklin</b>                  | Member                  | April 28, 2016          | April 28, 2016         |
| <b>Yoshiaki Nakano</b>                  | Member                  | April 29, 2004          | April 28, 2016         |
| <b>Antonio Bernardo Vieira Maia</b>     | Member                  | April 30, 2013          | April 28, 2016         |
| <b>Léo Steinbruch</b>                   | Member                  | April 28, 2015          | April 28, 2016         |
| <i>Board of Executive Officers</i>      |                         |                         |                        |
| <b>Benjamin Steinbruch</b>              | Chief Executive Officer | April 30, 2002          | August 12, 2015        |
| <b>Enéas Garcia Diniz</b>               | Executive Officer       | June 21, 2005           | August 12, 2015        |
| <b>Paulo Rogério Caffarelli</b>         | Executive Officer       | March 10, 2015          | August 12, 2015        |
| <b>David Moise Salama</b>               | Executive Officer       | August 2, 2011          | August 12, 2015        |
| <b>Luis Fernando Barbosa Martinez</b>   | Executive Officer       | August 2, 2011          | August 12, 2015        |
| <b>Fabio Eduardo de Pieri Spina</b>     | Executive Officer       | September 18, 2015      | September 18, 2015     |
| <b>Pedro Gutemberg Quariguasi Netto</b> |                         | May 11, 2016            | May 11, 2016           |

Executive  
Officer

The next election for our Board of Directors is expected to take place on April 2017. The next election for our Board of Executive Officers is expected to take place in August 2017.

**Board of Directors**

*Benjamin Steinbruch.* Mr. Steinbruch has been a member of our Board of Directors since April 23, 1993, and has simultaneously held the positions of Chairman since April 28, 1995 and CEO since April 30, 2002. He is also a member of the Administrative Board of the Portuguese Chamber, 1<sup>st</sup> Vice-President of the Federation of Industries of the State of São Paulo - FIESP since September 2004, member of FIESP's Superior Strategic Board, advisor to the Robert Simonsen Institute and member of the Interinstitutional Advisory Board, or CCI, of the Superior Court of the State of São Paulo. Over the past five years, he also served as Chairman of the Board of Directors and CEO of Vicunha Siderurgia S.A. and of Nacional Minérios S.A., Vice Chairman of the Board of Directors of Textília S.A., Chairman of the Board of Directors of Vicunha Aços S.A., Vicunha S.A., Fibra Cia. Securitizadora de Créditos Financeiros, Fibra Cia. Securitizadora de Créditos Imobiliários and Banco Fibra S.A., member of the Board of Directors of Elizabeth S.A. – Indústria Têxtil, Vicunha Participações S.A. and Vicunha Steel S.A., Officer of Rio Purus Participações S.A. and Officer of Rio Iaco Participações S.A., Administrator of Fazenda Alvorada de Bragança Agro-Pastoril Ltda., Ibis Agrária Ltda., Ibis II Empreendimentos Ltda., Ibis Participações e Serviços Ltda. and Haras Phillipson Ltda. (all these companies belong to our controlling group), Chairman of the Board of Directors of Companhia Metalúrgica Prada and FTL – Ferrovia Transnordestina Logística S.A. (both companies are controlled by us), Chairman of the Board of Directors of Transnordestina Logística S.A. and Nacional Minérios S.A. (both companies jointly controlled by us, having Nacional Minérios S.A. ceased to exist on December 31, 2015), Chairman of the Deliberative Council of the CSN Foundation . Mr. Steinbruch graduated from the Business School of Fundação Getúlio Vargas – FGV/SP and specialized in Marketing and Finance also from Fundação Getúlio Vargas - FGV/SP.

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*Fernando Perrone.* Mr. Perrone has been a member of our Board of Directors since September 26, 2002, and a member of our Audit Committee since June 24, 2005. He was our Infrastructure and Energy Executive Officer from July 10, 2002, to October 2, 2002. Over the past five years, he served as member of the Board of Directors of Profarma - Distribuidora de Fármacos S.A., acting as Chairman, member of the Board of Directors of João Fortes Engenharia S.A., Energia Sustentável S.A., Libra Aeroportos – Aeroporto de Cabo Frio and FTL – Ferrovia Transnordestina Logística S.A. (controlled by CSN). He also serves as an independent consultant in the infrastructure area. Mr. Perrone graduated in Business from a program sponsored by "Chimica" Bayer S.A., holds a Law degree from Universidade Federal Fluminense – UFF/RJ and has a graduate degree in Economics in the area of Capital Markets from Fundação Getulio Vargas – FGV/SP.

*Fabiam Franklin.* Mr. Franklin has been a member of our Board of Directors since April 28, 2016. Since April 4, 2016 he has been serving as Chairman of the Advisory Council of CSN's Stock Investment Fund (*CSN Invest Fundo de Investimentos em Ações*) and is a member of the Board of Directors of the Brazilian Association of Metallurgy and Mining (*Associação Brasileira de Matelurgia, Materiais e Mineração*) since April 2015. He also serves as General Manager of Blast Furnaces at CSN since 2002. Mr. Franklin graduated in Metallurgical Engineering and holds a graduate degree in Reduction Metallurgy, from the –Mc Master University, Hamilton, Canada, and an MBA from Fundação Dom Cabral – Belo Horizonte/MG.

*Yoshiaki Nakano.* Mr. Nakano has been a member of our Board of Directors since April 29, 2004, and a member of our Audit Committee since June 24, 2005. He also serves as a member of the Board of Directors of Transnordestina Logística S.A. (company joint controlled by CSN) and, over the past five years, Mr. Nakano has been a professor and Officer at the School of Economics of Fundação Getúlio Vargas – FGV/SP, a member of the Economy Superior Council (Conselho Superior de Economia - COSEC) of FIESP/Instituto Roberto Simonsen, and a board member of the Fundação de Amparo à Pesquisa do Estado de São Paulo – FAPESP, until 2015. Previously, Mr. Nakano served as Special Secretary for Economic Affairs in the Ministry of Finance and as Finance Secretary of the State of São Paulo. Mr. Nakano graduated in Business Administration from Fundação Getulio Vargas and has an MBA and a Ph.D. from Cornell University, USA.

*Antonio Bernardo Vieira Maia.* Mr. Maia was elected member of our Board of Directors on April 30, 2013 and a member of our Audit Committee since August 08, 2013, serving as Chairman of the Audit Committee since May 06, 2014, and of the Financial Committee since October 07, 2014. He is also CEO of BRG Capital Ltda. since July, 2005 and member of the Board of Directors of Transnordestina Logística S.A. (company joint controlled by CSN) and of FTL – Ferrovia Transnordestina Logística S.A. (controlled by CSN). From April, 1995 to May, 2005 he was Officer of Credit Suisse/Banco Garantia de Investimentos S.A.. He began his career in Citibank Brazil, as a trainee, in 1982 and moved to New York in 1986, where he first worked as an Institutional Investment Analyst of Citigroup for Latin America, until become an Office. Prior to that, he worked as an associate of Banco Bozano Simonsen de Investimentos in Rio from August 1979 to December 1981, and he served as a member of the Board of Directors of Banque Bénédict Hentsch & Cie SA, Geneva, Switzerland, from April to December 2006. He graduated in 1981 in Business and Public Administration from the Fundação Getulio Vargas.

*Léo Steinbruch:* Mr. Steinbruch has been member of the Company's Board of Directors since April 28, 2015 and is also member of the Board of Directors of Elizabeth S.A. Indústria Têxtil, Vicunha Aços S.A., Vicunha Participações S.A., Vicunha Steel S.A. and Textília S.A.. He is also an Executive Officer at CFL Participações S.A. and at Taquari Participações S.A., and administrator of Fazenda Santa Otília Agropecuária Ltda. (all these companies are part of the controlling group of CSN).



**Board of Executive Officers**

In addition to Mr. Steinbruch, the following people were members of our Board of Executive Officers as of the date of this annual report:

*Enéas Garcia Diniz.* Mr. Diniz holds the position of Executive Officer in charge of the steel, cement, energy and environmental operational areas since June 21, 2005. He has been serving CSN since 1985, previously acting as General Manager of Hot Rolling, General Manager of Maintenance, Metallurgy Officer and General Officer of the Presidente Vargas Steelworks and Director of Nacional Minérios S.A. (Nacional Minérios S.A. ceased to exist on December 31, 2015). Mr. Diniz is also currently a member of the Board of Directors of Arvedi Metalfer do Brasil S.A., Cia. Metalic Nordeste, Companhia Metalúrgica Prada, Congonhas Minérios S.A., Itá Energia S.A., Sepetiba Tecon S.A. and Lusosider – Aços Plano S.A. (all companies controlled by us or with equity interest of CSN). He is also currently serving as Officer of Cia. Metalic Nordeste, Companhia Florestal do Brasil, Companhia Metalúrgica Prada, CSN Energia S.A., Estanho Rondônia S.A., Itá Energética S.A., Minérios Nacional S.A. and Stahlwerk Thüringen GmbH (all companies controlled by us or with equity interest of CSN, having Nacional Minérios S.A. ceased to exist on December 31, 2015) and Fundação CSN. Mr. Diniz graduated in Mechanical Engineering from Pontificia Universidade Católica do Rio de Janeiro - PUC / RJ, further specialized in Business Management from Universidade Federal Fluminense - UFF/RJ and has an MBA from the Fundação Dom Cabral Business School of Belo Horizonte.

*David Moise Salama.* Mr. Salama was elected Executive Officer on August 2, 2011, being in charge of the real estate, insurance and credit areas. He has been serving CSN since 2006, having acted as Investor Relations Manager until August 2011 and as Investor Relations Executive Director from August 2011 until May 2015. He is also currently serving as Executive Officer of Estanho de Rondônia S.A. and member of the Board of Directors of Cia. Metalic Nordeste, Companhia Florestal do Brasil, Congonhas Minérios and Sepetiba Tecon S.A. (all companies controlled by CSN), and also a deputy member of the Deliberative Council of Caixa Beneficente dos Empregados of CSN, or CBS. Prior to joining CSN, Mr. Salama acted as Financial Officer at Tecnisa Engenharia e Comércio, Birmann Comércio e Empreendimentos and Goldfarb Comércio e Construções, was the head of consolidated financial information of Unilever Brasil and acted as senior auditor at PwC. Mr. Salama graduated in Accounting and has an MBA in Finance, both from the School of Economics, Business and Accounting of the Universidade de São Paulo / FEA-USP. He complemented his academic education by attending the Oxford Advanced Management and Leadership Program of Saïd Business School at Oxford University, England, and the Program on Negotiation of Harvard Law School at Harvard University, United States.

*Luis Fernando Barbosa Martinez.* Mr. Martinez was elected Executive Officer on August 2, 2011, being in charge of the commercial and logistic areas of the steel, cement and special sales segment. He has been serving CSN since 2002, having previously acted as Sales Officer and Director of Nacional Minérios S.A. (Nacional Minérios S.A. ceased to exist on December 31, 2015). Mr. Martinez is also President of the Brazilian Association of Steel Packaging – ABEAÇO and member of the Board of Directors of Associação Brasileira de Metalurgia, Materiais e Mineração, or ABM. He is also currently serving as Officer of Cia. Metalic Nordeste, Congonhas Minérios S.A., Estanho de Rondônia S.A., Mineração Nacional S.A., CSN Energia, S.A. and Stahlwerk Thüringen GmbH, and member of the Board of Directors of Congonhas Minérios S.A., Companhia Florestal do Brasil, Companhia Metalúrgica Prada (all companies controlled by us) and MRS Logística S.A. (company joint controlled by us) and member of the Deliberative Council of Caixa Beneficente dos Empregados da Companhia Siderúrgica Nacional, or CBS. Prior to

joining CSN, Mr. Martinez was a Sales Officer at Alcan Alumínio do Brasil S.A., having worked in such company for 14 years in different departments (processing, quality, product/market development and sales). He also acted as Executive Officer of the Brazilian Center of Steel Construction - CBCA and of the Brazilian Association of Metallic Construction, or ABCEM. Mr. Martinez graduated in Metallurgical Engineering from Instituto Mauá de Tecnologia, or IMT, has a graduate degree in Industrial Management from the School of Production Engineering of the Universidade de São Paulo, and also graduated from the Corporate Management Development Program at Alcan Aluminum Limited, Montreal, Canada.

*Paulo Rogério Caffarelli.* Mr. Caffarelli has been the Executive Officer responsible for the Company's corporate areas since March 10, 2015 and for the investor relations area since March 1, 2016. He has been a member of Banco Votorantim since 2009, Chairman of the Board of Directors of Brasilcap Capitalização since 2010 and deputy member of the Board of Directors of Transnordestina Logística S.A. (joint controlled by us). He worked for more than 30 years at Banco do Brasil, in the last five years of which in the following areas: wholesale, international business, private bank, capital market, insurance, private pension plans, capitalization, credit cards and individual loans. In the last five years, he was Executive Secretary of the Ministry of Finance, between 2014 and 2015, an alternate member of the Advisory Board of the Deposit Insurance Fund (FGC) between 2013 and 2014, CEO of BB Banco de Investimentos (BB-BI) and BB Leasing between 2012 and 2014, and a member of the Board of Directors of Vale S.A., between 2014 and the beginning of 2015, BB Gestão de Recursos (BB DTVM) between 2010 and 2014, BB Mapfre SH1 Participações, between 2011 and 2012, and Mapfre BB SH2 Participações, between 2011 and 2012, Chairman of the Board of Directors of Brasilprev, between 2009 and 2012, IRB Brasil Resseguros, between 2010 and 2012 and CBSS Visavale (Alelo), between 2010 and 2012, Vice Chairman of the Board of Directors of Visanet (Cielo), between 2009 and 2012, President of Fenacap – National Capitalization Federation, between 2011 and 2012, BB Seguros Participações, between 2009 and 2012, BB Administradora de Cartões de Crédito, between 2009 and 2012, BB ELO Participações, between 2010 and 2012, and ABECS – Brazilian Association of Credit Card and Service Companies, between 2009 and 2012, Vice President of CNseg – National Confederation of Insurance Companies, between 2011 and 2012, a member of the Self-Regulating Board of Febraban – Brazilian Federation of Banks, between 2010 and 2011, a member of the Advisory Board of BBTUR, between 2009 and 2011, and a member of the Fiscal Council of Neoenergia between 2009 and 2010. Mr. Caffarelli has a degree in Law from the Pontifical Catholic University of Curitiba, an MBA in Corporate Law and Finance from the Getulio Vargas Foundation (FGV), and has completed specialization courses in Foreign Trade at the FAE/CDE Business School in Curitiba, and in International Trade Law at IBEJ Curitiba. He also has a Master's degree in Business Administration and Economics from the University of Brasília.

