NATIONAL STEEL CO Form 20-F May 01, 2018

As filed with the Securities and Exchange Commission on April 30, 2018.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 **FORM 20-F** REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES **EXCHANGE ACT OF 1934** OR ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  $\mathbf{X}$ THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2017 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.

#### Title of each class

### Name of each exchange on which registered

Common Shares without par value

American Depositary Shares (as evidenced by American

Depositary Receipts), each representing one share of Common

Stock

New York Stock Exchange\*

New York Stock Exchange

The Proposition of Common Stock Stock Exchange Stock

<sup>\*</sup> 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.

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 December 31, 2017:

1,387,524,047 Common Shares without Par Value

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

Yes R 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 R No

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.

R Yes 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 Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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

U.S. GAAP

International Financial Reporting
Standards as issued by the
International Accounting Standards

Other

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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#### 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;
- "Brazil" are to the Federative Republic of Brazil;
- "Brazilian government" are to the federal government of Brazil;
- "real," "reais" or "R\$" are to Brazilian reais, the official currency of Brazil;
- "U.S. dollars," "\$," "US\$" or "USD" are to United States dollars;
- "km" are to kilometers, "m" are to meters, "mt" or "tons" are to metric tons, "mtpy" are to metric tons per year and "MV are to megawatts;
- "TEUs" are to twenty-foot equivalent units;
- "consolidated financial statements" are to our audited consolidated financial statements prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, as of December 31, 2015, 2016 and 2017 and for the years ended December 31, 2015, 2016 and 2017 together with the corresponding reports of our Independent Registered Public Accounting Firms; and
- "ADSs" are to CSN's American Depositary Shares and "ADRs" are to CSN's American Depositary Receipts.

#### 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 beliefs, expectations and projections about future events and financial trends affecting us. Although we believe these estimates and forward-looking statements are based on reasonable assumptions, these estimates and statements are subject to several risks and uncertainties and are made in light of the information currently available to us.

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 others:

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

- our liquidity position and leverage and our ability to obtain financing on satisfactory terms;
- management's expectations and estimates concerning our future financial performance and financing plans;
- 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;
- 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 these;
- existing and future governmental regulation; and
- the risk factors discussed under the caption "Item 3D. Risk Factors."

We caution you that the foregoing list of significant factors may not contain all of the material factors that are important to you. The words "believe," "may," "will," "aim," "estimate," "plan," "continue," "anticipate," "intend," "expect" a words are intended to identify forward-looking statements. Forward-looking statements include information concerning our possible or assumed results of operations, business strategies, financing plans, competitive position, industry environment, potential growth opportunities, the effects of regulation and the effects of competition, among others.

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, including 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 audited consolidated financial statements as of December 31, 2017 and 2016 and for the years ended December 31, 2017, 2016 and 2015 included elsewhere in this annual report have been presented in thousands of *reais* (R\$) and prepared in accordance with IFRS as issued by the IASB. See note 2.a. to our audited consolidated financial statements.

We have translated some of the Brazilian *real* amounts contained in this annual report into U.S. dollars solely for the convenience of the reader at the rate of R\$3.308 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2017, as reported by the Central Bank of Brazil, or the Central Bank. The U.S. dollar equivalent information presented in this annual report 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.

Certain figures included in this annual report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not represent an arithmetic sum of the figures that 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 years ended December 31, 2017, 2016, 2015, 2014 and 2013.

# **Summary Financial and Operating Data**

The following tables present summary consolidated financial and operating data for each of the periods indicated.

	Year Ended December 31,					
<b>Income Statement</b>						
Data:	20171	2017	2016	$2015^{2}$	2014	2013
	(in millions					
	of US\$,		(in millions o	of R\$, except pe	er share data)	
	except per share data)					
Net operating	,					
revenues	5,600	18,525	17,149	15,262	16,126	17,312
Cost of products sold	(4,110)	(13,596)	(12,640)	(11,740)	(11,592)	(12,423)
Gross profit	1,490	4,929	4,509	3,522	4,534	4,889
Operating expenses	,	,	,	,	,	,
Selling	(549)	(1,815)	(1,697)	(1,430)	(1,042)	(875)
General and	(126)	(416)	(518)	(470)	(438)	(486)
administrative	(120)	(410)	(316)	(470)	(436)	(400)
Equity in results of	33	109	65	1,160	331	158
affiliated companies				•		
Other expenses	(196)	(647)	(1,077)	(1,341)	(657)	(1,134)
Other income <sup>3</sup>	249	824	663	3,610	90	567
Total	(588)	(1,945)	(2,564)	1,529	(1,716)	(1,770)
Operating income	902	2,984	1,945	5,051	2,818	3,119
Non-operating income		, -	<i>y</i>	- ,	,	-, -
(expenses), net						
Financial income	89	295	644	488	172	171
Financial expenses	(834)	(2,759)	(3,166)	(3,853)	(3,253)	(2,683)
(Loss) income before						
taxes	157	520	(577)	1,686	(263)	608
Income tax						
Current	(109)	(359)	(206)	(136)	(528)	(1,291)
Deferred	(15)	(50)	(60)	(2,768)	679	1,217
	,	,	, ,			,
Net income						
(loss) from continuing	34	111	(843)	(1,218)	(112)	534
operations						
Net income						
(loss) from			(4.0)			
discontinued	-	-	(10)	2	-	-
operations						
Net income (loss) for						
the period	34	111	(853)	(1,215)	(112)	534
me periou						

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Net income (loss) attributable to noncontrolling interest	31	101	82	(2)	(7)	25
Net income (loss) attributable to Companhia Siderúrgica Nacional	3	10	(935)	(1,213)	(105)	509
Basic earnings per common share Diluted earnings per common share	0.00229 0.00229	0.00757 0.00757	(0.68876) (0.68876)	(0.89461) (0.89461)	(0.07443) (0.07443)	0.34913 0.34913

	As of December 31,					
Balance Sheet Data:	2017	2017	2016	2015	2014	2013
Dutu.	(in millions of US\$, except per share data)		(in millions o	of R\$, except p	er share data)	
Current assets Investments	3,592 1,662	11,881 5,499	12,445 4,568	16,431 3,998	15,936 13,665	16,403 13,487
Property, plant and equipment	5,431	17,965	18,136	17,826	15,624	14,911
Other assets	2,982	9,865	9,005	9,084	4,542	5,602
<b>Total assets</b>	13,667	45,210	44,154	47,339	49,767	50,403
Current liabilities	3,226	10,670	5,497	5,082	6,363	5,564
Non-current liabilities	7,936	26,252	31,272	35,166	37,669	36,770
Stockholders' equity	2,505	8,288	7,385	7,091	5,735	8,069
Total liabilities and stockholders' equity	13,667	45,210	44,154	47,339	49,767	50,403
Paid-in capital	1,372	4,540	4,540	4,540	4,540	4,540
Common shares (in millions of shares) Dividends declared	1,388	1,388	1,388	1,388	1,388	1,457
and interest on stockholders' equity  Dividends declared and interest on	-	-	-	275	700	800
stockholders' equity per common share (in reais)	-	-	-	0.20	0.50	0.55

- (1) Translated solely for the convenience of the reader at the rate of R\$3.308 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2017, as reported by the Central Bank.
- (2) The results of our former subsidiary Cia. Metalic Nordeste, or Metalic, were excluded from net operating revenues, cost of sales and/or services, gross profit, operating expenses, other operating expenses, other operating income, financial results and income taxes and were included in "Net income (loss) from discontinued operations" due to the sale of Metalic in November 2016. For further information, see "Item 4B. Business Overview—Downstream Facilities—Metalic."
- (3) Our 2015 financial information was impacted by the business combination of CSN Mineração as described in "Item 5A. Operating Results."
- (4) We paid dividends related to the fiscal year ended December 31, 2015 in 2016 before the second restatement of our financial statements as of and for the year ended December 31, 2015. As a consequence of this second restatement, which resulted in a net loss for 2015, we recorded the payment as a payment from our profit reserve account (statutory reserve of working capital) existing at the time of the distribution. The payment was not allocated to the minimum mandatory dividends for the year ended December 31, 2015 as established at our 2016 annual shareholders' meeting, held in April 2016. For a discussion of our dividend policy and dividend and interest payments, see "Item 8A. Consolidated Statements and Other Financial Information—Dividend Policy."

# **Exchange Rates**

Brazil's 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 amount, subject to certain regulatory procedures.

During the last decade, the Brazilian currency has experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies.

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 *real* to float freely or will intervene in the exchange rate market through a currency band system or otherwise. The *real* may significantly depreciate or appreciate against the U.S. dollar.

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

	Period-End	Average <sup>(1)</sup> (R\$ per U	Low JS\$)	High
Year		(It per c	,54)	
2013	2.343	2.161	1.953	2.446
2014	2.656	2.355	2.197	2.740
2015	3.905	3.338	2.575	4.195
2016	3.259	3.484	3.119	4.156
2017	3.308	3.193	3.051	3.381

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2018 (through April 26, 2018) 3.467 3.283 3.139 3.504

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	<b>Month-End</b>	$Average^{(1)}$	Low	High
		(R\$ per US\$)		
Month				
October 2017	3.276	3.191	3.131	3.280
November 2017	3.262	3.259	3.214	3.292
December 2017	3.308	3.291	3.232	3.333
January 2018	3.162	3.211	3.139	3.270
February 2018	3.245	3.242	3.173	3.282
March 2018	3.324	3.279	3.225	3.338
April 2018 (through April 26, 2018)	3.467	3.404	3.310	3.504

Source: Central Bank

(1) Represents the average of the exchange rates during the period.

We pay cash dividends and make other cash distributions, if any, with respect to our common shares in Brazilian currency. Accordingly, exchange rate fluctuations may affect the U.S. dollar amounts received by ADS holders upon 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 the B3 S.A. – *Brasil*, *Bolsa*, *Balcão*, or the B3.

### 3B. Capitalization and Indebtedness

Not applicable.

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

Not applicable.

### 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.

For purposes of this section, when we state that a risk, uncertainty or problem may, could or will have an "adverse effect" on us or "adversely affect" us, we mean that the risk, uncertainty or problem could have an adverse effect on our business, financial condition, results of operations, cash flow, prospects and/or the trading price of our ADSs, except as otherwise indicated. The risks described below are those that we currently believe may materially and adversely affect us.

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# **Risks Relating to Brazil**

The Brazilian government has exercised, and continues to exercise, significant influence over the Brazilian economy and such involvement, along with general political and economic conditions, could adversely affect us.

The Brazilian government has frequently intervened in the Brazilian economy and occasionally made drastic changes in policy and regulations. The Brazilian government's actions to control inflation and affect other policies and regulations have often involved, among other measures, increases in interest rates, changes in tax and social security policies, price controls, currency exchange and remittance controls, devaluations, capital controls and limits on imports. We may be adversely affected by changes in policy or regulations at the federal, state or municipal level involving or affecting the following factors, among others:

- 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, logistics and energy industries;
- environmental policies and regulations;
- tax policies and regulations, including frequent changes that may result in uncertainties regarding future taxation; and
- other political, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian government will implement changes in policy or regulation affecting these or other factors may contribute to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and securities issued abroad by Brazilian companies.

After two years of economic contraction, Brazil's gross domestic product, or GDP, grew by 1.0% in 2017, as compared to (3.5)% in 2016, (3.5)% in 2015, 0.5% in 2014 and 3.0% in 2013.

We have been, and will continue to be, affected by the weakness of the Brazilian GDP. We cannot assure you that the Brazilian GDP will increase or remain stable. Developments in the Brazilian economy may affect Brazil's growth rates and, consequently, the demand for our products.

# Political instability may adversely affect us.

Brazilian markets have experienced heightened volatility in recent years due to uncertainties derived from the ongoing *Lava Jato* investigation, which is being conducted by the Federal Prosecutor's Office (*Ministério Público Federal*) and its impact on the Brazilian economy and political environment. Numerous members of the Brazilian government and of the legislative branch, as well as senior officers of large state-owned and private companies, have been convicted of political corruption of officials accepting bribes by means of kickbacks on contracts granted by the government to several infrastructure, oil and gas and construction companies. Profits from these kickbacks financed the political campaigns of political parties that were unaccounted for or not publicly disclosed, and served to further the personal enrichment of the recipients of the bribery scheme. As a result, a number of senior politicians, including congressmen and officers of the major state-owned and private companies in Brazil, resigned or have been arrested, including, most recently, former President of Brazil, Luiz Inácio Lula da Silva, who was arrested in April 2018.

The ultimate outcome of these investigations is uncertain, but they have already had an adverse impact on the image and reputation of the implicated companies, and on the general market perception of the Brazilian economy. The development of these unethical conduct cases has and may continue to adversely affect us.

After the impeachment of President Dilma Rousseff in August 2016, Vice President Michel Temer was sworn in as the new President of Brazil until the next presidential election in October 2018. The Brazilian economy has been and continues to be subject to the effects of uncertainty regarding the results of the next presidential election. We cannot predict the effects of these recent developments and the current ongoing political uncertainties on the Brazilian economy.

The Brazilian government has exercised, and continues to exercise, significant influenceover the Brazilian economy

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

The Brazilian currency has, during the last decade, experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies. In 2015, the real depreciated 47% reaching R\$3.905 per US\$1.00 as of December 31, 2015. In 2016, the *real* appreciated against the U.S. dollar, reaching R\$3.259 per US\$1.00 as of December 31, 2016. The exchange rate remained relatively stable in 2017 and was R\$3.268 per US\$1.00 as of December 31, 2017. On April 26, 2018, the exchange rate was R\$3.947 per US\$1.00.

Depreciation of the *real* against the U.S. dollar creates inflationary pressures in Brazil and causes increases in interest rates, which negatively affect the growth of the Brazilian economy as a whole, curtail access to foreign financial markets and may prompt government intervention, including recessionary governmental policies. Depreciation of the *real* against the U.S. dollar may also, in the context of an economic slowdown, lead to decreased consumer spending, deflationary pressures and reduced growth of the Brazilian economy.

On the other hand, appreciation of the *real* relative to the U.S. dollar and other foreign currencies could lead to a deterioration of the Brazilian foreign exchange current accounts, as well as dampen 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 ADSs.

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 have a total U.S. dollar-denominated or -linked indebtedness of R\$14,781 million, which represents 50% of our total indebtedness, as of December 31, 2017.

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

Historically, Brazil has experienced high inflation rates. Inflation and certain actions taken by the Central Bank to curb it have had significant negative effects on the Brazilian economy. Inflation as measured by the national broad consumer price index (*Índice Nacional de Preços ao Consumidor Amplo*), or IPCA, was 10.7%, 6.3% and 3.0% in 2015, 2016 and 2017, respectively, and 10.5%, 7.2% and (0.5)% as measured by the general market price index (*Índice Geral de Preços do Mercado*), or IGP-M.

The base interest rate for the Brazilian banking system is the Central Bank's Special System for Settlement and Custody (Sistema Especial de Liquidação e Custódia) rate, or SELIC rate. As of December 31, 2015, 2016 and 2017, the SELIC rate was 14.25%, 13.65% and 7.00% respectively. In its twelfth consecutive cut since October 2016, the Central Bank further reduced the SELIC rate to 6.50% in March 2018.

Inflation and the Brazilian government's measures to fight it, principally the Central Bank's monetary policy, have had and may have significant effects on the Brazilian economy and us. Tight monetary policies with high interest rates have restricted and may restrict Brazil's growth and the availability of credit. Conversely, more lenient government and Central Bank policies and interest rate decreases have triggered and may trigger increases in inflation, and, consequently, growth volatility and the need for sudden and significant interest rate increases, which could negatively affect us and increase the payments on our indebtedness.

# Developments and the 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 issuers is affected 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. Crises in the United States, the European Union or emerging market countries may diminish investor 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 for us to gain access to the capital markets and finance our operations on acceptable terms, or at all.

# 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 significantly affect the prices of our products and may adversely affect us.

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 these 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.

# Prices charged for iron ore are subject to volatility. International iron ore prices may decrease significantly and have a material and adverse impact on us or require us to suspend certain of our projects and operations.

Our iron ore prices are determined by a variety of pricing factors, which are generally based on market price indices. Our iron ore prices, and consequently our revenues from our iron ore operations, are subject to volatility, which may adversely affect us. According to the average Platts IODEX (62% Fe CFR China), in 2017, average iron ore prices increased 22.0% to US\$71.3/dmt, from US\$58.4/dmt in 2016. In 2016, average iron ore prices increased 5.3% to US\$58.4/dmt, from US\$55.5/dmt in 2015. As of April 24, 2018, the index was US\$67.25/dmt. Partly due to these changes in iron ore prices, revenues from our mining business represented 21%, 27% and 25% of our total net revenues in 2015, 2016 and 2017, respectively. A decrease in iron ore market prices may adversely affect our operations or even require us to suspend certain projects and operations as well as record impairment of assets, which could adversely affect us.

# Adverse economic conditions in China and an increase in global iron ore production capacity could have a negative impact on us.

China has been the main driver of global demand for minerals and metals over the past decade, effectively driving global prices for iron ore and steel In 2017, China accounted for 79% of the global seaborne iron ore trade. The percentage of our iron ore sales volume consumed in China was around approximately 70% in 2017, as compared to approximately 60% in 2016. China is also the largest world steel producer, accounting for approximately 50% of 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's over-capacity, which would materially and adversely affect companies in the industry, including us. 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 affect us. China's GDP increased 6.9% in 2017 compared to 6.7% in 2016 and 6.9% in 2015.

In addition, in recent years, major iron ore suppliers have increased the pace of their new projects, which could result in increased supply and decreased seaborne iron ore prices. In addition, the recent upsurge in iron ore prices could also stimulate high cost producers to resume operations, expanding the available supply base. Either of these scenarios could have an adverse impact on us.

# 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 21%, 27% and 25% of our total net revenues in 2015, 2016 and 2017, respectively. If we are required to operate at significant idle capacity during periods of weak demand, we may suffer 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 agreements.

Conversely, our ability to rapidly increase our production capacity is limited by these same factors, which could render us unable to fully satisfy an upsurge in demand for our iron ore. When demand exceeds our production capacity, we may meet excess customer demand by purchasing iron ore from unrelated third 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.

# A decrease in the availability or an increase in the price of raw materials for steel production, particularly coal and coke, may adversely affect us.

In 2017, raw material costs accounted for 58% 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 49% 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.

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. Interruptions and price increases could result from 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 these cost increases onto our customers or to meet our customer demand because of unavailability 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, customer service and technological advances permitting reduced production costs. Several factors influence Brazil's export of steel products, including protectionist policies of other countries, especially the United States, disputes regarding these policies before the 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 technology have given rise to improvements in products such as plastics, aluminum, ceramics and glass, permitting them to serve as substitutes for 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 results in oversupply and 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, particularly China and India, as well as other emerging markets. China is 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 non-domestic markets), which can have a significant impact on steel prices in other markets. If we are not able to remain competitive in relation to competitors in China or other steel-producing countries, we may be adversely affected.

Steel companies in Brazil face 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 imported. If the Brazilian government does not implement measures against subsidized steel imports and there is an increase in imports, we may be materially and adversely affected. Apart from direct steel imports, the Brazilian industry also faces competition from imported finished goods, which adversely affects the whole steel supply and production chain.

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

In response to increased production and steel exports from 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.

This scenario returned in 2015, when 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. In 2016, the European Commission initiated an anti-dumping investigation of hot-rolled sheets and coils imported from Brazil and other countries.

In April 2017, the President of the United States, Donald Trump requested an investigation under Section 232 of the Trade Expansion Act to determine if steel imports are harming national security. As a result of this investigation, in March 2018, the U.S government established the entry in force of Section 232, which imposes an ad valorem tariff of 25% on imported steel. In the same month, prompted by the United State's adoption of Section 232 measures, the European Union initiated a safeguard investigation into imports of 26 categories of steel products, which must be completed within nine months of its initiation.

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, licenses and permits and changes in applicable laws, regulations or government measures could adversely affect us.

Our activities and the activities of our subsidiaries and joint ventures are subject to governmental authorizations, concessions, licenses and 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, or that no additional requirement will be imposed on us in connection with our requests.

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, or we may not be able to do so under the terms of new concession laws, claims for amicable contractual termination and subsequent re-bidding for concessions. We also cannot guarantee that we, our controlled entities and our joint ventures that hold concessions will timely comply with our or their obligations under any relevant concession agreement or in conduct adjustment agreement (Termos de Ajustamento de Conduta), or TACs, entered into with governmental agencies. In addition, we are exposed to supervision, penalties and fiscalization from the governmental entitis, including the Brazilian court of audit (Tribunal de Contas da União), or TCU, and regulatory agencies. A material breach of those obligations 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, the acceleration or an event of default under our indebtedness. Additionally, we would be subject to penalties, including fines or the closure of facilities. In case of a takeover or concession agreement termination due to government default, if we are entitled to any indemnification from granting authorities for our investments, this indemnification may be insufficient to cover our costs, expenses or losses and may be paid long after the events affecting our concessions, permits or licenses occur, if at all.

In addition, changes in applicable laws or regulations could require modifications to our technologies and operations and unexpected capital expenditures. Capital expenditures that we have already made may not generate the returns we expected, if any. In our mining operations, new or more stringent environmental licensing requirements for our project operations, specifically for our dams, could be imposed. 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 them, thereby risking exposure to civil responsibility, administrative penalties, criminal sanctions and closure orders for non-compliance with these regulations. These events and additional costs may have a negative impact on us and the return from our projects and may render certain projects economically or otherwise unfeasible.

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 operate, 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. For example, 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 December 19, 2017, Law No. 13,540, originated from Executive Order No. 789/2017, was enacted, increasing the CFEM rate for our mining activities and altering its calculation basis. Further

Our activities depend on authorizations, concessions, licenses and permits and changes in applicable laws regulat

changes to the CFEM regime or increases in applicable rates could adversely affect us. 14

Our activities depend on authorizations, concessions, licenses and permits and changes in applicable law regulat

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

As of December 31, 2017, our total debt outstanding was R\$29,511 million, comprising R\$6,527 million of short-term debt and R\$22,984 million of long-term debt. We had R\$3,412 million in cash and cash equivalents as of December 31, 2017. Our planned investments across our business segments will require a significant amount of cash over the course of 2018 and following years. See "Item 4D. Property, Plant and Equipment—Capital Expenditures—Planned Investments."

Our level of indebtedness could affect our credit rating and our ability to obtain any necessary financing in the future and may 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 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 us 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.

# The renegotiation of our indebtedness with Caixa Econômica Federal is subject to certain conditions precedent, including their final approval.

The aggregate principal amount of our and our subsidiaries' debt with Caixa Econômica Federal, one of our principal creditor's, represents approximately 25% of our aggregate consolidated indebtedness as of December 31, 2017. We are in negotiations with Caixa Econômica Federal regarding amortization schedules so as to soften the amortization profile and extend the maturity of this debt. Some terms have not yet been negotiated and the execution of documentation of the renegotiated debt instrument with Caixa Econômica Federal will be subject to certain conditions precedent, including, among others, final approvals by Caixa Econômica Federal's internal committees. If we do not reach an agreement with Caixa Econômica Federal, if Caixa Econômica Federal does not obtain the necessary internal approvals or if we are not able to comply with any of the conditions precedent, we will be required to make significant payments of principal amounts in 2018 under the current debt instrument with this lender, which might trigger a ratings downgrade and would adversely affect our financial and cash position.

# 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 weak economic conditions in Brazil. These factors have materially and adversely affected our liquidity and we expect this to continue. Recent cost cutting measures implemented by us may not be sufficient to offset these effects or to improve our liquidity position.

We have announced certain measures to improve our liquidity and debt profile, including the potential sale of certain assets. In addition, we are negotiating the extension of certain of our credit facilities. If we are unable to successfully sell certain assets and/or extend our debt amortization profile, we may not be able to maintain adequate liquidity and

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our cash flows from operations and available capital may not be sufficient to meet our obligations.

# 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 our common shares or ADSs, 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 due to factors specific to us, trends in the industries we operate or in the credit and capital markets generally. On December 31, 2017, our Fitch, Moody's and S&P credit ratings were B-, Caa2 and CCC, respectively. Debt rollovers with Banco do Brasil S.A. and Caixa Econômica Federal and other factors have recently resulted in improvements in our credit ratings. In February 2018, Moody's and S&P improved our credit ratings from Caa2 and CCC to B3 and CCC+, respectively. Credit rating agencies regularly evaluate us and their ratings are based on a number of factors, including our financial strength. We cannot assure that credit rating agencies will not downgrade our credit ratings or that credit ratings will remain in effect for any given period of time or not be withdrawn entirely by the rating agencies, if in their judgment circumstances so warrant.

Any lowering, suspension or withdrawal of our credit ratings may have an adverse effect on us and our ability to refinance our existing indebtedness.

# Our indebtedness includes restrictive covenants, which may give rise to early maturity in the case of default.

Our loan agreements contain certain covenants and disclosure obligations regarding our financial statements. For example, in 2017, we were unable to publish our financial statements as of and for the year ended December 31, 2016 within the contractual period and requested a waiver from the holders of our 5th, 7th, 8th and 9th debentures issuances to grant an extension until October 31, 2017 for their publication. While we met the October 31, 2017 deadline and are not in default under any of our financings, we cannot assure you that we will be able to fully comply with all the covenants in our financial agreements.

# 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 subject to enforcement worldwide. Our governance and compliance procedures may not prevent breaches of law, accounting and/or governance standards applicable to us. We may be subject to breaches of our Code of Ethics, business conduct protocols and to instances of fraudulent behavior, dishonesty and unlawful conduct by our employees, contractors or other agents, which could subject us to fines, loss of our 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.

Our internal controls over financial reporting may not prevent or detect misstatements in 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 we fail to maintain the adequacy of our internal controls, including implementing new or improved required controls, we could fail to meet our financial reporting obligations, which could trigger a default under some of our agreements. In this regard, and in connection with management's evaluation of the effectiveness of our internal control over financial reporting, we concluded that, as of December 31, 2017, CSN's internal control over financial reporting is effective. The material weakness previously reported on management's annual assessment of internal control over financial reporting as of December 31, 2016 was remediated and no longer is a material weakness.

# 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: (i) established a strategic alliance with an Asian consortium at our controlled investee CSN Mineração to mine iron ore; (ii) 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; (iii) a joint venture with certain Brazilian governmental entities at Transnordestina Logística S.A., or TLSA, to explore railway

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transportation in the Northeastern region of Brazil; (iv) a joint venture with Engie Brasil Energia S.A. and Cia. de Cimento Itambé at Itá Energética S.A., or ITASA, to produce electricity; and (v) a consortium with Votorantim Metais Zinco S.A., Aliança Geração de Energia S.A. (union of Vale S..A and CEMIG Geração e Transmissão S.A.) and AngloGold Ashanti Córrego do Sítio Mineração S.A. at Igarapava hydroelectric facility to produce electricity.

Our forecasts and plans for these 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, which could adversely affect us.

# Accidents or malfunctioning equipment on our premises, railways or ports may decrease or interrupt production, internal logistics or distribution of our products and adversely affect us.

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. Any 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 exposure to civil responsibilities, administrative penalties, criminal sanctions and closure orders for non-compliance with these regulations. Our health, safety and environmental standards and risk management programs and procedures may prove insufficient in preventing incidents or accidents that could adversely affect us.

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

We maintain several types of insurance policies as part of our risk management for each of our businesses and seek to follow industry practice regarding best coverage, which encompasses domestic and international (import and export) cargo transportation (road, rail, sea or air), life insurance, personal accidents, health, automobile, directors and officers, general liability, CAR (construction and erection risks), boiler and machinery coverage, trade credit insurance, surety, named perils, ports and terminal liabilities.

We also have an insurance policy covering the operational risks, material damages and loss of profits of the following operations and subsidiaries: Presidente Vargas Steelworks, CSN Mineração and the container terminal Sepetiba Tecon S.A., or TECON. This policy was negotiated with domestic and foreign insurers and reinsurers and is valid until March 31, 2019, with a limited indemnity of US\$600 million (for an insured value of US\$9.1 billion) with a deductible of US\$385 million for material damages and 45 days to loss of profits. Under the terms of the policy, we remain responsible for the first tranche of US\$385 million in losses (material damages and loss of profits).

The coverage obtained in our insurance policies may not be sufficient to cover all risks or the extent of the risks we are exposed to, which could expose us to significant costs. Additionally, we may not be able to successfully contract

Accidents or malfunctioning equipment on our premises, railways or ports may decrease or interrupt prodection, into

or renew our insurance policies or to do so on terms satisfactory to us. The occurrence of one or more of these events may adversely affect us.

# Our projects are subject to risks that, if materialized, may result in increased costs and/or delays or that could prevent their timely or successful implementation.

We are investing to further increase our steel, mining and cement production capacity, as well as our logistics capabilities. The success of these projects is subject to a number of risks that, if materialized, may adversely affect our growth prospects and profitability, including, among others:

• delays, availability issues or higher than expected costs in obtaining the necessary equipment, services and materials to build and operate a project;

- lack of infrastructure, including waste disposal areas and reliable power and water supply;
- delays or higher than expected costs in obtaining or renewing required authorizations, concessions, licenses or permits and/or regulatory approvals to build or continue a project; and
- changes in market conditions, laws or regulations that render 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.

We are subject to environmental, health and safety incidents. Additionally, current, new or more stringent environmental, health and safety regulations applicable to us may result in liability exposure and increased capital expenditures.

Our steel production, mining, cement, energy and logistics facilities are subject to a broad range of laws, regulations and permit requirements in the countries where we operate relating to the protection of the environment, health and safety.

Brazilian pollution standards are subject to change, including 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, or areas of relevant ecological interest (ARIE), including the Cicuta Forest, as 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 by 2020 for the industry (including steel making and cement sectors) and an action plan 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. For air emission standards, the environmental national council, (*Conselho Nacional do Meio Ambiente*), or CONAMA, issued a resolution that obliges steel companies to comply with certain restrictions until 2018. The Brazilian government has also established a national policy for solid waste (*Política Nacional de Resíduos Sólidos*), which provides for 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 under development by the department of geology, mining and mineral processing of 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.

Our operations involve the use, handling, storage, discharge and disposal of hazardous substances into the environment and the use of natural resources, and are subject to significant risks and hazards, including fire, explosion, toxic gas leaks, spilling of polluting substances or other hazardous materials, rockfalls, incidents involving dams, failure of operational structures and incidents involving mobile equipment, vehicles or machinery. This could occur by accident or by breach of operating and maintenance standards, and could result in significant environmental and social impacts, damage to or destruction of mineral properties or production facilities, personal injury, illness or death of employees, contractors or community members close to operations, environmental damage, delays in production, monetary losses and possible legal liability. Additionally, in remote localities, our employees may be exposed to tropical and contagious diseases that may affect their health and safety. Notwithstanding our standards,

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policies and controls, our operations remain subject to incidents or accidents that could adversely affect us and our stakeholders.

New or more stringent environmental, safety and health standards imposed on us could require increased capital expenditures, additional legal preservation areas within our properties or modifications to our operating practices or projects. Especially with regard to our mining activities, more stringent environmental, health and safety standards, including with respect to the licensing process of our projects operations, specifically for our dams, could be imposed. As a result, the amount and timing of 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 responsibility, administrative penalties, criminal sanctions and closure orders for non-compliance with these regulations, as well as encounter delays in obtaining 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 in foreign markets to which we export our products may also materially and adversely affect our export sales and us.

In addition, we may enter into TACs with Brazilian regulatory 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 or to remediate non-compliance in a timely manner, we may be exposed to penalties, such as fines, revocation of permits or closure of facilities.

# Risks associated with drilling and production could render mining projects economically unfeasible.

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 record write-offs. In addition, 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 economically unfeasible.

# Our mineral reserve and mine life may prove inaccurate, market price fluctuations and cost changes 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, among other factors, 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 or anticipated level of production beyond the remaining lives of our existing mines.

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### Natural and other disasters, or extreme weather conditions, could disrupt our operations.

Because of our exposure to raw materials costs, extreme weather conditions, such as heavy rainfall or flooding, could reduce the available supply of our raw materials and increase our raw materials costs, which would have a material adverse impact on us. Additionally, we are subject to technical or physical risks including fire, power loss, water supply loss, reduction or rationing, leakages, accidents and failures in telecommunications and information technology systems, any of which could disrupt our operations.

# We may not be able to consummate proposed acquisitions 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 acquisitions successfully and develop these businesses to realize revenue growth and cost savings, we 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 liabilities, could adversely affect us and reduce the expected and bargained-for 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 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 the transaction, do so subject to restrictions, including the divestment of assets, or reject it. Any of these developments or adverse regulatory decisions could negatively affect

# 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 operations of our facilities and/or the timing of completion and the cost of our projects.

# We are exposed to the risk of litigation.

We are currently and may in the future be a party to legal proceedings and judicial, administrative or arbitration 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 unfavorable 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 us.

# **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 by Brazilian Corporate Law. Our controlling shareholder may have an interest in pursuing acquisitions, dispositions, financings or other transactions that could conflict with your interests as a holder of our common shares and ADSs.

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# 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. 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 depositary'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 in which they do so. Alternatively, ADS holders can exercise their right to vote by surrendering their ADSs for cancellation in exchange for our common shares. Pursuant to applicable Brazilian law, companies that issue ADSs must publish the first call for a shareholders' meeting at least 30 days in advance of the meeting, and the second call must be published at least eight 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 in time 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. There is also significantly greater concentration in the Brazilian securities market than in major securities markets in the United States. The ten largest companies in terms of market capitalization represented 51.3% of the aggregate market capitalization of the B3 S.A. – *Bolsa, Brasil, Balcão*, or the B3, as of December 31, 2017.

Our controlling shareholder has the ability to direct our business and affairs and itsinterests could conflict with yours

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 the price and time you wish 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 available exemptions from registration, 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 is not available, 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."

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

In recent years, our market capitalization has been volatile, resulting in increased volatility in the trading price of our common shares and ADSs. Any decreases in our market capitalization may further increase volatility. The trading price of our ADSs decreased throughout 2017 and presented a variation of (25)% as compared to their 2016 year-end trading price. If the trading price of our ADSs drops below the levels required by the listing standards of the New York Stock Exchange, or NYSE, 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 Brazilian president Getúlio Vargas. The Presidente Vargas Steelworks, located in the city of Volta Redonda, in the state of Rio de Janeiro, began its production of coke, pig iron and steel products in 1946, when we also incorporated 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 and the Arcos Mine provides our flux, limestone and dolomite.

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

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 these investments, since February 1996, all our production involves continuous casting, which requires lower energy use and results in decreased metal loss as compared to ingot casting. From 1996 until 2002, we invested the equivalent of US\$2.4 billion in our 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 an 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 CSN Mineração, 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. CSN Mineração 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 CSN Mineração 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 of the cement business with our steel business.

In order to diversify our product portfolio, we entered 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, we installed a new plant for production of long steel products at Volta Redonda, which began operations 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. This plant provides the domestic Brazilian market with rebar for civil construction and wire rod for industrial and civil construction.

In 2015, we inaugurated two new grinding mills, and in 2016, we concluded a new 6,500 tons per day kiln line, reaching an aggregate annual capacity of 4.7 million tons in our cement plants.

### General

We are one of the largest fully integrated steel producers in Brazil and Latin America in terms of crude steel production. 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

#### Steel

Our steel segment comprises a portfolio of diverse products and provides us an international footprint by means of our international subsidiaries and our exports from Brazil. In our flat steel segment, we are an almost fully integrated steelmaker. Our main industrial facility, Presidente Vargas Steelworks produces 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 Presidente Vargas Steelworks is 5.6 million and 5.1 million tons, respectively. At the end of 2015, due to weak internal demand for steel, we decided to interrupt the operation of Blast Furnace No. 02 for maintenance, which impacted our annual production capacity of crude steel at the Presidente Vargas Steelworks by 28%, while the production of rolled steel decreased 20%. During 2016, our inventory levels significantly dropped and we resumed operations of Blast Furnace No. 2 in October 2016.

Our production process is based on the integrated steelworks concept.

We currently obtain all of our iron ore (except for pellets), limestone and dolomite requirements and a portion of our tin requirements, from our own mines. Using imported coal, we produce approximately 48% 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.

In addition to the production of flat steel, we entered into the long steel segment, with the acquisition of 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 an output of 500,000 tons per year once fully operational, providing the domestic market with products for civil construction.

# Mining Activities

We own a number of high quality iron ore mines, strategically 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 CSN Mineração, and the 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,

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respectively, pertaining to our wholly owned subsidiary Minérios Nacional S.A. (formerly Mineração Nacional S.A.).

Our mining assets also include (i) the solid bulks cargo terminal Itaguaí Port, or TECAR, in the state of Rio de Janeiro, which pertains to CSN Mineração; (ii) the Bocaina mines, located in the city of Arcos, in the state of Minas Gerais, which produce dolomite and limestone; and (iii) Estanho de Rondônia S.A., or ERSA, located in the city of Ariquemes, in the state of Rondônia, which mines and casts tin.

We sold 25.7 million tons, 32.9 million tons and 27.4 million tons of iron ore to third parties in 2015, 2016 and 2017, respectively.

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# Logistics

Our vertical integration strategy and the synergies among our business units are strongly dependent on the logistics needed to guarantee the transportation of inputs at low cost. A number of railways and port terminals comprise the logistics system that integrates our mining, steelmaking and cement units.

We operate a port terminal for containers, TECON at Itaguaí Port, in the state of Rio de Janeiro, and CSN Mineração operates TECAR.

We also have the following participation in three railways: (i) we share control in MRS, which operates in the Southeast region of the federal railway system, along the Rio de Janeiro - São Paulo - Belo Horizonte axis; (ii) we have an interest in joint venture Transnordestina Logística S.A., or TLSA, which has a concession to construct and operate the Northeastern Railway System II; and (iii) we control Ferrovia Transnordestina Logística S.A., or FTL, which operates the Northeastern Railway System I.

#### Cement

We entered the cement market in May 2009 in order to take advantage of the synergy potential with our steelmaking business. Our cement operations use as inputs slag generated by our blast furnaces at Volta Redonda and limestone from our limestone reserves in our Bocaina mines, which is used to produce clinker. Slag and clinker are the main inputs in cement production.

In 2015, we inaugurated two grinding mills and in 2016, we concluded a new kiln line with a capacity of 6,500 tons per day, reaching an aggregate capacity of 4.7 million tons per year of cement production considering our Volta Redonda and Arcos plants. We plan to increase our market share in the cement segment in Brazil in order to diversify our product mix and markets, which will allow us to reduce our risk exposure.

### Energy

We are self-sufficient in our energy needs. Steelmaking requires significant amounts of electricity to power rolling mills, production lines, hot metal processing, coking plants and auxiliary units.

The main source of the electricity we use is our thermoelectric cogeneration power plant located at Presidente Vargas Steelworks, which is fueled by gases from the steel production process, and has an installed capacity of 235.2 MW. In addition, we have a 29.5% interest in the Itá Hydroelectric Power Plant in the state of Santa Catarina, through a 48.75% equity interest in ITASA, and a 17.9% interest in the Igarapava hydroelectric facility in the state of Minas Gerais, from which we have assured 136 MW from each. In 2014, we installed a new turbine generator at Presidente Vargas Steelworks, which added 21 MW to our installed capacity. This turbine uses 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, 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 and we believe this integration supports resilient and profitable operations. Our integrated business model comprises our captive sources of raw materials, principally iron ore, and our infrastructure, including railways and deep-water port facilities. In terms of raw materials, we own a number of high-quality iron ore mines, strategically located within Brazil's "Iron Ore Quadrangle," which distinguishes us from our main competitors in Brazil who are required 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 mining expansions will enable us to expand our product portfolio and total output, increasing our presence in seaborne markets.

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We have high-quality iron ore reserves in Casa de Pedra, Engenho, Fernandinho and other mines, all located in the state of Minas Gerais. Our mining activities are an important contributor to our EBITDA. We sold 25.7 million tons of iron ore to thirs parties in 2015, 32.9 million tons in 2016 (including 100% of Namisa due to its full consolidation of CSN Mineração) and 32.6 million tons in 2017. Our mining business also includes TECAR, a solid bulks terminal at Itaguai Port in the state of Rio de Janeiro, with a capacity to handle 45 million tons per year, and Mineração Bocaina, located in the city of Arcos in the state of Minas Gerais, which produces dolomite and limestone, as well as ERSA, which mines and casts tin.

In 2015 and 2016, we implemented cost reduction measures, which, along with the depreciation of the *real*, reduced our production costs at the Casa de Pedra mine from US\$24.66/ton in 2014 to US\$15.56/ton in 2015, to US\$12.92/ton in 2016 and to US\$15.75 in 2017.

Thoroughly developed transport infrastructure. We have a thoroughly developed transport infrastructure, connecting our iron ore mines to our steel mills and to the port terminals we operate. Our Presidente Vargas Steelworks facility is located next to railway and port systems, which facilitates its supply of raw materials, product shipments and access to our main clients. Our steelworks are close to the main steel consumer centers in Brazil, with easy access to port facilities and railways. The concession for the main railway we use and operate is owned by MRS, in which we hold a 34.9% direct and indirect ownership interest. The railway connects our Casa de Pedra mine to Presidente Vargas Steelworks and to our terminals at Itaguaí Port, which handle 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's railway in 1996, it has significantly improved its productivity and developed its business, with increased cash generation.

Self-sufficiency in energy generation. We are self-sufficient in our energy needs through our interests in the hydroelectric plants of Itá and Igarapava, as well as our own thermoelectric plant located inside Presidente Vargas Steelworks. We sell excess energy we generate in the energy market on a spot basis. Our 256 MW thermoelectric cogeneration plant provides Presidente Vargas Steelworks with approximately 60% of its energy needs for its steel mills, and uses 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 the state of Santa Catarina. This ownership stake grants us assured energy of 167 MW, proportional to our ownership interest, pursuant to a 30-year power purchase agreement at a fixed price per megawatt hour, adjusted annually for inflation. In addition, we own 17.9% of the Igarapava hydroelectric plant, which has a fully installed capacity of 210 MW and a direct take of 136 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 in both the steel and mining segments. Other factors that lead to our low cost structure include the strategic location of our steelworks facility along with our low-cost, skilled workforce.

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, including 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 and to establish 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 Brazilian market for steel products, with a market share of approximately 30% of the domestic flat steel market. In addition, through our international subsidiaries we sell our flat steel products in the United States and in Europe, which sales accounted for approximately 25% of our total sales in 2017. Direct exports accounted for 6% of our total sales in 2017. 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 2017, SWT accounted for 16% of our total sales.

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# **Our Strategies**

Our goal is to make the most of our high-quality product portfolio, low cost production and diverse consumer market to preserve our position as one of the world's lowest-cost steel producers and as a global player in the mining of iron ore, increase our cement segment's market share and optimize our infrastructure assets, including ports, railways and power generating plants, which support our high integration and low cost structure. To achieve these goals, we have developed specific strategies for each of our business segments, as described below.

#### Steel

The strategy for our steel business comprises:

- Focus on the domestic market, by increasing market share in the flat steel segment and long steel market;
- 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 and our focus on diversifying our exports through, among others, coated steels;
- Constant pursuit of operational excellence by developing and implementing cost reduction projects, including energy efficiency, and process review programs, including internal logistic optimization, project development and implementation discipline;
- Exploring marketing and commercial synergies through our flat steel distribution network and product portfolio to accelerate our entrance into the domestic long steel market; and
- Increased 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, including CSN Mineração, to generate low operational costs and long-term growth opportunities.

In the coming years, we expect to reach an annual shipment level of over 60 million tons per year of iron ore products, including third party products, by increasing mine capacities, including Casa de Pedra, and developing export services for third party producers. In the short term, considering downward pricing pressure expected by global iron ore market participants and likely volatility in global iron ore prices, our focus is on exporting quality iron ore at low cost in order to guarantee our participation in the seaborne market.

To sustain this growth, we plan to increase TECAR's capacity from 42 million tons per year to 60 million tons per year.

To maximize the profitability of our product portfolio, we are focused on increasing our output of high quality pellet feed with Itabirito's deposits and investing with strategic partners and clients in providing pellet feed to pellet producers.

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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 logistics capabilities, which comprise our integrated infrastructure operations of railways and ports, in order to increase the transportation efficiency of both our incoming raw materials and distributed products.

We will continue to improve our product delivery in the Brazilian market (mainly steel and cement) by implementing low-cost measures, increasing our use of rail transportation and providing more distribution centers to reach end-clients.

In addition to investments in the bulk terminal TECAR, we expanded the TECON container terminal in 2014 in order to operate large vessels simultaneously, which increased TECON's capacity to 440,000 containers.

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In terms of railways, we are developing the Transnordestina Logística project, which focuses on iron ore, agricultural commodities, gypsum and fuel. We also plan to invest in increased efficiency and capacity in the South of Brazil through our participation in MRS.

#### Cement

Our cement business strategy involves the utilization of the limestone reserves in our Bocaina mines and the slag generated by our blast furnaces at Volta Redonda. Our first cement grinding mill was inaugurated in 2009, with a capacity to produce 2.4 million tons per year. In 2011, we began producing clinker in the Arcos plant, which provided lower production costs. In 2015, we inaugurated two grinding mills and, in 2016, we concluded a new kiln line with a capacity of 6,500 tons per day, reaching an aggregate capacity of 4.7 million tons per year. We intend to expand our cement production capacity to 5.7 million tons per year over the next years. For information on planned investments relating to our cement activities, see "Item 4D. Property, Plant and Equipment—Capital Expenditures—Planned Investments."

### **Investments and Divestitures**

In addition to our planned investments and capital expenditures, we continue to evaluate acquisition opportunities, as well as joint ventures 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.

We also have a significant portfolio of non-core assets in each of our operating segments that are available for sale, including assets outside Brazil, and are currently considering several opportunities to divest certain of these non-core assets to improve our liquidity position in the short- to medium-term. These opportunities are in various stages, including, in some cases, exclusive negotiations.

# **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

Our Presidente Vargas Steelworks produces flat steel products, which comprise slabs, hot-rolled, cold-rolled, galvanized and tin mill products. For more information on our flat steel 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.

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#### **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 with 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 with thickness ranging from 0.30 millimeters to 2.99 millimeters.

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#### **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 and home appliances, among others. 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 allows for 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 standard galvanized products. *Galvanew*® 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 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 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 these products.

Through 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.

Cold-Rolled Products 55

#### 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. We apply coatings of tin or chromium by electrolytic process. Coating costs place tin mill products among our highest priced products. The added value from the coating process permits us to price our tin mill products at a higher 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;
- *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;

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Tin Mill Products 56

- 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 largest producers of tin mill products in the world and the sole producer of coated tin mill products in Brazil.

#### Quality Management System

We maintain a Quality Management System certified to comply with the International Standardization Organization ISO 9001 standard and the automotive industry's Technical Specification ISO/TS 16949. The ISO 9001 standard 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, third edition, is for the manufacture of hot-rolled flat, pickled and oiled steel products, cold-rolled and galvanized steel products. In 2018, we plan to upgrade our Quality Management System certifications to comply with the International Standardization Organization ISO 9001:2015 standard and with the International Automotive Task Force IATF 16949:2016 standard.

## **Production Output**

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

Crude Steel Production	Brazil	CSN	CSN % of Brazil		
(In millions of tons)					
2017	34.3	4.2	12.2%		
2016	30.2	3.0	9.9%		
2015	33.3	4.2	12.7%		
2014	33.9	4.5	13.3%		
2013	34.2	4.5	13.2%		

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

The following table presents selected operating statistics for the periods indicated:

#### Certain Operating Statistics

Certain Operating Statistics				
	2017 2016		2015	
	(In millions of tons)	(In millions of tons)	(In millions of tons)	
Production of:				
Molten Steel	4.3	3.1	4.4	
Crude Steel	4.2	3.0	4.2	
<b>Hot-Rolled Coils and Sheets</b>	3.9	3.3	4.3	
Cold-Rolled Coils and Sheets	2.5	2.3	2.5	

Galvanized Products	1.8	1.8	1.4
Tin Mill Products	0.5	0.5	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.

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Production Output 58

#### 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."

To secure pellets supply, in 2015, we signed a one-year agreement without a "take-or-pay" clause but with a quarterly negotiation of pellet prices. In 2016, we amended this agreement to ensure the continuity of our supply. In 2017, we negotiated a new one-year agreement without a "take-or-pay" clause. We are currently negotiating a long term agreement.

#### Coal

In 2017, our metallurgical coal consumption totaled 2.17 million tons. Metallurgical coal includes coking coal and PCI coal, which is a lower grade coal injected into blast furnaces in pulverized form to reduce coke consumption. The PCI system reduces our need for imported coke, thereby reducing our production costs. Total PCI coal consumption in 2017 was 0.562 million tons, all of which was imported. The sources of the hard coking coal consumed in our plants in 2017 were: United States (64.7%), Australia (25.0%), Mozambique (6.1%), Canada (3.2%) and Colombia (1.0%), and our PCI coal was sourced entirely from Russia.

The coking coal benchmark price began 2017 falling from a multi-year high in the fourth quarter of 2016, as constraints on Australia's logistics eased towards the end of 2016, The coking coal benchmark price closed at U\$155/ton as of March 31, 2017 representing 33% reduction from the closing price as of December 31, 2016. Logistics difficulties caused by a cyclone in April forced major Australian producers to halt their operations, which drove prices to increase again, which effect lasted until June 2017 when supply and demand reached a balance and the coking coal benchmark prices was U\$150/ton as of June 30, 2017. Tightened supply of domestic Chinese coal due to environmental and safety policy restrictions as well as reduced supply of Mongolian coal into China lead to a U\$38/ton increase reaching \$188/ton as of September 30, 2017. Additionally, the Chinese government's decision to reduce coke production by 30% and cut steel capacity by 50% from November 2017 until March 2018, as well as problems at an Australian coal terminal port in the end of 2017 kept prices high and the coking coal benchmark price was U\$263/ton as of December 31, 2017.