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*Fábio Eduardo De Pieri Spina.* Mr. Spina was elected Executive Officer on September 17, 2015, and is in charge of the legal area. During the last few years Mr. Spina acted as the Vice-President Legal Corporate Finance of The Kraft Heinz Company, during 2014 and 2015, having also acted as Latin America General Counsel and Global Head of Ethics & Compliance. Mr. Spina acted as an Officer at AGN Participações and Director of AGNs' subsidiaries from 2012 until 2014. From 2009 until 2011, he acted as Global General Counsel and Corporate Affairs Officer at Vale S.A. and acted as Vice-President of Investor Relations of Anheuser-Busch Inbev during 2008 and 2009. Mr. Spina was also a teacher at INSPER and acted as a member of the INSPER Legal Consulting Board, Executive Vice-President of the Brasil-China Economic Council, a member of the board of IBRAM (Brazilian Mining Institute), a Board member of the Centre for Sustainable Development Vale-Columbia University, a member of the Consulting Board of Fundação Getúlio Vargas – FGV and member of the Board of Instituto Millenium. Mr. Spina graduated in law at the University of São Paulo Law School (São Paulo, Brazil - 1994) and possesses an L.L.M. from Columbia University School of Law (NY, US – 1997), and an MBA from INSEAD/Wharton (Fontainebleau, France - 2002).

*Pedro Gutemberg Quariguasi Netto.* Mr. Quariguasi was elected Executive Officer on May 11, 2016, and is in charge of the strategic businesses area. During the last five years, Mr. Quariguasi acted as CEO of Vale at Moçambique and as Global Officer of Coal of Vale at Australia from March 2014 until April 2016, and as Partner and Commercial and Marketing Officer at B&A Mineração from May 2012 until September 2013. Mr. Quariguasi has a degree in Metallurgical Engineering from Universidade Federal Fluminense, a Master degree in Metallurgical Engineering from Pontificia Universidade Católica do Rio de Janeiro, a PhD in Metallurgical Engineering from McGill University, Canada, and an MBA in Finance, Corporate Strategy and Economy from McKinsey & Company.

Mr. Benjamin Steinbruch and Mr. Léo Steinbruch are cousins. There are no other family relationships between any of the persons named above. The address for all of our directors and executive officers is Av. Brigadeiro Faria Lima, 3400, 20<sup>th</sup> floor, Itaim Bibi, city of São Paulo, State of São Paulo, Brazil (telephone number 55-11-3049-7100).

### **Indemnification of Officers and Directors**

There is no provision for or prohibition against the indemnification of officers and directors in Brazilian law or in our bylaws. Officers are generally not individually liable for acts performed within the course of their duties. We either indemnify or maintain directors' and officers' liability insurance insuring our Directors, our Executive Officers and certain key employees against liabilities incurred in connection with their respective positions with us.

### **6B. Compensation**

For the year ended December 31, 2015, the aggregate compensation paid by us to all members of our Board of Directors and the members of our Board of Executive Officers for services in all capacities was R\$ 47.9 million, which includes salaries, bonuses, profit sharing arrangements and benefits, such as medical assistance, pension plan and life insurance, among others. See “—Item 6D. Employees” for a brief description of our profit sharing arrangements.

### **6C. Board Practices**

#### **Fiscal Committee and Audit Committee**



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Under Brazilian Corporate Law, shareholders may request the appointment of a Fiscal Committee (Conselho Fiscal), which is a corporate body independent of management and our external auditors. The primary responsibility of the Fiscal Committee is to monitor management's activities, review the financial statements, and report its findings to the shareholders. Currently, we do not have a Fiscal Committee in place.

In June 2005, an Audit Committee (*Comitê de Auditoria*) was appointed in compliance with SEC's rules, which is composed of independent members of our Board of Directors. The Audit Committee is responsible for recommending to the Board of Directors the appointment of the independent auditors, reporting on our auditing policies and our annual audit plan prepared by our internal auditing team, as well as monitoring and evaluating the activities of the external auditors. Our Audit Committee has also been tasked with identifying, prioritizing and submitting actions to be implemented by our Executive Officers, analyzing our annual report and our financial statements, and making recommendations to our Board of Directors.

The Audit Committee is currently composed of Mr. Fernando Perrone, Mr. Yoshiaki Nakano and Mr. Antonio Bernardo Vieira Maia and is constantly assisted by an outside consultant.

For information on the date of election and term of office of the members of our Board of Directors and Board of Executive Officers, see "Item 6A. Directors and Senior Management."

### **Service Contracts**

We permit our directors to continue to participate in our employee pension plan after ceasing to be a director of our Company.

### **6D. Employees**

As of December 31, 2013, 2014 and 2015, we had 21,962 and 22,801 and 23,736 employees, respectively. As of December 31, 2015, approximately 3,500 of our employees were members of the Steelworkers' Union of Volta Redonda and region, which is affiliated with the Força Sindical since 2012, a national union. We believe we have a good relationship with Força Sindical. We have collective bargaining agreements, renewable annually on May 1<sup>st</sup> of every year. Moreover, we have members affiliated with other unions, such as the Engineers' Union with 19 members, the Accountants' Union with 2 members and the Workers' Unions from Arcos, Casa de Pedra, Camaçari, Recife and Araucária, with a total of 258 members. At all other companies controlled by CSN, such as Prada, ERSa, Namisa/Congonhas Minérios and Transnordestina, we have a total of 1,550 members.

In March 1997, we established an employee profit sharing plan. All employees participate in the plan, and earn bonuses based on our reaching certain goals for each year, including a minimum EBITDA margin, as well as other measures such as sales, cost control, productivity and inventory levels, as appropriate for each sector based on its nature.

The Company is the main sponsor of this non-profit entity established in July 1960, primarily engaged in the payment of benefits that supplement the official government Social Security benefits to participants. In its capacity as sponsor, CSN carries out transactions involving the payment of contributions and recognition of actuarial liabilities calculated in defined benefit plans. See further details in Note 27 to our consolidated financial statements contained in "Item 18. Financial Statements."

**6E. Share Ownership**

The Steinbruch family, which includes Mr. Benjamin Steinbruch, our Chairman and Chief Executive Officer holds an indirect majority ownership interest in Vicunha Aços S.A. and Rio Iaco Participações S.A., our controlling shareholders.

All of our Executive Officers and members of our Board of Directors held an aggregate of 90,550 shares of our outstanding common shares as of December 31, 2015.

[Table of contents](#)**Item 7. Major Shareholders and Related Party Transactions****7A. Major Shareholders**

On December 31, 2015, our capital stock was composed of 1,387,524,047 common shares. Our capital stock is entirely composed of common shares and each common share entitles the holder to one vote at our shareholders' meetings.

The following table sets forth, as of December 31, 2015, the number of our common shares owned by our major shareholders:

| <b>Common Shares</b>                       |                     |                                      |
|--|---------------------|--------------------------------------|
| <b>Name of Person or Group</b>             | <b>Shares Owned</b> | <b>Percent of Outstanding Shares</b> |
| Vicunha Aços S.A. <sup>(1)</sup>           | 697,719,990         | 50.29%                               |
| Rio Iaco Participações S.A. <sup>(1)</sup> | 58,193,503          | 4.19%                                |

(1) Owned indirectly by the Steinbruch family, which includes Mr. Benjamin Steinbruch, Chairman of our Board of Directors and CEO, as well as other members of his family.

**7B. Related Party Transactions**

The Company's transactions with related parties consists of (i) transactions with our holding companies; (ii) transactions with subsidiaries, jointly controlled entities, associates, exclusive funds and other related parties; and (iii) other unconsolidated related parties, which are detailed in Note 19 to our Consolidated Financial Statements included in "Item 18. Financial Statements".

i. Vicunha Siderurgia S.A is a holding company set up for the purpose of holding equity interests in other companies and is the Company's main shareholder, holding 51.41% of CSN's voting shares. Rio Iaco Participações S.A is also a holding company and holds 4.29% of CSN's voting capital.

ii. Our commercial and financial transactions with our subsidiaries, jointly controlled entities, associates, exclusive funds and other related parties are carried out at normal market prices and conditions, based on usual terms and rates applicable to third parties. The Company presents details of such transactions in Note 19, item b) of our Consolidated Financial Statements.

iii The Company maintain relations with other unconsolidated related parties as CBS Previdência, Fundação CSN, Banco Fibra, Ibis Participações e Serviços Ltda and Companhia de Gás do Ceará

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## **Item 8. Financial Information**

### **8A. Consolidated Statements and Other Financial Information**

See “Item 3. Key Information—Selected Financial Data” and “Item 18. Financial Statements” for our consolidated financial statements.

#### **Legal Proceedings**

In the ordinary course of our business, we are party to several proceedings, both administrative and judicial, which we believe are incidental and arise out of our regular course of business. We believe that the outcome of the proceedings to which we are currently a party will not have a material adverse effect on our financial position, results of operations and cash flows. We have established provisions for all amounts in dispute that represent a probable loss based on the legal opinion of our internal and external legal counsels.

#### ***Labor Contingencies***

As of December 31, 2015, the Company and its subsidiaries were defendants in 7,532 labor claims, for which a provision has been recorded in the amount of R\$ 479 million. Most of the claims relate to alleged subsidiary and/or joint liability with respect to our independent contractors, salary equalization, health hazard premiums and hazardous duty premiums, overtime pay, differences in the 40% fine on the severance pay fund (FGTS) deposits resulting from past federal government economic plans, and indemnity claims resulting from alleged occupational diseases or on-the-job accidents, breaks between working hours, and differences in profit sharing from 1997 to 1999 and from 2001 to 2003.

#### ***Civil Contingencies***

These are mainly claims for indemnities within the civil judicial processes in which we are involved. Such proceedings result, in general, from contractual disputes and collection of values, claims for damages and compensations related to our commercial and industrial activities, real estate disputes and disputes aiming at restoring health insurance. As of December 31, 2015, the amount relating to probable losses for these contingencies was R\$ 128 million.

We also classify as civil contingencies the administrative and judicial proceedings filed against us for alleged violation of environmental statutes, mainly as a result of our industrial activities, claims for regularization, indemnification or imposition of fines. As of December 31, 2015, the amount relating to probable losses for civil

contingencies relating to environmental issues was R\$ 18 million.

### ***Tax Contingencies***

Among our tax contingencies, there are charges for alleged non-payment of income tax and social contribution taxes in Brazil, for which a provision of R\$ 214 million has been recorded in 2015.

### ***REFIS I, REFIS II and Advance Tax Payment Program***

In November 2009, we adhered to the REFIS I, a special settlement and installment payment program established by the Federal Government, to settle certain of our tax and social security liabilities due until November 2008. Law No. 12,865, dated October 9, 2013, later extended the original deadline of the REFIS I (originally November 2009) to December 2013 and allowed the submission of additional tax and social security liabilities under the program.

In November 2013, we adhered to the Tax Recovery Program for Profits of Foreign Subsidiaries, or REFIS II, a special settlement and installment payment program established by the Federal Government, to settle the Income Tax (IRPJ) and the Social Contribution on Net Income (CSLL) arising from the taxation of profits of foreign subsidiaries. We submitted to the REFIS II the outstanding debts related to the 2004-2009 fiscal years.

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Our decision to join both the REFIS I and the REFIS II took into consideration the economic benefits provided by such settlement programs, such as discounts in the amounts of fines, interest and legal charges due, as well as the high costs of maintaining pending lawsuits.

In November 2014, we adhered to the Advance Tax Payment Program established by the Federal Government under Law 13.043/2014, which allowed settlement of active federal debts, including the debts that were covered by the REFIS I and REFIS II programs mentioned above, through an advance payment of 30% of the total amount due in cash and the offset of the remaining amount due with tax losses. The total amount included in the program was R\$1.603 million, resulting in an impact to the cash account of R\$ 502 million and a positive result of R\$ 79 million in our income statements. We are currently waiting for a formal notification to be issued by the Federal Revenue to consolidate the Tax Payment Program.

As of December 31, 2015, we started to consolidate Congonhas Minérios as successor of Namisa in our results and financial reports, including its settlement and installment payment programs. In November 2013, Namisa adhered to the Tax Recovery Program for Profits of Foreign Subsidiaries, or REFIS II, established by the Federal Government to settle the Income Tax (IRPJ) and the Social Contribution on Net Income (CSLL), arising from the taxation of profits of foreign subsidiaries. Namisa did not adhere to the Advance Tax Payment Program. On December 31, 2015, the position of Congonha's debt under the REFIS II was R\$ 62 million.

For more information, see Note 16 – Taxes Installments - to the consolidated financial statements included in “Item 14.a). Financial Statements”.

***Antitrust***

In October 1999, CADE fined us, claiming that certain practices adopted by us and other Brazilian steel companies up to 1997 allegedly comprised a cartel. We challenged the cartel allegation and the imposition of the fine judicially and, on June 2003, obtained a partially favorable judgment by a federal trial court. CADE appealed the trial court decision and, in June 2010, a federal appellate court in Brasília held a judgment reversing the trial court's decision and confirming the cartel allegation, as well as the fine imposed by CADE in the amount of R\$65 million. We appealed the decision of the appellate court to the Brazilian Superior Court of Justice. We have not yet recorded any provision in connection with this fine.

In September 2011, we received a request from the SDE to provide information related to the acquisition of shares of Usinas Siderúrgicas de Minas Gerais S.A., or Usiminas, which later evolved to the analysis by CADE of a concentration act. In October 2011, SDE involved the CADE and the SEAE on the subject and we provided the requested information to these antitrust bodies.

In April and July, 2012, CADE issued certain injunctive orders limiting our ability to, among other things, increase our equity stake in Usiminas or exercise our voting rights with the shares we already own.

On April 10, 2014 CADE issued its decision on the matter, and a Performance Commitment Agreement (*Termo de Compromisso de Desempenho*), or TCD, was executed by CADE and CSN. Under the terms of CADE's decision and the TCD, CSN shall reduce its equity stake in Usiminas, within a specified timeframe. The timeframe and reduction percentages are confidential. Furthermore, our political rights in Usiminas will continue to be suspended until we reach the thresholds established in the TCD. On March 24, 2016, we applied to CADE to partially suspend the TCD so that we are able to exercise certain political rights, namely that of appointing independent directors and members of the fiscal committee. On April 27, 2016 CADE granted our request, and on April 28, 2016, at USIMINAS' Annual General Meeting, we appointed two (2) independent directors and one (1) independent member of the fiscal committee of Usiminas, and their respective alternates. The election of Usiminas' Board and Fiscal Committee members by CSN, as well as all meetings of the Board of Directors of Usiminas, are currently suspended as a result of judicial decisions issued by the State Court of Minas Gerais and the Federal Court of the Federal District, respectively. CSN has appealed the decision issued by the State Court of Minas Gerais on May 13, 2016.

#### ***Other Legal Proceedings***

We are defendants in other proceedings at administrative and judicial levels, in the approximate amount of R\$21,541 million as of December 31, 2015 (R\$15,430 million as of December 31, 2014), of which R\$ 19,024 million relate to tax contingencies as of December 31, 2015 (R\$13,799 million as of December 31, 2014), R\$834 million to civil contingencies as of December 31, 2015 (R\$446 million as of December 31, 2014), R\$1,033 million to labor contingencies and social security contingencies as of December 31, 2015 (R\$1,070 million as of December 31, 2014) and R\$359 million to environmental contingencies as of December 31, 2015 (R\$115 million as of December 31, 2014). The assessments made by legal counsel define these contingencies as entailing a risk of possible loss and, therefore, no provision has been recorded. Contingencies related to each of our subsidiaries are included proportionally to the percentage of these subsidiaries that we consolidate in our financial statements.

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Our main tax contingency relates to a R\$ 7,743 million tax assessment notice issued against the Company for having allegedly failed to submit to taxation the capital gain resulting from the alleged sale of 40% of the shares of its subsidiary Namisa to the Asian Consortium. On May 2013, the São Paulo Regional Judgment Office (lower administrative court) issued a decision favorable to us and cancelled the tax assessment notice. Such decision was partially reviewed by the Administrative Board of Tax Appeals (CARF) and the tax assessment notice was partially reinstated. CSN and the Bureau of Federal Public Attorneys filed administrative appeals against CARF's decision and we are currently waiting for the analysis by the Superior Council of Tax Appeals (Conselho Superior de Recursos Fiscais).

The same tax assessment notice informed above resulted on other contingency issued against Namisa (merged in December 31, 2015 by our subsidiary Congonhas Minérios), in a total amount of R\$2,250 million. This tax assessment demands the payment of income tax and social contribution not paid in view of the alleged improper goodwill amortization from 2008 to 2011. On May 2013, the São Paulo Regional Judgment Office (Delegacia Regional de Julgamento), the lower administrative court, issued a decision favorable to Namisa and cancelled the tax assessment notice. Such decision was maintained by CARF and we are currently waiting for the analysis by the Superior Council of Tax Appeals (Conselho Superior de Recursos Fiscais) of the special appeal filed by the Bureau of Federal Public Attorneys.

In December 2015, CSN received a new tax assessment notice, in the total amount of R\$ 1.087 million for having allegedly improperly deducted interest expenses agreed in the pre-payment contracts between CSN and Namisa. We filed our defense before the São Paulo Regional Judgement Office (Delegacia Regional de Julgamento) and are waiting for a decision to be issued.

In July 2012, the environmental public prosecutor of the State of Rio de Janeiro (Ministério Público Estadual do Rio de Janeiro) filed a judicial proceeding against us claiming that we must (i) remove all waste disposed in two areas used as an industrial landfill in the city of Volta Redonda and (ii) relocate 750 residences located in the adjacent neighborhood Volta Grande IV Residential, also in the city of Volta Redonda. The court denied these requests but ordered that we present a timetable to investigate the area and, if necessary, to remediate the potential issues raised by the public prosecutor. We presented a timetable considering the conclusion of all studies related to investigation phases, including the risk assessment and intervention plan, which were concluded in April 30, 2014. We presented the studies resulting from our investigation to INEA and are awaiting for their response. We have also received notices for lawsuits brought by certain home owners at Volta Grande IV Residential claiming indemnification for alleged moral and material damages.

On April 8, 2013, the INEA fined us in the amount of R\$35 million in connection with the matters involving Volta Grande IV Residential and requested that we perform the same actions already under discussion in the July 2012 public prosecutor lawsuit. In January 2014 we filed a lawsuit seeking to reverse this fine and are awaiting for the INEA to file its response.

In August 2013, the federal environmental public prosecutor (Ministério Público Federal) filed a judicial civil proceeding against us with the same claims requested on the lawsuit brought by the environmental public prosecutor of the State of Rio de Janeiro, described above.

After that, in May 2014, the state of Rio de Janeiro (INEA) filed a lawsuit to execute the debt. We are currently challenging both proceedings but no final decision on this matter has been issued to date.

As a result of the accident involving a Brazilian mining company in November 2015, the State of Minas Gerais filed judicial proceedings against several companies in the mining segment, based on the information disclosed in 2014 on the Environmental Statement Register. These proceedings question the structures that do not have technical stability guaranteed by an external auditor or which stability was not attested due to a lack of documents or technical data.

On March, 2016, CSN was notified about the Public Civil Action filed against it by the State of Minas Gerais and the State Environmental Foundation (FEAM) questioning the stability of CSN's structure referred to as BAIA 4 – a small structure installed inside the industrial area and used for collection of fine of the ore filtration process. Such proceeding was filed based on outdated information. CSN will present its defense, clarifying the facts and attesting the stability of BAIA 4's structure, in accordance with the auditor report.

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Environmental and social contingencies for our logistics facilities and the implementation of the new railroad are being reviewed by the management in accordance with the emergency attendance and the risk management plans established in 2014.

For further information on our legal proceedings and contingencies, see Notes 17 and 18 to our consolidated financial statements.

**Dividend Policy***General*

Subject to certain exceptions set forth in Brazilian Corporate Law, our bylaws require that we pay a yearly minimum dividend equal to 25% of our adjusted net profits, calculated in accordance with Brazilian Corporate Law. Proposals to declare and pay dividends in excess of the statutory minimum dividend requirement are generally made at the recommendation of our Board of Directors and approved by the vote of our shareholders. Any such proposal will be dependent upon our results of operations, financial condition, cash requirements for our business, future prospects and other factors deemed relevant by our Board of Directors. Until December 2000, it had been our policy to pay dividends on our outstanding common shares not less than the amount of our required distributions for any particular fiscal year, subject to a determination by our Board of Directors that such distributions would be inadvisable in view of our financial condition. In December 2000, our Board of Directors decided to adopt a policy of paying dividends equal to all legally available net profits, after taking into consideration the following priorities: (i) our business strategy; (ii) the performance of our obligations; (iii) the accomplishment of our required investments; and (iv) the maintenance of our good financial status.

Pursuant to a change in Brazilian tax law effective January 1, 1996, Brazilian companies are also permitted to pay limited amounts of interest on Shareholders' equity to holders of equity securities and to treat these payments as an expense for Brazilian income tax purposes. These payments may be counted in determining if the statutory minimum dividend requirement has been met, subject to shareholder approval.

At our Annual Shareholders' Meeting of April 28, 2016, our shareholders ratified the payment of R\$ 275 million as dividends relating to 2015, which were already approved by the Board of Directors Meeting held on March 11, 2015, and paid to the shareholders. For dividends declared during the past four years, see "Item 3A. Selected Financial Data."

*Amounts Available for Distribution*

At each Annual Shareholders' Meeting, our Board of Directors is required to recommend how our earnings for the preceding fiscal year are to be allocated. For purposes of Brazilian Corporate Law, a company's income net of income tax and social contribution for any one fiscal year, any accumulated losses from prior fiscal years and amounts allocated to employees' and management's participation in earnings, represents its "net profits" for that fiscal year.

In accordance with Brazilian Corporate Law, shareholders are entitled to receive as a mandatory dividend in each fiscal year, either (i) the portion of the profits as may be stated in the bylaws of the company or, in the event the latter is silent in this regard, (ii) an amount equal to 50% of the net profits as increased or reduced by: (a) amounts allocated to the legal reserve; (b) amounts allocated to the contingency reserve and the tax incentive reserve, if any; and (c) any reversion of contingency reserves constituted in prior years. The payment of dividends may be limited to the amount of net profits realized during the fiscal year, provided that the difference is recorded as a reserve for unrealized profits.

Profits recorded in the reserve for unrealized profits, when realized and not absorbed by losses in subsequent years, have to be added to the first dividend declared after their realization. Under our bylaws, we are required to distribute to shareholders as dividends in respect of each fiscal year ending on December 31, to the extent profits are available for distribution, an amount equal to at least 25% of our adjusted net profits, which amount shall include any interest paid on capital during that year. See “Mandatory Dividends” below.



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*Legal Reserve.* Under 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. However, we are not required to make any allocations to our legal reserve in a year in which the legal reserve, when added to our other established capital reserves, exceeds 30% of our capital stock. The amounts allocated to such reserve must be approved by our shareholders in the Annual Shareholders’ Meeting, and may be used to increase our capital stock or to offset losses and, therefore, are not available for the payment of dividends.

*Discretionary (or Statutory) Reserves.* Under Brazilian Corporate Law, any corporation may provide in its by-laws for the creation of additional reserves, provided that the maximum amount that may be allocated to such reserves, the purpose of such reserves and the allocation criteria of such reserves are specified. There cannot be any allocation to such reserves if it affects payment of the Mandatory Dividend (as defined below). Our by-laws currently provide that our Board of Directors may propose to our shareholders the deduction of at least 1% from our net profits to be allocated to a Working Capital and Investments Reserve. Constitution of such reserve will not affect payment of the Mandatory Dividend. Our by-laws do not provide for any other discretionary reserve.

*Contingency Reserve.* Under Brazilian Corporate Law, a percentage of our “net profits” may be allocated to a contingency reserve for estimable losses that are considered probable in future years. Any amount so allocated in a prior year must either be reserved in the fiscal year in which the loss had been anticipated if the loss does not occur as projected or be written off in the event that the anticipated loss occurs.

*Tax Incentive Reserve.* Our shareholders in a shareholders’ meeting may, following a management’s proposal, allocate to a tax incentive reserve the portion of our “net profits” resulting from donations or governmental grants for investments, which may be excluded from the taxable basis of the Mandatory Dividend.

*Unrealized Profits Reserve.* Under Brazilian Corporate Law, the amount by which the Mandatory Dividend exceeds our realized net profits in a given fiscal year may be allocated to an unrealized profits reserve. Brazilian Corporate Law defines “realized net profits” for the period as the amount by which our “net profits” exceeds the sum of (i) positive equity net results and (ii) the net profits, gains or returns that will be realized after the end of the subsequent fiscal year. “Net profits” allocated to the unrealized profits reserve must be added to the next Mandatory Dividend distribution after those profits have been realized, if they have not been used to absorb losses in subsequent periods.

*Retained Earnings Reserve.* Under Brazilian Corporate Law, our shareholders may decide at a general shareholders’ meeting to retain a portion of our net profits as provided for in a previously approved capital expenditure budget. No allocation of net profits may be made to the retained earnings reserve in case such allocation affects payment of the Mandatory Dividend.

The balance of our profit reserves, except those for contingencies, tax incentives and unrealized profits, shall not be greater than our capital stock. If such reserves reach this limit, the manner in which such surplus is used will be decided at a shareholders’ meeting.

For purposes of determining reserve amounts, the calculation of “net profits” and allocations to reserves for any fiscal year are determined on the basis of financial statements prepared in accordance with Brazilian Corporate Law. The consolidated financial statements included herein have been prepared in accordance with IFRS and, although our allocations to reserves and dividends will be reflected in the financial statements, investors will not be able to calculate the allocations or required dividend amounts from the consolidated financial statements.

*Capital Reserve.* Under Brazilian Corporate Law, the capital reserve consists of premiums from the issuance of shares, goodwill reserves from mergers, sales of founders' shares, and sales of warrants. Amounts allocated to our capital reserve are not taken into consideration for purposes of determining Mandatory Dividends. Our capital stock is not currently represented by founders' shares. In our case, any amounts allocated to the capital reserve may only be used to increase our capital stock, to absorb losses that surpass accumulated profits and profit reserves, or to redeem, reimburse or purchase shares.