#### Coke

In 2017, in addition to the approximately 1.073 million tons of coke we produced, we also consumed 0.856 million tons of coke bought from third parties in China and Colombia, which represented a 36.76% increase as compared to our consumption in 2016.

#### 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 3 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.

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Limestone and Dolomite 60

• The Bocaina Mine is also responsible for supplying limestone for cement manufacturing in Volta Redonda and Arcos.

#### 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. We purchase part of our demand from our subsidiary ERSA. We maintain approximately 15, eight and 22 days worth of 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 we generally purchase from domestic suppliers.

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 gas production facilities located on the Presidente Vargas Steelworks site. In 2017, we used 726,192 tons of oxygen to produce 4.2 million tons of crude steel.

#### Water

We require large quantities of water in the production of steel. Water serves as a solvent, a catalyst and a cleaning agent. It is also used to cool, carry waste, to help produce and distribute heat and power and dilute liquids. Our source of water is the Paraíba do Sul River, which runs through the city of Volta Redonda. Over 93.4% 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\$1.576 million.

#### **Electricity**

Steelmaking requires significant amounts of electricity to power rolling mills, production lines, hot metal processing, coking plants and auxiliary units. In 2017, our Presidente Vargas Steelworks consumed approximately 3.2 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 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 facility in Minas Gerais, from which we have average ensured energy of 167 MW and 23 MW, respectively. In 2014, we installed a new turbine generator at the Presidente Vargas Steelworks, which added 21 MW to our existing installed capacity. This turbine uses outlet gases from our iron production 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 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.

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 in Brazil which use natural gas. Due to low levels of rainfall in 2013 and 2014, which resulted in reservoirs reaching their lowest levels in a decade the Brazilian Electricity System Operator (*Operador Nacional do Sistema Elétrico*), or the ONS, increased the utilization of thermoelectric generation. In 2017, the Presidente Vargas Steelworks consumed 449 million m<sup>3</sup> of natural gas.

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Natural Gas 62

#### Diesel Oil

In mid-October 2006 and July 2008, we entered into agreements with Companhia Brasileira de Petróleo 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 to our steel plant in Volta Redonda. In 2017, our diesel oil consumption totaled 77,974 kiloliters, used to produce 29,921 million tons of iron ore, for which we paid R\$124.9 million.

#### **Suppliers**

We acquire our inputs in Brazil and abroad. Aluminum, zinc, tin, spare parts, refractory bricks, lubricants, oxygen, nitrogen, hydrogen and argon are the main inputs we acquire in Brazil. Coal and coke are the only inputs we acquire abroad.

Our main raw materials suppliers are set forth below:

Main Suppliers	<u>Raw Material</u>
Vanomet and CSA	Slabs
Rio Tinto Coal, BHP, Drummond, Contura, Carbo One	Coal
Limited, Vale and Warrior	
CI Milpa, Sinochen, Noble, Trafigura and Coeclerici	Coke
Ibrame, Latasa, and Nova Metais and Metalur	Aluminum
Votorantim Metais <sup>(1)</sup>	Zinc
White Solder, ERSA and Melt Metais	Tin
Sotreq, Metso, Conveybelts, Komatsu, Simplex, Mason,	Spare parts
Minas Maquinas and Michelan	
Magnesita, RHI, Vesuvius and Saint Gobain	Refractory bricks
Ipiranga and Cosan	Lubricants

<sup>(1)</sup> Votorantim Metais 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 four square km and containing five coke batteries, three of which are in operation, three sinter plants, two blast furnaces, a basic oxygen furnace steel 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.

The annual production capacity of steel at the Presidente Vargas Steelworks is 5.6 million tons.

#### 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® 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.

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Downstream Facilities 64

#### Prada

We have a 99.99% ownership interest in Cia. Metalúrgica Prada. Established in 1936, Cia. Metalúrgica 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, which is Cia. Metalúrgica Prada's main raw material, making it one of our most important customers. Cia. Metalúrgica 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.

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 of 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 is 280,000 and 315,000 tons per year, respectively. Currently, CSN LLC obtains its raw material, hot rolled coils directly from mills in the United States or mills abroad. See "Item 4B. Government Regulation and Other Legal Matters—Proceedings Related to Protectionist Measures—United States" for a discussion on anti-dumping matters regarding 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 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 Northern regions of Brazil. We also have a distribution center in the city of Canoas, in the state of Rio Grande do Sul, to support sales in the Southern region of Brazil.

# Long Steel Mills

#### SWT

In February 2012, we acquired SWT in 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, SWT produces more

CSN Porto Real 65

than 200 types of sections according to different German and international standards.

# SWT's Production Output

	2017	2016	2015	_	2014	2013
Production of:				(in inous	sands of tons	)
Beam Blank (Crude Steel)	862		823	794	844	813
<b>Long Steel (Finished Products)</b>	801		782	743	758	765
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33						

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#### Raw Materials and Suppliers

#### Raw Materials and Energy Requirements

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

In 2017, the price of scrap increased by 33% as compared to 2016 prices. We consumed approximately 0.97 million tons of scrap in 2017, as compared to approximately 0.93 million tons in 2016, and scrap accounted for approximately 65% and 56% of our production costs in 2017 and 2016, respectively. We are able to obtain approximately 70% of our scrap needs from within a 250 km vicinity of our production facilities.

#### Ferroalloys, Lime and Foaming Coal

Because we do not own any sources of ferroalloys, lime or foaming coal, we must buy these raw materials from third party traders, most of which are located in Europe and source these raw materials from 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, which is an electric arc furnace, we use graphite electrodes with a diameter of 750mm. In the ladle furnace, we use electrodes with a diameter of 400mm. We source these electrodes 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.

# 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:

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Suppliers 68

#### Main Suppliers Raw Material

Scholz, TSR Scrap

RWE Supply & Trading GmbH

Shell Erdgas Marketing GmbH & Co KG

Natural gas

Refractories Site Service GmbH

Refractory

Graftec, W.A.S., SHOWA DENKO

Siemens, Schneider, Voith

Spare parts

Irle, Walzengießerei Coswig

Rolls

Facilities - SWT

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

#### **Effective Capacity - SWT**

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

# Volta Redonda EAF Mill

#### Plant Characteristics

We completed a new plant mill for the production of long steel products in Volta Redonda and began assisted operations in December 2013. The Volta Redonda plant comprises a 50 ton electric arc steelmaking furnace, 50 ton ladle metallurgy, continuous casting machine for billets and a hot rolling mill for wire rod and reinforcing bar. We expect this plant to reach and output of up to 500,000 tons per year once fully operational, providing the Brazilian market with products for civil construction and high quality drawing and cold heading applications.

# Steelmaking Shop

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

# **Rolling Mill**

Designed for an output of 500,000 tons per year, this unit has one walking-beam reheating furnace, or RHF, a four-stand blooming mill, a 250 ton hot shear, a six-stand roughing mill, a six-stand intermediate mill, a six-stand

Facilities - SWT 69

pre-finishing mill, internal water cooling, a double length flying shear, a stepping cooling bed, a 500 ton 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.

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Rolling Mill 70

# **Production Output**

#### **Certain Operating Statistics**

(in thousands of tons)	2017	2016	2015
<b>Production of:</b>			
Billets (Crude Steel)	211	197	151
<b>Long Steel (Finished Products)</b>	202	186	131

#### Raw Materials and Energy Suppliers

The main raw material we use in our long steel production 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. Business Overview—Raw Materials and Suppliers."

# **Our Mining Segment**

Our mining activities are among the largest in Brazil and are mainly driven by the exploration of one of our 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 from our principal hubs in Minas Gerais, Brazil and Austria.

#### **Our Mines**

#### Casa de Pedra Mine

Casa de Pedra is an open pit mine located in the city of Congonhas, in the state of Minas Gerais, approximately 80 km south of the city of Belo Horizonte and 360 km north of the city of 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. We incorporated the mine in 1941, but it has been operating since 1913.

Our iron ore at Casa de Pedra is currently excavated by a fleet of hydraulic shovels and wheel loaders and then hauled by a fleet of trucks with an installed annual ROM capacity of approximately 103 million tons. The iron ore is then processed in our treatment facilities, which have an installed capacity of 33 million tons of products per year (a sum of the central plant, mobile plants and Pires treatment facilities). At Casa de Pedra mine and the Pires complex, we use electrical power provided by hydroelectric plants.

Casa de Pedra mine supplies all of our iron ore needs, except pellets, and produces lump ore, sinter feed and pellet feed fines with high iron content. The following map illustrates the location of our Casa de Pedra mine:

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Production Output 71

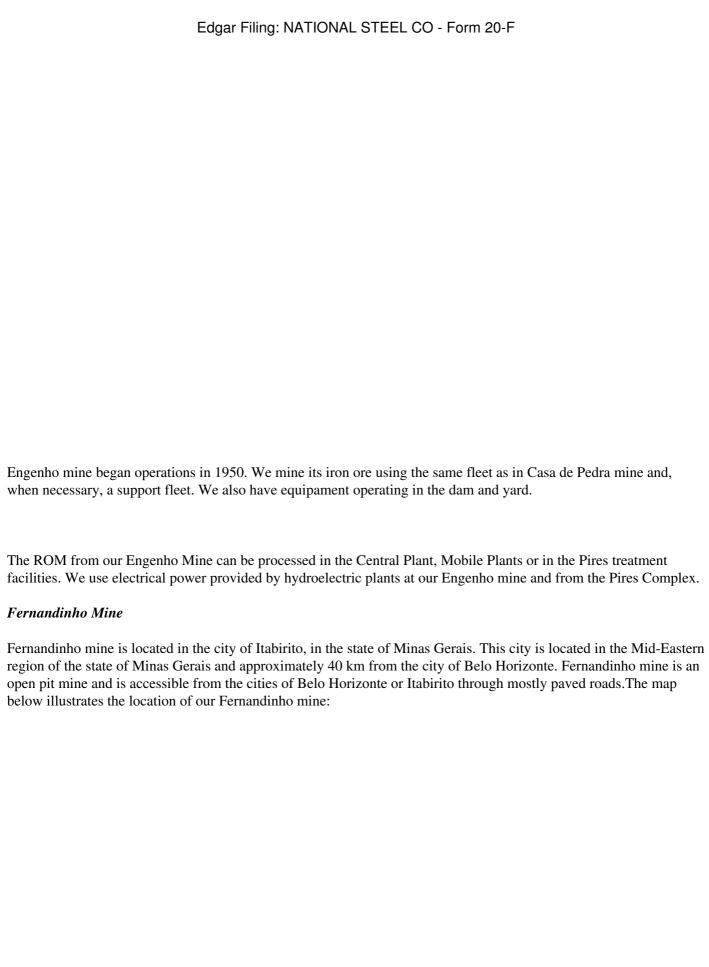


#### Engenho Mine

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:

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Casa de Pedra Mine 72



Engenho Mine 73

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Fernandinho Mine 74

Fernandinho mine began operations in 1950. As of the date of this annual report, Fernandinho mine is inactive.

The following map shows the location of Casa de Pedra, Engenho and Fernandinho mines:

# 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. Bocaina is an open pit mine and it can be accessed from the cities of Belo Horizonte, located approximately 230 km away, and Volta Redonda (where the Presidente Vargas Steelworks is situated), located approximately 462 km away, through mostly paved roads.

In 2016, a new crushing plant started, increasing the installed capacity to approximately 15 million tons per year.

This mine has sufficient limestone reserves to adequately supply our steel and cement productions at current levels by an average of 38 years.

# Tin Facility

We own a tin facility in Itapuã do Oeste, in the state of Rondônia, through our subsidiary 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.

We hold concessions to mine iron ore, limestone and dolomite. We purchase manganese in the local market. We own 87.52% of CSN Mineração 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 CSN Mineração's property) and Fernandinho mine, a Minérios Nacional's property.

#### Casa de Pedra

Our mining rights for Casa de Pedra include the mine, a beneficiation plant, roads, a loading yard and a railway branch and are duly registered with the National Mining Agency (*Agência Nacional de Mineração*), or ANM. ANM 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 information on the type of mine, period of operation, projected exhaustion dates and percentage of our interest for each of our mines:

Mine	Type	Operating since	Projected exhaustion date	CSN % interest
Iron:				
Casa de Pedra	Open pit	1913	2040	87.52
(Congonhas,				
Minas Gerais)				
Engenho (Congonhas,	Open pit	2007 (Start of operation	2040	87.52
Minas Gerais)		by Namisa)		
Fernandinho (Itabirito,	Open pit	2007 (Start of operation	2039	100
Minas Gerais)		by Namisa)		
Limestone and				
<b>Dolomite:</b>				
Bocaina (Arcos, Minas	Open pit	1946	2060	100
Gerais)				
<u>Tin:</u>				
Santa Barbara (Itapuã	Open pit	1950	2054	100
do Oeste, Rondonia)				

We calculate our estimates of proven and probable reserves and other mineral deposits at our mines in accordance with the technical definitions contained in the SEC's Industry Guide 7, and estimates of mine life described herein are

Casa de Pedra 77

derived from these reserve estimates. The mineralized material disclosed refers to the entire mines, and not just to 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 and only resources for Fernandinho mine. We do not have audited resources or reserves studies for our Bocaina mine, thus the resources and reserves presented in 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 this property in light of its low materiality to our business.

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Mineral Reserves 78

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:

	Pro	ven and F	Probable F	Reserves <sup>1</sup>			
	Audited R	Reserves	Ore Ton	nage <sup>2</sup>			Recoverable Product <sup>4</sup>
Mine Name and Location	(in millions	of tons)(	in millions	of tons)	Grade <sup>3</sup>	Rock Type	(in millions of tons)
	Proven <sup>5</sup> Pr	obable <sup>6</sup> I	Proven <sup>5</sup> Pı	obable <sup>6</sup>			
Iron:							
Casa de Pedra (Congonhas, Minas Gerais)	1 ,043	1,662	928	1 ,662	41.36%	Hematite (7%) Itabirite (93%)	1 ,429
Engenho (Congonhas, Minas Gerais)	108	209	103	209	39.48%	Hematite (3%) Itabirite (97%)	161
Fernandinho (Itabirito, Minas Gerais)					40.21%	Itabirite (100%)	
Limestone and Dolomite:							
D : (A ) (C : )	200	0.2	200	0.2	50.25% CaO	Limestone (94.46%)	200
Bocaina (Arcos, Minas Gerais)	280	0.2	280	0.2	16.0% MgO	Dolomite (5.54%)	280

- (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) Represents ROM material.
- (3) Grade is the proportion of metal or mineral present in ore or any other host material.
- (4) Represents total product tonnage after mining and processing losses.
- (5) 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.
- (6) 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 percentage of iron in the ore delivered to the processing plant that is recovered by the metallurgical process. In 2017, the metallurgical recovery factor obtained by Casa de Pedra's concentration plant was 77.9%. Since 2017, the Pires plant has operated through a dry process and its metallurgical

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recovery factor is 100%.

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%.

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.

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	Price for the	three years pri-	Long term average	
		(US\$/t)	(US\$/t)	
	2011	2012	2013	Assumption
Platts 62Fe CFR N.China (\$/dmt)	169	130	135	90

#### Casa de Pedra Mine

In 2012, we started a multi-year study of our iron ore resources and reserves at Casa de Pedra 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% SiO2. 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 several drilling campaigns. The last drilling campaign was in 2014, and we had drilled more than 92,000 meters by November 2014.

#### Engenho and Fernandinho Mines

In 2012, we started the same process used at Casa de Pedra to identify iron ore resources and reserves at the Engenho 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 317 million tons of iron ore for Engenho (as of December 31, 2014) at a grade of 39.48% Fe and 40.01% SiO2.

After our last drilling campaign, we had drilled more than 9,000 meters by November 2014 in our Engenho mine.

#### **Production**

#### Casa de Pedra Mine

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 103 million tons and 40 million tons, respectively.

Casa de Pedra Mine 81

#### Pires and Fernandinho Beneficiation Plants

Pires plant is the beneficiation plant of Congonhas Minérios. The plant receives material from Engenho and Casa de Pedra Mines and generates final products such as: lump ore, 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. As of the date of this annual report, Fernandinho plant and Fernandino mine are idle.

The following table sets forth the production volume of iron ore in each of our mines in the last three years:

Casa de Pedra <sup>(2)</sup> (Mt)	26.24	29.46	26.05
Grade (%)	63.8%	63.1%	62.1%
Pires <sup>(2)</sup> (Mt)	1.6	2.71	3.87
Grade (%)	63.9%	61.0%	60.4%
Fernandinho <sup>(2)</sup> (Mt)	0.0	0.0	0.03
Grade (%)	-	-	61.6%

<sup>(1)</sup> In addition to its own production, Namisa also purchased iron ore from third parties. Third party purchase volumes totaled 3.1 million tons, 3.4 million tons and 3.6 million tons in 2015, 2016 and 2017, respectively.

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

Consolidated Sales (Mt) 25.67 36.98 27.36

(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).

Until recently, Brazil's railway system (including railcars and tracks) was principally government-owned and in need

<sup>(1)</sup> Consolidated sales consider 100% of Namisa's Sales Volume until November 2015.

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. We have operated the coal and container terminals since August 1997 and 1998, respectively.

#### **Our Logistics Segment**

Our logistics segment is comprises 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, 2017, 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 28% of the Brazilian Southeastern railway system's total volume. We are jointly and severally liable, along with the other main MRS 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.

In 1997, we were awarded a concession granting the exclusive right to operate cargo railway transportation at the RFFSA, which we currently call Northeastern Railway System I, effective January 1, 1998, and the preference to operate cargo railway transportation in any new tracks of the Northeastern Railway System that the Brazilian government elected to build.

In 2005, we executed a letter of intent with the Brazilian government (the grantor of this concession) to enable the development of new tracks and certain other improvements of the Northeastern Railway System, in a project called "Nova Transnordestina." The Nova Transnordestina project discussions resulted in the execution, in 2013 and 2014, of a TAC, which settled all claims of non-compliance by us with the original concession agreement until 2012, and multiple agreements, including an investment agreement (discussed below) and a new concession, pursuant to which we were granted the right to develop and operate new tracks and the Northeastern Railway System management was divided in two sub-railway systems:

(i) Northeastern Railway System I, which is in operation by our subsidiary FTL, encompasses the RFFSA network, covering the stretches between the cities of São Luís – Mucuripe, Arrojado – Recife, Itabaiana – Cabedelo, Paula Cavalcante – Macau and Propiá – Jorge Lins, with 4,238 km of railways, of wich 1,191 km are operational and the rest are in negociation process with the National Agency for Ground Transportation (*Agência Nacional de Transportes Terrestres*), or ANTT. As of December 31, 2017, we held 90.78% of the capital stock of FTL and its concession extends until 2027, renewable for an additional 30 years. As of December 31, 2017, R\$90.7 million in concession payments were outstanding over the remaining 10 years of the concession.

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(ii) Northeastern Railway System II, which is under construction by our jointly controlled investee TLSA, will encompass the new network, covering the stretches between the cities of Missão Velha – Salgueiro, Salgueiro – Trindade, Trindade – Eliseu Martins, Salgueiro – Porto de Suape and Missão Velha – Porto de Pecém, with an expected extension of 1,753 km that will connect the interior of Northeast Brazil to Pecém and Suape Ports. As of December 31, 2017, we held 46.30% of the capital stock of TLSA and its concession extends until the earlier of 2057 or the date when TLSA reaches a rate of annual return of 6.75% of its invested capital.

In September 2013, we entered into an investment agreement, or the TLSA Investment Agreement, with our partners in TLSA, Valec Engenharia, Construções e Ferrovias S.A., or Valec, and Fundo de Desenvolvimento do Nordeste, or FDNE, two Brazilian government entities focused on infrastructure and the development of the northeastern region. Under the TLSA Investment Agreement we and our partners agreed on a budget of R\$7.5 billion to complete the construction of the Northeastern Railway System II. A revised budget of approximately R\$11.2 billion has been already approved by FINOR, or Fundo de Investimentos do Nordeste, and it is currently being revised and under approval by FDNE. If the construction of Northeastern Railway System II requires funds in addition to the budget, they will be provided by us or third parties under trackage right agreements.

The TLSA Investment Agreement also provides for indicative terms and conditions, including amounts, under which Banco Nacional de Desenvolvimento Econômico e Social – BNDES, agreed to provide long-term financing for the completion of Northeastern 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 lenders. If any of the conditions are not met, including final credit approval by the lenders in terms and costs reasonable to us, we may not be able to obtain the financing. The other long-term financing from FDNE and FNE, or Fundo Constitucional de Desenvolvimento do Nordeste, has been already taken by TLSA.

The TCU – Tribunal de Contas da União - has initiated a proceeding questioning the legality of certain aspects of the concession contract for the Northeastern Railway System II, which has contributed to a slow pace of construction of the new tracks, and the ANTT has initiated a proceeding claiming TLSA did not comply with the terms of the concession contract for the Northeastern Railway System I. In April 2017, the Brazilian government created an inter-ministerial working group comprised of various government representatives in order to identify and implement alternatives to continue the Northeastern Railway System projects, which may include the settlement of the TCU and ANTT proceedings. See "Item 8A. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings—Northeastern Railway System Proceedings."

#### 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 m², 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 unload at least 3.0 million tons of coal and coke annually and, as of 2020, to ship 38.4 million tons of iron ore annually.

#### Container Terminal

We own 99.99% of TECON, which holds a concession to operate, for a 25-year term (which can be renewed for up to 70 years), the container terminal at the Itaguaí Port, located in the state of Rio de Janeiro. As of December 31, 2017, R\$263 million of the cost of the concession was outstanding and payable over the remaining 9 years of the concession.

The Itaguaí Port is located in Brazil's Southeast region, with all major exporting and importing areas in the states of São Paulo, Minas Gerais and Rio de Janeiro within 500 km. In 2014, this area represented more than 55% of the Brazilian GDP, according to the Brazilian Geography and Statistics Institute (*Instituto Brasileiro de Geografia e Estatística*), or IBGE.

In the past few years, significant investments in port infrastructure projects were made, including expansion of the maritime access channel to the Port of Itaguaí, duplication of the Rio-Santos road, and the Rio de Janeiro metropolitan

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bypass, which is a beltway that crosses the Rio de Janeiro metropolitan area. Favorable natural conditions, like deep waters and a low urbanization rate around the Port of Itaguaí allow large vessels to operate and also allow for highly competitive prices for services rendered.

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Container Terminal 88

After TECON's investments in infrastructure and equipment, which increased our capacity to 440,000 containers (660,000 TEUs) per year, new improvements were achieved in 2016 and 2017, which increased the terminal's service level and productivity.

TECON handled 188,000 containers, 989,000 tons of steel products and 9,000 tons of general cargo in 2017. Its volume increased 34% in 2017 due to new services on the routes from Asia and the Mediterranean.

# **Our Cement Segment**

Our cement segment is comprised of 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 grinding facilities were delivered in Arcos, increasing its annual capacity by 2.3 million tons of cement. In 2016, a new clinker kiln line was delivered allowing CSN to achieve self-sufficiency in the production of this raw material.

#### **Production**

Our cement production takes place at Volta Redonda and Arcos and begins with the influx of raw materials comprising clinker, limestone, gypsum and slag. The clinker is produced in our plant in Arcos, where limestone, clay and other correctives such as iron ore and bauxite are ground in a raw mill and calcined inside the kiln. The clinker and limestone are stored in silos and warehouses and come in part from Arcos to Volta Redonda 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, 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. In Volta Redonda, there are two grinding lines and each mill has a nominal capacity of 170 tons/h and in Arcos the other two grinding lines have a nominal capacity of 160 tons/h each, resulting in an annual plant capacity of 2.4 million tons of cement in Volta Redonda and 2.3 million tons in Arcos. The mill has a hydraulic roller system, which uses pressure to grind the layer of material on the turntable. In Volta Redonda, a 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, CP II-E-40 and CP II-F in bagged and bulk forms. Our Volta Redonda plant has four silos, two of them with 10,000 tons of capacity and two with 5,000 tons of capacity. Our Arcos plant has a silo with 7 chambers and 28,000 tons of total capacity. Cement can be shipped in bagged and bulk forms.

# **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. 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 electricity.

## Itá Hydroelectric Facility

CSN and ENGIE 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. ENGIE directly owns the remaining 39.5% of the Itá hydroelectric facility.

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

Itá has an installed capacity of 1,450 MW, and became fully operational in March 2001.

## 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, which has an installed capacity of 210 MW. Other consortium members are Aliança, Votorantim Metais Zinco and AngloGold Ashanti Mineração Ltda.

# Marketing, Organization and Strategy

#### Flat Steel

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

Our sales approach involves establishing brand loyalty and achieving a reputation for quality products by developing relationships with our clients, focusing on their specific needs and providing tailor-made solutions.

Our commercial area is responsible for sales of all our products. This area is divided into two major teams, one focused on sales in international markets and the other on sales in the domestic market. The domestic market sales team covers seven market divisions: packaging, distribution network, automotive industry (automakers and auto parts), home appliances, general industry, construction and pipes. We also have a team responsible for selling all process residues, which include 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. In addition to independent distributors, we count with our own distributor, Prada Distribuição. The pipes division supplies oil and gas pipe manufacturers as well as industries that produce small diameter pipe and light profiles. The packaging division acts in an integrated way with suppliers, representatives of the canning industry and distributors to respond to customer needs for finished products. We supply the automotive division from a specialized mill, CSN Porto Real, and also by a portion of the galvanized material produced at Presidente Vargas Steelworks, thereby benefitting from a combined sales strategy.

Historically, our sales in international markets were 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 these brokers and have instead focused on direct sales to more profitable international markets.

All of our sales are on an 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 international markets based on historical data and general economic outlooks. We have our own data systems to remain informed of worldwide and Brazilian market developments. Our management believes that a key to our success is maintaining our presence in international markets, which provide us flexibility to shift between domestic and international markets depending on

how favorable conditions are.

Unlike other commodity products, steel is not traded on an exchange, nor is there uniform pricing, due to wide differences in size, quality and specifications. In general, we price exports 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 2017, we sold steel products to customers in Brazil and 29 other countries. The fluctuations in the portion of total sales assigned to domestic and international markets, which are presented in the table below, reflect our ability to adjust our sales domestic and international sales mix in light of economic conditions, steel demand and prices.

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The two main export markets for our products are Europe and North America, representing approximately 41% and 38%, respectively, of our export sales volume in 2017.

In North America, we operate through our subsidiary CSN LLC, which acts as a commercial channel for our products. We have historically shipped hot-rolled steel sheets and coils to CSN LLC, which then processes and transforms it into higher value-added products at its own plant, including cold-rolled coils and galvanized products. We also export cold-rolled coils directly to CSN LLC, to be sold by them or processed to manufacture galvanized products.

#### **CSN – Sales of All Steel Products by Destination**

(in thousands of tons and millions of R\$)

			2017				2016				2015	
	Tons	% of Total	Net Operating Revenues <sup>(2)</sup>	% of Total	Tons	% of Total	Net Operating Revenues <sup>(2)</sup>	% of Total	Tons	% of Total	Net Operating Revenues <sup>(2)</sup>	% of Total
Brazil	2,841	58%	7,819	60%	2,784	57.31%	6,815	60.82%	2,968	59.50%	6,612	60.40%
Export	2,081	42%	5,140	40%	2,073	42.69%	4,391	39.18%	2,023	40.50%	4,332	39.60%
Total	4,922	100%	12,959	100%	4,857	100%	11,205	100%	4,990	100%	10,944	100%
<b>Exports by</b>												
Region												
Asia	13	1%	23	1%	18	1%	31	1%	9	0%	17	0%
North America <sup>(1)</sup>	651	31%	2,009	39%	759	36.62%	1,802	41.05%	802	39.70%	1,834	42.30%
Latin America	180	9%	507	10%	95	4.58%	260	5.91%	115	5.70%	376	8.70%
Europe	1,223	59%	2,565	49%	1,189	57.34%	2,269	51.69%	1,090	53.90%	2,087	48.20%
All Others	14	1%	36	1%	12	1%	29	1%	7	0%	18	0%
(1) Sales to	Mexico	o are in	cluded in Nor	th Ame	erica.							

<sup>(2)</sup> 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 sales breakdown by product in Brazil in each of the last three years:

CSN Domestic Sales Breakdown	2017	2016	2015
Hot-Rolled Products	34%	33%	36%
Cold-Rolled Products	18%	18%	19%
Galvanized Products	29%	30%	28%
Tin Mill Products	10%	13%	12%
Long Steel	8%	6%	5%

# Sales by Industry

We sell our steel products to customers in several industries. The following table sets forth our breakdown by market segment of domestic volume shipped in each of the last three years:

	2017	2016	2015
	(In percentages o	f total domestic vol	ume shipped)
Distribution Network	41%	46%	45%
Packaging	11%	14%	13%
Automotive	22%	15%	11%
Home Appliances	9%	9%	9%
OEM	4%	4%	4%
Construction	13%	12%	18%

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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 2016 Compared to Year 2015—Net Operating Revenues."

#### **Seasonality**

Steel demand is strongest in the second quarter of each year and weakest in the last quarter. Our production, however, 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 in 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 two to six 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.

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 Euler Hermes risk insurance, a bank guarantee or a letter of credit. Sales are made primarily on cost and freight terms.

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# 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, Portugal and Hong Kong. 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 destinations are Brazil, Europe and Asia. 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.

			2017				2016				2015	
	Tons	% of total	Net Operating Revenues	% of total	Tons	% of total	Net Operating Revenues	% of total	Tons	% of total	Net Operating Revenues	% of total
Brazil	5,211	16%	829,268	12%	4,12	11%	542,027	12%	539	2%	175,223	6%
Export	27,37	84%	3,791,730	88%	32,863	89%	4,039,875	88%	23,322	98%	3,012,027	95%
Total	36,983	100%	4,620,971	100%	36,983	100%	4,581,902	100%	23,861	100%	3,187,250	100%
Exports to Asia	25,993	95%	3,602,143	96%	29,349	89%	3,519,713	87%	21,963	95%	2,836,505	95%
North America	-	-	-	-	-	-		-	-	-	-	-
Europe	1,372	5%	189,586	4%	3,514	11%	434,378	11%	1,028	4%	132,792	4%
Latin America	-	-	-	-	-	-	. <u>-</u>	_	331	1%	42,73	1%
Others	-	-	-	-	-	-	85,784	2%				

<sup>(\*)</sup> 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 CSN Mineração as of December 2015).

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

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to also handle and export iron ore and to load from our own facilities the first shipment of our iron ore products.

In 2017, our iron ore sales reached 32.3 million tons, 27.4 million tons to third parties and 5.2 million tons to CSN steel mills, an increase of 26% compared to 2016. Total mining net revenue increased 1% in 2017, due to the lower volume sold and offset by better prices. The share of mining segment revenue in CSN's total net revenue decreased from 27% in 2016 to 25% in 2017.

In 2017, 95% of our iron ore export sales went to the Asian market, mainly China and Singapore and 5% were sold in the European market. Of our total sales volume to third parties, 78% were sinter feed, 8% pellet feed, 14% lump ore and 0.2% 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.

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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 have a diverse client base of approximately 20,000 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.

In 2017, amid weak growth in the Brazilian economy, we significantly increased our sales, reaching 3.3 million tons, marking a growth of 18% as compared to 2016. All our cement production is sold in the domestic market.

### **CSN – Cement Sales Figures**

	(in thousands of metric tons and millions of $R$ \$)						
	2017			2016	2015		
	Tons	Net Operating Revenues	Tons	Net Operating Revenues	Tons	Net Operating Revenues	
Brazil	3,311	487	2,814	491	2,182	432	

# **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, CAR (construction and 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, CSN Mineração and TECON. This policy was negotiated with domestic and foreign insurers and reinsurers and is valid until March 31, 2019, with a limited indemnity of US\$600 million (for an insured value of US\$9.1 billion) with a deductible of US\$385 million for material damages and 45 days to loss of profits. Under the terms of the policy, we remain responsible for the first tranche of US\$385 million in losses (material damages and loss of profits).

# **Intellectual Property**

We maintain a special unit for managing our intellectual property rights, which include trademarks, patents and industrial designs, ensuring adequate protection for us and the possibility of commercialization through technology transfer agreements. 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.

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# **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 in the periods indicated:

	2016	2015	2014		
	Production	Production	Production		
	(In million tons)	(In million tons)	(In million tons)		
Gerdau <sup>(2)</sup>	6.8	7.0	7.4		
Usiminas	3.1	5.0	6.0		
ArcelorMittal Tubarão	7.0	6.8	5.3		
CSN	3.1	4.2	4.4		
ArcelorMittal Aços	3.1	3.1	3.2		
Longos	5.1	3.1	5.2		
CSA	4.2	4.2	4.1		
Others	3.9	1.9	3,4		
Total	31.2	32.2	33.8		
Source: IARr					

<sup>\*2017</sup> data was not available as of the date of this annual report.

# Competitive Position — Global

During 2017, Brazil maintained its place as the largest producer of crude steel in South America, with a production output of 34,3 million tons and a 2% share of total world production, according to data from the World Steel Association, or WSA. In 2017, Brazil maintained the ninth position in the global steel production ranking, accounting 80% of total production in South America, approximately two thirds more than Mexico's or 42% of the U.S.' steel production. According to IABr, Brazilian exports in 2017 the amount of 15.3 million tons of finished and semi-finished steel products, an increase of 14,3% as compared to 2016.

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.

# 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 increased 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 and 2016, sales in the external market became more attractive, due to the depreciation of the *real* against the U.S. dollar, lower domestic demand and an increase of more than 50% in international prices. During 2016, imports of flat steel in Brazil decreased by 51% compared with the same period in 2015. In 2017, in turn, Brazilian GDP increased by 1.0% leading to a recovery of volumes in the domestic market and, in parallel, price readjustments accompanying the strength of the international market.

# **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, CONAMA 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 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, 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.

With the publication of the new Decree in Minas Gerais and a joint determination between the environmental agencies to reduce bureaucracy and standardize the documents necessary for the processes of environmental regularization in the state, it is expected that the analysis periods for the release of Environmental Licenses in the state of Minas Gerais will be reduced.

# 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 monitoring and control of environmental risks. All environmental controls are audited to comply with Sarbanes-Oxley (SOX) guidelines, helping to mitigate the environmental risks of our operations.

We have an Environmental Management System, or EMS, certified by ISO 14001 in Casa de Pedra Mine (Congonhas, MG), Presidente Vargas Steelworks (Volta Redonda, RJ), Porto Real (Porto Real, RJ), Bocaina Mine (Arcos, MG), CSN Paraná (Araucária, PR), TECON (Sepetiba, RJ) and Prada Distribution (Mogi das Cruzes, SP). The other sites are in process of implementing the EMS and have been following a corporate program for their progressive advancement following the guidelines of ISO 14001.

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. We also received the Gold Standard of the GHG Protocol for three years, which confirms that we are in compliance with the standards imposed by the GHG Protocol and ensures that our GHG inventory was duly verified by a third party. 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 and Casa de Pedra 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, 94% in the Presidente Vargas steel mill.

Since our privatization, we have invested heavily in environmental protection and remediation programs. We had environmental expenditures (capitalized and expensed) of R\$326 million in 2017, of which R\$38 million relate to capital expenditures (CAPEX) and R\$287 million relate to operational expenditures (OPEX). Our total environmental expenditures were R\$369 million in 2016 and R\$405 million in 2015. Our investments in environmental projects during 2016 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.

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, in accordance with technical standards and relevant legislation.

#### Other Environmental Proceedings and Liabilities

Our main environmental issues as of December 31, 2016, were associated with recovery services at former coal mines decommissioned in 1989 in the state of Santa Catarina, due to previous operations in our Presidente Vargas

#### Steelworks.

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, 2017, we had provisions for environmental liabilities in the total amount of R\$255.5 million, which we believe are sufficient to cover all probable losses. Such amount compares to R\$273.5 million, as of December 31, 2016, R\$262.3 million as of December 31, 2015. The increase in our provisions for environmental liabilities in 2016 as compared to 2015 is mainly due to the critical review of the remediation strategy and environmental management for external landfill areas, especially the areas of (i) the Southern Region of Santa Catarina State (environmental recovery of a former coal mine) under agreements with the Public Prosecutor Office seeking the recovery of environmental liabilities caused by coal mining in the Southern Region of Santa Catarina until the 1990s, and (ii) Estação Ecológica de Corumbá (management of a nature conservation area in the state of Minas Gerais), under our 2011 TAC, which we have observed and which are accompanied by the Public Prosecutor Office and by the competent environmental agency with the expectation of the discharge of the obligations in 2017.

For more information regarding environmental legal proceedings, please see "Item 8A. Consolidated Statements and Other Financial Information—Legal Proceedings—Other Legal Proceedings."

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

#### **Amounts**

(in millions of R\$) 262.3 **December 31, 2015** Term of Undertaking (TAC)(1) 6.3 **Decommissioned Coal Mines (Santa Catarina)** 0.4 Landfills and other(2) 4.4 **December 31, 2016** 273.4 Term of Undertaking (TAC)(1) (3.0)**Decommissioned Coal Mines (Santa Catarina)** (10,4)Landfills and other(2) (4,6)**December 31, 2017** 255,5

(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 ANM, the regulatory agency under the Ministry of Mines and Energy of the Brazilian

government. ANM grants prospecting authorizations to a requesting party for an initial period of one to three years. These authorizations are renewable at ANM's discretion, provided that the requesting party is able to show that the renewal is necessary for proper conclusion of prospecting activities. Upon completion of prospecting activities and geological exploration at the site, the holder of the prospecting authorization must submit a final report to ANM. If the geological exploration reveals the existence of a mineral deposit that is technically and economically exploitable, the grantee has one year (which ANM may extend) from approval of the report by ANM 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. ANM grants mining concessions for an indeterminate period of time lasting until the exhaustion of the mineral deposit. After extraction, the mineral products that are specified in the concession belong to the holder of the concession. With the prior approval of ANM, 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.

#### 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 iron ore 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 Bocaina 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 the Brazilian Department of Mineral Production (*Departamento Nacional de Produção Mineral*), now the ANM, the Manifesto de Mina for Casa de Pedra was transferred by CSN to CSN Mineração, which was also granted the Engenho mining concession from Namisa 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 Namisa to Minérios Nacional S.A. 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 ANM. We have also been granted by ANM easements in 19 mine areas located in the surrounding region, which are not currently part of Casa de Pedra mine. These areas are needed to expand our operations and as operating support areas.

In addition, we have obtained and are in compliance with all environmental 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, which calculation considers the gross revenue, excluding taxes over the selling. ANM is responsible for enacting regulations on CFEM and auditing the mining companies to ensure the proper payment of CFEM. In December 2017, Law No. 13,540 was enacted, changing the framework for CFEM calculation and collection.

The current CFEM rates vary between 1% and 3.5%, as follows:

- 1%: rocks, sand, gravel, clay and other minerals used in civil construction; ornamental rocks and mineral and thermal water;
- 1.5%: gold;
- 2%: diamond and other minerals;
- 3%: bauxite, manganese, niobium and rock salt;
- 3.5%: iron ore.

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.

The Brazilian Congress is reviewing a bill that proposes significant changes in the Mineral Code, including more stringent rules for dams and 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.

Since January 1998, we have held the exclusive rights to operate the Cargo Railway Transport at the Northeast Railway System. In 2005, we executed a letter of intention to carry out a Northeastern Railway System enlargement and improvement project, or Project Nova Transnordestina, jointly with the federal government as grantor. In 2013 and 2014, we executed the respective agreements to start Project Nova Transnordestina. In order to direct the private-public funding agreed upon with the Government bodies exclusively to Project Nova Transnordestina, we divided the Northeastern Railway System management into two sub-railway systems:

- (i) Northeast Railway System I (operational stretch), which encompasses the stretches between the cities of São Luís Mucuripe, Arrojado Recife, Itabaiana Cabedelo, Paula Cavalcante Macau and Propiá Jorge Lins, and is operated by our subsidiary Ferrovia Transnordestina Logística S.A, or FTL, and;
- (ii) Northeast Railway System II (under construction) which encompasses the stretches between Missão Velha Salgueiro, Salgueiro Trindade, Trindade Eliseu Martins, Salgueiro Porto de Suape and Missão Velha Porto de Pecém, and is operated by our subsidiary Transnordestina Logística S.A, or TLSA.

Antitrust Regulation 111

Our railway business is subject to regulation and supervision by the Brazilian Ministry of Transportation and ANTT, and operates pursuant to Concession Contracts granted by the federal government, which impose certain limitations and obligations.

Our port business is subject to regulation and supervision by the Brazilian Secretariat of Ports (*Secretaria Nacional de Portos*), or SNP, the Ministry of Transportation, Ports and Civil Aviation (*Ministério do Transportes, Portos e Aviação Civil*) and the National Water Transportation Agency (*Agência Nacional de Transportes Aquaviários*), or ANTAQ. As of December 31, 2017, 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 CSN Mineração 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."

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 ONS. As of December 31, 2017, 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 in April 2016, in which the rate imposed on exports to the U.S. was 20.84% as of March 7, 2016. In March 2016, the DOC issued the preliminary determination on the AD investigation of hot-rolled products, in which the rate imposed was 33.91%. The final determination for AD and CVD of cold rolled was issued in July 2016, imposing a rate of 11.31% for CVD and a rate of 19.56% for AD with a cash deposit of 15.49%. The final determination for hot

rolled products was issued in August 2016 and the rates imposed were 11.31% for CVD and 33.14% for AD with a cash deposit of 29.07%.

In addition to the AD and CVD measures, in March 2018, the U.S. government implemented Section 232 for U.S. national security purposes, which imposes an ad valorem tariff of 25% on imported steel. Brazil obtained a temporary suspension of the measure until the end of April 2018, after which the tariff will be enforced unless Brazil enters into a new agreement with the U.S.

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#### European Union

Anti-dumping. In the European Union, we are subject to regulation and supervision by the European Commission.

On July 7, 2016, the European Commission initiated an anti-dumping investigation concerning imports of certain hot-rolled flat steel products originating from Brazil, Iran, Russia, Serbia and Ukraine.

On July 29, 2016, the European Commission decided to limit its investigation to a reasonable number of exporting producers by using a sample in accordance with Article 17(1) of Regulation (EU) 2016/1036 of the European Parliament. The criteria used to select the sample was the volume of the product concerned exported to the European Union during the investigation period. As a result, three companies, Arcelor Mittal, CSN and Usiminas, collectively responsible for 97% of total steel exports from Brazil to the European Union, were chosen to represent Brazil in the investigation.

In January 2017, the European Commission issued a regulation establishing that imports of hot–rolled flat steel products originating from Brazil and Russia be subject to customs registration, meaning that all imports cleared after January 7, 2017 would be exposed to the risk of retroactive collection of duties against Brazil at the end of the investigation.

The preliminary determination was issued in April 2017 by the European Commission, which opted not to impose provisional duties on the imports of hot rolled products from Brazil into the European Union. In October 2017, the European Commission imposed a definitive anti-dumping duty of 53.4 euros/ton on imports from us. The duties imposed for other Brazilian companies were 54.5 euros/ton for Arcelor Mittal, 55.8 euros/ton for Gerdau and 63 euros/ton for Usiminas. The final determination for hot rolled products was issued in October 2017 and imposed a tariff rate of 53.4 euros/net ton.

More recently, in response to the imposition of the U.S. Section 232, the European Union initiated, on April 26, 2018, an investigation into safeguards for 26 categories of steel products.

#### Canada

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

Since 2001, Canada has had an anti-dumping order in place relating to hot-rolled sheets and coils from Brazil. However, we are not currently affected by this anti-dumping order since we do not export hot-rolled sheets or coils 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 2006 through 2015, total global crude steel production averaged approximately 1.5 billion tons per year. According to the WSA, in 2016, production reached 1.6 billion tons, which represents an increase of 0.8% as compared to 2015.

China's crude steel production in 2016 reached 808 million tons, an increase of 1.2% as compared to 2015. Production volume in China has almost doubled in the last ten years, from 421 million tons in 2006. China's share of world steel production increased from 49.4% in 2015 to 49.6% in 2016. In 2016, Asian countries increased their production by 1.6%, reaching 1.125 billion tons, according to WSA.

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All major producing countries, except for India, decreased their production levels in 2016. According to the World Steel Association, in 2016 the global crude steel production increased, slightly and, considering that 2014 was a record production year, the production levels remained in line with 2015 figures.

In 2017, all the major steel producing countries increased their production levels. Consequently, global steel production reached 1.67 billion tons in 2017, a 6% increase compared to 2016.

#### **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 investment scarcity 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 decreased from 147 kilograms in 2010 to 88 kilograms in 2016. It is considered low when compared to the levels of some developed countries, such as the United States and Germany.

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

and 2016, vehicles sales decreased 26.6% and 20.2%, respectively, due to the economic recession, a large number of vehicles in stock and by the return of the industrialized products tax. In 2017, selling and automotive production increased 29.3% and 9.4% respectively, giving hope to the automotive market and steel companies.

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#### **Market Participants**

According to IABr, the Brazilian steel industry is composed of 30 mills managed by 11 corporate groups, with an installed annual capacity of approximately 50.4 million tons, producing a full range of flat, long, carbon, stainless and specialty steel.

#### Capacity Utilization

Installed capacity in Brazil in 2016 and 2015 was estimated at 50.3 million tons and 47.4 million tons, respectively.

#### 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. 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, the exports of semi-finished and finished steel products reached 13.7 million tons, an increase of 40% compared to 2014.

In 2016, Brazilian steel exports totaled 13.4 million tons and accounted for US\$5.6 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. In 2017, 15.4 million tons of steel was exported from Brazil for US\$8.0 billion. The Brazilian steel industry has experienced periods of overcapacity, cyclicality 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. In 2016, steel imports decreased by 2.1% as compared to 2015, according to IABr. In 2017, steel imports increased by 23.9% as compared to 2016.

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 audited consolidated financial statements included elsewhere herein.

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

Our principal executive offices are located in the city of São Paulo, state of São Paulo, and our main production operations are located in the city of Volta Redonda, state of Rio de Janeiro. Presidente Vargas Steelworks, our steel mill, is an integrated facility covering approximately far square km and is located in the city of Volta Redonda, 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 properties as of December 31, 2017. For more information, see note 9 to our audited consolidated financial statements included elsewhere herein."

Companhia Siderúrgica Nacional	Presidente Vargas Steelworks	Steel Mill	Brazil	RJ	Volta Redonda	Owned
Companhia Siderúrgica Nacional	CSN Paraná	Galvanized and Pre-Painted Products	Brazil	PR	Araucária	Owned
Companhia Siderúrgica Nacional	CSN Porto Real	Galvanized Steel Producer	Brazil	RJ	Porto Real	Owned
Companhia Siderúrgica Nacional	Service Center	Distributor	Brazil	SP	Mogi das Cruzes	Owned
Companhia Siderúrgica Nacional	Service Center	Distributor	Brazil	BA	Camaçari	Owned
Companhia Metalúrgica Prada	Service Center	Distributor	Brazil	SP	Mogi das Cruzes	Owned
Companhia Metalúrgica Prada	Service Center	Distributor	Brazil	SP	Bebedouro	Owned
Companhia Matalárgiaa Brada	Steel Can	Packaging	Brazil	SP	São Paulo	Owned
Metalúrgica Prada  Companhia  Metalúrgica Prada	Manufacturer Steel Can	Packaging	Brazil	MG	Uberlândia	Owned
Companhia Siderúrgica Nacional	Manufacturer Distribution Center	Cement Distributor	Brazil	MG	Uberlândia	Owned
CSN Mineração	Iron Ore Mine	Iron Ore Mine	Brazil	MG	Congonhas	Owned
Companhia Siderúrgica Nacional	Arcos Mine	Limestone Mine	Brazil	MG	Arcos	Owned
CSN Mineração	Ouro Preto Mine	Iron Ore Mine	Brazil	MG	Ouro Preto	Owned
Minérios Nacional S.A.	Fernandinho Mine	Iron Ore Mine	Brazil	MG	Rio Acima	Third Parties
Estanho de Rondônia S.A. (ERSA)	Office	Tin Mine	Brazil	RO	Ariquemes	Owned
Estanho de Rondônia S.A. (ERSA)	ERSA Mine	Tin Mine	Brazil	RO	Itapuã do Oeste	Owned
Companhia Siderúrgica	CSN LLC	Flat Steel Producer	USA	Indiana	Terre Haute	Owned
Nacional LLC Lusosider Aços Planos S.A.	Lusosider	Flat Steel Producer	Portugal	Seixal	Seixal	Owned
Stahlwerk Thüringen Gmbh	SWT	Steel Profile	Germany	Saalfeld-Rudolsta	ndt Unterwellenborn	Owned
Companhia Siderúrgica Nacional	Thermoelectric Plant	Energy	Brazil	RJ	Volta Redonda	Owned
Companhia Metalúrgica Prada	Metallic	Packaging	Brazil	RJ	Resende	Third Parties
Companhia Metalúrgica Prada	Packaging Plant Metallic	Packaging	Brazil	SP	Lins	Third Parties
8	Packaging Plant Metallic	Packaging	Brazil	GO	Luziânia	

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Companhia Metalúrgica Prada	Packaging Plant					Third Parties
Companhia Metalúrgica Prada	Metallic Packaging Plant	Packaging	Brazil	RS	Pelotas	Third Parties
Consórcio Usina Hidrelétrica	Hydroelectric Facility	Energy	Brazil	SP	Igarapava	Owned
de Igarapava	1 demity					
Itá Energética S.A.	Hydroelectric Facility	Energy	Brazil	RS	Aratiba	Owned
Companhia Siderúrgica Nacional	Service Center	Distributor	Brazil	PE	Jaboatão dos Guararapes	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Distributor	Brazil	RS	Canoas	Third Parties
Companhia Metalúrgica Prada	Distribution Center	Distributor	Brazil	SP	Piracicaba	Third Parties
Companhia Metalúrgica Prada	Distribution Center	Distributor	Brazil	MG	Contagem	Third Parties
Companhia Siderurgica Nacional	Steel Distribution	Distributor	Brazil	MG	Contagem	Third Parties
Companhia Metalúrgica Prada	Center Distribution Center	Distributor	Brazil	MG	Juiz de Fora	Third Parties
Companhia Siderúrgica Nacional	Distribution Center	Cement Distributor	Brazil	MG	Juiz de Fora	Third Parties
Companhia Metalúrgica Prada	Companhia Siderúrgica Nacional	Distributor	Brazil	SP	Mauá	Third Parties
Companhia Siderúrgica Nacional	Companhia Siderúrgica Nacional	Cement Distributor	Brazil	SP	Mauá	Third Parties
Companhia Siderurgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Varginha	Third Parties
Companhia Siderurgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Ribeirão Preto	Third Parties
Companhia Siderurgica Nacional	Distribution Center	Cement Distributor	Brazil	SP	Guarulhos	Third Parties
Companhia Sideurgica Nacional	Distribution Center	Steel Distributor	Brazil	RS	Caxias do Sul	Third Parties
CSN Mineração	TECAR - Terminal de Carvão	Iron Ore Shipment	Brazil	RJ	Itaguaí	Third Parties
Sepetiba Tecon S.A.	TECON - Terminal de Conteiners	Logistics	Brazil	RJ	Itaguaí	Third Parties
Companhia Siderúrgica Nacional	Cement Plant	Cement Manufacturer	Brazil	RJ	Volta Redonda	Owned
Companhia Siderúrgica Nacional	Clinker and	Cement Manufacturer	Brazil	MG	Arcos	Owned
Companhia Siderúrgica Nacional	Cement Plant Long Steel Plant	Long steel Manufacturer	Brazil	RJ	Volta Redonda	Owned

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MRS Logística S.A.	Railway	Railway Logistics	Brazil	Several	Several	Third Parties
Ferrovia	Railway	Railway	Brazil	Several	Several	Third
Transnordestina		•				Parties
Logística S.A. (FTL)		Logistics				
Transnordestina		Dailman	Brazil	Several	Several	Third
	Railway	Railway				Parties
Logística S.A. (TLSA)	1	Logistics				
Companhia	Distribution Center	Cement	Brazil	RJ	Rio de Janeiro	Third
Siderúrgica Nacional		Distributor		ΝJ	Kio de Jaheno	Parties
Companhia	Distribution Center	Cement	Brazil	SP	A maniaana	Third
Siderúrgica Nacional		Distributor		SF	Americana	Parties
Companhia	Distribution Center	Cement	Brazil	DΙ	Oneimades	Third
Siderurgina Nacional		Distributor		RJ	Queimados	<b>Parties</b>
Companhia	Distribution Center	Cement	Brazil	CD	São José dos	Third
Siderúrgica Nacional		Distributor		SP	Campos	<b>Parties</b>
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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 audited consolidated financial statements included elsewhere herein.

The following map shows the locations of the Presidente Vargas Steelworks, CSN Paraná, Prada, CSN Porto Real (formerly 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

As of December 31, 2017, we owned, directly and indirectly, 20.86% of the preferred shares and 15.19% of the common shares of Usinas Siderúrgicas de Minas Gerais S.A., or Usiminas, resulting from various acquisitions in the market since mid-2010. For more information on the value of these assets, 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 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."

In March 2016, Usiminas' board of directors approved a capital increase of R\$64.9 million, through the issuance of 50,689,310 preferred shares. In April 2016, we exercised our right of subscription, paying R\$11.6 million for 9,064,856 preferred shares.

In April 2016, Usiminas, shareholders' meeting approved a capital increase of R\$1.0 billion, through the issuance of 200,000,000 common shares. In May 2016, we exercised our right of subscription, paying R\$178.8 million for 35,766,351 common shares.

In 2014, we entered into an agreement with CADE limiting our ability to exercise our voting rights in Usiminas. In March 2016, we applied for and were granted an exception to this agreement, pursuant to which we appointed, for a two-year term, two fixed and two alternate members on Usiminas' board of directors and, for a one-year term, one fixed and one alternate member on Usiminas' fiscal committee. CADE's ruling granting us this exception is currently under litigation. Although the 2016 appointments are currently under litigation, there has been no judicial order overturning or otherwise suspending their effects. Since 2016, however, we have been unable to appoint new members to Usiminas' fiscal committee as our request in 2017 for another exception was denied by CADE. Most recently, in April 2018, our latest request for exception was denied as well by CADE.

## Namisa / CSN Mineração

In 2008, a consortium of Asian companies comprising 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, 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 late 2015, we restructured our iron ore business by merging the iron ore businesses and related logistics assets of CSN and Namisa into our subsidiary CSN Mineração, which resulted in a fully integrated operation.

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.

The transaction consisted of a joint venture whereby the Asian Consortium contributed its 40% ownership interest in Namisa to CSN Mineração 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 CSN Mineração of iron ore products to the Asian Consortium members and to us, as well as a long term port services agreement between CSN Mineração 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 CSN Mineração 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 CSN Mineração from 12.48% to 8.71%.

CSN Mineração 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.

By means of this structure, CSN Mineração 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, thereby creating a world class company.

#### Metalic

In August 2016, CSN's board of directors approved the sale of all shares issued by Metalic to Can-Pack Brasil Indústria de Embalagens Ltda., a subsidiary of the Polish metallic packaging company Can-Pack S.A., a manufacturer and marketer of metallic packaging. The value of the transaction was R\$372.5 million and the sale was effective as of November 30, 2016. For more information, see note 4 to our audited consolidated financial statements included elsewhere herein."

#### **Capital Expenditures**

In 2017, our investments totaled approximately R\$1.0 billion, highlighting:

- Steel: R\$454 million, mainly for sustaining investments in coke plants at Presidente Vargas Steelworks, environmental projects, general repair of our hot rolling mill, technological modernization and maintenance projects;
- Mining: R\$363 million, mainly for the construction of high intensity magnetic separation plants at our Casa de Pedra and Fernandinho mines, as well as other sustainment investment projects;
- Cement: R\$112 million, mainly for completion of a new clinker plant and other sustainment investment projects;
- Other investments: R\$96 million in other operations, including FTL and TECON, and corporate projects, such as information technology.

#### **Planned Investments**

In 2018, our investment budget prioritizes the sustainment of existing investments to maintain operational capability and to comply with environmental and safety requirements. New investments are evaluated considering market conditions, expected financial results and projected additional cash flows generated by each project.

Considering these guidelines, investments planned for 2018 amount to R\$1.1 billion, highlighting:

- Steel: R\$581 million, mainly for technological modernization projects at Presidente Vargas Steelworks, sustainment investments in coke plants, safety and environmental projects and maintenance projects in other units;
- Mining (projects at CSN Mineração, including Tecar): R\$393 million, mainly for running projects in iron ore beneficiation, maintenance of tailings dams and sustainment investment projects in our units;
- Cement: R\$60 million, especially sustainment investment projects in our units;

• Other investments: R\$53 million for sustainment investments in other operations, including FTL and TECON, and corporate projects, such as information technology;

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

#### Steel

Our investment plan in the coming years prioritizes the sustainment of existing investments for efficiency gains, including the revamp of coke ovens, blast furnaces, steel mills, pickling and casting and environmental projects, technological modernization projects at Presidente Vargas Steelworks and maintenance projects in other units.

#### Mining

Our mining investment plan in the coming years prioritizes the sustainment of existing investments. Depending on market conditions, our financial results and projected additional cash flows generated by each project, we intend to invest in quality improvement and cost reduction projects in our Casa de Pedra and Fernandinho mines.

#### Cement

In the second half of 2016, we began operating a second clinker kiln in Arcos, where we use our own limestone and two cement mills.

#### 4E. Unresolved Staff Comments

None.

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

The following discussion should be read in conjunction with our audited consolidated financial statements as of December 31, 2017 and 2016, and for the years ended December 31, 2017, 2016 and 2015, included elsewhere herein.

#### 5A. Operating Results

## Overview

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## Brazilian Macroeconomic Scenario

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 in Brazil. The rate of growth in Brazil is important in determining our own growth capacity and results of operations.

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

	Year ended December 31,					
	2017	2016	2015			
GDP growth (contraction) rate	1.0%	(3.5)%	(3.5)%			
Inflation (IPCA) <sup>1</sup>	3.0%	6.3%	10.7%			
Inflation (IGP-M) <sup>2</sup>	(0.5)%	7.2%	10.5%			
CDI <sup>3</sup>	6.9%	14.0%	13.2%			
Appreciation (depreciation) of the <i>real</i> against the U.S. dollar	1.5%	(4.2%)	(29.5%			
Exchange rate at the end of period (US\$1.00)	R\$3.308	R\$3.259	R\$3.904			
Average exchange rate (US\$1.00)	R\$3.193	R\$3.483	R\$3.338			
Unemployment rate <sup>4</sup>	12.7%	11.5%	8.5%			

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

- (1) The IPCA is measured by the IBGE.
- (2) The IGP-M is 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 (Pesquisa Nacional por Amostra de Domicílios) is measured by IBGE.

#### Steel

For the years ended December 31, 2015, 2016 and 2017, our steel segment represented 73%, 67% and 69% of our net revenues, respectively, and 58%, 47% and 49% of our gross profit, respectively. In 2017, 60% of our steel revenues were in Brazil and 40% were abroad, as compared to 60% and 40%, respectively, in 2016, and 60% and 40%, respectively, in 2015.

According to the World Steel Association (WSA), global crude steel production totaled 1.67 billion tons in 2017, which was 5.5% more than in 2016, with China responsible for 831,7 million tons, or about 50% of the global output, representing an increase of 6% as compared to 2016. Japan's crude steel production remained stable totaling 105 million tons in 2017. In the European Union, production reached 168 million tons in 2017, corresponding to an increase of 4.1% compared to 2016. In the U.S., crude steel production totaled 81 million tons in 2017, stable when compared to 2016. Existing global capacity usage increased by 1.8% over the year to 69.5%.

According to Brazilian Steel Institute (IABr), domestic crude steel production was 34.3 million tons in 2017, 9.9% less than in 2016, while rolled steel output totaled 22.4 million tons, up by a 7.2% as compared to 2016.

Domestic steel product consumption in Brazil was 19.2 million tons in 2017, 5.3% more than in 2016, while domestic sales increased 2.3% to 16.9 million tons. Annual imports to Brazil were 2.3 million tons, 23.9% more in 2016, and exports increased 14.3% to 15.4 million tons in 2017.

#### Mining

For the years ended December 31, 2015, 2016 and 2017, our mining segment represented, 21%, 27% and 25% of our net revenues, respectively, and 27%, 33% and 33% of our gross profit, respectively. In 2017, the global seaborne iron ore market accelerated its recovery, which initiated in late 2016, due to high-level investments in infrastructure and construction. Moreover, the closure of illegal and high emission mills, resulted in an increase in utilization capacity, which, coupled with higher steel demand, led to improved margins and higher iron ore prices. Iron ore prices increased 22.0% in 2017, as compared to 2016, reaching an average of US\$71.32/dmt (Platts, Fe 62%).

## Logistics, Port Logistics, Cement and Energy

The performance of our logistics, cement and energy segments is directly related to the performance of our steel and mining segments. For the years ended December 31, 2015, 2016 and 2017, these segments represented an aggregate of 13%, 13% and 14% of our net revenues, respectively, and an aggregate of 17%, 13% and 12% 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**

## CSN Mineração

In December, 2014, our board of directors approved a strategic alliance with the Asian Consortium.

The transaction consisted of a joint venture whereby the Asian Consortium contributed its 40% ownership interest in Namisa to CSN Mineração 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 CSN Mineração of iron ore products to the Asian Consortium members and to us, as well as a long term port services agreement between CSN Mineração and CSN to guarantee the use of TECAR by CSN to import raw materials necessary for our other activities.

The transaction was concluded by the signing of a shareholders' agreement by the shareholders of CSN Mineração, in November 30, 2015.

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

- Payment of dividends by Namisa before the closing of the transaction, amounting to US\$1.4 billion (equivalent at the time to R\$5.4 billion);
- Disproportionate spin-off of certain assets of Namisa, such as the mining rights of Fernandinho, Cayman and Pedras Pretas, as well as the net assets of Fernandinho, for subsequent contribution to Minérios Nacional S.A., a wholly-owned subsidiary of CSN. After the spin off, CSN held a 59.76% interest in Namisa;
- Restructuring of CSN Mineração through CSN's contribution, of assets and liabilities related to Casa de Pedra, the rights to operate TECAR, 59.76% of Namisa's shares post-split of the excluded assets, 8.63% of MRS' shares, and US\$850 million in debt (equivalent at the time to R\$3,370 million);
- Liquidation 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;
- CSN Mineração's acquisition, of Namisa shares post-split of the excluded assets held by the Asian Consortium, resulting in the merger of Namisa into CSN Mineração;
- Signing of a shareholders' agreement by the shareholders of CSN Mineração;
- Payment by CSN of US\$680 million relating to the acquisition of 4% of the shares held by the Asian Consortium in CSN Mineração and an additional US\$27 million relating to the acquisition of 0.16% of the shares held by the Asian Consortium in CSN Mineração, amounting to US\$707 million (as of equivalent at the time to R\$2.7 billion).

We applied IFRS 3 to record the transaction, as there was a change of control of Namisa as of November 30, 2015. Before the acquisition, Namisa was spin-off to set apart certain assets, such as the mining rights of Fernandinho, Cayman and Pedras Pretas, as well as the net assets of Fernandinho, which were transferred to Minérios Nacional S.A., which main assets were acquired by CSN Mineração.

As a result of the acquisition, we recognized a gain of R\$3,790 million in the value of Namisa, representing 59.76% interest in Namisa after the spin-off of the excluded assets amounting to R\$2,516 million and 60% interest in Namisa before the spin-off which amounted to R\$1,274 million for the excluded assets (Fernandinho, Cayman and Pedras Pretas mines). In addition, as a result of the application of items B51 and B52 of IFRS 3, we recognized a loss of R\$493 million equivalent to 40.24% of the result of the termination of the then existing agreements between Namisa and CSN Mineração. We also recorded a tax expense of R\$266 million on the net gains from the transaction. For more information, see note 2.a.b. and note 3 to our audit consolidated financial statements included elsewhere herein.

Additionally, there was a change in our interest in CSN Mineração without representing a loss of control. 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\$2,943 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 of R\$5,975 million.

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## **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 actual transaction prices difficult to determine.

Historically, export prices and margins have been lower than domestic prices and margins because of the logistics costs, taxes and tariffs involved in exports – not all of which we can pass onto customers. The portion of our production that we export depends on domestic demand, exchange rate fluctuations and how favorable the prices that can be charged in the international markets are.

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

	2017	2016	2015
Brazilian Market (in thousands of tons)			
Total Flat and Long Steel			
Production		30,212	33,256
<b>Apparent Consumption</b>		18,254	15,734
Hot-Rolled Coils and Sheets			
Production		2,601	4,715
Apparent Consumption		2,654	2,980
Cold-Rolled Coils and Sheets			
Production		1,861	2,244
<b>Apparent Consumption</b>		1,993	2,299
Galvanized Sheets			
Production		2,804	2,108
<b>Apparent Consumption</b>		2,804	2,874
Tin Plates			
Production			576
Apparent Consumption			497
Global Market (in millions of tons)			
Crude Steel Production		1,628	1,622

<sup>\*2017</sup> data was not available as of the date of this annual report.

#### **Product Mix and Prices**

We forecast sales trends in both the domestic and foreign markets monthly based on data preceding months. We use our own information system to remain informed on market developments so we can respond swiftly to fluctuations in demand.

We consider our flexibility in shifting between domestic and foreign markets, and our ability to monitor and optimize inventory levels in light of changing demand, as key to our 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 <b>V</b>	Volum	es				
	To		% of Sales Volumes						
			In	Mark	et*	Total			
	2017	2016	2015	2017	2016	2015	2017	2016	2015
<b>Domestic Sales</b>									
Slabs	2	-	6	0%	0%	0%	0%	0%	0%
<b>Hot-Rolled</b>	973	922	1,065	34%	33%	36%	20%	19%	21%
Cold-Rolled	520	491	556	18%	18%	19%	11%	10%	11%
Galvanized	818	826	818	29%	30%	28%	17%	17%	16%
Tin Plate	295	370	363	10%	13%	12%	6%	8%	7%
Long Steel	233	176	161	8%	6%	5%	5%	4%	3%
J									
Subtotal	2,841	2,784	2,968	100%	100%	100%	58%	<b>57%</b>	<b>59%</b>
		•	•						
Sales Abroad									
Slabs	-	-	-	0%	0%	0%	0%	0%	0%
<b>Hot-Rolled</b>	74	114	235	4%	5%	12%	1%	2%	5%
Cold-Rolled	77	89	204	4%	4%	10%	2%	2%	4%
Galvanized	925	938	717	44%	45%	35%	19%	19%	14%
Tin Plate	197	158	141	9%	8%	7%	4%	3%	3%
Long Steel	808	775	724	39%	37%	36%	16%	16%	15%
J									
Subtotal	2,081	2,073	32,022	100%	100%	100%	42%	43%	41%
		•	·						
<b>Total Sales</b>									
Slabs	2	0	6						
<b>Hot-Rolled</b>	1,047	1,035	1,301						
Cold-Rolled	597	580	760						
Galvanized	1,742	1,763	31,535						
Tin Plate		527	-						
Long Steel	1,042	951	885						
U	,								
Total	4,922	4,857	4,990				100%	100%	100%
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\*% of sales volume in the market means the participation of each product line in our group of domestic sales and sales abroad.

		Net Ope	erating	Rever	nues					
	(in milli	<b>%</b>	% of Net Operating Revenues							
				In Market*				Total		
	2017	2016	2015	2017	2016	2015	2017	2016	2015	
<b>Domestic Sales</b>	<u>3</u>									
Slabs	2	-	6	0%	0%	0%	0%	0%	0%	
<b>Hot-Rolled</b>	2,133	1,630	1,789	28%	24%	27%	17%	15%	16%	
<b>Cold-Rolled</b>	1,269	1,020	1,06	17%	15%	16%	10%	9%	10%	
Galvanized	2,466	2,215	1,991	32%	33%	30%	19%	20%	18%	
Tin Plate	1,348	1,646	1,475	18%	24%	22%	11%	15%	13%	
<b>Long Steel</b>	426	303	291	6%	4%	4%	3%	3%	3%	
Subtotal	7,643	6,815	6,612	100%	100%	100%	60%	61%	60%	
Sales Abroad										
Slabs	_	_	_	0%	0%	0%	0%	0%	0%	
Hot-Rolled	145	147	386	3%		9%	1%	1%		
Cold-Rolled	191	153	403	4%		9%	2%	1%		
Galvanized	2,662	2,249	1,734	53%		40%	21%	20%		
Tin Plate	523	389	421	10%		10%	4%	3%		
Long Steel	1,520		1,388	30%			12%	13%		
	-,	-,	-,				,-			
Subtotal	5,040	4,390	4,332	100%	100%	100%	40%	39%	40%	
<b>Total Sales</b>										
Slabs	2	-	6							
<b>Hot-Rolled</b>	2,278	1,777	2,175							
Cold-Rolled	1,460	1,174	1,463							
Galvanized	5,128	4,465	3,725							
Tin Plate	1,871	2,035	1,896							
Long Steel	1,945		1,679							
Total	12,683	11,205	10,944				100%	100%	100%	
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Product Mix and Prices 136

\*% of net operating revenues in the market means the participation of each product line in our group of domestic sales and sales abroad and considers only revenues from products, excluding other revenues.

# **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 *real* against the U.S. dollar has the following effects our results of operations:

- domestic revenues tend to be lower (in comparison with prior years), partially offset by an increase in foreign market sales:
- the impact of *real* denominated costs of products sold and operating costs tends to be lower; and
- financial expenses increase to the extent 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, we recognize our foreign exchange variation generated from debt used as a hedge instrument directly in net equity as other comprehensive income, which we charge against income at the time the future export transactions occur.

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

- foreign revenues tend to be lower (in comparison with prior years), partially offset by an increase in domestic market sales:
- the impact of *real* denominated costs of products sold and operating costs tends to be higher; and
- financial expenses decrease to the extent 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, we recognize our foreign exchange variation generated from debt used as a hedge instrument directly in net equity as other comprehensive income, which we charge 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 our results of 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 (expenses) attributable to the profit (or loss) on the derivative transactions of our foreign currency-denominated debt. In order to minimize the effects of exchange rate fluctuations, we may use derivative transactions, including currency swap and foreign currency option agreements. For a discussion on the possible impact of exchange rate fluctuations on our principal financial instruments and positions, see "Item 11. Quantitative and Qualitative Disclosures About Market Risk."

## **Effects of Inflation and Interest Rates**

Inflation measured by the IPCA index was 10.7%, 6.3% and 3.0% in 2015, 2016 and 2017, respectively, and 10.5%, 7.2% and (0.5)% as measured by the IGP-M index.

Inflation 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 indices. A significant portion of our *real*-denominated debt bears interest based on the CDI rate, which is partially adjusted for inflation. The CDI rate in 2015, 2016 and 2017 was 13.2%, 14.0% and 9.9%, respectively.

# **Accounting for Mining Production Utilized by Our Steel Production**

We are currently self-sufficient for the iron ore used in our steel production, except for pellets. We extract iron ore from our CSN Mineração mines, which in 2017 provided approximately 5.2 million tons of iron ore. We sell the remainder of our iron ore production to third parties in Brazil and abroad.

We record the cost of iron ore for our steel production on our income statement in cost of products sold at its extraction cost plus transport cost from the mine. In 2017, 2016 and 2015, these costs were R\$835 million, R\$515 million and R\$377 million, respectively.

As of the closing of our transaction with the Asian Consortium, we record the cost of iron ore for our steel production at adjusted market prices and conditions, instead of its extraction cost plus transport cost from the mine, as our mining operations are concentrated in CSN Mineração, which sells iron ore to us for our steel production. Details of this transaction are described in "Item 4D. Property, Plant and Equipment."

# **Critical Accounting Estimates**

We prepared our consolidated financial statements as of and for the years ended December 31, 2017, 2016 and 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 which 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 (i) we used different estimates that we reasonably could have or (ii) 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 uncertain matters for which we use estimates, 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*, we assess long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. We measure recoverability of assets to be held and used by a comparison of the carrying amount of an asset to the estimated discounted future cash flows expected to be generated by the asset, or cash generating unit.

If the carrying amount of a cash generating unit exceeds its estimated future cash flows, an impairment loss is recognized in the amount by which the carrying amount of the asset exceeds the greater of the value in use or fair value of the cash generating unit.

A determination of the value in use or fair value of a cash generating unit 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 our 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 assessed annually for impairment in accordance with IAS 36 *Impairment of assets*. We review assets subject to amortization for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. We allocate goodwill to cash-generating units, for impairment testing purposes, that are expected to benefit from the business combination from which the goodwill arose, and the unit is not greater than the operating segment.

We assess financial assets are 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.

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 evidence of impairment of available-for-sale financial assets, we reclassify 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, from shareholders' equity and recognize the loss in our income statement. Impairment losses recognized in our income statement as available-for-sale instruments are not reversed through our income statement.

On December 31, 2017, we owned, directly and indirectly, 20.86% of the preferred shares (USIM5) and 15.19% of the common shares (USIM3) of Usiminas, resulting from various acquisitions on the stock exchange since mid-2010. We classify these as financial instruments available-for-sale and measured at their fair value based on their quoted market price on the B3 as of December 31, 2017.

# **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 useful lives of assets.

We review the useful lives of assets every fiscal year for all of our units. See further details in note 10 to our audited consolidated financial statements included elsewhere herein.

# **Fair Value of Business Combinations**

We use the acquisition method to account for each business combination that we conduct. We measure the payment obligation transferred by acquiring an entity 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. We recognize acquisition-related costs in profit or loss, as incurred. We initially measure identifiable assets acquired and liabilities assumed in a business combination at their fair values at the acquisition date.

## **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 these instruments at fair value. We record changes in the fair value of derivatives in each period in our income statement in other comprehensive income, depending on whether we designate a transaction as an effective hedge. Our derivative instruments do not qualify for hedge accounting. We immediately record changes in the fair value of any of these derivative instruments in our income statement as financial income or 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 debt and with highly probable forecast transactions that may affect our net results. Our hedging instrument are non-derivative monetary items. Therefore, we account for the effective portion of the foreign exchange gains and losses in other comprehensive income. We account for the ineffective portion of the gain or loss on the hedging instrument, if any, in income (loss). With respect to the fair value measurement, we must make assumptions as to future foreign currency exchange and interest rates. For a discussion of the possible impact of fluctuations in 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**

We sponsor certain pension plans for 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 28 to our audited consolidated financial statements and include, among others, the expected long-term rate of return on plan assets and increases in salaries. We calculate our net obligation regarding pension plans individually for each plan by estimating the value of the future benefit that the employees accrue in return for services provided in the current period and in prior periods; we then discount this benefit to its present value. The discount rate is the yield presented at the end of the reporting period for top line debt securities whose maturity dates approximate the terms and conditions of our obligations and which are denominated in the same currency as the one in which we expect the benefits will be paid. A qualified actuary calculation annually by using the projected unit credit method.

We recognize all the actuarial gains and losses resulting from pension plans immediately in other comprehensive income and then transfer them within equity. If the plan is extinguished, we recognize actuarial gains and losses in profit or loss.

Some of our entities offered a postretirement healthcare benefit to their employees as well. The expected costs of these benefits were accumulated during the employment period, and we calculate them using the same accounting method used for the pension plans.

## **Deferred Taxes**

We compute and pay income taxes based on results of operations determined under Brazilian Corporate Law. We recognize a deferred income tax liability for all temporary tax differences, while we recognize a deferred income tax asset only to the extent that it is probable that future taxable profit will be available against which the deductible temporary difference can be utilized. We classify deferred tax assets and liabilities as long-term. We offset tax assets and liabilities 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. We recognize the income tax related to items recognized directly in equity in the current

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period or in a prior period directly in the same account.

We regularly review deferred income tax assets for recoverability and only recognize these if we believe 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.

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We annually perform a technical study to demonstrate if we will generate future taxable income and, if we have deferred tax assets recognized in our balance sheet, we assess if the future taxable income will support the realization of the tax credits. Even if we do not have deferred tax assets recognized in our balance sheet, we perform the study to have an estimate of the timeframe we will be able to recognize the tax credits and if any valuation allowance will continue to be applicable. This study is prepared at entity level, in accordance with the Brazilian tax legislation, and considers our projections for the parent company since the major part of our recent tax losses as well as the major part of temporary differences are generated in that entity and our subsidiaries do not have significant tax credits for purposes of this study.

Deferred tax assets on tax losses and temporary differences refer mainly to the following:

<u>otion</u>
significant portion of our loans and financings are
parent company, we have incurred tax losses mainly
nigh financial expenses.
012, we have opted for taxation on a cash basis. We
perated without a taxable profit, so it would not
ense to use this deductibility on an accrual basis. As
of the cash basis tax treatment, taxes are only due
penses are only deductible at the time of debt
ent.
ognize the losses on Usiminas shares on an accrual
ut a taxable event will occur only at the time of
nent, which we expect to occur during the period
ed to compensate for deferred taxes.
ognize various accounting provisions on an accrual
ut their taxation occurs only at the time of their
ion. This includes provisions for contingencies,
ment losses, environmental liabilities, etc.

We prepared the study based on our long-term business plan, which covers a period for which our management can reasonably make estimates. It considered several scenarios, which varied according to different macroeconomic and operating assumptions.

The model for projection of taxable income considers two main indicators:

- Pre-tax income, reflecting our projected EBITDA plus depreciation, other income and expenses and financial income (expenses); and
- Taxable income, which is our pretax income plus (less) expenses and income items that are taxable or deductible in fiscal years other than the current year (temporary differences).

Taxable income is obtained considering adjustments to pretax income for the following main items:

• Exchange differences expenses: are expected to be offset against future income based on debts owed to third parties and rescheduling of intercompany debts (to match the periods of greater profitability);

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- Losses on Usiminas shares: the model uses tax assets at the time of sale of the preferred shares (and realization of losses), exclusively;
- Other provisions: in view of the unpredictability of the occurrence of losses for which we have recorded provisions, we assumed an even 10% utilization per year; and
- Tax losses: utilization is limited under Brazilian law to 30% of the taxable income in a given year and income tax losses do not expire and may be used to offset future taxable income.

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In addition, we perform a sensitivity analysis of tax credits utilization considering changes in macroeconomic assumptions, operational performance and liquidity events.

On the other hand, as a negative factor, we have experienced income tax losses in most of the last five years resulting from the deterioration of the Brazilian political and macroeconomic environment, as well as due to our financial leverage, which has unbalanced the relationship between operating and financial results.

In summary, the main positive and negative evidence we considered in making our projections were:

- i. Positive aspects: Operating profit, non-expiration on tax losses benefit and extinguishment of the financial expenses arising from the elimination of the pre-existing relationship between Namisa and us, and dividends to be received from CSN Mineração.
- ii. Negative aspects: history of tax losses, substantial cash generation used for the payment of debts and increases in iron ore costs since the business combination, when we started purchasing iron ore at market price from CSN Mineração and, pursuant to Brazilian law, utilization of the tax loss is limited to 30% of the taxable income in a given year.

The existence of tax losses generated in the most recent years is objectively verifiable material negative evidence, and, consequently, more weight is given to this evidence than to others which may have subjective features, according to the interpretation of IAS 12.

The projections for future taxable profits for 2015 that supported the recording of deferred tax credits attributed an important weight to the sale of certain non-core assets whose technical reflection during 2017 indicated that the corresponding sales would not be subject to inclusion in these projections since they would be out of our management's control. This understanding reduced the future taxable base for the period estimated in these projections.

Therefore, we do not believe there is sufficiently strong evidence to support the recording of tax credits and, accordingly, we limited their recognition to 30% of deferred tax liabilities.

# **Provision for Risks, Contingencies and Disputed Taxes**

We record provisions for risks 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 we properly recognize these contingencies 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 Brazilian federal or state governments or to settle municipal tax obligations owed to the corresponding municipality. 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 and the amounts recoverable can be measured at reasonable precision. Our accounting for 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 applicable 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. 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 an allowance for doubtful accounts in our trade accounts receivable in order to reflect our expectation as to the net realizable value of these accounts. We estimate provision based on an analysis of our receivables and periodically review it to maintain real expectation of collectability of our accounts receivable.

## Mineral Reserves and Useful Life of Mines

We periodically evaluate and update our estimates of probable and proven reserves. We determine these reserves 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 a significant impact on probable and proven iron ore reserves recorded and on the useful life of mines.

We depreciate tangible assets that are mine-specific over the shorter of the normal useful lives of such assets or the useful life of the mine.

We recognize exploration expenditures as expenses until we can establish the feasibility of mining activities, after which we capitalize subsequent development costs. Exploration and valuation expenditures include:

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

We capitalize the development costs of new mineral deposits or capacity expansion in mine operations and amortize 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; and
- 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).

We capitalize stripping costs (the costs associated with the removal of overburden and other waste materials) incurred during the development of a mine, before production commences, as part of the depreciable cost of developing the property. We subsequently amortize these costs over the useful life of the mine based on proven and probable reserves.

We include stripping costs in the production phase in the cost of inventory, except when we undergo a specific extraction campaign to access deeper deposits than of the ore body. In these cases, we capitalize costs in noncurrent

assets when the mineral ore deposit is extracted and we amortize these costs over the useful life of the ore body.

Additionally, we account for asset retirement obligations as the estimated cost for decommissioning, retirement or restoration of areas upon the termination of activities related to mining resources. We recognize the initial liability as discounted to the present value, and subsequently as an increase in expenses. We capitalize asset retirement obligations equivalent to the initial liability as part of the carrying amount of the asset, which we depreciate over the useful life of the asset.

# **Property, Plant and Equipment**

In accordance with our accounting policy, we capitalize the cost of maintenance in operating assets when it does not occur annually and results in an increase in the useful life of the asset. We recognize depreciation on an accrual basis until the next maintenance event of the relevant asset. We charge expenditures for maintenance and repairs in operating assets, that are necessary to maintain assets under normal conditions of use, to operating costs and expenses, as incurred.

As of December 31, 2017, 2016 and 2015, we capitalized borrowing costs amounting to R\$91.9 million, R\$215.8 million and R\$166.4 million, respectively. These costs are basically estimated for our cement and mining projects and relate mainly to our new integrated cement plant, the Casa de Pedra expansion and Tecar.

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

The standards, amendments to standards and IFRS interpretations issued by the IASB that are not yet effective and were not early adopted by us for the year ended December 31, 2017, are described in note 2.a.b to our audited consolidated financial statements included elsewhere herein.

# **Results of Operations**

The following table presents certain financial information with respect to our operating results for each of the years ended December 31, 2017, 2016 and 2015:

		Year Ended December 31,			
<b>Income Statement</b>			• • • •		
Data:	2017 <sup>1</sup>	2017	2016	2015 <sup>2</sup>	
	(in million of US\$, except per share data)	(in million o	R\$, except per share	e data)	
Net operating revenues	5,600	18,525	17,149	15,262	
Cost of products sold	(4,110)	(13,596)	(12,640)	(11,740)	
<b>Gross Profit</b>	1,490	4,929	4,509	3,522	
<b>Operating expenses</b>					
Selling	(549)	(1,815)	(1,697)	(1,430)	
General and Administrative	(126)	(416)	(518)	(470)	
Equity in results of affiliated companies	33	109	65	1,160	
Other Expenses	(196)	(647)	(1,077)	(1,341)	
Other Income <sup>3</sup>	249	824	663	3,610	
Total <sup>3</sup>	(588)	(1,945)	(2,564)	1,529	
Operating income Non-operating income (expenses), net	902	2,984	1,945	5,051	
Financial income	89	295	644	488	
Financial expenses	(834)	(2,759)	(3,166)	(3,853)	
(Loss) income before taxes Income tax	157	520	(577)	1,686	
Current	(109)	(359)	(206)	(136)	
Deferred	(15)	(50)	(60)	(2,768)	
Net income (loss) from continuing	34	111	(843)	(1,218)	

## operations

Net income (loss) from discontinued operations	-	-	(10)	2
Net Income (loss) for the period	34	111	(853)	(1,215)
Net income (loss) attributable to noncontrolling interest	31	101	82	(2)
Net income (loss) attributable to Companhia Siderúrgica Nacional	3	10	(935)	(1,213)
Basic earnings per common share	0.00229	0.00757	(0.68876)	(0.89461)
Diluted earnings per common share	0.00229	0.00757	(0.68876)	(0.89461)
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- (1) Translated solely for the convenience of the reader at the rate of R\$3.308 to US\$1.00, which was the U.S. dollar selling rate as of December 31, 2017, as reported by the Central Bank.
- (2) Metalic results were excluded from net operating revenues, cost of sales and/or services, gross profit, operating expenses, other operating expenses, other operating income, financial results and income taxes and were included in "Net (Loss) from discontinued operations" due to the sale of Metalic in November 2016 to Can-Pack Brasil Indústria de Embalagen Ltda. For further information, see "Item 4B. Business Overview—Downstream Facilities—Metalic."
- (3) Our 2015 financial information was impacted by the business combination of CSN Mineração as described in "Item 5A. Operating Results."

## Year 2017 Compared to Year 2016

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 our proportional interest in our jointly controlled entities, MRS and CBSI – *Companhia Brasileira de Serviços de Infraestrutura*, reflected in the figures presented below.

We have been consolidating Namisa since December 2015, upon acquiring majority control, which we previously recorded under the equity method until November 2015. On December 31, 2015, Namisa merged into CSN Mineração.

Our consolidated results for the years ended December 31, 2017 and 2016, by business segment are presented below:

\*Adjusted EBITDA is a measurement which helps us to assess the performance of our operations and our capacity to generate recurring operating cash, consisting of net income (loss) for the year *less* net financial income (expenses), income tax and social contribution, depreciation and amortization, equity in results of affiliated companies, results of discontinued operations and other operating income (expenses), plus the proportionate EBITDA of joint ventures. Although Adjusted EBITDA is an indicator used for performance measurement purposes, it is not a measurement recognized under IFRS. Therefore, it has no standard definition and may not be comparable with measurements using similar names provided by other companies. For the reconciliation of net income to EBTIDA and Adjusted EBITDA, see note 25 to our audited consolidated financial statements included elsewhere herein.

# **Net Operating Revenues**

Net operating revenues increased R\$1,376 million, or 8%, from R\$17,149 million recorded in 2016 to R\$18,525 million in 2017, mainly due to the higher volumes and prices practiced in the steel segment and the higher average price in the mining segment.

Net domestic revenues remained stable, at R\$7,730 million in 2016 and R\$8,707 million in 2017, while net revenues of exports and sales abroad increased 4%, from R\$9,419 million in 2016 to R\$9,818 million in 2017, due to the higher price in the steel segment.

#### Steel

Steel net operating revenues increased R\$1,443 million, or 13%, from R\$11,516 million in 2016 to R\$12,959 million in 2017, due to the higher price of steel commercialized both in the domestic market and in the foreign market and the maintenance of sales volumes of coated products. Average steel prices increased by 12% in 2017 versus the previous year. Sales volume increased 1% from 4,857 thousand tons in 2016 to 4,922 thousand tons in 2017. Steel net domestic revenues increased R\$839 million, or 12%, from R\$6,980 million in 2016 to R\$7,819 million in 2017, due to higher prices. Sales volume increased 2%, from 2,784 thousand tons in 2016 to 2,841 thousand tons in 2017.

Steel net revenues from exports and sales abroad increased R\$604 million, or 13%, from R\$4,536 million in 2016 to R\$5,140 million in 2017. Sales volume increased 0.5% from 2,073 thousand tons in 2016 to 2,081 thousand in 2017.

## Mining

Total mining net operating revenues increased R\$39 million, or 0.9%, from R\$4,582 million in 2016 to R\$4,621 million in 2017, due to the lower volume sold and offset by better prices, our sales decreased from 36.9 million tons in 2016 to 32.5 million tons in 2017, or 12%. Iron ore prices increased 22% in 2017 compared to 2016, reaching an average of US\$53.8/dmt (Platts, Fe 62%).

Mining net export revenues decreased R\$248 million, or 6%, from R\$4,040 million in 2016 to R\$3,792 million in 2017, mainly due to lower volume sold.

Mining net domestic revenues increased R\$287 million, from R\$542 million in 2016 to R\$829 million in 2017, due to an increase in the volume of iron ore sold from the Presidente Vargas Steeworks in the domestic market.

# Logistics

In 2017, net operating revenues from railway logistics were R\$1,417 million and net operating revenues from port logistics were R\$238 million, while in 2016, net operating revenues from railway logistics were R\$1,320 million and net operating revenues from port logistics were R\$208 million. These logistics handled 990,000 tons of steel products, 9,000 tons of general cargo and 188,000 containers.

#### Cement

Cement net revenue decreased R\$4 million, or 0.8%, from R\$491 million in 2016 to R\$487 million in 2017, mainly due to lower prices in 2017 than 2016.

# Energy

Our net operating revenues from the energy segment increased R\$139 million, or 52%, of total net revenue from the energy segment, from R\$269 million in 2016 to R\$408 million in 2017.

# **Cost of Products Sold**

Consolidated cost of products sold increased R\$957 million, or 8% from R\$12,640 million in 2016 to R\$13,597 million in 2017, due to the higher prices of coal (26%) and iron ore (22%) compared to 2016.

## Steel

Consolidated steel costs of products sold were R\$10,538 million in 2017, representing 12% increase as compared to the R\$9,393 million in 2016, mainly due to the increase in the main raw materials prices, especially coal and iron ore.

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## **Mining**

Our mining costs of products sold decreased R\$93 million, or 3%, from R\$3,099 million in 2016 to R\$3,006 million in 2017, mainly due to the lower volume sold.

## Logistics

Cost of services attributable to our logistics segment increased R\$126 million, or 12%, from R\$1,056 million in 2016 to R\$1,182 million in 2017, due to increase in railway logistics costs, mainly due to the 16% increase in tons per kilometer transported by FTL. For port logistics services, TECON handled 990 thousand tons of steel products, representing a 23% increase as compared to 2016, 9 thousand tons of general cargo and 188 thousand containers.

#### Cement

Cost of products sold attributable to our cement segment increased R\$46 million, or 10%, from R\$467 million in 2016 to R\$513 million in 2017, mainly due to an 18% increase in volume sold.

## Energy

Cost of products sold attributable to our energy segment remained stable and was R\$285 million in 2017.

# **Gross Profit**

Gross profit increased R\$419 million, or 9%, from R\$4,509 million in 2016 to R\$4,928 million in 2017, due to the R\$1,376 million increase in net revenues, which was partially offset by the R\$957 million increase in cost of products sold, as discussed above.

#### Steel

Gross profit in the steel segment increased R\$298 million, or 14%, from R\$2,123 million in 2016 to R\$2,421 million in 2017 due to the reasons mentioned above.

#### Mining

Our gross profit in the mining segment increased R\$132 million, or 9%, from R\$1,483 million in 2016 to R\$1,615 million in 2017 due to the reasons mentioned above.

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#### Logistics

Gross profit in the logistics segment increased R\$1 million, from R\$472 million in 2016 to R\$473 million in 2017 due to the reasons mentioned above.

#### Cement

Gross profit in the cement segment decreased R\$50 million, or 208%, from R\$24 million in 2016 to R\$26 million in 2017 due to the reasons mentioned above.

#### Energy

Gross profit in the energy segment increased R\$49 million, or 68%, from R\$73 million in 2016 to R\$123 million in 2017 due to the reasons mentioned above.

# Selling, General and Administrative

Selling, general and administrative expenses increased R\$16 million, or 1%, from R\$2,215 million in 2016 to R\$2,231 million in 2017. Selling expenses increased R\$118 million, or 7%, from R\$1,697 million in 2016 to R\$1,815 million in 2017, mainly due to an increase in iron ore CIF sales, which include insurance and freight costs, while general and administrative expenses decreased R\$102 million, or 20%, from R\$518 million in 2016 to R\$416 million in 2017, due to our strong efforts to reduce all expenses.

# **Other Operating Income (Expenses)**

Other operating income (expenses) decreased R\$590 million from a net operating expense of R\$413 million in 2016 to a net operating income of R\$177 million in 2017, mainly due to the gain recorded from the recognition of inflationary compensation from judicial discussions.

# **Equity in Results of Affiliated Companies**

Equity in results of affiliated companies increased R\$44 million, or 68%, from income of R\$65 million in 2016 to R\$109 million in 2017. This was mainly due to better results in MRS and a reduction in accounting loss in TLSA.

#### **Operating Income**

Operating income increased R\$1,039 million, or 53%, from R\$1,945 million in 2016 to R\$2,984 million in 2017 due to the reasons stated above.

# **Financial Income (Expenses), Net**

Financial income (expenses) generated net financial expenses of R\$2,464 million in 2017, as compared to net financial expenses of R\$2,522 million in 2016. This was mainly due to the appreciation of the *real* which generated a foreign exchange loss of R\$16 million in 2017, as compared to a net foreign exchange gain of R\$117 million in 2016.

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# **Hedge Accounting**

We regularly export a large portion of our iron ore production, as well as finished steel products. Our revenue in *reais* from these exports is affected by the exchange rate fluctuations. We raise funds in foreign currencies through borrowings and financings. Our expenses in foreign currencies include imports of metallurgical coal and coke, which we use in our steelmaking process, among other production inputs. These foreign currency liabilities act as a natural hedge for oscillations in export revenues.

In order to better reflect the effect of exchange rate fluctuations on our financial statements, we designate part of our U.S. dollar-denominated liabilities as a hedge for future exports. As a result, we temporarily record the exchange rate variation arising from these liabilities directly in net equity as "other comprehensive income," which amounted to R\$437 million as of December 31, 2017. This amount is transferred to our income statement when exports occur, thus allowing impacts from the exchange rate fluctuations on liabilities and on export revenues to be recorded simultaneously. The adoption of hedge accounting does not involve the contracting of any type of financial instrument. For more information, see note 12.b. to our audited consolidated financial statements included elsewhere herein.

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## **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 social contribution. Adjustments are made to income in order to reach the effective tax expense or benefit for each fiscal year. As a result, our effective tax rate between fiscal years shows volatility.

At statutory rates, the balances resulted in an expense of R\$177 million in 2017 compared to a benefit of R\$196 million in 2016 (34% of income before taxes and adjustments to income). After adjustments to meet the effective rates, we recorded an expense for income tax and social contribution of R\$409 million in 2017, as compared to an expense of R\$266 million in 2016. Expressed as a percentage of pretax income, our effective income tax rate was (46)% in 2016 and 79% in 2017. For the year ended December 31, 2017, adjustments to meet the effective income tax rate amounted to an expense of R\$232 million, comprised mainly of R\$368 million in unrecognized tax losses carryforward due to the recent history of tax losses we have experienced, which was partially offset by the net effect of R\$139 million comprising a positive impact of R\$542 million in unrecognized tax effects of temporary differences and a negative impact of R\$403 million related to reversal of tax credits previously recognized. Other minor items comprise our reconciliation of our statutory income tax rate to our effective income tax rate, including adjustments related to equity results, results of subsidiaries taxed at different rates or not taxed, transfer price adjustments and tax incentives, among others, which net tax result was R\$3 million.

For further information, see note 14.a. to our audited consolidated financial statements included elsewhere herein.

It is not possible to predict future adjustments to federal income tax and social contribution statutory rates, as they depend on interest on shareholders' 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 2017, we recorded net income of R\$110 million, as compared to a loss of R\$853 million in 2016. This R\$963 million increase was due to the reasons described above.

# Year 2016 Compared to Year 2015

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 our proportional interest in our jointly controlled entities, MRS and CBSI – *Companhia Brasileira de Serviços de Infraestrutura*, reflected in the figures below.

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 merged into CSN Mineração.

Our consolidated results for the years ended December 31, 2016 and 2015 by business segment are presented below:

R\$ millions

Year Ended

December 31,

Income Taxes 159

<b>Consolidated Results</b>	Steel 1	Mining	Port	•	Cement	Energy F	Eliminations	2016 Consolidated
		4 500	Logistics	Logistics		2.60	(4.000)	17.110
Net operating revenues	11,516		208	1,320		269	(1,236)	17,149
Domestic market	6,980	542	208	1,320	491	269	(2,080)	7,730
Export market	4,536	4,040	-	-		-	843	9,419
Cost of products sold	(9,393)		(142)	(914)	` /	(196)	1,572	(12,640)
Gross profit	2,123	,	66	406		73	336	4,509
General and	(915)	(185)	(25)	(83)	(75)	(25)	(907)	(2,215)
administrative expenses								
Depreciation <sup>(1)</sup>	679	461	13	228	73	17	(193)	1,279
Proportionate EBITDA							502	502
of joint ventures								
Adjusted EBITDA*	1,887	1,759	54	550	22	65	(262)	4,075
R\$ millions								Year Ended
<b>Consolidated Results</b>	Stool	Mining	Port	Doilway	Comont	Inoney E		December 31, 2015 Consolidated
Consolidated Results	Steel	wining	Logistics	Railway Logistics	Cement	liergy r	Eliminations	Consolidated
Not appearing mayanyas	11,203	3,187	213	0	432	245	(1,175)	15 060
Net operating revenues  Domestic market	6,757	175	213	1,157 1,157		243	(1,173) $(1,296)$	15,262 7,683
	4,446			•		243	121	·
Export market	,	,	(142)	(700)		(106)		7,579
Cost of products sold	(9,127)		(142)	(788)	` ′	(196)	1,166	(11,740)
Gross profit	2,076	864	71	369		49	(8)	3,522
General and	(955)	(70)	(20)	(90)	(73)	(23)	(669)	(1,901)
administrative expenses	(70	277	12	100	47	17	(102)	1 121
Depreciation <sup>(1)</sup>	670	377	13	189	47	17	(183)	1,131
Proportionate EBITDA	-	-	-	-	-	-	499	499
of joint ventures	1 701	1 171	(2	460	75	42	(2(1)	2.051
Adjusted EBITDA* 82	1,791	1,171	63	469	75	43	(361)	3,251

(1) See note 11.a. to our audited consolidated financial statements included elsewhere herein.

\*Adjusted EBITDA is a measurement which helps us to assess the performance of our operations and our capacity to generate recurring operating cash, consisting of net income (loss) for the year *less* net financial income (expenses), income tax and social contribution, depreciation and amortization, equity in results of affiliated companies, results of discontinued operations and other operating income (expenses), plus the proportionate EBITDA of joint ventures. Although Adjusted EBITDA is an indicator used for performance measurement purposes, it is not a measurement recognized under IFRS. Therefore, it has no standard definition and may not be comparable with measurements using similar names provided by other companies. For the reconciliation of net income to EBTIDA and Adjusted EBITDA, see note 27 to our audited consolidated financial statements included elsewhere herein.

# **Net Operating Revenues**

Net operating revenues increased R\$1,887 million, or 12%, from R\$15,262 million in 2015 to R\$17,149 million in 2016, mainly due to higher volumes sold and higher prices in the mining segment.