***Mandatory Dividend***

Under our bylaws, we are required to distribute to shareholders as dividends in respect of each fiscal year ending on December 31, to the extent profits are available for distribution, an amount equal to at least 25% of our adjusted profits (the “Mandatory Dividend”) in any particular year, which amount shall include any interest paid on capital during that year. See “Additional Payments on Shareholders’ Equity” below. In addition to the Mandatory Dividend, our Board of Directors may recommend that shareholders receive an additional payment of dividends from other funds legally available. Any payment of interim dividends may be netted against the amount of the Mandatory Dividend for that fiscal year. Under Brazilian Corporate Law, if the Board of Directors determines prior to the Annual Shareholders’ Meeting that payment of the Mandatory Dividend for the preceding fiscal year would be inadvisable in view of our financial condition, the Mandatory Dividend does not need to be paid. That type of determination must be reviewed by the Fiscal Committee, if one exists, and reported, together with the appropriate explanations, to the shareholders and to the CVM. Mandatory dividends not distributed as described above shall be registered as a special reserve and, if not absorbed by losses in subsequent fiscal years, shall be paid as a dividend as soon as our financial condition allows for it.

***Payment of Dividends***

We are required to hold Annual Shareholders’ Meetings within the first four months after the end of our fiscal year at which an annual dividend may be declared. Additionally, our Board of Directors may declare interim dividends. Under 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 interest on shareholders’ equity as described under “Additional Payments on Shareholders’ Equity” below) in respect of its shares, after which we will no longer be liable for the dividend payments.

Our payments of cash distributions on common shares underlying the ADSs will be made in Brazilian currency to our ADR custodian on behalf of our ADR depository. Our ADR custodian will then convert the proceeds into U.S. dollars and will cause the U.S. dollars to be delivered to our ADR depository for distribution to holders of ADSs.

***Additional Payments on Shareholders’ Equity***

Since January 1, 1996, Brazilian companies have been permitted to pay interest on shareholders’ equity to holders of equity securities and to treat those payments as a deductible expense for Brazilian income tax purposes. The amount of interest payable on capital is calculated based on the TJLP – Long Term Interest Rate, as determined by the Central Bank, and applied to each shareholder’s portion of net equity. Brazilian Corporate Law establishes that current earnings are not included as part of the net equity.

The TJLP is determined by the Central Bank on a quarterly basis. The TJLP is based on the annual profitability average of Brazilian public internal and external debt. The TJLP rate for 2015 was 6.25%.

Interest on shareholders’ equity is deductible up to the greater of the following amounts: (i) 50% of the net income (before taking into account the amounts attributable to shareholders as interest on shareholders’ equity and the provision of corporate income tax but after the deduction of the provision of the social contribution on net profits) related to the period in respect of which the payment is made; or (ii) 50% of the sum of retained profits and profits

reserves as of the date of the beginning of the fiscal year in respect of which the payment is made

**8B. Significant Changes**

None

**Item 9. The Offer and Listing****9A. Offer and Listing Details**

Our capital stock is comprised of common shares without par value (*ações ordinárias*). On January 22, 2008, our shareholders approved a one-for-three split of our common shares. As a result of this stock split, each common share of our capital stock as of January 22, 2008 became represented by three common shares after the split. The same ratio of one common share for each ADS was maintained.

On March 25, 2010, our shareholders approved a two-for-one split of our common shares. As a result of this stock split, each common share of our capital stock as of March 25, 2010 became represented by two common shares after the split. The same ratio of one common share for each ADS was maintained. See “Item 10.B. Memorandum and Articles of Association.”

The following table sets forth information concerning the high and low closing sale prices and the average daily trading volume of our common shares on the BM&FBOVESPA (per common share) and the ADSs on the NYSE for the periods indicated:

|                | Common Shares <sup>(1)</sup>    |       |                | American Depositary Shares <sup>(1)</sup> |      |                |
|----------------|---------------------------------|-------|----------------|---|------|----------------|
|                | U.S.\$ per Share <sup>(2)</sup> |       | Volume         | U.S.\$ per ADS                            |      | Volume         |
|                | High                            | Low   | (In thousands) | High                                      | Low  | (In thousands) |
| <b>2010</b>    |                                 |       |                |   |      |                |
| Year end       | 14.58                           | 10.26 | 3,680          | 14.67                                     | 9.76 | 5,349          |
| <b>2011</b>    |                                 |       |                |   |      |                |
| Year end       | 16.60                           | 5.83  | 3,456          | 13.37                                     | 5.62 | 4,828          |
| <b>2012</b>    |                                 |       |                |   |      |                |
| Year End       | 7.58                            | 3.79  | 4,868          | 8.36                                      | 3.67 | 6,131          |
| <b>2013</b>    |                                 |       |                |   |      |                |
| First quarter  | 5.22                            | 3.69  | 5,607          | 5.11                                      | 3.68 | 5,175          |
| Second quarter | 3.79                            | 2.39  | 7,943          | 3.80                                      | 2.37 | 6,103          |
| Third quarter  | 3.73                            | 2.02  | 8,441          | 3.87                                      | 2.10 | 6,823          |
| Fourth quarter | 5.71                            | 3.62  | 6,285          | 5.64                                      | 3.73 | 6,752          |
| Year End       | 6.01                            | 2.14  | 7,104          | 5.64                                      | 2.07 | 6,225          |
| <b>2014</b>    |                                 |       |                |   |      |                |
| First quarter  | 5.50                            | 3.37  | 6,458          | 5.59                                      | 3.39 | 6,057          |
| Second quarter | 4.14                            | 3.56  | 5,764          | 4.17                                      | 3.59 | 3,925          |
| Third quarter  | 4.82                            | 3.54  | 5,715          | 4.88                                      | 3.31 | 5,515          |

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|                       |      |      |        |      |      |       |
|-----------------------|------|------|--------|------|------|-------|
| <b>Fourth quarter</b> | 3.33 | 1.65 | 6,146  | 3.49 | 1.55 | 5,299 |
| <b>Year End</b>       | 5.52 | 1.79 | 6,019  | 5.59 | 1.55 | 5,185 |
| <b>2015</b>           |      |      |        |      |      |       |
| <b>First quarter</b>  | 2.13 | 1.39 | 5,992  | 2.02 | 1.45 | 2,941 |
| <b>Second quarter</b> | 2.95 | 1.68 | 5,139  | 2.89 | 1.65 | 3,003 |
| <b>Third quarter</b>  | 1.63 | 0.79 | 6,847  | 1.61 | 0.77 | 3,771 |
| <b>Fourth quarter</b> | 1.59 | 0.96 | 7,273  | 1.58 | 0.94 | 1,521 |
| <b>Year End</b>       | 2.71 | 0.83 | 6,314  | 2.89 | 0.77 | 2,372 |
| <b>2016</b>           |      |      |        |      |      |       |
| <b>First quarter</b>  | 2.11 | 0.81 | 7,207  | 2.27 | 0.73 | 1,774 |
| <b>Month Ended:</b>   |      |      |        |      |      |       |
| <b>April 29, 2016</b> | 3.83 | 1.96 | 10,269 | 3.78 | 1.94 | 3,382 |

Source: Economática and Bloomberg.

- (1) Prices and volumes of our common shares and ADSs have been adjusted to reflect the two-for-one stock split occurred in March 2010 whereby each common share of our capital stock on March 25, 2010 became represented by two common shares. See “Item 10.B. Memorandum and Articles of Association.”
- (2) U.S. dollar amounts have been translated from *reais* at the exchange rates in effect on the respective dates of the quotations for the common shares set forth above. These U.S. dollar amounts may reflect exchange rate fluctuations and may not correspond to changes in nominal *reais* prices over time.

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As of April 29, 2016, the closing sale price (i) per common share on the BM&FBOVESPA was of R\$13.14 and (ii) per ADS on the NYSE was of US\$3.78. The ADSs are issued under a deposit agreement and JP Morgan Bank serves as depository under that agreement.

As of December 31, 2015, approximately 336,435 million, or approximately 24.2%, of our outstanding common shares were held through ADSs. Substantially all of these ADSs were held of record by The Depository Trust Company. In addition, our records indicate that on that date there were approximately 172 record holders (other than our ADR depository) with addresses in the U.S., holding an aggregate of approximately 61 million common shares, representing 10.0% of our outstanding common shares.

#### **9B. Plan of Distribution**

Not applicable.

#### **9C. Regulation of Securities Markets**

The principal trading market for our common shares is BM&FBOVESPA. Our ADSs trade on the NYSE under the symbol "SID."

#### **Trading on the BM&FBOVESPA and NYSE**

CSN shares traded in the market are comprised of ordinary shares without nominal value. Ordinary shares are traded on the Brazilian Stock Exchange, BM&FBOVESPA, under the code CSNA3. Our ADSs, each one representing an ordinary share, are traded on the New York Stock Exchange, NYSE, under the code SID.

In 2000, the BM&FBOVESPA was reorganized through the execution of a memoranda of understanding by the Brazilian stock exchanges. Under the memoranda, all securities in Brazil are now traded only on the BM&FBOVESPA. When shareholders trade in common and preferred shares on the BM&FBOVESPA, the trade is settled in three business days after the trade date without adjustment of the purchase price for inflation. The seller is ordinarily required to deliver the shares to the exchange on the third business day following the trade date. Delivery of and payment for shares are made through the facilities of BM&FBOVESPA's clearinghouse.

The BM&FBOVESPA is significantly less liquid than the NYSE or other major exchanges in the world. As of December 2015, the aggregate market capitalization of the BM&FBOVESPA was equivalent to R\$1.91 trillion (or US.\$ 490 billion). In contrast, as of December 2015, the aggregate market capitalization of the NYSE was US\$24.50 trillion. The average daily trading volume of the BM&FBOVESPA and NYSE for 2015 was of approximately R\$6.79 billion (or US.\$ 2.04 billion) and U.S.\$ 3.69 billion, respectively. Although any of the outstanding shares of a listed company may trade on the BM&FBOVESPA, in most cases fewer than half of the listed shares are actually available for trading by the public, since the remaining shares are generally being held by small groups of controlling persons, by government entities or by one principal shareholder. See "Item 3. Risk Factors—Risks Relating to the ADSs and Our

Common Shares— The relative volatility and illiquidity of the Brazilian securities markets may substantially limit your ability to sell the common shares underlying the ADSs at the price and time you desire”



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As of December 31, 2015, we accounted for approximately 2.90% of the market capitalization of all listed companies on the BM&FBOVESPA.

The following table reflects the fluctuations in the Ibovespa index during the periods indicated:

**Ibovespa Index**

|                                | <b>High</b> | <b>Low</b> | <b>Close</b> |
|--------------------------------|-------------|------------|--------------|
| <b>2010</b>                    | 72,995      | 58,192     | 69,304       |
| <b>2011</b>                    | 71,632      | 48,668     | 56,754       |
| <b>2012</b>                    | 68,394      | 52,481     | 60,952       |
| <b>2013</b>                    | 63,472      | 44,816     | 51,507       |
| <b>2014</b>                    | 62,304      | 44,904     | 50,007       |
| <b>2015</b>                    | 58,574      | 42,749     | 44,014       |
| <b>2016 (through March 31)</b> | 50,023      | 37,046     | 49,084       |

The IBOVESPA index closed at 49,084 on March 31, 2016. Trading on the BM&FBOVESPA by nonresidents of Brazil is subject to certain limitations under Brazilian foreign investment legislation. See “Item 10D. Exchange Controls.”

**Regulation of the Brazilian Securities Markets**

The Brazilian securities markets are regulated by CVM, which has authority over stock exchanges and the securities markets in general, and by the Central Bank, which has, among other powers, licensing authority over brokerage firms and regulates foreign investment and foreign exchange transactions. The Brazilian securities market is governed by Law No. 6,385, dated December 7, 1976, as amended, or the Brazilian Securities Law, Brazilian Corporate Law and regulations issued by CVM.

Under Brazilian Corporate Law, a company is either public, a *companhia aberta*, such as CSN, or private, a *companhia fechada*. All public companies are registered with CVM and are subject to reporting and regulatory requirements.

Trading in securities on the BM&FBOVESPA may be suspended at the request of a company in anticipation of a material announcement. The company should also suspend its trading on international stock exchanges where its securities are traded. Trading may also be suspended on the initiative of the BM&FBOVESPA or CVM, among other reasons, based on or due to a belief that a company has provided inadequate information regarding a material event or has provided inadequate responses to the inquiries by CVM or the BM&FBOVESPA.

The Brazilian Securities Law and the regulations issued by CVM provide for, among other things, disclosure requirements, restrictions on insider trading and price manipulation, as well as protection of minority shareholders. However, the Brazilian securities markets are not as highly regulated and supervised as the United States securities markets or markets in certain other jurisdictions.

**Disclosure Requirements**

According to Law No 6,385, dated December 7, 1976, a publicly held company must submit to CVM and BM&FBOVESPA certain periodic information, including annual and quarterly reports prepared by management and independent auditors. This legislation also requires companies to file with CVM shareholder agreements, notices of shareholders' meetings and copies of the related minutes.

Pursuant to CVM Resolution No. 358, of January 3, 2002, as recently modified by CVM Instruction No. 565, of June 15, 2015, CVM revised and consolidated the requirements regarding the disclosure and use of information related to material facts and acts of publicly held companies, including the disclosure of information in the trading and acquisition of securities issued by publicly held companies.

Such requirements include provisions that:

- Establish the concept of a material fact that gives rise to reporting requirements. Material facts include decisions made by the controlling shareholders, resolutions of the shareholders at a shareholders' meeting and of management of the company, or any other facts related to a company's business (whether occurring within the company or otherwise somehow related thereto) that may influence the price of its publicly traded securities, or the decision of investors to trade such securities or to exercise any of such securities' underlying rights;
- Specify examples of facts that are considered to be material, which include, among others, the execution of agreements providing for the transfer of control of the company, the entry or withdrawal of shareholders that maintain any managing, financial, technological or administrative function with or contribution to the company, and any corporate restructuring undertaken among related companies;
- Oblige the investor relations officer, controlling shareholders, other officers, directors, members of the audit committee and other advisory boards to disclose material facts;
- Require simultaneous disclosure of material facts to all markets in which the corporation's securities are admitted for trading;
- Require the acquirer of a controlling stake in a corporation to disclose material facts, including its intentions as to whether or not to de-list the corporation's shares within one year from the acquisition of such controlling stake;
- Establish rules regarding disclosure requirements in the acquisition and disposal of a material ownership interest; and
- Forbid trading on the basis of material non-public information.