Net operating revenues from the domestic market remained stable at R\$7,683 million in 2015 and R\$7,730 million in 2016, while net operating revenues from the export market increased 24%, from R\$7,579 million in 2015 to R\$9,419 million in 2016, due to the slowdown in the domestic economy and our strategy to redirect our sales to the foreign market.

#### Steel

Steel net operating revenues increased R\$313 million, or 3%, from R\$11,203 million in 2015 to R\$11,516 million in 2016, due to higher prices, which was partially offset by a 3% decrease in sales volume from 4,990 thousand tons in 2015 to 4,857 thousand tons in 2016.

Steel net operating revenues from the domestic market increased R\$223 million, or 3%, from R\$6,757 million in 2015 to R\$6,980 million in 2016, due to higher prices, which was partially offset by a 6% decrease in sales volume, from 2,969 thousand tons in 2015 to 2,783 thousand tons in 2016.

Steel net operating revenues from the export market increased R\$90 million, or 2%, from R\$4,446 million in 2015 to R\$4,536 million in 2016, due to an increase of 3% in sales volume as a result of our strategy to redirect sales as discussed above, from 2,022 thousand tons in 2015 to 2,073 thousand tons in 2016.

In 2016, even operating with idle capacity, steel sales only decreased 3% as compared to 2015 because we were able to reduce our inventories.

# Mining

Total mining net operating revenues increased R\$1,395 million, or 44%, from R\$3,187 million in 2015 to R\$4,582 million in 2016, mainly due to a 28% increase in sales volume from 25.7 million tons in 2015 to 32.8 million tons in 2016 and a 5.3% increase in iron ore prices, which reached an average of US\$58.45/dmt (Platts, Fe 62%).

Mining net operating revenues from the domestic market increased R\$367 million, from R\$175 million in 2015 to R\$542 million in 2016, due to an increase in the volume or iron ore sold from the Presidente Vargas Steelworks in the domestic market since December 2015, which, before the restructuring of our iron ore business in CSN Mineração, was transferred from Casa de Pedra mine to Presidente Vargas Steelworks.

Mining net operating revenues from exports increased R\$1,028 million, or 34%, from R\$3,012 million in 2015 to R\$4,040 million in 2016, mainly due to higher volumes.

## Logistics

Logistics net operating revenues increased R\$158 million, or 12%, from R\$1,370 million in 2015 to R\$1,528 million in 2016 due to a 16% increase in tons per kilometer transported by FTL. In 2016, net revenue from railway logistics totaled R\$1,320 million and net revenue from port logistics amounted to R\$208 million, while in 2015, net revenue from railway logistics totaled R\$1,157 million and net revenue from port logistics amounted to R\$213 million.

#### Cement

Cement net revenue increased R\$59 million, or 14%, from R\$432 million in 2015 to R\$491 million in 2016, mainly due to an increase of 29% in cement sales volume from 2,182 thousand tons in 2015 to 2,814 thousand tons in 2016 due to the ramp up of the new plant in Arcos. This effect was partially offset by lower prices from R\$198 per ton in 2015 to R\$174 per ton in 2016.

## Energy

Our net operating revenues from the energy segment increased R\$24 million, or 10% of total net revenue from the energy segment, from R\$245 million in 2015 to R\$269 million in 2016.

# **Cost of Products Sold**

Consolidated cost of products sold increased R\$900 million, or 8%, from R\$11,740 million in 2015 to R\$12,640 million in 2016, mainly due to higher production volumes in our mining segment.

#### Steel

Consolidated steel costs of products sold were R\$9,393 million in 2016, representing a 3% increase as compared to R\$9,127 million in 2015, mainly due to increased cost of iron ore purchased from CSN Mineração.

<b>Steel Production</b>	<u>2016</u>		<u>2015</u>		Variation 201	6 vs. 2015
<u>Cost</u>	millions of R\$	R\$/ ton	millions of R\$	R\$/ ton	millions of R\$	R\$/ ton
<b>Raw Materials</b>	2,841	874.3	3,242	725.8	(400)	148.5
Iron Ore	515	158.6	377	84.3	139	74.3
Coal	635	195.3	670	150.0	(36)	45.3
Coke	446	137.1	874	195.7	(428)	(58.6)
Coils	49	15.0			49	15.0
Metals	511	157.2	443	99.1	68	58.1
Outsourced Slabs	285	87.6	278	62.3	6	25.3

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Pellets	161	49.6	296	66.3	(135)	(16.6)
Scrap	18	5.5	48	10.7	(30)	(5.1)
Other <sup>(1)</sup>	222	68.3	256	57.4	(35)	10.9
Labor	759	233.5	777	173.9	(18)	59.6
Other						
Production	2,044	629.2	2,471	553.3	(426)	75.9
Costs						
Energy / Fuel	617	189.9	718	160.9	(101)	29.0
Services and	559	172.1	866	194.0	(307)	(21.0)
Maintenance	339	1/2.1	800	194.0	(307)	(21.9)
Tools and	249	76.7	264	59.1	(15)	17.6
Supplies	249	70.7	204	39.1	(15)	17.0
Depreciation	399	122.6	408	91.4	(10)	31.2
Other	220	67.8	214	47.9	6	19.9
Total	5,644	1,736.9	6,489	1,453.0	(845)	284.0
(1) Includes limestone	e and dolomite.					
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## **Mining**

Our mining cost of products sold increased R\$775 million, or 33%, from R\$2,324 million in 2015 to R\$3,099 million in 2016, mainly due to an increase in volume sold.

## Logistics

Cost of services attributable to our logistics segment increased R\$126 million, or 14%, from R\$930 million in 2015 to R\$1,056 million in 2016, due to an increase in railway logistics costs, mainly due to the 16% increase in tons per kilometer transported by FTL. For port logistics services, costs remained stable.

#### Cement

Cost of products sold attributable to our cement segment increased R\$137 million, or 42%, from R\$330 million in 2015 to R\$467 million in 2016, mainly due to higher volumes produced with the new mills at our Arcos plant. Since the clinker line was concluded only at the end of 2016, part of the clinker used in our production process was purchased from third parties, which increased production costs.

## Energy

Cost of products sold attributable to our energy segment was R\$196 million in 2016 and remained stable as compared to 2015.

## **Gross Profit**

Gross profit increased R\$987 million, or 28%, from R\$3,522 million in 2015 to R\$4,509 million in 2016, due to an increase of R\$1,887 million in net revenues, which was partially offset by an increase of R\$900 million in cost of products sold, as discussed above.

#### Steel

Gross profit in the steel segment increased R\$47 million, or 2%, from R\$2,076 million in 2015 to R\$2,123 million in 2016, due to the reasons mentioned above.

# Mining

Gross profit in the mining segment increased R\$619 million, or 72%, from R\$864 million in 2015 to R\$1,483 million in 2016, due to the reasons mentioned above.

# Logistics

Gross profit in the logistics segment increased R\$32 million, or 7%, from R\$440 million in 2015 to R\$472 million in 2016, due to the reasons mentioned above.

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#### Cement

Gross profit in the cement segment decreased R\$79 million, or 77%, from R\$102 million in 2015 to R\$23 million in 2016, due to the reasons mentioned above.

## Energy

Gross profit in energy segment increased R\$24 million, or 49%, from R\$49 million in 2015 to R\$73 million in 2016, due to the reasons mentioned above.

# Selling, General and Administrative

Selling, general and administrative expenses increased R\$314 million, or 17%, from R\$1,901 million in 2015 to R\$2,215 million in 2016. Selling expenses increased R\$267 million, or 18%, from R\$1,430 million in 2015 to R\$1,697 million in 2016, mainly due to an increase in iron ore CIF sales (sales including insurance and freight costs), while general and administrative expenses increased R\$48 million, or 10%, from R\$470 million in 2015 to R\$518 million in 2016.

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Cement 165

# **Other Operating Income (Expenses)**

Other operating income (expenses) decreased by R\$2,682 million from net operating income of R\$2,269 million in 2015 to net operating expense of R\$413 million in 2016, mainly due to a gain of R\$3,297 million in 2015 comprising a positive impact of R\$3,790 million from re-measurement at fair value of our 60% stake in Namisa, partially offset by a R\$493 million loss in the settlement of the preexisting relationship as a result of the business combination, as explained in "Item 5A. Operating Results—Specific Events Affecting our Results of Operations—CSN Mineração." In 2016, we recorded an impairment loss of R\$388 million in the goodwill recognized in our investment in Transnordestina. This impact was partially offset by a gain of R\$252 million recognized in 2016 due to Metalic's asset sale transaction, as explained in "Item 4B. Business Overview—Downstream Facilities—Metalic."

Additionally, in 2015, we recognized an impairment in available-for-sale financial assets of R\$555 million, which effect did not occur in 2016. For more information, see note 25 to our audited consolidated financial statements included elsewhere herein.

# **Equity in Results of Affiliated Companies**

Equity in results of affiliated companies decreased R\$1,095 million, or 94%, from R\$1,160 million in 2015 to R\$65 million in 2016. In 2015, there was an increase in the result of our jointly-controlled investee Namisa due to the exchange rate variation over Namisa's cash position proportional to our interest.

Our investment in Namisa was accounted for under the equity method until November 30, 2015. In December 2015, we exchanged a stake in CSN Mineração for a stake in Namisa and became Namisa's majority shareholder; accordingly, we began consolidating Namisa as of December 1, 2015.

# **Operating Income**

Operating income decreased R\$3,105 million, or 61%, from R\$5,050 million in 2015 to R\$1,945 million in 2016, due to the reasons discussed above.

# Financial Income (Expenses), Net

Our financial income and expenses generated net financial expenses of R\$2,522 million in 2016 as compared to net financial expenses of R\$3,365 million in 2015. This decrease was mainly due to the appreciation of the *real* which generated a foreign exchange gain of R\$921 million in 2016 in comparison to a foreign exchange loss of R\$1,619 million in 2015, partially offset by a loss of R\$812 million in our derivatives transactions compared to a gain of R\$846 million in 2015.

# **Income Taxes**

At statutory rates, the balances resulted in a tax benefit of R\$196 million in 2016, as compared to total tax expenses of R\$573 million in 2015 (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\$266 million in 2016, as compared to an expense of R\$2,903 million in 2015. Expressed as a percentage of pre-tax income, income tax was 172% in 2015 and (46)% in 2016. For the year ended December 31, 2016, the adjustments to meet the effective rates totaled expenses of R\$462 million, comprised mainly of:

- positive R\$22 million adjustment related to equity result;
- expenses of R\$288 million related to results of subsidiaries taxed at different rates or not taxed;
- R\$(822) million adjustment related to tax loss and negative basis for which a tax credit was not recorded; and
- a positive impact of R\$644 million related to tax credits not recorded in the year.

# **Net Income (Loss) for the Year**

In 2016, we recorded a net loss of R\$853 million, as compared to a net loss of R\$1,216 million in 2015. The reasons described above explain the R\$363 million improvement.

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#### 5B. Liquidity and Capital Resources

## **Overview**

Our main uses of funds are capital expenditures and debt repayments. We have historically met these requirements with cash generated by our operating activities and through the issuance of short and long-term debt instruments. In 2017, we met our cash needs 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 2017.

In addition, we periodically review acquisition and investment opportunities and, if a suitable opportunity arises, we conduct selected acquisitions and investments to implement our business strategy. We generally make our 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 these.

# **Sources of Funds and Working Capital**

#### Cash Flows

Cash and cash equivalents decreased by R\$1,460 million in 2017, compared to a decrease of R\$2,990 million in 2016 and a decrease of R\$825 million in 2015.

#### **Operating Activities**

Cash provided by operating activities was R\$572 million in 2017 and R\$276 million in 2016. The R\$296 million variation was mainly due to the following events:

- in 2017, there was an improvement in our results, with a consolidated net income of R\$111 million, as compared to a consolidated net loss of R\$853 million in 2016;
- in 2017, our equity in results of affiliated companies had a positive impact of R\$109 million, which represented an increase of R\$44 million as compared to our equity in results of affiliated companies of R\$65 million in 2016, which increase was mainly due to better results in MRS and a decrease in accounting loss in TLSA;
- impact in monetary and exchange variations, net, mainly due to the fluctuation of the U.S. dollar exchange rate; and
- a monetary adjustment related to Eletrobrás' compulsory loan of R\$755 million; and
- a working capital variation mainly due to inventories from a 40% increase in the production of slab.

Cash provided by operating activities was R\$276 million in 2016 and R\$5,069 million in 2015. The R\$4,793 million decrease was mainly due to:

- the receipt of R\$3,239 million in dividends from Namisa in 2015, which did not occur in 2016; and
- monetary and exchange variations due to the 17% appreciation of the *real* against the U.S. dollar in 2016, as compared to the 47% depreciation of the *real* against the U.S. dollar in 2015.

These effects were partially offset by:

- a higher adjusted EBITDA of R\$4,075 million in 2016 as compared to R\$3,251 million in 2015; and
- a positive variation in working capital mainly due to the reduction of inventories from 127 days in 2015 to 97 days in 2016. In 2015, due to weak domestic demand for steel, our inventories significantly increased and we halted operation of Blast Furnace No. 02. In 2016, we destocked finished products and, despite a decrease in production, we maintained the same level of sales as in 2015.

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#### **Investing Activities**

Cash used in investing activities was R\$1,049 million in 2017, R\$2,305 million in 2016 and R\$2,865 million in 2015. The decrease of R\$1,256 million in cash used in investing activities from 2016 to 2017 was mainly due to (i) a reduction in operations with derivatives and (ii) a reduction in acquisitions of property, plant and equipment. The decrease of R\$560 million in cash used in investing activities from 2015 to 2016 was mainly due to (i) the payment of R\$2,727 million in 2015 related to the purchase of a 4.16% stake in CSN Mineração as part of the business combination between our mining assets and Namisa and (ii) the sale of Metalic in 2016 for which we received R\$332 million in net cash, which decrease was partially offset by a payment for derivatives operations of R\$722 million in 2016, as compared to a receipt from derivatives operations of R\$903 million in 2015.

#### Financing Activities

Cash used in financing activities was R\$994 million in 2017, R\$883 million in 2016 and R\$3,091 million in 2015. The increase of R\$111 million from 2016 to 2017 was mainly due to the amortization of borrowings and financings in the period. The decrease of R\$2,208 from 2015 to 2016 was mainly due to a decrease of R\$1,496 million in net amortizations and payments of R\$550 million in dividends in 2015.

#### Trade Accounts Receivable Turnover Ratio

Our trade accounts receivable turnover ratio, which is the ratio between our trade accounts receivable and our net operating revenues, measured in days of sales, decreased by one day to 34 days as of December 31, 2017, as compared to 35 days as of December 31, 2016 and 30 days as of December 31, 2015.

## **Inventory Turnover Ratio**

Our inventory turnover ratio, which we measure by dividing our inventories by our annualized cost of products sold, measured in days of cost of products sold, increased by one day to 95 days in 2017, as compared to 97 days in 2016 and 127 days in 2015.

## Trade Accounts Payable Turnover Ratio

Our trade accounts payable turnover ratio, which we measure by dividing our trade accounts payable by our annualized cost of products sold, measured in days of cost of products sold, increased by 11 days to 62 days as of December 31, 2017, as compared to 51 days as of December 31, 2016 and 52 days as of December 31, 2015.

# Liquidity Management

Given the capital intensive and cyclical nature of our industry and the generally volatile Brazilian macroeconomic environment, we retain sufficient cash on hand to run our operations and to meet our short-term financial obligations. As of December 31, 2017, cash and cash equivalents were R\$3,412 million, as compared to R\$4,871 million as of December 31, 2016 and R\$7,861 million as of December 31, 2015.

As of December 31, 2017, our short-term and long-term indebtedness accounted for 22% and 78%, 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**

We invested R\$1,025 million in 2017, in:

- the conclusion of the high intensity magnetic separator project in Casa de Pedra Mine, with the capacity to produce 1.3 million tons per year of pellet feed from central plant tailings.
- the extension of the economic life of coke batteries in the Presidente Vargas Steelworks.
- the conclusion of our carbochemical cooling water recycling project to reduce effluent discharge and demand for water.

Of our investments in 2017, R\$256 million went to spare parts and R\$601 million to current and maintenance investments.

We invested R\$1,638 million in 2016, taking advantage of opportunities to accelerate projects to enhance our competitiveness, including:

- the conclusion of the revamp of the coke oven batteries in the Presidente Vargas Steelworks, which extended the plant's economic life and productivity.
- the conclusion of the Arcos clinker kiln project in anticipation of higher operating margins in Brazil's Southeast region.

In 2017, we focused on consolidating our strategy of expansion in the cement business and prioritized the sustaining investments to maintain our operational capability and to comply with environmental and safety requirements.

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**

As of December 31, 2017 and 2016, total debt (composed of current and non-current portions of borrowings and financings) was R\$29,511 million and R\$30,441 million (excluding transactions costs), respectively, equal to 356% and 312% of the Shareholders' equity as of December 31, 2017 and 2016, respectively. As of December 31, 2017, our short-term debt (composed of current borrowings and financings, which includes current portion of long-term debt) totaled R\$6,527 million and our long-term debt (composed of non-current borrowings and financings) totaled R\$22,984 million. The foregoing amounts do not include debt of others for which we are contingently liable. See "Item 5E. Off-Balance Sheet Arrangements."

As of December 31, 2017, approximately 50% of our debt was denominated in *reais* and substantially all of the remaining balance was denominated in U.S. dollars.

In 2017, we held negotiations with our main creditors, Banco do Brasil and Caixa Econômica Federal, to extend our debt maturities initially due in 2017 and 2018. Our intention was to set an amortization schedule more consistent with our cash flow generation.

In February 2018, we renegotiated the amortization schedules of our debt with Banco do Brasil, one of our principal creditors, which debt represented approximately 24% of our aggregate consolidated indebtedness as of December 31, 2017, so as to soften the amortization profile and extend the maturity of this debt, the duration of which we increased from 26 months to 49 months. The agreement granted certain collateral to the lenders, including in the form of pledges over a portion of shares we hold in Usinas Siderúrgicas de Minas Gerais S.A., or Usiminas. We have agreed with the lenders to sell any shares pledged in the short- to medium-term, and to use the proceeds from those sales for amortization payments under the amended financings with the lenders.

See "—Liability Management" for more information. We are in similar negotiations with Caixa Econômica Federal. See "Item 3D. Risk Factors— Risks Relating to Us and the Industries in Which We Operate— The renegotiation of our indebtedness with Caixa Econômica Federal is subject to certain conditions precedent, including their final approval.

Our policy is to protect ourselves against foreign exchange losses and interest rate losses on our debt, which we do through hedge accounting. For a description of our derivative instruments, see note 12.b. to our audited consolidated financial statements included elsewhere herein.

The components of R\$6,527 million of our consolidated current portion of short-term debt and current portion of long-term debt outstanding as of December 31, 2017 were:

Commonanto	Average	Total
Components	Interest Rate	(in millions of R\$)
Fixed rate notes*	4.14% to 10%	139
BNDES/Finame	1.3% + TJLP and fixed rate of 2.5% to 6% + 1.5%	71
Prepayment financing	1% to 8% and 109.5% to 116.5% of CDI	2,581
Debentures	110.8% to 113.7% of CDI	523
CCB	112.5% and 113% of CDI	2,601
Perpetual bonds	7%	5
ACC	3.14%	379
Others	1.2% to 8.0%	228
Total		6,527

<sup>\*</sup> In February 2018, we issued US\$350.0 million in aggregate principal amount of 7.625% senior notes due 2023, the proceeds of which we used to cancel US\$203 million in aggregate principal amount of outstanding 6.875% senior notes due 2019 and US\$147 million in aggregate principal amount of outstanding 6.50% senior notes due 2020.

The components of R\$22,984 million of our consolidated long-term debt outstanding as of December 31, 2017 were (amounts are reflected in long-term debt):

Components	Average	Total
Components	Interest Rate	(in millions of $R$ \$)
Debentures	110.8% to 113.7% of CDI	771
Fixed rate notes	6.5% to 6.9%	5,612
BNDES/Finame	1.3% + TJLP and fixed rate of $2.5%$ to $6% + 1.5%$	961
Perpetual bonds	7.00%	3,308
Prepayment financing	1% - 8% and 109.5% to 116.5% of CDI	7,476
CCB	112.5% and 113% of CDI	4,693
Others	1.2% to 8.0%	163
Total		22,984

The information of our indebtness below refers to the outstanding amount in December 31, 2017.

- 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 n	naturity 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 US\$750 million bonds, 6.875% per annum coupon, issued in September 2009 with maturity in 2019.
- in July 2010, we issued US\$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 US\$200 million. The offering price was 106.00% and yield was 5.6% p.a.
- in September 2010, we issued US\$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 this debt mentioned below;
- in September 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 CSN Mineração, 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\$500 million. This amortization also is related to the rollover of this debt mentioned below;
- In February 2013, in the amount of R\$100 million, in favor of Bradesco, initially due 2016;
- In 2016, the total amount was extended to 2019;

•	n September 2015, R\$1.5 billion in favor of Banco do Brasil due 2022. This amortization also is related to the
rollov	of this debt mentioned below;

• in September 2015, R\$715 million, through our subsidiary CSN Mineração, in favor of Banco do Brasil due 2022. 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 US\$33,3 million, in favor of Banco Santander S.A., due 2017. In 2016, the total amount was extended to 2019;
- in April 2012, in the amount of US\$15 million, in favor of Banco Safra S.A., due 2017;
- in April 2013, in the amount of US\$378 million in favor of Banco do Brasil S.A., due 2021;

•	in November 2013, in the amount of US\$200 million, in favor of Banco Bradesco S.A., due 2018;
•	in November 2013, in the amount of US\$345 million, in favor of Banco Bradesco S.A., due 2022;
•	in February 2014, in the amount of US\$100 million, in favor of ING Bank, due 2019;
•	in April 2014, in the amount of US\$200 million, in favor of Banco Santander S.A., due 2019;
•	in September 2014, in the amount of US\$100 million, in favor of Banco Santander S.A., due 2019;
•	in December 2014, in the amount of US\$100 million, in favor of Bank of China, due 2020;
• 2020;	in April 2015, in the amount of US\$71 million, in favor of Caterpillar Financial Services Corporation., due
•	in July 2015, in the amount of US\$77 million, in favor of Caterpillar Financial Services Corporation, due 2020
	ontracted credit facilities from Caixa Econômica Federal, under its special credit for large companies, in the fornank credit bill, or CCB:
	on August 2009, in the amount of R\$2.0 billion and to be amortized in 172 months. In August 2015, we ized R\$1.285 billion resulting in an outstanding balance of R\$715 mm. This amortization is related to the er of R\$2.57 billion mentioned below.
	on February 2010, in the amount of R\$1.0 billion and to be amortized in 166 months. In August 2015, we ized R\$285 million resulting in an outstanding balance of R\$715 million. This amortization also is related to the ter of R\$2.57 billion mentioned below.
In 20	11, we contracted two additional CCBs:

- 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 Caixa Econômica Federal in the amount of R\$2.57 billion, and with Banco do Brasil in the amount of R\$2.21 billion, extending maturities scheduled for 2016-2017 to 2018-2022, in equally distributed installments.

In January 2012, we secured financing 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., or Grupo Gallardo, in the following companies: SWT and Gallardo Sections S.L.U.

In 2016, we contracted a credit line with FINEP to fund our innovation projects in the steel segment. The amount available from FINEP is R\$23 million due in 2026, the total amount approved by FINEP is R\$174 million and the remaining installments are expected to be available according to an investments disbursement schedule.

In September 2017, we negotiated one Advanced Exchange Contract ("ACC") for US\$54.5 million, in favor of Banco do Brasil, due in November 2017, the total amount of which we then extended to May 2018. In March 2018 we anticipated the settlement of this contract.

## Maturity Profile

The table below sets forth the maturity profile of our long-term debt as of December 31, 2017, gross of transaction costs and premiums on issuance. We have since extended our maturity profile as a result of debt issuances, debt repurchases and renegotiations in early 2018. See "—Liability Management."

Maturity in	Principal Amount
	(in thousands of R\$)
2019	7,239,968
2020	7,572,510
2021	2,228,628
2022	1,843,847
2023	176,631
After 2023	648,369
Perpetual bonds	3,308,000
Total	23.017.953

## Liability Management

In February 2018, we issued US\$350.0 million in aggregate principal amount of 7.625% senior notes due 2023, the proceeds of which we used to cancel US\$356 million in aggregate principal amount of outstanding 6.875% senior notes due 2019 and 6.50% senior notes due 2020. Additionally, we renegotiated the amortization schedules of our debt with Banco do Brasil, one of our principal creditors, which debt represented approximately 24% of our aggregate consolidated indebtedness as of December 31, 2017, so as to soften the amortization profile and extend the maturity of these financings, the duration of which we increased from 26 months to 45 months. For more information on this renegotiation, see "Item 3D. Risk Factors—Risks Relating to Us and the Industries in Which We Operate—The renegotiation of our indebtedness with Caixa Econômica Federal is subject to certain conditions precedent, including their final approval."

#### 5C. Research and Development and Innovation

Innovation is part of our essence as a pioneer in production and market solutions, always committed to quality and to the search for new initiatives to provide greater added value to our customers and stakeholders.

In 2016, we strengthened our commitment to innovative projects and processes and to energy efficiency and environmental consciousness through INOVA CSN, our initial step in our strategic innovation plan. This plan connects us to the national and international technological and scientific development environment. It also led to our development of advanced high strength steel on an industrial scale for the automotive industry, a project which was financed by the government agency FINEP.

As part of our our strategic innovation plan, we signed a partnership agreement with the Brazilian Agency for Industrial Research and Innovation (Embrapii) and Senai from Bahia state for two additional projects related to environmental responsibility: (i) development of new manufacturing routes and coating for metal sheet by direct hot stamping and (ii) development of an intelligent system for the predictive maintenance of overhead cranes.

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We also invest in intellectual property rights management, which covers branding, patents and industrial projects, in order to ensure appropriate protection and to permit technology transfer agreements.

Our total investments in research, development and innovation in 2017 were R\$18.5 million.

Following are our current projects under development:

- Advanced high strength galvanized steel dual phase DP600 grade to meet new dimensional demands;
- Advanced high strength galvanized steel ferritic-bainitic FB590 grade with thickness over 2.0 mm with cold-rolled and hot-rolled base;

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- High strength structural galvanized steel G450 grade, for the construction market with emphasis on application in storage silos;
- Pre-painted steel with new colors for the export market;
- High strength IF (interstitial free) steel, IF 210 HSS grade, galvanized (Zn-Fe Alloy GA) and pre-painted with thickness of 0.70 mm for application in fuel tanks;
- Advanced high strength galvanized steel dual phase of DP450, DP500, DP600HF (high formability), DP800 and DP1000 grades for the automotive industry;
- Press hardening galvanized steel PHS 1200/1500 GA for the automotive market;
- Development and optimization of CSN galvanized steel for the application in tubes for bus body structures;
- High strength IF (interstitial free) galvanized steel, IF 260 and 300 HS grades, for the automotive market;
- Development of textured pre-painted material for the home appliance industry;
- Development of high-strength structural steel with 55% Al-Zn coating for construction systems in general;
- High strength low alloy development as hot-rolled and hot-rolled pickled products for automotive parts and agricultural segments;
- Hot-rolled high carbon steel for clutch bearings applications;
- Hot-rolled and cold-rolled products homologation to meet Nissan's global requirements;
- Development of a new production process for high strength low alloy (HSLA420) cold-rolled steel for the automotive industry;
- Bake hardening cold-rolled steel for the automotive industry; and
- Tin plate steel for bodies of expanded cans produced by continuous annealing in substitution to batch annealing.

#### **5D. Trend Information**

#### Steel

The WSA expects that global steel demand, excluding China, will reach 882.4 million tons in 2018, which would represent a 3% as compared to 2017. The IABr estimates domestic sales will be 17.4 million tons in 2018, with apparent consumption of 20.1 million tons.

#### Mining

In 2017, the global seaborne iron ore market intensified its recovery, which started in mid-2016, with the maintenance of investments in infrastructure and civil construction in China. In addition, the closure of illegal plants with high

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pollutant emissions resulted in an increase in the utilization of steel capacity. This, together with increased demand for steel, allowed for improved margins and higher iron ore prices. The price of iron ore increased 22% in 2017, as compared to 2016 iron ore prices, and reached an average of US\$71.32/dmt (Platts, Fe62%, N. China).

#### 5E. Off-Balance Sheet Arrangements

In addition to the debt that is reflected on our balance sheet, we are contingently liable for off-balance concession payments and "take-or-pay" contractual obligations. The following table summarizes our off-balance sheet obligations:

#### Contingent Liability with Respect to Consolidated and Non-Consolidated Entities as of December 31, 2017

	Aggregate Amount	Maturity
	(In millions of	R\$)
<b>Guarantees of Debt:</b>		
Transnordestina	2,825	Until 09/19/2056 and indefinite

#### Contingent Liability for Concession Payments (amounts in thousands of R\$):

Concession	Type of service	2018	2019	2020	2021	After 2021	Total
FTL (Ferrovia Transnordestina Logística) Tecar	30-year concession granted on in December 1997, renewable for another 30 years, to develop public service and operate the railway system in northeastern Brazil; the northeastern railway system covers 4,238 km of railway network and operates in Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Alagoas and Rio Grande do Norte. Concession to operate TECAR, a solid bulk terminal, one of the four terminals that	9,069	9,069	9,069	9,069 107,296	54,414 2,789,696 <b>3</b> ,	90,690
	make up the Port						

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	at the Port of Itaguai.	147,323	147,323	147,323	147,323	2,983,419	3,572,711
TECON	of Itaguai, located in Rio de Janeiro; the concession was renewable and the agreement expires in 2047. 25-year concession started in July 2001, renewable for another 25 years to operate the container terminal	30,958	30,958	30,958	30,958	139,309	263,141

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## "Take-or-Pay" Contractual Obligations

## Payments in the period (in millions of R\$)

millions of R\$)								
Type of service	2016	2017	2018	2019	2020	2021	After 2021	Total
Transportation of iron ore, coal, coke,								
steel products, cement	873.186	957,373	877,288	877,288	854,609	732,3913	3,602,687	5,944,263
and mining products								
Supply of power, natural gas, oxygen,								
nitrogen, argon and	621,551	563,743	246,624	36,159	36,159	36,159		355,101
iron ore pellets, coal and clinker								
Processing of slag generated during pig								
iron and steel	49,487	8,880	6,012	6,012	6,012	6,012	7,515	31,563
production								
Manufacturing, repair, recovery and								
production of ingot	36,765	52,103	18,118	5,665				23,783
casting machine units	4 #00 000	. =04 000		00= 404	00 < <b>=</b> 00			
	1.580.9891	1,582,0991	1,148,042	925,1248	896,780	774,5623	3,610,2027	7,354,710

## **Guarantees of Debt**

We guarantee 100% of the loans granted by BNDES and Banco do Nordeste/BNB to TLSA and 50.97% of the debentures held by FDNE and issued by TLSA. The aggregate amount of debt outstanding under the debentures guaranteed by us as of December 31, 2017 was R\$2,217 million.

Under the TLSA Investment Agreement we and our partners, Valec and FDNE, agreed on a budget of R\$7.5 billion to complete the construction of the Northeastern Railway System II. A revised budget of approximately R\$11.2 billion is under review and up for approval by ANTT. If the construction of Northeastern Railway System II requires funds in addition to the budget, they will be provided by us or third parties under trackage right agreements.

## **Contingent Liability for Concession Payments**

#### **FTL**

As of December 31, 2017, we held 90.78% of the capital stock of FTL, which has a concession to operate the Northeastern Railway System I until 2027, renewable for an additional 30 years. As of December 31, 2017, FTL had R\$90.7 million in concession payments outstanding over the remaining 10 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, we achieved the anticipated contract renewal for 25 more years and, accordingly, the expiration date was extended from 2022 to 2047. Itaguaí Port, in turn, is connected to the Presidente Vargas Steelworks and CSN Mineração by the Southeastern railway system. Our imports of coal and coke arrive at this terminal. Under the terms of the concession, we must ship at least three million tons of bulk cargo annually and provide port service to ship two million tons of third parties' iron ore and pellets cargoes. As of December 31, 2017, R\$3,219 million was outstanding over the remaining 30 years of the concession.

#### **TECON**

We own 99.99% of Sepetiba Tecon S.A., or TECON, which holds a concession to operate, for a 25-year term (which can be renewed for a maximum of 70 years), the container terminal at Itaguaí Port, located in the state of Rio de Janeiro. As of December 31, 2017, R\$263 million of the cost of the concession was outstanding and payable over the remaining 10 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.

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#### Transportation of Iron Ore, Coal and Coke to Volta Redonda

In 2017, the volume set for iron ore and pellets was 6.8 Mkt and the volume set for coal, coke and other smelter products was 3.2 Mkt with a guarantee of payment of at least 85% of forecast annual revenue.

#### Transportation of Iron Ore for Export from Itaguaí

In 2017, the volume set for iron ore was 34.5 Mkt, with a guarantee of payment of at least 85%. We may increase by up to 10% or decrease by up to 15% the volume set in the agreement every year, considering the volume informed in the previous year.

#### Transportation of Steel Products

In 2017, the volume set for steel products was 1.7 Mkt, 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 customers.

#### **Cement Transportation**

This agreement covers transportation of bagged cement from the Presidente Vargas cement plant to our terminals. In 2017, the volume set was 633.6 Kt, with a guarantee of payment of at least 80%.

#### Ferrovia Centro Atlântica

#### Transportation of Limestone

This agreement covers transportation of limestone from the city of Arcos to the city of Volta Redonda. In 2017, the volume set for limestone was 1.8 Mkt, with 70% of performance volume guarantee.

#### Transportation of Clinker

This agreement covers transportation of clinker products from the city of Arcos to the city of Volta Redonda. In 2017, the volume was set was 660 Kt, with a guarantee of payment of at least 90%.

The calculation of "take-or-pay" contracts considers the total volume performed in clinker and limestone contracts, regardless of the percentage transported of each.

## Supply of Power, Natural Gas, Oxygen, Nitrogen, Argon and Iron Ore Pellets

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. To secure gas supply (oxygen, nitrogen and argon), in 1994, we signed a 22-year "take-or-pay" agreement with White Martins under 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 White Martins is unable to meet its financial obligations. The original term of the contract ended in November 2016; however, White Martins continues to supply gas while we negotiate a new contract.

#### 5F. Tabular Disclosure of Contractual Obligations

The following table presents our long-term contractual obligations as of December 31, 2017:

## Payment due by period

(In millions of R\$)

<b>Contractual Obligations</b>	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term accrued finance charges <sup>(1)</sup>	13,075	2,007	2,794	1,302	6,973
Taxes payable in installments	101	22	18	17	44

Long-term debt <sup>(2)</sup> "Take-or-pay" contracts Derivatives swap agreements <sup>(3)</sup>	22,984 7,355 0	0 1,148 0	14,792 1,822 0	4,064 1,513 0	4,128 2,872 0
Concession agreements <sup>(4)</sup>	3,573	147	295	295	2,836
<b>Purchase Obligations</b>					
Raw materials <sup>(5)</sup>	2,012	771	1,241	0	0
Maintenance <sup>(6)</sup>	741	462	234	44	0
Utilities/Fuel <sup>(7)</sup>	2,457	989	1,638	819	0
Total	5,210	2,222	3,113	863	0

- (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) There are no derivative swap agreement as of December 31, 2017.
- (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."

#### 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 (one of whom is the chief executive officer). In accordance with our bylaws (*estatuto social*), each director is elected for a term of two years 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 comprised one chairman and five members, and our board of executive officers was comprised of our chief executive officer and four executive officers.

Our directors and executive officers as of the date of this annual report are:

Name	Position	Age <sup>1</sup>	First Elected on	Last Elected on
Board of Directors Benjamin Steinbruch	Chairman	64	April 23, 1993	July 03, 2017
Fernando Perrone	Member	70	September 26, 2002	July 03, 2017
Fabiam Franklin	Member	50	April 28, 2016	July 03, 2017
Yoshiaki Nakano	Member	73	April 29, 2004	July 03, 2017
Antonio Bernardo Vieira Maia	Member	58	April 30, 2013	July 03, 2017
Léo Steinbruch	Member	49	April 28, 2015	July 03, 2017
Board of Executive Officers Benjamin Steinbruch	Chief Executive Officer	64	April 30, 2002	29 September, 2017
David Moise Salama	Executive Officer	51	August 2, 2011	2017

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			29 September, 2017
Luis Fernando Barbosa Martinez	Executive Officer	54 August 2, 2011	29 September, 2017
Pedro Gutemberg Quariguasi Netto	Executive Officer	52 May 11, 2016	29 September, 2017
Marcelo Cunha Ribeiro	Chief Financial and Investor Relations Officer	40 29 September, 2017	29 September, 2017

<sup>&</sup>lt;sup>1</sup>Age as of April 30, 2018.

The next election for our board of directors is expected to take place in April 2019. The next election for our board of executive officers is expected to take place in September 2019.

## **Board of Directors**

Following is a brief biography of the members of our board of directors.

Benjamin Steinbruch. Mr. Steinbruch has been a member of our board of directors since April 1993, and has held the positions of chairman since April 1995 and chief executive officer since April 2002. He is in charge of our mining, railways and institutional strategy. He has been chairman of the board of directors of the Jockey Club of São Paulo since 2017, a member of the Board of Economic and Social Development since 2014, a member of the Administrative Board of the Portuguese Chamber, First 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 Superior Court of the state of São Paulo. Over the past five years, he also served as chairman of the board of directors and chief executive officer of Vicunha Siderurgia S.A., chairman of the board of directors of Nacional Minérios S.A., Companhia Metalúrgica Prada, Transnordestina Logística S.A. and FTL - Ferrovia Transnordestina Logística S.A., as member of the Interinstitutional Advisory Board and as administrator of Haras Phillipson Ltda. (dissolved in November 2017). Currently he holds the position of vice chairman of the board of directors of Textília S.A., chairman of the board of directors of Vicunha Aços S.A., 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., Rio Iaco Participações S.A. and BS Holdings S.A. Administrator of Fazenda Alvorada de Bragança Agro-Pastoril Ltda., Ibis Agrária Ltda. and Ibis Participações e Serviços Ltda. (all these companies belong to our controlling group), chairman of the board of directors of CSN Mineração (controlled by us), and chairman of the deliberative council of the CSN Foundation. Mr. Steinbruch graduated from the Fundação Getúlio Vargas - FGV/SP Business School and specialized in marketing and finance also at Fundação Getúlio Vargas - FGV/SP.

Fernando Perrone. Mr. Perrone has been a member of our board of directors since September 2002, and a member of our audit committee since June 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 a member of the board of directors of Energia Sustentável S.A. He is chairman of the board of directors of Profarma - Distribuidora de Fármacos S.A. and member of the board of directors of João Fortes Engenharia S.A. and FTL – Ferrovia Transnordestina Logística S.A. (controlled by us), he is also a deputy member of the board of directors of Transnordestina Logítica S.A (company joint controlled by us). 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 Getúlio Vargas – FGV/SP.

Fabiam Franklin. Mr. Franklin has been a member of our board of directors since April 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*), as manager of the CSN Financial Education Program since 2008 and as general manager of steel metallurgy at CSN since June 2017. He also served as a member of the board of directors of the Brazilian Association of Metallurgy and Mining (*Associação Brasileira de Metalurgia, Materiais e Mineração*) from 2015 until 2017 and as general manager of blast furnaces at CSN from 2002 until 2017. Mr. Franklin graduated in metallurgical engineering from Universidade Federal Fluminense – UFF/RJ and holds a graduate degree in reduction metallurgy, from the –Mc Master University, Hamilton, Canada, and a master's in business administration from Fundação Dom Cabral – Belo Horizonte/MG. Mr. Franklin is currently studying for a master's degree in economics at IBMEC.

Yoshiaki Nakano. Mr. Nakano has been a member of our board of directors since April 2004, and a member of our audit committee since June 2005, serving as chairman of the audit committee since October 30, 2017. He also serves as a member of the board of directors of Transnordestina Logística S.A. (company joint controlled by us) and, over the past five years, Mr. Nakano has been a professor and Officer at the School of Economics of Fundação Getúlio Vargas –

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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 a master's in business administration and a Ph.D. from Cornell University.

Antonio Bernardo Vieira Maia. Mr. Maia was elected member of our board of directors on April 2013 and has been a member of our audit committee since August 2013, and has served as chairman of the audit committee since May 2014 to October 2017. He was also a member of our Financial Committee from October 2014 to December 2016, member of the board of directors of Transnordestina Logística S.A. (company joint controlled by us) and of FTL – Ferrovia Transnordestina Logística S.A. and CSN Mineração (controlled by us). He has also been chief executive officer of BRG Capital Ltda. Since July 2005. 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 Officer of Citibank New York. Prior to that, he worked as an associate at 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 with a degree in business and public administration from Fundação Getulio Vargas.

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Léo Steinbruch. Mr. Steinbruch has been a member of our board of directors since April 2015, and was elected as vice chairman of the board of directors in May 2016. He is also member of the board of directors of Elizabeth S.A. Indústria Têxtil, Vicunha Aços S.A. and Textília S.A. He is an executive officer at CFL Participações S.A. and at Taquari Participações S.A. (all these companies are part of our controlling group). Over the past few years, he also served as administrator of Fazenda Santa Otília Agropecuária Ltda. and as member of the board of directors of Vicunha Participações S.A. and Vicunha Steel S.A. (also companies that are part of our controlling group).

#### **Board of Executive Officers**

Following is a brief biography of the members of our board of executive offers.

Benjamin Steinbruch. See "—Board of Directors."

David Moise Salama. Mr. Salama was elected as an executive officer in August 2011, is in charge of the real estate, insurance and credit areas. He has been serving at CSN since 2006, having acted as investor relations officer. He is also currently serving as Executive Officer of Estanho de Rondônia S.A., Minérios Nacional S.A. and Companhia Florestal do Brasil and is a member of the board of directors of CSN Mineração, TECON, Itá Energética S.A., Lusosider – Aços Planos S.A., Lusosider Productos Siderúrgicos S.A., and Lusosider Ibérica. He is also a deputy member of the Deliberative Council of Caixa Beneficente dos Empregados of CSN, or CBS and deputy member of the board of directors of Transnordestina Logística S.A (a company jointly controlled by us) and FTL – Ferrovia Transnordestina Logística S.A (controlled by us). 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 a master's in business administration 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 Harvard Law School Program on Negotiation at Harvard University, United States.

Luis Fernando Barbosa Martinez. Mr. Martinez was elected as an executive officer in August 2011, and is 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, director of Nacional Minérios S.A. (which ceased to exist on December 31, 2015) and as member of the board of directors of Companhia Florestal do Brasil and Companhia Metalúrgica Prada. Mr. Martinez is also a member of the board of directors of Associação Brasileira de Metalurgia, Materiais e Mineração, or ABM, and deputy member of the board of directors of FTL - Ferrovia Transnordestina Logística and Transnordestina Logística S.A.. He is also currently serving as an Officer of Estanho de Rondônia S.A., Minérios Nacional S.A., CSN Energia, S.A. and Stahlwerk Thüringen GmbH, and as member of the board of directors of CSN Mineração (controlled by us) and chairman of the board of directors of MRS, which is jointly controlled by us, and a member of the Deliberative Council of Caixa Beneficente dos Empregados da Companhia Siderúrgica Nacional, or CBS. Since March 2017 he is also member of the board of officers of Câmara de Comércio e Indústria Brasil -Alemanha. Prior to joining CSN, Mr. Martinez was a sales officer at Alcan Alumínio do Brasil S.A., having worked at that 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, and he was president of the Brazilian Association of Steel Packaging -ABEAÇO. Recently, Mr. Martinez received the prize Prêmio Barão de Mauá – Instituto Mauá de Tecnologia as Professional and Market Highlight in 2016. Mr. Martinez graduated with a degree 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 in Montreal, Canada.

Pedro Gutemberg Quariguasi Netto. Mr. Quariguasi was elected as an executive officer in May 2016, and is in charge of the steel operational area. During the few last years, Mr. Quariguasi acted as chief executive officer of Vale in Mozambique and as Global Officer of Coal of Vale at Mozambique and 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. Previously, he was the Global Marketing Officer at Vale S.A. and chief executive officer in Manganês, he also acted in Rio Tinto and McKinsey & Co. He is also member of the board of directors of MRS, which is jointly controlled by us, and CSN Mineração (controlled by us). Mr. Guariguasi has a degree in Metallurgical Engineering from Universidade Federal Fluminense, a master's degree in Metallurgical Engineering from Pontificia Universidade Católica do Rio de Janeiro, a PhD in Metallurgical Engineering from McGill University, Canada, and a master's in business administration in Finance, Corporate Strategy and Economics from McKinsey & Company.

Marcelo Cunha Ribeiro. was elected as an executive officer in September 2017, and is in charge of the treasury, controller, tax and accounting areas and is our chief financial officer and, since March 2018, our chief investor relations officer. During the few last years, Mr. Ribeiro acted as chief financial officer of St. Marche Group, Vice President of Finance and Investor Relations of Restoque Comércio e Confecções de Roupas S.A., chief financial officer of Grupo SBF (GP Investimentos Ltd), Managing Director of the Private Equity area of GP Investimentos Ltd and chief financial officer of San Antonio International Ltd. He was also a member of the board of directors of Hopi Hari SA, Telemar Norte Leste SA (Oi S.A.), Contax Participações S.A., Estácio Participações S.A., Magnesita Refratários S.A., BR Towers SPE1 SA. Mr. Ribeiro graduated in production engineering from the University of São Paulo and has a master's in business administration from Harvard Business School.

Mr. Benjamin Steinbruch and Mr. Léo Steinbruch are cousins and members of our controlling family. There are no other family relationships among any of our directors or executive officers.

## **Indemnification of Officers and Directors**

There is no provision for or prohibition against the indemnification of officers and directors under Brazilian law or 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 covering our directors, officers and certain key employees against liabilities incurred in connection with their respective positions with us.

#### **6B.** Compensation

For the year ended December 31, 2017, the aggregate compensation paid by us to all members of our board of directors and board of executive officers for services in all capacities was R\$39.8 million, which includes salaries, bonuses, profit sharing arrangements and benefits, such as medical assistance, pension plan contributions 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**

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 shareholders. Currently, we do not have a fiscal committee in place.

In June 2005, we appointed an audit committee (*comitê de auditoria*) in compliance with SEC rules, which comprises independent members of our board of directors. Our audit committee is responsible for recommending to our board of directors the appointment of 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 our independent 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 financial statements and making recommendations to our board of directors.

Our audit committee comprises Mr. Fernando Perrone, Mr. Yoshiaki Nakano and Mr. Antonio Bernardo Vieira Maia and it may be assisted by an outside consultant. All members of our audit committee satisfy the audit committee membership independence requirements set forth by the SEC and the NYSE. All members of our audit committee have been determined by our board of directors to qualify as an "audit committee financial expert" within the meaning of the rules adopted by the SEC relating to the disclosure of financial experts on audit committees in periodic filings pursuant to the Exchange Act.

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 participating in our employee pension plan after ceasing to be directors.

#### **6D. Employees**

As of December 31, 2015, 2016 and 2017, we had 23,736 and 23,993 and 25,189 employees, respectively. As of December 31, 2017, approximately 3,700 of our employees were members of the Steelworkers' Union of Volta Redonda and region, which is affiliated with the *Força Sindical* since 2012, which is a national union. We believe we have a good relationship with *Força Sindical*. We have collective bargaining agreements, renewable annually on May 1 of every year. Moreover, we have members affiliated with other unions, such as the Engineers' Union with seven members, the Accountants' Union with one member and the Workers' Unions from Arcos, Camaçari, Recife and Araucária, with a total of 54 members. At all other companies controlled by CSN, including Prada, ERSA, CSN Mineração and Transnordestina, we have a total of 1,195 employees that are members of unions.

In March 1997, we established an employee profit sharing plan. All employees participate in this plan and earn bonuses based on our consolidated results, the results of our business units, employees' individual results and employees' competence assessments.

We are also the main sponsor of a non-profit entity, Caixa Beneficente dos Empregados da CSN, established in July 1960, which is primarily engaged in the payment of benefits that supplement the government's social security benefits to our former employees. 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 26 to our audited consolidated financial statements included elsewhere herein.

#### **6E. Share Ownership**

The Steinbruch family, which includes Mr. Benjamin Steinbruch, our chairman and chief executive officer, and Léo Steinbruch, a member of our board of directors, holds an indirect majority ownership interest in Vicunha Aços S.A., Rio Iaco Participações S.A., Vicunha Têxtil S.A. and CFL Participações S.A., our controlling shareholders.

Our executive officers and members of our board of directors directly held an aggregate of 1,526 shares of our outstanding common shares as of December 31, 2017.

#### **Item 7. Major Shareholders and Related Party Transactions**

#### 7A. Major Shareholders

As of December 31, 2017, our capital stock comprised 1,387,524,047 common shares, each of which entitles its holder to one vote at our shareholders' meetings.

The following table sets forth, as of December 31, 2017, the number of our common shares owned by our major shareholders:

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#### **Common Shares**

Name of Person or Group	Shares Owned	Percent of Outstanding Shares
Vicunha Aços S.A. <sup>(1)</sup>	682,855,454	49.21%
Rio Iaco Participações S.A. (1)	58,193,503	4.19%
Vicunha Textil S.A. (1)	4,927,000	0.36%
CFL Participações S.A. <sup>(1)</sup> 102	3,977,536	0.29%

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(1) Owned indirectly by the Steinbruch family, which includes Mr. Benjamin Steinbruch, the chairman of our board of directors and our chief executive officer, and Léo Steinbruch, a member of our board of directors.

#### 7B. Related Party Transactions

Our transactions with related parties consist 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 20 to our audited consolidated financial statements included elsewhere herein.

- i. Vicunha Aços S.A. is a holding company set up for the purpose of holding equity interests in other companies and is our main shareholder, holding 49.21% of CSN's voting shares. Rio Iaco Participações S.A., CFL Participações S.A. and Vicunha Textil S.A. are also holding companies that hold 4.29%, 0.29% and 0.36% of our common shares as of December 31, 2017, respectively.
- ii. Our commercial and financial transactions with our subsidiaries, jointly controlled entities, associates, exclusive funds and other related parties are carried out at market prices and under market conditions, based on common terms and rates applicable to third parties. For further details on these transactions, see note 18 to our audited consolidated financial statements.
- iii. We maintain relations with other unconsolidated related parties, which include CBS Previdência, Fundação CSN, Banco Fibra, Taquari Asset, Ibis Agrária Ltda, Ibis Participações e Serviços Ltda, Partifib Projetos Imobiliários Ltda, Vicunha Imóveis Ltda and Vicunha Serviços Ltda.
- iv. As disclosed in note 32 of our audited consolidated financial statements, during the first quarter of 2018 we purchased US\$23 million in agregate principal amount of 8.125% notes due 2028 issued by Banco Fibra.

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

#### 8A. Consolidated Statements and Other Financial Information

See "Item 3. Key Information—Selected Financial Data" and our audited consolidated financial statements included elsewhere herein.

## **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 counsel.

## Labor Contingencies

As of December 31, 2017, we and our subsidiaries were defendants in 8,778 labor claims, for which we recorded a provision of R\$451 million. Most of these 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,

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differences in the 40% fine on the severance pay fund (FGTS) deposits resulting from past federal government economic plans and indemnity claims resulting from other 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.

Changes in 2017 to our provisions for labor contingencies were due to the closing of certain lawsuits and our constant revision of accounting estimates in setting these provisions, which consider, among other factors, the nature of the claims involved.

#### Civil Contingencies

These are mainly indemnity claims resulting from contractual disputes and collections, claims for damages and compensation related to our commercial and industrial activities, real estate disputes and disputes for restoring health insurance. As of December 31, 2017, we had recorded a provision of R\$148 million for these civil contingencies.

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We also classify as civil contingencies the administrative and judicial proceedings filed against us for alleged violations of environmental statutes, mainly as a result of our industrial activities, claims for regularization, indemnification or imposition of fines. As of December 31, 2017, the amount relating to probable losses for civil contingencies relating to environmental issues was R\$38 million.

## Tax Contingencies

Our tax contingencies include charges for alleged non-payment of income tax and social contribution taxes in Brazil and other charges, for which we had R\$188 million recorded as of December 31, 2017.

## 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 Brazilian government, to settle certain of our tax and social security liabilities due by 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 Brazilian government, to settle the income tax (IRPJ) and the social contribution on net income (CSLL) arising from taxation of profits of foreign subsidiaries. We submitted to REFIS II our outstanding debts related to our 2004-2009 fiscal years.

Our decision to adhere to REFIS I and REFIS II took into consideration the economic benefits provided by these settlement programs, which include discounts on fines, interest and legal charges due, as well as to mitigate the high costs of maintaining pending lawsuits.

In November 2014, we adhered to the Advance Tax Payment Program established by the Brazilian government under Law 13.043/2014, which allowed for settlement of active federal debts, including debts 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 our cash account of R\$502 million and a positive result of R\$79 million in our income statement. We are currently waiting for a formal notification to be issued by the federal revenue service to consolidate the Advance Tax Payment Program.

As of December 31, 2015, we began consolidating CSN Mineração (formerly Congonhas Minérios) as successor to Namisa in our results and financial statements, including our settlement and installment payment programs. In November 2013, Namisa adhered to REFIS II. Namisa did not adhere to the Advance Tax Payment Program. As of December 31, 2017, our debt position under REFIS II was R\$62.4 million.

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#### 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 reversed the trial court's decision and confirmed 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, as the risk of loss is classified as possible.

In September 2011, we received a request from the Economic Law Secretariat of the Ministry of Legal Affairs (*Secretaria de Direito Econômico do Ministério da Justiça*), or SDE, to provide information related to the acquisition of shares of Usiminas, which later involved analysis by CADE of a concentration act. In October 2011, the SDE involved CADE and the Secretariat for Economic Monitoring (*Secretaria de Acompanhamento Econômico*), or SEAE, and we provided all requested information to them.

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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 respect to the shares already owned.

On April 10, 2014, CADE issued its decision and a Performance Commitment Agreement (*Termo de Compromisso de Desempenho*), or TCD, was executed between CADE and us. Under the terms of CADE's decision and the TCD, we must reduce our 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 as to exercise certain rights, namely 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 shareholders' meeting, we appointed two independent directors and one independent member of Usiminas' fiscal committee, as well as their respective alternates. Although the 2016 appointments are currently under litigation, there has been no judicial order overturning or otherwise suspending their effects. Since 2016, we have been unable to appoint new members to Usiminas' fiscal committee as our request in 2017 for another exception was denied by CADE. Most recently, in April 2018, our latest request for exception was denied as well by CADE.

#### Northeastern Railway System Proceedings

The Federal Audit Court (*Tribunal de Contas da União*), or TCU, initiated proceedings in April 2016 questioning the legality of the governmental authorizations for the segregation of the Northeastern Railway System into two sub-railway systems – Northeastern Railway System I (in operation by FTL) and Northeastern Railway System II (under construction by TLSA). According to the claim, the federal government should have undergone a new bidding process to grant the concession for the construction of the new tracks of the Northeastern Railway System (Northeastern Railway System II).

We are unable to anticipate the outcome of this proceeding. The consequences of an unfavorable decision may include the loss by TLSA of the concession for Northeastern Railway System II, the imposition of additional investments in developing this sub-railway system and the acceleration of loans granted to TLSA, for which we are guarantors. See "Item 5E. Off-Balance Sheet Arrangements—Guarantees of Debt." In addition, even if we are entitled to any indemnification in connection with a termination of the TLSA concession agreement for our investments in developing Northeastern Railway System II, this indemnification may be insufficient to cover our costs, expenses or losses and may be paid long after a decision terminating the concession, if at all.

In the course of this proceeding, the TCU suspended further disbursements by government agencies, including the the state-owned railway company *Valec Engenharia Contruções e Ferrovias*, or Valec, and the Northeast National Development Fund (*Fundo Nacional de Desenvolvimento do Nordeste*), or the FDNE, for the development of Northeastern Railway System II, which has adversely affected the pace of construction of the new tracks.

Additionally, in 2013, ANTT initiated proceedings claiming that FTL did not meet certain transportation targets for the Northeastern Railway System I in 2013 and seeking to terminate the TAC executed by FTL that year, which had settled all claims of non-compliance by us with the original concession agreement of the Northeastern Railway System until 2012.

This proceeding resulted in the reopening of the administrative proceeding which began in 2012 for ANTT to evaluate the occurrence of any relevant breach to FTL's concession agreement. The consequences of an unfavorable decision in this proceeding may include the loss by FTL and TLSA of the concession for Northeastern Railway System, in case ANTT finds that the alleged breaches were severe enough to warrant the reinstatement of penalties imposed prior to 2013 and imposition of additional penalties. Furthermore, in May 2017, ANTT also initiated proceedings claiming

that TLSA did not comply with some of its obligations arising from its concession agreement. This proceeding is in an early phase and there has been no decision rendered on the merits. An unfavorable decision in this proceeding may result in the same adverse consequences.

The Brazilian government created a working group comprised of various ministries in order to identify and implement alternatives to continue the Northeastern Railway System projects, which may include the settlement of the TCU and ANTT proceedings. The working group conclusion will be relevant for the TCU and ANTT judgments in the proceedings discussed above.

#### Other Legal Proceedings

We are defendants in other administrative and judicial proceedings involving claims in the aggregate amount of R\$30,639 million as of December 31, 2017 (as compared to R\$25,845 million as of December 31, 2016), of which (i) R\$27,457 million relate to tax contingencies as of December 31, 2017 (R\$23,421 million as of December 31, 2016), (ii) R\$1,210 million relate to civil contingencies as of December 31, 2017 (R\$910.8 million as of December 31, 2016), (iii) R\$1,570 million relate to labor contingencies and social security contingencies as of December 31, 2017 (R\$1,138 million as of December 31, 2016) and (iv) R\$402.4 million relate to environmental contingencies as of December 31, 2017 (R\$375.3 million as of December 31, 2016). Our legal counsel has assessed these contingencies as entailing a risk of possible loss and, therefore, no provision has been recorded for these contingencies.

#### Tax Contingencies Related to Namisa

Our main tax contingency relates to a tax assessment notice involving R\$11.074 million, as of December 31, 2017, issued against us for having allegedly failed to submit to taxation the capital gain resulting from the alleged sale of 40% of our shares in former subsidiary Namisa (merged into our subsidiary CSN Mineração as of December 31, 2015) to the Asian Consortium. In May 2017, the São Paulo regional judgment office (*Delegacia Regional de Julgamento*), which is a lower administrative court, issued a decision cancelling the tax assessment notice. This decision was reversed and the tax assessment maintained by the second level administrative court – the Administrative Board of Tax Appeals (*Conselho Administrativo de Recursos Fiscais*), or CARF. There remains a pending issue to be decided by the Superior Chamber of CARF regarding the qualified penalty. We have challenged the merits of the tax assessment before at the judicial level and obtained an injunction against any kind of immediate assessment. There is a fiscal execution by which a portion of our assets, including as buildings, equipment, land, vehicles and fixtures and furniture, has been given as a guarantee for our potential liability. Our assessment remains that our risk of loss is possible.

This same tax assessment notice resulted in another contingency issued against Namisa involving R\$2,623 million as of December 31, 2017. This tax assessment demands the payment of income tax and social contribution not paid due to allegedly improper goodwill amortization from 2008 to 2011. On May 2013, 2017, the São Paulo regional judgment office issued a decision favorable to us and cancelled the tax assessment notice, which was confirmed by CARF. After an appeal filed by the Federal Prosecutor's Office, the Superior Chamber of CARF reversed the decision and reinstated the tax assessment, but there remains a pending issue to be decided by the lower administrative authorities regarding the qualified penalty. We have also challenged the merits of the tax assessment before at the judicial level and obtained an injunction against any kind of immediate assessment.

As a consequence of this tax assessment notice, we received new tax assessment notices in December 2015 and December 2016 for R\$1,300 million and R\$1,200 million (as of December 2017), respectively, for an allegedly improper deduction of interest expenses in pre-payment contracts between us and Namisa. We filed our defense before the São Paulo regional judgment office and are waiting a final administrative decision.

#### Environmental Proceedings Related to Presidente Vargas Steelworks

In 2010, we signed a TAC with the state of Rio de Janeiro, with the commitment to carry out new studies and investments to upgrade the environmental control equipment of the power plant at Presidente Vargas Steelworks. This TAC initially estimated an investment in the amount of R\$216 million, which was later updated to R\$260 million, after obtaining more precise cost data for the project. In 2013, we signed an amendment to the TAC to, among others, include new obligations imposed by the state environmental agency (*Instituto Estadual do Ambiente*), or INEA, resulting in an additional investment of R\$165 million, which we made. Due to the final deadline of the 2010 TAC, which would end in 2015, we, the state of Rio de Janeiro and INEA entered into a new TAC in April 2016 for new

investments in the amount of R\$178.5 million related to adjustments to the power plant at Presidente Vargas Steelworks, payment of environmental fines in the amount of R\$16 million and R\$6.1 million in compensation to be allocated to environmental programs in the region of Volta Redonda. Although we believe we are in compliance with the TAC, certain obligations are under dispute with INEA, which could result in penalties, including fines, lawsuits, plant and production interruption or the termination of the TAC. During the validity of this TAC, the power plant at Presidente Vargas Steelworks has an environmental authorization to operate (*Autorização Ambiental de Funcionamento*), or AAF. The power plant at Presidente Vargas Steelworks has full authorized operation guaranteed until June 20, 2018 and we are seeking a solution for the environmental issues that have been brought up with the environmental bodies of the state of Rio de Janeiro.

#### Environmental Proceedings Related to Volta Redonda

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. 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 Environmental Public Prosecutor. We presented a timetable considering the conclusion of all studies related to our investigation, including a risk assessment and intervention plan, which were concluded in April 2014. We presented the studies resulting from our research to INEA and the Environmental Public Prosecutor claimed inconsistencies in the studies, which we rejected. As of December 31, 2017, there had been no answer from INEA. 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. Additionally, we are defendants in two criminal lawsuits related to alleged water and soil pollution in Volta Redonda and are subject to ongoing police inquiries related to alleged inappropriate air emissions, irregular effluents discharge, water and soil pollution and inadequate transportation, storage and disposal of waste.

Additionally, we are defendants in two criminal lawsuits related to alleged water and soil pollution in Volta Redonda. In the first lawsuit, Vazamento ETE, we were acquitted upon appeal, but the Public Prosecutor's Office filed a special appeal (*Recurso Especial*) to the Superior Court of Justice and an extraordinary appeal (*Recurso Extraordinário*) to the Supreme Federal Court, both of which are pending judgment. The second lawsuit is in the instruction phase at the first instance and awaiting a hearing. We are also subject to ongoing police inquiries related to alleged inappropriate air emissions, irregular effluents discharge, water and soil pollution and inadequate transportation, storage and disposal of waste.

In April 2013, INEA fined us R\$35 million in relation to Volta Grande IV Residential, in response to which we filed an annulment action in January 2014 to the Tenth Public Treasury Court of the Capital District (RJ). INEA, in response, filed a fiscal execution action in May 2014 for enforcement of the fine. The fiscal execution action is suspended until judgment is rendered in the annulment action.

In August 2013, the Federal Environmental Public Prosecutor filed a judicial civil proceeding against us based on the same claims brought up by the State Environmental Public Prosecutor of Rio de Janeiro, as described above.

In 2015, the Federal Prosecutor's Office filed a public civil action against us for the regularization of certain emissions and the stoppage of our sintering plants. According to a CONAMA resolution, we have until December 2018 to comply, which deadline we expect to meet.

Concerning other allegedly contaminated areas in Volta Redonda, the Federal Prosecutor's Office filed three public civil actions for the environmental remediation and indemnification of certain areas. These actions are in an early stage and we are conducting environmental studies to determine possible environmental damage related to soil contamination and to ensure our compliance with all applicable laws. Once we complete these environmental studies, we will present them in the context of these actions.

#### Other Environmental Proceedings

In 2016, the Federal Prosecutor's Office and the State Public Prosecutor of Rio de Janeiro filed a judicial proceeding against us regarding alleged irregular deposit of residues and claiming that we must recover degraded areas, repair damage to flora and fauna and compensate damage to human health. We have filed our defense and this proceeding remains in its initial phase.

In 2004, the Federal Prosecutor's Office filed a public civil action against us for alleged environmental contamination and pollution of the Paraíba do Sul River, allegedly caused by our industrial activity in the area. The court ruled against us and demanded that we compensate the environmental damage caused. We appealed this decision to the Superior Court of Justice, which upheld our appeal and returned the proceeding to its initial stage in order to carry out expert investigation, which are still ongoing.

In 1995, the Municipality of Volta Redonda filed a public civil action against us regarding the requirements of an environmental compensatory program. We entered into a TAC with the Municipality of Volta Redonda and, in May 2008, despite reporting our compliance with the TAC, the Municipality of Volta Redonda requested the payment of R\$16 million in outstanding obligations. After initial discussions, the Municipality of Volta Redonda filed a petition for R\$172 million, which we contested. The lower level court appointed an expert team to determine our outstanding obligations and the respective amounts involved.

We are subject to a civil investigation regarding our activities in Arcos to verify (i) the environmental requirements of our cement plant in the city of Arcos; (ii) the monitoring and mitigation of the environmental impacts of the cement plant's activities; (iii) our compliance with the conditions of our environmental permits, including the creation of a museum within the Corumbá ecological station and the creation of a private natural reserve (*Reserva Particular de Patrimonio Natural*); and (iv) our actions for the preservation of cultural heritage and compensatory measures. In February 2011, we signed a TAC to fulfill the Public Prosecutor's Office's requirements. The Public Prosecutor's Office has questioned our compliance with the TAC and we expect to enter into a new TAC.

In 2009 and 2010, we signed agreements with the Public Prosecutor's Office regarding environmental liabilities caused by coal mining in the Southern Region of Santa Catarina until the 1990s. The environmental liabilities covered by the agreements include restoration of certain areas. Our compliance with the agreement was questioned in 2015 by the Public Prosecutor's Office, who may seek to impose fines, freeze our bank accounts or initiate a criminal investigation. We are negotiating new agreements in order to extend the deadlines for this restoration.

As a result of an accident involving a Brazilian mining company in November 2015, the state of Minas Gerais filed judicial proceedings against several mining companies, including us, based on a State Dam Inventory disclosed in 2014. The state seeks to investigate structures that do not provide technical stability guaranteed by an external auditor or which stability has not been attested to.

In March 2016, a public civil action was filed against us by the state of Minas Gerais and the State Environmental Foundation questioning the stability of a small structure installed inside an industrial area and used for collection and filtration of iron ore. After showing the action was based on outdated information, the state of Minas Gerais dismissed it. In August 2016, we were notified of a similar public civil action regarding another structure of ours, Dique do Engenho. We presented documents to the state autorithies proving the stability and security of Dique do Engenho and expect that this action will also be dismissed.

In May 2017, CSN Mineração signed a TAC with the Secretary of State for the Environment and Sustainable Development (*Secretaria de Estado de Meio Ambiente e Desenvolvimento Sustentável*), or SEMAD, aiming to promote environmental adaptations in its mining treatment unit. As of December 31, 2017, CSN Mineração was in compliance with the terms of the TAC.

In June 2017, CSN Mineração signed an additional TAC with SEMAD to formalize its application for a corrective installation license, promote environmental adaptations in its reutilization of mineral goods disposed in dams, infrastructure works and temporary disposal of materials.

In October 2017, CSN Mineração entered into an agreement with the Public Prosecutor's Office of the state of Minas Gerais, agreeing to adopt certain measures, including some specified in the technical report prepared by the Public Prosecutor's Office regarding the Casa de Pedra dam complex in order to adopt measures in compliance with the emergency plan for mining dams, as well as general recommendations on the location, works, types of dams and audits of the Casa de Pedra dam complex.

## **Independent Investigation**

Following media reports about statements made as part of a plea bargain testimony in a criminal proceeding not involving us that illicit payments of R\$16.5 million were allegedly arranged by our chairman and chief executive officer and made by us in connection with the construction of the Long Steel Plant in Volta Redonda in the 2010-2014 period, in May 2017, our audit committee decided to engage external forensic specialists and legal advisors to conduct an independent investigation regarding these allegations.

The internal investigation was conducted over a seven-month period, as directed by our independent audit committee, and the specialists and advisors involved were provided access to members of our senior management, including our chairman and chief executive officer, and information and documents related to the contracts, parties and periods implicated in the allegations. In November 2017, the investigation, based on the data reviewed, concluded with no findings of misconduct by us involving the contracts and periods alleged, or any evidence of any misconduct involving the parties mentioned in the allegations. As a result, we have not recorded any contingencies in this regard.

In October 2017, we were informed that the Brazilian Federal Police, at the request of the criminal court conducting the proceedings, opened an investigation into our chairman and chief executive officer regarding the same allegations. We have not been the subject of any investigation by any governmental or enforcement agencies with respect to these allegations. Additionally, no evidence or testimony has been requested to date. Because the inquiry is at a very early stage, we cannot assure that there will not be further facts or developments related to the inquiry, or further formal or informal allegations or related investigations against us, our affiliates or any of our officers, directors or shareholders, which could materially and adversely affect our reputation or the trading price of our common shares or ADSs.

#### **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. We have 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.

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, net of withholding income tax, may be included in determining whether the statutory minimum dividend requirement has been met, subject to shareholder approval.

For dividends declared during the past five 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 for each fiscal year, either (i) the portion of the profits as may be stated in our bylaws 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.

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 our 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.

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Discretionary (or Statutory) Reserves. Under Brazilian Corporate Law, any corporation may provide in its bylaws 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 bylaws 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 bylaws 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, we may allocate the amount by which the mandatory dividend exceeds our realized net profits in a given fiscal year 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 we use this surplus 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. Our audited consolidated financial statements included elsewhere herein have been prepared in accordance with IFRS and, although our allocations to reserves and dividends are reflected in the financial statements, investors will not be able to calculate the allocations or required dividend amounts from these 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. We do not consider amounts allocated to our capital reserve 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, or 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

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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 our 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 permits.

## 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 depositary. 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 depositary for distribution to holders of ADSs.

#### Additional Payments on Shareholders' Equity

Brazilian companies are 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 shareholders' equity is calculated based on the TJLP, as determined by the Central Bank on a quarterly basis and applied to each shareholder's portion of net equity.

The TJLP is based on the annual profitability average of Brazilian public internal and external debt. The TJLP for 2017 was 7.00%.

Interest on shareholders' equity is deductible up to the greater of the following amounts: (i) 50% of our 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 profit 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 comprises common shares without par value (*ações ordinárias*) and each ADS represents one common share.

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 B3 (per common share) and the ADSs on the NYSE for the periods indicated:

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		non Shares	American Depositary Shares				
	US\$per share <sup>(1)</sup>		Volume	US\$per ADS		Volume	
	High	Low	(In thousands)	High	Low	(In thousands)	
2017							
October	3.45	2.57	10,407	3.37	2.53	3,719	
November	2.57	2.24	11,079	2.53	2.22	3,267	
December	2.53	2.22	9,178	2.52	2.17	1,948	
Fourth quarter:	3.45	2.22	10,256	3.37	2.17	3,005	
Year End	4.13	1.80	7,571	4.11	1.77	2,585	
2018							
January	3.46	2.66	12,363	3.40	2.66	4,553	
February	3.50	2.99	9,341	3.41	2.96	3,314	
March	2.98	2.49	9,759	2.93	2.46	3,154	
First quarter:	3.50	2.49	10,545	3.41	2.46	3,686	

(1) 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.

As of December 31, 2017, the closing sale price (i) per common share on the B3 was R\$8.38 and (ii) per ADS on the NYSE was US\$2.52. The ADSs are issued under a deposit agreement and JP Morgan Bank, N.A. serves as depositary under that agreement.

As of December 31, 2017, approximately US\$303.6 million, or approximately 21.88%, of our outstanding common shares were held through ADSs. Substantially all of these ADSs were held of record by The Depository Trust Company.

#### 9B. Plan of Distribution

Not applicable.

### 9C. Regulation of Securities Markets

The principal trading market for our common shares is the B3, on which they trade under the symbol "CSNA3." Our ADSs, each of which represents one common share, trade on the NYSE under the symbol "SID."

# Trading on the B3 and NYSE

In 2000, the São Paulo Stock Exchange was reorganized through the execution of memoranda of understanding by the Brazilian stock exchanges. Under the memoranda, all securities are now traded only on the São Paulo Stock Exchange, with the exception of electronically traded public debt securities and privatization auctions, which are traded on the Rio de Janeiro Stock Exchange.

In May 2008, the São Paulo Stock Exchange and the Brazilian Mercantile and Futures Exchange merged, adopting the corporate name BM&FBOVESPA – Securities, Commodities and Futures Exchange (BM&FBOVESPA S.A. – *Bolsa de Valores, Mercadorias e Futuros*), or BM&FBOVESPA. In March 2017, BM&FBOVESPA and Cetip S.A. – *Mercados Organizados* merged, creating B3 S.A. – *Brasil, Bolsa, Balcão*, or the B3. The B3 is one of the largest exchanges worldwide in terms of market value, the second largest in the Americas and the leading exchange in Latin America.

When shareholders trade in common and preferred shares on the B3, 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 second business day following the trade date. Delivery of and payment for shares are made through the facilities of the clearinghouse, *Companhia Brasileira de Liquidação e Custódia*, or CBLC.

The B3 is significantly less liquid than the NYSE or other major exchanges in the world. As of December 31, 2017, the aggregate market capitalization of the B3 was equivalent to R\$3.1 trillion and the 10 largest companies listed on the B3 represented approximately 53.1% of the total market capitalization of all listed companies. In contrast, as of December 31, 2017, the aggregate market capitalization of the NYSE was US\$28.0 trillion. Although any of the outstanding shares of a listed company may trade on the B3, in most cases fewer than half of the listed shares are actually available for trading by the public, the remainder 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."

As of December 31, 2017, we accounted for approximately 0.4% of the market capitalization of all listed companies on the B3.

# **Regulation of the Brazilian Securities Markets**

Brazilian securities markets are regulated by the CVM, which has regulatory authority over the stock exchanges and securities markets, as well as 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 markets are governed by Law No. 10,198 dated February 14, 2001, Law No. 10,303 dated October 31, 2001, or Law No. 10,303, and Law No. 10,411 dated February 26, 2002, which introduced new concepts and several changes to Law No. 6,385 dated December 7, 1976, as amended and supplemented, the principal law governing the Brazilian securities markets, through Brazilian corporation law and regulations issued by the CVM, the Brazilian National Monetary Council (Conselho Monetário Nacional), or the CMN and the Central Bank. These laws and regulations, among others, provide for disclosure requirements applicable to issuers of traded securities, criminal sanctions for insider trading and price manipulation, and protection of minority shareholders. They also provide for licensing and oversight of brokerage firms and governance of Brazilian stock exchanges. However, the Brazilian securities markets are not as highly regulated and supervised as U.S. securities markets.

Under Brazilian Corporate Law, a company is either publicly held, (companhia aberta) or privately held (companhia fechada). All listed companies are registered with the CVM and are subject to reporting and regulatory requirements.

A company registered with the CVM may trade its securities either on the B3 or in the Brazilian over-the-counter market. Shares of companies listed on the B3 may not simultaneously trade on the Brazilian over-the-counter market. The shares of a listed company may also be traded privately, subject to several limitations. To be listed on the B3, a company must apply for registration with the B3 and the CVM.

The trading of securities on the B3 may be halted at the request of a company in anticipation of a material announcement. Trading may also be suspended on the initiative of the B3 or the CVM, among other reasons, based on or due to a belief that a company has provided inadequate information regarding a significant event or has provided inadequate responses to inquiries by the CVM or the B3.

According to Law No. 6,385, dated December 7, 1976, a publicly held company must submit to the CVM and the B3 certain periodic information, including annual and quarterly reports prepared by management and independent auditors. This law also requires companies to file with the CVM shareholder agreements, notices of shareholders' meetings and copies of the related minutes.

Pursuant to CVM Resolution No. 358, as amended, the CVM revised and consolidated its requirements regarding the disclosure and use of information related to material facts and acts of publicly held companies, including the disclosure of 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, shareholder and management resolutions or any other facts related to a company's business (whether occurring within the company or otherwise 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 material, which include, among others, the execution of agreements providing for a transfer of control, the entry or withdrawal of shareholders that provide any managing, financial, technological or administrative function 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 company'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 its 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, or CVM Rule No. 480, the CVM expanded the quantity and improved the quality of information required to be reported by issuers in Brazil. This rule provides the market with greater transparency and requires issuers to file annually a comprehensive reference form (*Formulário de Referência*). The reference form is in line with the shelf registration system recommended by the International Organization of Securities of Commissions (IOSCO) through which information is consolidated and subject to periodic update.

The CVM also enacted Rule No. 481, dated December 17, 2009, as amended, 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 the exercise of voting rights. The rule aims to (i) improve the quality of information disclosed by publicly held companies to shareholders and to the market in general, favoring the use of the Internet; (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 (iii) facilitate snareholder oversight of companies.
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 Brazilian 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 directly or indirectly related to this purpose, including: mining, cement and carbochemical business activities, the manufacture and assembly of metallic structures, construction, transportation, navigation and port activities; the generation, management and commercialization of energy; and the participation in the capital of other national or international companies.

## **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 an aggregate amount is fixed, our board of directors is responsible for the allocation. 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 incorporated herein by reference.

# Capital Stock

As of December 31, 2017, our capital stock comprised 1,387,524,047 common shares. Our bylaws authorize our board of directors to increase our capital stock to 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 its 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.

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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 Folha de São Paulo – Edição Regional*, at least 15 days prior to the scheduled meeting date and no fewer than three times (in accordande with CVM Instructions No. 599/2015, our shareholder's meeting must be convened 30 days prior to the scheduled meeting). 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 us, 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 our 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).

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## 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 in 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 B3 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 B3 (through a Brazilian institution duly authorized to operate by the Central Bank and having a clearing account with the B3). The fact that those common shares are held in the custody of the B3 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 B3 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. 4,373 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) any direct or indirect acquisition or disposition of shares that exceeds, up or down, the levels of 5%, 10%, 15% and so on of any class of capital stock of a listed company; (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.

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#### 10C. Material Contracts

None.

#### 10D. Exchange Controls

There are no restrictions on ownership or voting of our common shares by individuals or legal entities headquartered or 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 CMN.

According to Resolution No. 4,373, dated September 29, 2014, of the CMN, or Resolution 4,373, foreign investors may participate in almost all financial assets and engage in almost all transactions available in the Brazilian market, provided that certain requirements are fulfilled. Resolution 4,373 defines foreign investors as individuals and legal entities, mutual funds and others collective investment entities headquartered or domiciled outside Brazil. In accordance with Resolution 4,373 the foreign investor must:

- indicate at least one representative in Brazil, with powers to practice all the actions relating to its investments;
- complete the foreign investor registration form;
- register as a foreign investor before the CVM, and register its foreign investment before the Central Bank; and
- appoint a custodian, duly licensed by the Central Bank, if the Brazilian representative is not a financial institution.

Resolution 4,373, specifies the manner of custody and the permitted means for trading securities held by foreign investors. The offshore transfer or assignment of securities or other financial assets held by foreign investors pursuant to Resolution 4,373 is prohibited, except for transfers resulting from a corporate reorganization, or occurring upon the death of an investor by operation of law or will.

Resolution 4,373 also provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. It provides that (i) proceeds from the sale of ADSs by holders of ADRs outside Brazil are not subject to Brazilian foreign investment controls and (ii) holders of ADSs who are not residents of a low-tax jurisdiction (*país com tributação favorecida*), as defined by Brazilian law, will be entitled to favorable tax treatment.

A certificate of registration has been issued in the name of JP Morgan Chase Bank, N.A., as our ADR depositary, and is maintained by the *Itaú Corretora de Valores S.A.*, our ADR custodian, on behalf of our ADR depositary. Pursuant to the certificate, our ADR custodian and our ADR depositary 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 depositary'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 before the CMN, 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."

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. 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 Brazilian and U.S. federal income 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 depositary 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. Additionally, no assurance can be given that the countries will continue to accept this offset.

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 4,373, of September 2014, of the National Monetary Council (a "4,373 Holder").

## Taxation of Dividends and Interest on Shareholders Equity

Dividends, including stock dividends and other dividends, paid by us (i) to our ADSs depositary 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, 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 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):

- are exempt, when realized by a Non-Resident Holder that (i) is a 4,373 Holder and (ii) is not resident or domiciled in a Tax Haven Jurisdiction;
- are subject to income tax at a rate of 15% in case of gains realized by (A) a Non-Resident Holder that (i) is not a 4,373 Holder and (ii) is not resident or domiciled in a Tax Haven Jurisdiction; or (B) a Non-Resident Holder that (i) is a 4,373 Holder and (ii) is resident or domiciled in a Tax Haven Jurisdiction; and
- are subject to income tax at a rate of 25% in case of gains realized by a Non-Resident Holder that (i) is not a 4,373 Holder and (ii) is resident or domiciled in a Tax Haven Jurisdiction.

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.

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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 4,373 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 rates varying from 15% to 22.5%, depending on the total amount of gains within the same fiscal year (see table below) 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 4,373 Holder; and
- are subject to income tax at a rate of 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 4,373 Holder.

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The capital gains rates described above, varying from 15% to 22.5%, shall be determined according to the following table:

Capital Gains Tax Rate Threshold (total gains on the sale of the same rights within a fiscal year)

15% Total gains below R\$5 million

**17.5**% Total gains above R\$5 million, but below R\$10 million **20**% Total gains above R\$10 million, but below R\$30 million

22.5% Total gains above R\$30 million

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. 4,373, 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 common 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.

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

Taxation of Dividends 239

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.

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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.

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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.

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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.

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.

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 US\$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 <a href="http://www.sec.gov">http://www.sec.gov</a>. 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 applicable.

#### 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 or commodities prices could adversely affect the value of our financial assets, liabilities, expected future cash flows or earnings. We maintain policies aimed at managing our exposure to these market risks. We may use financial instruments, such as derivatives, in order to achieve the main goals established by our board of directors to minimize our cost of capital and maximize our returns on financial assets, while observing credit and risk parameters, as determined by our board of directors. Derivatives are contracts whose value derives from one or more underlying financial instruments, indexes or prices defined in the contract. We only use well-understood and conventional derivative instruments 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 internal controls in order to:

understand market risks;

reduce our probability of financial losses; and

reduce the volatility of our financial results.

The principal tools used by our treasury department are:

Sensitivity Analysis. This 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.* This 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.

Following is a discussion of the primary market risk exposures that we face together with an analysis of our exposure to each one.

## **Interest Rate Risk**

We are exposed to interest rate risk on short- and long-term instruments as a result of refinancing of fixed-rate instruments included in our consolidated debt. Consequently, in addition to managing the currency and maturity of our debt, we manage interest costs through a balance between floating rate debt, which has inherently higher risk, and fixed-rate debt. We can use derivatives to achieve the desired ratio between floating-rate debt and fixed-rate debt, which ratio varies according to market conditions.

We are 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) and our cash position held offshore in U.S. dollars, which is invested in short-term instrument;

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.

Maturities

				IVI	aturiti	es	
Exposure as of December 31, 2017*	Notional amount	2018	2019	2020	2021	2022	Thereafter
(amortization)							
U.S. dollar LIBOR	4,845	747	1,655	1,674	541	228	-
U.S. dollar fixed rate	8,920	-	2,238	3,374	-	-	3,308
CDI	13,551	4,708	3,178	2,361	1,627	1,557	120
Euro fixed rate	285	95	95	95	-	-	-
TJLP	1,025	67	72	66	58	57	705
Other	541	531	3	3	3	1	-

				M	aturities		
Exposure as of							
December 31, 2016*	Notional amount	2017	2018	2019	2020	2021	Thereafter
(amortization)							
U.S. dollar LIBOR	5,277	505	735	1,630	1,649	533	225
U.S. dollar fixed rate	8,788	-	-	2,205	3,324	-	3,259

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CDI	14,431	880	4,708	3,178	2,361	1,627	1,677
Euro fixed rate	332	83	83	83	83	-	-
TJLP	1,070	62	59	71	65	58	755
Other	31	16	8	2	2	2	1

<sup>\*</sup>All figures in millions of *reais*.

Our cash and cash equivalents were as follows:

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	<b>December 31, 2017</b>	<b>December 31, 2016</b>	Exposure
Cash in reais:	842	1,899	CDI
Cash in U.S. dollars:	781	925	LIBOR

The following table sets forth the average interest rate and the average term of our debt:

	As of Dec	ember 31, 2017	As of December 31, 2016		
	Average rate %	Average life	Average rate %	Average life	
U.S. dollar LIBOR	5.04	2.09	4.74	2.84	
U.S. dollar fixed rate	6,65	12.12 (with	6.76	13.58 (with	
o.s. donar macu rate	0,03	perpetual bond)	0.70	perpetual bond)	
Euro fixed rate	3.88	1.09	3.88	1.59	
Real Fixed	4.5	2.55	8.00	1.06	
CDI	112.69% of CDI	2.17	112.63% of CDI	3.07	
TJLP Spread	1.30	7.63	1.30	8.98	

We may conduct U.S. dollar futures operations on the B3 to ensure the forward purchase or sale of U.S. dollars, which are settled by the difference in contracted R\$/US\$ buy or sell parity against the R\$/US\$ sell or buy parity, defined by the future U.S. dollar contracts traded on the B3 with daily adjustments and exchange swap agreements. The main purpose of these operations is 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 U.S. dollar exchange and CDI fluctuations. The following tables set forth the duration of our U.S. dollar and fixed-rate derivatives:

#### **December 31, 2017**

(In millions, unless otherwise indicated)	Functional Currency	Notional Amount	Average Interest	Average Maturity (days)
DI future	Real	-	-	-
Hedge accounting of export	U.S. Dollar	1,318	-	
Hedge accounting net investment	Euro	72	-	
CDI-to-fixed rate interest rate swap	Real		-	
Fixed rate-to-CDI interest rate swap December 31, 2016	Real		-	

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(In millions, unless otherwise indicated)	Functional Currency	Notional Amount	Average Interest	Average Maturity (days)
DI future	Real	1,641	-	2
Hedge accounting of export	U.S. Dollar	1,458	-	
Hedge accounting net investment	Euro	96	-	
CDI-to-fixed rate interest rate swap	Real	-	-	-
Fixed rate-to-CDI interest rate swap	Real	-	-	-

# Foreign Currency Exchange Rate Risk

Fluctuations in exchange rates can have significant effects on our operating results. They affect the value of our *real*-denominated assets, the carrying and repayment costs of our *real*-denominated financial liabilities, our *real*-denominated production costs, the cost of *real*-denominated capital items and the prices we receive in the Brazilian market for our finished steel products. We attempt to manage our net foreign exchange rate exposures, trying to balance our non-*real* denominated assets with our non-*real* denominated liabilities and using derivative instruments to match them. However, at any given time we may have significant foreign currency exchange rate risk exposure.

Our exposure to the U.S. dollar is due to the following contract categories:

- U.S. dollar-denominated debt;
- offshore cash;
- currency derivatives;
- U.S. dollar indexed accounts payable and receivable (usually related to international trade, i.e., imports and exports); and
- offshore investments, which comprise assets purchased offshore and denominated in U.S. dollars on our balance sheet.

	<b>December 31, 2017</b>	<b>December 31, 2016</b>
U.S. dollar liabilities		
Loans and financing	4,333	4,373
Trade accounts payable	97	97
Intercompany loans	0	0
Others	4	18
Total liabilities	4,434	4,488
U.S. dollar assets		
Offshore cash and cash equivalents	777	914
Guarantee margin	-	-
Trade accounts receivable	311	373
Advances to suppliers	-	-
Intercompany loans	0	0
Other	3	4
Total assets	1,091	1,290
Total U.S. dollar exposure	(3,343)	(3,198)
Cash flow – hedge accounting	1,318	1,458
Total U.S. dollar net exposure	(2,025)	(1,740)
Perpetual bonds	1,000	1,000

Total U.S. dollar net exposure, excluding perpetual bonds

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(1,025)

**(740)** 

Our exposure to the euro is due to the following contract categories:

- euro-denominated debt;
- offshore cash;
- euro indexed accounts payable and receivable (usually related to international trade, i.e., imports and exports); and
- offshore investments: assets that we bought offshore and that are denominated in euros on our balance sheet.

	<b>December 31, 2017</b>	<b>December 31, 2016</b>
Euro liabilities		
Loans and financing	73	98
Trade accounts payable	2	2
Others	3	9
Total liabilities	78	109
Euro assets		
Offshore cash and cash equivalents	3	6
Trade accounts receivable	3	3
Intercompany loans	-	-
Advances to suppliers	-	-
Other	4	13
Total assets	9	23
Total euro exposure	(69)	(86)
Derivative notional	0	0
Investment – hedge accounting	72	96
Perpetual bonds	-	-
Total euro net exposure, excluding perpetual	3	10
bonds		

# **Offshore Investments**

We have capitalized our offshore subsidiaries domiciled in U.S. dollar-based countries with equity investments, and those investments are accounted as U.S. dollar investments. The result is that they work as assets indexed to the U.S. dollar from an earnings perspective.

# **Commodity Price Risk**

Fluctuations in the price of steel, iron ore and some of the commodities used in producing steel, such as zinc, aluminum, tin, coal, coke and energy, can have an impact on our earnings. We do not currently hedge our exposure to commodity price fluctuations.

Offshore Investments 255

# **Sensitivity Analysis**

In the Brazilian macroeconomic environment, exchange rate variation is the most significant market risk we face.

The U.S. dollar/*real* exchange had an annual volatility of approximately 23% from 2013 to 2017. For more information, see "Exchange Rates."

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Sensitivity Analysis 256

# Sensitivity Analysis of Derivative Financial Instruments and Foreign Exchange Exposure

Scenarios 1 and 2 represent 25% and 50% appreciation of the foreign currency, using the respective closing selling rate as of December 31, 2017, as reported by the Central Bank, as a benchmark.

The currencies used in the sensitivity analysis and the respective scenarios are as follows:

Currency	Exchange rate	Problable	Scenario 1	December 31, 2017 Scenario 2
		scenario		
U.S. dollar to real	3.3080	3.2381	4.1350	4.9620
Euro to real	3.9693	4.0295	4.9616	5.9540
				December 31, 2017
Interest	Interest rate	Scenario 1	Scenario 2	
CDI	6.89%	8.61%	10.34%	
TJLP	7.0%	8.75%	10.50%	
LIBOR	1.84%	2.30%	2.76%	

Set forth below are the effects on our income statement of scenarios 1 and 2:

Instruments	Notional amount	Risk	Probable scenario (*)	Scenario 1	Scenario 2
Hedge accounting of exports	1,317,667	U.S. dollar	(92,105)	1,089,711	2,179,422
Exchange position functional currency (not including exchange derivatives above)	(3,343,057)	U.S. dollar	233,680	(2,764,708)	(5,529,416)
Consolidated exchange position (including exchange derivatives above)	(2,025,390)	U.S. dollar	141,575	(1,674,997)	(3,349,994)
Hedge accounting net investment	72,000	Euro	4,334	71,447	142,864
Exchange position functional currency (not including exchange derivatives above)	(69,203)	Euro	(4,166)	(68,672)	(137,344)
Consolidated exchange position	2,797	Euro	168	2,775	5,550
(including exchange derivatives above)	<b>=</b> ,///	Luio	100	2,770	2,220

(\*) We calculated the probable scenario considering the following variations: 2.11% appreciation of the *real* against the U.S. dollar and 1.52% depreciation of the *real* against the euro.

Source: Central Bank as of February 16, 2018.

# **Sensitivity Analysis of Changes in Interest Rates**

Scenarios 1 and 2 represent 25% and 50 %, respectively, interest volatility growth as of December 31, 2017.

#### **Impact on profit or loss**

(in thousands of reais)

Changes in interest rates	% p.a	Assets	Liabilities	Probable scenario (*)	Scenario 1	Scenario 2
TJLP	7.00		(1,003,712)	(3,202)	(17,565)	(35,130)
Libor	1.84		(4,844,105)	(44,657)	(22,247)	(44,494)
CDI	6.89	644,525	(13,550,383)	(206,061)	(222,303)	(444,606)

<sup>(\*)</sup> This sensitivity analysis assumes a probable scenario of interest rates as of December 31, 2017, as recorded in our assets and liabilities

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#### **Market Price Risk of Our Common Shares**

We are exposed to the risk of changes in the market price of our common shares due to investments made and investments classified as available-for-sale.

#### Item 12. Description of Securities Other Than Equity Securities

### American Depositary Shares

JP Morgan Chase Bank, N.A. serves as the depositary for our ADSs. ADR holders are required to pay various fees to the depositary, and the depositary may refuse to provide any service for which a fee is assessed until the applicable fee has been paid.

ADR holders are required to pay the depositary amounts in respect of expenses incurred by the depositary or its agents on behalf of ADR holders, including expenses arising from compliance with applicable law, taxes or other governmental charges, facsimile transmission or conversion of foreign currency into U.S. dollars.

ADR holders are also required to pay additional fees for certain services provided by the depositary, as set forth in the table below.

**Depositary service** 

Issuance and delivery of ADRs, including in connection with share distributions or stock splits

Deposit of securities, including in respect of share, rights and other distributions

Withdrawal of deposited securities

Fee payable by ADR holders

US\$5.00 for each 100 ADSs (or portion thereof)

US\$5.00 for each 100 ADSs (or portion thereof)

US\$5.00 for each 100 ADSs (or portion thereof)

# **Direct and Indirect Payments by the Depositary**

The depositary reimburses us for certain expenses we incur in connection with the ADR program, subject to a ceiling agreed between us and the depositary from time to time. These reimbursable expenses currently include legal and accounting fees, listing fees, investor relations expenses and fees payable to service providers for the distribution of material to ADR holders. For the year ended December 31, 2017, such reimbursements totaled US\$1 million.

#### Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modification to the Rights of Security Holders and Use of Proceeds

None.

## **Item 15. Controls and Procedures**

## **Disclosure Controls and Procedures**

We carried out an evaluation, under the supervision of our chief executive officer and chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our chief executive officer and chief financial officer have concluded that as of December 31, 2017 CSN's disclosure controls and procedures are effective. The material weakness previously reported on management's annual assessment of internal control over financial reporting as of December 31, 2016 was remediated during the year.

# Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting.

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Our internal control over financial reporting is a process designed under the supervision of our chief executive officer and chief financial officer and our audit committee and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with IFRS.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS and that our receipts and expenditures are being made only in accordance with the authorization of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect material misstatements on a timely basis. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "Internal Control - Integrated Framework," issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission (2013). Based on this assessment, we concluded that our internal control over financial reporting is effective as of December 31, 2017.

# **Changes in Internal Control over Financial Reporting**

Other than the changes resulting from the material weakness discussed below, there have been no changes in our internal control over financial reporting that occurred during the period covered by this annual report that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

In order to prevent the occurrence of deficiencies related to our monitoring process and management review controls that were not adequately designed and/or implemented on complex, non-routine or infrequent transactions identified in 2016, our management took the necessary measures to remediate the material weakness. In this context, the key accounting and financial planning personnel held technical discussions and debates on sensitive aspects of valuation techniques and assumptions necessary in the preparation of fair value measurements and cash flows projections as well reviewed and discussed policies and accounting aspects as well as adherence to the accounting pronouncements to ensure our accounting decisions were fully compliant with the authoritative guidance of accounting. We also strengthened the documentation on internal communication to ensure the adequate formalization of our monitoring process and management review controls.

This material weakness identified for the year ended December 31, 2016 concerning our monitoring process and management review controls, mentioned above, was remediated during 2017 and no longer is a material weakness.

# **Attestation Report of the Independent Registered Public Accounting Firm**

Grant Thornton Auditores Independentes, our independent registered public accounting firm, concluded that, as of December 31, 2017, our internal control over financial reporting is effective. The material weakness previously reported in management's annual assessment of internal control over financial reporting as of December 31, 2016 has been remediated and is no longer a material weakness. For Grant Thornton Auditores Independentes' report dated April 30, 2018, see our audited consolidated financial statements included elsewhere herein.

# Item 16. [Reserved]

# 16A. Audit Committee Financial Expert

After reviewing the qualifications of the members of our audit committee, our board of directors has determined that all three members of our audit committee qualify as an "audit committee financial expert," as defined by the SEC. In addition, all of the members of our audit committee meet the applicable independence requirements both under Brazilian Corporate Law and under the NYSE rules.

Our audit committee is may be assisted by a consultant, who renders financial and consulting services, among others, to the members of our audit committee.

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## 16B. Code of Ethics

We adopted a Code of Ethics in 1998, reinforcing our ethical standards and the values that apply to all of our employees, including executive officers and directors.

Our Code of Ethics was updated in 2015 and in February 2016 copies were distributed to each employee of the organization, to the members of our board of directors and our audit committee, each of who signed a commitment letter, reinforcing their dedication to our established values.

In our governance structure, the compliance area is responsible for our integrity program, which aims to ensure compliance with ethical standards of conduct and transparency. This program includes continuous training for our employees and employees of our third parties, and also monitoring of compliance with laws, regulations, policies and internal standards.

There was no amendment to or waiver from any provision of our Code of Ethics in 2017. Our Code of Ethics is in compliance with the SEC requirements for codes of ethics for senior financial officers. A copy of our Code of Ethics is available on our website at <a href="https://www.csn.com.br.www.csn.com.br">www.csn.com.br</a>.

# 16C. Principal Accountant Fees and Services

Our interaction with our independent auditors with respect to the contracting of services unrelated to the external audit is based on principles that preserve the independence of the auditors and are otherwise permissible under applicable rules and regulations. For the fiscal year ended December 31, 2017, Grant Thornton Auditores Independentes acted as our independent auditor, while for the fiscal years ended December 31, 2016 and 2015, our independent auditor was Deloitte Touche Tohmatsu Auditores Independentes.

The following table sets forth the services rendered and the related fees:

	Year Ended December 31,	
	2017	2016
	(in thousands of reais)	
Audit fees	5,889	8,719
Audit – related fees	354	-
Tax fees	-	-
Total	6,243	8,719

## **Audit Fees**

Audit fees in 2017 and 2016 consisted of the aggregate fees billed and billable by our independent auditors in connection with the audit of our consolidated financial statements, reviews of interim financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements.

## **Audit-Related Fees**

In 2017, audit-related fees in the above table are fees billed and billable by our independent auditors for services that are reasonably related to the performance of the audit or review of our financial statements. In 2016, there were no audit-related fees provided by our independent auditors.

Services additional to the examination of the financial statements are submitted for prior approval to our audit committee in order to ensure that they do not represent a conflict of interest or affect the auditors' independence.

## **Tax Fees**

In 2017 and 2016, there were no fees for tax services provided by our independent auditors.

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Audit-Related Fees 264

# 16D. Exemptions from the Listing Standards for Audit Committees

We are in full compliance with the listing standards for audit committees pursuant to Exchange Act Rule 10A-3. For a discussion on our audit committee, see "Item 6. Directors, Senior Management and Employees—Board Practices—Fiscal Committee and Audit Committee."