Pursuant to CVM Rule No. 480, dated December 7, 2009, as amended ("CVM Rule No. 480"), CVM expanded the quantity and improved the quality of information reported by issuers in Brazil. This Rule represents a significant step forward in providing the market with greater transparency over securities issuers and provides for issuers to file annually a comprehensive and opinative reference form (*Formulário de Referência*). The reference form (*Formulário de Referência*) is in line with the Shelf Registration System recommended by the International Organization Securities Commission (IOSCO) and adopted in other countries (England and the United States, among others), by means of which the information regarding an specific issuer is consolidated into one document and is subject to periodic update (the "Shelf Document"). This mechanism offers the investor the possibility to analyze one single document for relevant information about the issuer.

CVM Rule No. 480 also created two groups of issuers per type of securities traded. Group A issuers are authorized to trade in any securities, whereas Group B issuers must not trade in stocks, depositary receipts (BDRs, Units) and securities convertible or exchangeable into stocks or depositary receipts. The greater extend of Group A authorization is followed by more stringent disclosure and reporting requirements. We, as issuers of stocks, are part of Group A and, as such, are subject to more stringent disclosure and reporting requirements.

CVM has also enacted Rule No. 481, dated December 17, 2009, as amended ("CVM Rule No. 481"), to regulate two key issues involving general meetings of shareholders in publicly held companies: (i) the extent of information and documents to be provided in support of call notices (subject to prior disclosure to shareholders); and (ii) proxy

solicitation for exercise of voting rights.

CVM Rule No. 481 is intended to (i) improve the quality of information disclosed by publicly held companies to shareholders and to the market in general, favoring the use of Internet as a vehicle to that end; (ii) make the exercise of voting rights less costly and foster the participation of shareholders in general meetings, especially for companies with widely dispersed capital; and, consequently (iii) facilitate the oversight of corporate businesses.

**9D. Selling Shareholders**

Not applicable.

## **9E. Dilution**

Not applicable.

## **9F. Expenses of the Issue**

Not applicable.

## **Item 10. Additional Information**

### **10A. Share Capital**

Not applicable.

### **10B. Memorandum and Articles of Association**

#### **Registration and Corporate Purpose**

We are registered with the Department of Trade Registration under number 15,910. Our corporate purpose, as set forth in Article 2 of our bylaws, is to manufacture, transform, market, import and export steel products and steel derived by-products, as well as to explore other activities that are directly or indirectly related to our corporate purpose, including: mining, cement and carbochemical business activities, the manufacture and assembly of metallic structures, construction, transportation, navigation and port activities.

#### **Directors' Powers**

Pursuant to our bylaws, a director may not vote on a proposal, arrangement or contract in which the director's interests conflict with our interests. In addition, our shareholders must approve the compensation of our management and, in case a global amount is fixed, our Board of Directors is responsible for allocating individual amounts of management compensation. There is no mandatory retirement age for our directors. A detailed description of the general duties and powers of our Board of Directors may be found in "Item 6A. Directors and Senior Management."

#### **Description of Capital Stock**

Set forth below is certain information concerning our capital stock and a brief summary of certain significant provisions of our bylaws and Brazilian Corporate Law applicable to our capital stock. This description does not purport to be complete and is qualified by reference to our bylaws and to Brazilian law. For further information, see our bylaws, which have been filed as an exhibit to this annual report.

#### ***Capital Stock***

On December 31, 2015 our capital stock was composed of 1,387,524,047 common shares. Our bylaws authorize the Board of Directors to increase the capital stock up to 2,400,000,000 common shares without an amendment to our bylaws. There are currently no classes or series of preferred shares issued or outstanding. We may purchase our own shares for purposes of cancellation or to hold them in treasury subject to certain limits and conditions established by the CVM and Brazilian Corporate Law. See "Item 16E. Purchases of Equity Securities by the Issuer and Affiliated

Purchasers.”

***Liability for Further Capital Calls***

Pursuant to Brazilian Corporate Law, a shareholder’s liability is generally limited to the issue price of the subscribed or purchased shares. There is no obligation of a shareholder to participate in additional capital calls.

***Voting Rights***

Each common share entitles the holder to one vote at our shareholders’ meetings. According to CVM regulations, shareholders that represent at least 5% of our common shares may request cumulative voting in an election of our Board of Directors. Pursuant to Brazilian Corporate Law, shareholders holding at least 15% of our common shares have the right to appoint a member of our Board of Directors.

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

Pursuant to Brazilian Corporate Law, the shareholders present at an annual or extraordinary shareholders' meeting, convened and held in accordance with Brazilian Corporate Law and our bylaws are empowered to decide all matters relating to our corporate purpose and to pass any resolutions they deem necessary for our protection and well-being.

In order to participate in a shareholders' meeting, a shareholder must be a record owner of the share on the day the meeting is held, and may be represented by a proxy.

Shareholders' meetings are called, convened and presided over by the Chairman of our Board of Directors or, in his absence, by whom he appoints. Brazilian Corporate Law requires that our shareholders' meeting be convened by publication of a notice in the *Diário Oficial do Estado de São Paulo*, the official government publication of the State of São Paulo, and in a newspaper of general circulation in Brazil and in the city in which our principal place of business is located, currently the *Jornal Valor Econômico*, at least 15 days prior to the scheduled meeting date and no fewer than three times. Both notices must contain the agenda for the meeting and, in the case of an amendment to our bylaws, an indication of the subject matter.

In order for a shareholders' meeting to be held, shareholders representing a quorum of at least one-fourth of the voting capital must be present, except for meetings convened to amend our bylaws, where shareholders representing at least two-thirds of the voting capital must be present. A shareholder may be represented at a shareholders' meeting by means of a proxy, appointed not more than one year before the meeting, who must be either a shareholder, a company officer or a lawyer. For public companies, such as we are, the proxy may also be a financial institution. If no quorum is present, notice must be given in the manner described above, no fewer than eight days prior to the scheduled meeting date. On second notice, the meeting may be convened without a specific quorum requirement, subject to the minimum quorum and voting requirements for certain matters, as described below. A holder of shares with no voting rights may attend a shareholders' meeting and take part in the discussion of matters submitted for consideration.

Except as otherwise provided by law, resolutions passed at a shareholders' meeting require a simple majority vote, abstentions not considered. Pursuant to Brazilian Corporate Law, the approval of shareholders representing at least one-half of the issued and outstanding voting shares is required for the following actions: (i) to create a new class of preferred shares or disproportionately increase an existing class of preferred shares relative to the other classes of preferred shares, to change a priority, preference, right, privilege or condition of redemption or amortization of any class of preferred shares or to create 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 (in these cases, a majority of the issued and outstanding shares of the affected class is also required); (ii) to reduce the Mandatory Dividend; (iii) to change our corporate purpose; (iv) to merge into or consolidate with another company or to spin-off our assets; (v) to dissolve or liquidate our Company; (vi) to cancel any liquidation procedure; (vii) to authorize the issuance of founders' shares; and (viii) to participate in a centralized group of companies as defined under Brazilian Corporate Law.

Pursuant to Brazilian Corporate Law, shareholders voting at a shareholders' meeting have the power to: (i) amend our bylaws; (ii) elect or dismiss members of our Board of Directors (and members of the Fiscal Committee) at any time; (iii) receive and approve the annual management accounts, including the allocation of net profits and payment of the mandatory dividends and allocation to the various reserve accounts; (iv) authorize the issuance of debentures in general; (v) suspend the rights of a shareholder who has violated Brazilian Corporate Law or our bylaws; (vi) accept or reject the valuation of assets contributed by a shareholder in consideration of the subscription of shares in our capital stock; (vii) authorize the issuance of founders' shares; (viii) pass resolutions authorizing reorganization of our

legal form, a merger, consolidation or split of the company, dissolution and liquidation of the company, election and dismissal of our liquidators and to examine their accounts; and (ix) authorize management to declare the company insolvent and to request a *recuperação judicial* or *recuperação extrajudicial* (a procedure involving protection from creditors similar in nature to a reorganization under the U.S. Bankruptcy Code), among others.



### ***Redemption Rights***

Our common shares are not redeemable, except that a dissenting and adversely affected shareholder is entitled, under Brazilian Corporate Law, to obtain redemption upon a decision made at a shareholders' meeting by shareholders representing at least one-half of the issued and outstanding voting shares to: (i) create a new class of preferred shares or to disproportionately increase an existing class of preferred shares relative to the other classes of preferred shares (unless these actions are provided for or authorized by our bylaws); (ii) 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 an existing class of preferred shares; (iii) reduce the mandatory distribution of dividends; (iv) change our corporate purpose; (v) merge us with another company or consolidate us; (vi) transfer all of our shares to another company in order to make us a wholly-owned subsidiary of that company (*incorporação*); (vii) approve the acquisition of control of another company at a price that exceeds certain limits set forth under Brazilian Corporate Law; (viii) approve our participation in a centralized group of companies as defined under Brazilian Corporate Law; (ix) conduct a spin-off that results in (a) a change of corporate purpose, (b) a reduction of the Mandatory Dividend or (c) any participation in a group of companies as defined under Brazilian Corporate Law; or (x) in the event that the entity resulting from (a) a merger or consolidation, (b) an *incorporação* as described above or (c) a spin-off of a listed company fails to become a listed company within 120 days of the shareholders' meeting at which the decision was taken. The right of redemption lapses 30 days after publication of the minutes of the relevant shareholders' meeting. We would be entitled to reconsider any action giving rise to redemption rights within 10 days following the expiration of those rights, if the redemption of shares of dissenting shareholders would jeopardize our financial stability. Law No. 9,457, dated May 5, 1997, which amended Brazilian Corporate Law, contains provisions which, among others, restrict redemption rights in certain cases and allow companies to redeem their shares at their market value, subject to certain requirements. According to Brazilian Corporate Law, the reimbursement value of the common shares must equal the book value, which is determined by dividing our net assets by the total number of shares issued by us, excluding treasury shares (if any).

### ***Preemptive Rights***

Except as provided for in Brazilian Corporate Law (such as in the case of mergers and public offerings), our bylaws allow each of our shareholders a general preemptive right to subscribe to shares in any capital increase, in proportion to his or her ownership interest. 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 transferable. In the event of a capital increase that would maintain or increase the proportion of capital represented by common shares, holders of ADSs 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 ADSs will have preemptive rights to subscribe for common shares, in proportion to their ownership interest, only to the extent necessary to prevent dilution of their interest in us.

### ***Form and Transfer***

As our common shares are in registered form, the transfer of shares is governed by the rules of Article 31, paragraph 3, of Brazilian Corporate Law, which provides that a transfer of shares is effected by a transfer recorded in a company's share transfer records upon presentation of valid share transfer instructions to the company by a transferor or its representative. When common shares are acquired or sold on a Brazilian stock exchange, the transfer is effected on our records by a representative of a brokerage firm or the stock exchange's clearing system. Transfers of shares by a non-Brazilian shareholder are made in the same way and are executed by such shareholders' local agent.

The BM&FBOVESPA operates a central clearing system. A holder of our common shares may choose, at its discretion, to participate in this system and, in that case, all shares elected to be put into this system will be deposited in the custody of the BM&FBOVESPA (through a Brazilian institution duly authorized to operate by the Central Bank and having a clearing account with the BM&FBOVESPA). The fact that those common shares are held in the custody of the BM&FBOVESPA will be reflected in our register of shareholders. Each participating shareholder will, in turn, be registered in our register of beneficial shareholders maintained by the BM&FBOVESPA and will be treated in the same way as registered shareholders.

***Limitations on Ownership and Voting Rights by non-Brazilians Shareholders***

There are no restrictions on ownership or voting of our common shares by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of common shares into foreign currency and to remit those amounts outside Brazil is subject to exchange control restrictions and foreign investment legislation which generally require, among other things, obtaining a Certificate of Registration under the Brazilian National Monetary Council's Resolution No. 2,689 or its direct foreign investment regulations. See "Item 10D. Exchange Controls."

***Share Ownership Disclosure***

There are no provisions in our bylaws governing the ownership threshold above which shareholder ownership must be disclosed. CVM regulations require the disclosure of (i) the acquisition of 5% of any class of capital stock of a listed company and any subsequent direct or indirect acquisition or disposition of at least 5% of any such class of capital stock, (ii) acquisition of control of a listed company and (iii) the ownership of shares of capital stock of a listed company by members of such company's Board of Executive Officers, Board of Directors, Audit Committee, Fiscal Committee (if any) and any other consulting or technical body (if any) and certain relatives of those persons.

**10C. Material Contracts**

None.

**10D. Exchange Controls**

There are no restrictions on ownership or voting of our common shares by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of common shares into foreign currency and to remit those amounts outside Brazil is subject to exchange control restrictions and foreign investment legislation which generally require, among other things, obtaining a Certificate of Registration under the Brazilian National Monetary Council's Resolution No. 2,689, dated March 31, 2000, or its direct foreign investment regulations.

Resolution No. 2,689, dated March 31, 2000, introduced new rules to facilitate foreign investment in Brazil. The principal changes for foreign investors entering the Brazilian market include:

- the removal of restrictions on investments by portfolio composition (e.g., equities, fixed income and derivatives); and
- permission for foreign individuals and corporations to invest in the Brazilian market, in addition to foreign institutional investors.