# 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In 2015, in accordance with the limits and provisions of CVM Instruction No. 10/80, our board of directors approved various share buyback programs with the purpose of holding shares in treasury for subsequent disposal or cancellation. In 2017, we maintained 30,391,000 shares in treasury.

Program	Board's	Authorized	Program Period	Number	Shares	Balance in
	Authorization	Quantity		Bought Back	Cancellation	Treasury
1 <sup>st</sup>	03/13/2014	70,205,661	03/14/2014	2,350,000		2,350,000
			04/14/2014			
2 <sup>nd</sup>	04/15/2014	67,855,661	04/16/2014	9,529,500		11,879,500
			05/23/2014			
3rd	05/23/2014	58,326,161	05/26/2014	31,544,500		43,424,000
			06/25/2014			
4 <sup>th</sup>	06/26/2014	26,781,661	06/26/2014	26,781,661		70,205,661
			07/17/2014			
	07/18/2014				60,000,000	10,205,661
5 <sup>th</sup>	07/18/2014	64,205,661	07/18/2014	240,400		10,446,061
			08/18/2014			
	08/19/2014				10,446,061	
6 <sup>th</sup>	08/19/2014	63,161,055	08/19/2014	6,791,300		6,791,300
			09/25/2014			
7 <sup>th</sup>	09/29/2014	56,369,755	09/29/2014	21,758,600		28,549,900
			12/29/2014			
8 <sup>th</sup>	12/30/2014	34,611,155	12/31/2014	1,841,100		30,391,000
			03/31/2015			
9th	03/31/2015	32,770,055	04/01/2015	0		30,391,000
			06/30/2015			

In April 2018, we sold 22,981,500 shares that we held in treasury at an average price of R\$7.86 per share, equivalent to R\$181 million. We sold these shares at an average price of R\$9.29 per share, totaling cash inflows in the amount of R\$213 million. We recognized the surplus of R\$32 million between the sale price of the shares and their purchase price in our capital reserve.

# 16F. Change in Registrant's Certifying Accountant

On December 7, 2017, our Board of Directors approved the appointment of Grant Thornton Auditores Independentes, or GT, which was effective upon completion of the audit for the year ended December 31, 2016, to act as our independent registered public accounting firm to audit our consolidated financial statements for the fiscal year ended

December 31, 2017. During the two most recent fiscal years and any subsequent interim periods we did not consult our newly engaged public accounting firm, including regarding those as prescribed in Item 16F (a)(2)(i) and Item 16F (a)(2)(ii) of Form 20-F.

Deloitte's audit report dated December 22, 2017, on the effectiveness of our internal control over financial reporting as of December 31, 2016, expressed an adverse opinion related to the following material weakness: we did not maintain effective internal controls over our monitoring process and management review controls on complex, non-routine or infrequent transactions.

# 16G. Corporate Governance

# Significant Differences between our Corporate Governance Practice and NYSE Corporate Governance Standards

We are subject to the NYSE corporate governance listing standards. As a foreign private issuer, the standards applicable to us are considerably different than the standards applied to U.S. listed companies. Under the NYSE rules, we are required only to: (i) have an audit committee or audit board, pursuant to an applicable exemption available to foreign private issuers, that meets certain requirements, as discussed below, (ii) provide prompt certification by our chief executive officer of any material non-compliance with any corporate governance rules and (iii) provide a brief description of the significant differences between our corporate governance practices and the NYSE corporate governance practices required to be followed by U.S. listed companies. The discussion of the significant differences between our corporate governance practices and those required of U.S. listed companies follows below.

## Majority of Independent Directors

The NYSE rules require that a majority of the board of directors consist of independent directors. Independence is defined by various criteria, including the absence of a material relationship between the director and the listed company. Brazilian law does not have a similar requirement. Under Brazilian law, neither our board of directors nor our management is required to test the independence of directors before their election to the board. However, both Brazilian Corporate Law and the CVM have established rules that require directors to meet certain qualification requirements and that address the compensation and duties and responsibilities of, as well as the restrictions applicable to, a company's executive officers and directors. While our directors meet the qualification requirements of Brazilian Corporate Law and the CVM, we do not believe that a majority of our directors would be considered independent under the NYSE test for director independence. Brazilian Corporate Law requires that our directors be elected by our shareholders at an annual shareholders' meeting.

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#### Executive Sessions

NYSE rules require that the non-management directors meet at regularly scheduled executive sessions without management present. Brazilian Corporate Law does not have a similar provision. According to Brazilian Corporate Law, up to one-third of the members of our board of directors can be elected from management. Mr. Benjamin Steinbruch, our chief executive officer, is also the chairman of our board of directors. There is no requirement that non-management directors meet regularly without management. As a result, the non-management directors on our board of directors do not typically meet in executive sessions without management present.

## Nominating and Corporate Governance Committee

NYSE rules require that listed companies have a nominating and corporate governance committee composed entirely of independent directors and governed by a written charter addressing the committee's required purpose and detailing its required responsibilities, which include, among others, identifying and selecting qualified board member nominees and developing a set of corporate governance principles applicable to the company. We are not required under Brazilian Corporate Law to have, and currently we do not have, a nominating and a corporate governance committee.

### Compensation Committee

NYSE rules require that listed companies have a compensation committee composed entirely of independent directors and governed by a written charter addressing the committee's required purpose and detailing its required responsibilities, which include, among others, reviewing corporate goals relevant to the chief executive officer's compensation, evaluating the chief executive officer's performance, approving the chief executive officer's compensation levels and recommending to the board non-chief executive officer compensation, incentive compensation and equity-based plans. We are not required under applicable Brazilian law to have, and currently do not have, a compensation committee. Under Brazilian Corporate Law, the total amount available for compensation of our directors and executive officers and for profit-sharing payments to our executive officers is established by our shareholders at the annual shareholders' meeting. The board of directors is then responsible for determining the individual compensation and profit-sharing of each executive officer, as well as the compensation of our board and committee members.

#### Audit Committee

NYSE rules require that listed companies have an audit committee that (i) is composed of a minimum of three independent directors who are all financially literate, (ii) meets the SEC rules regarding audit committees for listed companies, (iii) has at least one member who has accounting or financial management expertise and (iv) is governed by a written charter addressing the committee's required purpose and detailing its required responsibilities. However, as a foreign private issuer, we need only to comply with the requirement that the audit committee meet the SEC rules regarding audit committees for listed companies to the extent compatible with Brazilian Corporate Law. We have established an audit committee, which is equivalent to a U.S. audit committee, and provides assistance to our board of directors in matters involving our accounting, internal controls, financial reporting and compliance. Our audit committee recommends the appointment of our independent auditors to our board of directors and reviews the compensation of, and coordinates with, our independent auditors. They also report on our auditing policies and our annual audit plan prepared by our internal auditing team. Our audit committee evaluates the effectiveness of our internal financial and legal compliance controls and is comprised of up to three independent directors elected by our board of directors for two-year terms. The current members of our audit committee are Fernando Perrone, Yoshiaki Nakano and Antonio Bernardo Vieira Maia. All members of our audit committee satisfy the audit committee

membership independence requirements set forth by the SEC and the NYSE. All members of our audit committee have been determined by our board of directors to qualify as an "audit committee financial expert" within the meaning of the rules adopted by the SEC relating to the disclosure of financial experts on audit committees in periodic filings pursuant to the Exchange Act. For further information on our audit committee, see "Item 6. Directors, Senior Management and Employees—Board Practices—Fiscal Committee and Audit Committee."

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Audit Committee 268

## Code of Business Conduct and Ethics

NYSE rules require that listed companies adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. Applicable Brazilian law does not have a similar requirement. We have adopted a Code of Ethics applicable to all our employees, including our executive officers and directors, and it was updated in the beginning of 2016. We believe this code addresses the matters required to be addressed pursuant to the NYSE rules. For a further discussion of our Code of Ethics, see "Item 16B. Code of Ethics."

## Shareholder Approval of Equity Compensation Plans

NYSE rules require that shareholders be given the opportunity to vote on all equity compensation plans and material revisions thereto, with limited exceptions. We currently do not have any such plan and, pursuant to our bylaws, we would require shareholder approval to adopt an equity compensation plan.

## Corporate Governance Guidelines

NYSE rules require that listed companies adopt and disclose corporate governance guidelines. We have adopted the following corporate governance guidelines, either based on Brazilian law, our Code of Ethics or our institutional handbook:

- insider trading policy for securities issued by us;
- disclosure of material facts;
- disclosure of annual financial reports;
- confidential policies and procedures; and
- Sarbanes-Oxley disclosure committee's duties and activities.

# 16H. Mine Safety Disclosure

Not applicable as none of our mines are located in the United States and as such are not subject to the Federal Mine Safety and Health Act of 1977 or the Mine Safety and Health Administration.

## **Item 17. Financial Statements**

See "Item 18. Financial Statements."

# **PART III**

#### **Item 18. Financial Statements**

The following consolidated financial statements of the Registrant, together with the report of Grant Thornton Auditores Independentes thereon, are filed as part of this annual report.

	Page
Report of Independent Registered Public Accounting Firm	FS-R1
Report of Independent Registered Public Accounting Firm	FS-R2
Report of Independent Registered Public Accounting Firm	FS-R3
Consolidated financial statements:	
Balance sheets as of December 31, 2017 and 2016	FS- 1
Statements of income for the years ended December 31, 2017, 2016 and 2015	FS- 3
Statements of comprehensive income the years ended December 31, 2017, 2016 and 2015	FS- 4
Statements of cash flow for the years ended December 31, 2017, 2016 and 2015	FS- 5
Statements of changes in shareholders' equity for the years ended December 31, 2017, 2016 and 2015	FS- 6
Notes to consolidated financial statement	FS- 7

The following consolidated financial statements of MRS Logística S.A. together with the report of PricewaterhouseCoopers Auditores Independentes thereon, are filed as part of this annual report.

	Page
Report of Independent Registered Public Accounting Firm	FS-R1
Consolidated financial statements:	
Balance sheets as of December 31, 2017 and 2016	FS- 1
Statements of income for the years ended December 31, 2017, 2016 and 2015	FS- 3
Statements of comprehensive income the years ended December 31, 2017, 2016 and 2015	FS- 4
Statements of changes in shareholders' equity for the years ended December 31, 2017, 2016 and 2015	FS- 5
Statements of cash flow for the years ended December 31, 2017, 2016 and 2015	FS- 7
Notes to consolidated financial statement	FS- 9

The following consolidated financial statements of Nacional Minérios S.A. together with the report of Deloitte Touche Tohmatsu Auditores Independentes thereon, are filed as part of this annual report.

	Page
Report of Independent Registered Public Accounting Firm	FS-R
Consolidated financial statements:	
Balance sheets as of November 30, 2015 and December 31, 2014	FS- 1
Statements of income for the eleven month-period ended November 30, 2015 and for the year ended December 31, 2014	FS- 2
Statements of comprehensive income for the eleven month-period ended November 30, 2015 and for the year ended December 31, 2014	FS- 3
Statements of changes in shareholders' equity for the eleven month-period ended November 30, 2015 and for the year ended December 31, 2014	FS- 4
Statements of cash flow for the eleven month-period ended November 30, 2015 and for the year ended December 31, 2014	FS- 5
Notes to consolidated financial statement	FS- 6

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## Item 19. Exhibits

Exhibit Number		Description
1.1		Bylaws of the registrant (English translation), incorporated herein by reference from our Form 6-K filed with the SEC on November 27, 2017.
2.1		Form of Amended and Restated Deposit Agreement dated November 1, 1997, as amended and restated as of November 13, 1997, among Companhia Siderúrgica Nacional, JP Morgan Chase Bank, N.A. (as successor to Morgan Guaranty Trust Company of New York), as successor depositary, and all holders from time to time of American Depositary Receipts issued thereunder, incorporated herein by reference from our Registration Statement on Form F-6 filed with the SEC.
2.2		Form of Amendment No. 1 to the Deposit Agreement, incorporated herein by reference from our Registration Statement on Form F-6EF filed with the SEC on April 30, 2004.
2.3		Form of Amendment No. 2 to the Deposit Agreement, including the form of American Depositary Receipt, incorporated herein by reference from our Registration Statement on Form F-6POS filed with the SEC on January 5, 2011.
4.1		Investment Agreement, dated November 21, 2014, among Companhia Siderúrgica Nacional, Brazil Japan Iron Ore Corporation, POSCO, China Steel Corporation, CSN Mineração S.A. and Nacional Minérios S.A., incorporated herein by reference from our Annual Report on Form 20-F for the year ended December 31, 2014, filed with the SEC on April 30, 2015.
8.1	+	List of Subsidiaries.
12.1	+	Section 302 Certification of Chief Executive Officer.
12.2	+	Section 302 Certification of Chief Financial Officer.
13.1	+	Section 906 Certification of Chief Executive Officer.
13.2		Section 906 Certification of Chief Financial Officer.
	+	

15.2

Consent of Snowden do Brasil Consultoria Ltda, incorporated herein by reference from our Annual Report on Form 20-F for the year ended December 31, 2014, filed with the SEC on April 30, 2015.

- \* Certain portions of the exhibit have been omitted from the public filing and were filed separately with the SEC with a request for confidential treatment.
- + Filed herewith.

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# **SIGNATURE**

The registrant hereby certifies that it meets all the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

April 30, 2018

Companhia Siderúrgica Nacional

By: /s/ Benjamin Steinbruch

Benjamin Steinbruch
Title: Chief Executive Officer

By: /s/ Marcelo Cunha Ribeiro

Marcelo Cunha Ribeiro

Chief Financial and Investor

Title: Relations Officer

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Report of independent registered public accounting firm

Board of Directors and Shareholders

Companhia Siderúrgica Nacional

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Companhia Siderúrgica Nacional and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2017, and our report dated April 30, 2018 expressed an unqualified opinion on those financial statements.

#### Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

#### Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal

control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

April 30, 2018

Grant Thornton Auditores Independentes

São Paulo, SP, Brazil

FS-R1

Report of Independent registered public accounting firm

Board of Directors and Shareholders

Companhia Siderúrgica Nacional

#### Opinion on the consolidated financial statements

We have audited the accompanying consolidated balance sheet of Companhia Siderúrgica Nacional and subsidiaries (the "Company") as of December 31, 2017, the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for the year ended December 31, 2017, in conformity with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated April 30, 2018 expressed an unqualified opinion.

#### Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the PCAOB and required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Emphasis of matter – Ability of the jointly-controlled subsidiary to obtain the necessary funds

As discussed in Note No 8.d and 27.c to the consolidated financial statements, the new railroad network of the joint-controlled entity Transnordestina Logística S.A. ("TLSA") is currently under construction, and certain terms on the concession agreement are still under discussion with the relevant government agencies. The completion of the project and consequent commencement of operations depend on the

continuing contribution of funds by its shareholders and third parties. Those events or conditions, along with other matters described on such note, indicate that a material uncertainty exists. TLSA's Management's plans in regard to these matters are also described in Note No.8 d and 27 c. The financial statements do

plans in regard to these matters are also described in Note No 8.0 and 27.c. The illiandial statements do	
not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not	
modified with respect to this matter.	

We have served as the Company's auditor since 2017.

April 30, 2018

**Grant Thornton Auditores Independentes** 

São Paulo, SP, Brazil.

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

Companhia Siderúrgica Nacional

Sao Paulo, Brazil

We have audited the accompanying consolidated balance sheet of Companhia Siderúrgica Nacional and subsidiaries (the "Company") as of December 31, 2016, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the two years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board – PCAOB (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Companhia Siderúrgica Nacional and subsidiaries as of December 31, 2016, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2016, in conformity with International Financial Reporting Standards – IFRS, as issued by the International Accounting Standards Board – IASB.

As discussed in note 2.a.b) to the consolidated financial statements of the year ended December 31, 2016, dated December 22, 2017, the accompanying consolidated financial statements for the year ended December 31, 2015 have been restated to: (a) change in the previous business combination accounting, because management has revised the fair value measurement in connection with an acquisition occurred during 2015, conducted by the subsidiary Congonhas Minérios S.A.; and (b) record an allowance over deferred income tax assets, as a consequence of a revised analysis performed by management on the recoverability of such deferred income tax assets. Our opinion is not modified with respect to this matter.

As discussed in note 10.d) to the consolidated financial statements of the year ended December 31, 2016, dated December 22, 2017, the new railroad network of the joint-controlled entity Transnordestina Logística S.A. ("TLSA") is currently under construction, and certain terms on the concession agreement are still under discussion with the relevant governmental agencies. The completion of the project and consequent commencement of operations depend on the continuing contribution of funds by its shareholders and third parties. Those events or conditions, along with other matters described on such note, indicate that a material uncertainty exists, which raises substantial doubt on TLSA's ability to continue as a going concern. TLSA's Management's plans in regard to these matters are also described in Note 10.d. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

/s/ DELOITTE TOUCHE TOHMATSU

**Auditores Independentes** 

São Paulo, Brazil

December 22, 2017

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## **Companhia Siderúrgica Nacional and Subsidiaries**

Consolidated Balance Sheets as of December 31 Thousands of Brazilian Reais

Assets CURRENT ASSETS	Note	2017	2016
Cash and cash equivalents	3	3,411,572	4,871,162
Financial Investments	4	735,712	
Trade receivables	5	2,276,215	,
Inventories	6	4,464,419	
Other current assets	7		852,013
Total current assets		•	12,444,918
NON CURRENT ACCETS			
NON-CURRENT ASSETS Deferred income taxes	1.4 b	60 110	70 151
	14.b 7	63,119	70,151
Other non-current assets	1	2,528,475 <b>2,591,594</b>	
Investments in associates and joint controlled entities	8.b	5,499,995	4,568,451
Property, plant and equipment	9	17,964,839	18,135,879
Intangible assets	10	7,272,046	7,258,404
Total non-current assets		33,328,474	31,708,705
TOTAL ASSETS		45,209,970	44,153,623

The accompanying notes are an integral part of these consolidated financial statements.

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# Companhia Siderúrgica Nacional and Subsidiaries

Consolidated Balance Sheet as of December 31 Thousands of Brazilian Reais

Liabilities and shareholders' equity	Note	2017	2016
CURRENT LIABILITIES Payroll and related taxes Trade payables Taxes payable Borrowings and financing Other payables Provisions for tax, social security, labor and civil risks Total current liabilities	11 13 16	252,418 2,460,774 264,097 6,526,902 1,059,901 105,958 <b>10,670,050</b>	253,837 1,763,206 231,861 2,117,448 1,021,724 108,607 <b>5,496,683</b>
NON-CURRENT LIABILITIES Borrowings and financing Other payables Deferred income taxes Provisions for tax, social security, labor and civil risks Pension and healthcare plan Provision for environmental liabilities and decommissioning of assets Total non-current liabilities	11 13 14.b 16 26 17	22,983,942 129,323 1,173,559 719,133 908,721 337,013 <b>26,251,691</b>	28,323,570 131,137 1,046,897 704,485 719,266 347,064 <b>31,272,419</b>
Shareholders' Equity Issued capital Capital reserves Earnings reserves Treasury Shares Accumulated Profit / (Loss) Other comprehensive income Total equity attributable to owners of the Company	19	4,540,000 30 238,976 (238,976) (1,291,689) 3,779,032 <b>7,027,373</b>	4,540,000 30 238,976 (238,976) (1,301,961) 2,956,459 <b>6,194,528</b>
Non-controlling interests		1,260,856	1,189,993
Total equity		8,288,229	7,384,521
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		45,209,970	44,153,623

The accompanying notes are an integral part of these consolidated financial statements.

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## **Companhia Siderúrgica Nacional and Subsidiaries**

Consolidated Statements of Income for the years ended December 31

Thousands of Brazilian Reais, except for the earnings (loss) per common share

	Note	2017	2016	2015
Net Revenue from sales and/or services	21	18,524,601	17,148,949	15,261,697
Cost of sales and/or services	22	(13,596,141)	(12,640,042)	(11,740,101)
Gross profit		4,928,460	4,508,907	3,521,596
Operating income (expenses) Selling expenses General and administrative expenses Other operating income Other operating expenses Equity in results of affiliated companies	22 22 23 23 8.b	(1,944,495) (1,815,107) (415,841) 824,286 (646,944) 109,111	(518,232) 663,509	3,610,347
Profit before financial income (expenses) and taxes		2,983,965	1,945,476	5,050,503
Financial income Financial expenses	24 24	295,074 (2,758,701)	643,590 (3,166,017)	487,720 (3,852,882)
Profit (Loss) before income taxes		520,338	(576,951)	1,685,341
Income tax and social contribution	14.a	(409,109)	(266,546)	(2,903,216)
Profit (Loss) from continued operations		111,229	(843,497)	(1,217,875)
Profit (Loss) from discontinued operations		-	(9,561)	1,911
Net income (loss) for the year		111,229	(853,058)	(1,215,964)
Profit (Loss) for the year attributed to:				
Controlling interests Non-controlling interests		10,272 100,957	(934,747) 81,689	(1,214,122) (1,842)
Earnings (loss) per common share - (reais/share)				
Basic Diluted	19.g 19.g	0.00757 0.00757	(0.68876) (0.68876)	(0.89461) (0.89461)

The accompanying notes are an integral part of these consolidated financial statements.

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Companhia Siderúrgica Nacional and Subsidiaries Consolidated Statements of Comprehensive Income for the years ended December 31

Thousands of Brazilian Reais

		2017	2016	2015
Consolidated profit (loss) for the year Other comprehensive income Items that will not be subsequently reclassified to the statement of income				1,215,964) 1,190,803)
Actuarial (losses)/gains on defined benefit plan from investments in subsidiaries		(12)	87	230
Actuarial (losses)/gains on defined benefit pension plan		(203,022)	(219,417)	92,221
Income tax and social contribution on actuarial (losses) gains on defined benefit pension plan		(1,073)	(2,619)	(64,756)
		(204.107)	(221,949)	27,695
Items that could be subsequently reclassified to the statement of income				
Cumulative translation adjustments for the year Change in fair value of available-for-sale assets financial assets			(486,890) 711,942	513,685 (969,701)
Income tax and social contribution on available-for-sale financial assets				174,128
Impairment of available-for-sale assets	12			555,298
Income tax and social contribution on impairment of available-for-sale assets				(33,269)
Gain on change in percentage of ownership (Loss) gain on cash flow hedge accounting	12	2,814 (50,987)	,	1,980 1,410,896)
Income tax and social contribution on (loss) gain on cash flow hedge accounting	12			(41,014)
Cash Flow hedge reclassified to income statement (Loss) /gain on hedge of net investments in foreign subsidiaries (Loss) / gain on business combination	12.b 12.b	92,140 (39,893) 4,415	77,444 77,952	11,439 (20,148)
(LOSS) / gain on business combination		,	1,387,715(	1,218,498)
Comprehensive income (loss) for the year Attributable to:		933,802	312,708(	2,406,767)
Attributed to owners of the Company		832,845	231,019(	2,404,925)
Attributed to non-controlling interests		100,957	81,689	(1,842)

The accompanying notes are an integral part of these consolidated financial statements.

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# **Companhia Siderúrgica Nacional and Subsidiaries**

Consolidated Statements of Cash Flows for the years ended December 31 Thousands of Brazilian Reais

	Note	2017	2016	2015
Profit (Loss) for the year	to not oas	111,229	(853,058)	(1,215,964)
Adjustments to reconcile net income (loss) Accrued charges on borrowings and financing Charges on loans and financing granted Depreciation/ depletion / amortization Equity in results of affiliated companies Deferred income tax and social contribution	9 and 10 8.b	2,346,598 (54,777) 1,453,335 (109,111) 50,128	2,944,558 (58,731) 1,322,497 (64,918) 60,368	2,889,163 (65,084) 1,176,840 (1,160,348) 2,767,545
Provision for tax, social security, labor and civil risks		10,166	(25,642)	85,965
Monetary variations and exchange differences		250,660	(1,038,018)	3,389,448
Gain/(Loss) of derivative financial instruments  Monetary adjustment related to the	12.b	(28,503)	(5,467)	4,086
Monetary adjustment related to the Eletrobrás's compulsory loan Impairment of available-for-sale assets Proceeds from disposal of assets Gain on repurchase of debt securities Provision for actuarial liabilities Gain on business combination Gain on disposal of available for sale assets Provision for environmental liabilities and	23	(755,151)		
	23	28,127	88,339 (146,214)	555,298 6,466 (166,642)
		(36,953)	(18,803) (66,496) (252,023)	1,193 (3,297,499)
decommissioning of assets	17	(10,051)	18,133	
Impairment of Transnordestina Other provisions		82,682 <b>3,338,379</b>	387,989 (993) <b>2,291,521</b>	101,855 <b>5,072,322</b>
Changes in assets and liabilities Trade receivables - third parties		(300,449)	(388,469)	208,488
Trade receivables - related parties Inventories		14,449 (442,109)	(3,956) 947,834	217,439 (726,800)
SIGNATURE				288

Receivables from related parties Recoverable taxes Judicial deposits Trade payables Payroll and related taxes Taxes in installments - REFIS Payables to related parties Interest paid Interest received Interest on swaps paid Other Increase (Decrease) in assets and liabilities Net cash generated by operating activities		68,224 (100,470) (6,720) 667,032 (3,658) 23,775 46,081 (2,634,931) (97,752) (2,766,528) 571,851	34,082 275,018 38,910 482,009 (5,691) (253,374) (9,726) (3,050,036) 19,636 (3,999) (97,841) (2,015,603) 275,918	3,545,142 (537,669) (35,415) 301,118 188,734 (176,737) (69,412) (2,964,826) 8,402 38,377 (3,159) 5,069,163
Investments / acquisition of shares Purchase of property, plant and equipment Capital reduction on joint venture Payment in derivative transactions Purchase of intangible assets Cash and cash equivalents in Namisa consolidation	9	(1,059,481) 30,453 (622)	(190,435) (1,628,694) (722,443) (3,119)	(2,727,036) (1,616,173) 466,758 903,153 (1,462) 456,364
Loans granted to related parties Financial investment, net of redeemed amount Receipt loans – related party Cash and Cash equivalents from discontinued operations	4	(49,072) 24,679 4,819	(96,461) 3,208 331,835	(61,217) (728,725) 443,345
Cash and Cash equivalents on acquisition of			941	
control  Net cash used in investing activities  Borrowings and financing raised  Cost of borrowing  Payment of borrowings  Payment of borrowings - related parties	11.b 11.b	(1,049,224) 534,506 (238) (1,528,023)	(2,305,168) 22,597 (26,844) (398,699)	(2,864,993) 411,793 (38,302) (2,380,968) (52,839)
Payment of dividends and interests on shareholder's equity Treasury shares Forfaiting funding / drawee risk Forfaiting amortization / drawee risk	20 11.b 11.b		78,240 (407,155)	(549,835) (9,390) 924,706 (1,146,306)
Buyback of debt securities  Net cash used in financing activities		(993,755)	(151,098) <b>(883,012)</b>	(249,627) <b>(3,090,768)</b>
Exchange rate changes on cash and cash equivalents of foreign subsidiaries		11,538	(77,628)	61,629
Increase (Decrease) in cash and cash equivalents		(1,459,590)	(2,989,890)	(824,969)
CLONATURE				

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Cash and cash equivalents at the end of the year	3,411,572	4,871,162	7,861,052
of the year	4,871,162	7,861,052	8,686,021

The accompanying notes are an integral part of these consolidated financial statements.

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# Companhia Siderúrgica Nacional and Subsidiaries

Consolidated Statement of Changes in Shareholders' Equity
Thousands of Brazilian reais

**SIGNATURE** 

	Paid-in Capital	•		Retained earnings	Other comprehensive sincome	Shareholders´Equity	Non-Controllir interests
Balances at December 31, 2014	4,540,000	30	1,131,298	O	25,140	5,696,468	38,50
Capital transactions with shareholders			(284,390)			(284,390)	
Treasury shares acquired Declared			(9,390)			(9,390)	
dividends (R\$202.63 per thousand shares)			(275,000)			(275,000)	
Total comprehensive income				(1,214,122)	1,765,553	551,431	(1,84
Profit (loss) for the year				(1,214,122)		(1,214,122)	(1,84
Other comprehensive income					1,765,553	1,765,553	
Cumulative translation adjustments for the period Actuarial gain					513,685	513,685	
(loss) on defined benefit pension plan, net of taxes Gain/(Loss) on					27,695	27,695	
available-for-sale assets, net of taxes Gain/(loss) on					(273,544)	(273,544)	
percentage change in investments					1,980	1,980	
Gain/(loss) on cash flow hedge accounting, net or	f				(1,440,471)	(1,440,471)	

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	9	9				
taxes Gain/(loss) on hedge of net investments in foreign subsidiaries Gain/(loss) on				(20,148)	(20,148)	
Gain/(loss) on business combination Internal changes	ı			2,956,356	2,956,356	
in shareholders' equity		(846,908)	846,908			1,091,1
Earnings reserve Non-controlling interests in		(846,908)	846,908			1,091,1
subsidiaries Balances at December 31, 2015	4,540,000	30	(367,214)	1,790,693	5,963,509	1,127,7
Total comprehensive income			(934,747)	1,165,766	231,019	81,6
Profit (loss) for the year <b>Other</b>			(934,747)		(934,747)	81,6
comprehensive income				1,165,766	1,165,766	
Cumulative translation adjustments for the period Actuarial				(486,890)	(486,890)	
gain/(loss) on defined benefit pension plan, net of taxes.				(221,949)	(221,949)	
Gain/(Loss) on available-for-sale assets, net of taxes Gain/(loss) on				711,942	711,942	
percentage change in investments Gain/(loss) on				1,299	1,299	
cash flow hedge accounting, net of				1,083,412	1,083,412	
taxes Gain/(loss) on hedge of net				77,952	77,952	

investments in foreign subsidiaries Internal changes in shareholders' equity Non-controlling interests in subsidiaries Balances at December 31, 2016	4,540,000	30	(1,301,961)	2,956,459	6,194,528	(19,47 (19,47 <b>1,189,9</b> 9
Total comprehensive			10,272	822,573	832,845	100,95
income Profit/(loss) for the year			10,272		10,272	100,95
Other comprehensive income				822,573	822,573	
Cumulative translation adjustments for the period Actuarial				170,342	170,342	
gain/(loss) on defined benefit pension plan, net of taxes				(204,107)	(204,107)	
Gain/(Loss) on available-for-sale assets, net of taxes				847,849	847,849	
Gain/(loss) on percentage change in investments				2,814	2,814	
Gain/(loss) on cash flow hedge accounting, net of taxes Gain/(loss) on	f			41,153	41,153	
hedge of net investments in foreign subsidiaries				(39,893)	(39,893)	
Gain/(loss) on business combination				4,415	4,415	
COMBINATION						(30,09

Internal changes in shareholders' equity Non-controlling interests in subsidiaries

(30,09

Balances at

December 31, 4,540,000 30 (1,291,689) 3,779,032 7,027,373 1,260,85

2017

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#### (Expressed in thousands of reais – R\$, unless otherwise stated)

#### 1. DESCRIPTION OF BUSINESS

Companhia Siderúrgica Nacional "CSN", also referred to as the Company, is a publicly-held company incorporated on April 9, 1941, under the laws of the Federative Republic of Brazil (Companhia Siderúrgica Nacional, its subsidiaries, joint ventures, joint operations and associates are collectively referred to herein as the "Group"). The Company's registered office is located at Av. Brigadeiro Faria Lima, 3.400, 19 th and 20 th floors, Itaim Bibi, São Paulo, Brazil, CEP 04538-132.

CSN has shares listed on the São Paulo Stock Exchange (B3 S.A.- Brasil, Bolsa, Balcão) and on the New York Stock Exchange (NYSE), under the code SID. Accordingly, the Company reports its information to the Brazilian Securities Commission (CVM) and the U.S. Securities and Exchange Commission (SEC).

The Group's main operating activities are divided into five (5) operating segments as follows:

#### • Steel:

The Company's main industrial facility is the Presidente Vargas steelworks ("UPV"), located in the city of Volta Redonda, State of Rio de Janeiro. This segment consolidates the operations related to the production, distribution and sale of flat steel, long steel, metallic containers and galvanized steel. In addition to the facilities in Brazil, CSN has operations in the United States, Portugal and Germany, all of them are in line with the plan to achieve new markets and perform excellent services for final consumers. Its steel has been used in home appliances, civil construction and automobile industries.

#### • Mining:

The production of iron ore is developed in the city of Congonhas, State of Minas Gerais.

Iron ore is sold basically in the international market, especially in Europe and Asia. The prices charged in these markets are historically cyclical and subject to significant fluctuations over short periods of time, driven by several factors related to global demand, strategies adopted by the major steel producers and the foreign exchange rate. All these factors are beyond the Company's control. The ore transportation is accomplished by Terminal de Carvão e Minérios do Porto de Itaguai ( "TECAR"), a solid bulk terminal, one of the four terminals that compose the Port of Itaguai, located in the State of Rio de Janeiro. Imports of coal and coke are held through this terminal and directed to the steel industry of CSN.

The Company's mining activities also comprises tin exploitation, which is based in the State of Rondônia, this facility is engaged to supply the needs of UPV, with the excess of raw materials being sold to subsidiaries and third parties.

#### Cement:

CSN entered in the cement market boosted by the synergy between this new activity and its existing businesses. Next to UPV in Volta Redonda (RJ), is installed the new business unit: CSN Cimentos, which produces CP-III type of cement by using slag produced by the UPV blast furnaces in Volta Redonda. It also explores limestone and dolomite at the Arcos unit, located in the State of Minas Gerais, to satisfy the needs of UPV as of the cement plant.

In the fourth quarter of 2016, the Company started the operation of its second clinker production line in Arcos/MG. As a result, the Company is self-sufficient in the production of cement, with an installed capacity of 4.7 million tons per year.

## Logistics

Railroads:

CSN has interests in three railroad companies: MRS Logística S.A., which manages the former Southeast Railway System of Rede Ferroviária Federal S.A ("RFFSA")., Transnordestina Logística S.A. ("TLSA") and FTL - Ferrovia Transnordestina Logística S.A. ("FTL"), which has the concession to operate the former

Northeast Railway System of RFFSA, in the States of Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco and Alagoas, with TLSA being responsible for the rail links of Missão Velha-Salgueiro, Salgueiro-Trindade, Trindade-Eliseu Martins, Salgueiro-Porto de Suape and

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Missão Velha-Porto de Pecém (Railway System II), still under construction, and FTL being responsible for the rail links of São Luiz-Mucuripe, Arrojado-Recife, Itabaiana-Cabedelo, Paula Cavalcante-Macau and Propriá-Jorge Lins (Railway System I).

Ports:

In the State of Rio de Janeiro, by means of its subsidiaries Sepetiba Tecon S.A. and CSN Mineração S.A. ("CSN Mineração"), the Company operates the Container Terminal ("Tecon") and the solid bulk terminal (Tecar), respectively, both located at the Itaguaí Port. Established in the harbor of Sepetiba, the mentioned port has a privileged highway, railroad and maritime access.

("Tecon") is responsible for the shipments of CSN's steel products, movement and storage of containers, consolidation and deconsolidation of cargo; The Tecar's port terminal is engaged to the iron ore shipment overseas and to the landing of coal, petroleum, coke, sulfur and zinc concentrate for our own operation and for third parties.

#### Energy:

Since the energy supply is fundamental in CSN's production process, the Company owns and operates facilities to generate electric power for guaranteeing its self-sufficiency. See further details in Note 8.d.

The note 25 - "Segment Information" details the financial information per each of CSN's business segment.

#### **Going Concern**

In 2017, the Company amortized principal and interest in the approximate amount of R\$4.2 billion of its loans and financing. Until March 2019, loans and interest to be incurred next year, are expected to be paid in the approximate amount of R\$8.9 billion, after the local debt reprofiling.

The financial leverage may adversely affect the businesses, financial conditions and operating results and may require the following considerations:

- Allocation of a substantial part of the cash generated from operations for repayment of the borrowings.
- Exposure (i) to fluctuations in interest rates due to the renegotiation of debts and new borrowings taken, and fluctuations in exchange rates since a significant part of the borrowings is denominated in foreign currency.
- Increase in the economic and financial vulnerability due to adverse conditions of the industry and segment, limiting the funds available in the short term, considering the high financial leverage and the expected cash disbursements;
- Limitation of the Company's ability to enter into new businesses (acquisitions) until the financial leverage is reduced;
- Limitation of the Company's ability to obtain new credit lines under more favorable interest conditions due to the risks associated to the current financial leverage.

The Company's ability to continue operating depends on the achievement of operating targets defined by Management, in addition to refinancing of contracted debts, and/or actions related to financial deleveraging.

In addition to the continuous focus on improvement in operating income, Management has various actions in progress to increase the Company's liquidity through an extension of borrowing payment terms.

This plan was started in 2015, with the renegotiation of R\$ 2.5 billion with Caixa Econômica Federal and R\$ 2.2 billion with Banco do Brasil S.A, postponing the maturities from 2016 and 2017 to 2018 through 2022. In 2016, the Company extended the installments of certain NCE contracts amounting to R\$ 100 million and prepayments of US\$ 66 million with Bradesco, postponing the maturities from 2016 to 2019. In 2017, Management remained committed to the plan to extend it debt payment term, mainly those of short term, working on the renegotiation of borrowings at R\$ 1.5 billion.

In February 2018 we concluded the renegotiation of R\$4,98 billion of our outstanding debt with Banco do Brasil, postponing the maturities of 2018 through 2022 up to 2024. In February 2018 we issued debt instruments ("Notes") in the amount of US\$350 million through our wholly-owned subsidiary CSN Resources S.A., with maturity date in 2023 and, in

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conjunction, we made a repurchase offer ("Tender Offer") of the Notes previously issued by CSN Islands XI Corp and CSN Resources S.A, having been repurchased US\$350 million in Notes with maturities scheduled for 2019 and 2020.

Additionally, Management studies alternatives to financial deleverage from the disposal of non-strategic assets. However, it is not possible to affirm that the sale of assets will occur within a 12-month period. Thus, the Company did not segregate and did not reclassify any assets in the financial statements as discontinued operations in accordance with IFRS 5.

Based on Management's cash flow projections that covered the period until December 2018 as of the date of these financial statements, which depend on factors such as the achievement of production targets, sales volumes and prices, as well as on renegotiations of borrowings, Management believes that the Company has appropriate resources to continue as a going concern in a reasonably estimable period of time. Accordingly, the Company's financial statements for the year ended December 31, 2017 have been prepared on the assumption that the Company will continue as a going concern.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### 2.a) Basis of preparation

The consolidated financial statements have been prepared and are being presented in accordance with International Financial Reporting Standards "IFRS" issued by the International Accounting Standards Board (IASB). All the relevant information of the financial statements, and only this information, are being highlighted and correspond to those used by the Company's management.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's accounting policies. It is disclosed in the notes to this report all subjects involving a high degree of judgment or complexity or when assumptions and estimates are significant to the consolidated financial statements, those subjects are related to the allowance for doubtful debts, provision for inventory losses, provision for labor, civil, tax, environmental and social security contingences, depreciation, amortization, depletion, provision for impairment, deferred taxes, financial instruments and employee benefits. Actual results may differ from these estimates.

The financial statements are presented in thousands of Brazilian Reais (R\$). Depending on the applicable IFRS standard, the measurement criteria used in preparing the financial statements considers the historical cost, net realizable value, fair value or recoverable amount. When the IFRS allows us to option between acquisition cost and other measurement criteria, the acquisition cost was the criteria used.

The consolidated financial statements were approved by the Board of Directors on April 30, 2018.

#### 2.b) Consolidated financial statements

The accounting policies have been consistently applied to all consolidated companies. The consolidated financial statements for the years ended December 31, 2017 and 2016 include the following direct and indirect subsidiaries, joint ventures and joint operations, as well as the exclusive funds, as follows:

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## Equity interests (%)

	Equity	111010313 (70)	
Companies	12/31/2017	12/31/2016	Core business
Direct interest in subsidiaries: full consolidation			
CSN Islands VII Corp.	100.00	100.00	Financial transactions
CSN Islands XI Corp.	100.00	100.00	Financial transactions
CSN Islands XII Corp.	100.00	100.00	Financial transactions
CSN Minerals S.L.U. (1)	100.00	100.00	Equity interests
CSN Export Europe, S.L.U. (1)	100.00	100.00	Financial transactions and Equity interests
CSN Metals S.L.U. (1)	100.00	100.00	Equity interests and Financial transactions
CSN Americas S.L.U. (1)	100.00	100.00	Equity interests and Financial transactions
CSN Steel S.L.U.	100.00	100.00	Equity interests and Financial transactions
TdBB S.A (*)	100.00	100.00	Equity interests
Sepetiba Tecon S.A.	99.99	99.99	Port services
Minérios Nacional S.A.	99.99	99.99	Mining and Equity interests
Companhia Florestal do Brasil	99.99	99.99	Reforestation
Estanho de Rondônia S.A.	99.99	99.99	Tin Mining
			Manufacture of containers and distribution of steel
Companhia Metalúrgica Prada	99.99	99.99	products
CSN Gestão de Recursos Financeiros Ltda. (*)	99.99	99.99	Management of funds and securities portfolio
CSN Mineração S.A.	87.52	87.52	Mining and Equity interests
CSN Energia S.A. (2)	99.99	100.00	Sale of electric power
FTL - Ferrovia Transnordestina Logística S.A.	90.78	90.78	Railroad logistics
Nordeste Logística S.A.	99.99	99.99	Port services
CGPAR - Construção Pesada S.A. (3)	-	100.00	Mining support services and Equity interests
Indirect interest in subsidiaries: full consolidation			
Companhia Siderúrgica Nacional LLC	100.00	100.00	Steel
CSN Europe Lda.(4)	-	100.00	Financial transactions, product sales and Equity interests
CSN Ibéria Lda. (4)	-	100.00	Financial transactions, product sales and Equity interests
Lusosider Projectos Siderúrgicos S.A.	99.94	99.94	Equity interests and product sales
Lusosider Aços Planos, S. A.	99.99	99.99	Steel and Equity interests
CSN Resources S.A.	100.00	100.00	Financial transactions and Equity interests
Companhia Brasileira de Latas (2)	99.99	100.00	Sale of cans and containers in general and Equity interests
Companhia de Embalagens Metálicas MMSA	99.67	99.67	Production and sale of cans and related activities
Companhia de Embalagens Metálicas - MTM	99.67	99.67	Production and sale of cans and related activities

			Financial transactions, product sales and Equity
CSN Steel Holdings 1, S.L.U.	100.00	100.00	interests
CCN Draductos Cidavívariose C I	100.00	100.00	Financial transactions, product sales and Equity
CSN Productos Siderúrgicos S.L.		100.00	interests
Stalhwerk Thüringen GmbH	100.00	100.00	Production and sale of long steel and related activities
CSN Steel Sections UK Limited (*)	100.00	100.00	Sale of long steel
CSN Steel Sections Polska Sp.Z.o.o	100.00	100.00	Financial transactions, product sales and Equity interests
CSN Asia Limited	100.00	100.00	Commercial representation
OSIN ASIA LITIILEU	100.00	100.00	Financial transactions, product sales and Equity
CSN Mining Holding, S.L (5)	87.52	87.52	interests
			Financial transactions, product sales and Equity
CSN Mining GmbH	87.52	87.52	interests
CSN Mining Asia Limited	87.52	87.52	Commercial representation
			Commercial representation,sale of steel and related
Aceros México CSN	100.00	100.00	activity
Lusosider Ibérica S.A. (6)	99.94		Steel, commercial and industrial activities and equity interests
CSN Mining Portugal, Unipessoal Lda. (6)	87.52		Sale and commercial representation
Direct interest in joint operations: proportionate			
consolidation			
Itá Energética S.A.	48.75	48.75	Electric power generation
Consórcio da Usina Hidrelétrica de Igarapava	17.92	17.92	Electric power consortium
Direct interest in joint ventures: equity method			
MRS Logística S.A.	18.64	18.64	Railroad transportation
Aceros Del Orinoco S.A.	31.82	31.82	Dormant company
CBSI - Companhia Brasileira de Serviços de			
Infraestrutura	50.00	50.00	Equity interests and product sales and iron ore
Transnordestina Logística S.A.	46.30	49.02	Railroad logistics
Indirect interest in joint ventures: equity method			
MRS Logística S.A.	16.30	16.30	Railroad transportation
Direct interest in associates: equity method			
Arvedi Metalfer do Brasil S.A.	20.00	20.00	Metallurgy and Equity interests

<sup>(\*)</sup> They are Dormant Companies, therefore they do not appear in the note 8.a, where is disclosed business information under the equity method and classified as available for sale.

#### • Events in 2017:

(1) On February 6, 2018, the Spanish commercial registry recognized the merger by absorption of the companies by CSN Steel, S.L.U., date from which the companies were considered legally extinct. In addition, before third parties and for the purposes of commercial law, the merger is retroactive to the date of December 28, 2017;

<sup>(\*)</sup> They are Dormant Companies, therefore they do not appear in the note 8.a, where is disclosed business information under the equity method and classified as available for sale.

- (2) Transfer of 1 share in August 2017;
- (3) Company sold to the CSN Mineração and in August 2017 was incorporated by the same subsidiary;
- (4) Companies liquidated in July 2017;
- (5) New corporate name of Namisa International Minérios SLU, amended in September 2017;
- (6) Companies constituted in 2017;

### Exclusive funds

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	Equity Inte	Core			
Exclusive funds	12/31/2017	2017 12/31/2016			
Direct interest: full consolidation			business		
Diplic II- Private credit balanced mutual fund	100.00	100.00	Investment fund		
Caixa Vértice - Private credit balanced mutual fund	100.00	100.00	Investment fund		
VR1 – Private Credit balanced mutual fund	100.00	100.00	Investment fund		

In preparing the consolidated financial statements, we have adopted the following consolidation procedures:

#### Transactions between subsidiaries, associates, joint ventures and joint operations

Unrealized gains on transactions with subsidiaries, joint ventures and associates are eliminated to the extent of CSN's equity interests in the related entity by the consolidation process. Unrealized losses are eliminated in the same manner as unrealized gains, although only to the extent that there are not indications of impairment. The Company eliminates the effect on profit or loss of transactions carried out with joint ventures and, as a result, reclassifies part of the equity in results of joint ventures to financial costs, cost of sales and income tax and social contribution.

The base date to the financial statements of the subsidiaries and joint ventures is the same as of the Company, and their accounting policies are also in line with the policies adopted by the CSN.

## **Subsidiaries**

Subsidiaries are all entities (including special purpose entities) which financial and operating policies can be conducted by the Company and when it is exposed to, or has rights to, variable returns from its

involvement with the entity and has the ability to use its power to affect its returns. The existence and effect of potential voting rights that are actually exercisable or convertible are taken into consideration when assessing whether the Company controls another entity. Subsidiaries are fully consolidated from the date when the control is transferred to the Company and are deconsolidated from the date when such control ceases.

## Joint ventures and joint operations

Joint arrangements are all entities over which the Company has joint control with one or more other parties. The investments in joint arrangements are classified as joint operations or joint ventures depending on the contractual rights and obligations of each investor.

Joint operations are accounted for in the financial statements in order to represent the Company's contractual rights and obligations. Therefore, the assets, liabilities, revenues and expenses related to its interests in joint operations are accounted for individually in the financial statements.

Joint ventures are accounted for under the equity method and are not consolidated.

The Company eliminates the effect on profit or loss of transactions carried out with joint ventures and, as a result, eliminates part of the equity in results of joint ventures to financial costs, cost of sales, net sales and income tax and social contribution.

#### **Associates**

Associates are all entities over which the Company has significant influence but not control, generally through a shareholding percentage from 20% up to 50% of the voting rights. Investments in associates are accounted for under the equity method and are initially recognized at cost.

#### Transactions and non-controlling interests

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The Company treats transactions with non-controlling interests as transactions with owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of subsidiary net assets is recorded in shareholders' equity. Gains and losses on disposals to non-controlling interests are also recognized directly in shareholders' equity.

When the Company no longer holds control, any retained interest in the entity is remeasured to its fair value, with the change in the carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest in an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Company had disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

#### 2.c) Foreign currencies

### i. Functional and presentation currency

Items included in the financial statements are related to each one of the Company's subsidiaries are measured using the currency of the primary economic environment in which the subsidiary operates ("functional currency"). The consolidated financial statements are presented in Brazilian Reais (R\$), which is the Company's functional currency and the Group's presentation currency.

#### ii. Transactions and balances

Transactions in foreign currencies are translated into the functional currency using the exchange rates in effect at the dates of the transactions or valuations when their values are remeasured. Foreign exchange gains and losses resulting from the settlement of those transactions and from the translation at exchange rates in effect as of December 31, 2017 related to monetary assets and liabilities denominated in foreign currencies are recognized in the income statement, except when they are recognized in shareholders' equity as a result of foreign operation characterized as foreign investment.

The balances of assets and liabilities are translated by exchange rates prevailing at the end of the reporting period. As of December 31, 2017, US\$1 is equal to R\$3.3080 (R\$3.2591 at December 31, 2016) and €1 is equal to R\$3.9693 (R\$3.4384 at December 31, 2016).

All other foreign exchange gains and losses, including foreign exchange gains and losses related to borrowings and cash and cash equivalents, are presented in the income statement as financial income or costs.

Changes in the fair value of monetary securities denominated in foreign currency, classified as available-for-sale, are segregated into exchange differences related to the amortized cost of the security and other changes in the carrying amount of the security. Exchange differences related to amortized cost are recognized in profit or loss, and other changes in the carrying amount are recognized in shareholders' equity.

Exchange differences on non-monetary financial assets and liabilities classified as measured at fair value through profit or loss are recognized in profit or loss as part of the gain or loss on the fair value. Exchange differences on investments classified as available-for-sale are included in comprehensive income in shareholders' equity.