Prior to Resolution No. 2,689, foreign investors had to leave and reenter the country in order to switch their investments from equity to fixed income. Now foreign investors can freely switch their investments without leaving the local market. Foreign investors registered with the CVM and acting through authorized custody accounts and a legal representative may buy and sell any local financial product traded on the local exchanges and registered on the local clearing systems, including shares on the BM&FBOVESPA, without obtaining separate Certificates of Registration for each transaction. Pursuant to Resolution No. 2,689, as amended, investors are also generally entitled

to favorable tax treatment. See “Item 10E. Taxation—Brazilian Tax Considerations.”

A Certificate of Registration has been issued in the name of JP Morgan Chase Bank N.A., as our ADR depository, and is maintained by the *Itaú Corretora de Valores S.A.*, our ADR custodian, on behalf of our ADR depository. Pursuant to the Certificate, our ADR custodian and our ADR depository are able to convert dividends and other distributions with respect to the common shares represented by ADSs into foreign currency and remit the proceeds outside Brazil. In the event that a holder of ADSs surrenders its ADSs for common shares, that holder will be entitled to continue to rely on our ADR depository’s Certificate of Registration for only five business days after the surrender, following which the holder must obtain its own Certificate of Registration. Thereafter, unless the common shares are held pursuant to Resolution No. 2,689 or direct foreign investment regulations, the holder may not be able to convert into foreign currency and remit outside Brazil the proceeds from the disposition of, or distributions with respect to, those common shares, and the holder generally will be subject to less favorable Brazilian tax treatment than a holder of ADSs. See “Item 10E. Taxation—Brazilian Tax Considerations.”

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A non-Brazilian holder of common shares may experience delays in obtaining a Certificate of Registration, which may delay remittances abroad. This kind of delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder.

Under current Brazilian legislation, the Brazilian government may impose temporary restrictions on remittances of foreign capital abroad in the event of a serious imbalance or an anticipated serious imbalance of Brazil's balance of payments. For approximately nine months in 1989 and early 1990, the Brazilian government froze all dividend and capital repatriations held by the Central Bank that were owed to foreign equity investors in order to conserve Brazil's foreign currency reserves. These amounts were subsequently released in accordance with Brazilian government directives. See "Item 3D. Risk Factors—Risks Relating to our Common Shares and ADSs—If you surrender your ADSs and withdraw common shares, you risk losing the ability to remit foreign currency abroad and certain Brazilian tax advantages."

For a description of the foreign exchange markets in Brazil, see "Item 3A. Selected Financial Data— Exchange Rates.

## **10E. Taxation**

The following is a summary of certain U.S. federal income and Brazilian tax consequences of the acquisition, ownership and disposition of our common shares or ADSs by an investor that holds such common shares or ADSs. This summary does not purport to address all material tax consequences of the acquisition, ownership and disposition of our common shares or ADSs, does not take into account the specific circumstances of any particular investor and does not address certain investors that may be subject to special tax rules.

This summary is based on the tax laws of the United States (including the Internal Revenue Code of 1986, as amended, or the Code, its legislative history, existing and proposed Treasury regulations thereunder, published rulings and court decisions) and Brazil, as in effect on the date hereof, which are subject to change (or changes in interpretation), possibly with retroactive effect. In addition, this summary is based in part upon the representations of our ADSs depository and the assumption that each obligation in our deposit agreement and any related agreement will be performed in accordance with its terms.

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. Both countries have been accepting the offset of income taxes paid in one country against the income tax due in the other based on reciprocity. No assurance can be given, however, as to whether or when an income tax treaty will enter into force or how it will affect the U.S. Holders, as defined below, of our common shares or ADSs.

This discussion does not address any aspects of U.S. taxation (such as estate tax, gift tax and Medicare tax on net investment income) other than federal income taxation or any aspects of Brazilian taxation other than income, gift, inheritance and capital taxation. Prospective investors are urged to consult their own tax advisors regarding the Brazilian and U.S. federal, state and local tax consequences of the acquisition, ownership and disposition of our common shares and ADSs.

### **Brazilian Tax Considerations**

The following discussion summarizes the principal Brazilian tax consequences of the acquisition, ownership and disposition of common shares or ADSs by a holder that is not domiciled in Brazil for purposes of Brazilian taxation ("Non-Resident Holder"). It is based on Brazilian law as currently in effect. Any change in such law may change the consequences described below, possibly with retroactive effect. This discussion does not specifically address all of the Brazilian tax considerations applicable to any particular Non-Resident Holder. Each Non-Resident Holder of common shares or ADSs should consult their own tax advisor concerning the Brazilian tax consequences of an investment in our common shares or ADSs.

A Non-Resident Holder of ADSs may withdraw them in exchange for common shares in Brazil. Pursuant to Brazilian law, the Non-Resident Holder may invest in common shares under Resolution 2,689, of January 26, 2000, of the National Monetary Council (a "2,689 Holder").

***Taxation of Dividends and Interest on Shareholders Equity***

Dividends, including stock dividends and other dividends, paid by us (i) to our ADSs depository in respect of the common shares underlying the ADSs or (ii) to a Non-Resident Holder in respect of common shares, are currently not subject to Brazilian withholding income tax, as far as such amounts are related to profits generated on or after January 1, 1996. Dividends relating to profits generated prior to January 1, 1996 may be subject to Brazilian withholding income tax at varying rates, depending on the year such profits have been generated, but CSN does not have any profits generated prior to January 1, 1996.

It is important to note that as from January 1<sup>st</sup>, 2008, Brazil has adopted new GAAP, following IFRS standards. As from such date, Brazilian income taxes were calculated under a temporary regime called Transitional Tax Regime (RTT, in the Portuguese acronym). The goal of such regime was to neutralize the impacts on the calculation of the corporate income tax in Brazil that could derive from the adoption of the new GAAP. Law 12.973 was then enacted in 2013, with the goal to adapt Brazilian tax legislation, based on the new GAAP, eliminating the RTT. With the introduction of the new rules, the law determined that, for fiscal year 2014, any dividends paid out of accounting profits which, for any reason, would be higher than the “tax profits” calculated according to the RTT, would be subject to withholding income tax in Brazil. Nonetheless, CSN does not have relevant accounting adjustments which could result in a lower “tax profit” as compared to the group’s accounting profit, reason why no withholding income tax shall be levied on any future distribution of dividends paid out of profits generated in 2014. As from fiscal year 2015, since there is no “tax profit” under the RTT, no potential exposure should exist, and the exemption for dividends is normally applicable again.

Since 1996, Brazilian companies have been permitted to pay limited amounts of interest on shareholders' equity to holders of equity securities and to treat those payments as a deductible expense for purposes of its Brazilian income tax and social contribution on net profits tax basis. For tax purposes, this interest is limited to the daily pro rata variation of the Brazilian Federal Government's Long-Term Interest Rate or TJLP, as determined by the Central Bank from time to time, multiplied by the net equity value of the Brazilian company, and the amount of the deduction may not exceed the greater of (i) 50% of the net income (before taking into account the amounts attributable to shareholders as interest on shareholders' equity and the provision of corporate income tax but after the deduction of the provision of the social contribution on net profits) related to the period in respect of which the payment is made; or (ii) 50% of the sum of retained profits and profits reserves as of the date of the beginning of the fiscal year in respect of which the payment is made. Payments of interest on shareholders' equity are decided by the shareholders on the basis of the recommendations of our Board of Directors.

Payment of interest on shareholders' equity to a Non-Resident Holder is subject to withholding income tax at the rate of 15%, or 25% if the Non-Resident Holder is domiciled in a tax haven.

For this purpose, a “tax haven” or “low-tax regime” is a country or location (1) that does not impose income tax, (2) where the income tax rate is lower than 20% or (3) where the local legislation imposes restrictions on disclosing the shareholding composition or ownership of the investment (“Tax Haven Jurisdiction”). These payments of interest on shareholders' equity may be included as part of any mandatory dividend.

No assurance can be given that our board of directors will not recommend that future distributions of income should be made by means of interest on shareholders' equity instead of dividends.

*Taxation of Gains*

Capital gains realized by Non-Resident Holders on the disposition of common shares sold on the Brazilian stock exchange (which includes the transactions carried out on the organized over-the-counter market):

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- are exempt, when realized by a Non-Resident Holder that (i) is a 2,689 Holder and (ii) is not resident or domiciled in a Tax Haven Jurisdiction;
- are subject to income tax at rates varying from 15% to 22.5%, depending on the total amount of gains within the same fiscal year (see table below) in case of gains realized by (A) a Non-Resident Holder that (i) is not a 2,689 Holder and (ii) is not resident or domiciled in a Tax Haven Jurisdiction; or (B) a Non-Resident Holder that (i) is a 2,689 Holder and (ii) is resident or domiciled in a Tax Haven Jurisdiction; and
- are subject to income tax at a rate of up to 25% in case of gains realized by a Non-Resident Holder that (i) is not a 2,689 Holder and (ii) is resident or domiciled in a Tax Haven Jurisdiction.

The capital gains rates described above, varying from 15% to 22.5%, shall be determined according to the following table:

| <b>Capital Gains Tax rate</b> | <b>Threshold (total gains on the sale of the same rights within a same fiscal year)</b> |
|-------------------------------|---|
| <b>15.0%</b>                  | Total gains below BRL 5 million   |
| <b>17.5%</b>                  | Total gains above BRL 5 million, but below BRL 10 million                               |
| <b>20.0%</b>                  | Total gains above BRL 10 million, but below BRL 30 million                              |
| <b>22.5%</b>                  | Total gains above BRL 30 million  |

As a general rule, capital gains realized as a result of a disposition transaction are the positive difference between the amount realized on the disposition of the common shares and the respective acquisition cost.

According to Law No. 10,833/03, the gains recognized on a disposition of assets located in Brazil, such as our common shares, by a Non-Resident Holder, are subject to withholding income tax in Brazil. This rule is applicable regardless of whether the disposition is conducted in Brazil or abroad and/or if the disposition is or is not made to an individual or entity resident or domiciled in Brazil.

A withholding income tax of 0.005% will apply and can be offset against any income tax due on the capital gain. Such withholding does not apply to a 2,689 Holder that is not resident or domiciled in a Tax Haven Jurisdiction.

Any other gains realized on the disposition of common shares that are not carried out on the Brazilian stock exchange:

- are subject to income tax at a rate of 15% when realized by any Non-Resident Holder that is not resident or domiciled in a Tax Haven Jurisdiction, whether or not such holder is a 2,689 Holder; and
- are subject to income tax at a rate of up to 25% when realized by a Non-Resident Holder that is resident or domiciled in a Tax Haven Jurisdiction, whether or not such holder is a 2,689 Holder.

In the cases described above, if the gains are related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation, the withholding income tax of 0.005% will also apply and can be offset against any income tax due on the capital gain.

Any exercise of preemptive rights relating to common shares will not be subject to Brazilian withholding income tax. Gains realized by a Non-Resident Holder on the disposition of preemptive rights will be subject to Brazilian income

tax according to the same rules applicable to disposition of common shares.

In the case of a redemption of common shares or a capital reduction, the positive difference between the amount received by the Non-Resident Holder and the acquisition cost of the common shares redeemed in *reais* is treated as capital gain derived from the sale or exchange of shares not carried out on a Brazilian stock exchange market and is therefore subject to income tax at the rate of 15%, or 25%, as the case may be.

### ***Sale of ADSs by U.S. Holders to Other Non-Residents in Brazil***

As discussed above, pursuant to Law No. 10,833, the sale of assets located in Brazil involving Non-Resident Holders is subject to Brazilian withholding income tax. We believe that the ADSs do not fall within the definition of assets located in Brazil for the purposes of Law No. 10,833, and, thus, should not be subject to the Brazilian withholding tax. However, due to the lack of any administrative or judicial guidance, there is no assurance that such position would prevail.

### ***Gains on the Exchange of ADSs for Common Shares***

The withdrawal of ADSs in exchange for common shares is not subject to Brazilian income tax, assuming compliance with applicable regulation regarding the registration of the investment with Central Bank.

### ***Gains on the Exchange of Common Shares for ADSs***

The deposit of common shares in exchange for the ADSs may be subject to Brazilian withholding income tax on capital gains if the amount previously registered with the Central Bank as a foreign investment in common shares or, in the case of other market investors under Resolution No. 2,689, the acquisition cost of the common shares, as the case may be, is lower than:

- the average price per common share on the Brazilian stock exchange on which the greatest number of such common shares were sold on the day of deposit; or
- if no common shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of common shares were sold during the 15 preceding trading sessions.

The difference between the amount previously registered, or the acquisition cost, as the case may be, and the average price of the common shares, calculated as set forth above, is considered a capital gain subject to income tax at a rate of 15%, or 25% if the Non-Resident Holder is resident or domiciled in a Tax Haven Jurisdiction.

### ***Tax on Financial Transactions***

The Tax on Financial Transactions (*Imposto sobre Operações de Crédito, Câmbio e Seguro ou relativas a Títulos ou Valores Mobiliários*), or “IOF”, is imposed on foreign exchange, securities, credit and insurance transactions.

### ***IOF on Foreign Exchange Transactions***

Tax on foreign exchange transactions, or “IOF/Exchange”, may be levied on foreign exchange transactions (conversion of foreign currency in *reais* and conversion of *reais* into foreign currency), affecting either or both the inflow or outflow of investments. Currently, the general IOF/Exchange rate applicable to foreign currency exchange transactions is 0.38%.

The Brazilian Government may increase the rate of the IOF/Exchange to a maximum rate of 25% of the amount of the foreign exchange transactions at any time, but such an increase will only apply in respect to future foreign exchange transactions.

Currently, for most foreign exchange transactions related to this type of investment, the IOF/Exchange rate is zero.

***IOF on Bonds and Securities Transactions***

IOF may also be levied on transactions involving bonds and securities (“IOF/Securities”), including those carried out on a Brazilian stock, futures or commodities exchanges. The rate of the IOF/Securities applicable to most transactions involving common shares is currently zero percent. The Brazilian Government may increase the rate of the IOF/Exchange up to 1.5% per day at any time, but such an increase will only apply in respect of future transactions.

### ***Other Brazilian Taxes***

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of common shares or ADSs 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 to individuals or entities resident or domiciled within that state in Brazil. There are no Brazilian stamp, issue, registration or similar taxes or duties payable by holders of common shares or ADSs.

### **U.S. Federal Income Tax Considerations**

The summary discussion below is applicable to you only if you are a “U.S. Holder” or a “Non-U.S. Holder” (both as defined below) . This summary is based upon the Internal Revenue Code of 1986, as amended (the “Code”), Treasury regulations, administrative pronouncements of the U.S. Internal Revenue Service (the “IRS”) and judicial decisions, all as in effect on the date hereof, and all of which are subject to change (possibly with retroactive effect) and to differing interpretations. This summary does not describe any implications under state, local or non-U.S. tax law, or any aspect of U.S. federal tax law (such as the estate tax, gift tax, the alternative minimum tax or the Medicare tax on net investment income) other than U.S. federal income taxation.

This summary does not purport to address all the material U.S. federal income tax consequences that may be relevant to the holders of the common shares or ADSs, and does not take into account the specific circumstances of any particular investors, some of which (such as tax-exempt entities, banks or other financial institutions, insurance companies, dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings, regulated investment companies, real estate investment trusts, investors liable for the alternative minimum tax, partnerships and other pass-through entities, U.S. expatriates, investors that own or are treated as owning 10% or more of our voting stock, investors that hold the preferred shares or ADSs as part of a straddle, hedge, conversion or constructive sale transaction or other integrated transaction and persons whose functional currency is not the U.S. dollar) may be subject to special tax rules.

For purposes of this discussion, a U.S. Holder is any beneficial owner of common shares or ADSs that is (i) an individual who is a citizen or resident of the United States, (ii) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) organized under the laws of the United States, any state thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income tax without regard to its source, or (iv) a trust if a U.S. court is able to exercise primary supervision over administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or if the trust validly elects under applicable Treasury regulations to be taxed as a U.S. person. A “Non-U.S. Holder” is any beneficial owner of common shares or ADSs that is an individual, corporation, estate or trust who is neither a U.S. Holder nor a partnership for U.S. federal income tax purposes.

If a partnership holds our common shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and upon the activities of the partnership. A prospective investor who is a partner of a partnership

holding our shares should consult its own tax advisor.

In general, for U.S. federal income tax purposes, holders of American Depositary Receipts evidencing ADSs will be treated as the owners of the common shares represented by those ADSs, and exchanges of common shares for ADSs, and ADSs for common shares, will not be subject to U.S. federal income tax.

### ***Taxation of Dividends***

#### ***U.S. Holders***

Under the U.S. federal income tax laws, and subject to the passive foreign investment company (“PFIC”) rules discussed below, U.S. Holders will include in gross income, as dividend income, the gross amount of any distribution paid by us (including (i) payments considered “interest” in respect of Shareholders’ equity under Brazilian law and (ii) amounts withheld in respect of Brazilian taxes and (iii) any additional amounts payable in respect of such withholding taxes as described above under “Brazilian Tax Considerations—Taxation of Dividends and Interest on Shareholders’ Equity”) out of our current or accumulated earnings and profits (as determined for U.S. federal income tax purposes) when the distribution is actually or constructively received by the U.S. Holder, in the case of common shares, or by our ADSs depositary, in the case of ADSs. Distributions in excess of current and accumulated earnings and profits, as determined under U.S. federal income tax principles, will be treated as a return of capital to the extent of the U.S. Holder’s adjusted tax basis in the common shares or ADSs and thereafter as capital gain, which will be either long-term or short-term capital gain depending on whether the U.S. holder held the common shares or ADSs for more than one year. We do not intend to maintain calculations of our earnings and profits under U.S. federal income tax principles and, unless and until such calculations are made, U.S. Holders should assume all distributions are made out of earnings and profits and constitute dividend income.

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The dividend income will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations. Subject to certain exceptions for short-term and hedged positions certain non-corporate U.S. Holders (including individuals) may qualify for a maximum 20% rate of tax in respect of “qualified dividend income” received. Dividend income with respect to the ADSs will be qualified dividend income, provided that, in the year that a non-corporate U.S. Holder receives the dividend, the ADSs are readily tradable on an established securities market in the United States, and we were not in the year prior to the year in which the dividend was paid, and are not in the year in which the dividend is paid, a PFIC. Based on existing IRS guidance, it is not entirely clear whether dividends received with respect to the common shares not held through ADSs will be treated as qualified dividend income, because the common shares are not themselves listed on a U.S. exchange.

The amount of the dividend distribution includible in gross income of a U.S. Holder will be the U.S. dollar value of the *real* payments made, determined at the spot *real*/U.S. dollar rate on the date such dividend distribution is includible in the gross income of the U.S. Holder, regardless of whether the payment is in fact converted into U.S. dollars. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in gross income to the date such payment is converted into U.S. dollars will be treated as ordinary income or loss from sources within the United States and will not be eligible for the special tax rate applicable to qualified dividend income.

Dividends received by most U.S. holders will constitute foreign source “passive income” for foreign tax credit purposes. Subject to limitations under U.S. federal income tax law concerning credits or deductions for foreign income taxes and certain exceptions for short-term and hedged positions, any Brazilian income tax withheld from dividends paid by us would be treated as a foreign income tax eligible for credit against a U.S. Holder’s U.S. federal income tax liability (or at a U.S. Holder’s election, may be deducted in computing taxable income if the U.S. Holder has elected to deduct all foreign income taxes paid or accrued for the relevant taxable year). The rules with respect to foreign tax credits are complex and U.S. Holders are urged to consult their own tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

The U.S. Treasury Department has expressed concern that intermediaries in connection with depositary arrangements may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. persons who are holders of depositary shares. Accordingly, investors should be aware that the discussion above regarding the availability of foreign tax credits for Brazilian income tax withheld from dividends paid with respect to common shares represented by ADSs could be affected by future action taken by the U.S. Treasury Department.

Distributions of additional common shares to U.S. Holders with respect to their common shares or ADSs that are made as part of a pro rata distribution to all our Shareholders generally will not be subject to U.S. federal income tax.

***Non-U.S. Holders***

Dividends paid to a Non-U.S. Holder in respect of common shares or ADSs will not be subject to U.S. federal income tax unless those dividends are effectively connected with the conduct of a trade or business within the United States by the Non-U.S. Holder (or are attributable to a permanent establishment maintained in the United States by the Non-U.S. Holder, if an applicable income tax treaty so requires as a condition for the Non-U.S. Holder to be subject to U.S. taxation on a net income basis in respect of income from common shares or ADSs), in which case the Non-U.S. Holder generally will be subject to U.S. federal income tax in respect of the dividends in the same manner as a U.S.

Holder. Any such effectively connected dividends received by a corporate Non-U.S. Holder may also, under certain circumstances, be subject to an additional “branch profits tax” (at a 30% rate or at a reduced rate as may be specified by an applicable income tax treaty).



## ***Taxation of Capital Gains***

### ***U.S. Holders***

Subject to the PFIC rules discussed below, upon a sale, redemption or other taxable disposition of common shares or ADSs, a U.S. Holder will recognize gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the U.S. dollar value of the amount realized (before deduction of any Brazilian tax) and the U.S. Holder's adjusted tax basis (determined in U.S. dollars) in the common shares or ADSs. Generally, a non-corporate U.S. Holder's gain or loss will be capital gain or loss taxed at a maximum rate of 20% where the property is held for more than one year. The deductibility of capital losses is subject to limitations under the Code.

Capital gain or loss, if any realized by a U.S. Holder on the sale, exchange or other taxable disposition of common shares or ADSs generally will be treated as U.S. source gain or loss for U.S. foreign tax credit purposes. Consequently, in the case of a gain from the disposition of a share or ADS that is subject to Brazilian income tax (see "Taxation – Brazilian Tax Considerations – Taxation of Gains"), the U.S. Holder may not be able to benefit from the foreign tax credit for that Brazilian income tax (i.e., because the gain from the disposition would be U.S. source income), unless the U.S. Holder can apply the credit against U.S. federal income tax payable on other income from foreign sources. Alternatively, the U.S. Holder may be able to take a deduction for the Brazilian income tax if it does not elect to claim a foreign income tax credit for any foreign taxes paid or accrued during the taxable year.

### ***Non-U.S. Holders***

A Non-U.S. Holder will not be subject to U.S. federal income tax in respect of gain recognized on a sale, exchange or other taxable disposition of common shares or ADSs unless:

- the gain is effectively connected with a trade or business of the Non-U.S. Holder in the United States (or is attributable to a permanent establishment maintained in the United States by that Non-U.S. Holder, if an applicable income tax treaty so requires as a condition for that Non-U.S. Holder to be subject to U.S. taxation on a net income basis in respect of gain from the sale or other disposition of the common shares or ADSs); or
- in the case of a Non-U.S. Holder who is an individual, that Non-U.S. Holder is present in the United States for 183 or more days in the taxable year of the sale and certain other conditions apply.

Effectively connected gains realized by a corporate Non-U.S. Holder may also, under certain circumstances, be subject to an additional branch profits tax (at a 30% rate or at a reduced rate as may be specified by an applicable income tax treaty).

### ***Passive Foreign Investment Companies***

Based on current estimates of our gross income, gross assets and the nature of our business, we believe that our common shares and ADSs should not be treated as stock of a PFIC for U.S. federal income tax purposes. There can be no assurances in this regard, however, because the application of the relevant rules is complex and involves some uncertainty. The PFIC determination is made annually and is based on the portion of our assets and income that is characterized as passive under the PFIC rules. Moreover, our business plans may change, which may affect the PFIC determination in future years.

In general, we will be a PFIC with respect to a U.S. Holder if, for any taxable year in which the U.S. Holder held our ADSs or common shares, either (i) at least 75% of our gross income for the taxable year is passive income or (ii) at least 50% of the value (determined on the basis of a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income. For this purpose, passive income generally includes, among other things, dividends, interest, royalties, rents (other than certain rents and royalties derived in the active conduct of a trade or business), annuities and gains from assets that produce passive income. If a non-U.S. corporation owns at least 25% by value of the stock of another corporation, the non-U.S. corporation is treated for purposes of the PFIC tests as owning its proportionate share of the assets of the other corporation, and as receiving directly its proportionate share of the other corporation's income.

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If we are treated as a PFIC, a U.S. Holder that did not make a “mark-to-market election” or “QEF election,” each as described below, would be subject to special rules with respect to (a) any gain realized on the sale or other disposition of common shares or ADSs and (b) any “excess distribution” by CSN to the U.S. Holder (generally, any distributions to the U.S. Holder in respect of the common shares or ADSs during a single taxable year that are greater than 125% of the average annual distributions received by the U.S. Holder with respect to the common shares or ADSs during the three preceding taxable years or, if shorter, the U.S. Holder’s holding period for the common shares or ADSs). Under these rules, (i) the gain or excess distribution would be allocated ratably over the U.S. Holder’s holding period for the common shares or ADSs, (ii) the amount allocated to the taxable year in which the gain or excess distribution was realized would be taxable as ordinary income, (iii) the amount allocated to each prior year, with certain exceptions, would be subject to tax at the highest tax rate in effect for that year and (iv) the interest charge generally applicable to underpayments of tax would be imposed in respect of the tax attributable to each such prior year.

If we are treated as a PFIC and, at any time, we invest in non-U.S. corporations that are classified as PFICs (each, a “Subsidiary PFIC”), U.S. Holders generally will be deemed to own, and also would be subject to the PFIC rules with respect to, their indirect ownership interest in that Subsidiary PFIC. If we are treated as a PFIC, a U.S. Holder could incur liability for the deferred tax and interest charge described above if either (1) we receive a distribution from, or dispose of all or part of our interest in, the Subsidiary PFIC or (2) the U.S. Holder disposes of all or part of its common shares or ADSs.

The special PFIC tax rules described above will not apply to a U.S. Holder if the U.S. Holder makes an election (i) to “mark-to-market” with respect to the common shares or ADSs (a “mark-to-market election”) or (ii) to have us treated as a “qualified electing fund” (a “QEF election”). The QEF election is not available to holders unless we agree to comply with certain reporting requirements and provide the required annual information statements. The QEF and mark-to-market elections only apply to taxable years in which the U.S. Holder’s common shares or ADSs are treated as stock of a PFIC. Our ADR Depositary has agreed to distribute the necessary information to registered holders of ADSs.

A U.S. Holder may make a mark-to-market election, if the common shares or ADSs are “regularly traded” on a “qualified exchange.” Under applicable U.S. Treasury regulations, a “qualified exchange” includes a national securities exchange, such as the New York Stock Exchange, that is registered with the SEC or the national market system established under the Exchange Act. Also, under applicable Treasury Regulations, PFIC securities traded on a qualified exchange are regularly traded on such exchange for any calendar year during which such stock is traded, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. We cannot assure you that the ADSs will be eligible for a mark-to-market election.

A U.S. Holder that makes a mark-to-market election with respect to its ADSs must include for each taxable year in which the U.S. Holder’s common shares or ADSs are treated as shares of a PFIC, as ordinary income, an amount equal to the excess of the fair market value of the common shares or ADSs at the close of the taxable year over the U.S. Holder’s adjusted tax basis in the common shares or ADSs, and is allowed an ordinary loss for the excess, if any, of the adjusted tax basis over the fair market value of the common shares or ADSs at the close of the taxable year, but only to the extent of the amount of previously included mark-to-market inclusions (not offset by prior mark-to-market losses). These amounts of ordinary income, and any gain recognized on the sale, redemption or other taxable disposition of an ADS with respect to which such an election is in place, will not be eligible for the favorable tax rates applicable to qualified dividend income or long-term capital gains. A U.S. Holder’s tax basis in the common shares or ADSs will be adjusted to reflect any income or loss amounts on its annual inclusions. Although a U.S. Holder may be eligible to make a mark-to-market election with respect to its common shares or ADSs, no such election may be made with respect to the stock of any Subsidiary PFIC that such U.S. Holder is treated as owning, because such Subsidiary

PFIC stock is not marketable. Thus, the mark-to-market election will not be effective to avoid all of the adverse tax consequences described above with respect to any Subsidiary PFICs. U.S. Holders should consult their own tax advisors regarding the availability and advisability of making a mark-to-market election with respect to their common shares of ADSs based on their particular circumstances.