#### iii. Group companies

The results and financial position of all the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

• The assets and liabilities of each balance sheet presented are translated by exchange rate at the end of the reporting period;

- The income and expenses of each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates at the transaction dates, in which case income and expenses are translated at the rate in effect at the transaction dates):
- All resulting exchange differences are recognized as a separate component in other comprehensive income; and
- Gains and losses accumulated in shareholders' equity are included in the income statement when the foreign operation is partially disposed or sold.

On consolidation, exchange differences resulting from the translation of monetary items with characteristics of net investment in foreign operations are recognized in shareholders' equity. When a foreign operation is partly disposed of or sold, exchange differences previously recorded into other comprehensive income are recognized in the income statement as part of the gain or loss on sale.

#### 2.d) Cash and cash equivalents

Cash and cash equivalents include cash on hand, in bank accounts and other short-term highly liquid investments redeemable within 90 days from the end of the reporting period, readily convertible into a known amount of cash and subject to an insignificant risk of change in value. Bank certificates of deposit and government securities that do not meet the above criteria are not considered cash equivalents and are classified as financial investments, according to note 4.

#### 2.e) Trade receivables

Trade receivables are initially recognized at fair value, including the related taxes and expenses. Foreign currency-denominated trade receivables are adjusted at the exchange rate in effect at the end of the reporting period. The allowance for estimated losses on doubtful debts were recognized in an amount considered sufficient to cover any losses. Management's assessment takes into consideration the customer's history and financial position, as well as the opinion of their legal counsel regarding the collection of these receivables for recognizing the allowance for estimated losses.

#### 2.f) Inventories

Inventories are carried at the lower of cost and net realizable value. Cost is determined using the weighted average cost method on the acquisition of raw materials. The costs of finished goods and work in process comprise raw materials, labor and other direct costs (based on the normal production capacity). Net realizable value represents the estimated selling price in the normal course of business, less estimated costs of completion and costs necessary to make the sale. The allowance for estimated losses on slow-moving or obsolete inventories are recognized when considered necessary.

Stockpiled ore inventories are accounted for as processed when removed from the mine. The cost of finished goods comprises all direct costs necessary to transform stockpiled inventories into finished goods.

#### 2.g) Investments

Investments in subsidiaries, joint ventures and associates are accounted for under the equity method of accounting and are initially recognized at cost. The gains or losses are recognized in profit or loss as operating income (or expenses). In the case of foreign exchange differences arising on translating foreign investments that have a functional currency different from the Company's, changes in investments due exclusively to foreign exchange differences, as well as adjustments to pension plans and available-for-sale investments that impact the subsidiaries' shareholders' equity, are recognized in line item "Cumulative translation adjustments", in the Company's shareholders' equity, and are only recognized in profit or loss when the investment is disposed or written off due to impairment loss. Other investments are recognized at cost or fair value.

When necessary, the accounting policies of subsidiaries, joint ventures and associates are changed to ensure consistency with the policies adopted by the Company.

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#### 2h) Business combination

The acquisition method is used to account for on each business combination conducted by the Company. The payment obligation transferred by acquiring an entity is measured by the fair value of the assets transferred, liabilities incurred and equity instruments issued by the Company. 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.

## 2.i) Property, plant and equipment

Property, plant and equipment are carried at cost of acquisition, formation or construction, less accumulated depreciation or depletion and any impairment loss. Depreciation is calculated under the straight-line method based on the remaining economic useful economic lives of assets, as mentioned in note 9. The depletion of mines is calculated based on the quantity of ore mined. Land is not depreciated since their useful life is considered indefinite. However, if the tangible assets are mine-specific, that is, used in the mining activity, they are depreciated over the shorter between the normal useful lives of such assets and the useful life of the mine. The Company recognizes in the carrying amount of property, plant and equipment the cost of replacement and consequently reducing the carrying amount of the part that is replaced if it is probable that future economic benefits embodied therein will revert to the Company, and if the cost of the asset can be reliably measured. All other disbursements are expensed as incurred. Borrowing costs related to funds obtained for construction in progress are capitalized until these projects are completed.

If some components of property, plant and equipment have different useful lives, these components are accounted for in separate line items of property, plant and equipment.

Gains and losses on disposal are determined by comparing the sale value less the residual value and are recognized in 'Other operating income (expenses)'.

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 from new mineral deposits or from 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, they 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 of where ore body is located. 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.

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The Company holds spare parts that will be used to replace parts of property, plant and equipment and that used to increase the asset's useful life when it exceeds 12 months. These spare parts are classified in property, plant and equipment and not in inventories.

#### 2.j) Intangible assets

Intangible assets comprise assets acquired from third parties, including through business combinations.

These assets are recognized at cost of acquisition or formation, less amortization calculated on a straight-line basis method based on the estimated periods of exploration or recovery

Mineral rights acquired are classified in line item "other assets" in intangible assets.

Intangible assets with indefinite useful lives and goodwill based on expected future profitability are not amortized.

## Goodwill

Goodwill represents the positive difference between the amount paid and/or payable for the acquisition of a business and the net fair values of the acquiree's assets and liabilities. Goodwill on acquisitions from business combination is recognized as intangible assets in the consolidated financial statements. The gain from a bargain purchase is recognized directly in the statement of income at the acquisition date. Goodwill is annually tested for impairment. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of a Cash-Generating Unit (CGU) include the carrying amount of goodwill related to

the CGU sold.

Goodwill is allocated to CGUs for impairment testing purposes. The allocation is made to CGUs of CGUs that are expected to benefit from the business combination in which the goodwill arose, and recalling that unit is not greater than the operating segment.

#### Software

Software licenses purchased are capitalized based on the costs incurred to purchase the software and make it ready for use. These costs are amortized on a straight-line basis over the estimated useful lives from one to five years.

## 2.k) Impairment of non-financial assets

Assets with infinite useful lives, such as goodwill, are not subject to amortization and are annually tested for impairment. Assets subject to amortization and/or depreciation, such as property, plant and equipment, are tested for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. An impairment loss is recognized by determining an asset's recoverable amount. The recoverable amount is the higher of the fair value of an asset less costs to sell and its value in use. For impairment testing purposes, assets are grouped at their lowest levels for which there are separately identifiable cash flows (Cash Generating Units, or CGUs). Non-financial assets, except for goodwill, are subsequently reviewed for possible reversal of the impairment at the reporting date.

#### 2.I) Employee benefits

#### i. Employee benefits

### **Defined contribution plans**

A defined contribution plan is as a post-employment benefit plan whereby an entity pays fixed contributions to a separate entity (pension fund) and will not have any legal or constructive obligation to pay additional

amounts. Obligations for contributions to defined contribution pension plans are recognized as employee benefit expenses in the periods during which services are provided by employees. Contributions paid in advance are recognized for an asset since it is agreed that either cash reimbursement or future reduction on payables will flow back to CSN. Contributions to a defined

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contribution plan that is expected to mature twelve (12) months after the end of the period in which the employee provides services are discounted to their present values.

## **Defined benefit plans**

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company's net obligation regarding defined pension benefit plans is calculated individually for each plan by estimating the value of the future benefit that the employees accrue as return for services provided in the current period and in prior periods; such benefit is discounted to its present value. The discount rate is the yield presented at the end of the reporting period for top line debt securities whose maturity dates approximate the terms and conditions of the Company's obligations and which are denominated in the same currency as the one in which it is expected that the benefits will be paid. The calculation is made annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit for the Company, the asset to be recognized is limited to the total amount of any unrecognized costs of past services and the present value of the economic benefits available in the form of future plan reimbursements or reduction in future contributions to the plan. The present value of economic benefits is calculated taking into account the funding requirements applicable to the Company's plans. An economic benefit is available to the Company if it is realizable during the life of the plan or upon settlement of the plan's liabilities.

The Company and some of its subsidiaries offered a postretirement healthcare benefit to its employees. The right to these benefits is usually contingent to their remaining in employment until the retirement age and the completion of the minimum length of service. The expected costs of these benefits are accumulated during the employment period, and are calculated using the same accounting method used for defined benefit pension plans. These obligations are annually valued by qualified independent actuaries.

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. When benefits became vesting rights, all actuarial gains or losses are immediately recognized in profit or loss.

The Company recognizes all actuarial gains and losses resulting from defined benefit plans immediately in other comprehensive income. If the plan is extinguished, actuarial gains and losses are recognized in profit or loss.

## ii. Profit sharing and bonus

Employee profit sharing and executives' variable compensation are linked to the achievement of operating and financial targets. The Company recognizes a liability and an expense substantially allocated to production cost and, where applicable, to general and administrative expenses when such goals are met.

#### 2.m) Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation and it has reliable cost estimation.

The amount recognized as a provision is the best value estimation required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material). Success fees are accrued to the extent that they make it probable that disbursements will occur. When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is probable that reimbursement will be received and that the amount of the receivable can be measured reliably.

#### 2.n) Concessions

The Company has governmental concessions to provide the following types of services: railway and port transportation managed by Company's subsidiaries and joint-ventures. The concessions included in the consolidated financial statements are related to the rail network in the Northeast area, managed by the subsidiary FTL, the container terminal in Itaguaí, managed by the subsidiary Sepetiba Tecon and the port terminal TECAR for exporting ore and importing coal, which is managed by the subsidiary CSN Mineração.

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The Company´s concession contracts are not within the scope of the international interpretative standard IFRIC 12, considering that the grantor (refers to the government) has effectively no control over what, to whom and at what price the services will be provided by the dealer (refers to the private part) to the customers. In essence, all concession contracts has operating leasing characteristics. Therefore, the accounting should follow the accounting rules applicable to leases. Our concession agreements provide for the use of a specific asset for an agreed period of time, but without any transfer of ownership to the Company or option to buy these assets after the completion of these contracts.

Payments made under operating leases are recognized in the income statement on a straight line basis over the period of the contracts.

There are assets related to our concessions which are subject to reversion to the grantor at the end of the concession agreement.

The residual carrying amounts of these assets on December 31, 2017 are listed below with an indication of their classification in our financial statements:

Sepetiba Tecon S.A. (TECON)

Tecar

Concession

Net book value (R\$) 313million

1,528 million

230 million

Classification in balance sheet

Fixed assets intangible: Software

Fixed assets intangible: Software

Fixed assets

Ferrovia Transnordestina Logística S.A. (FTL)

Transnordestina Logística S.A. (TLSA) 7,934 million (1) Investment MRS Logística S.A. (MRS) 3,428 million (2) Investment

- (1) The amount of fixed and intangible assets is recognized in TLSA's financial statements. We recognize our interest in the net assets of TLSA under the equity method and our investment balance in TLSA as of December 31, 2017 was R\$1,473,298.
- (2) The amount of fixed and intangible assets is recognized in MRS's financial statements. We recognize our interest in the net assets of MRS by the equity method and our investment balance consolidated in MRS as of December 31, 2017 was R\$ 1,325,032.

### 2.o) Share capital

Common shares are classified in shareholders' equity.

Incremental costs directly attributable to the issue of new shares or options are shown in shareholders' equity as a deduction to the amount received, net of taxes.

When any Company of the Group buys Company shares (treasury shares), the amount paid, including any directly additional costs (net of income tax), is deducted from shareholders' equity attributable to owners of the Company until the shares are canceled or sold. When these shares are subsequently sold, any amount received, net of any directly attributable additional transaction costs and the related income tax and social contribution effects, is included in shareholders' equity attributable to owners of the Company.

## 2.p) Revenue recognition

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Operating revenue from the sale of goods in the normal course of business is measured at the fair value of the receivables. Revenue is recognized when there is convincing evidence that the most significant risks and rewards of ownership of goods have been transferred to the buyer, it is probable that future economic benefits will flow to the entity, the associated costs and possible return of goods can be reliably estimated, there is no continued involvement with the goods sold, and the amount of the operating revenue can be reliably measured. If it is probable that discounts will be granted and the value thereof can be reliably measured, then the discount is recognized as a reduction of the operating revenue as sales are recognized. Revenue from services provided is recognized as it is realized.

The appropriate timing for transfer of risks and rewards varies depending on the individual terms and conditions of the sales contract. For international sales, this timing depends on the type of term of the contract term.

### 2.q) Financial income and financial expenses

Financial income includes interest income from funds invested (except available-for-sale financial assets), dividend income not accounted for under the equity method, gains on disposal of available-for-sale financial assets, changes in the fair value of financial assets measured at fair value through profit or loss, and gains on derivative instruments that are recognized in profit or loss. Interest income is recognized in profit or loss under the effective interest method. Dividend income is recognized in profit or loss when the Company's right to receive payment has been established. Distributions received from investees accounted for under the equity method reduce the investment value.

Financial expenses comprise interest expenses on borrowings, losses on the fair value of financial instruments measured at fair value through profit or loss, impairment losses recognized in financial assets, and losses on derivative instruments that are recognized in profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are measured through profit or loss under the effective interest method.

Foreign exchange gains and losses are reported on a net basis.

#### 2.r) Income tax and social contribution

Current income tax and social contribution are calculated based on the tax laws enacted by the end of the reporting period, including in the countries where the Group entities operate and generate taxable profit. Management periodically assesses the positions taken in the tax calculations with respect to situations where applicable tax regulations are open to interpretations. The Group recognizes provisions where appropriate, based on the estimated payments to tax authorities. The income tax and social contribution expense comprises current and deferred taxes. Current and deferred taxes are recognized in profit or loss unless they are related to business combinations or items recognized directly in shareholders' equity.

Current tax is the expected tax payable or receivable on taxable profit or loss for the year at tax rates that have been enacted by the end of the reporting period and any adjustment to taxes payable in relation to prior years.

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax is not recognized for the following temporary differences: initial recognition of assets and liabilities in a transaction that is not a business combination and does not affect either the accounting or taxable profit or loss, and differences associated with investments in subsidiaries and joint ventures when it is probable that they will not reverse in the foreseeable future.

Moreover, a deferred tax liability is not recognized for taxable temporary differences resulting from the initial recognition of goodwill. The deferred tax is measured at the rates that are expected to be applied on temporary differences when they reverse, based on the laws enacted by the end of the reporting period.

Current income tax and social contribution are carried at their net amounts by the taxpayer, in liabilities when there are amounts payable or in assets when prepaid amounts exceed the total amount due at the end of the reporting period.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority on the same entity subject to taxation.

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A deferred income tax and social contribution asset is recognized for all tax losses, tax credits, and deductible temporary differences to the extent that it is probable that taxable profits will be available against which those tax losses, tax credits, and deductible temporary differences can be utilized. Annually, the Company reviews and verifies the existence of future taxable income and a provision for loss is recognized when the realization of these credits is not likely.

## 2.s) Earnings/(Loss) per share

Basic earnings/loss per share are calculated by means of the profit/loss for the year attributable to owners of the Group and the weighted average number of common shares outstanding in the related period. Diluted earnings/loss per share are calculated by means of the average number of shares outstanding, adjusted by instruments potentially convertible into shares, with diluting effect, in the reported periods. The Group does not have any instruments potentially convertible into shares and, accordingly, diluted earnings/loss per share are equal to basic earnings/loss per share.

#### 2.t) Environmental and restoration costs

The Company recognizes a provision for the recovery costs and fines when a loss is probable and the amounts of the related costs can be reliably measured. Generally, the period when the provision for recovery is recognized coincides with the end of a feasibility study or the commitment to adopt a formal action plan.

Expenses related to compliance with environmental regulations are charged to profit or loss or capitalized, as appropriate. Capitalization is considered appropriate when the expenses refer to items that will continue to benefit the Group and that are basically related to the acquisition and installation of equipment to control and/or prevent pollution.

The Company make the provisions for asset retirement obligations which refer to estimated costs for decommissioning, retirement or restoration of areas upon the termination of activities of our mining resources. The initial measurement is recognized as a liability discounted to present value and subsequently through increase in expenses over time. The asset retirement cost equivalent to the initial liability is capitalized as part of the carrying amount of the asset and is depreciated over the useful life of the asset.

#### 2.u) Research and development

Research expenditures are recognized as expenses when incurred. Expenditures on project developments (related to the design and testing stages of new or improved products) are recognized as intangible assets when it is probable that projects will be successful, based on their commercial and technological feasibility, and only when the cost can be reliably measured. When capitalized, development expenditures are amortized from the start of a product commercial production, on a straight-line basis and over the period of the expected benefit.

## 2.v) Financial instruments

#### i) Financial assets

Financial assets are classified into the following categories: measured at fair value through profit or loss, loans and receivables, held-to-maturity and available-for-sale. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at the time of initial recognition.

#### Recognition and measurement

The Company classifies, at initial recognition, its financial assets into four categories: i) fair value through profit or loss, ii) loans and receivables, iii) held-to-maturity assets, and iv) available-for-sale financial assets. Assets are recognized at fair value, plus (with the exception of assets recognized at fair value through profit or loss) transaction costs that are directly attributable to the acquisition or issuance of financial asset.

In the subsequent measurement, loans and receivables are carried at amortized cost using the effective interest method.

Gains or losses resulting from changes in the fair value of financial assets measured at fair value through profit or loss are presented in the income statement under "financial income" in the period in which they arise. Dividend income from financial assets at fair value through profit or loss is recognized in the income statement as part of other financial income when the Company's right to receive the dividends has been established.

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The changes in the fair value of available-for-sale financial assets are recognized as follows: (i) the effects of foreign exchange differences and the changes in the fair value of the investment in the investee's capital are recognized directly in the Company's shareholders' equity, in "Other comprehensive income" and; (ii) the effects of foreign exchange differences and the changes in the option's fair value are recognized in the income statement for the year.

Interest on available-for-sale securities, calculated under the effective interest method, is recognized in the income statement as part of other income. Dividends from available-for-sale equity instruments, such as shares, are recognized in the income statement as part of other financial income when the Company's right to receive payments has been established.

The fair values of publicly quoted investments are based on current purchase prices. If the market for a financial asset (and for instruments not listed on a stock exchange) is not active, the Company establishes the fair value by using valuation techniques. These techniques include the use of recent transactions contracted with third parties, reference to other instruments that are substantially similar, analysis of discounted cash flows, and option pricing models that make maximum use of market inputs and relies as little as possible on entity-specific inputs.

Regular purchases and sales of financial assets are recognized at the trading date on which the Company undertakes to buy or sell the asset.

#### Derecognized

Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred, in the latter case, provided that the Company has transferred significantly all risks and rewards of ownership.

#### Financial assets measured at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for active and frequent trading. Derivatives are also categorized as held for trading and, accordingly, are classified in this category unless they have been designed as cash flow hedging instruments. Assets in this category are classified in current assets.

#### Loans and receivables

This category includes loans and receivables that are non-derivative financial assets with fixed or determinable payments not quoted in an active market. They are included in current assets, except those with maturity of more than 12 months after the end of the reporting period (which are classified as non-current assets). Loans and receivables include loans to associates, trade receivables, other receivables and cash and cash equivalents, except short-term investments. Cash and cash equivalents are recognized at fair value. Loans and receivables are carried at amortized cost using the effective interest method.

## Held-to-maturity assets

These are basically financial assets acquired with the positive intent and ability to hold to maturity. Held-to-maturity investments are initially recognized at their value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method, less any impairment loss.

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#### Available-for-sale financial assets

These are non-derivative financial assets, designated as available-for-sale, that are not classified in any other category established. They are included in non-current assets when they are strategic investments for the Company, unless Management intends to dispose of the investment within 12 months from the end of the reporting period. Available-for-sale financial assets are recognized at fair value.

#### ii) Impairment of financial assets

The Company evaluates at each reporting period whether there is an evidence of impairment in a financial asset or a group of financial assets. This evaluation should consider objective evidence of the occurrence of events that may impact the estimated cash flows of an individual financial asset or group of financial assets.

#### Assets measured at amortized cost

A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there are evidences of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event"), such loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets and the future cash flow estimation can be reliably calculated.

The criteria used by CSN to determine whether there are evidences of impairment loss includes:

- significant financial weakness related to the issuer or counterparty;
- a breach of contract, such as default or delinquency at interest or principal payments;
- the issuer, for economic or legal reasons relating to the borrower's financial weakness, grants to the borrower a concession that the lender would not otherwise consider:
- it becomes probable that the borrower will incur in bankruptcy or other financial reorganization;
- the disappearance of an active market for the related financial asset because of financial weakness; or
- observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of financial assets since the initial recognition of such assets, although the decrease cannot yet be identified with the individual financial assets in the portfolio, including:
- Adverse changes in the payment status of borrowers in the portfolio;
- National or local economic conditions that correlate with defaults on the assets in the portfolio.

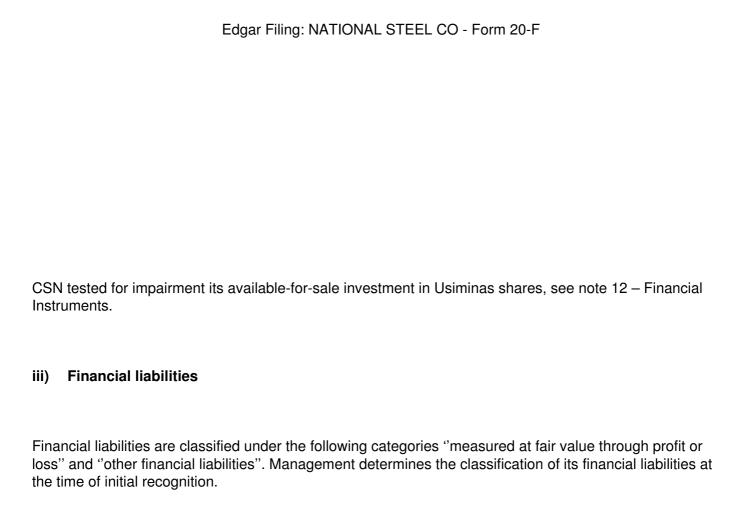
The amount of the loss is measured by the difference between the carrying amount of the asset and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the original effective interest rate of the financial asset. The carrying amount of the asset is reduced and the amount of the loss is recognized in the income statement. If a loan or held-to-maturity investment has a variable interest rate, the discount rate to measure an impairment loss is the current effective interest rate determined pursuant to the contract. As a practical expedient, the Company may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the previously recognized impairment loss is reversed and recognized in the consolidated income statement.

Assets classified as available-for-sale

In the case of equity securities classified as available-for-sale, a significant or prolonged decline at the fair value of an investment in an equity instrument below of its cost is also an evidence of impairment. Determining what is considered a "significant" or "prolonged" decline requires judgment. 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 as well as the financial health and short-term business prospects for the investee, including factors such as: industry and segment performance, changes in technology and operating/financial cash flows. If any of the impairment evidences is observed for 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 equity to profit or loss. Impairment losses recognized in the income statement as available-for-sale instruments are not reversed.

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## Financial liabilities measured at fair value through profit or loss

Financial liabilities classified in category fair value through profit or loss are financial liabilities held for trading or those designated at the time of initial recognition.

Derivatives are also classified as trading securities, and thereby are classified so, unless they have been designated as effective hedging instruments.

Gains and losses on financial liabilities classified at fair value through profit or loss are recognized in profit or loss

#### Other financial liabilities

Other financial liabilities are measured at amortized cost using the effective interest method. The Company holds the following non-derivative financial liabilities: borrowings, financing and debentures as well as trade payables.

#### Write-off of financial liabilities

Financial liabilities are written-off only when the obligations are terminated and canceled or when they mature. The difference between the carrying amount of the financial liability written off and the consideration paid and payable is recognized in profit or loss.

## Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to set off the recognized amounts as well as the intention to either settle them on a net basis or to realize the asset and settle the liability simultaneously.

## iv) Derivative instruments and hedging activities

#### Derivatives measured at fair value through profit or loss

Derivatives are initially recognized at fair value on the date when a derivative contract is entered, thereafter they are subsequently measured at their fair value and any changes are recognized as "Financial income (costs)" in the income statement.

# Cash flow Hedge

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The Company adopts hedge accounting and designates certain financial liabilities as a hedging instrument of a foreign exchange risk associated to the cash flows from forecast, highly probable exports (cash flow hedges).

At the inception of the transaction, the Company documents the relationships between the hedging instruments and the hedged items, as well as its risk management objectives and strategy for undertaking hedging transactions. The Company also documents its assessment, both at the inception of the hedge and on an ongoing basis, of whether the hedging transactions are highly effective in offsetting changes in the cash flows of the hedged items.

The effective portion of the changes in the fair value of financial liabilities designated and qualifying as cash flow hedge is recognized on equity, in line item "Hedge accounting". Any gain or loss related to the ineffective portion is recognized immediately in other operational income(expenses), if applicable.

The amounts accumulated in equity are reclassified to the income statement in the periods when the forecast exports affect profit or loss.

When a hedging instrument expires, is settled in advance or the hedging relationship no longer meets the hedge accounting criteria, or even when Management decides to discontinue hedge accounting, all cumulative gains or losses recorded in equity at the time remain recognized in equity and, from that moment, the exchange variations are recorded in the financial income (expenses). When the forecast transaction is completed, the gain or loss is reclassified to profit or loss. When a forecast transaction is no longer expected to take place, the cumulative gain or loss previously recognized in shareholders' equity is immediately transferred to the income statement, in line item "Other operating income (expenses)".

The movements in the hedge amounts designated as exporting cash flow hedges are stated in note 12 – Financial instruments.

#### Net investment hedge

For net investment hedge, the Company designates part of its financial liabilities as hedging instruments of its overseas investments with functional currencies other than the Group's functional currency, according to IAS39. Such relationship occurs since the financial liabilities are related to the investments in the amounts required for the effective relationship.

At the inception of the hedge relationship, the Company documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking out hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values of the hedged item.

The effective portion of changes in the fair value of financial liabilities that are designated and qualify as a net investment hedge is recognized in equity in line item "Hedge Accounting". The gain or loss relating to the ineffective portion is recognized in financial income (costs), when applicable. If at some point of the hedging relationship the balance of the debt is higher than the balance of the investment, the exchange variation on the excess debt will be reclassified to the statement of profit or loss as Other operating income/(expenses) (ineffectiveness of the hedge).

The amounts accumulated in equity will be realized in the statement of profit or loss upon disposal or partial disposal of the foreign operation.

The changes in the amounts of hedge denominated as Net investment hedge are shown in note 12 – Financial Instruments.

#### 2.w) Segment information

An operating segment is a component of the Group committed to the business activities from which it can obtain revenues and incur expenses, including revenues and expenses related to transactions with any other components of the Group. All the operating results of operating segments are reviewed regularly by the Executive Officers of CSN to enable decisions regarding resources to be allocated to the segment and assessment of its performance. The Company maintains distinct financial information for the distinct

segments.

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#### 2.x) Government grants

Government grants are not recognized until there is reasonable assurance that the Company will comply to the conditions attaching to them and assurance that the grants will be received, so then they will be recognized in profit or loss on a systematic basis over the periods in which the Company recognizes as expenses the related costs that the grants are intended to compensate.

The Company has state tax incentives in the North and Northeast regions, which are recognized in profit or loss as a reduction of the corresponding costs, expenses and taxes.

#### 2.y) Noncurrent assets held for sale and discontinued operations

Noncurrent assets and groups of assets are classified as held for sale if their carrying amount is recovered mainly through a sale transaction and not through continued use.

The criteria for classification of items held for sale are considered to be met only when the sale is highly probable and the asset or group of assets is available for immediate sale.

Assets and liabilities classified as held for sale are presented separately as current items in the balance sheet.

Classification as a discontinued operation occurs through disposal, or when the transaction meets the criteria to be classified as held for sale if this occurs earlier. A discontinued operation is a component of a Group business which comprises operations and cash flows that may be clearly distinct from the rest of the

Group and represent a separate business line or geographical area of operations.

The result of discontinued operations is presented in a single amount in the income statement, including the total income after income tax of these operations, less any impairment loss.

## 2.z) New standards and interpretations issued and not yet adopted

The following standards and interpretations have been issued and will be mandatory for subsequent accounting periods and were not early adopted by the Group for the year ended December 31, 2017:

#### Standard

#### Main items introduced by the standard

**Effective date** 

The standard retains but simplifies the combined measurement model and establishes two main measurement categories of financial assets: amortized cost and fair value. The classification basis depends on the entity business model and the characteristics of the financial asset's contractual cash flow.

# IFRS 9 – Financial Instruments

IFRS 9 retains most of IAS 39 requirements for financial liabilities. The main change refers to those cases where the fair value of the financial liabilities must be segregated so that the fair value portion related to the entities credit risk is recognized in "other comprehensive income" and not in profit or loss for the period.

January 1, 2018

The standard introduces an expected credit loss model for the measurement of the impairment of financial assets. However, it is no longer necessary for a credit event to have occurred before a credit loss is recognized. Finally, IFRS 9 introduces a new hedge accounting model that is designed to be more closely aligned with how entities undertake risk management activities when hedging financial and non-financial risk exposures.

The requirements for derecognition of financial assets and liabilities under IFRS 9 are carried forward from IAS 39.

This new standard introduces the principles that an entity will apply to determine the revenue measurement and when such revenue shall be recognized.

IFRS15 – Revenue from Contracts with Customers

January 1, 2018

IFRS 15 replaces IAS 11 – Construction Contracts, IAS 18 - Revenue and related interpretations.

This new standard defines the principles for recognition, measurement, presentation and disclosure of leases and introduces a single model for the accounting of leases in the balance sheet for the lessees. A lessee recognizes a right-of-use asset that represents his obligation to make lease payments. Optional exemptions are available for short- term leases and low-value items. For lessors, accounting treatment remains practically the same, with the classification of leases as operating leases or financial leases, and accounting for these two types of lease differently. IFRS 16 replaces existing lease standards, including IAS 17 – Leasing Operations and IFRIC 4, SIC 5 and SIC 27 – Complementary Aspects of Leasing

January 1, 2019

IFRS16 - Leases

Operations.

IFRIC 22 – Foreign Currency Transaction and Advance Consideration

The Interpretation covers foreign currency transactions (or part of them) when an entity recognizes a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration before the entity recognizes the related asset, expense or income (or part of it).

January 1, 2018

IFRIC 23 – Uncertainty over Income Tax Treatments

Can be unclear how tax law applies to a particular transaction or circumstance. This interpretation complements the IAS 12 – Income Tax, clarify how to reflect the effects of uncertainty over income tax treatments.

January 1, 2019

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The following information presents the possible impacts on the adoption of IFRS 9 and IFRS 15 which were available at the time of the preparation of these financial statements. In this way, these preliminary assessments and their potential impacts are subject to change until the initial adoption be disclosed in the 2018 financial statements.

#### - IFRS 9 – Financial Instruments

Classification and measurement of financial assets: Management evaluated the classification and measurement of financial assets offered by the new pronouncement based on its diagnosis, business model, expectations of the company's cash flow and the financial assets management model. In this way, was concluded that the investment in Usiminas shares would be appropriately classified in the category of "fair value through profit or loss" and that the loans and receivables would be classified in the category of measured at "amortized cost".

In the classification of the category of "fair value through profit or loss", the gains or losses arising from the variation of the quotation of the shares are recorded directly in the statement of income at the time of adoption and throughout all future periods. On the other hand, since it is an initial adoption, the Company evaluated the possible impacts related to the investment in Usiminas shares and the gain of R\$1.5 billion previously recognized and accumulated in Other comprehensive income was reclassified to "Other operating income" in the statement of income on January 1st, 2018., arising from the recording of the accumulated balance currently recognized in other comprehensive income.

#### - IFRS 15 - Revenue from Contracts with Customers

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The Company's Management evaluated all stages of the new standard for the recognition of revenue from contracts with customers. Based on this analysis, the Company did not identify material measurement impacts on the application of this standard.

The observed impacts are related to the review of internal procedures, with the objective to ensure that the new contracts with clients will be properly evaluated and accounted in accordance with the principles of the new standard.

#### IFRS 16 – Leases

During 2018, the Company will evaluate, in the main contracts, the effects of applying the new standard.

The Company does not expect material impacts arising from the application of the new standard.

#### - IFRIC 22 - Foreign Currency Transaction and Advance Consideration

For IFRIC 22, the Company will evaluate the effects of applying the new interpretation during 2018, in its operations in foreign currency.

## - IFRIC 23 - Uncertainty over Income Tax Treatments

For IFRIC 23, during 2018 the Company will study this interpretation to assets how it applies to the Brazilian tax environment.

The Company does not expect material impacts arising from the application of the interpretation.

#### 3. CASH AND CASH EQUIVALENTS

Current	12/31/2017	Consolidated 12/31/2016
Cash and cash equivalents Cash and banks	193,702	502,480
Short-term investments In Brazil:		
Government securities	12,100	17,929
Private securities	644,525	1,390,707
	656,625	1,408,636
Abroad:		
Time deposits	2,561,245	2,960,046
Total short-term investments	3,217,870	4,368,682
Cash and cash equivalents	3,411,572	4,871,162

The short-term investments are held through exclusive funds and are comprised of Certificates of Bank Deposits ("CDBs") and yield interest based on the floating of Certificates of Interbank Deposits ("CDI"), and of Brazilian Treasury notes with return at fixed rates. These short-term investments have immediate liquidity.

A significant part of the funds of the Company and its foreign subsidiaries is invested in time deposits in top rated banks abroad and the returns are based on fixed interest rates.

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#### 4. FINANCIAL INVESTMENTS

		Consolidated
	12/31/2017	12/31/2016
CDB - Bank Certificate of Deposit (1)	716,218	658,476
Government securities (2)	19,494	101,915
	735,712	760,391

- (1) Financial investments linked to Bank Certificates of Deposit (CDBs), to be used as a collateral to a guarantee letter, of certain loans.
- (2) Financial investments in Public Securities (Financial Treasury Bills) managed by its exclusive funds. In 2016, in addition to the Financial Treasury Bills, the Company had a financial investment in Public Securities managed by its exclusive funds which were used as collateral for future CDI rate's contracts in the period as detailed in note 12 (b). These investments were settled in October 2017.

#### 5. TRADE RECEIVABLES

	12/31/2017	Consolidated 12/31/2016
Trade receivables	12/01/2011	12/01/2010
Third parties		
Domestic market	1,290,823	1,027,639
Foreign market	982,846	919,936
	2,273,669	1,947,575
Allowance for doubtful accounts	(191,979)	(172,782)
	2,081,690	1,774,793
Related parties (Note 18 b)	115,388	129,837
	2,197,078	1,904,630
Other receivables		
Dividends receivable (Note 18 b) (*)	41,528	37,679

Advances to employees	33,942	34,607
Other receivables	3,667	20,300
	79,137	92,586
	2,276,215	1,997,216

(\*) Refers mainly to dividends from CSN Mineração S.A. totaling R\$ 837,084 received in February 2018.

The Company assigns certain accounts receivable to anticipate the cash inflows and eliminate the credit risk of the notes. These transactions amounted to R\$181,972 as of December 31, 2017 (R\$263,644 as of December 31, 2016).

The breakdown of gross trade receivables from third parties is as follows:

		Consolidated
	12/31/2017	12/31/2016
Current	1,391,839	1,381,255
Past-due up to 180 days	310,106	245,012
Past-due over 180 days	571,724	321,308
	2,273,669	1,947,575

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The movements in the Group's allowance for doubtful debts are as follows:

		Consolidated
	12/31/2017	12/31/2016
Opening balance	(172,782)	(151,733)
Estimated losses	(36,697)	(25,474)
Recovery of receivables	17,500	4,425
Closing balance	(191,979)	(172,782)

## 6. INVENTORIES

		Consolidated
	12/31/2017	12/31/2016
Finished goods	1,308,802	1,183,619
Work in progress	1,135,589	674,860
Raw materials	1,050,588	1,124,158
Spare parts	814,725	824,478
Iron ore	278,041	255,029
Advances to suppliers	12,514	3,168
(-) Provision for losses	(135,840)	(101,176)
	4,464,419	3,964,136

The movements in the provision for inventory losses are as follows:

		Consolidated
	12/31/2017	12/31/2016
Opening balance	(101,176)	(111,427)
Reversal / (losses) for slow-moving and obsolescence	(34,664)	10,251
Closing balance	(135,840)	(101,176)

# 7. OTHER CURRENT AND NON-CURRENT ASSETS

The group of other current and non-current assets is comprised as follows:

		O	N	Consolidated
	10/01/0017	Current		n-current
	12/31/2017	12/31/2016	12/31/2017	12/31/2016
Judicial deposits (Note 16)			339,351	331,258
Credits with the PGFN (1)			46,774	46,774
Recoverable taxes (2)	866,986	780,715	401,071	386,872
Prepaid expenses	50,078	27,011	30,741	20,421
Actuarial asset - related party			111,281	119,854
(Note 18 b)			, = 0 .	,
Derivative financial instruments		2,298		
(Note 12 I)		2,290		
Securities held for trading (Note	2,952	2,966		
12   )	2,552	2,300		
Iron ore inventory (3)			144,499	144,499
Northeast Investment Fund –			26,598	26,598
FINOR			20,000	20,000
Other receivables (Note 12 I)			20,024	15,291
Loans with related parties (Note	2,441		554,694	479,960
18 b and 12 l)	_,		001,001	., 0,000
Other receivables from related	3,577	5,768	30,770	32,020
parties (Note 18 b)	0,011	<b>5</b> ,. <b>55</b>	33,	3_,3_3
Monetary adjustment related to				
the Eletrobrás's compulsory			755,151	
loan (Note 23)				
Other	67,544	33,255	67,521	72,273
	993,578	852,013	2,528,475	1,675,820

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- (1) Refers to the excess of judicial deposit originated by the 2009 REFIS (Tax Debt Refinancing Program). After the settlement of the tax debt refinancing program, the amount related to one of the lawsuits was fully redeemed through a judicial authorization.
- (2) Refers mainly to taxes on revenue (PIS/COFINS) and State VAT (ICMS) recoverable and income tax and social contribution for offset.
- (3) Long-term iron ore inventories that will be used after the construction of the processing plant, which will produce pellet feed, expected to start operating in the first half of 2020.

#### 8. INVESTMENTS

#### Reduction of financial leverage

With the primary objective of reducing the Company's financial leverage, Management is committed to a plan to dispose of a set of assets, however, it is not possible to confirm that the sale within a period of 12 months is highly probable for any of the assets contemplated. The Company considers several sales scenarios that vary according to different macroeconomic and operational assumptions. In this context, the Company did not segregate and did not reclassify such assets in the financial statements as discontinued operations in accordance with IFRS 5.

#### Events occurred in 2017

Sale of the Subsidiary - CGPAR Construção Pesada - "CGPAR"

In July 2017, the Company concluded the sale of its subsidiary CGPAR Construção Pesada S.A. to CSN Mineração S.A., a subsidiary of the Company. The summary of the transaction can be shown as follows:

	R\$ (000)
Consideration paid	99,452
Net assets acquired at book value	(64,063)
Capital distribution	(35,389)

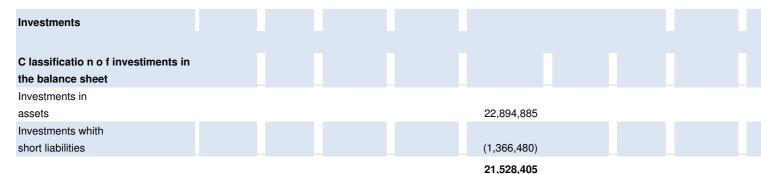
8.a) Direct equity interests in subsidiaries, joint ventures, joint operations, associates and other investments

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Companies
CSN in units interest equity (loss) for period  Common Preferred  Investments under the equity method  Subsidiaries  CSN Islands VII  Corp. 20,001,000 100.00 5,242,890 5,421,043 (178,153) (385,919) 100.00 6,436,140 6  CSN Islands IX  Corp. (1)  CSN Islands XI  Corp. (1)  CSN Islands XI  Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2  CSN Islands XII  Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3  CSN Minerals  S.L.U. (2) 331,897 100.00 3,833,669
Common Preferred period Preferred Profile Prof
Investments under the equity method  Subsidiaries  CSN Islands VII  Corp. 20,001,000 100.00 5,242,890 5,421,043 (178,153) (385,919) 100.00 6,436,140 6  CSN Islands IX  Corp. (1)  CSN Islands XI  Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2  CSN Islands XII  Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3  CSN Minerals  S.L.U. (2) 331,897 100.00 3,833,669
method       Subsidiaries       CSN Islands VII       Corp.     20,001,000     100.00     5,242,890     5,421,043     (178,153)     (385,919)     100.00     6,436,140     6       CSN Islands IX     Corp.     (1)       CSN Islands XII     Corp.     50,000     100.00     2,514,894     2,557,398     (42,504)     (63,201)     100.00     2,530,563     2       CSN Islands XII       Corp.     1,540     100.00     2,166,682     3,312,505     (1,145,823)     (126,524)     100.00     2,244,240     3       CSN Minerals     S.L.U.     (2)     331,897     100.00     3,833,669
CSN Islands VII Corp. 20,001,000 100.00 5,242,890 5,421,043 (178,153) (385,919) 100.00 6,436,140 6 CSN Islands IX Corp. (1) CSN Islands XI Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2 CSN Islands XII Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3 CSN Minerals S.L.U. (2) 331,897 100.00 3,833,669
Corp. 20,001,000 100.00 5,242,890 5,421,043 (178,153) (385,919) 100.00 6,436,140 6 CSN Islands IX Corp. (1) CSN Islands XI Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2 CSN Islands XII Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3 CSN Minerals S.L.U. (2) 331,897 100.00 3,833,669
CSN Islands IX Corp. (1) CSN Islands XI Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2 CSN Islands XII Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3 CSN Minerals S.L.U. (2) 331,897 100.00 3,833,669
Corp. (1)  CSN Islands XI  Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2  CSN Islands XII  Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3  CSN Minerals  S.L.U. (2) 331,897 100.00 3,833,669
CSN Islands XI  Corp. 50,000 100.00 2,514,894 2,557,398 (42,504) (63,201) 100.00 2,530,563 2  CSN Islands XII  Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3  CSN Minerals  S.L.U. (2) 331,897 100.00 3,833,669
Corp.       50,000       100.00       2,514,894       2,557,398       (42,504)       (63,201)       100.00       2,530,563       2         CSN Islands XII         Corp.       1,540       100.00       2,166,682       3,312,505       (1,145,823)       (126,524)       100.00       2,244,240       3         CSN Minerals       S.L.U.       (2)       331,897       100.00       3,833,669
CSN Islands XII  Corp. 1,540 100.00 2,166,682 3,312,505 (1,145,823) (126,524) 100.00 2,244,240 3  CSN Minerals  S.L.U. (2) 331,897 100.00 3,833,669
Corp.     1,540     100.00     2,166,682     3,312,505     (1,145,823)     (126,524)     100.00     2,244,240     3       CSN Minerals     S.L.U.     (2)     331,897     100.00     3,833,669
CSN Minerals S.L.U. (2) 331,897 100.00 3,833,669
S.L.U. (2) 331,897 100.00 3,833,669
- (-)
Europe, S.L.U. (2) 22,600 100.00 666,362
CSN Metals
S.L.U. (2) 23,188 100.00 636,408
CSN Americas
S.L.U. (2) 193,652 100.00 1,492,678
CSN Steel S.L.U. (2) 2,042,688 100.00 6,905,164 322,963 6,582,201 108,427 100.00 2,537,179 1
Sepetiba Tecon
S.A. 254,015,052 99.99 459,647 160,402 299,245 29,768 99.99 441,214
M inérios
Nacional S.A. 66,393,587 99.99 105,586 65,290 40,296 (13,600) 99.99 74,738
Fair Value - M
inérios Nacional 2,123,507
Estanho de
Rondônia S.A. 121,861,697 99.99 46,005 41,032 4,973 (6,291) 99.99 32,816
Companhia M
etalúrgica Prada 313,651,399 99.99 655,748 485,915 169,833 (29,258) 99.99 769,337

			-							
CSN Mineração	450 440 400		07.50	44.070.000	5 000 107	0.050.450	707 500	07.50	10 000 767	
S.A.	158,419,480		87.52	14,273,290	5,620,137	8,653,153	767,568	87.52	13,039,767	4
CSN Energia	40.440		00.00	140400	FF 000	04 400	50.007	100.00	100.000	
S.A.	43,149		99.99	146,130	55,030	91,100	56,987	100.00	109,290	
FTL - Ferrovia Transnordestina										
Logística S.A.	395,302,149		90.78	419,388	138,888	280,500	(77,384)	90.78	484,218	
Companhia										
Florestal do										
Brasil	41,673,302		99.99	34,910	3,734	31,176	(1,499)	99.99	35,206	
Nordeste										
Logística	99,999		99.99	80	55	25	(1)	99.99	81	
CGPAR - Construção										
Pesada S.A	(3)						723	100.00	40,889	
Fair value fixed	(0)						0		.0,000	
assets - CGPAR							(3,940)			
				32,970,414	18,184,392	16,909,529	827,193		35,404,795	19
.lo int-venture ar	nd Jo int-o peratio			32,970,414	10,104,392	10,909,529	027,195		33,404,793	13
n	ia do int-o peratio									
Itá Energética										
S.A.	253,606,846		48.75	265,476	18,104	247,372	10,789	48.75	282,383	
M RS Logística	, ,			•	,	,	· ·		,	
S.A.	26,611,282	2,673,312	18.64	1,520,264	857,581	662,683	85,974	18.64	1,411,526	
CBSI -										
Companhia										
Brasileira de	1,876,146		50.00	16,005	13,654	2,351	1,785	50.00	13,574	
Serviços de										
Infraestrutura										
Transnordestina Logística S.A.	24,168,304		46.28	3,806,380	2,604,198	1,202,182	(21,357)	49.02	3,786,556	2
-			40.20	3,000,300	2,004,190	1,202,102	(21,337)	49.02	3,760,330	۷
	ed to TLSA in loss					074 440				
of control						271,116				
				5,608,125	3,493,537	2,385,704	77,191		5,494,039	3
A sso ciates										
Arvedi M etalfer										
do Brasil	46,994,971		20.00	43,653	23,978	19,675	(4,368)	20.00	53,101	
				43,653	23,978	19,675	(4,368)		53,101	
C lassified as av	ailable fo r sale									
(no te 12 I)										
Usiminas						2,200,459				
Panatlântica						21,974				
						2,222,433				
Other						2,222,433				
investments										
voodiiloiito						(70, 470)	4.005			
						(72,473)	1,985			
Others						63,537	(165)			
						(8,936)	1,820			
T o tal						21,528,405	901,836			

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- (1) Company terminated in 2016;
- (2) Merger of the companies by the subsidiary CSN Steel S.L.U. in December 2017, according to note 2;
- (3) Company sold in July 2017, to the subsidiary CSN Mineração.

The number of shares, the carrying amounts of assets, liabilities and shareholders' equity, and the amounts of profit or loss for the year refer to the equity interests held by CSN in those companies.

8.b) Changes of investments balances in subsidiaries, joint ventures, joint operations, associates and other investments

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Opening balance of investments	12/31/2017 4,568,451	Consolidated 12/31/2016 3,998,239
Capital increase/acquisition of shares	20,579	190,651
Dividends (1)	(79,189)	(36,765)
Comprehensive income (2)	850,640	713,442
Equity in results of affiliated companies (4)	147,800	108,031
Amortization of fair value – investment in MRS	(11,746)	(11,746)
Amortization of fair value – investment in CGPAR	·	(3,940)
Impairment of the Fair Value of Transnordestina (3)		(387,989)
Others	3,460	(1,472)
Closing balance of investments	5,499,995	4,568,451
Total	5,499,995	4,568,451

- (1) In 2017 refers to the allocation of dividends from subsidiaries Sepetiba Tecon, MRS Logistica, CSN Energia, Itá Energética, CBSI Companhia Brasileira de Serviços de Infraestrutura, CSN Minerals, CSN Steel, CSN Metals, CSN Mineração and CSN Americas.
- (2) Refers to the mark-to-market of investments classified as available for sale and translation to the reporting currency of the foreign investments (the functional currency of which is not the Brazilian Reais), actuarial gain/loss and gain/loss on net investment hedge from investments measured by equity method.
- (3) Refers to impairment of the fair value of Transnordestina Logística S.A, see note 8.d).
- (4) The reconciliation of the equity in results of affiliated companies included on investment balance with the amount disclosed in the income statement and it is due to the elimination of the results of the CSN's transactions with these companies

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		Consolidated
	12/31/2017	12/31/2016
Equity in results of affiliated companies		
MRS Logística S.A.	171,905	155,617
CBSI - Companhia Brasileira de Serviços de Infraestrutura	1,785	2,953
Transnordestina	(21,357)	(52,127)
Arvedi Metalfer do Brasil	(4,368)	1,372
Others	(165)	216
	147,800	108,031
Eliminations		
To cost of sales	(40,823)	(41,556)
To taxes	13,880	14,129
Others		
Amortization of fair value - Investments in MRS Amortization of fair value - Investments in CGPAR	(11,746)	(11,746) (3,940)
Equity in results	109,111	64,918

#### 8.c) Additional information about the main operating subsidiaries

## • SEPETIBA TECON S.A. ("TECON")

The Container Terminal was created to exploit the terminal no 1 in Itaguaí Port, located in the State of Rio de Janeiro. The terminal is connected to the UPV by the Southeast railroad network. The Southeast railroad network is the contract object of the concession that has been granted to MRS Logística S. A. The range of services includes the move operation of cargo, storage of containers and steel products, general cargo, cleaning and maintenance.

Tecon won the auction held on September 3, 1998 to enter into a lease agreement for operation of the port terminal for a period of 25 years, extendable for an equal period. With the publication of Presidential Decree 9048 of May 10, 2017, the operation of the terminal may be successively extended in distinct periods with a

maximum term of 70 years.

When the concession expires, it will return to the Union as well as all the rights and privileges transferred to Tecon, along with the ownership of assets and those resulting from investments, declared reversible by the Federal Government for being necessary to the continuity of terminal's operation. The reversible assets will be indemnified by the Federal Government at the residual value of cost, based on the accounting records of Tecon after deducting depreciation.

## • ESTANHO DE RONDÔNIA S.A. ("ERSA")

Headquartered in the state of Rondônia, the subsidiary operates two units, which are based in the cities of Itapuã do Oeste/RO and Ariquemes/RO. In Itapuã do Oeste is extracted the cassiterite (tin ore) and in Ariquemes is located the casting operation, where the metallic tin is made, which is the raw material used in UPV for the production of tin plates.

## • COMPANHIA METALÚRGICA PRADA ("Prada")

Prada operates in the area of two segments: steel metal packaging, production and processing and distribution of flat steel.

Metal packaging

In the steel metal packaging segment, Prada produces its supply chain includes the chemical and food segments, providing packaging and printing services to leading companies in the market.

Prada holds a 100% interest in the capital stock of Companhia Brasileira de Latas - "CBL".

On 2015, Prada has incorporated its subsidiary Rimet Empreendimentos Industriais e Comerciais.

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## Distribution

Prada is a player in the market of processing and distribution regarding flat steel products, with a diversified product line. It provides coils, rolls, strips, blanks, metal sheets, profiles, tubes and tiles, among other products, to the most different industry segments - from automotive to construction. It is also specialized in providing service steel processing, meeting the demand of the all national companies.

#### CSN ENERGIA S.A.

Its main objective is the distribution of the excess electric power generated by CSN and Companies, consortiums or other entities in which CSN holds an interest.

#### • FTL - FERROVIA TRANSNORDESTINA LOGÍSTICA S.A. ("FTL")

FTL was created on the purpose of incorporating the spin-off portion of TLSA, the Company holds the concession to operate the railway cargo transportation, the public service is provided in northeastern of Brazil, which includes the rail segments of Sao Luis - Fortaleza, Arrojado - Recife, Itabaiana - Cabedelo, Paula Cavalcante - Macau and Propriá - Jorge Lins ("Network I").

As of November 2016, the CSN subscribed shares by capitalization of advances for future capital increase amounting R\$ 39,341, therefore its participation in the share capital of the company increased from 89.79% to 90.78%. As a result of the operations described above that caused a change in the shareholder's participation, the Company recorded a loss in the amount of R\$(25) recorded in shareholders' equity in other comprehensive income.

• CSN MINERAÇÃO S.A. ("CSN Mineração")

Headquartered in Congonhas, Minas Gerais, it is primarily engaged in the production, purchase and sale of iron ore. CSN Mineração S.A. commercializes its products mainly in the overseas market. From 30 November 2015, the CSN Mineração S.A. has centralized mining operations of CSN, including the establishments of the mine Casa de Pedra, the port TECAR and the participation of 18.63% in MRS. The participation of the CSN in this subsidiary is 87.52%.

• MINÉRIOS NACIONAL S.A. ("Minérios Nacional")

Headquartered in Congonhas, Minas Gerais, Mineração Nacional is mainly engaged in the production and commercialization of iron ore. This subsidiary concentrates the mining rights assets related to the Fernandinho, Cayman and Casa de Pedra mines transferred to this subsidiary in the business combination process that took place in 2015.

## 8.d) Joint ventures and joint operations financial information

The balances of the balance sheets and income statements of joint venture and joint operation are presented as follows and refer to 100% of the companies' profit/loss:

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## 12/31/2017

	MDO	Joint-Vent		Joint-Operation	MDO	Joint venture	
Equity interest (%)	MRS Logística	CBSI	Transnordestina Logística	Itá Energética	MRS Logística	CBSI	Trans Lo
Balance	34.94%	50.00%	46.30%	48.75%	34.94%	50.00%	49
sheet							
Current							
assets							
Cash and cash							
equivalents	484,978	101	5,763	16,231	345,164	2,925	
Advances to							
suppliers Other current	14,911	37		22	7,452	951	
assets	685,311	28,475	49,494	16,447	406,170	19,603	
Total current		_0,	,	,	,	,	
assets	1,185,200	28,613	55,257	32,700	758,786	23,479	
Non-current assets							
Other							
non-current							
assets	693,434	974	238,004	27,459	598,577	234	
Investments, PP&E and							
intangible							
assets	6,277,550	2,423	7,927,881	484,406	6,215,442	3,434	
Total							
non-current assets	6,970,984	3,397	8,165,885	511,865	6,814,019	3,668	
		-		·		·	
Total Assets	8,156,184	32,010	8,221,142	544,565	7,572,805	27,147	
Current							
liabilities							
		1,411	52,691				

Borrowings and financing Other current	668,947				653,491		
liabilities  Total current	1,272,365	25,898	113,739	33,666	740,319	23,034	
liabilities Non-current liabilities	1,941,312	27,309	166,430	33,666	1,393,810	23,034	
Borrowings and financing Other	2,084,422		5,457,768		2,176,357		
non-current liabilities Total	575,170	-	434	3,471	699,830	-	
non-current liabilities	2,659,592	-	5,458,202	3,471	2,876,187	-	
Shareholders' equity Total	3,555,280	4,701	2,596,510	507,428	3,302,808	4,113	
liabilities and shareholders'	0 156 104	22.010	0 221 142	EAA EGE	7 570 905	97 147	
equity	8,156,184	32,010	8,221,142	544,565	7,572,805	27,147	
		Joint-Vent	ure	01/01/2017 to 12/31/2017 Joint-Operation		Joint vent	ure
	MRS		Transnordestina	-	MDC		Tropo
Equity		CBSI		Itá Energética	MRS Logística	CBSI	Trans
interest (%)	Logística 34.94%	CBSI 50.00%	Logística 46.30%	Itá Energética 48.75%	Logística 34.94%	CBSI 50.00%	Lo
• •	Logística		Logística	•	Logística		
interest (%) Statements of Income Net revenue	Logística		Logística	•	Logística		
interest (%) Statements of Income	Logística 34.94%	50.00%	Logística	48.75%	<b>Logística</b> 34.94% 3,279,420	50.00%	
interest (%)  Statements of Income  Net revenue Cost of sales and services  Gross profit Operating	<b>Logística 34.94</b> % 3,492,805	<b>50.00%</b> 135,399	Logística	<b>48.75</b> % 168,194	<b>Logística</b> 34.94% 3,279,420	<b>50.00%</b> 122,870	
interest (%)  Statements of Income  Net revenue Cost of sales and services  Gross profit Operating (expenses) income Finance	34.94% 3,492,805 (2,307,108)	<b>50.00</b> % 135,399 (120,647)	Logística	<b>48.75%</b> 168,194 (76,810)	34.94% 3,279,420 (2,208,786)	<b>50.00</b> % 122,870 (105,692)	
interest (%)  Statements of Income  Net revenue Cost of sales and services  Gross profit Operating (expenses) income Finance income (costs), net Income before income tax	34.94% 3,492,805 (2,307,108) 1,185,697	<b>50.00%</b> 135,399 (120,647) 14,752	Logística 46.30%	<b>48.75%</b> 168,194 (76,810) 91,384	34.94% 3,279,420 (2,208,786) 1,070,634	<b>50.00%</b> 122,870 (105,692) 17,178	
interest (%)  Statements of Income  Net revenue Cost of sales and services  Gross profit Operating (expenses) income Finance income (costs), net Income before income tax and social contribution	Logística 34.94% 3,492,805 (2,307,108) 1,185,697 (283,151)	50.00% 135,399 (120,647) 14,752 (8,340)	Logística 46.30%	48.75% 168,194 (76,810) 91,384 (58,465)	Logística 34.94% 3,279,420 (2,208,786) 1,070,634 (160,187)	50.00% 122,870 (105,692) 17,178 (8,367)	
interest (%)  Statements of Income  Net revenue Cost of sales and services  Gross profit Operating (expenses) income Finance income (costs), net Income before income tax and social	Logística 34.94% 3,492,805 (2,307,108) 1,185,697 (283,151) (187,295)	50.00% 135,399 (120,647) 14,752 (8,340) (1,004)	Logística 46.30%	48.75% 168,194 (76,810) 91,384 (58,465)	Logística 34.94% 3,279,420 (2,208,786) 1,070,634 (160,187) (249,300)	50.00% 122,870 (105,692) 17,178 (8,367) (1,676)	

contribution (Loss) profit for the year,

net 461,250 3,570 (46,183) 22,131 417,545 5,906

## • ITÁ ENERGÉTICA S.A. - ("ITASA")

ITASA is a corporation established in July 1996 that was engaged to operate under a shared concession, the Itá Hydropower Plant (UHE Itá), with 1,450 MW of installed power, located on the Uruguay River, on the Santa Catarina and Rio Grande do Sul state border.

# MRS LOGÍSTICA S.A. ("MRS")

With registered offices in the City of Rio de Janeiro-RJ, this subsidiary is engaged in public railroad transportation, on the basis of an onerous concession, on the domain routes of the Southeast Grid of the federal railroad network (Rede Ferroviária Federal S.A. – RFFSA), located in the Southeast (Rio de Janeiro, São Paulo and Belo Horizonte. The concession has a 30-year term as from December 1, 1996, extendable for an equal term by exclusive decision of the concession grantor.

MRS may further engage in services involving transportation modes related to railroad transportation and participate in projects aimed at expanding the railroad service concessions granted.

For performance of the services covered by the concession for a, MRS leased from RFFSA for the same concession period, the assets required for operation and maintenance of the freight railroad transportation activities. At the end of the concession, all the leased assets are to be transferred to the ownership of the railroad transportation operator designated at that time.

The Company had a direct equity interest of 18.64% in the capital stock of MRS and an indirect equity interest of 18.63% through its subsidiary CSN Mineração S.A, consequently the total participation is 34.94%.



	,	,	
•	CONSORCIO DA LISINA	HIDREI ETRICA	DF IGARAPAVA

The Igarapava Hydroelectric Power Plant is located on the Grande River, in the city of Conquista, MG, and has installed capacity of 210 MW. It consists of 5 bulb-type generating units.

CSN holds a 17.92% investment in the consortium, whose specific purpose is the distribution of electric power, which is made according to the percentage equity interest of each company.

The balance of property, plant and equipment less depreciation as of December 31, 2017 is R\$24,759 (R\$25,921 as of December 31, 2016) and the expense in 2017 amounted to R\$5,966 (R\$6,041 in 2016).

• CBSI - COMPANHIA BRASILEIRA DE SERVIÇOS DE INFRAESTRUTURA ("CBSI")

CBSI is the result of a joint operation between CSN and CKTR Brasil Ltda. Based in the city of Araucária, PR, CBSI is primarily engaged in providing services CSN and other third-party entities, and can operate activities related to the refurbishment and maintenance of industrial machinery and equipment, construction maintenance, industrial cleaning, logistic preparation of products, among other activities.

TRANSNORDESTINA LOGÍSTICA S.A. ("TLSA")

TLSA is primarily engaged in the public service operation and development of a railroad network in the Northeast of Brazil network, comprising the rail segments Missão Velha-Salgueiro, Salgueiro-Trindade,

Trindade-Eliseu Martins, Salgueiro- Porto de Suape, and Missão Velha-Porto de Pecém sections ("Railway System II").

It is in pre-operational phase and should remain so until the completion of Rail Network II. The approved schedule, which considered the completion of the work by January 2017, is currently under review and discussion with the responsible bodies; However, Management understands that new deadlines for project completion will not have material adverse effects on the expected return on investment. After assessing this matter, its Management has concluded as appropriate the use of the accounting basis of operating continuity of the project in the preparation of its financial statements.

During the year 2017, the others shareholders of TLSA subscribed 2,912,997 shares in amounting to R\$153,253, diluting CSN on TLSA share capital to 46.30%. Therefore, due to the transactions described above and the participation change of the shareholders in the share capital of TLSA on 2017, the Company recognized a gain of R\$2,814, recorded in equity in others comprehensive income.

The Management receives funds from its shareholders and third parties for completion of the works, which are expected to be available, based on agreements previously entered into and recent discussions between the involved parties. After analyzing this matter, Management concluded as adequate the use of the accounting base of the project's going concern in the preparation of the financial statements for the year ended December 31, 2017.

In this direction, TLSA performed an impairment test of its own long-live assets using the discount cash flow method and considered the main assumptions, as follows:

Measurement of recoverable value:

#### **Cash Flow Projection**

**Gross Margin** 

Estimated Costs
Growth rate in perpetuity

Discount rate

#### **Until 2057**

Based on market studies to capture operations costs and loads, according studied of market trends.

Costs based on studies and market trends.

Growth rate was not considered due to the projection model until the end of the concession.

Between 5.1% to 6.25% in real terms.

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In addition, CSN, as an investor, performed an impairment test of its stake in TLSA, through TLSA ability to distribute dividends, methodology known as Dividend Discount Model, or DDM, to remunerate the capital invested by shareholders. In order to perform this test, some aspects were taken into account, such as:

- The flow of dividends was obtained from the TLSA nominal cash flow;
- The flow of dividends was calculated considering the annual percentages of participation, considering the dilutions of the CSN's stakes due to the amortization of debts:
- This flow of dividends was discounts at present value using cost of equity (Ke) embedded in the WACC rate of TLSA; and
- This Ke obtained was the one calculated in the "rolling WACC" of TLSA.

Another important aspect that was considered in the analysis of the impairment of CSN's investment in the TLSA, was the need to apply an additional percentage of risk to the discount rate in addition to the one already used to determine the discounted cash flow of TLSA. Due to the sharing of investors risks, and by the fact that the asset that is being tested represents the cash-generating unit itself, which is equal to the legal entity, the risk determined by CSN Management is the same applied by TLSA when the evaluation of their own investments, not applying an additional risk factor to the model.

As a result, the Company which had recognized a loss in the surplus value of the investments of TLSA in the amount of R\$ 387,989 recorded as other operating expenses and R\$ 131,916 in deferred taxes in 2016, did not recognized additional impairment losses in the surplus-value of the investments in 2017.

#### 8.e) Additional information on indirect participation in foreign operations

STAHLWERK THÜRINGEN GMBH ("SWT")

SWT was formed from the former industrial steel complex of Maxhütte, located in the Germany city of Unterwellenborn, which produces steel shapes used for construction in accordance with international quality standards. Its main raw material is steel scrap, the Company has an installed production capacity of 1.1 million metric tons steel/year. The SWT is a wholly owned indirect subsidiary of CSN Steel S.L.U, a subsidiary of CSN.

• COMPANHIA SIDERURGICA NACIONAL – LLC ("CSN LLC")

The CSN LLC has an industrial plant in Terre Haute, Indiana State - USA, where is located the cold rolled and galvanized steel production lines, its installed production capacity is 800 thousand tons/year. CSN LLC is a wholly owned indirect subsidiary through CSN Steel S.L.U. after Merger, previously named CSN Americas S.L.U, a subsidiary of CSN.

LUSOSIDER AÇOS PLANOS S.A. ('Lusosider")

Incorporated in 1996 in succession to Siderurgia Nacional (a company privatized by the Portuguese government that year), Lusosider is the only Portuguese company of the steel industry to produce cold rolled and galvanized anti-corrosion steel. Based in Paio Pires, The Lusosider has an installed capacity of about 550,000 tons / year to produce four large groups of steel products: galvanized sheet, cold rolled sheet, pickled and oiled plate. The products are manufactured by Lusosider and may be used in the packaging industry, construction (pipes and metallic structures) and in home appliance components.

#### 8.f) Other investments

• PANATLÂNTICA S. A. ("Panatlântica")

Panatlântica is a publicly-held company, headquartered in the city of Gravataí, State of Rio Grande do Sul, engaged in the manufacturing, trade, import, export and processing of steel and ferrous or non-ferrous metals, coated or not. This investment is classified as available-for-sale and measured at fair value.

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The Company currently holds 11.33% (11.35% as of December 31, 2016) of Panatlântica's total share capital.

• USINAS SIDERURGICAS DE MINAS GERAIS S.A. – USIMINAS ("USIMINAS")

Usiminas, headquartered in Belo Horizonte, State of Minas Gerais, is engaged in steel and related operations. Usiminas produces flat rolled steel in the Intendente Câmara and José Bonifácio de Andrada e Silva plants, located in Ipatinga, Minas Gerais, and Cubatão, São Paulo, respectively, the final product is sold in the domestic and foreign market. Usiminas also exploits iron ore mines located in Itaúna, Minas Gerais, to meet its verticalization and production cost optimization strategies. Usiminas also has service and distribution centers located in several regions of Brazil, and the Cubatão, São Paulo, and Praia Mole, Espírito Santo, all centers are located in strategic locations for the shipment of its production.

On April 9, 2014, the Administrative Council for Economic Defense (CADE - Conselho Administrativo de Defesa Econômica) issued its decision on the matter about the Usiminas shares held by CSN signing a Performance Commitment Agreement), also called TCD, between CADE and CSN. Under the terms of the decision of CADE and TCD, CSN must reduce its interest in Usiminas, within a specified period. The deadline and percentage reduction are confidential. In addition, the political rights in Usiminas will continue suspended until the Company reaches the limits established in the TCD.

In March 2016, the Board of Directors of Usiminas approved a capital increase of R \$ 64,882, through the issue of up to 50,689,310 preferred shares. On April 22, 2016, CSN exercised its preemptive rights in full, paying R \$ 11,603 for 9,064,856 preferred shares. This increase was approved by the Board of Directors of Usiminas on June 3, 2016.

On March 24, 2016, the Company requested to CADE (Brazilian Antitrust Agency) the flexibilization of the PAT (Performance Commitment Agreement (TCD), in order to enable the Company the exercise of certain political rights, namely the power to elect independent members of the board of directors and supervisory board. On April 27, 2016, CADE approved the Company's request to permit such election. On April 28, at the Usiminas' annual general meeting, the Company elected 2 independent members of the board of

directors and 1 of the supervisory board, as well as the same number of alternates.

In April 2016, the Extraordinary Shareholders' Meeting of Usiminas approved a capital increase of R\$ 1,000,000 through the issue of 200,000,000 common shares. On May 20, 2016, CSN exercised its preemptive right in full, paying R\$ 178,832 for 35,766,351 common shares. This increase was approved by the Extraordinary General Meeting of Usiminas on July 19, 2016.

As of December 31, 2017 and 2016, the Company's interest in Usiminas's capital was 15.19% in common shares and 20.86% in preferred shares.

USIMINAS is listed on the São Paulo Stock Exchange ("B3 S.A.- Brasil, Bolsa, Balcão": USIM3 and USIM5).

ARVEDI METALFER DO BRASIL S.A. ("Arvedi")

Arvedi, headquartered in Salto, State of São Paulo, is engaged in pipe production. As of December 31, 2017 and 2016 CSN held 20.00% of Arvedi's share capital.

# 9. PROPERTY, PLANT AND EQUIPMENT

	Land	Buildings and Infrastructure	Machinery, equipment and facilities	Furniture and fixtures	Construction in progress	Othe
Balance at December 31, 2015	263,539	2,689,241	11,072,244	38,730	3,199,386	56
Cost	263,539	3,429,573	18,601,088	182,830	3,199,386	81
Accumulated depreciation		(740,332)	(7,528,844)	(144,100)		(24
Balance at December 31, 2015	263,539	2,689,241	11,072,244	38,730	3,199,386	56
Effect of foreign exchange differences	(13,348)	(38,538)	(149,908)	(915)	(8,345)	(
Acquisitions	4	100	205,488	867	1,412,685	1
Capitalized interest (notes 24 and 29)					215,794	
Write-off (note 23)	(144)	(2,723)	(10,423)	(77)	(41,093)	(2
Depreciation (note 22)		(116,760)	(1,096,668)	(5,822)		(3
Transfers to other asset categories Transfers to intangible assets	14,951	298,121	2,318,728	444	(2,502,615) (16,538)	(12
Acquisition control - CGPAR			7,377	189	, ,	
Goodwill - Aguisition control CGPAR			57,889			
Transfer of Metalic - Held for sale	(373)	(13,466)	(30,440)	(208)	(261)	
Others	, ,	(296)	(4,657)	(45)	1,851	
Balance at December 31, 2016	264,629	2,815,679	12,369,630	33,163	2,260,864	39
Cost	264,629	3,637,903	20,712,371	173,821	2,260,864	67
Accumulated depreciation		(822,224)	(8,342,741)	(140,658)		(28
Balance at December 31, 2016	264,629	2,815,679	12,369,630	33,163	2,260,864	39
Effect of foreign exchange differences	8,702	21,737	72,811	593	3,076	
Acquisitions	8,241	1,196	91,251	1,171	951,796	-
Capitalized interest (notes 24 and 29)					91,957	
Write-off (note 23)	653	30,634	(30,383)	(37)	(2,536)	(2 (4
Depreciation (note 22)		(156,580)	(1,174,852)	(5,656)		(4
Transfers to other asset categories	(2,485)	84,281	659,119	3,869	(805,207)	6
Transfers to intangible assets					(26,183)	
Others			(1,656)		2,168	
Balance at December 31, 2017	279,740	2,796,947	11,985,920	33,103		39
Cost	279,740	3,819,929	21,674,362	164,152	2,475,935	66
Accumulated depreciation		(1,022,982)	(9,688,442)	(131,049)		(27

Balance at December 31, 2017 279,740 2,796,947 11,985,920 33,103 2,475,935

(\*) Refer basically to railway assets such as courtyards, tracks and leasehold improvements, vehicles, hardware, mines, ore deposits, and spare part inventories.

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The breakdown of the projects that comprise construction in progress is as follows:

					Consolidated
Project description	Start date	Completion date		12/31/2017	12/31/2016
Logistics Current investments to maintain current operations at their full capacity.				106,956 <b>106,956</b>	103,284 <b>103,284</b>
Mining				100,550	100,204
Expansion of Casa de Pedra Mine capacity production.	2007	2020	(1)	750,999	689,160
Expansion of TECAR export capacity.	2009	2022	(2)	275,811	253,545
Current investments to maintain current operations at their full capacity.				408,522	261,056
				1,435,332	1,203,761
Steel Supply of 16 torpedo's cars for operation in the steel industry.	2008	2019		99,483	91,779
Current investments to maintain current operations at their full capacity.			(3)	228,029	307,448
operations at their rail capacity.				327,512	399,227
Cement Construction of cement plants.	2011	2020	(4)	554,865 51,270	529,631 24,961
Current investments to maintain current operations at their full capacity.				606,135	554,592
Total Construction in Progress				2,475,935	2,260,864

<sup>(1)</sup> Estimated completion date of the Central Plant Step 1;

<sup>(2)</sup> Estimated completion date of phase 60 Mtpa;

(3) Refers substant	tially to the r	eforming of I	batteries for	coke ovens	and reuse	of the carbochemic	cal cooling
waters;							

(4) Refers substantially to the acquisition of new Integrated Cement Plants

The average estimated useful lives are as follows (in years):

		Consolidated
	12/31/2017	12/31/2016
Buildings	39	41
Machinery, equipment and facilities	21	18
Furniture and fixtures	12	12
Other	17	14

## 9.a) Capitalized Interest

As of December 31, 2017, the Company capitalized borrowing costs amounting to R\$91,957 in consolidated financial statement (as of December 31, 2016, R\$215,794). These costs are basically estimated for the cement and mining projects, mainly relating to: new integrated cement plant; and (ii) Casa de Pedra (MG) expansion and TECAR (RJ), see notes 24 and 29.

The rates used to capitalize borrowing costs are as follows:

Rates	12/31/2017	12/31/2016
Unspecified projects	8.63%	10.48%

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# 10. INTANGIBLE ASSETS

Palance at December 21, 2015	Goodwill	Customer relationships	Software 75,237	Trademarks and patents	Rights an licenses (
Balance at December 31, 2015	3,604,022	413,276	13,231	143,636	3,185,7
Cost	3,974,128	549,302	173,154	143,636	3,185,7
Accumulated amortization	(260,776)	(136,026)	(97,917)		
Adjustment for accumulated recoverable value	(109,330)				
Balance at December 31, 2015  Effect of foreign exchange differences Acquisitions and expenditures Transfer of property, plant and equipment	3,604,022	<b>413,276</b> (74,167)	<b>75,237</b> (236) 2,995 16,538	<b>143,636</b> (27,440)	3,185,7
Writte-of Amortization (note 22) Aquisition of control - CGPAR Transfer of Metalic - Held for sale	(13,091)	(41,449)	(3) (26,093) 47 (232)		(7
Balance at December 31, 2016	3,590,931	297,660	68,253	116,196	3,184,9
Cost	3,834,234	444,635	183,166	116,196	3,185,7
Accumulated amortization	(133,973)	(146,975)	(114,913)		(7
Adjustment for accumulated recoverable value	(109,330)				
Balance at December 31, 2016 Effect of foreign exchange differences Acquisitions and expenditures Transfer of property, plant and equipment	3,590,931	<b>297,660</b> 41,916	68,253 183 622 26,183	<b>116,196</b> 17,941	3,184,9
Disposals Amortization (note 22) Aquisition of control - CGPAR		(38,701)	(70) (21,986)		(12,4

Balance at December 31,2017	3,590,931	300,875	73,185	134,137	3,172,4
Cost	3,834,234	513,068	167,162	134,137	3,185,7
Accumulated amortization	(133,973)	(212,193)	(93,977)		(13,2
Adjustment for accumulated recoverable value	(109,330)				
Balance at December 31,2017	3,590,931	300,875	73,185	134,137	3,172,4

<sup>(\*)</sup> Composed mainly by mineral rights with estimated resources of 1,101 million tons. Corresponding amortization is recorded based on production volumes.

The estimated average useful lives by nature are as follows (in years):

		Consolidated
	12/31/2017	12/31/2016
Software	8	8
Customer relationships	13	13

# 10.a) Impairment testing

The goodwill arising from expectations for future profitability of the companies acquired and the intangible assets with indefinite useful lives (trademarks) have been allocated to the operational divisions (cash-generating units) of CSN, which represent the lowest level of assets or group of assets. When a CGU has an intangible asset with indefinite useful life allocated, the Company performs an impairment test. The CGU with intangible assets in this situation are as follows:

Cook		Good	dwill	Trade	marks		Consolidated otal
Cash generating unity	Segment	12/31/2017	12/31/2016	12/31/2017	12/31/2016	12/31/2017	12/31/2016
Packaging	Steel	158,748	158,748			158,748	158,748
Long steel (1)	Steel	235,595	235,595	134,137	116,196	369,732	351,791
Mining (2)	Mining	3,196,588 <b>3,590,931</b>	3,196,588 <b>3,590,931</b>	134,137	116,196	3,196,588 <b>3,725,068</b>	3,196,588 <b>3,707,127</b>

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- (1) The goodwill and trademark that are recorded in line item intangible assets at long steel segment, those transactions are derived from the business combination of *Stahlwerk Thuringen* GmbH ("SWT") and Gallardo Sections CSN. The assets mentioned are considered to have indefinite useful lives as they are expected to contribute indefinitely to the Company's cash flows.
- (2) Refers to the goodwill based on expectations for future profitability, resulting from the acquisition of Namisa by CSN Mineração, an operation that was concluded in December 2015. From 2016, the balance started to be tested annually for impairment analysis.

The impairment testing of the goodwill and the trademark include the balance of property, plant and equipment of the cash-generating units and also the intangible. The test is based on the comparison between the actual balances and the value in use of those units, determining based on the projections of discounted cash flows and use of such assumptions and judgements as: growth rate, costs and expenses, discount rate, working capital, future Capex investment and macroeconomic assumptions observable in the market.

The main assumptions used in calculations of value in use at December 31, 2017 are as follows:

	Metal Packaging	Long Steel (**)	Mining
Measurement of recoverable value	Discounted Cash Flow	Discounted Cash Flow	Discounted Cash Flow
Cash flow projection	Until 2028	Until 2028	Until 2056
Gross Margin	Gross margin updated based on historical data, impacts of business restructuring and market trends	Gross margin updated based on historical data and market	Average of the gross margin of each Cash generating units based on the history and projections to the next 39 years and long-term price and exchange rate curves from industry reports.

Cost based on historical data Cost Atualization of each product and impacts

of business restructuring.

Costs based on historical data and market trends.

Costs based on historical data, mix of products and market trends.

**Growth rate** 

Without growth in real terms, Without growth in real terms, only updated by long term inflation of 4.0%.

only updated by long term inflation of 2.0%, Euro zone. The growth rate was not considered.

These cash flows were considered using a discount rate after taxes between 7% and Discount rate 13% in real terms. The discount rate was based on the weighted average cost of capital ("WACC") that reflects the specific risk of each segment.

(\*) Refer to assets of subsidiary SWT, located in Germany. The discount rate was applied on the discounted cash flow prepared in Euros, the functional currency of this subsidiary.

Based on the analyses conducted by Management, it was not necessary to record losses by impairment to those assets for the year ended on December 31, 2017.

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# 11. BORROWINGS, FINANCING AND DEBENTURES

The balances of borrowings, financing and debentures, which are carried at amortized cost, are as follows:

	Rates p.a. (%)	Cu 12/31/2017	rrent liabilities 12/31/2016	Non- 12/31/2017	Consolidated current liabilities 12/31/2016
FOREIGN					
CURRENCY	40/ 1 0 50/	0.474	440044	100 50 1	100.047
Prepayment	1% to 3.5%	2,174	110,944	•	482,347
Prepayment	3.51% to 8%	788,989	438,802	, ,	4,290,062
Perpetual bonds	7%	4,503	4,436		3,259,100
Fixed rate notes	4.14% to 10%	139,184	137,126	5,612,342	5,529,380
ACC	3.135%	379,822			
Others	1.2% to 8%	251,630	95,983	197,130	259,262
		1,566,302	787,291	13,214,981	13,820,151
LOCAL CURRENCY					
	1,3% + TJLP and fixed				
BNDES/FINAME	rate 2.5% to 6% + 1,5%	71,121	73,736	960,872	1,012,268
	1,5 % 110.8% to 113.7% of				
Debentures	CDI	523,252	538,003	770,767	1,270,383
	109.5% to 116.5% of				
Prepayment	CDI and fixed rate of	1,789,737	570,778	3,378,333	5,080,000
	8%				
000	112.5% and 113% of	0.004.050	101 110	4 000 000	7,000,000
CCB	CDI	2,601,352	181,143	4,693,000	7,200,000
		4,985,462	1,363,660	9,802,972	14,562,651
Total borrowings an	d financing (Note 12 I)	6,551,764			28,382,802
Transaction costs and		(24,862)	(33,503)	(34,011)	(59,232)
Total borrowings an		, ,	, ,	,	,
transaction costs	· · · · · · · · · · · · · · · · · · ·	6,526,902	2,117,448	22,983,942	28,323,570

#### 11.a) Maturities of borrowings, financing and debentures presented in non-current liabilities

As of December 31, 2017, the breakdown of principal plus interest of long-term liabilities as borrowings, financing and debentures by maturity date is presented as follows:

							Consolidated
	Prepayment	Bonds	Perpetual Bonds	ССВ	Othes		Total
2019	2,824,551	2,238,034 (*)		1,507,000	670,383	7,239,968	31%
2020	2,409,959	3,374,308 (*)		1,508,000	280,243	7,572,510	33%
2021	1,276,969			774,000	177,659	2,228,628	10%
2022	964,363			784,000	95,484	1,843,847	8%
2023				120,000	56,631	176,631	1%
After 2023					648,369	648,369	3%
Perpetual bonds			3,308,000			3,308,000	14%
	7,475,842	5,612,342	3,308,000	4,693,000	1,928,769	23,017,953	100%

<sup>(\*)</sup> In February 2018, the Company concluded the renegotiation of its debt with Banco do Brasil S.A ("BB"), as well as the issuance of debt instruments and repurchase of US\$350 million (*Tender Offer*), as described in more detail in note 31 - Events subsequent.

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# 11.b) Amortization and new borrowings, financing and debentures

The table below presents the new funding transactions and amortization during the year:

	12/31/2017	Consolidated 12/31/2016
Opening balance	30,441,018	34,282,515
Funding Transactions	538,771	30,034
Forfaiting funding / Drawee Risk		78,240
Repayment	(1,528,023)	(695,938)
Payments - Forfaiting / Drawee Risk		(407,155)
Payment of interest and other charges	(2,634,931)	(3,044,342)
Payment of interest and other charges – Forfaiting / Drawee		(5,694)
Provision of interest and other charges	2,438,555	3,156,120
Provision of charges - Forfaiting / Drawee Risk		4,237
Others (1)	255,454	(2,956,999)
Closing balance	29,510,844	30,441,018

(1) Includes unrealized monetary and foreign exchange variations.

In 2017, the Group captures and amortized loans as shown below:

# • Funding

**SIGNATURE** 

Transaction	Date	Amount	Consolidated Maturity
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Total			538,771	
Advance contract exchange (ACC) (*)	BB	December 2017	200,000	February/18
Fixed Rate Notes	JP MORGAN	November/17	163,506	November/18
Advance contract exchange (ACC)	BB	September/17	171,000	may/18
CDC - ERSA	BANCO MERCEDEZ BENS	August/17	4,265	October/21

<sup>(\*)</sup> The operation was amortized in February 02, 2018

# Amortization

Transaction	Payment of principal	Consolidated Debt charges
	Payment of principal	•
Bonds	-	578,482
Fixed Rate Notes	90,028	12,736
Debentures	479,617	201,118
Bank Credit Bill	-	869,717
Export Credit Note	400,000	668,325
Pre - Export Payment	490,803	226,894
BNDES/FINAME	67,575	75,539
Advance contract exchange (ACC)	-	2,120
Total	1,528,023	2,634,931

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#### Covenants

The Company's loan agreements establish the fulfillment of certain non-financial obligations, as well as maintenance of certain parameters and performance indicators, such as disclosure of its audited financial statements according to regulatory deadlines or payment of commission on risk assumption, if the net debt-EBITDA ratio reaches the levels in those agreements, under penalty of anticipated maturity. Until now, the Company is in compliance with all financial and non-financial obligations (covenants) of its current contracts.

On December 31, 2017, the Company has accrued R\$ 30,843 as the commission on risk assumption in the current liabilities.

#### 11.c) Guarantees

The Company is the guarantor or is liable for the guarantees given to its subsidiaries and joint ventures as follows:

	Currency	Maturities		wings 12/31/2016		eclosure 12/31/2016		her 12/31/2016
Transnordestina Logísitca	R\$	Up to 09/19/2056 and Indefinite	2,541,347				3,866	4,866
FTL - Ferrovia Transnordestina	R\$	11/15/2020	69,405	76,700				
Sepetiba Tecon	R\$	Indefinite					36,308	28,914
	R\$	Indefinite			333	333	18,540	19,340

Total in US\$ Total in R\$			145,000 10,334,149 14,948,054		25,376	26,169	58,714	55,640
Lusosider Aços Planos	EUR	Indefinite	25,000	25,000				
CSN Steel S.L.	EUR	01/31/2020	120,000	120,000				
Total in US\$			2,950,000	2,950,000				
CSN Resources	US\$	07/21/2020	1,200,000	1,200,000				
CSN Islands XII	US\$	Perpetual	1,000,000	1,000,000				
CSN Islands XI	US\$	09/21/2019	750,000	750,000				
Total in R\$			4,613,905	4,624,637	25,376	26,169	58,714	55,640
Estanho de Rondônia	R\$	07/15/2022	3,153					
CSN Mineração	R\$	09/22/2022	2,000,000	2,000,000				2,520
CSN Energia	R\$	Indefinite			2,829	2,829		
Cia Metalurgica Prada								

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#### 12. FINANCIAL INSTRUMENTS

#### I - Identification and measurement of financial instruments

The Company enters into transactions involving various financial instruments, mainly cash and cash equivalents, including short-term investments, marketable securities, trade receivables, trade payables, and borrowings and financing. The Company also enters into derivative transactions, especially interest rate and foreign exchange and rate swaps.

Considering the nature of these instruments, their fair value is basically determined by using Brazil's money market and mercantile and futures exchange quotations. The amounts recognized in current assets and current liabilities have immediate liquidity or short-term maturity, mostly less than three months. Considering the maturities and characteristics of such instruments, their carrying amounts approximate their fair values.

#### Classification of financial instruments

Consolidated	Notes	Available for sale	Fair value through profit or loss	Loans and receivables	Others liabilities measured at amortized cost	12/31/2017 Balances
Assets Current						
Cash and cash equivalents	3			3,411,572		3,411,572
Short - term investments	4			735,712		735,712
Trade receivables Derivative financial instruments	5			2,197,078		2,197,078

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Trading securities Loans - related parties Dividends receivable Total	7 7 5		2,952 <b>2,952</b>	2,441 <b>6,346,803</b>	41,528 <b>41,528</b>	2,952 2,441 41,528 <b>6,391,283</b>
Non-current Other trade receivables Investments Loans - related parties Total	7 8 7	2,222,433 <b>2,222,433</b>		20,024 554,694 <b>574,718</b>		20,024 2,222,433 554,694 <b>2,797,151</b>
Total Assets		2,222,433	2,952	6,921,521	41,528	9,188,434
Liabilities Current Borrowings and financing Derivative financial instruments Trade payables Dividends and interest on capital Total	11 13				6,551,764 2,460,774 510,692 <b>9,523,230</b>	510,692
Non-current Borrowings and financing Total Total Liabilities	11				23,017,953 <b>23,017,953</b>	23,017,953 23,017,953 32,541,183

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#### Fair value measurement

The following table shows the financial instruments recognized at fair value through profit or loss using a valuation method:

Consolidated	Level 1	Level 2	12/31/2017 Balances	Level 1	Level 2	12/31/2016 Balances
Assets Current assets Financial assets at fair value through						
profit or loss Derivative financial instruments Trading securities Non-current assets Available-for-sale financial assets	2,952		2,952	2,966	2,298	2,298 2,966
Investments Total Assets	2,222,433 <b>2,225,385</b>	-	2,222,433 <b>2,225,385</b>	, ,	2,298	1,374,268 <b>1,379,532</b>
Liabilities Current liabilities Financial liabilities at fair value						
through profit or loss Derivative financial instruments Total liabilities		-	-		121 <b>121</b>	121 <b>121</b>

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Includes observable inputs in market such as interest rates, exchange etc., but not prices traded in active markets.

There are no assets and liabilities classified as level 3.

# II – Investments in financial instruments classified as available-for-sale and measured at fair value through OCI

The Company has investments in common (USIM3) and preferred (USIM5) shares of Usiminas ("Usiminas Shares"), designated as available-for-sale financial assets. The Company adopts this designation because the nature of the investment is not comprised in any other categories of financial instruments (loans and receivables, held-to-maturity investments or financial assets at fair value through profit or loss). The asset is classified as a non-current asset in line item "investments" and is carried at fair value based on the quoted price on the stock exchange (B3 S.A.). According to the Company's policy, the gains and losses arising from changes in the price of shares are recorded directly in equity, as other comprehensive income.

The Company's accounting policy requires a quarterly analysis based on quantitative and qualitative information available in the market from the moment the instrument demonstrates a drop of more than 20% of their market value or from a significant drop in market value compared to their acquisition cost for more than 12 months. If the Company concludes that there was a significant drop in the price of the instrument, an impairment loss must be recognized. In 2012, considering the price of Usiminas shares on the B3 S.A, was recorded the first impairment loss on that shares. According to this policy, whenever the share price reached a level lower than the last record impairment, the Company should record further losses, redefining the new minimum threshold value of the shares.

During the year 2017 and 2016, there was no impairment recorded and the gain from the change in share price in the period was recorded in other comprehensive income. The impairment recorded as of December 31, 2015 amounted R\$555,298.

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	12/31/2017				12/31/2016	Variation	in the year	
Class of shares	Quantity	Share price	Closing Balance	•	Share price	Closing Balance	Share price	Variation in the carrying amount
Common	107,156,651	10.83	1,160,506	107,156,651	8.26	885,114	2.57	275,392
Preferred	114,280,556	9.10	1,039,953	114,280,556	4.10	468,550	5.00	571,403
	221,437,207		2,200,459	221,437,207		1,353,664		846,795

As of December 31, 2017 and 2016, the Company's interest in Usiminas's capital was 15.19% in common shares and 20.86% in preferred shares.

#### Share market price risks

The Company is exposed to the risk of changes in share prices due to the investments made and classified as available-for-sale.

According to the Company's accounting policies, any negative changes in the investment in Usiminas considered significant (impairment) are recognized in profit or loss and the other changes that not occur from impairment are recognized in comprehensive income until the investment is realized.

As of December,31 2017, the amount recognized in comprehensive income for investments available for sale, net of taxes is R\$1,559,680 (R\$678,035 as of December 31, 2016).

#### III - Financial risk management

The Company follows strategies of managing its risks, with guidelines regarding the risks incurred by the company. The nature and general position of financial risks are regularly monitored and managed in order to assess the results and the financial impact on cash flow. The credit limits and the quality of counterparties' hedging instruments are also periodically reviewed.

The market risks are hedged when it is considered necessary to support the corporate strategy or when it is necessary to maintain a level of financial flexibility.

Under the terms of the risk management policy, the Company can manage some risks by using derivative instruments not associated to any speculative deals or short sales.

#### 12.a) Foreign exchange and interest rate risks

#### Exchange rate risk

The exchange rate risk arises from the existence of assets and liabilities denominated in US dollars or Euros, since the Company's functional currency is the Real. Net exposure is the result of offsetting the natural currency exposure by hedging instruments adopted by CSN.

The consolidated net exposure as of December 31, 2017 is as follows:

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		12/31/2017
Foreign Exchange Exposure	(Amounts in US\$'000)	(Amounts in €'000)
Cash and cash equivalents overseas	777,310	2,857
Trade receivables	310,642	2,799
Other assets	3,283	3,636
Total assets	1,091,235	9,292
Borrowings and financing	(4,332,686)	(73,186)
Trade payables	(97,622)	(1,941)
Other liabilities	(3,984)	(3,368)
Total liabilities	(4,434,292)	(78,495)
Foreign exchange exposure	(3,343,057)	(69,203)
Cash flow hedge accounting	1,317,667	
Net Investment hedge accounting		72,000
Net foreign exchange exposure	(2,025,390)	2,797
Perpetual Bonds	1,000,000	
Net foreign exchange exposure		
excluding perpetual bonds	(1,025,390)	2,797

CSN is in the process of redefining its currency hedging strategy. The company has focused its hedge strategy on preserving its cash flow, so it is evaluating a replacement of the exposure generated by the settlement of derivatives with new hedge accounting designations, capturing the existing natural hedges, as well as using other derivative instruments with the purpose of hedging CSN's future cash flows.

#### Interest rate risk

Risk arises from short and long term liabilities with fixed or post fixed interest rates and inflation rates.

Item 12 b) shows the derivatives and hedging strategies to protect exchange and interest rates risks.

#### 12.b) Hedging instruments: Derivative and hedge accounting

CSN uses several instruments for protection of foreign currency risk and interest rate risk, as shown in the following topics:

#### Portfolio of derivative financial instruments

		Appreciation (R\$)					Аррі	
Counterparties	Functional Currency			Liability position	receivanie	Notional amount	Asse positio	
BNPP <b>Total dollar-to-euro swa</b> p	Dollar				, (pagasis)	10,250 <b>10,250</b>	33, <b>33</b> ,	
BM&FBovespa <b>Total DI future</b>	Real					1,641,378 <b>1,641,378</b>		

33,

## **Forward DI contracts**

The Company to hedge part or all of its exposure to assets whose interest rates are pre-fixed may obtain DI derivative operations on the stock exchange or the over-the-counter market, linking these assets to market trends. As of December 31, 2016 the Company held in its portfolio forward CDI rate contracts traded at B3 S.A. which totaled the notional amount of R\$ 1.641 billion.

The forward DI contract is defined as the accumulative value of the average daily DI rates of one day, calculated between the date of the transaction and the last trading date, being used to hedge and manage the interest rate risk of assets / liabilities in DI. The purchase and sale transactions, originally contracted in rate, will be converted into sale and purchase transactions, respectively, in PU.

The contract settlement is exclusively financial, on the due date and occurs daily until the maturity. The position held by the Company is set at the end of each session based on the difference of the day's settlement price (D0) compared to the previous day price (D-1), and is settled on the following day (D+1), according to the rules of B3 S.A.

For as much as the Company maintains contracts traded on the B3 S.A, it is required by the clearing house a guarantee margin to cover those commitments in these contracts, which is only a percentage of the contract's total amount. CSN maintains securities linked to this guarantee margin, consisting mainly of government bonds, which will be redeemed after the end position. The amounts of these investments are described in Note 4.

#### **Dollar x Euro swap**

The subsidiary Lusosider has derivative transactions to protect its dollar exposure versus euro.

Classification of the derivatives in the balance sheet and statement of income

12/31/2017
Instruments Assets Liabilities

	Current	Total	Current	Total	Net Financial Income (Note 24)
Dollar - to - euro swap					(229)
Future DI					28,503
					28,274

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	Asset	ts	Liabili	12/31/2016 Net Financial		
Instruments	Current	Total	Current	Total	Income (Note 24)	
Future Dollar BM&F Dollar - to - euro swap	2,298	2,298			(805,760) (6,467)	
Fixed rate - to - CDI swap (*) CDI - to - fixed rate					(299)	
swap (*)					(63)	
Future DI			(121)	(121)	5,829	
	2,298	2,298	(121)	(121)	(806,760)	

<sup>(\*)</sup> Swap positions were settled in October 2017.

#### Hedge accounting – cash flow

Beginning November 1, 2014, the Company formally designated cash flow hedging relationships to protect highly probable future cash flows against US dollar fluctuations.

In order to better reflect the accounting impacts of this foreign exchange hedging strategy on its profit, CSN designated part of its US dollar-denominated liabilities as a hedging instrument of its future exports. As a result, foreign exchange differences arising on translating the designated liabilities will be temporarily recognized in shareholders' equity and allocated to profit or loss when such exports are carried out, which will allow recognizing the US dollar impact on liabilities and exports concurrently. Note that adopting hedge accounting does not entail contracting any financial instrument. As of December 31, 2017 the Company designated for hedge accounting US\$1.3 billion in exports to be carried out between January, 2018 to October, 2022.

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To support these designated amounts, the Company prepared formal documentation indicating how hedging is aligned with the goal and strategy of CSN's Risk Management by identifying the hedging instruments used, the hedging purpose, the nature of the hedged risk, and showing the expected high effectiveness of the designated relationships. The designated debt instruments total an amount equivalent to the portion of future exports. Thus, the exchange differences on translating the instrument and the hedged item are similar. According to the Company's accounting policy, continuous assessments of the prospective and retrospective effectiveness must be carried out by comparing the designated amounts with the expected amounts, approved in Management's budgets, and the actual export amounts.

Through hedge accounting, the exchange gains and losses of the debt instruments do not immediately affect the Company's profit or loss except to the extent that exports are carried out.

The table below shows a summary of the hedging relationships as of December 31, 2017:

Designatid <b>t</b> edging Date Instrume		of period	rate on	(US\$'000≬USD'000)R€	on Shareholders'
3/11/2014 Export prepayn in US\$ t third parties	<b>O</b> , ,	Foreign October lexchange 2016 - y - R\$ Septembe vs. 2019 US\$ spot rate		500,000 (133,334) 53	,203 (316,726)
1/12/2014 Export prepayn in US\$ t third parties	0 , ,	Foreign October læxchange 2015 - y - R\$ February vs. 2019 US\$	2.5601	175,000 (114,999) 38	,937 (44,880)

	spot rate		
12/18/2014Export prepayme in US\$ to third parties	Part of the Foreign May entsighly probablexchange 2020 future monthly - R\$ iron ore vs. exports US\$ spot rate	2.6781 100,000	(62,990)
07/21/2015Export prepayme in US\$ to third parties	Part of the Foreign July entsighly probable xchange 2019 - future monthly - R\$ March iron ore vs. 2021 exports US\$ spot rate	3.1813 60,000	(7,602)
07/23/2015Export prepayme in US\$ to third parties	Part of the Foreign July entsighly probable xchange 2019 - future monthly - R\$ March iron ore vs. 2021 exports US\$ spot rate	3.2850 100,000	(2,300)
07/23/2015Export prepayme in US\$ to third parties	Part of the Foreign October intsighly probablexchange 2018 - future monthly - R\$ October iron ore vs. 2022 exports US\$ spot rate	3.2850 30,000	(690)
	Part of the Foreign October entsighly probablexchange 2018 - future monthly - R\$ October iron ore vs. 2022 exports US\$ spot rate	3.3254 100,000	1,740
07/27/2015Export prepayme in US\$ to third parties	Part of the Foreign October ontsighly probablexchange 2018 - future monthly - R\$ October iron ore vs. 2022 exports US\$ spot rate	3.3557 25,000	1,193
07/27/2015Export prepayme in US\$ to third parties	Part of the Foreign October entsighly probable exchange 2018 - future monthly - R\$ October iron ore vs. 2022 exports US\$ spot rate	3.3557 70,000	3,339

07/27/2015Exp	oort Part of the paymen <b>ts</b> ighly proba	Foreign October olexchange 2018 -	3.3557	30,000	1,	,431
in L	JS\$ to future month	ly - R\$ October				
thir		vs. 2022				
par	ties exports	US\$ spot				
		rate				
07/28/2015Exp	ort Part of the	Foreign October	3.3815	30,000	2,	,205
pre	paymen <b>ts</b> ighly probal	olexchange 2018 -				
in U	JS\$ to future month	ly - R\$ October				
thir	d iron ore	vs. 2022				
par	ties exports	US\$				
		spot				
		rate				
1/8/2015 Exp	ort Part of the	Foreign (1)	3.3940			
pre	paymen <b>ts</b> ighly probal	olexchange				
in U	JS\$ to future month	ly - R\$				
thir	d iron ore	VS.				
par	ties exports	US\$				
		spot				
		rate				