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A U.S. Holder that makes a QEF election will be currently taxable on its pro rata share of our ordinary earnings and net capital gain (at ordinary income and long-term capital gain rates, respectively) for each of our taxable years, regardless of whether we distributed the income and gain. The U.S. Holder's basis in the common shares or ADSs will be increased to reflect taxed but undistributed income. Distributions of income that had previously been taxed will result in a corresponding reduction of tax basis in the common shares or ADSs and will not be taxed again as a distribution to the U.S. Holder.

In addition, notwithstanding any election that a U.S. Holder makes with regard to the common shares or ADSs, dividends that a non-corporate U.S. Holder receives from us will not constitute qualified dividend income if we are a PFIC either in the taxable year of the distribution or the preceding taxable year.

Special rules apply with respect to the calculation of the amount of the foreign tax credit with respect to excess distributions by a PFIC or, in certain cases, QEF inclusions.

A U.S. Holder who owns common shares or ADSs during any taxable year that we are a PFIC in excess of certain de minimus amounts and fails to qualify for certain other exemptions would be required to file IRS Form 8621. In addition, under certain circumstances, the temporary regulations also require a "United States person" (as such term is defined in the Code) that owns an interest in a PFIC as an indirect shareholder through one or more United States persons to file Form 8621 for any taxable year during which such indirect shareholder is treated as receiving an excess distribution in connection with the ownership or disposition of such interest, or reports income pursuant to a mark-to-market or QEF election, among other circumstances. U.S. holders should consult their own tax advisors regarding the application of the PFIC rules to the common shares or ADSs.

***Backup Withholding and Information Reporting***

***U.S. Holders***

Dividends paid on, and proceeds from the sale, redemption or other taxable disposition of common shares or ADSs received by a U.S. Holder generally will be subject to information reporting and backup withholding, unless, in the case of backup withholding, the U.S. Holder provides an accurate taxpayer identification number or in either case otherwise establishes an exemption. The amount of any backup withholding collected from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that certain required information is timely furnished to the IRS.

***Non-U.S. Holders***

If common shares are held by a Non-U.S. Holder through the non-U.S. office of a non-U.S. related broker or financial institution, backup withholding and information reporting generally would not be required. Information reporting, and

possibly backup withholding, may apply if the common shares are held by a Non-U.S. Holder through a U.S., or U.S.-related, broker or financial institution, or the U.S. office of a non-U.S. broker or financial institution and the Non-U.S. Holder fails to provide appropriate information. Information reporting and backup withholding generally will apply with respect to ADSs if the Non-U.S. Holder fails to timely provide appropriate information. Non-U.S. Holders should consult their tax advisors regarding the application of these rules.

***“Specified Foreign Financial Asset” Reporting***

Owners of “specified foreign financial assets” with an aggregate value in excess of U.S.\$50,000 (and in some circumstances, a higher threshold), may be required to file an information report with respect to such assets with their U.S. federal income tax returns. “Specified foreign financial assets” generally include any financial accounts maintained by foreign financial institutions as well as any of the following, but only if they are not held in accounts maintained by financial institutions: (i) stocks and securities issued by non-U.S. persons, (ii) financial instruments and contracts held for investment that have non-U.S. issuers or counterparties and (iii) interests in foreign entities.

Prospective purchasers should consult their own tax advisors regarding the application of the U.S. federal income tax laws to their particular situations as well as any additional tax consequences resulting from purchasing, holding or disposing of common shares or ADSs, including the applicability and effect of the tax laws of any state, local or foreign jurisdiction, including estate, gift, and inheritance laws.

#### **10F. Dividends and Paying Agents**

Not applicable.

#### **10G. Statement by Experts**

Not applicable.

#### **10H. Documents on Display**

We are subject to the information requirements of the Exchange Act 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 100 F Street, N.E., Washington, D.C. 20549. You can obtain further information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to the public from the SEC's website at <http://www.sec.gov>. You may also inspect our reports and other information at the offices of the NYSE, 11 Wall Street, New York, New York 10005, on which our ADSs are listed. For further information on obtaining copies of our public filings at the NYSE, you should call (212) 656-5060. We also file financial statements and other periodic reports with the CVM.

#### **10I. Subsidiary Information**

Not required.

### **Item 11. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to a number of different market risks arising from our normal business activities. Market risk is the possibility that changes in interest rates, currency exchange rates, commodities prices could adversely affect the value of financial assets, liabilities, expected future cash flows or earnings. We developed policies aimed at managing the volatility inherent to certain of these natural business *exposures*. We use financial instruments, such as derivatives, in order to achieve the main goals established by our Board of Directors to minimize the cost of capital and maximize the returns on financial assets, while observing, as determined by our Board of Directors, parameters of credit and risk. Derivatives are contracts whose value is derived from one or more underlying financial instruments, indices or prices defined in the contract. Only well-understood, conventional derivative instruments are used for these purposes. These include futures and options traded on regulated exchanges and "over-the-counter" swaps, options and forward contracts.

#### **Market Risk Exposures and Market Risk Management**

Our treasury department is responsible for managing our market risk exposures. We use some internal controls in order to:

- help us understand market risks;
- reduce the likelihood of financial losses; and
- diminish the volatility of financial results.

The principal tools used by our treasury department are:

- “Sensitivity Analysis,” which measures the impact that movements in the price of different market variables such as interest rates and exchange rates will have in our earnings and cash flows; and
- “Stress Testing,” which measures the worst possible loss from a set of consistent scenarios to which probabilities are not assigned. The scenarios are deliberately chosen to include extreme changes in interest and currency exchange rates.



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Following is a discussion of the primary market risk exposures that we face together with an analysis of the exposure to each one of them.

**Interest Rate Risk**

We are exposed to interest rate risk on short- and long-term instruments and as a result of refinancing of fixed-rate instruments included in our consolidated debt. Consequently, as well as managing the currency and maturity of debt, we manage interest costs through a balance between lower-cost floating rate debt, which has inherently higher risk, and more expensive, but lower risk, fixed-rate debt. We can use derivatives to achieve the desired ratio between floating-rate debt and fixed-rate debt. The desired ratio varies according to market conditions: if interest rates are relatively low, we will shift towards fixed rate debt.

We are basically exposed to the following floating interest rates:

- U.S. dollar LIBOR, due to our floating rate U.S. dollar-denominated debt (usually trade-finance related), to our cash position held offshore in U.S. dollars, which is invested in short-term instruments,
- TJLP (Long Term Interest Rate), due to *real*-denominated debt indexed to this interest rate, and
- CDI (benchmark Brazilian *real* overnight rate), due to our cash held in Brazil (onshore cash) and to our CDI indexed debt.

| Exposure as of<br>December 2015* (amortization) | Notional<br>amount | Maturities |      |       |       |       |            |
|---|--------------------|------------|------|-------|-------|-------|------------|
|   |                    | 2016       | 2017 | 2018  | 2019  | 2020  | Thereafter |
| U.S. dollar LIBOR                               | 6,512              | 449        | 605  | 881   | 1,693 | 1,976 | 908        |
| U.S. dollar fixed rate                          | 11,103             | 287        | -    | -     | 2,801 | 4,110 | 3,905      |
| CDI   | 14,496             | 345        | 680  | 4,728 | 3,078 | 2,361 | 3,304      |
| Euro fixed rate                                 | 510                | 102        | 102  | 102   | 102   | 102   | -          |
| TJLP  | 1,052              | 40         | 57   | 57    | 66    | 60    | 772        |
| Other   | 141                | 104        | 15   | 11    | 3     | 3     | 5          |

| Exposure as of<br>December 2014* (amortization) | Notional<br>amount | Maturities |      |      |      |      |            |
|---|--------------------|------------|------|------|------|------|------------|
|   |                    | 2015       | 2016 | 2017 | 2018 | 2019 | Thereafter |

|                               |        |       |       |       |       |        |       |
|-------------------------------|--------|-------|-------|-------|-------|--------|-------|
| <b>U.S. dollar LIBOR</b>      | 4,364  | 328   | 539   | 645   | 373   | 1,191  | 1,288 |
| <b>U.S. dollar fixed rate</b> | 8,760  | 1,108 | -     | -     | -     | 11,992 | 5,660 |
| <b>CDI</b>                    | 14,879 | 783   | 2,207 | 3,380 | 4,011 | 2,694  | 1,804 |
| <b>Euro fixed rate</b>        | 385    | -     | 77    | 77    | 77    | 77     | 77    |
| <b>TJLP</b>                   | 1,003  | 53    | 61    | 61    | 61    | 77     | 690   |
| <b>Other</b>                  | 79     | 36    | 21    | 7     | 6     | 2      | 7     |

\*All figures in R\$ million.

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Our cash and cash equivalent were as follows:

|                              | <b>December<br/>31, 2015</b> | <b>December<br/>31, 2014</b> | <b>Exposure</b> |
|------------------------------|------------------------------|------------------------------|-----------------|
| <b>Cash in reais:</b>        | 1,488                        | 747                          | CDI             |
| <b>Cash in U.S. dollars:</b> | 2,399                        | 2,989                        | LIBOR           |

The table below shows the average interest rate and the average life of our debt.

|                               | <b>Average rate %</b> | <b>December 2015<br/>Average life</b> | <b>Average rate %</b> | <b>December 2014<br/>Average life</b> |
|-------------------------------|-----------------------|---------------------------------------|-----------------------|---------------------------------------|
| <b>U.S. dollar LIBOR</b>      | 3                     | 3.62                                  | 3.08                  | 4.26                                  |
| <b>U.S. dollar fixed rate</b> | 7.15                  | 14,58 (with perpetual bond)           | 7.15                  | 15.58 (with perpetual bond)           |
| <b>Euro fixed rate</b>        | 3.88                  | 2.09                                  | 3.88                  | 3.09                                  |
| <b>Real Fixed CDI</b>         | 8                     | 0.82                                  | 8                     | 1.14                                  |
| <b>TJLP</b>                   | 112.54% of CDI        | 4,07                                  | 111.11% of CDI        | 3.54                                  |
|                               | 1.36                  | 9,79                                  | 1.36                  | 7.89                                  |

We conduct Non Deliverable Forward (NDF) agreements to ensure the forward purchase of U.S. dollars, which are settled, without physical delivery, by the difference in contracted R\$/U.S.\$ buy parity against the R\$/U.S.\$ sell parity, with is the Sale Ptax T-1 to maturity and exchange swap agreements to hedge liabilities indexed to the U.S. dollar from Brazilian real fluctuations, which are affected by market, economic, political, regulatory and geopolitical conditions, among others. The gains and losses from these contracts are directly related to exchange (dollar) and CDI fluctuations. For the duration of our U.S. dollar fixed-rate derivatives, see tables below:

#### December 31, 2015

| <i>(in million, unless otherwise indicated)</i> | <b>Functional Currency</b> | <b>Notional Amount</b> | <b>Average Interest</b> | <b>Average Maturity (days)</b> |
|---|----------------------------|------------------------|-------------------------|--------------------------------|
| <b>Dollar future-to-real</b>                    | U.S. Dollar                | 1,435                  | -                       | 30                             |
| <b>Hedge accounting of export</b>               | U.S. Dollar                | 1,558                  | -                       |                                |
| <b>Hedge accounting net investment</b>          | Euro                       | 120                    | -                       |                                |

|   |      |     |   |    |
|---|------|-----|---|----|
| <b>CDI-to-fixed rate interest rate swap</b> | Real | 150 | - | 61 |
| <b>Fixed rate-to-CDI interest rate swap</b> | Real | 345 | - | 61 |

Table of contents**December 31, 2014***(In million, unless otherwise indicated)*

|   | <b>Functional<br/>Currency</b> | <b>Notional<br/>Amount</b> | <b>Average<br/>Interest</b> | <b>Average<br/>Maturity<br/>(days)</b> |
|---|--------------------------------|----------------------------|-----------------------------|--|
| <b>Dollar-to-CDI swap</b>                   | U.S. Dollar                    | 10                         | -                           | 2                                      |
| <b>Dollar-to-real swap (NDF)</b>            | U.S. Dollar                    | 1.218                      | -                           | 20                                     |
| <b>Dollar-to-euro swap (NDF)</b>            | Euro                           | 90                         | -                           | 9                                      |
| <b>Fixed rate-to-CDI interest rate swap</b> | Real                           | 345                        | -                           | 417                                    |

**December 31, 2013***(In million, unless otherwise indicated)*

|                                  | <b>Functional<br/>Currency</b> | <b>Notional<br/>Amount</b> | <b>Average<br/>Interest</b> | <b>Average<br/>Maturity<br/>(days)</b> |
|----------------------------------|--------------------------------|----------------------------|-----------------------------|--|
| <b>Dollar-to-CDI swap</b>        | U.S. Dollar                    | 110                        | -                           | 116                                    |
| <b>Dollar-to-real swap (NDF)</b> | U.S. Dollar                    | 293                        | -                           | 128                                    |
| <b>Dollar-to-euro swap</b>       | U.S. Dollar                    | 11,8                       | -                           | 102                                    |
| <b>Dollar-to-euro swap (NDF)</b> | Euro                           | 90                         | -                           | 50                                     |